University of Zagreb
FACULTY OF ECONOMICS & BUSINESS
Zagreb - Croatia

1st INTERNATIONAL STUDENT CONFERENCE 2009
Conference Proceedings

12-13 June 2009
ZAGREB
CROATIA
Contents

PREFACE ................................................................................................................................... 4

SPONSORS ................................................................................................................................ 7

THE IMPORTANCE OF CODE OF ETHICS IN PREVENTING FINANCIAL SCANDALS IN THE TIME OF FINANCIAL CRISIS ................................................................. 8
Introduction ................................................................................................................................ 9
Unethical behaviour of management and employees ............................................................... 10
‘Tone at the top’ ....................................................................................................................... 12
Unethical behavior of auditors ................................................................................................. 14
Threats of unsuccessful compliance with the Code of Ethics .............................................. 16
Recommendations for better compliance with Code of Ethics ............................................ 19
Conclusion ................................................................................................................................ 21

NEOLIBERAL ECONOMIC DOCTRINES, FREE MARKET FUNDAMENTALISM AND THEIR IMPACT ON THE FORMER SOCIALIST COUNTRIES OF EUROPE .............. 23
Understanding the genealogy behind the neo-liberal economic doctrines ......................... 24
From 1979 onwards – time of neoliberalism and deregulation ........................................... 26
Impact of sudden adoption of market fundamentalism and neoliberal capitalism on the transition economies of Europe ............................................................................. 29
The case of Croatia .................................................................................................................. 32
Conclusion ................................................................................................................................ 36
Available solutions for the Croatian economy – applicable to other similar countries ........ 37

VULNERABILITY OF THE FINANCIAL SECTOR IN CENTRAL AND SOUTHEASTERN EUROPE ............................................................... 40
Introduction .............................................................................................................................. 41
Subprime crisis .......................................................................................................................... 42
Spillover effect ............................................................................................................................. 44
Central and Southeastern European countries' banking systems in crisis ......................... 45
Analysis of banking institutions .............................................................................................. 45
Impacts on real economy in Central and Southeastern European countries .................... 49
Conclusion ................................................................................................................................ 51

THE EUROPEAN COMMISSION AND THE BOLOGNA PROCESS: FINDING A COMMON LANGUAGE ......................................................................................... 53
PREFACE

On behalf of the Organizing Committee and Faculty of Economics and Business Zagreb, it is my pleasure to present to you proceedings of the First International Student Conference: «Time to Rethink Economics». This conference addresses rethinking theories, researches, new developments, and interdisciplinary approach to the present and future challenges, not only in the field of economics, but also in the general social, education, ecology and ethics field.

This first volume of the Conference Proceedings consists of ten full papers accepted for presentation at the conference. All submissions were carefully reviewed by our members of the Review Committee and their recommendations used for selection. Borderline cases were reviewed at a special Program Committee meeting where appropriate decisions were made based on re-reviews.

The coverage of the contributions is very wide, which is one of the features that tend to distinguish the First International Student Conference of conferences from others that focus on more specific areas. Our intention has been to provide a wide range of possible topics - a meeting place of different scientific fields, researchers and practitioners - as a forum wherein persons from disparate but related fields can meet and learn about issues and interrelations that impact their activities.

The major areas covered at the conference and presented in this volume include:

- The European New Deal
- Financial Crisis and its Implications on the World Order
- Knowledge-based Economy: Is the Bologna Process Helping?
- Is the Education of Economists Open Enough for Interdisciplinary Approaches and Ideas?
- Social Psychology in Economic Studies

The conference has given students with the opportunity to choose from suggested topics, but also to suggest their own topic as well.
In addition to the papers included in this volume, participants in the conference also heard experts Keynote and Invited lectures; participated in tutorials, group discussions and had a chance to discuss and present different points of view on the present and future challenges.

Let me take the opportunity to urge you to plan now to attend Second International Student Conference 2010. Periodically check http://sites.google.com/site/isc2010croatia for information on the following – bigger, better and more challenging event!

In closing, I would like to thank all authors for submitting their work, and all members of the Organizing Committee and Review Committee, listed on the following page, for their cooperation and time spent organizing the event and reviewing submissions. Special appreciation is extended to the Ministry of Science, Education and Sport, to the City of Zagreb, University of Zagreb, Faculty of Economics and Business Zagreb, T-Hrvatski Telekom and lot of our sponsors that helped this event to become reality.

Yours sincerely,

Siniša Topalović

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THE IMPORTANCE OF CODE OF ETHICS IN PREVENTING
FINANCIAL SCANDALS IN THE TIME OF FINANCIAL
CRISIS

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Abstract:
Fraud exists in every industry and it can occur at any time and at any level within the organization. Managers and employees commit fraud for various reasons. Sometimes the incentives for fraud exist for their personal gain, and sometimes the managements only wants to make financial statements more attractive to the stakeholders. Fraudulent financial reporting occurs if management and/or accountants commit intentional adjustments or omissions in the financial statements. Sometimes the intentional plot with the auditors exists and an auditor issues a unqualified opinion in his audit report for client’s fraudulent reports. Today, during the global financial crisis, the incentives for fraud are even more present. Therefore, an even greater need exists for implementing measures that can prevent and deter fraud. Code of Ethics is one mean through which this can be achieved. Every company should have and comply with Code of Ethics. Also, auditors need to comply with the Code of Ethics established by the international professional body along with national requirements for ethical behavior of auditors. This paper examines how Code of Ethics can help in preventing managers, employees and auditors to commit fraud and issue fraudulent financial statements in this period of global financial crisis.

Keywords: auditor, Code of Ethics, fraud, managers, tone at the top, financial crisis
Introduction

Fraud is present everywhere. It can occur in every industry and at any level within the organization. Fraud can be committed by managers who are deliberately ‘making numbers’ so that financial statements can look more attractive. It can be committed by employees that have a motive, opportunity and ability to rationalize fraud. And, finally it can be committed by the auditor that has a conflict of interest, or no integrity.

The Association of Certified Fraud Examiners defines fraud as an: intentional, deliberate, misstatement or omission of material facts, or accounting data which is misleading and, when considered with all the information made available, would cause the reader to change or alert his or her judgment or decision. (Rezaee, 2002) From this point of view, fraud is inevitable a part of any scandal, especially financial scandal. Since 2002 and collapses of Enron, WorldCom, Parmalat, Arthur Andersen and many more, the reliability toward financial statements, management and auditing profession is questioned. The financial crisis that happened in 2008 with a collapse of Lehman Brothers also raised many questions regarding effective procedures of fraud detection and prevention within the organization. After 2002, many laws were introduced, like Sarbanes-Oxley Act of 2002 in the United States and, new Eight Directive in the European Union, with a goal to regain trust from shareholders, investors and public towards financial reporting and auditing. On the one hand, those laws gave more authority, accountability and independence to auditors, but on the other hand made very strict laws for the companies. But, with the last collapse, one can raise the question if they were good enough and strict enough? One can also assume that during this crisis companies have more incentive for fraud since their financial statements are not as good as they were before.

There are many ways that can help managers to detect, prevent and disable employees from committing fraudulent financial reports. Some of them are (1) vigilant corporate governance; (2) a corporate code of conduct; (3) an adequate and effective internal control structure; (4) an internal audit function; and (5) external audit service. (Rezaee, 2002). What is not mentioned above and it is very similar to a corporate code of conduct is the Code of Ethics. A Code of Ethics provides a moral compass for employees by defining the company's position on ethical issues and promoting integrity. (Biegelman and Bartow, 2006). Thus, a Code of
Ethics is the basis for conduct since it explains what kind of behaviour is considered ethical and acceptable. Code of Conduct is a statement of ethical practices or guidelines to which an enterprise adheres. In this paper it will be considered that Code of Ethics and Code of Conduct have equal meaning. Companies can use Code of Ethics issued by SEC (Securities and Exchange Commission) in US, or issued by national regulatory bodies, like Code of Ethics issued by Croatian Chamber of Economy. Auditors and accountants have their own Code of Ethics issued by IFAC (International Federation of Accountants). In addition, Big Four audit firms (PricewaterhouseCoopers, Ernst & Young, KPMG, and Deloitte and Touch) have their own Code of Conduct.

Code of Ethics is a very powerful tool in fraud prevention since it explains what is acceptable and what is not. But the problem in most cases (Enron, Tyco, and WorldCom) is that the code is not well communicated throughout the company and/or that management and employees are not ethical and have no integrity. That applies to auditors and accountants since they work in this kind of environment and greed can make them cross the ethical line. In this paper some examples of unethical behaviour by top management and employees will be given. Also, measures and behaviour that can help in preventing fraud by management, employees, auditors and accountants will be discussed, which is especially important during this financial crisis.

**Unethical behaviour of management and employees**

Former CEOs Jeffrey Skilling, Bernard Ebbers and Dennis Kozlowski are one of the most famous managers in the world when it comes to greed and noncompliance with the Code of Ethics. First was a CEO of Enron, a famous American energy company based in Houston, Texas. Enron was ‘doing well’ till October 16, 2002, when it reported $686 million in losses and when the fraud was revealed. Skilling together with co-conspirators manipulated Enron's finance so that they exceed analyst's expectation and gave false and misleading public statements regarding financial performance. Enron had a Code of Ethics, but the problem was inappropriate ‘tone at the top’. Skilling as a CEO had to give example to other employees by acting ethically, morally and by working with integrity, but his ‘tone at the top’ ‘... was based
of noncompliance and lawlessness that created an environment of fraud and corruption at all levels of the organization.’ (Biegelman and Bartow, 2006).

Second, Bernard Ebbers was a former CEO of WorldCom, a world known long distance telecom company. Its downfall began in March, 2002 when Vice-President of Internal Audit Cynthia Cooper expressed the concern about company's accounting to former CFO Scott Sullivan. She was told to mind her own business, and after just two months she revealed $500 million in fraudulent computer expenses. During this investigation, Arthur Andersen as WorldCom's auditor did not respond to her questions. After the fraud was discovered, Sullivan said that Ebbers forced him to commit fraud if he wants to retain his job. (Biegelman and Bartow, 2006) This ‘tone at the top’ not only was corrupted and unethical, but also forced other employees to behave in an unethical way and against their will. It is again seen how a Code of Ethics was not in a place and was not part of top management behavior.

Third CEO was Dennis Kozlowski. He was former CEO at Tyco, a highly diversified global manufacturing company. He was accused together with other executives of stealing $600 million from the company for personal expenses, sales of stock that were inflated by fraudulent corporate accounting. (Biegelman and Bartow, 2006) It is again seen how greed put aside ethics and destroyed the corporation.

Beside top management, fraud can also be committed by employees on lower positions in the corporation. Former employee of WorldCom, Walt Pavlo, who was a Senior Manager in Billing Collection, was convicted for money laundering, wire fraud, and obstruction of justice. He stated that he was pressured by upper level management to constantly achieve revenue growth in the company, so that company can fulfill analyst's expectation. (Biegelman and Bartow, 2006) This is an example that despite Code of Ethics, some employees are persuaded to do unethical things and commit fraud although they are not thinking in that way. Ultimately, Pavlo also committed fraud for his personal gain, after recognizing that this kind of behavior was ‘normal’ in his organization. Again, this was due to the lack of appropriate ‘tone at the top’.

These three examples from above show how existence of Code of Ethics can have no meaning if there is no appropriate ‘tone at the top’ that will demonstrate to all employees how they should behave and work. Next to behaviour of the top management is how well Code of Ethics is communicated and understood throughout the company. No matter how strong laws and obligations regarding committing fraud exist, if Code of Ethics is not incorporated within
the culture of the company, than it is a big possibility that the big scandals will arise again. In the next part it will be explained how appropriate ‘tone at the top’ can help in creating culture of honesty and integrity. It is seen from above that just relying on Code of Ethics is not enough.

‘Tone at the top’

Top management has a big role in creating a culture of honesty and integrity within the corporation. They are the ones who create Code of Ethics (or adopt from the regulatory bodies) and they should be the examples to all employees. As seen from historical data, it is not enough just to set the rules and values and then expect all employees to comply with them if management is not doing the same thing. Detailed and well structured Code of Ethics is a good starting point for employees and organization as a whole.

Efficient Code of Ethics should state the following topics together with examples: general employee conduct while at work (company support and except honest behaviour from all employees), conflict of interest (give clear examples of acceptable and not acceptable conflict of interest), confidentiality, relationship with customers and suppliers, gifts, entertainment (what kind of entertainment is allowed with customers and vendors), expected unethical behaviour, use of organization's asset for private purpose and reporting fraud or unethical behaviour. (Coenen, 2008)

With a Code of Ethics structured like this, management has to be a good example to all employees by complying with it. Of course, it is impossible to list all ethical situations and because of their complexity it is expected from employee that he will use Code of Ethics as a guideline in solving his situation. There is always a problem with employees and their views and values regarding ethics. If company doesn't have employees who are ethical, accountable, and who accept rules, there is a small chance that company will create strong ethical workplace.

There are many ways how managers can set appropriate ‘tone at the top’. The following steps can help in creation of ethical behaviour within organization. First and the most important step is the communication of Code of Ethic to all employees, so that they know what is
expected from them. Second step is to lead by example. Third step is to provide a safe way for the employees to report unethical behaviour of others. The last step is a rewarding system that will reward ethical behaviours of employees. (ACFE, 2009)

In many cases management thinks that, for example, e-mailing a Code of Ethics to all employees is enough to create ethical environment. This way of thinking is incorrect because many employees will not take seriously something that is just sent by e-mail, or will not even struggle to read it. Management has to explain to the employees the importance of Code of Ethics. His obligation is to communicate the Code within all levels of the organization. It has to be clear to everyone what is a Code of Ethics, what is his content, how can the Code help them to solve some ethical dilemmas, what is a punishment for unethical behaviour and what are the rewards for ethical behavior, etc. It is also recommended that management yearly explains Code of Ethics to employees, to remind them of its importance. Also, a good way of communicating the Code is by training. It is usually organized for new employees, to create a positive ‘fraud awareness’ and to make them understand Code of Ethics and its importance.

Leading by example refers to chief executives, officers and directors. If there is a Code of Ethics with certain values and rules, it is expected from management to comply with it and to show everyone what kind of behaviour is expected. They should stimulate ethical behaviour. This refers to support employees to anonymously report any behaviour that is not ethical or legal. There should be zero tolerance for fraudulent behaviour and everyone should know that. Every report regarding violation of Code should be rewarded and every fraud should be punished and announced to everyone, so that employees understand that the truth will eventually come out. It can be seen from the examples that some managers nurse and support unethical behaviour. Employees should have the ability to file those managers if they are pressuring them to do illegal things. But, on the other hand greed can cause even the most honest people to commit fraud. And now it is the most important for the companies to have healthy and honest environment and not to commit fraud because they will, in the end, harm themselves the most.

Providing a safe way for the employees to report unethical behaviour of others gives them more confidence in doing that. The most important thing in reporting fraudulent behaviour is the ability to do that anonymously. Whistle-Blowers and hotlines are some of the efficient ways for detection and prevention fraud (Coenen, 2008), so they should provide to employees a guarantee that they will not be revealed or that they will be protected from eventual trial. It
should be clear that it is accepted and welcomed to report any kind of committed or intended fraud. Management have the obligation to protect their employees from any embarrassment or occupations. Employees have to know that they are not doing anything wrong and that they will be protected.

The last step of setting appropriate ‘tone at the top’ is a rewarding system that will reward ethical behaviours of employees. After reporting fraud, employees should be adequately rewarded. Management has to reward any report that is in a spirit of Code of Ethics, so that employees see that they are doing the right thing. It is important to reward those employees because they did an excellent thing for the company. Firstly, they saved the cost of fraud (that can be very high), secondly they showed that they are honest employee, thirdly they exposed unethical employees and fourthly they showed that they care about the company. On the other hand, management has to punish employees that committed fraud because they are the example to others that there is a zero tolerance towards that kind of behavior.

Setting the appropriate ‘tone at the top’ is a key to an environment that supports a culture of honesty and integrity. Managers cannot rely only on written statements. They have to communicate Code of Ethics, be an example of acceptable employee, give the possibility to employee to report any behavior that is not complying with Code, reward those employees and punish employees that are doing against the Code. Financial crisis raised some concerns regarding Code of Ethics. Managers are in the situation when their companies are not doing well, the market is very sensitive to constant changes and the trust from all stakeholders is jeopardized again and they are under the pressure to ‘make numbers’. If the company has honest and ethical employees at all level within the organization than they will present reliable and realistic financial statements and behave in an ethical way. If the company has employees that are only profit oriented, than there is no such a Code of Ethics that can help them and eventually they will be revealed and punished by the market.

**Unethical behavior of auditors**

After explaining how appropriate ‘tone at the top’ can help in creation of a company that complies with Code of Ethics, it is very important to express the importance of Code of Ethics in audit profession. Unfortunately, all big corporate scandals are somehow connected to audit and fair presentation of financial statement. Since audit opinion is related to fair presentation
of financial reports, every scandal questioned their audit. The collapses of Arthur Andersen, Enron and Parmalat have put a big stain on audit profession.

Arthur Anderson was one of Big Five audit companies (together with PricewaterhouseCoopers, Ernst & Young, KPMG, and Deloitte and Touche). It was operating in more than 84 countries and employed more than 85,000 people. Arthur Andersen provided for its clients (large corporations) auditing services, non-auditing services, consulting services, tax service and more. This auditing company was an example of high integrity and competence till 2002. Collapse of Enron revealed many unethical behaviors by Arthur Andersen. During the investigation it was revealed that Arthur Andersen made several critical mistakes. Arthur Andersen was accused by the SEC for shredding documents and deleting e-mails, providing parallel auditing and consulting service, gave false unqualified opinion, and more. (Biegelman and Bartow, 2006) This scandal didn't question only independence and integrity of Arthur Andersen's auditors, but the independence, integrity and trust of auditors worldwide. Conflict of interest, lack of objectivity, independence and integrity were present in this case. Since then the audit profession is trying to regain the trust of public and shareholders.

Second fraud example took place in Italy. Parmalat was a big diary and food corporation. It was famous for its acquisitions around the world. Until the end of 2002 Parmalat Finanziaria S.p.A. was a multinational food group operating with more than 200 companies (from different industries) within more than 50 countries. It was doing great till 2003, when it was discovered that Parmalat was purchasing debt-ridden and loss making companies for more than a decade what cause approximately €14.5 billion debt. What happened in this example is that Parmalat's auditor Grant Thornton (GT), together with management, made fraudulent financial reports for a long time. They hid losses, overstate assets and understated debts. The way to hid losses was through various entities (the most important was Bonlat). Even when it was time to change auditor, management of Parmalat used GT network and made him secondary auditor, so that the new auditor (Deloitte Touche Tohmatsu) can't find out the truth about offshore entities. Thus, GT because of its small size and big proportion of profit that was generated from Parmalat, put integrity, independence and Code of Ethics aside and made the biggest fraud in Europe. (Ferrarini and Giudici, 2005)

There are many more examples of auditor’s unethical behavior. Many of them came from inappropriate ‘tone at the top’ that is profit-oriented, greed for high profit and bonuses, lack of
integrity, and lack of independence which is one of the biggest problem nowadays. Every Code of Ethics for auditor, whether it is from regulatory body of Big Four, states independence, integrity, objectivity, professional competence, professional behavior and confidentiality as a fundamental principles. If Code of Ethics is detailed and clear, what makes auditor to give unqualified for companies that are not doing well. In the following pages, it will be explained what kind of threats exists for auditors in complying with Code of Ethics.

**Threats of unsuccessful compliance with the Code of Ethics**

Independence, integrity, objectivity, professional competence, professional behavior and confidentiality are fundamentals of every Code of Ethics. It is important that all auditors comply with them in everyday business, but unfortunately they can be disrupted easily. IFAC (International Federation of Accountants) states some of the threats that can cause auditors and accountants to violate fundamental principles of Code of Ethics: (1) self-interest threats (arise when accountant or a part of his family have a financial interest from a company that he is auditing); (2) self-review threats (arise when accountant has to check his own judgment); (3) advocacy threats (can arise when auditor express opinion to that extent that can question his objectivity); (4) acquaintance threats (arise when professional accountant shows to much understanding toward interests of other); and (5) intimidation threats (arise when accountant's objectivity is jeopardized by threats). (IFAC, 2007). According to IFAC, there are two types of protection measurements that can eliminate or minimize those threats: (a) protection measurements established by profession, laws or regulations; (b) protection measurement established within the organization. (IFAC, 2007) Each of these measures can help auditors and accountants to detect, evaluate and respond to everyday ethical dilemma.

There are many measurements established by regulatory bodies and profession. Sarbanes-Oxley Act from 2002 made many changes for accounting profession. Section 101 established Public Company Accounting Oversight Board (PCAOB). This board is established to protect investor’s interests. Its duties are to register public accounting rules, adopt all kind of standards related to the preparation of audit reports (independence, ethics, quality control, etc.), conduct inspection of accounting firms, enforce compliance with this Act, conduct
investigation and disciplinary proceeding, etc. (Sarbanes-Oxley Act, 2002). This Act gave security to investors when it comes to reliability of financial statements. On other hand, it gave regulatory protection to auditors and accountants, but it also gave higher opportunity to regulatory bodies to notice if some audit firms are behaving illegally. Section 206 prohibits companies to employ accounting firms that had any business connection with company and therefore prevent possibility for the conflict of interest. (Sarbanes-Oxley Act, 2002). This Act is very important in preventing companies to employ former consulting firms.

New 8th Directive in European Union made big changes to audit profession in EU. According to this Directive, new ethical principles should be defined together with independence of auditors. This Directive also gives auditors more freedom and the opportunity to decrease pressure made by management, audit rotation is also mandatory so that there is no threat that auditor and management will create some kind of friendship. Furthermore, the establishment of audit committee is mandatory and auditors have to file reports regarding material irregularities within internal control and possible threats connected to lack of auditor's independence. Articles 21-24 from 8th Directive proposed measures that will protect independence for statutory auditors. Article 22 states that auditor should not carry out audit if he is in any kind of relationship with the company, or if his independence is compromised. It also states that auditor should not carry statutory audit if he feel any kind of threats (self-review, self-interest, advocacy, familiarity and intimidation). Article 21 from 8th Directive states that every Member State have to ensure that all statutory auditors adopted Code of Ethics, especially regarding their independence, integrity, objectivity and professional competence. (8th Directive, 2006) As it is stated above, governmental laws and regulations are set as a protection for auditors and audit firms from companies that expects from auditor or audit to participate in creation of fraudulent financial reports. The following protection measurements are the ones created within the client's company.

According to IFAC, protection measurements created within the client's company are the following: (1) measurements that helps persons that are not part of the board of directors to confirm or approve arrangement regarding execution of engagement between client and company in public practice; (2) client has experienced, competent and for the long time employees that will carry out management functions; (3) client has implemented internal procedures that assure objectivity during the approval of engagement that it is not related to assurance services; (4) client has corporate management structure that provide acceptable oversight and communication related to companies services. (IFAC, page 25) These are not
only protection measurements, there are also ones made by audit firms and ones related to engagement of auditor, but here it will be discussed measurements related to clients company.

Measurements listed above can help auditors to fulfill their duty as objective, independent, with integrity and professional competent employee. To achieve all that, auditors as well as accountants need support from the company management. This is similar to situation with employees. If auditor doesn't have freedom and ability to work independently and objectively, then his process of making opinion will not be entirely in the public interest. To ensure ethical environment for auditors, first thing is to start with engagement of the auditor. There should be few levels of people that decide which auditor to employee. If only board of director decide about engagement of auditor, then there can be problem of self-interest, since no one is checking their decision.

To maintain ethical environment, management have to have employees who are experienced, competent and trustworthy. Those employees who work for a company for a long time know how everything works and they can help auditors in finding or explaining some information. Their responsibility is to check if auditors have enough independence and access to relevant people and information.

Third, internal controls are very important for protection of auditors and accountants. There should be available hot line for auditors. They can discover some frauds by other employees, or some employees are not responding to them correctly, and if they don't have appropriate way to report that behavior eventually problems can arise. Audit committee can ensure independence for auditors if they are regularly checking communication between auditors and other employees and act when some situation is affecting auditor independence.

Oversight and communication, especially when communicating information relating to the preparation of financial statement, is crucial for auditors. When communicating with other employees it is important for auditor to have timely and useful information. It is important for them that the filtration of information is minimized within the company and that someone is inspecting the circulation of information. Managers should assure freedom and all resources for auditors if they have some problems relating to conduct of information necessary for reporting or creation of opinion, and they should also check that employees are behaving in appropriate way. Audit committee should check and report situation where auditor's objectivity or independence is jeopardized and report that to management or regulatory body.
Auditors as well as employees have some incentive or pressure to commit fraud. Their fundamental principles (integrity, independence, objectivity, etc.) that are basis for every Code of Ethics, are always under the pressure by management. Now, during this crisis it is very hard to comply with them and to work in an ethical environment. Sarbanes-Oxley and New 8th Directive created huge protection for auditors and accountants when it comes to minimizing pressure by management to commit fraud. They also made important integration of Code of Ethics within the company for auditors. Yet, if there is no adequate management and if auditors are not independent and objective, this crisis will serve as a period of fraudulent financial reporting and short-term profit.

**Recommendations for better compliance with Code of Ethics**

Survey conducted by Association of Certified Fraud Examiners on more than 500 randomly selected Certified Fraud Examiners (CFE's) revealed the increase of fraud compared to previous year (55.4 percent of representatives said that). Furthermore, the study presented that the increase of fraud is due to increase of the following factors (1) pressure- 49.1 %, (2) opportunity- 27.1% and (3) rationalization- 23.7%. (ACFE, 2009) According to this research, more than half frauds are committed under the pressure of other employees.

First important thing, especially during the financial crisis is appropriate selection of employees. It can be seen from above that efficient creation of ethical environment within the organization is an important precondition for fraud prevention. If there is no appropriate ‘tone at the top’, then it is difficult to create a culture with honest employees. When selecting CEO, or CFO or any other upper level manager, shareholders should carefully decide whom to select. Code of Ethics will just be words on the paper if there are no ethical and honest managers who will openly comply with it.

Second, Sarbanes- Oxley and New 8th Directive were introduced to prevent or minimize potential fraud scandals. But, the new scandals are rising again and auditing profession is jeopardized again. Maybe it is time to reconsider those laws and regulations. Maybe the penalties were not high enough, and the fee for discovering the fraud was lower that profit from it.
Third, the research showed that the increase of layoffs in the last 12 months decreased some internal controls. (ACFE, 2009) It is important that during the time of layoffs, especially if some 20,000 or 30,000 employees are fired, internal controls should be increased. The incentives to steal the money or some other assets from the company are present if employees know they will lose their job. Management should be very good prepared for this situation and they have to ensure an effective way for ethical employees to report such unethical behavior of their colleagues.
Conclusion

Frauds are an inevitable part of everyday business. They are seen through history within every industry and on all levels in the organization. Now, during this crisis, fraud can be even more present because managers attempt to commit fraud to exceed analyst's expectation and to please shareholders. On the other hand, they are pulled by their own greed, so they steal company’s money or assets. Furthermore, auditors are pressured by the management to issue an unqualified opinion, or their client is a big source of their income, and therefore auditors can issue a false unqualified opinion for client’s fraudulent reports, because of the fear of losing an important client. Anyway, strong internal controls and ethical working environment should reduce fraudulent financial reporting.

Code of Ethics is one of the ways to reduce fraudulent financial statements. It is a statement that provides guidelines to employees regarding acceptable moral behavior within the organization and give solution for some ethical dilemmas. Nevertheless, it is not enough just to have Code of Ethics in the organization. The obligation of management and upper level employees is to be an example for the rest of the organization. Management has to explain Code of Ethics to everyone, and more importantly, they have to comply with it in every situation. If employees notice their manager is not behaving according to the Code, they can assume that unethical behavior is acceptable. Management has to create ethical working environment. They have to provide anonymous hotline so that employees can fearlessly report unethical behavior. And they have to adequately reward those employees that report noncompliance with the Code, and punish those who commit fraud.

Due to financial crisis, investors, shareholders and public are again questioning audit profession. Financial crisis in 2002 and collapse of Enron, WorldCom and Arthur Andersen had a great impact on laws and regulation. Sarbanes-Oxley Act from 2002 in the US and New 8th Directive in EU straightened the position of auditors and their independence. Since the most frauds are committed under the pressure, it is very important to ensure auditor's independence. Auditors can be protected from various sides. They can be protected by the laws and regulations, and by the organization (their own and clients). The most efficient is the combination of both. Code of Ethics is helping auditors to ensure objective, independent and honest conduct. Since they are under the magnifier, especially in the last few months, Code can help them to decide which behavior is ethical.
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NEOLIBERAL ECONOMIC DOCTRINES, FREE MARKET FUNDAMENTALISM AND THEIR IMPACT ON THE FORMER SOCIALIST COUNTRIES OF EUROPE

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Abstract:
The current world economic crisis serves both as a media through which previously generated economic faults became widely transparent and as a catalyst which speeded up the progress of questioning and rethinking the widely accepted neo-liberal economic doctrines. After the collapse of the Soviet Union, western powers lead by the United States found themselves being the only economic, political and military superpowers. Their foreign policy goals shifted from battling fascism and later communism to spreading democracy, free market principles and capitalism. The so-called “transition economies”, of which Croatia is a member, became a clear example that quick and sudden adoption of free-trade and liberal capitalist principles bring, among all the benefits, a general problem of over dependence on the availability of foreign capital and an addiction to import goods, services and knowledge. Transition economies found themselves not wealthy enough and not having the adequate level of technological and industrial development to cope with the western companies and products, making them vulnerable to foreign takeovers and rising indebtedness. The current financial and economic crisis made this very evident and gave the opportunity to rethink economics.
Understanding the genealogy behind the neo-liberal economic doctrines

Market fundamentalism and neoliberal capitalism appeared in the United States of America and the western European countries during the 1970-s and became the mainstream economic doctrine in the beginning of 1980-s. These doctrines are still in use today and are silently enforced in all less developed and transitional economies in the world. The neoliberal concept came about when both, the government intervention approach introduced by John Maynard Keynes in the 1920-s and 30-s and the “welfare state” project supported by most of the European western countries, came under critique of simply not being good enough to continue the economic expansion to which most of those countries were used to since after World War II. The most significant international event that shook the western economies is the 1970-s oil crisis caused by OPEC oil supply cuts, namely the rise of oils prices in 1973 from 1.9 $/bbl to 9.76 $/bbl and then in 1979 from 12.6 $/bbl to 28.76 $/bbl. The drastic increase in oil prices caused an increase in inflation, decrease of GDP, a fall in production levels and a rise in unemployment. It was a typical cost-push inflation scenario that caused a deep structural recession. In addition, the western economies came to the point that Keynes called the physical limit of production\(^1\). Governments were, following the Keynesian approach, for twenty five years deliberately using fiscal and monetary policy to increase the aggregate demand. Keynes argued persuasively that increasing aggregate demand was something governments could and should do since he realized that if an economy is not at its full employment the rise of AD would simply be followed by an increase in production without causing an increase in price levels (Keynesian L-shaped short-run aggregate supply curve)\(^{(1)}\).

This caused large government interventions in the markets and worked perfectly well until western economies did reach their physical limit of production and until prices went sky rocketing.

The crisis pushed the business community and professors from the University of Chicago to propose a long term solution to the problem – the return to the free market based approach, the abandonment of extensive government interventionism, and focusing mainly on monetary

\(^{1}\) Keynesian L-shaped short-run aggregate supply curve

Source and explanation from: Glanville A., Economics from a global perspective, 1997
policy as means of controlling inflation and interest rates. At the end of 1970-s they proposed a return to the classical liberal economic principles that were first introduced two centuries ago by Adam Smith (1723 – 1790), David Ricardo (1772 – 1823) and Jean Baptiste Say (1767 – 1832). Those three economists laid the foundations of capitalism and the liberal free trade economy. Adam Smith in his famous work “An inquiry into the Nature and causes of Wealth of nations”\(^2\) stated the basic principle of capitalism: the wealth of nations comes from every individual’s interest to satisfy his own personal needs and to increase his wealth and social status. In order to achieve these goals individuals must be granted with complete economic and social freedom while respecting the law. Adam Smith noted that only free markets are able to satisfy each individual demand and provide the needed product supply at a fair price that will be set by the “invisible hand” of the market. David Ricardo, one of the founders of the classical approach to the theory of money, formulated the “iron law of wages”\(^3\)” in his well known argument that wages naturally tended towards a minimum level corresponding to the subsistence needs of the workers\(^4\). According to him, every attempt of government intervention in the labor markets and any intention to increase the minimum wages by means of the law creates an even greater instability and is doomed to fail. Jean Baptiste Say is the author of the third crucial axiom of classical economic thought, namely that there will always be a macroeconomic balance between supply and demand and that production will always create enough income to buy everything that is produced. In other words he states that governments should not intervene in the markets both at the domestic and the international level so to allow the economic prosperity. The classical “laissez-faire” principle was guiding all of the western economies until the Great economic depression of 1929 – 1933 when Keynes proposed and Roosevelt put to practice the government interventionist approach in order to correct the faults of the free liberal-market doctrines.

The persona behind the re-installment of the liberal economic doctrines in the western world at the beginning of 1980-s and the fierce advocate of market fundamentalism and free trade economics was Milton Friedman (1914 – 2006), a former professor at the Chicago University and the leader of the famous Chicago school of inflation. In one of his most prominent books, 

\(^2\) Smith, A., Istraživanje prirode i uzroka bogatstva naroda, Masmedia d.o.o, Zagreb, (eng: An inquiry into the Nature and Causes of Wealth of nations)  
\(^4\) Ibid.
Capitalism and freedom\(^5\) (1962), Friedman openly advocated the minimization of the role of government in a free market and the acceptance of market forces as the only effective and efficient resource allocation mechanisms. One of his most controversial claims is that everyone runs on greed\(^6\). In order to effectively satisfy the inherent human greed and desire for wealth and new products one must allow free trade and minimal government intervention to be the basis of satisfying the large demands of consumers at a fair price. His works and the lobbying of owners of capital in the US and other developed countries lead to the acceptance of neo-liberal economic doctrines, free trade principles and the market-lead strategies that would eventually become the basis of International monetary fund actions and the World Bank. These principles would be installed in the governments of the former soviet block and in all the less developed countries that wanted and still want to become a part of the capitalist world. However, one must note that the centers of international financial power, namely the IMF and the World Bank, moved further away from Friedman’s “basic” monetarism and adopted the raw and simplified version of monetarism that is advocated by neoclassic theorists J. Sachs, T. Sargent and others\(^7\). This rough version of monetarism, which appears inside the neo classical economics and which the IMF recommends to be used by post-socialist countries, differs much from the Friedman’s version and Friedman has distanced himself from it during the 1990-s.

**From 1979 onwards – time of neoliberalism and deregulation**

As we have previously mentioned, one of the first and most prominent events that lead to the return to the market as the only true regulator of the economic processes was the oil crisis of the 1970-s. As Milan Mesarić states in his work “(eng.) The long term non-sustainability of

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\(^5\) Friedman, M., Capitalism and Freedom, 1962
\(^6\) An excerpt from an interview with Phil Donahue in 1979- Milton Friedman discusses greed, [http://www.youtube.com/watch?v=RWsx1X8PV_A](http://www.youtube.com/watch?v=RWsx1X8PV_A)
\(^7\) Medić, Đ., Zašto su monetaristička teorija i politika neprimjerene za poticanje ekonomskog rasta u Hrvatskoj?, Računovodstvo i Financije, 2001 (eng: “Why are monetary theory and policy inapplicable for the stimulation of Croatian economic growth?”)
market fundamentalism and neoliberal capitalism.”⁸, Ronald Reagan’s republican administration and conservative government of Margaret Thatcher fully accepted the new neoliberal course in economic politics upon coming into power. Ronald Reagan firstly changed some provisions of the Sherman Antitrust bill that was put forth by Congress in 1960 in order to loosen the restrictions on monopoly, after which he decreased the jurisdiction of the Federal Trade Commission. At the same time he increased the taxes on consumption, and decreased the taxes on assets and capital and made a series of other changes whose point was to limit the sphere of government intervention in the markets and allow the expansion of corporations and companies which would allegedly, under the terms of free trade and low taxes, bring benefits not only to the owners of capital but also to workers and the overall population through increased economic activity and the rise in available jobs. Regarding the financial markets and institutions, USA started in the mid 1980-s a long period of deregulation and re-regulation. The process included a large liberalization of financial markets, especially the stock and bond markets, and the overall deregulation of banking rules. The process in the USA ended with the “Financial Services Modernization Act”, or the Gramm–Leach–Bliley Act⁹ from 1999 that allowed banks to operate in all of the available financial transactions and businesses making them the full-service financial institutions. Similar deregulation procedures were adopted by Japan and the EU-12 countries, with respect to specific economic circumstances and differences in each of those countries, creating the fully liberalized international financial markets, the free international flow of financial instruments, and a large speculative foreign currency exchange market. The floating exchange rates are supposed to ensure external balance by reaching an equilibrium rate and set the “true” price of the currency. Government intervention in the currency exchange market is therefore something that market liberal fundamentalists will never advise. But how then did the price of dollar expressed in yen fluctuate between 80 and 380 yen, while the external balance of the USA remained in huge deficit?¹⁰ Market fundamentalists seem not to be able to find an answer.

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⁹ http://banking.senate.gov/conf/- details about Gramm – Leach – Bliley Act

¹⁰ Amin S., Economic globalism and political universalism: Conflicting issues?, page 588, Journal of world-systems research, 2000
All the above set the stage for the large expansion of corporations, multinationals and conglomerations owned mainly by stockholders of the western developed countries which exponentially expanded the sales of their products to new markets and moved their production lines to countries with lower production costs and lower taxes. At the same time the western financial sectors expanded rapidly with the appearance of financial innovations and derivatives and with the increased inflow of money from increased and liberalized international trade. The WTO did everything to diminish the barriers to free the trade among member nations, while the income from trade with the newly “opened” transition countries surged into the trade accounts of western countries. The financial institutions in developed countries, especially banks, soon found themselves in a situation where they could extensively lend money to transition economies on the ground of their acceptance of democracy, capitalism, free trade and their incorporation in the various western-controlled transnational organizations such as the WTO. In reality, those financial institutions were lending money so that the former socialist economies could pay the large amounts of imports. Their demand for western products, diversity and style of living was huge and there was no way for those countries to balance the volume of imports with their exports. The industrial power and the level of technological advancement of former socialist countries, their productiveness, and the quality of their products was no match for western industries.

It seems that western economies, namely the United States, did not think or did not want to openly consider the possible problems when they engaged in the strong economic expansion towards transition economies. In the beginning of 1990-s, developed western countries finally won the half a century long struggle to beat socialism both in the military and in the economic sense. The Cold war was over and there was no other power in the world to counterbalance the political, economic and military power of the United States and the larger EU countries (Germany, France, England…). The long term mission of their foreign affairs now became to turn the socialist countries into democratic ones and to change their economies into capitalist ones. The proof for this claim is the history itself, but we would also like to mention the book “The Superpower myth – the use and misuse of American might”\(^\text{11}\) by Nancy Soderberg, a senior foreign policy advisor for President Bill Clinton from the 1992 campaign through the end of his second term in 2001. In several occasions she stated that one of the objectives of

Clinton administration was to “resurge American institutions and values across formerly communist Eastern Europe”. These values concerned free trade market oriented capitalism with minimal government intervention and free flow of capital.

However, the induced change was rather quick, sharp and intense in the sense that countries that were used to government control and planning of every sector of their economy now were suddenly working under the principles of neo-liberal capitalism and free trade. Government property was privatized over the course of several years, imports of foreign goods became widely available while domestic exports could not compete, and the usually large and inefficient industrial companies were laying-off the excess of workers to become economically and financially efficient. The social goals suddenly became less important than the profits of the owners of capital. The problem was that everyone, both the workers and the new capitalists, suddenly found themselves in a predatory economic system that they have never experienced before.

The acceptance of democracy and abandonment of socialism was somehow naturally connected with the immediate acceptance of free trade and neo-liberalism, while the same government interventionism that brought the welfare state in the western block after the WW2 was not even considered an option. This is one of the key points of this paper: the governments of transition economies and of those that recently passed through the period of transition could have and should have accepted democracy without immediately pushing their economies to adopt market fundamentalism and neo-liberal capitalism.

**Impact of sudden adoption of market fundamentalism and neoliberal capitalism on the transition economies of Europe**

Most of the transition economies during the starting period of transition were encouraged by the IMF to maintain price stability and reduce fluctuation of exchange rates, but they implicitly sacrificed their own productivity and exports. All of this was proposed for the sake of attracting the foreign direct investments and increasing the volume of international trade. On the other hand, the real sector was left to maintain itself solely on the proposition that the
market will correct every instability it might occur. Obviously, that was not the case because most of the transition countries were unprepared for the fundamental change and shift from planned towards market economy. The induced shock and blind trust towards market fundamentalism caused increasing inequality of income and continuous growth of external debt and a fall in industrial production and potential.

Figure 1: Percentage of external debt in GDP of transition countries

\[\text{Note: Legend stands for Czech Republic, Croatia, Hungary, Slovakia, Slovenia}\]
Increase of GDP was somewhat evident, but fueled by a large role of FDI and foreign debt. The output of transition economies was falling continuously until 1999, and some countries have only recently reached the production levels of 1989.

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13 World Bank, Transition, the first ten years, World Bank, 2002
Therefore we can surely conclude that transition economies owe the rise in their GDP mainly to the financing expenditure by debt, a problem that future generations will face when debts will need to be paid.

The case of Croatia

Croatia is a country that has, unlike other European former communist countries, suffered from a four year long war for independence from Yugoslavia and Serbian forces from 1991 - 1995. This caused that all the problems faced by other countries that were changing into a democracy with capitalism were much more emphasized. As in other transition countries, unemployment rapidly increased and industrial activity decreased as large industrial government operated companies had to be restructured since they were highly inefficient in comparison to their western privately owned counterparts.

14 IMF occasional paper, Growth experience in transition countries, IMF, 1999
The foreign direct investments largely increased from 1993 onwards, but their structure is problematic because most of the investments were made by selling Croatian companies, financial institutions and government property in order to finance public expenditure and to cover the huge insolvency of newly and badly privatized companies. Gross foreign dept increased rapidly from the very beginning of Croatian independence, and it does not show any signs of decreasing. If one looks at the graph below, one can see that all of the sectors of the economy contributed to the indebtedness.

15 Authors calculation according to statistical data from www.hnb.hr.
The trade balance in Croatia shows that both the aggregate exports and the aggregate imports continually rose, but that exports were and are nowhere near the point of covering the imports. Croatia has an extremely large trade balance deficit which is mostly covered by more and more loans from the same countries from which Croatia gets most of its imports. This is a text-book situation where a country is completely dependant on the availability of foreign capital and which takes loans not for the sake of investing into domestic production, but for the sake of consumer expenditure. The basis for such an unsustainable economic situation is found in the main goals of the Croatian government and its monetary policy. The primary goals are the stability of the exchange rate of Kuna, and the stability of price levels. Everything else, especially employment and relative competitiveness of domestic industry falls victim to those two main goals. International monetary fund strongly advised Croatian authorities that it is vital to keep inflation low and exchange rate stable, with the notion that every other macroeconomic factor instability will simply correct itself under the influence of the market forces.

\[\text{16} \, \text{www.hnb.hr}\]
Figure 7: Trade balance in Croatia during the transition period

Authors calculation according to statistical data from www.hnb.hr.
Conclusion

We will not continue to provide evidence of the effects of neo-liberal economics, but we will state the main result. Monetarist and neo-liberal doctrines do not advocate or have any proposals in regards to government intervention in the real economy; they tend to leave the production, employment and resource allocation, and international trade relations to the spontaneous forces of demand and supply. At the same time they promote the usage of monetary policy and the money supply to suppress inflation, to stabilize the exchange rate in order to allow foreign investments and larger trade volume, and finally to make sure that foreign debts are fully paid. In other words, a government in the neo-liberal economy should limit its intervention only to the necessary fiscal actions to provide enough income for the state budget, and to the monetary policy of adjusting the money supply. The rest is to be in the hands of the “invisible hand of the market”\(^\text{18}\). These concepts of free trade and neo-liberal capitalism were intentionally imposed on the transition economies in the early 1990-s by the IMF, the World Bank and other international financial and trade organizations. It was claimed that the only way to prosperity was to reduce the role of government, to implement privatization of state owned companies, to liberalize trade, to allow the free flow of capital, to reduce protective barriers to foreign trade, and to allow the foreign capital to enter without many restrictions. The creation of capital markets and the stock exchange was supposed to allow quick and effective transformation of various forms of property into money and vice versa, while opening up the economy to international financial markets was supposed to bring in the necessary capital to revitalize it. Transition countries have widely accepted these proposals and have suddenly and abruptly adopted and implemented them in their economies.

The results presented in the previous chapters are not quite what the neo-liberal economists and free market fundamentalists have expected. Countries that are less developed, that have a smaller productive capacity and that do not have a large accumulation of capital and wealth cannot compete in the free international markets with developed and rich countries that have a

\(^{18}\) Medić, Đ., Zašto su monetaristička teorija i politika neprimjerene za poticanje ekonomskog rasta u Hrvatskoj?, Računovodstvo i Financije, 2001, (eng: "Why are monetary theory and policy inapplicable for the stimulation of Croatian economic growth?")
strong financial background and a developed industry. Former communist countries opened their gates towards market economies while being unprepared and weak. Average citizens wanted the same lifestyle as their western neighbors, they wanted a large range of quality goods, they wanted shopping malls, new cars, and above all they wanted to become their own boss – to become an entrepreneur. Governments, that now became democratic and had to satisfy their voters to get re-elected every four years, did everything to satisfy the wants of the population. With the lack of domestic capital and an inefficient industry the only way to achieve the “consumer society” was to get foreign capital from international banks and other financial institutions. Governments themselves had to obtain foreign loans to finance their ever increasing expenditure, while a large part of domestic financial institutions were taken over by western European bank groups. A clear example is Croatia where 90% of the overall bank assets are in the hands of foreign financial institutions!\(^\text{19}\) Bank assets in Croatia were rapidly and continuously increasing from 1997, and they more than tripled by 2006. The sources of the sudden rise of bank investments are mostly and unfortunately loans from their foreign owners.\(^\text{20}\)

**Available solutions for the Croatian economy – applicable to other similar countries**

Instead of blindly following everything that the US, the World Bank, the IMF and EU require from a country such as Croatia, governments should consider a different economic approach – the concept of industrial development suited for small and open economies instead of the concept of dependence and debt\(^\text{21}\). For almost 20 years Croatia has willingly adjusted itself to the requirements of the developed countries, instead of creating its own economic policy that would finally revitalize its industrial production. One of the things that should be immediately implemented is some form of encouragement from the Croatian Central Bank to the

19 The ownership structure of Croatian banks according to the shares in the total assets (1996 – IX/2006) – official data from Croatian National bank (www.hnb.hr).


21 Medić, Đ., Zašto su monetaristička teorija i politika neprimjerene za poticanje ekonomskog rasta u Hrvatskoj?, Računovodstvo i Financije, 2001, (eng: “Why are monetary theory and policy inapplicable for the stimulation of Croatian economic growth?”)
commercial banks which direct the bulk of their credit activity into financing domestic industrial production. Currently, commercial banks are not allowed to have more than 12% increase in assets per year. But, an exception could be made to those banks which will direct 60% of their investments into industrial production, an investment strategy that Croatian banks have not implemented for more than 15 years. This would encourage banks to decrease the financing of consumption and start investing into production. The second and more important solution should come from the government in the form of clear and decisive industrial, financial and export strategy plans for the minimum of 10 years. This strategy should be adjusted according to the special economic circumstances in Croatia and should not be under foreign influence.
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Abstract:
This paper presents microeconomic and macroeconomic aspects of current financial crisis which originated in the United States in 2007 and spread all around world. Due to the breakdown of real estate markets and significant increase in non-performing subprime loans, all segments of financial markets faced with serious difficulties. The contagion effect was transmitted through global interbank market consequently pulling down the real economy. Detailed analyses of banking institutions will be presented for Central and Southeastern European countries. Through indicators such as the degree of financial leverage, this paper will demonstrate more prominent effects of the crisis in advanced economies than in emerging and developing economies resulting in a need for stronger cooperation between those economies to restore confidence in financial market.

Keywords: contagion effect, deregulation, emerging and developing economies, subprime loans, vulnerability
Introduction

It is without a doubt that the crisis in financial markets has marked the beginning of the 21st century. Moreover, it is believed that it would have an impact on the whole global economy in the years to come.

For this exact reason, origins and causes of this crisis need to be identified, as well as means of preventing such distortions in the future. Historical evidence identifies subprime loans as microeconomic trigger factors of this crisis. Issued in the U.S., these are generally referred as loans extended to people with poor or limited credit histories. These credits also differentiate from prime credits by size of the loan, structure of the loan, ratio of borrower debt to income or assets, ratio of loan to value or collateral, and in documentation provided which do not meet institutional underwriting guidelines for prime mortgages. Due to higher risk premium, subprime credits are extended with higher interest rates on average.

Value of collateral, which is in most cases value of real estate, is significant factor affecting repayment of the loan. When market value of real estate drops under nominal value of mortgage loan, many borrowers would stop paying the loan. Exactly that happened in USA after 2007.

The main problem that occurred in the process of credit expansion is underestimation of problems like asymmetric information, moral hazard and adverse selection. Increase of credit and market risk for those banks emerged as a consequence of these problems.

The aim of this paper is to show, in more detail, the causes of the crisis, how the crisis spilled over to other countries of the world and why countries were not equally affected by it.
**Subprime crisis**

After 2005, conditions of high solvency, low interest rates and growth of real estate prices resulted in expansion of mortgage loans in the U.S. market.

Permanent shortage of capital in banks, required for meeting the high demand for loans, was being compensated by securitization. Banks regularly, in relatively short intervals, sold their portfolios of mortgage loans to special purpose vehicles (SPVs). Some SPVs issued short-term securities, usually commercial papers based on the expected cash flows associated with repayments of underlying credit. Commercial papers were offered for sale to all interested investors. After repayment due, SPVs issued new mortgage backed securities. Credit risk was therefore transferred onto the investor, who was willing to buy the security issued on the basis of credit portfolio.

It was common for the credit process in the USA to be fragmented i.e. divided into numerous independent intermediaries (mortgage broker, bank, federal agency) and securitization only led to further fragmentation. The problem of multiple intermediaries is that any party in the process could have more or better information than other. There was greater risk of asymmetric information between intermediaries.

Under the influence of globalization, it was not unusual for the investor or underwriter to be situated in another country or on another continent. This is a reason why location of the expected loss also changed. Because of this particular reason the crisis spilled over, at such a fast rate, to almost every country in the world.

It is perfectly clear that both the regulatory mechanism and credit rating system have failed here. Agencies assigned credit ratings to emissions of commercial papers without completely understanding the fundamental risk they carried. They also used assessment methods which were inappropriate for that kind of financial products.

On the other hand, the investor simply accepted these credit ratings without questioning methods and potential conflicts of interests of agencies which were providing both advices to the issuer and ratings. This made a large increase in number of emissions of securities based on credit portfolios possible.
Regulatory mechanism failed because regulators only regulated financial leverage in banks through capital adequacy, but other participants in the securitization were not well and efficiently regulated.

The first sign of crisis, the fall of prices in USA real estate market, went off almost unnoticed in 2005. From the perspective of regulators on U.S. market it was seen as a local occurrence, rather than a global trend, until the dramatic real estate price crash happened in 2006. The new FED governor, Mr. Ben Bernanke, believed that by increasing interest rates he would be able to crush the real estate market bubble. But he underestimated the negative impact of the real estate price crash on the overall credit and economic activity.

At the beginning of August 2007 a crisis occurred on the interbank market. Major Banks, not knowing the exact loss figures for institutions involved in the subprime crisis, stopped lending to each other. Central banks were forced to pump huge amounts of money into the system in order to maintain liquidity. The severity of the crisis can be best expressed by the number of interventions, new measures and instruments of central banks in order to stabilize the financial market.

After serious negative effects on financial market, countries have joined together to save the banks all over the world, providing them with much needed capital. Some countries also nationalized some banks in the process. In order to reestablish the trust in the security of banks, many governments increased the amount of insured deposits.

Today, it is a well known fact that subprime credit portfolios did not pass the criteria of statistical predictability of losses. The increase of their relative importance in the mortgage market and increase in volume of securitization based on these portfolios have marked a big structural change. That change could not have been described well or predicted by any statistical model.
Spillover effect

Many mergers and acquisitions in the last 15 years resulted in huge international banking groups which operate throughout the world. They become the key agents on the global financial market.

Since the banks are the main creditors and organizers of all activities, it was natural for them to become the primary transmitters of the crisis on real economy. The crisis was spilled over from one country to another through losses in the banking sector because major banking institutions have their own subsidiaries in almost all segments of financial market all around world.

In addition, crisis was carried into another financial market because of structured financial products, especially securitization. The contagion effect was also accelerated by the increased fragmentation of the credit process structure, which involves numerous intermediaries. Due to high returns on investments in financial markets, the influence of the crisis extended not only to investment institutions but also to conservative institutions and countries. The crisis is also indirectly transmitted through the contraction of credit activities in the banks.

Conclusion is that the bigger are the bank losses, the harder it will be for the banks, and its subsidiaries and the economy as a whole to recover. The occurrence of the crisis indicated that not enough attention and care was devoted to keeping a valid record of solvency and liquidity risks. Consequently, the regulators will have to improve the overall quality of risk management in times to come.
Central and Southeastern European countries' banking systems in crisis

So far we focused on defining potential reasons for increased vulnerability of financial sector. Now we will present a detailed analysis of banking institutions in Central and Southeastern European countries. The best way for demonstrating evidence of stronger crisis effects in some countries is analysis through a variety of indicators. All indicators presented in this paper are based on authors’ calculations using data from International Financial Statistics (IFS).

Analysis of banking institutions

The degree of financial leverage is a very important indicator for predicting influence of crisis on banking institutions. Relatively low capital ratio of banks in some country, or percentage of banks capital to its assets\(^{22}\), implies increased vulnerability of banking sector in the whole country.

\(^{22}\) In banks assets are included: Reserves, Other Claims on Monetary Authority, Foreign Assets, Claims on Central Government, Claims on Other General Government and Claims on Other Resident Sector.
Table 1: Financial leverage for banking institutions in Central and Southeastern countries

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<tbody>
<tr>
<td>Lithuania</td>
<td>23.54</td>
<td>26.00</td>
<td>25.49</td>
<td>23.43</td>
<td>14.39</td>
<td>14.43</td>
<td>12.11</td>
<td>9.91</td>
<td>8.25</td>
<td>7.97</td>
<td>8.16</td>
</tr>
<tr>
<td>Poland</td>
<td>11.45</td>
<td>11.29</td>
<td>11.10</td>
<td>11.21</td>
<td>11.69</td>
<td>11.30</td>
<td>10.91</td>
<td>18.36</td>
<td>17.51</td>
<td>15.73</td>
<td>14.47</td>
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<tr>
<td>Romania</td>
<td>14.70</td>
<td>10.06</td>
<td>12.06</td>
<td>12.50</td>
<td>17.18</td>
<td>15.88</td>
<td>15.09</td>
<td>13.56</td>
<td>13.44</td>
<td>11.41</td>
<td>9.20</td>
</tr>
</tbody>
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Source: Authors calculations based on IFS data

The most vulnerable country in this analysis is Lithuania as financial leverage in that country has decreased from highest level in 1996 to lowest level in 2007. Many banking institutions have also decreased their capital ratio in order to earn more profits but some banks, like those operating in Croatia, started increasing their capital ratio from 2004 onwards, thus making them less vulnerable.

The reasons for increasing capital ratio in Croatia can be found in continuous efforts of Croatian National Bank to protect stability of financial sector thus limiting impacts on the whole economy. Considering the results of calculations stated above, it is possible to predict stronger crisis effects in Hungary, Estonia, Slovakia, Romania and Lithuania than in other countries included in this analysis.

Of course, provided that other variables and factors do not change. This is not the case. For that reason, we focused on a larger set of selected indicators for different banking institutions across countries in 2007 to identify which countries would face greater difficulties in facing with this crisis.

23 All numbers are expressed as percentage
Table 2: Selected indicators for banking institutions in Central and Southeastern European countries in 2007

<table>
<thead>
<tr>
<th>Country/Indicator</th>
<th>Capital/Assets</th>
<th>Capital/Total credit(^{24})</th>
<th>Total credit(^{25})/Deposits</th>
</tr>
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<tbody>
<tr>
<td>B&amp;H</td>
<td>13,0%</td>
<td>21,2%</td>
<td>98,6%</td>
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<td>Bulgaria</td>
<td>11,2%</td>
<td>15,2%</td>
<td>111,4%</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>11,8%</td>
<td>17,2%</td>
<td>91,0%</td>
</tr>
<tr>
<td>Croatia</td>
<td>12,8%</td>
<td>17,9%</td>
<td>111,5%</td>
</tr>
<tr>
<td>Estonia</td>
<td>9,3%</td>
<td>12,6%</td>
<td>198,6%</td>
</tr>
<tr>
<td>Hungary</td>
<td>9,6%</td>
<td>11,9%</td>
<td>161,6%</td>
</tr>
<tr>
<td>Lithuania</td>
<td>8,2%</td>
<td>10,3%</td>
<td>170,6%</td>
</tr>
<tr>
<td>Poland</td>
<td>14,5%</td>
<td>17,3%</td>
<td>117,4%</td>
</tr>
<tr>
<td>Romania</td>
<td>9,2%</td>
<td>13,5%</td>
<td>122,2%</td>
</tr>
<tr>
<td>Slovakia</td>
<td>9,5%</td>
<td>14,4%</td>
<td>96,1%</td>
</tr>
</tbody>
</table>

Source: Authors calculations based on IFS data

Banking institutions having relatively high capital ratio also have relatively high ratio of capital to total credit which indicates their robustness in a potential crisis, mostly as they are able to rely on their own funds to cover for credit losses. Taking the first two indicators into account, the least vulnerable countries are Poland, Bosnia and Herzegovina (B&H), Croatia, Czech Republic and Bulgaria. If we were to consider the third indicator, it is possible to observe total credit exceeding deposits by almost 100% in countries like Estonia, Hungary and Lithuania, making them very dependent on foreign funding and thus exposed to spillovers from global markets. Banking institutions in those countries provide credit from own funds, borrowing in the money markets, borrowing from mother banks or from other banks, resulting in higher risk of transmission of contagion effect than in other countries included in this analysis.

Due to an ongoing trend of financial deregulation, credit expansion can become unsustainable due to a deterioration of the quality of banking placements, consequently signalizing higher

\(^{24}\) Without Other Claims on Monetary Authority

\(^{25}\) Without Other Claims on Monetary Authority
risk for that particular banking institution. In Figure 1 we present data for credit growth on the annual basis starting from 1997.

*Figure 1: Annually credit placement growth in period 1997-2007*

![Credit expansion 1997-2007](image)

*Source: Authors calculations based on IFS data*

Data in the Figure confirm higher vulnerability in already mentioned countries (Lithuania, Romania, and Estonia) due to higher annual growth of credit of their banking institutions than in other countries. High credit expansion may imply less caution in evaluation process of credit score of every potential credit client which consequently leads to higher credit risk for banks. However even this conclusion should be interpreted with great caution. Higher rates of growth of credit may be associated with lower base (initial condition).
Impacts on real economy in Central and Southeastern European countries

Regardless to whether the current financial crisis had stronger or weaker impacts on countries in Central and Southeastern European countries, all banking institutions were forced to cut down credit supply and introduce rigorous risk management measures. Banks were no longer able to finance entrepreneurs and households like in times before the crisis which resulted in a slowdown of the entire economy. Many countries registered negative GDP growth, decreased production and exports and the inevitable increase in unemployment. In Table 3 we present GDP data for countries from central and southeastern countries that are members of European Union, to demonstrate impacts of financial crisis on the real economy. We use these data to check if our predictions from previous section were correct.

Table 3: Annual gross domestic product: volume growth

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bulgaria</strong></td>
<td>5.4</td>
<td>4.1</td>
<td>4.5</td>
<td>5.0</td>
<td>6.6</td>
<td>6.2</td>
<td>6.3</td>
<td>6.2</td>
<td>6.0</td>
<td>4.5 f</td>
<td>4.7 f</td>
</tr>
<tr>
<td><strong>Czech</strong></td>
<td>3.6</td>
<td>2.5</td>
<td>1.9</td>
<td>3.6</td>
<td>4.5</td>
<td>6.3</td>
<td>6.8</td>
<td>6.0</td>
<td>4.4 f</td>
<td>3.6 f</td>
<td>3.9 f</td>
</tr>
<tr>
<td><strong>Estonia</strong></td>
<td>9.6</td>
<td>7.7</td>
<td>7.8</td>
<td>7.1</td>
<td>7.5</td>
<td>9.2</td>
<td>10.4</td>
<td>6.3</td>
<td>-3.6</td>
<td>-1.2 f</td>
<td>2.0 f</td>
</tr>
<tr>
<td><strong>Lithuania</strong></td>
<td>4.2</td>
<td>6.7</td>
<td>6.9</td>
<td>10.2</td>
<td>7.4</td>
<td>7.8</td>
<td>7.8</td>
<td>8.9</td>
<td>3.1</td>
<td>0.0 f</td>
<td>-1.1 f</td>
</tr>
<tr>
<td><strong>Hungary</strong></td>
<td>5.2</td>
<td>4.1</td>
<td>4.1</td>
<td>4.2</td>
<td>4.8</td>
<td>4.0</td>
<td>4.1</td>
<td>1.1</td>
<td>0.5</td>
<td>0.7 f</td>
<td>1.8 f</td>
</tr>
<tr>
<td><strong>Poland</strong></td>
<td>4.3</td>
<td>1.2</td>
<td>1.4</td>
<td>3.9</td>
<td>5.3</td>
<td>3.6</td>
<td>6.2</td>
<td>6.6</td>
<td>4.8</td>
<td>3.8 f</td>
<td>4.2 f</td>
</tr>
<tr>
<td><strong>Romania</strong></td>
<td>2.1</td>
<td>5.7</td>
<td>5.1</td>
<td>5.2</td>
<td>8.5</td>
<td>4.2</td>
<td>7.9</td>
<td>6.2</td>
<td>7.1</td>
<td>4.7 f</td>
<td>5.0 f</td>
</tr>
<tr>
<td><strong>Slovakia</strong></td>
<td>1.4 e</td>
<td>3.4 e</td>
<td>4.8 e</td>
<td>4.7 e</td>
<td>5.2 e</td>
<td>6.5 e</td>
<td>8.5 e</td>
<td>10.4 e</td>
<td>6.4 e</td>
<td>4.9 f</td>
<td>5.5 f</td>
</tr>
</tbody>
</table>


Until 2007, real GDP has recorded growth almost in every country; however, the slowdown trend dominated the next year, only to result in negative growth rates the year after. For countries that we characterized as more vulnerable (Hungary, Romania, Slovakia, Estonia and Lithuania) GDP growth was slowing more than in other countries, e.g. in Poland.

26 % Change on previous year; calculated on data at chain-linked volumes
27 European Commission forecasts
28 Estimated value
The most favorable forecasts for 2009 and 2010 are for Romania and Slovakia, and the least favorable forecasts are for Estonia, Lithuania and Hungary. In 2008 Hungary and Lithuania accepted help from European Union (EU) and International Monetary Fund (IMF) in the form of crisis loan. Last country that requested help from EU and IMF is Romania because the possibility of bankruptcy of that country emerged. According to forecasts by IMF experts the GPD in 2009 for Romania should fall for 4,1%\(^{29}\) what is contrary to Eurostat\(^{30}\) forecasts presented in Table 3. As an addition, we can connect analysis from section 3 about vulnerability of banking institutions with stronger impacts of crisis on the real economy, because the countries we pointed out were the first who needed help from international institutions like IMF.


\(^{30}\) Statistical Office of the European Commission
Conclusion

It is an undeniable fact that the current crisis started many changes and provoked coordinated activities of developed and developing countries in order to stabilize financial market and that excessive aspiration to deregulation and liberalization would not always guarantee success.

The profit-seeking agents took advantage of the absence of regulatory framework to operate for their own benefit, through the process of securitization via multiple intermediaries which in cases of some instruments destabilized financial markets.

The economic life of Central and Southeastern Europe had bloomed in the past ten years. More or less successful transition was followed by an expected credit expansion, providing funding for corporate, government and household sectors alike. Lack of domestic funding was compensated by borrowing money on the global financial market, all made possible by the deregulation of capital controls as advised by IMF and required by EU Acquis. However, it is important to stress that domestic savings rate also needs to grow to serve as a source of funding, primarily to avoid great demand for external loans and hence decrease financial vulnerability.

After a detailed research on causes and consequences of current crisis, four measures were identified to avoid such distortions in the future:

1. Increasing savings
2. Increasing production and export
3. Reforming legislation
4. Regulating financial market

All public policies should be oriented towards those four goals; devising strategies and designing a legal framework that supports the financial sector without crippling its efficiency would be the key objectives of each country that aims for macroeconomic and financial stability and ultimately, sustainable economic growth and development.
References

Abstract:

This paper evaluates the effect of the increasing involvement of the European Commission in the Bologna process. Firstly, I look back to the origins, main characteristics and values of the Bologna process. Secondly, I observe the official European Union (EU) standpoints on education by a short analysis of the Maastricht Treaty and the Lisbon agenda. The analysis of these treaties shows that the role and involvement of the EU, or in particular the Commission, has been steadily growing in the past decade. Thirdly, I observe the positive and the negative effects of the Commission’s involvement in the reform of higher education in Europe in terms of Bologna process. From a practical perspective, I argue that the Commission’s involvement can be beneficial both from a financial side, as well as due to the enormity of Commission’s influence in policy spheres. However, I argue that convergence of Lisbon agenda and Bologna process is detrimental to Bologna process for three main reasons. Firstly, Bologna process loses its voluntary aspect and thereby the educational reforms are incomplete. Secondly, the effectiveness of Bologna process is questioned from the perspective of non-EU countries involved in Bologna (i.e. Russia). Thirdly, using Bologna process as merely one of the means towards reaching goals of Lisbon agenda has a moral perspective echoing in the academic community and thereby again harming the effectiveness of educational reforms. I conclude with a policy proposal of continuing cooperation between the Commission and Bologna on different terms.

Keywords: Bologna Process, European Commission, Higher Education, Lisbon Agenda
Introduction

It is the main purpose of this paper to evaluate the effect of the increasing involvement of the European Commission (further on Commission) in the Bologna process. In order to do so, I first look back to the origins, main characteristics and values of the Bologna process. Secondly, I observe the official European Union (EU) standpoints on education by a short analysis of the Maastricht Treaty and the Lisbon agenda\(^3\). The analysis of these treaties shows that the role and involvement of the EU, or in particular the Commission, has been steadily growing in the past decade. Thirdly, I observe the positive and the negative effects of the Commission’s involvement in the reform of higher education in Europe in terms of Bologna process. From a practical perspective, I argue that the Commission’s involvement can be beneficial both from a financial side, as well as due to the enormity of Commission’s influence in policy spheres. However, I argue that convergence of Lisbon agenda and Bologna process is detrimental to Bologna process for three main reasons. Firstly, Bologna process loses its voluntary aspect and thereby the educational reforms are incomplete. Secondly, the effectiveness of Bologna process is questioned from the perspective of non-EU countries involved in Bologna (i.e. Russia). Thirdly, using Bologna process as merely one of the means towards reaching goals of Lisbon agenda has a moral perspective echoing in the academic community and thereby again harming the effectiveness of educational reforms. Taking the aforementioned issues into account, I conclude with a policy proposal of continuing cooperation between the Commission and Bologna on different terms. The Commission should adopt a lesser role in the process, not limiting its finances. Its official statements and actions should demonstrate recognition of the inherent, instead of purely economic value of higher education and research in Europe, thereby enhancing the workings of Bologna process.

\(^3\) Although I acknowledge that plenty of other official EU documents are very relevant with respect to education, for the purpose of brevity I shall concentrate on these two.
The Bologna Process

The Bologna Process has a goal of creating a European Higher Education Area (EHEA) by 2010, ‘based on cooperation between ministries, higher education institutions, students and staff from 46 countries, with the participation of international organizations’ (Bologna process, 2008). It was founded as an intergovernmental declaration signed in Bologna in 1999 by Ministers of Education of 29 countries. Bologna process can be seen as an answer to problems of higher education governance, social dimension and public responsibility of education, as well as a call for preserving the values and roles of higher education in the time of globalization and modernization of societies. The EHEA is perceived to increase the mobility of students, graduates and staff as well as prepare students for not only careers but also life as active citizens in democratic societies. Finally, EHEA aims to offer ‘broad access to high-quality higher education, based on democratic principles and academic freedom’ (Bologna process, 2008). In that respect, Bologna process is clearly set out as a valuable end in itself; a claim I shall further examine in the course of this paper. Another important aspect of the Bologna process to which I shall refer to is the voluntary character of Bologna process. In particular, because it is an intergovernmental agreement between both EU and non-EU countries, it does not and should not have status of EU legislation. There are no legal obligations for participatory states, and the extent of participation and cooperation is completely voluntary.

European Commission and Higher Education - An overview

Article 126 of the Maastricht Treaty, signed in 1992, presents a reserved position of the European Community in higher education: ‘The Community shall contribute to the development of quality education by encouraging co-operation between Member States and, if necessary, by supporting and supplementing their action, while fully respecting the responsibility of the Member States for the content of teaching and the organization of education systems and their cultural and linguistic diversity’ (Maastricht, 1992). In principle,
it codifies the subsidiarity principle, and is very clear on the modest role of the EC in higher education. This has not changed significantly in the Lisbon Treaty.

Eight years later, the European Union set out the Lisbon strategy, also known as the Lisbon agenda, or Lisbon process. The strategy outlines the main goal for the EU: ‘to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion’ (Lisbon strategy, 2000). One of the necessary foundations of such a system is, of course, a strong, research-based, competitive higher education system. In that respect, proponents of the Lisbon agenda have been having a larger interest in the Bologna Process. As Wende and Huisman argue, ‘the Bologna process and the Lisbon strategy are obviously converging into one policy framework’. Indeed, anything other than convergence would be unsuccessful. One cannot count on a successful, knowledge-based union in which the mobility of labour and mobility of capital work together without the mobility of knowledge in place. Thus the increasing role of the Commission, to which I now turn, is not surprising.

The ‘Invisible Hand’ of the European Commission

The EC has always been in some ways close to Bologna process. It mainly participated by supporting (financially or otherwise) certain initiatives and programs under the Bologna process. For example, in 2001 Prague conference, the Commission supported several projects connected to quality assurance, particularly the Tuning project and Transnational European Evaluation Program (TEEP). Official involvement of European Commission with the Bologna Process began with the formation of the Bologna Follow-up Group (BFUG). It was founded after signing the original Bologna Declaration, and the Commission became a permanent member. Today, the official statement of the Commission regarding the role of the Bologna process is the following: ‘The Commission supports the Bologna process in order to assist Member States in their efforts to modernize their education systems

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32 This term is used by Huisman and Van der Wende (2004: 351)
33 Tuning project, officially called 'Tuning educational structures in Europe', was a pilot project started in 2000 by a group of universities actively participating in the Bologna process. It is based on the adoption of a system of easily readable and comparable degrees, the adoption of a system based on two cycles and the establishment of a system of credits. For more information on Tuning project, see European Commission, 2006.
Lisbon Strategy for Growth and Jobs, which also encompasses reinforced cooperation in vocational education and training (Copenhagen Process).’ (European Commission, 2007, italics added).

The Positive Aspects

Despite the criticism I present later in this essay, I hereby note that there are positive aspects to the Commission’s involvement in the reforms of higher education around Europe. Examples that I turn to in this section prove that Commission’s involvement can be very beneficial not only due to the large amount of funds that are at it’s disposition, but also due to widespread influence that the Commission has among educational policy-makers and stakeholders.

One of Commission’s most successful examples of successful educational program is Erasmus\textsuperscript{34}: a program coordinating co-operation between higher-education institutions across Europe in arranging student exchange programmes. It is part of a larger European Union initiative called Socrates started in 1994, and renamed in 2007 into Lifelong Learning Programme. Erasmus is open to not only students, but also professors and academics, truly attempting to achieve the ‘mobility of knowledge’. So far, around 90 % of European universities have participated, with a total of 1.9 million students taking part since the beginning of the programme in 1987 (European Commission, 2008).

There is, however, an important setback in Erasmus program. The only countries participating in the program are 27 members of the EU, plus Iceland, Liechtenstein, Norway and Turkey. Clearly, there is a large bias excluding the non-EU members into the program, which can be justified by the fact that the EU is the main sponsor of the program.

Turning to Commission’s involvement in the actual Bologna process, Wende and Huisman (2004: 352) argue that its support ‘could not be but positive: international mobility increased, part of the necessary resources was supplied by the EU, and the implementation was in the

\footnote{34 It is important to note that Erasmus is not a program directly connected to the Bologna process. Yet it is important for this essay’s analysis as it is an example of Commission’s direct involvement in higher education.}
hands of the higher education institutions’. Further on, they argue, through extensive financial support, European Commission has advanced the Bologna process, especially in the field of research. In part this may be true. Research is definitely one of the under funded aspects of European economy, and research-based universities are sometimes struggling to find resources to undertake research. However, as I argue later, Commission might have been ‘research-blinded’ or bureaucratically (versus content-based) biased when advocating certain reforms.

**The Negative Aspects**

The negative sides of the EC’s involvement are two-fold. Firstly, there are practical problems. On the one hand, it is connected to Bologna losing its voluntary aspect through the effect of conditionality (as shown by the example of candidate states and their negotiations process with the EU). On the other hand, it is connected with the impact on the non-EU states, which are participating in Bologna. Secondly, there are moral problems. Treating education as means to reach an end, instead of an end in itself is a grey area in many respects, some of which I explore here.
The Practical Issues

a) Conditionality effect

On the practical issues, I start with the candidate member states. An excellent case study, which portrays EC’s involvement, is Croatia. It is the country which advanced furthest in negotiations process, now almost certain to become the 28th member of the EU, possibly by 2011. In a series of interviews with government officials and educational stakeholders that I have conducted during 2007\textsuperscript{35}, one that still strikes me most is that with a highly ranked government official (at that time Assistant Minister for Higher Education at the Ministry of Science, Education and Sports) in Zagreb. Speaking about the reforms Croatia undertook with regards to Bologna, Kovacevic stated that many of the aspects of the reforms are part of a greater picture of Croatia's accession negotiations with the EU. She mentions deadlines as a positive aspect, which accelerated the process of not only opening the negotiation chapters 'Science and Research' and 'Education and Culture', but also closing them (Kovacevic, 2007).

However, such thinking is not shared by some in Croatia. Bologna process and reform of higher education has been widely criticized as taking a top-down approach, reforming only the structure, while not dealing with the content. Due to deadlines, many of the universities were forced to reform their programs from previous ‘4+1’ to new, ‘3+2’ programs\textsuperscript{36}. Many of the institutions failed to deal with the content of subjects, thereby actually only formally changing the structure, and not touching the actual content of the material taught. Such approach of merely dealing with the ‘tip of the iceberg’ caused a great deal of dissatisfaction among both students and academics, who started resisting the reform. With the resistance from the academia, and closing deadlines for negotiations with the EU, Croatia had no other way than to press for any kind of reform. The result was the aforementioned ‘formal’ reform, with many of the substantial changes not implemented. This is a clear example of how education needs to be approached differently than other reforms in public sector. It must not

\textsuperscript{35} For a brief outline of the research, see Kauzlaric, 2008
\textsuperscript{36} ‘4+1’ system is one in which the undergraduate degrees usually last 4 years, with another one to two years of Masters degree. ‘3+2’ system shortens the time necessary for and undergraduate degree, while making the postgraduate degree longer.
and cannot happen overnight, and therefore the conditionality effect can be more detrimental than beneficial. The voluntary aspect of Bologna is thus one which must not be violated, as coercion and conditionality have proven to be inefficient.

b) Non-EU states and Bologna

Another danger of EC’s involvement is the case of non-EU countries. In particular, the Bologna process should have a broader scope than merely being an instrument of reaching the goals of the Lisbon agenda because it also has a broader membership than the European Union. Bologna currently counts 46 countries, compared to 27 members of the EU. Therefore some of the aspects that the Commission is trying to implement into the Bologna process which are relevant for the EU might not be relevant for other countries. Despite the fact that some do hope to join the EU at a later stage, there are countries which do not. For example, the largest country taking part in Bologna process is Russia. Despite also having interest in modernizing its universities, Russia has no interest in making EU the most competitive, knowledge-based society in the world. In that respect, as Nyborg (2008) notes, ‘universities and student organizations being partners in the Bologna process may not wish to be partners in Lisbon strategy, but they certainly want to continue a pan-European cooperation in higher education.’ In that respect, I here argue that leaving Lisbon agenda out of the Bologna process creates room for a continuing and more inclusive cooperation in higher education, one originally envisioned by the Bologna process.

The Moral Issues

From a moral perspective, Commission’s involvement has so far proven to be very much connected to achieving the goals of the Lisbon Process. It is here argued that such thinking needs to change, especially with regards to the goals and aims outlined in the Commission’s formal statements regarding the Bologna process. What should always come first is the inherent value of education, education for education’s sake, and not for the purpose of employability, growth, job-creation or economic supremacy. Only by such thinking will the
reform of higher education truly be socially responsible, all-inclusive, and supported by those participating in it at the very fundamental level – students, academics, and university staff.

The practical problems of treating education as a means instead of an end could also arise. Primarily, it is the under funding of economically ‘unattractive’ or ‘unprofitable’ research, in fields such as Arts or Humanities. It can be argued that, with increasing competitiveness of universities in terms of funding opportunities, some universities turn to more profitable areas, such as research in the fields of business, computer science, engineering, medicine, chemistry and other sciences. With the surroundings the universities are facing, an economist would argue it is only natural that such process occurs. Therefore the government should counter such externality through a form of educational ‘positive discrimination’: by nurturing under funded research areas. Yet with the current EU’s agenda of ‘becoming the most competitive economy in the world’, less competitive fields might be neglected.

Another important caveat that might occur, and that I have already mentioned in the case of Croatia is the revolt of the academic community. What is important to emphasize here is that this particular type of resistance is one grounded on clear and argued opposition to specific aspects of certain policy reforms. In that case, policy-makers should strive to effectively include members of the academia into the reform process. That way, the legitimacy and effectiveness of the educational reform might increase.

In that respect, a policy proposal outlined here is to alter the official agenda of the Commission by striving to treat education as valuable *per se* in all further policies. For Lisbon agenda to succeed, a competitive education is indeed necessary. However, not at the cost of devaluing those forms of education which are less- or even non-competitive. Research in competitive fields, of course, needs to be advanced, but not at the cost of less-competitive fields or teaching. Furthermore, academic community needs to be included in every step of the reform. The Commission should therefore consider having an advisory academic council, which would work with the Commission in framing further policies regarding Commission’s involvement in higher education. It could consist of current and previous academics as well as students from different member states.

In future treaties, and particularly in the European Constitution, should one ever exist, higher education needs to have an important, yet autonomous role. The autonomy of universities in
setting not only the curriculum, but also the pace of changes they are undertaking, is crucial for a ‘knowledge based society’. Conditionality effect which is used by the Commission in negotiations with candidate states in all the different fields of public policy must be avoided in the case of higher education, as it hinders the intrinsic values of education. This should also be part of a formal standpoint of the Commission in dealing with future candidate states. Finally, the Commission must acknowledge the participation of non-EU states in the Bologna process by clearly diverging its educational policies from the Lisbon agenda.
Conclusion

In conclusion, this paper argues that the European Commission’s involvement in the Bologna process should be revised. Bologna process was started as an independent, inter-governmental declaration between different countries on the territory of Europe. Its voluntary aspect and inclusive approach towards countries was created with a specific purpose – that of real and meaningful change. European Commission’s involvement, despite being financially beneficial, hinders these fundamental ideas of Bologna. By over-involvement in Bologna, Commission is adopting Bologna as an EU project; something Bologna, considering the signatory countries involved, certainly is not. Towards those countries that are candidates for EU accession, the Commission uses educational reforms under Bologna as a condition for EU accession. In some cases, such as that of Croatia, this has proven detrimental to the educational reform, causing resentment among students and academics. Non-EU countries, such as Russia, might also have a problem with the EU overtaking Bologna. Finally, by using Bologna process as a means of reaching the Lisbon agenda, the Commission sends a wrongful message about its stance towards higher education. Instead of viewing it as a public good, it is commercializing it, and observing it only through the lens of economic growth and employability. If indeed the Commission continues to actively participate in Bologna process, it should strive to de-politicize and de-economize its actions towards education. True goals of Bologna declaration need to be strived for: education needs to be internationalized, and intellectualized; however hard that task sometimes might seem.
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KNOWLEDGE-BASED ECONOMY: IS THE BOLOGNA PROCESS HELPING?

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Abstract:
The Bologna Process aims to create a European Higher Education Area by 2010. In June 1999 “The Bologna Declaration” was established and it proclaimed a series of reforms to make a European Higher Education more competitive, comparable, compatible and to ensure mobility for students.

So far, 46 countries accepted the responsibility which carried the process of implementation of higher education system. Croatia ratified the Bologna declaration 2001 in Prague.

The framework of Bologna process, so called “golden triangle of reform“, is defined in 3 cycles of qualification degree (Bachelor/Master/Doctoral) that are determined by ECTS credits and the system of Quality Assurance which provides an continual improvement as a cause to competitive higher education and advanced life standard.

But the system is frequently confronting with some irregularities.

In this paper we summarize and present the facts of implementation of Bologna process in Croatia, its benefits and deficiencies and we answer the question is Bologna process a fake or a promise for our country.
Keywords: Knowledge based economy, quality assurance, competences, implementation, Croatia
Introduction

European Union proclaimed „Lisbon Strategy“ in 2000 a strategy that clearly stated objectives to accomplish more broader and deeper integration till 2010. Among main goals is also the emergence of knowledge society which predicts development of human capital through education.

Bologna declaration was introduced in 1999 and was ratified by 46 countries till 2007. Some of the „tools“, which needed to be implemented on grounds of declaration are:

- easy to move from one country to the other (within the European Higher Education Area) – for the purpose of further study or employment;
- to increase the attractiveness of European higher education so many people from non-European countries can also come to study and/or work in Europe;
- the European Higher Education Area that provides Europe with a broad, high quality and advanced knowledge base, and ensures the further development of Europe as a stable, peaceful and tolerant community benefiting from a cutting edge European Research Area;
- Greater convergence between the U.S. and Europe as European higher education adopts aspects of the American system.

The framework of Bologna process lays on 4 objectives that give her a purpose; these are compatibility, mobility, employability and competitiveness. So called “golden triangle of reform“, is defined in 3 cycles of qualification degree (Bachelor/Master/Doctoral) that are determined by ECTS credits and the system of Quality Assurance.

In year 2001 ministry conference in Prague added three more objectives:

1. Life long learning
2. Higher educational institutes and engagement of students in the process as well as their participation in decision making.
3. Promoting the European Higher Education Area apropos adapting the program of exchange students and professors (Erasmus Mundus)

Croatia ratified the Bologna declaration in 2001 on the governmental conference in Prague. Thereby it accepted international obligation to adapt national higher education system, its principals and conditions till year 2010.

That dateline for Croatia is to ambitious because she still didn't finished her first phase of implementation. The implementation of entirely new education system which brings credits as an instrument for monitoring students’ success is widely different from previous national education system which based students’ success on one grade they accomplished through final and oral exams.

**Bologna process**

The best way to describe Bologna is through its subject – students. They are the ones who have to cope with the system and whose future is in stake. Therefore, we present some pros and cons of the Bologna system and afterwards the implications and interpretation of it in Croatia.

**Bologna process – fake or promise**

If you summarize all the best techniques that were used in development of procedures in economical, technological, social, political, scientific... areas, you can see that most of the best practices were invented in America and were accepted and implemented in Europe and throughout the World. But what is better for one is not better for everybody. That is why managers still don't comprehend that some practices couldn't be accepted in environment that is different from the parent environment. The four basic principles of the Bologna Declaration (easily readable and comparable degrees; two main cycles, undergraduate and graduate; system of credits – ECTS; quality assurance) had clearly been adopted from the American model. In result for that we have Germany who has problems and considers of rejecting the Bologna process and returning to the previous system; Spain where students regularly protest.
over ineffectiveness of the system, and other countries like Italy, Poland, France... Technically the benchmarking of the education system is failing, but the EU still invests hopes in it and assuring other potential candidates of its effectiveness.

In Table 1 we present the pros and cons for the whole system with an argumentation

**Table 1: Pros and Cons of Bologna process**

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duty for students is distributed between attending classes, practical work, consultations, seminars, private researching (libraries, archives) and final exam. It takes into matter not just time spent on the faculty studying but also the time spent at home studying. The Bologna formula is: 8x8x8 (8h sleeping, 8h studying (4h at home, 4h on the faculty) and 8h free time</td>
<td>Students don't have much free time between attending the class, learning at home and researching and writing seminars; No time for satisfying social, physical and health needs; Double checking knowledge (final exam and mid-term exams) that are obviously unnecessary; Usually because of the need to fulfill schedule student have 8h of lecturing so they must use the hours for free time to study at home.</td>
</tr>
<tr>
<td>It urges students to study continuously and to research for arguments for theoretical statements.</td>
<td>Students don't have enough time to study theory and in the same time to do researches. Most of the study programs don't encourage students for critical thinking; instead they are vainly trying to memorize facts (most of them are irrelevant).</td>
</tr>
<tr>
<td>Educational system is connected and universities collaborate with each other in exchange of student, information and making a synergy combining programs and developing them, increasing and facilitating mobility.</td>
<td>Wide possibility of mobilization could provoke student to emigrate from poor developing countries to high developed = brain drain. Not all exchange regulations are executed properly. Quality of universities and the possibility for recognizing outlandish diploma in parent country are still questioning.</td>
</tr>
<tr>
<td>Possibility to get a job in any country - member of EU; unique employment rights for everybody; EQF that facilitates employer recruitment; unique diploma verified in all of Europe</td>
<td>Decreasing employment and slow growth of economy as a consequence of concentration in all the developed countries; some universities throughout Europe may not have quality programs but will still give diplomas that worth the same as the ones given by high-quality universities</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>The communiqué supports the idea that higher education should be considered a public good and it is and will remain a public responsibility.</td>
<td>Systems of tuition fees vary around Europe and it may be financially more attractive to some students to go to countries with no tuition fees than to countries with high fees. To earn scholarship money, student has to work for it, but they don’t have time to study and attend school.</td>
</tr>
<tr>
<td>The evaluation system that classifies students into a range that MUST be distributed in these categories: 10% students must get an A (national grade 5) 25% - B (national grade 4) 30% - C (national grade 3) 25% - D (national grade 2) 10% - E (national grade 1).</td>
<td>This evaluation system refer on the normal distribution of values that random variable takes. The mean is positioned in the middle of the Gauss distribution diagram. According to the law of big numbers the possibility of achieving reliable result is converging with the number of empirical sampling. So the possibility for random variable appearing in normal distribution is converging with the larger sample. Practical that means that this evaluation system is sustainable for large number of students. Assumptions is a large number of students who decide to continue study in the second degree, otherwise this method is not sustainable.</td>
</tr>
</tbody>
</table>
**Bologna process in Croatia**

On the beginning of implementation, the reform of higher education has aroused generic expectation that the Bologna process will stimulate and conduct significant changes and improve studying. There was a belief that a new program will “solve” surplus problems (students which can’t finish in due). First of all, why? In our opinion there should be a critical mass of students which are still unsure if faculty is for them. Why not give them a chance to try finding themselves.

In Croatia Bologna process was carried out ad hoc to satisfy the dateline and to expedite the closing on all open issues of EU negotiations. But the first thing Croatian universities should have done is to reconstruct themselves on the way European universities did, so the declaration could be fully applied.

Croatia has 7 universities, 13 public Polytechnic universities which higher education conduct though academic and professional study programs.

The framework of Bologna process lays on 4 objectives that give her a purpose; these are compatibility, mobility, employability and competitiveness. So called “golden triangle of reform”, is defined in 3 cycles of qualification degree (Bachelor/Master/Doctoral) that are determined by ECTS credits and the system of Quality Assurance.

Their implications in Croatian system are following:
Table 2: Comparison of standard Bologna process application with the Bologna implementation in Croatia

<table>
<thead>
<tr>
<th>How it should be</th>
<th>How it is</th>
</tr>
</thead>
<tbody>
<tr>
<td>On every faculty there should be a student’s coordinator group, who is in charge for ECTS and <strong>equally</strong> and <strong>in collaboration</strong> with the professor, decides on the abstract of every subject. Every year they submit a questionnaire on how professors abide the students decisions</td>
<td>Since the implementation of the Bologna process in Croatia, the transition from previous national education system(^{37}) to a new one had to adapt, so majority of faculties don't have this student group. Students don't participate in any kind of decision-making.</td>
</tr>
<tr>
<td>There should be a book of regulations and every subject should have defined program, student’s responsibilities, evaluation system and available literature. All this should be standardized for each subject.</td>
<td>Some professors use old methods in class and they carry out autocracy. They individually interpreted Bologna process and don’t stick to regulations. Result - different criteria for each subject that confuses students</td>
</tr>
<tr>
<td>The Bologna process has its main goals – to achieve compatibility, competitiveness and comparison of the higher education system. All that can be used to increase and improve mobilization of students (vertical and horizontal).</td>
<td>The structure of educational system in Croatia is not even close to European educational system. Therefore, the comparison and evaluation of study programs is not possible. As for mobilization it is limited between national and international faculties. Programs vary from faculty to faculty. There is no explicit collaboration between universities.</td>
</tr>
<tr>
<td>For undergraduate and graduate course there is maximal work load of 60 ECTS for one academic year or 30 ECTS by semester. Work load of 60 ECTS should be distributed between maximum of 3 subjects per semester (that is how universities abroad do).</td>
<td>In Croatia the matter is different. One semester usually consists of maximal 6 subjects per semester (the obligatory subjects carries max. 6 and optional 4 ECTS). Multiply that with the work load that each subject carries and the time for quality studying decreases.</td>
</tr>
<tr>
<td>The cyclic system of qualification degree</td>
<td>Croatia made some changes in her law of</td>
</tr>
</tbody>
</table>
consists of 3 degrees Bachelor/Master/Doctoral. There is a defined border between each degree which implies on competence, skills and knowledge. professional names and titles, but it didn’t define the competence and necessary qualifications students get by each degree. The business sector thought that 3 year studying isn't enough for comprehending and they responded by noting undergraduate student as under-qualified. So most of students continued their education on the optional level despite of scholarship costs.  

According to Bergen communiqué (2005): “we urge higher education institutions to continue their efforts to enhance the quality of their activities through the systematic introduction of internal mechanisms and their direct correlation to external quality assurance”  

There is an the European Association for Quality Assurance in Higher Education (ENQA) and every year students have right to grade their studies and their professors so the irregularities could be corrected. The continual evaluation is necessary for improvement.  

Before implementing the Bologna process into universities, Croatia didn’t conducted any studies (not as we know), nor it made a plan for restructuring and transition. Croatian universities didn’t have enough time to do that. So by performing the bologna process in 2005/2006 it left enough space for manipulation and adaptation for each university. Therefore, we have no compatible, no comparative universities which operate by decision of ministry of education. There isn’t any systematic monitoring and improving the quality of study program, nor there is questioned a way how lectures are deducted. Every year universities accept more that regular apply quote of student. Students protest about insufficiencies of educational system but they often don’t get heard.  

Through cooperation, provides and prepares for life long learning, conference and seminars attendance. In Croatia life long learning has just recently due in order, but the concept is still assertive then operational. Unfortunately life long

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learning depends on the will and financial opportunity for an individual to continue education. The market of education is still in progress, but then again in compare with EU, there aren’t any incentive funds for an individual and its deployment. Most of them come because their company sends them so they aren't very motivated to learn.

Explanations of Table 2:

1 Characteristics of previous national education system: unlimited possibilities to take an exam of the same subject, oral and written test as a condition to pass the subject, unmotivated students that couldn’t graduate in years, professors with too much obligations, redundant literature to comprehend in a period of a year, sometimes no exams in the end of the semester but till the end of academic year, usual graduation due in 4 years.

2 To increase the educated population and to assimilate students that graduated under previous system, they automatically promoted them into masters, which is a degree given after 5 years of study by Bologna, not 4 as previous.

3 Although the Croatia accepted the Bologna process in 2001, four years before implementation it, Croatia named National Council for Higher Education (NCHE) as higher institution for maintaining development and quality throughout the whole higher education system. The report on quality that universities are obligated to submit to the NCHE consists of these criteria:

1. description of university
2. organization of study programs
3. purpose, goal and subject of university programs
4. science programs and external cooperation
5. data about students
6. data about professors
7. internal mechanism for quality assurance
Students that are inscribed in 2005/2006 when Croatia first implemented the Bologna process were studying according to ad hoc Bologna (the rules were not equally as the ones Bologna process uses). Then in 2008/2009 Croatia implemented the full regulations of Bologna (of course, with some adaptability). So now there is a group of first classes under graduated and graduated courses, second and third year’s classes are studying according to ad hoc Bologna, and also there is a critical mass of students still attending according to previous education system. Now can you imagine the complexity of administrations, rules, evaluation systems and organization of each subject for professors?

Research

According to survey made by university of Zagreb in regard of how is Bologna process implemented in Croatian universities, all the implications mentioned, sustain. On the first figure we see the results on how much did students, when inscribing into universities really knew about Bologna process and its requests. 90% of students were poorly informed about the Bologna process, and just 12% of them knew about it.

Figure 1: Level of familiarity of the Bologna process for the enrollment

Research also shows that many of them found out about the Bologna process through informal communication like web pages of their faculty, in the class while talking to
professors and with their colleagues. It's important to note that just 2.06% of high schools referred future students on that matter.

Figure 2 shows the example why universities should explore and research about the impacts of Bologna process on its subjects – students. This paragraph shows that 32% of students think that the Bologna process didn't made changes in the good way and 34% think it made changes but partially.

*Figure 2: Level of quality improvement in study resulting from the Bologna Process*

Since how this survey was taken in 2005 on the sample of 3261 second year students the results today vary in favor of ineffective education system. Let me remind you that in 2005 the Bologna process was not implemented in its full regulative and was conducted as ad hoc Bologna process.

But the fact that the new education system did made some positive changes like subjects that are one-semester, greater transience in exams, registering for exams through internet, did not made any changes in quality of studying. Students think the teaching was more quality before.

Studies also showed that 46.60% of students expected that, when graduating, they will receive internationally recognized diploma which will facilitate their employment. Regardless on all the positive expectations students had also expressed a worry that the future graduated
students will had to face the labor markets with the lack of knowledge in fulfilling its needs. Sure, the Bologna process will speed up the process of lunching new workforce but is labor market ready for quantity of freshly printed graduates. Maybe it's too soon to have more unemployed young workforce because they have to implement their knowledge and ideas and test them in an actual environment.

Here are some examples of expectations not fulfilled:

- bad organization of exams (overlapping exams)
- the work load on student is too big
- insufficient student mobility
- poor conditions for studying
- final exams ultimately have the biggest value and the most contribute to the ratings regardless on seminars, preliminary exams...
- students aren't motivated to learn for knowledge but for points etc.

We mustn’t neglect the fact that around 46% of students thought about studying abroad because they have more chance for quality studying and finding work there then in Croatia.

**Recommendations and Conclusion**

Considering all the mentioned facts, we could easily agree that the best thing to solve these problems is to dismiss the Bologna program and establish more profound one. But turning back could be a mistake. It will just be a result of more chaos and higher costs. Only thing is to improve it, change some aspects and adapt it, not the country itself, but with the cooperation with the EU.

**Recommendations for implement of Croatian education system**

We are suggesting some issues for improving the Bologna process in Croatia. These are below listed.
1. Establishment of system

It’s necessary to:

- issue key document of the university: vision, mission and strategy (lectures, research, communication, quality, infrastructure, services, staff training and development, international cooperation)
- issue all the relevant documents for QA (Quality Assurance)
- describe all the procedures
- make a reference book about quality

2. New paradigm

Instead of periodic review of quality (evaluation), perform the periodic review of QA system (audit) and not just through questionnaires directed to students but through internal and external revision (even unannounced), visitation of expert committee for audit that can measure students satisfaction within a determined time interval. All the results of audit must be documented.

3. Among other

- to increase a number of exams period
- to introduce the students and professors with the real and correct Bologna process
- to involve students in decision-making
- to promote faculty and mobility between universities in collaboration
- to introduce the aspects of a Bachelor degree to the employees
- to harmonize the timetable and hours spent in faculty with demanding subjects
- to install some practice (students who studied according to the previous system had an obligation to test their knowledge in practice)
Conclusion

More than half of the participating countries have quality assurance structures in place. However, this progress should not mask a deficit in quality assurance, and in particular the absence of student participation in quality assurance procedures. Most quality assurance systems have at least one level of student participation (these are the internal evaluation through questionnaires). There is a need to move as quickly as possible to accommodate student representation in keeping with the principles of good practice.

Although there are transitional difficulties frequent problem in all countries for students seeking to progress between cycles, for example the need to undertake bridging courses when moving between the university and non-university sector. Students also mentioned restrictions that are placed on progression to the next cycle, including limits on numbers inscribing on the next level, enrolment examinations and selection procedures that are present in some universities.

Finally, they indicated that tuition fees also posed a barrier. Since we mentioned that the tuition fees are questions of international nature, Croatia stand differently on the matter of that question. Namely the new decision adopted by the minister of education is that every student that studies by the regularly studying courses is not obligated to pay the tuition fee. This resolution was made in 2008 and the circumstances of that decision were the protest of more then thousand student all over the country.

Other problems that appeared to in the processing of Bologna were imbalance between the employment and its availability to student on completion of the first cycle. The system is not valid if there aren't any foundations for applying the results of education. Also there are issues such as the quality of the Diploma Supplement. There are difficulties associated with the Diploma Supplement, including demands on student records systems and costs of translation. As it has been decided that many of the graduates of 2005 will have the Diploma Supplement issued automatically and free of charge, that is not the situation in Croatia. All student had to pay for their diploma and because of a variety of validation procedures, most of them still
didn't get their Diploma Supplement even though they need it for maybe finding a job abroad, but not the job in Croatia because the employees still don't value this document.

So, we have to agree that Bologna process isn’t helping in making a knowledge based society and economy.

The Council of Europe has a strong role that is vital for new members, as well as those engaged in complex and major reform processes. It is his obligation to support applicant countries in implementation of the Bologna process.

Maybe their work isn't as profound as its thought to be or maybe there are more and more deficiencies appearing through the years of enforcement and for a proof we hear that one by one country is rejecting the Bologna process and the giving the reasons that imperfection are more consequential then advantages. As far as the European Union and its sustainability - a chain is only as strong as its weakest link.
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QUALITY OF HIGHER EDUCATION: IN SEARCH FOR IDEAL PROFESSOR FROM EDUCATIONAL AND STUDENTS PERSPECTIVE

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Abstract:
In today’s highly developed society, where innovation leads toward success and prosperity, it is essential to insure continuous development in higher education. That represents crucial factor for creating knowledge society. In order to achieve such goal, Bologna process has been designed and implemented across Europe as well as in the Republic of Croatia. One of the most important roles in Bologna process belongs to the educators who are expected to pass their knowledge and expertise to the students of higher education institutions. New technology and the knowledge industry require academics to become researchers in teaching. Teaching staff in some cases displays little motivation and lack of interest to improve the quality of teaching, instead relaying on traditional methods and their personal experience. In knowledge based economy, professors are the key factor for providing quality assurance; they are in direct contact with students and play a major role in education and teaching process. The quality assurance must be applied in order to achieve improvements in knowledge, increase student confidence and the university’s credibility and image. The aim of this paper is to explore characteristics which are important for ideal professor/educator according to the Bologna process standards from educational and students perspective. Conducted research has provided useful information for comparison of educational demands and
students preferences. Conclusions reported in this survey are useful in improving quality of higher education and creating competitive edge of Croatian higher education system.

**Keywords:** Bologna process, higher education, quality, Croatia
Introduction

“Although education alone is not a magic wand that will solve all global problems, it certainly is a factor that makes a significant difference especially on an individual level.

About the meaning of education evidence are conclusions of the UNESCO International Commission for Education at the beginning of 21 Century, according to which education is the most important tool available to encourage deeper human development with more harmony, and thereby to reduce hunger, poverty, ignorance, oppression and war (Delors, 1998).”

The purpose of the Bologna process is to create the European higher education area by making academic degree standards and quality assurance standards more comparable and compatible throughout Europe, in particular under the Lisbon Recognition Convention. It is named after the place it was proposed, the University of Bologna in the Italian city of Bologna, with the signing in 1999 of the Bologna declaration by Ministers of Education from 29 European countries. In Croatia, the implementation of the Bologna process started in the academic year 2005/2006.41

The three priorities of the Bologna process are: Introduction of the three cycle system (bachelor/master/doctorate), quality assurance and recognition of qualifications and periods of study42.

Most of international documents of the Bologna process unexceptionally emphasize the importance of quality while aiming at implementation of the main objectives of the Bologna process, tasks for aiming at objectives and means directed to tasks. Neither of the main objectives of Bologna – international competitiveness, mobility and employability is possible to be reached without the reliable system of study quality assurance on an institutional, national and international scale.

41 http://en.wikipedia.org/wiki/Bologna_process
42 http://elfa-afde.eu/bologna.aspx
Educational institutions provide valued services to their students and other customers, and aim to meet customer needs and expectations. While many institutions want to be responsive and effective they are not sure what responsiveness is or how to achieve it.

Responsive institutions focus on the customer – identifying who is the real customer, sensing and serving the needs and wants of its customers within the constraints of its mission and resources. They survey current student satisfaction and look for unmet needs and ways to enhance their services.

Various students may have different expectations and perceptions of the institution's performance. Expectations are formed on the basis of the person's prior experience, statements by friends and associates and communications with the institution.

In this case quality becomes an essential element defining the competitive ability and attraction of European system of higher education worldwide. Quality becomes not only an essential condition, aimed at the quality and compatibility of awarded degrees of qualifications, but also the base of the common European area of higher education.

After systematizing aims and tasks of the Bologna process, the creation of European higher education area can be diagrammatically depicted as a construction with quality standing for a base.

Various groups are engaged with the goal of rising quality level of higher education (students, employers, teachers, government, etc.). These groups have different opinions and attitudes towards the quality in higher education system.43

Universities that value their students and that show the same care and consideration for their employees as they expect employees to give to students achieve strong internal support for efforts to improve service quality. Educational institution must constantly identify and implement improvements in what they do and how they do it.

A school's educational programs and services reflect the school's mission and define the school in the eyes of its markets and publics.

Attracting students is often an educational institution's key marketing task. It is not enough just to attract students, retaining matriculated students is just as important as attracting and enrolling them. In spite of its central importance, student satisfaction can be difficult to measure. Students will differ in what characteristics of the college are related to their satisfaction and how much of each characteristic they feel is essential.44

Student expectations and evaluations of professors are a valuable source of information. Especially new undergraduate students may have idealistic expectations, and if higher education institutions know about their (new) students’ expectations, they may be able to respond to them to a more realistic level. At least, universities could inform students of what is realistic to expect from lecturers.45 The knowledge of student expectations may also help lecturers to design their teaching programmes.46 Hill found that student expectations in general, and in particular, in relation to academic aspects of higher education services such as teaching quality, teaching methods, and course content have been quite stable over time.47

Telford and Masson point out that the perceived quality of the educational service depends on students’ expectations and values.48 According to Claycomb et al., there is a positive impact of expectations and values on student participation.49 Accordingly, it is important to understand expectations and values of students in higher education.

Educational services play a central role in the students’ lives and students require huge amounts of motivation and intellectual skills to attain their goals. Educational services are predominately intangible, perishable, and heterogeneous. Each student has his/her own experiences and unique demands and needs. In addition, the lecturer’s teaching efforts are

simultaneously “produced” and “consumed” with both lecturer and student being part of the teaching experience.

This paper investigates the nature of service quality in higher education, and in particular, what qualities and behaviors students expect from their lecturers. By asking students about the qualities lecturers should possess and how they want them to behave, we will be able to compare what qualities lecturers should possess and what behaviors they should exhibit from a student’s point of view with what the literature on this topic suggests lecturers to do.  

**Educational demands**

For the purpose of this paper educational demands are observed by exploring fundamentals of educational psychology and other related disciplines.

In spite of long history of educational psychology and other related disciplines, and large number of scientific research, there is no such thing as an universal set of characteristics that make up an excellent professor. Our literature review has shown that there is a set of characteristics that are necessary for professors to posses. Each professor has his teaching style and methods, ways to preserve discipline, transfer knowledge and skills, and characteristics which define him as a professor and as a person. Each of them defines his relation towards students and that is what separate good from bad professors. We find important to describe every of that characteristics in order to compare them with expectations of students. Important characteristics are teaching style and methods, discipline, personal characteristics of professors, knowledge and teaching skills.

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There is two most common teaching styles, authoritarian and democratic. In the recent time, visibly is change toward style that has all good elements of those two.

Authoritarian style is characterized by appearance of utilization of authority in achieving education goals, typical for frontal teaching. Professor sets firm rules and standards, but without intention to discuss or negotiate with the members of the group about the reasons for establishing such rules. Use of a number of bans, the commandments and detailed instructions is often. According to the results of research authoritarian style has achieved better group results, because the members had clearly set goals and standards, the group achieved better results but there was tension among members. According to Baumrind, this style is more successful in development of cognitive structures and behavior mechanisms that ensures evolution of independence and responsibility. Quite the opposite, democratic style leads to positive attitudes in the group and good interpersonal relations, but the efficiency is lower. Students are allowed to have their own opinion. Such style of communication is linked with the expression of social reversibility - the possibility that the student turns to the master using the same words and manner as the teacher turns to the student, but with no violations of rules of good behavior while preserving respect and professionalism.

At the same time, teaching methods are:

- Direct instruction (frontal form)
- Teaching by guided discovery process and discussion
- Self study
- Tutorials
- Problem solving teaching
- Heuristic teaching
- Programmed instruction

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51 Didaktika, str.368
According to Bourner\textsuperscript{54} there is a clear view of the learning aims of higher education. They are:

- Disseminate up-to-date knowledge.
- Develop the capability to use ideas and information.
- Develop the student’s ability to test ideas and evidence.
- Develop the student’s ability to generate ideas and evidence.
- Facilitate the personal development of students.
- Develop the capacity of students to plan and manage own learning.\textsuperscript{55}

Next table displays ten common teaching methods and their usage in different learning aims.

\textit{Table 1: Teaching and learning methods for different learning aims}

<table>
<thead>
<tr>
<th>Disseminate up-to-date knowledge</th>
<th>Develop the capability to use ideas and information</th>
<th>Develop the student’s ability to test ideas and evidence</th>
<th>Develop the student’s ability to generate ideas and evidence</th>
<th>Facilitate the personal development of students</th>
<th>Develop the capacity of students to plan and manage own learning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7. Develop skills in using library and other learning resources</td>
<td>7. Simulations (e.g., computer based)</td>
<td>7. Exam papers</td>
<td>7. Structured experiences in groups</td>
<td>7. Independent study</td>
</tr>
</tbody>
</table>


Discipline

Discipline also represents one of important professors’ characteristic, because discipline is essential to maintain order in class and for establishment optimal learning environment. In order to achieve discipline, the most important is to have clear set rules and to increase time spent in the work:

- Minimize delays because their impact is deconcentration in the beginning of class due to forming an attitude that class doesn’t start on time. Also, it’s necessary to avoid earlier end of class because it leads toward lack of concentration at the end of a class.
- More efficient use of time for work: interesting lectures, the professor should be active and not too slow, and the teaching methods often need change. Combine lecture with group work and students participation through miscellaneous exercises and group assignments.

Characteristics of teachers

Widely accepted opinion is that those who believe in the student's capacity for learning and who feel responsible for encouraging students to learn, have students who are achieving better results regardless of the subject and level of teaching or the students' abilities. Components of positive and open attitude to learning include:

- display of enthusiasm and interest in teaching the subject
- expression of clear goals and expectations relating to learning
- encouragement of direction to the task
- demonstration of belief in students' learning potential
- interest for students and their learning
**Knowledge**

Regarding knowledge that every professor should have, it is possible to recognize two distinct types of knowledge:

1. Expertise knowledge:
   * Knowledge of the structure of objects - the main facts and key concepts in the field, but also the way in which these elements are organized, classified, and connected.
   * Knowledge of the syntax of each field - knowledge of scientific method which is used to explore the phenomena and processes

2. Knowledge of the nature of cognitive and motivational processes underlying learning, as well as knowing the specifics of each stage of cognitive and socio-emotional development of students

**Skills**

Educational scientists are writing about 3 groups of key skills:

1. Planning skills and teaching performance - clearly communicating well-structured information, using precise terms, a clear and recognizable sequence of presentation, emphasizing the important.

2. Assessing learning outcomes skills - appropriate design issues and questions in order to verify understanding - to encourage deeper thinking about the topic, increase involvement and help create links with the already existing experience or knowledge.

3. Group management skills as a social community - social skills management, which triggers interest in the material and reduces the leisure activities.

The ultimate goal in higher education must be to encourage students to be responsible for, and in control of, their own learning, and to make the conceptual change from learning a science (i.e. a subject or discipline) to becoming a problem-solver, independent of their teacher’s attitudes, beliefs and methodologies.\(^{56}\)

The results of a study that was taken in Australian universities includes a list of the features of good teaching: listening to students; enthusiasm for the subject; adjustment to students;

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encouragement of deep learning approaches; setting clear goals; offering feedback; and respect for students.\textsuperscript{57}

\textsuperscript{57} Jackson, M: “Serving time”: the relationship of good and bad teaching, University of Sydney, Sydney, Australia, p. 388
Research results

The research was conducted from March to April 2009. There were 156 participants in the survey, from those 40 male and 116 female. All of them are students of 3\textsuperscript{rd} (52.6\%), 4\textsuperscript{th} (45.5\%) or 5\textsuperscript{th} (1.9\%) year of study. Average grade is B (79 students), followed by C (59 students). 16 students have average A and only 2 students have average D. Of 156 participants, 96.2\% are students of economy science, and 3.8\% are students of non-economy science. Most of the participants (91.7\%) are students of Faculty of Economy and Business in Zagreb (143), 6 students are attending non economy faculty, 6 are attending Agora and 1 is attending Vern.

The research has been conducted by semi-structured questionnaire composed of 11 questions which has been accessible online. We asked students about important characteristics of professor. As is shown in the next table, the most important characteristics for students include communication and teaching skills, examples from practice, equable evaluation criterions, clearly defined education goals and professors’ expertise. It is interesting that professors’ research work is least important characteristic, while it’s known that only continuous education and research in area of professors’ interest leads to maximization of expertise and his knowledge about teaching matter.

*Table 2: Importance of different characteristic of professor*

<table>
<thead>
<tr>
<th>Importance</th>
<th>Characteristic</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Communication and teaching skills</td>
<td>4.67</td>
</tr>
<tr>
<td>2</td>
<td>Use of examples from practice</td>
<td>4.65</td>
</tr>
<tr>
<td>3</td>
<td>Equable evaluation criterions</td>
<td>4.63</td>
</tr>
<tr>
<td>4</td>
<td>Clearly defined education goals</td>
<td>4.58</td>
</tr>
<tr>
<td>5</td>
<td>Expertise</td>
<td>4.56</td>
</tr>
<tr>
<td>6</td>
<td>Accentuation of important parts of teaching materials</td>
<td>4.53</td>
</tr>
<tr>
<td>7</td>
<td>Regular consultations, personal contact and feedback</td>
<td>4.51</td>
</tr>
<tr>
<td>8</td>
<td>Actual teaching content</td>
<td>4.49</td>
</tr>
<tr>
<td>9</td>
<td>Teaching style</td>
<td>4.36</td>
</tr>
<tr>
<td>10</td>
<td>Encourage students interests</td>
<td>4.36</td>
</tr>
<tr>
<td>11</td>
<td>Readiness for classes</td>
<td>4.35</td>
</tr>
<tr>
<td>12</td>
<td>Burden scale</td>
<td>4.18</td>
</tr>
</tbody>
</table>
In order to compare importance of characteristics with students’ satisfaction we have compared results between very satisfied, satisfied and dissatisfied students. Average satisfaction is $M=3.20$, and in comparison male students are more satisfied ($M=3.30$) than female students ($M=3.16$). The level of students’ satisfaction students is shown in next table:

<table>
<thead>
<tr>
<th></th>
<th>Characteristics</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Teaching methods</td>
<td>4.17</td>
</tr>
<tr>
<td>14</td>
<td>Enthusiasm</td>
<td>4.14</td>
</tr>
<tr>
<td>15</td>
<td>Usefulness and excitement of teaching tasks and recommended literature</td>
<td>4.12</td>
</tr>
<tr>
<td>16</td>
<td>Innovativeness and introduction of changes</td>
<td>4.10</td>
</tr>
<tr>
<td>17</td>
<td>Encouragement of interactivity, cooperativity and study independency</td>
<td>3.99</td>
</tr>
<tr>
<td>18</td>
<td>Use of information technology in classes</td>
<td>3.85</td>
</tr>
<tr>
<td>19</td>
<td>Research work</td>
<td>3.33</td>
</tr>
</tbody>
</table>
Table 3: Level of satisfaction

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very dissatisfied</td>
<td>7</td>
<td>4.5</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>34</td>
<td>21.8</td>
<td>21.8</td>
<td>26.3</td>
</tr>
<tr>
<td>Neither satisfied or dissatisfied</td>
<td>43</td>
<td>27.6</td>
<td>27.6</td>
<td>53.8</td>
</tr>
<tr>
<td>Satisfied</td>
<td>65</td>
<td>41.7</td>
<td>41.7</td>
<td>95.5</td>
</tr>
<tr>
<td>Very satisfied</td>
<td>7</td>
<td>4.5</td>
<td>4.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>156</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Important characteristics for satisfied students

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Average grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Communication and teaching skills</td>
<td>4.68</td>
</tr>
<tr>
<td>2. Use of examples from practice</td>
<td>4.63</td>
</tr>
<tr>
<td>3. Clearly defined education goals</td>
<td>4.58</td>
</tr>
<tr>
<td>Accentuation of important parts of teaching materials</td>
<td></td>
</tr>
<tr>
<td>4. Expertise</td>
<td>4.49</td>
</tr>
</tbody>
</table>

Table 5: Important characteristics for very satisfied students

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Average grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Expertise</td>
<td>4.71</td>
</tr>
<tr>
<td>2. Use of examples from practice</td>
<td>4.71</td>
</tr>
<tr>
<td>3. Actual teaching content</td>
<td>4.71</td>
</tr>
<tr>
<td>4. Regular consultations, personal contact and feedback</td>
<td>4.57</td>
</tr>
<tr>
<td>5. Equable evaluation criterions</td>
<td>4.43</td>
</tr>
</tbody>
</table>

The results shown that there is only two characteristics between top five among the all satisfied students (satisfied and very satisfied) – expertise, which is in number one position for very satisfied, and on the 5th position for satisfied students. Next characteristic that is in common for all students is use of examples from practice.
There is also difference between sex: while for male students most important characteristics are Use of examples from practice (4,85), expertise (4,65), Equable evaluation criterions (4,63), communication and teaching skills (4,55) and actual teaching content (4,50); for female students most important characteristics are communication and teaching skills (4,7), clearly defined education goals (4,67), Equable evaluation criterions (4,63), accentuation of important parts of teaching materials (4,57) and regular consultations, personal contact and feedback (4,55).

It is interesting that least important characteristic for all students is research work, but that can be explained with students’ small knowledge about educational demands.

From all those results, we have formed a list of very important characteristics, from point of satisfied or very satisfied students, male or female, that is essential for professor to posses. They are:

1. Expertise
2. Equable evaluation criterions
3. Regular consultations, personal contact and feedback
4. Communication and teaching skills
5. Use of examples from practice

Because students find teaching skills very important (in top 5 characteristics), as well as teaching style and methods (they are ranked in top 10 characteristics), it’s important to find out what type of teaching style is more popular – autocratic or democratic. In consideration were taken answers about following statements: interactivity and communication with professor encourage students to come to the class, feedback from students shows that professor is good in communication, partner relation between professor and student influent on satisfaction with study. The results show that students find important interactivity and communication, as well as feedback and a fact that partner relation between professor and student leads to satisfaction with study in 75% responses, implicates that they want democratic style. Although they want clearly defined education goals, what is characteristic of autocratic style, the results implicates that students want combination of democratic and autocratic style. The autocratic style contributes with clear rules, which are important in order to preserve discipline and order, but in case of professors’ characteristics they prefer democratic style. That is good, because characteristics of democratic style are same
characteristics that Bologna system introducing. That shows that students are open for changes which come with implementation of Bologna.

Table 6: Interactivity and communication with professor encourage students to come to the class

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>I don’t agree at all</td>
<td>1</td>
<td>.6</td>
<td>.6</td>
</tr>
<tr>
<td></td>
<td>I don’t agree</td>
<td>17</td>
<td>10.9</td>
<td>10.9</td>
</tr>
<tr>
<td></td>
<td>Neither agree or don’t agree</td>
<td>22</td>
<td>14.1</td>
<td>14.1</td>
</tr>
<tr>
<td></td>
<td>I agree</td>
<td>55</td>
<td>35.3</td>
<td>35.3</td>
</tr>
<tr>
<td></td>
<td>I agree completely</td>
<td>61</td>
<td>39.1</td>
<td>39.1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>156</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 7: Feedback from students shows that professor is good in communication

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>I don’t agree at all</td>
<td>1</td>
<td>.6</td>
<td>.6</td>
</tr>
<tr>
<td></td>
<td>I don’t agree</td>
<td>2</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td></td>
<td>Neither agree or don’t agree</td>
<td>31</td>
<td>19.9</td>
<td>19.9</td>
</tr>
<tr>
<td></td>
<td>I agree</td>
<td>80</td>
<td>51.3</td>
<td>51.3</td>
</tr>
<tr>
<td></td>
<td>I agree completely</td>
<td>42</td>
<td>26.9</td>
<td>26.9</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>156</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 8: Partner relation between professor and student influent on satisfaction with study

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doesn’t influence at all</td>
<td>6</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
</tr>
<tr>
<td>Doesn’t influence</td>
<td>9</td>
<td>5.8</td>
<td>5.8</td>
<td>9.6</td>
</tr>
<tr>
<td>Neither influence or doesn’t</td>
<td>24</td>
<td>15.4</td>
<td>15.4</td>
<td>25.0</td>
</tr>
<tr>
<td>influence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influence</td>
<td>53</td>
<td>34.0</td>
<td>34.0</td>
<td>59.0</td>
</tr>
<tr>
<td>Influence very much</td>
<td>64</td>
<td>41.0</td>
<td>41.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>156</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Students were also asked to write maximum of 3 characteristics that professor shouldn’t possess in any case.

Table 9: Unwanted characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Number of time mentioned</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bad manners</td>
<td>46</td>
<td>arrogance, haughtiness, self-centered</td>
</tr>
<tr>
<td>Irresponsibility</td>
<td>34</td>
<td>unavailability, unfacility, unorganization, showing up late for class</td>
</tr>
<tr>
<td>Lack of enthusiasm</td>
<td>31</td>
<td>monotone, boring lectures, reading from a book</td>
</tr>
<tr>
<td>Indifference</td>
<td>25</td>
<td>Underestimation of students, not showing interest for students or teaching goals</td>
</tr>
<tr>
<td>Unprofessionalism</td>
<td>21</td>
<td>double standards, subjectivity, unfairness</td>
</tr>
</tbody>
</table>

From all of that we can see that students don’t want professors who aren’t interested in matter and establishment relations with students. They don’t like double standards; they want transparency in grading their work assignments, projects, seminars and exams.
Conclusion

This paper has examined what qualities and behaviors students expect from their lecturers in comparison with suggestions of educational literature.

Although students differ in what they expect of Bologna process and in characteristics they believe is essential for lecturers to posses, our research shows some common expectations. The study results indicate that students want lecturers to have good communication and teaching skills, to use fresh examples from practice, to have equable evaluation criterions, to clearly define education goals and to have great expertise knowledge. Students also think that lecturers should be enthusiastic and that students want combination of democratic and authoritarian teaching style, with all good elements of those two.

This research also showed that students are agitated when lecturers act with bad manners, lack of enthusiasm and interest, unprofessionally and irresponsible.

We can see that educational literature and students mostly agree in expectations from lecturers. Education explorers have been over the years changing their opinions about important characteristics. In the time of Old Greece, Kvintilijan has talked about individual approach to students and that professor needs to be as much as can educated and teaching matter divided into a round units that have sense. During Humanism and Renaissance attention is on scientific education of professors, individual approach and in consideration are new teaching methods. J. J. Rousseau had a great influence on education of 18th century. He, from professors, demanded development of students’ independence, activity and ability of observation. Today, most of scientist are putting accent on mutual understanding, new teaching techniques and methods, students participation in learning, group work etc. They point out that professors needs to know fundamentals of pedagogy, they continuously need to improve their knowledge with research work and participation in different educational programs.
The knowledge of student expectations may help lecturers and educational institutions to improve their teaching quality, to speed up the implementation of the main objectives of the Bologna process and finally to meet students' needs and expectations.
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Abstract:
Climate change will be one of the major challenges for policy makers in the 21st century. Although environmental economics helped us to solve some of the major environmental problems, its fundamentals lie on the Pigouvian neoclassical tradition of methodological individualism, unbounded rationality assumption and efficiency as a criterion for resource allocation. These fundamental assumptions of neoclassical economics are being tested by a growing number of heterodox schools which questions the validity of policy making proposals made by environmental economists. Moreover, the ‘narrowness’ of the ‘tractable’ models used prevented us from understanding some of the important environmental and ecological issues such as global warming and the loss of biodiversity. Hence, this paper brings into perspective the need for an interdisciplinary approach to complex environmental problems embodied in the field of ecological economics.

Keywords: ecological economics, climate change, neoclassical economics
Introduction

Fighting climate change will be one of the greatest challenges humans have faced since their existence. Climate change will become one of the most important issues of policy makers since it will have serious socio-economic impacts. It will affect the basic elements of life for people around the world - access to water, food production, health, and the environment. Hundreds of millions of people could suffer hunger, water shortages and coastal flooding as the world warms. In order to trigger a change we have to start realizing that the human economy is not an isolated system. Moreover, it is a part of the biosphere and depends on it for resources. With the current rate of development it is expected that the world population will reach nine billion by the middle of the century. This means that we will demand even more inputs from the biosphere but also create more outputs in the form of GHG emissions and pollution. Combined with climate change, the ever growing need for resources could lead us to limits of human development. Thus, we have to start thinking of ways to solve the ever-growing problems of the future; we need a sustainable path of development. Environmental economics has provided some answers in the form of policy recommendations. However, this is a field of economy built on the neoclassical framework which is being put to the test by a growing number of heterodox schools the most promising one being ecological economics. The main advantage of ecological economics is that it takes into account the interconnectivity of the economic, social and natural systems and faces socio-economic problems in a multidisciplinary way.

Climate change is an issue that can be best portrayed as being complex. Érdi (2008) states that complexity has the properties of circular causality, feedback loops non-linear cause-effect response, emergence, and unpredictability. Mainstream economics is not capable of solving such issues. Indeed, Costanza (2003) argues that mainstream economics is “autistic” in its deficits in communication and social interaction with other disciplines, preoccupation with mathematical fantasy, language impairment in its limited and specialized vocabulary, and excessive attachment to certain objects (assumptions and models). This intellectual impairment has led to its inability to address many important real world problems.
In contrast, ecological economics recognizes the complexity of the issue at hand and offers solutions by using an interdisciplinary approach. Thus this paper proposes ecological economics as a new framework for solving problems of climate change. However, in order to get a perspective on our future challenges, the first part of the paper outlines the main scientific findings on climate change and its predicted costs. Furthermore, the second part provides a critical review of neoclassical economics and the final part presents ecological economics as a promising alternative to environmental (neoclassical) economics.

**Climate change**

Warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice and rising global average sea level.\(^58\) The cause of climate change is human activity which is creating an increased concentration of greenhouse gasses in the earth’s atmosphere, particularly carbon dioxide (CO\(_2\)) from fossil fuel use. As this stops more and more of the sun’s energy being radiated back into space, there is likely to be a global average temperature increase of between 2 and 4°C, or even as high as 6°C, by the end of the century (relative to 1980-99 levels). As the oceans absorb more of this heat, seawater expands (thermal expansion) and causes a rise in sea levels. Once the full effects of glacial and ice sheet melting are also taken into account, some suggest that the average rise in sea levels could be significantly higher than the conservative IPCC predictions, potentially a meter or more by end of century. Just to put this in context, in Bangladesh for example, over 17 million people live at an elevation of less than one meter above sea level. It is almost certain that drought, food shortages and flooding will lead to the mass movement of peoples, with perhaps up to 200 million environmental refugees by the middle of the century. Furthermore, with most of the world’s cities, and of course ports, located on coasts or river deltas, there is a clear threat from these rising sea levels and extreme weather events to human life and property and other

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key infrastructure such as communication, transport and energy supply networks. The economic impacts of such losses could be enormous. In fact, The Stern Review published by the British Treasury at the end of 2006 concluded that if the more dramatic predictions come to pass, then inaction on climate change could cost the world economy more than 20% of global GDP each year. Although being the most widely cited report on economics of climate change, it is also criticized as being a vehicle for speculative alarmism. Hence, there is no scientific consensus on the costs of climate change. However, it is certain that climate change will involve not only changes in our environment but also socio-economic impacts. Consequently, it is evident that climate change will be one of the main challenges for future policy makers.

Current mainstream economics embodied in environmental economics, suggests policy recommendations based on neoclassical welfare models. Some of these argue that the cost of cutting emissions will be extremely large in comparison to the overall effects. William Nordhaus’s (1992) climate change model has been extremely influential in justifying delays in greenhouse gas reductions. Indeed, it states that the Kyoto reductions will cause a surprisingly small reduction in temperature (0.03°C) in 2100, partly because the developing countries will increase their CO$_2$ emissions. Moreover, if we fail to implement Kyoto on a global scale, our honorable intentions of helping the world by curbing CO$_2$ emissions would actually end up incurring a net cost to the world. However, Gowdy and Erickson (2005) conclude that working within the framework of welfare economics; the only greenhouse consequences that count are those that affect GNP, leaving out the effects on ecosystems. And since the Nordhaus model relies on a surprise-free scenario of mild and predictable change, these effects are likely to be modest. Chapman and Khanna (2000) conclude that the Nordhaus model is not based on scientific objectivity, but rather on value-laden assumptions about discounting, technical change and abatement costs at best reflecting the personal views of the analyst, and at worst the expectations of research sponsors. Ethical considerations are central to the global warming debate, but they are set aside by neoclassical welfare theorists.

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60 The Stern Review: A Dual Critique, 2006. World Economics, Vol 7, No. 4,
61 Under Kyoto, industrialized countries agreed to reduce their collective GHG emissions by 5.2% compared to the year 1990.
63 J.Gowdy,J.D.Erickson, An approach of ecological economics, Cambridge Journal of Economics, 2005
Hence, models based on neoclassical framework, are being put to the test\textsuperscript{64} which is why we have to look at alternatives, the most prominent one being the framework of ecological economics.

**Critical review of neoclassical economics**

The neoclassical era ushered in over 100 years ago with the elegant mathematical justification of free market capitalism by the likes of Marshall, Walras, and Pareto. Twentieth century challenges to the mainstream were most often characterized as anomalies to assumptions of consumer and firm behavior or as being easy to deal with through minor government intervention to correct market failure consistent with the general equilibrium framing of the problem.\textsuperscript{65} Furthermore, Gowdy and Erickson (2005) conclude that the theory of the consumer has been dominated by a goal of efficiency in utility maximization, supported by the notion of economic man and the underlying axioms of consumer choice (preferences are complete, reflexive, transitive and continuous, and exhibit non-satiation and diminishing marginal rates of substitution). Similarly, the theory of production has been dominated by a goal of efficiency in profit maximization, supported by the notion of perfect competition and the associated assumptions of firm behavior (independence of the actions of firms, no market power, constant returns to scale, perfect information and no uncertainty).

Matutinović (2009) states that neoclassical theorists attempted to supply “rigorous” proofs of market allocative efficiency by proposing two welfare theorems. The first theorem shows that the process of decentralized decision making of producers and consumers, mediated by relative prices and under the condition of perfect competition leads to Pareto optimal equilibrium solution (Šohinger 1991, 45-46). So derived Pareto optimality, however, does not refer to any socially desirable state of welfare: given an arbitrary initial economic endowments among individuals a competitive mechanism will produce an equally arbitrary distribution of wealth at the equilibrium state - its efficiency is therefore socially neutral or blind.

\textsuperscript{64} Detailed critiques of Nordhaus’ model are given by Wright and Erickson (2003A, 2003B) and Chapman and Khanna (2000)

\textsuperscript{65} J. Gowdy, J. Erickson, 2005. Ecological economics at a crossroads, Ecological Economics
In addition, Matutinović (2009) shows that being aware of the social meaninglessness of such a “proof” of efficiency, Arrow and Debreau proposed the second fundamental theorem of welfare economics that connects Walrasian equilibrium and Pareto optimality in the way that would ensure a more just distribution of wealth by means of an opportune initial redistribution of resources between individuals arranged by a central authority. However, as Dasgupta (1986) convincingly showed, the second welfare theorem is valid only under circumstances that render market allocative mechanism unnecessary. The meaningful context of discussing the allocative efficiency of real markets within the neoclassical theory is, therefore, lost because of the paradox stemming from of its own assumptions.

Another source of problems for Pareto efficiency is a growing body of evidence contradicting the axiomatic model of consumer choice. For example, rather than assume exogenous preferences that respond in predictable ways to price signals, Camerer et al., (2004) stress the pervasiveness of endogenous preferences and the importance of an individual’s personal history, interaction with others, and the social context of the individual choice. Furthermore, Thaler (1980) shows that individual choice is consistently influenced by an endowment effect where higher value is placed on things already in possession. This is in contrast with the Coase theorem which stresses that the optimal allocation of resources among individuals who can freely bargain at no cost should be independent of the initial assignment of property rights. Moreover, the success of Pigovian tax policies depends on self regarding, narrowly rational actors responding in consistent and predictable ways to price incentives. Here again the empirical evidence fails to support the behavior implied by the model’s assumptions. Gnezy and Rustichini (2004) show that the effect of incentives on behavior is mixed at best and is frequently perverse. This calls into question the relative importance of "getting the prices right" in environmental policy, over potentially more effective non-price adjustments. Henrich et al., (2001) conclude that the axiomatic neoclassical model makes poor predictions of economic behavior calling into question not only the validity of PPI as a policy guide but also the notion of efficiency as conceived by welfare economics. In addition, neoclassical economic theory has no role for physical materials, energy or the laws of thermodynamics. Energy and materials exist in the theory as outputs – products and services – but not as inputs or drivers. It is fundamentally a theory about relationships between immaterial abstractions.

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Future growth is simply assumed to be automatic, cost-free and independent of future energy costs. Thus the standard neoclassical economic theory is, in effect, “dematerialized”. It needs to be “rematerialized” in the sense of incorporating the laws of thermodynamics as real constraints on possible outcomes. Moreover, it is argued that with a meager level of understanding of the environmental system, the existing neoclassical models are capable of addressing only a very few environmental issues but are inadequate to incorporate variety of other issues. Sollner (1997) argues that this is because the neoclassical models (a) ignore the natural limits to growth (b) neglect the important interdependency between economy and environment and (c) downplay the role of time.

Furthermore, neoclassical economists were slow to recognize the implications of environmental degradation. However, environmental economics finally emerged as a recognized branch of the discipline around 1970s when the deteriorating state of the human environment began to achieve headline status. Currently, environmental economics dominates environmental policy across the globe. It is based on the Pigouvian neoclassical tradition of methodological individualism, unbounded rationality assumption and efficiency as a criterion for resource allocation. Environmental economics deals with externalities which cause market failure. This creates the necessity of enforcing a “polluter-pays-principle” or a second-best approach in the form of government regulation. In addition, the social optimum is reached by abiding to the principle of optimal allocation of scarce resources, where marginal social cost equals marginal social benefits. Furthermore, the need to balance benefits and costs of pollutant treatment and abatement has been a key insight of environmental economics (cost-benefit analysis). Another was the importance of private ownership as a precondition of conservation.

Though the Pigouvian neoclassical tradition had strengthened the analytical foundation of modern environmental economics, the ‘narrowness’ of the ‘tractable’ models used prevented us from understanding some of the important environmental and ecological issues such as global warming and the loss of biodiversity. Thus, in order to solve these issues we need to consider an interdisciplinary approach such as the one embodied in the field of ecological

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69 L. Venkatachalam, 2006. Environmental economics and ecological economics: Where they can converge?, Ecological Economics
70 Pigovian tax, tradable pollution permit approach and subsidies to the provision of open land
economics. At the outset, environmental economics and ecological economics differ on the basic theoretical framework that they utilize to analyze the underlying objective of understanding the human–economy–environment dynamism. While the former extends the basic premises of neoclassical economics, the latter adopts ‘diversified’ approaches such as energy/entropy analysis and ecological modeling. Hence, ecological economics calls for a multiplicity of approaches in constructing plural models that would accommodate the "real" issues.  

**Foundations of ecological economics**

As the only heterodox school of economics focusing on the human economy both as a social system and as one imbedded in the biophysical universe, and thus both holistic and scientifically based, ecological economics is poised to play a leading role in recasting the scope and method of economic science. Ecological economist’s question the sustainability of the economy because of its environmental impacts and its material and energy requirements, and also because of the growth of population.

Costanza (1991) concludes that ecological economics is a transdisciplinary effort to link the natural and social sciences broadly, and especially ecology and economics. Ecological economics therefore includes some aspects of neoclassical environmental economics, traditional ecology and ecological impact studies, and several other disciplinary perspectives as components, but it also encourages completely new, more integrated ways to think about the linkages between ecological and economic systems. Also, the goal is to develop a deeper scientific understanding of the complex linkages between human and natural systems, and to use that understanding to develop effective policies that will lead to a world which is ecologically sustainable, has a fair distribution of resources (both between groups and generations of humans and between humans and other species), and efficiently allocates scarce resources including “natural” and “social” capital. One of the basic organizing principles of ecological economics is thus a focus on this complex interrelationship between human and natural systems.

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71 L. Venkatachalam, 2006. Environmental economics and ecological economics: Where they can converge?, Ecological Economics  
ecological sustainability (including system carrying capacity and resilience), social sustainability (including distribution of wealth and rights, social capital, and coevolving preferences) and economic sustainability (including allocative efficiency in the presence of highly incomplete and imperfect markets).\textsuperscript{74}

Moreover, ecological economics sees the economy in an entirely different setting than mainstream economics. A basic building block of mainstream neoclassical economic theory is the standard "circular flow" model of an economic system (Figure 1). This model shows the exchange of goods, services, and factors of production between two types of economic actors, Consumers (households) and Producers (firms). However, the environment and the natural resources that make economic production possible do not appear in the usual version of this model.

\textit{Figure 1}: "Circular flow" model, Macroeconomics and the environment, Student reading for introductory macroeconomics, J.M. Harris, A.M. Codur, Global Development and Environment Institute, Tufts University

Therefore, economic models of the circular flow are usually presented as totally self-sufficient systems where prices for consumer goods and services, and prices for the services of production factors are formed. Georgescu-Roegen (1971) describes them as being immaterial perpetual motion machines. According to Ayers (2008) they assume that (1) technological progress continues indefinitely without cost or investment, (2) energy supply is not a constraint on growth and (3) price of energy will have little impact on growth. Indeed, most conventional economists define “health” in an economy as a stable and high rate of growth. Energy and resource limits to growth, according to these paradigms, will be eliminated as they arise by clever development and deployment of new technology. However, ecological

\textsuperscript{74} R. Costanza, 2003. Ecological Economics is Post-Autistic, University of Vermont, USA
economists assume that technology will not be able to circumvent fundamental energy and resource constraints and that eventually economic growth will stop.\textsuperscript{75}

Furthermore, Daly (1992) states that ecological economists see the economy not as a separate isolated system, but rather as an inextricably integrated, completely contained, and wholly dependent subsystem of the ecosphere. Our economy is a subsystem of the earth, and the earth is apparently a steady-state open system. The nested relationship between the ecosphere and the economy is actually typical of complex dynamic self-producing systems. These systems exist in loose, nested hierarchies, each component system contained by the next level up and itself comprising a chain of linked subsystems at lower levels.\textsuperscript{76} The behavior of these subsystems is therefore decidedly non-linear, even chaotic. Most importantly, they function as dissipative structures. Dissipative structures require continuous supplies of available energy, material, and information—various forms of exergy\textsuperscript{77} (see Ayers, 2008)—which they use to produce themselves and to maintain their adaptive self-organizational capacities. These systems also necessarily generate a continuous stream of degraded energy and waste (entropy\textsuperscript{78}) that is rejected back into the environment.\textsuperscript{79} All such dissipative processes are inherently thermodynamic in character, so the second law of thermodynamics is central to understanding the relationship between the ecosphere and the economy. It follows that the ecologically important flows in the economy are not the circular flows of money but rather the unidirectional and thermodynamically irreversible flows of useful matter and energy from the ecosphere through the economic subsystem and back to the ecosphere in degraded form (Figure 2). This linear throughput is what fuels the economy—technology notwithstanding, human society remains in a state of obligate dependence on the ecosphere both as a source of

\textsuperscript{75} R. Costanza, 1998. What is ecological economics? Ecological Economic-s. 1,

\textsuperscript{76} Think of the ecosphere as a subsystem of the solar system, individual ecosystems and the economy as subsystems of the ecosphere, individual organisms and people as subsystems of their ecosystems and economies, organ systems as subsystems of the individual, etc., all the way down to organelles as subsystems of individual body cells

\textsuperscript{77} Energy is a conserved quantity. It cannot be ‘consumed’ or ‘used up’, as such. However it can (and does) become less able perform useful work. Potentially useful work, or availability is quantifiable. By general agreement among physical scientists this quantity is now denoted exergy, namely the fraction of total energy that is available to perform work. (This fraction is also what most people really mean when they speak of energy.) Exergy is not conserved.

\textsuperscript{78} For various detailed definitions of entropy see http://en.wikipedia.org/wiki/Entropy

\textsuperscript{79} For example, photosynthesis in the ecosphere dissipates high-intensity solar radiation that is re-radiated into space as low-intensity infrared radiation; economic production dissipates mainly fossil energy extracted from the ecosphere and injects low-grade heat, water vapor, and carbon dioxide back into the ecosphere
useable energy/matter and as a sink for waste.\textsuperscript{80} In addition, Giampietro (2003) sees ecological and economic systems as mutually constitutive and Norgaard (1994) describes them as coecolving. On the other hand, as Christensen (1991) states, prevailing mainstream economic models of growth and “sustainability” do not pay tribute to ecological and thermodynamic considerations, or they are invisible to mainstream economic approaches.

According to ecological economics, the economy is also embedded in a structure of property rights on environmental resources and services, in a social distribution of power and income, in social structures of gender, social class or caste.\textsuperscript{81} Hence, ecological economics is more complex than mainstream economics because it rejects the variety of simplistic assumptions made by neoclassical economists. Accordingly, the approach of ecological economics differs from the one applied in neoclassical economics in many ways. One of the differences is in the tools used in assessing the effect of projects on the environment. While the former uses the standard Cost-Benefit analysis, ecological economics applies multi-criteria decision aide. Furthermore, ecological economists reject the usage of Marginal Analysis in the case of ecosystem valuation and adopts complex adaptive systems analysis. Another major issue dividing neoclassical and ecological economists is the treatment of uncertainty. Ecological economics adopts the precautionary principle developed by Ciriacy-Wantrup (1952) who suggests that we should "err" on the side of caution in the face of uncertainty. Changes induced to the ecosystem by human intervention are so unpredictable that we have to be really, really careful.\textsuperscript{82} These and some others (see Gowdy and Erickson, 2005) are the main methodological differences between ecological and environmental (neoclassical) economics. However, these differences are not the main subject of this paper and accordingly will not be discussed in detail.

\textsuperscript{82} T.Prugh, E.Assadourian, 2003. What is Sustainability, Anyway?, Worldwatch Institute
Figure 2: "Circular Flows with energy and Recycling" model, Macroeconomics and the environment, Student reading for introductory macroeconomics, J.M. Harris, A.M. Codur, Global Development and Environment Institute, Tufts University
Conclusion

Gowdy (2007) states that the critical problems that scientists warned about decades ago are now upon us. There is a near universal consensus that global warming is human-caused and that its effects are now accelerating. Biodiversity loss and ecosystem disruption is now well-documented. The global connections between social disruption, resource use and environmental degradation are now all too familiar. The scope of the problem is hardly comprehensible. In order to limit global warming to two degrees centigrade, a growing consensus in the scientific community warns, the world must not only cut emissions by at least 50 percent of today’s level as of 2030 but also cut them by 80 percent or more as of 2050, even as the world’s population and GDP rise. How and whether these goals can be reached isn’t understood yet. However, it is eminent that climate change will involve not only changes in our environment but also socio-economic impacts whose scope could limit global growth.

Current mainstream economics embodied in environmental economics offers solutions in the form of enforcing a “polluter-pays-principle” or a second-best approach in the form of government regulation. These policies are based on the Pigouvian neoclassical tradition of methodological individualism, unbounded rationality assumption and Pareto efficiency as a criterion for resource allocation. However, Gowdy and Erickson (2005) indicate that there are great difficulties in identifying potential Pareto improvements. Moreover, recent findings in behavioral economics and psychology demonstrate that individuals are not rational actors as assumed by neoclassical economists.

This casts doubt on neoclassical welfare economics as a foundation for environmental policy making. Moreover, the scope of neoclassical economics is narrow as it has no role for physical materials, energy or the laws of thermodynamics. Hence, the narrowness of the mainstream prevented it from addressing and understanding some of the major environmental and ecological issues such as the loss of biodiversity and global warming.

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On the other hand, ecological economics is the only heterodox school of economics focusing on the human economy both as a social system and as one imbedded in the biophysical universe. What is more, it is poised to play a leading role in recasting the scope and method of economic science. Ecological economics is a transdisciplinary effort to link the natural and social sciences broadly, and especially ecology and economics. Also, the goal is to develop a deeper scientific understanding of the complex linkages between human and natural systems, and to use that understanding to develop effective policies that will lead to a world which is ecologically sustainable, has a fair distribution of resources and efficiently allocates scarce resources.

The scope of climate change has outgrown the simplistic models of the mainstream. In accordance, we need to move on and adopt a transdisciplinary approach such as the one embodied in the field of ecological economics. Although some say that its methodology has become “too vast” focusing on too many areas they are voices of people who do not recognize the complexity of the problem at hand.

Of all the conventional and heterodox schools ecological economics is the only one poised to address the problems of human survival in the coming centuries. It is the school of thought that explicitly recognizes the interconnections and interdependence of the economic, biophysical and social worlds.

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SYSTEMIC RISK IN BANKING: NEW APPROACHES UNDER THE CURRENT FINANCIAL CRISIS

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Abstract:
In the context of the current financial crisis, the stability of the financial system becomes a priority on the agenda of the national monetary authorities. Since “systemic risk” is widely accepted as the fundamental underlying concept for the study of financial instability, this paper attempts to highlight the new dimensions of the concept in the pursuit of effective crisis management. Today, the potential for increased systemic risk is particularly related to combinations of structural trends. The increasing use of credit risk transfer (CRT) instruments and other financial innovations have changed the nature of systemic risk in banking activity. Moreover, as banks have become broad-based financial institutions engaging in a full spectrum of financial services including investment banking, brokerage services, asset management or proprietary trading, their risk exposures have become considerably more complex and interdependent. Thus, the risk of bank failure triggering a chain reaction and generating negative externalities for the whole financial system is significantly grown. Consequently, there is a stringent need for appropriate regulation and for macro-prudential supervision.

Keywords: systemic risk, financial innovation, contagion effects, CRT instruments, shadow banking system
Introduction

The financial crisis 2007-2008 has changed the dimensions under which systemic risk in banking is analyzed and inducts the necessity of new risk management instruments. The current context of the global financial system reveals the fact that the quantitative measures of risk have underestimated systemic risk. Financial innovation and the rising opacity of financial markets have amplified the systemic risk.

Even if Basel II intended to provide a more consistent and transparent framework for evaluating systemic risk in the banking system (through credit cycles), this risk has not been reduced because regulators focused most on the microeconomic risk. There is a fundamental difference between idiosyncratic risk and systemic risk, a difference which has been neglected both by regulators and U.S. bankers.

At the moment, an appropriate assessment of systemic risk is a crucial challenge for re-establishing supervisory and regulatory frameworks, since systemic risk was the “mobile” that transformed the U.S. crisis into a global one.

This paper is structured as follows. In Section 2, I discuss the traditional sources of systemic risk, as a necessary background and link to Section 3, where I analyze the new dimensions of systemic risk under the current financial crisis. In Section 4, I analyze the systemic risk in the banking activity of Romania and Section 5 concludes this paper.

Traditional approaches of systemic risk in banking

According to Kaufman (1995), systemic risk is the probability that cumulative losses will accrue from an event that sets in motion a series of successive losses along a chain of institutions (typically, banks) comprising a system... That is, systemic risk is the risk of a chain reaction of falling interconnected dominos”. The cause of this happening should be the illiquidity or insolvency of a large bank.
Another definition that emphasizes the correlation with causation, requiring direct and close connections among institutions is the definition given by the Bank for International Settlements (BIS 1994): “the risk that the failure of a participant to meet its contractual obligations may in turn cause other participants to default with a chain reaction leading to broader financial difficulties”. This “knock-on” reaction is caused by direct financial exposures among firms. For example, if bank A defaults on a loan, deposit or other payment to bank B, which produces a loss greater than bank B’s capital and forces it to default on a payment to bank C, generating a loss larger than bank C’s capital, and so on down the chain (Crockett, 1997). In brief, the smaller a bank’s capital-assets ratio is (the more leveraged it is), the more likely it is to be driven into insolvency by other bank insolvencies on the transmission chain.

An approach that does not involve direct causation, requiring weaker interconnections, emphasizes similarities in third-party risk exposures among the units involved and it is referred to as a “common shock” effect (Kaufman, 2000). When one unit experiences an adverse shock that generates severe losses, in order to minimize additional losses, market participants will withdraw funds from the units which have a similar risk exposure profile with that of the initial unit. One example of “common shock” is the 11th of September 2001 event.

Traditionally, systemic risk in banking regarded two primary channels for bank contagion: the exposure channel and the informational channel (Saunders, 1987). The exposure channel refers to the potential for “domino effects” through real exposures in the interbank markets and payment systems, whereas the informational channel relates to contagious withdrawals by the imperfectly informed depositors who ignore the type of shocks hitting banks and their physical exposure to each other (de Bandt and Hartmann, 2000). Because this information is not available immediately, accurately or free, participants will transfer their funds to safer units with the tendency to adjust their portfolios in quantities rather than in prices (interest rates). That is, they will not lend at any rate, generating a run to quality of units that appear potentially at risk.

Scholars (Kaminsky and Reinhart, 1998) also make distinction between rational or information-based systemic risk and “pure” contagious, random or non-information based systemic risk. Random contagion does not differentiate between parties, affecting both
“guilty” and “innocent” parties. The guiltiness/innocence is measured by the levels of solvability and leverage.

Essentially, any asset portfolio is a financial network. Likewise, the balance sheet of a bank is a network with nodes defined by the assets and links defined by the correlations directional lending relationship among those assets (Lazarov, 2009). Similarly, the financial system is a network, with nodes defined by the financial institutions and links defined by the financial interconnections between these institutions. Since this network faces unavoidably many uncertainties, identifying, pricing and managing balance sheet risk becomes a very difficult task for risk managers.

Systemic risk in the shadow banking system

In 1999, important provisions of Glass-Steagall Act, prohibiting a bank holding company form owning other financial companies, were repealed. As a consequence, banks have made use of ambiguous and poor regulations to develop the non-regulated sector – their own non-bank financial institutions (NBFI), independent entities – and thus, creating a shadow banking system (Dăianu, 2008). Between 2000 and 2008, these non-bank financial institutions have come to play an important role in providing credit across the global financial system.

The shadow banking system comprises entities that do not accept deposits and therefore they are not subjects to the same regulations as depositary banks, such as investment banks, hedge funds, SIVs (structured investment vehicles), mutual funds, insurance companies, pension funds and various broker/dealers and other related intermediaries. What made these entities vulnerable was the fact that they borrowed short term in liquid markets to purchase long-term, illiquid and risky assets, being also highly leveraged.

Together with the shadow institutions and financial and technological innovation, a new market has developed – the market for derivatives and structured products. In this context, banks created Credit Risk Transfer (CRT) instruments through which banks could transfer credit risk in the financial system, such as loan securitizations, Credit Default Swaps (CDS) and Collateralized Debt Obligations (CDOs). The effects of such products on systemic risk
accrue from the fact that derivatives can be used to create unlimited amounts of risk, risk that did not exist before the two parties entered into the transaction. Then, derivatives can be used to negate risks that parties were already exposed to in exchange for assuming other risks, thereby acting as a risk-transferring device. According to Nijskens and Wagner (2008), banks undertaking CRT activities may be individually less risky, but actually they are posing a greater risk for the financial system, as a whole.

Securitization, the process of creating and issuing asset-baked securities (CDOs) may involve the use of credit derivatives, such as CDS, through which banks buy protection against a debtor’s bankruptcy. The mechanism of creating CDOs implies the existence of an independent (shadow) entity (SIVs) which buys a package of assets/credits (mortgages) from a bank – package which will serve as collateral – by issuing new securities/bonds.

In this way, bankers wanted to reduce the risk of nonperforming credits (idiosyncratic risk), not taking into consideration an adverse tendency of the market (a systemic shock). When this has happened and the housing prices went down, a huge liquidity crisis occurred and many of these shadow institutions went into bankruptcy.

Partly, the run on the shadow banking system has been caused by the broadening of intermediation. As the number of market players increased, assessing the nature and magnitude of the risk involved or locating those who bear the risk, became increasingly difficult. The multiplication of CDOs has made it difficult to identify who is holding what. Rating agencies played here an important role: they have rated these instruments with triple-A, because a lot of defaults would have been needed to trigger losses and also because they were in conflict of interests (they were payed by the issuers and not by the purchasers of the instruments).

Nobel laureate Paul Krugman explained the run on the shadow banking system in a very relevant way: "As the shadow banking system expanded to rival or even surpass conventional banking in importance, politicians and government officials should have realized that they were re-creating the kind of financial vulnerability that made the Great Depression possible -- and they should have responded by extending regulations and the financial safety net to cover these new institutions. Influential figures should have proclaimed a simple rule: anything that does what a bank does, anything that has to be rescued in crises the way banks are, should be regulated like a bank."
Systemic risk in the banking activity of Romania

In Romania the shadow banking system is very low developed and does not pose any threat to the domestic banking system. Hence, systemic risk is not increased by the specific instruments of non-bank (non-regulated) institutions. The approach under which we analyze systemic risk is still traditional: through interbank exposures and liquidity risk. Bank assets portfolios do not comprise any “toxic asset” and even if their liquidity depressed lately, due to the global liquidity (and confidence) crisis, is still at a comfortable level.

As we can observe in Figure 1, the dynamic of credits was superior to that of the deposits in the analyzed period, the credits/deposits indicator surpassing 100% in 2007. From 2005, each year there were granted more credits than the deposits attracted. Under these conditions, the equilibrium of the balance sheet was sustained by growing the weight of interbank resources in total liabilities from 22, 3% in 2006 to 28% in 2007 and thus, heightening banks’ exposure to liquidity shocks.

Figure 1: The comparative evolution of two liquidity risk indicators

![Figure 1: The comparative evolution of two liquidity risk indicators](source)


The structural analysis of interbank resources (Figure 2) highlights the prevalence of external resources, especially from mother-banks. Taking into consideration that at the end of 2007,
resources from mother-banks represented 70% from total interbank resources of domestic banks, the most probable risk scenario would be the lack of liquidity of mother-banks. Since the Romanian banking system is dominated by banks from Austria and Greece, banks to which the global turmoil did not pose many difficulties, the severity of a possible external shock is limited.

The tests proceeded by the National Bank of Romania regarding the internal risk of interbank contamination show that the occurrence of a knock-on reaction is very improbable. The interbank exposures are very low in comparison with the own capital and the liquid assets at the disposal of creditor-banks.

The perspectives of a strong systemic process to arise in the Romanian banking system are related to a potential generalization of banks’ behavior to finance the development of credit activity mainly with interbank resources.
In Figure 3 we observe that along with the value of domestic interbank exposures, the average level of connectivity has grown. Thus, the value of interbank deposits attracted by domestic banks increased with 82% from 2007, due to the diversification of the creditors groups. Likewise, the average degree of connectivity extended from 14.11% in February 2007 to 26.81% in February 2008.
The evolution of the main banking risk indicators in the latest years is suggestive for the way in which national authorities have managed systemic risk. Despite all the prudential regulations, Romanian banking system did not remain unaffected by the global financial crisis. As we can see in the table below, almost all indicators have worsened in 2007 and 2008.
Table 1: The evolution of the main banking risk indicators in Romania since 2004

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<tr>
<td>Solvability ratio (≥8%)</td>
<td>20,64</td>
<td>21,07</td>
<td>18,02</td>
<td>13,78</td>
<td>12,34</td>
<td>x</td>
</tr>
<tr>
<td>Own capital ratio</td>
<td>8,93</td>
<td>9,18</td>
<td>8,63</td>
<td>7,32</td>
<td>7,04</td>
<td>5,95</td>
</tr>
<tr>
<td>General risk rate</td>
<td>46,95</td>
<td>47,61</td>
<td>53,01</td>
<td>56,94</td>
<td>50,74</td>
<td>x</td>
</tr>
<tr>
<td>Interbank investments and credit / Total assets</td>
<td>33,58</td>
<td>29,50</td>
<td>35,97</td>
<td>29,98</td>
<td>26,03</td>
<td>24,99</td>
</tr>
<tr>
<td>Credit granted to clients / Total assets</td>
<td>45,64</td>
<td>46,60</td>
<td>53,17</td>
<td>59,09</td>
<td>62,49</td>
<td>61,56</td>
</tr>
<tr>
<td>Overdue credit / Total credit</td>
<td>0,28</td>
<td>0,26</td>
<td>0,20</td>
<td>0,22</td>
<td>0,35</td>
<td>0,63</td>
</tr>
<tr>
<td>Total overdue claims / Total assets</td>
<td>0,18</td>
<td>0,15</td>
<td>0,14</td>
<td>0,17</td>
<td>0,31</td>
<td>0,51</td>
</tr>
<tr>
<td>Total overdue claims / Own capital</td>
<td>2,07</td>
<td>1,36</td>
<td>1,54</td>
<td>2,28</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Total overdue claims / Total debt</td>
<td>0,20</td>
<td>0,18</td>
<td>0,16</td>
<td>0,19</td>
<td>0,34</td>
<td>0,56</td>
</tr>
<tr>
<td>Credit risk rate</td>
<td>2,87</td>
<td>2,61</td>
<td>2,81</td>
<td>4,00</td>
<td>6,52</td>
<td>8,42</td>
</tr>
<tr>
<td>Liquidity indicator</td>
<td>2,28</td>
<td>2,59</td>
<td>2,31</td>
<td>2,13</td>
<td>2,56</td>
<td>2,35</td>
</tr>
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</table>


The liquidity indicator shows that, despite the increase of the total overdue claims and the credit risk rate, the Romanian banking system is still able to cover its liabilities. Being each year over the minimum standard of liquidity of 1, this indicator reveals the fact that banks operating in Romania conduct efficient liquidity risk management.

Beginning with 2006, both solvability ratio and own capital ratio decreased, even if the own capital ratio went down with a lower rate (18,42% compared with 31,52%). This evolution is explained by the fact that solvability was influenced by the more rapid rate of growth of the risk weighted assets in comparison with the rate of own capital. The continuous heightening of the general risk rate was due to the expansionary policy regarding credit volume and, also, a consequence of a higher concentration of banking assets in assets with risk (56,9% at the end of 2007, 53% in 2006, 47,6% in 2005). However, we observe that this indicator has slightly decreased at the end of 2008 (from 56,94% to 50,74%).
Figure 4: The comparative evolution of solvability ratio, own capital ratio and general risk rate

The figure below illustrates the effects of the global liquidity crisis on the Romanian banking system. From 2007 we observe a sharp growth of the weight of total overdue/non-performing claims in total assets, with 82.35% in 2008 and in February 2009 with 64.51%.
Also, we remark that in February 2009 the weight of total credit granted to clients in total assets decreased and we estimate a continuous descending trend of this indicator in the near future at least until the measure taken by National Bank of Romania of reducing the interest rate will have the desired effects.
Conclusion

The current financial crisis revealed new dimensions of systemic risk. Firstly, due to the creation of the shadow banking system, the concept has come to include non-banks along with banks. Secondly, it has moved beyond traditional lending to include all sorts of financial activities and resulting exposures. Nevertheless, interdependencies between market participants as well as their exposure to common risk factors became an important issue in assessing systemic risk in banking.

In the pursuit of huge profits, the highly leveraged shadow institutions involved in speculative operations, multiplying risks, which increased systemic risk and endangered the stability of the whole financial system.

Monetary authorities play now a crucial role in re-establishing the global order. The market freedom has failed and there is a need for state intervention. We expect new regulations and macro-prudential supervision to form the fundament of a financial reform to address systemic risk.
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DEBT, THE WEST AND THE CRISIS

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Abstract:
As the world enters a new paradigm of economics, we finally witness what debt and over-consumption does to an economy. Ever since the Bretton Woods breakdown, the United States has enjoyed its status as a safe haven built on consumption and credit. This is now over. However, they couldn't have done it without the help of the Federal Reserve and during the years, Asia. Thanks to the constant „bailouts“ over the past decade, massive deficit spending, false capitalism and government interventionism in the world economies, savings have become a thing of the past. As this crisis gains in momentum, we are to witness a economic shift of power, from West to East, and its impact on Europe.

Keywords: debt, United States, Asia, government interventionism, savings
Introduction

As many economists have erroneously stated throughout the past decades that “easy money” policies and government spending through times of economic hardship have cured the economy from its inbred diseases is a fallacy to say the least. Many “mainstream” economists have come to the conclusion that regulation is the only answer to prevent economic turmoil’s, by setting complex rules and regulations (especially the so-called government regulators), capital requirements, voting in laws which breed moral hazard, slashing interest rates, turning government into a leviathan, and many others, have only delayed the root of the problem to a later day. What these economists don’t understand is that these seeds are highly destructive, and when the plant grows to its full maturity, it’s already too late.

The boom-bust cycle in the economy is all too familiar and we again repeat the same mistakes that led to the problem. As the great Albert Einstein once put it: “The definition of insanity is to do the same thing over and over again and expect a different result.”

Whether the insanity was seen during the 1990’s in Japan, or the false prosperity brought during the NASDAQ bubble in The United States that led to a inevitable bust in 2001/2002, or the unnecessary Great Depression of the 1930’s.

The policies brought forth to the world, with the United States leading charge, and the prospect of change are indeed being met.

Unfortunately, in retrospective, these policies are a change for the worst.
The saver’s last resort

As children, our parents have always told us this important life lesson: Spend your money wisely and always save your money, or as the commodities guru, Jim Rogers, eloquently puts it during his interviews: Don’t throw money down a rat hole!

So the underlying question is: Where have all the savings gone?

To look at this crisis, which is a savings crisis as well, there has to be a comprehensive investigation of what happened in The United States. The first step is looking at The Federal Reserve System in the United States.

Ever since Paul Volcker left The FED and Alan Greenspan took his place, there was a 20 year, constant interest rate cut. Those same cuts led to the “dot-com” boom as well as the housing boom in The United States. Keeping interest rates too low for too long created the bubble and as they were slowly risen in the middle of the 1990’s as well as in 2005/2006, that led to the inevitable bust.

While lower interest rates play well for the banker community, it hurts savers, not only through diminished returns, but by purchasing power “disparity” through inflation. The average household in The United States in 2005, consumed more and borrowed more than they took through income, creating a gap, which was filled by the delusion of never ending real-estate appreciation that was funneled through “easy money” granted by The Federal Reserve. Without any savings, capital formation is gone and productive capacity is diminished. No central bank can ever replace savings and capital with inflation or as the central banks put it: “quantitative easing”.

Instead of lowering interest rates, Ben Bernanke should be raising interest rates, to attract capital in The United States. But the American economy is so much in debt and leverage that

85 Refered to as the „federal funds rate“ – the short term interest rate that effects lending standards in the U.S.A.
an interest rate “hike” would eventually “kill” the service-based economy. By lowering interest rates, The FED is flooding the market with trillions of dollars creating massive inflation\textsuperscript{86}.

This action is an alarm bell for all people holding dollar assets to abandon ship and diversify to other currencies that aren’t being devalued at such a fast rate. As Professor and legendary investor Marc Faber said on CNBC\textsuperscript{87}: “There are three schools of economic thought – The Austrian School, The school of rational expectations, The Monetarist School and the Zimbabwe School. So if there is a problem in America, the solution is print money. If that doesn’t work, print more money.”\textsuperscript{88}

Since the U.S. is accumulating such a high amount of debt, and is historically the largest debtor nation ever in history, it is incapable of returning current debt, let alone future obligations.

The only factor keeping the dollar afloat is the Chinese and other Asian nations, referred to as the creditor nations. China is the largest holder of U.S. debt. By September of last year, China holds $585 billion of it and it is “expected” of them to continue buying more treasury bonds and notes. Japan, the oil producing countries as well as Brazil and Russia hold enormous amounts of U.S. debt and do have a degree of leverage on The United States.

The only think that lies between the dollars continued decline, apart from the Chinese, is its status as the world’s reserve currency. But, as China and Japan and others figure out that depleting their own savings to buy dollars, only to get them back devalued, the game will eventually end for The United States. And there will be only be The Federal Reserve to buy federal debt by inflating the money supply.

During the following months, after the Dow Jones Industrial lost 50% and more of its value, and the interest cuts moved ever closer to zero, the American economy hasn’t improved, nor the world economy. There are two measures being brought to light, as to how The FED will usher the end of this recession. One is currently being implemented and the other still on the

\textsuperscript{86} Inflation as it was originally defined is an increase in the supply on money.
\textsuperscript{87} A worldwide financial and business channel
\textsuperscript{88} Faber M., CNBC, 2009-06-02, [online]: http://www.youtube.com/watch?v=SBI2mCx3b4A
drawing-board. One of them is buying $1.25 trillion\textsuperscript{89} of treasury bonds and the other one stated not too long ago - “negative interest rates”\textsuperscript{90, 91} (The FED is calling for negative 5%!)! This mind-boggling statement not only shows the severity of the situation, but a complete lack of understanding basic economics.

The Federal Reserve’s plan, when announced, caused bond yields to decline and the dollar to depreciate. This is just another warning sign to all holders of U.S. debt that The FED isn’t considering the health of its own promissory notes.

No country in history has ever inflated out of its problems. Weimar-Germany is an excellent example of the atrocities of inflation.

A legacy of deficit spending, and inflation through credit expansion have grinded the once manufacturing power-house to a stop. Instead of over-consuming borrowed money from the Chinese and Asia, they should have invested it in productive purposes as they did during the latter 1800’s. But, the granted capital wasn’t invested productively, due to The FED’s “easy money policies” (and being exponentially increased through the fractional – reserve commercial banking system), government spending and interference through its own mortgage-sponsored entities.

Under a truly free-market economy, also referred to as “laissez –faire” approach, none of these problems would have occurred. The only school of economic thought and its followers that correctly predicted market crashes ranging from The Great Depression, the inflation period of the 1970’s and the current housing debacle, is The Austrian School of Economics. It is one of the remaining schools that still advocate sound money through a commodity money such as a gold standard and which see government as a destroyer, not a beneficiary too the economy.

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**House of cards**

As a lack of savings and overconsumption brought this disaster, more of the same won’t solve it. The question remains: What are the politicians supposed to do? The answer is simple: Nothing. This answer surely would cause public hysteria and massive uprising. Or would it?

Since mainstream economists are all focused on government intervention, they see the problem, rather than the cause of it. As mentioned earlier, The Austrian School of Economics is the only school that has a credible answer, not only based on their “Theory of the Business cycle”, but also on historical basis.

The Austrian School as the only free-market school, advocates liberty through free-market enterprise. Its scholars, which have been ignored thanks to “mainstream” dominance, include greats as Ludwig von Mises, Murry N. Rothbard and Friedrich von Hayek.

All of which have predicted correctly market turmoil while the rest of the pack were busy concluding that a never ending prosperity was upon the world thanks to central banks and government polices.

The housing “boom-bust” period in America is explained through the “Austrian theory of the Business cycle.”

Based on Ricardian views (Ricardians), Ludwig von Mises elaborated this theory in 1912, while working at The University of Vienna that became a hallmark of the Austrians and introduced clear and nonbiased, basic verbal logic, that puts back the idea of returning to a gold standard or other commodity money, that can’t be inflated by the wits of a special institution:

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“Without bank credit expansion, supply and demand tend to be equilibrated through the free price system, and no cumulative booms or busts can then develop. But then government through its central bank stimulates bank credit expansion by expanding central bank liabilities and therefore the cash reserves of all the nation's commercial banks. The banks then proceed to expand credit and hence the nation's money supply in the form of check deposits. As the Ricardians saw, this expansion of bank money drives up the prices of goods and hence causes inflation. But, Mises showed, it does something else, and something even more sinister. Bank credit expansion, by pouring new loan funds into the business world, artificially lowers the rate of interest in the economy below its free market level.”

The underlying cause of the problem is the central bank and the commercial banks, which through the fractional-reserve banking system create an upside-down pyramid of debt.

The second factor is the interest rate created by the market through the “time-preference” of every individual that makes the market or that joins the market.

In his book “Capital and Interest”, Austrian economist Eugen von Böhm-Bawerk built upon the time-preference ideas of Carl Menger, insisting that there is always a difference in value between present goods and future goods of equal quality, quantity, and form. “The value of future goods diminishes as the length of time necessary for their completion increases.”

In a growing economy, the supply of goods will always be larger in the future than it is in the present (as the logical base implies). On the other hand, people have a tendency to underestimate their future needs due to carelessness and shortsightedness and finally, entrepreneurs would rather initiate production with goods presently available, instead of waiting for future goods and delaying production. The brilliance in their analysis, concludes that whenever there is a time distortion or time-preference change that is greatly induced thanks to interest rate manipulation by a government institution or in this case a government sponsored one, there will always be periods of fake and tremendous boom’s, that inevitably end with a bust.

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The question of how the mortgage collapse occurred, under the current environment, has been answered, but what failed to surface is: why? What caused bankers to make foolish loans and people to accept them. And why where those debt obligations rated triple A (AAA) by the rating agencies?

The question, looking from a free-market perspective is easy. Instead of letting the “dot-com” bust usher in a greater recession, Alan Greenspan “sliced” interest rates twelve times and the next hype began with the housing market and the financial system. Cheap money was provided by The FED; the banks just took the free money and gambled with it, knowing that the loans were good, because the government would have insured them in case of a default.

The government through Freddie Mac and Fannie Mae encouraged obscured standards of lending, allowing banks through realtor-brokers to sell houses with no money down, to people with no job, or assets nor income, also known as NINJA loans.

To make matters worse, there were no more fixed mortgage rates, but due to the government sponsored enterprises, there were subprime loans called “Alt-A’s” and “option ARM’s”. These loans were not only given to people who couldn’t afford a home, but to people who could afford one, but decided to max-up on their credit card and use the perceived never ending appreciation of there home as an ATM machine. For it was the housing sector that kept the economy somewhat rolling, after the manufacturing industry was left to rot.

But as Greenspan left and Bernanke took over, interest rates were gradually risen and the party was over.

The house of cards collapsed.

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96 Wikipedia, The free Encyclopedia [online]: http://en.wikipedia.org/wiki/Adjustable_rate_mortgage Definition: An "option ARM" is typically a 30-year ARM that initially offers the borrower four monthly payment options: a specified minimum payment, an interest-only payment, a 15-year fully amortizing payment, and a 30-year fully amortizing payment. Adjustable rate mortgages are sometimes sold to consumers who are unlikely to be able to repay the loan should interest rates rise.
The Aftermath

As of May 7, 2009, the national debt of The United States stands at $11.2 trillion and is growing by an average of $3.6 billion a day. The world is supposed to believe that The United States is the leader in terms of economic growth and prosperity. But how is it, they have to rely on huge amounts of debt, just to get past the day? The answer is: They aren’t the leader. They are indeed the largest consumer on planet Earth. And while we are to believe that consumption is a basis of economic growth, in this case, over-consumption drives a nation into a never-ending debt-spiral. For savings and under-consumption leads to economic growth and productive capacity through a strong manufacturing base and a balance of payments that goes in hand with a nation’s growth. The only thing keeping America afloat is, at the current moment, China.

China can well be considered a massive economy of scale. For it is the Chinese and the rest of Asia which manufacture the world’s goods and exports them to The United States which than consume the goods and give the Asians pieces of green paper.

The current Austrian economist Peter Schiff, who correctly predicted the housing debacle back in 2003/2004, has an analogy that he uses while conducting interviews. It is ironic and holds the future of the balance of power in the world to come. The analogy goes: “Picture four people that were caught in a severe storm at sea and were ship-wrecked on an island. Three of those individuals were Asian, one was an American. After getting their heads straight, they figured that they had to eat, keep warm and etc. So they decided that they had to split a workload in order to survive. One Asian was given the task of hunting; the other was given the task of fishing. And the third went out to gather wood to create a fire. The American had a task of eating, and in the meantime he would lie in the sun all day. He had a service-sector job. At the end of the day, all the Asians would gather all the food, fish and firewood and would give the American to eat everything they worked so hard for during the day. After the American was done eating, he would give some crumbs to the Asians, so they would continue the process the next day. A modern economist would look at the situation and say that the American is employing all those Asians, and without the American, those Asians would lie
around all day. This could hardly be farther than the truth. All the Asians have to do is kick the American of the island. Than, they would have lots more to eat, and wouldn’t probably work so hard.” This is indeed was the situation until now. The Asians have to decide whether to keep feeding the American or decouple.

The decoupling theory states that Asia can maintain itself without being fed green paper from The U.S. It is true that Asia would suffer in the short run because of its exposure to The United States, and the majority of the exports would have to be reallocated toward its own economies, but in the long run it is the new power of the coming decades. Commodity guru Jim Rogers on Bloomberg mentioned that moving to London in 1807 was a good idea, moving to America in 1907 as well. Moving to Asia in 2007 is the best thing people could do.

Because, where the most money was (historically), there was the most economic development and growth. Asia, notably Singapore and China have the largest cash reserves on the plant.

China would do itself a favor if they de-pegged the RMB\(^97\) from the dollar and let it float. This would cause an immediate appreciation in the RMB and would lift the purchasing power of the Chinese.

In turn, as they are currently amassing gold bullion, they should fix the RMB to gold. This would allow the RMB to overthrow the dollar as the world’s reserve currency. And instead of relying on Americans to buy the goods they created, they would be able to buy cars, houses, stocks and everything they need through increased purchasing power. But this is not only an economic endeavourer, by a political one. Is the West just going to watch as the Chinese take lead as the largest economy, and therefore a very large player on the international scene? Time will tell.

In the meantime, The United States continues to amass enormous debts and the economy is relied upon the consumer to feed until he dies. The dumbest thing people could focus on in this period is the stock market in The United States, which is rallying from its lows no thanks to the massive inflation the FED is pouring into the economy. And secondly, looking toward the gross domestic product or GDP is extremely childish. Since the American consumer has been holding up the American economy, the GDP in coming quarters has to fall as savings are to be replenished and capital formation can begin. GDP as a factor of economic growth has to

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\(^97\) General Information for Chinese currency RMB, [online]: http://www.chinatoday.com/fin/mon/
be thrown away and replaced as well. An economy grows due to under-consumption and savings, which benefit the people through falling prices – a hallmark of capitalism.

So consumption has to be eliminated from the equation and replaced with production. Secondly, government is a burden on an economy and through favoritism, destroys capital which otherwise would have been allocated somewhere else effectively in the economy. So government spending should be calculated as a negative factor, for through taxation, takes some capital from the economy and puts it where it believes to be well used. The government on the other hand, while employing individuals, doesn’t create any productivity and therefore no real gains for society and since the government is unable to run the postal office, it clearly has no idea where recourses should be allocated properly.

Bureaucrats and politicians have no idea what they are doing when favoring one industry over another. If they believed which business would be successful in the future, and where the market is to go in the future, why are they in politics? Why do they work in government? If they new where the most profits are going to be made, they would be working in the private sector reaping all those profits and would be rich. On the other hand, it is easier to squander other people’s money and keep coming for more. The fact that we need government is a necessary evil, for it is up to the government to insure the legality and enforcement of contract by law.

The aftermath of the stimulus packages and inflation will lead to the next crises – the dollar crises. There are going to be huge currency problems and currency devaluations not just of the dollar, but other currencies as well, for a good portion of the world’s central banks have no other answer than printing more money. Soon enough, the IMF will join the game by selling its gold, driving the price of gold down, making it the last chance for individuals to diversify from flawed assets. Oil prices will inevitably rise again (since they are traded in dollars), stocks will at one point start rising in nominal terms, but in real terms continue to fall.
The Grand Illusion

When looking towards stocks, and focusing on The United States, it is clear that there was no bull market in the industrial sector of the economy, rather a bear market. The Dow Jones Industrial Average was in a bear market starting from 2000. Even though it rose a couple of thousand points in dollar terms, calculating in the price of gold, the DJIA fell substantially. In January of 2000, with the Dow Jones at 11,750 and gold at $280 per ounce, the Dow was worth about 42 ounces of gold. During May of 2009 the Dow stands at approximately 8500 points and gold is worth around $910. This puts the Dow Jones at 9 ounces of gold. This comparison can be done with any other currency during that period, which means foreigners would have lost money if they bought into the false rally. Gold as a reference-value is used, because it used to represent money, and still is money, due to its intrinsic value. The market determined gold as a medium of exchange because it had all the necessary characteristics of money.

When the government sets legal tender laws, it undermines the market from setting the necessary medium of exchange or its value, and therefore giving the government (central bank) the power to inflate the supply of money as it wishes.

Impact on Europe

Europe, in comparison to The United States is in relatively good shape. Europe’s problems derive from bank purchases of securitized packages that were sold on Wall Street. Most European banks are suffering not only due to exposure from the West, but by giving bad loans to their eastern counter-parties. Many former-Soviet satellites, such as Hungary, Latvia, Lithuania, and Ukraine have all arrived on the edge of bankruptcy.

Just like The U.S., there economies were also bubble-like and were kept afloat due to consumer spending.

The only European country that wasn’t such a mess entering the crisis was Germany. But as Germany tries to revive its economy through their own stimulus plans, it is unlikely that they
will be able to assist there eastern neighbors. It is expected that Germany’s economy would shrink by 2.25% in 2009 and that the export sector would be hit pretty hard. Instead, the IMF is called to provide much needed liquidity in those nations, even though the IMF suffers problems of its own. The most damaged western country in Europe is currently Great Britain, which at the moment stands in negative equity, with some analysts predicting that the U.K. might go the way of Iceland and the Icelandic krona. The British pound during the crisis has devalued some 25% and the British government was unable to sell its bonds on an auction that took place on March 26 2009.

“For the first time in 14 years prices of benchmark U.K. government bonds, or gilts, fell Wednesday after the Debt Management Office failed to collect enough bids from investors at an auction of £1.75 billion ($2.57 billion) in 40-year government bonds.

The failure will force the government to try again at a later date, or to raise the money by issuing bonds with shorter maturities, which tend to be easier to sell.”

Since Britain is even in worse shape than The United States, its central bank has decided to inflate out of the problem as well.

“All after Wednesday's failed auction, the yield on the benchmark 10-year gilt rose at one point to 3.38%, up from 3.31% Tuesday, though it fell later as the central bank purchased bonds in the five-year to 10-year range.” Since Britain was being held up only due to the “City of London”, massive inflation can also be expected in the near future and that inflation is expected to wipeout some of the newly accumulated public debt. Due to falling tax revenues, in the fiscal year 2009/2010, British Chancellor Gordon Brown acknowledged that a additional £ 175 billion had to be borrowed, raising the annual deficit to 12.4% of GDP; a record during times of peace, not accounting in the already spent/borrowed money to bailout the banking industry and not accounting in the interest to be paid on the debt.

The Banking Industry

It is clear that not only reform is needed in the regulatory system, but also in the system that has to follow the rules. The banking industry, when attaining free money from the central banks, played with it, creating all kinds of exotic instruments and a massive derivatives market, no one really understands. Instruments as “Credit default swaps”100, practices of “naked short-selling”101 and others have created a derivatives market estimated around $565 trillion, dwarfing not only the total assets on earth but the entire world’s GDP several times.

The derivatives came from Wall Street (some were even rated triple A (AAA)), and most of these derivatives are the same toxic assets that nearly imploded the financial market right after Lehman Brothers collapsed in September of 2008.

And since most of the derivatives didn’t even have an underlining asset, and were either bets (CDS’s) or fraudulent instruments.

The question remains, why didn’t the regulatory system detect these instruments? Why had The Securities and Exchange Commission fail to enforce contract law, allowing for such instruments to be made and on what basis did the rating agencies base the assumption that most of these instruments, which were tied closely to housing market, were the highest investment quality, trapping oncoming investors? Thomas Jefferson102, a member of the American Founding Fathers, understood the dangers of banking and the fractional reserve system back in the 18th century, and to what lengths banks can ruin economies through there practices of inflation and deflation, and the dangers banks pose once they tie to government:

“I believe that banking institutions are more dangerous to our liberties than standing armies. If the American people ever allow private banks to control the issue of their currency, first by

100 A credit default swap (CDS) is a credit derivative contract between two counterparties. The buyer makes periodic payments to the seller, and in return receives a payoff if an underlying financial instrument defaults.
101 Naked short selling, or naked shorting, is the practice of selling a financial instrument short without first borrowing the security or ensuring that the security can be borrowed as is done in a conventional short sale.
102 Thomas Jefferson, 3rd President of The United States (1743 - 1826), [online]: http://www.quotationspage.com/quote/37700.html
inflation, then by deflation, the banks and corporations that will grow up around [the banks] will deprive the people of all property until their children wake-up homeless on the continent their fathers conquered. The issuing power should be taken from the banks and restored to the people, to whom it properly belongs.”

A reform is indeed needed, to restore a free-market system.
Conclusion

To defeat the crisis, sound money has to be introduced back in the economy. Any form of commodity money is acceptable as long as it is regulated by the free-market and can not be devalued by central banks or the government. Fractional-reserve banking has to be revised, either by eliminating it and returning to a free-banking system. Governments have to allow the market to purify the imbalances which will lead to a short but steep decline, but the recession will not be prolonged as it was during The Great Depression. Prices, as being artificially inflated during the boom period, have to be allowed to drop to their real values. Government has to shrink and stop spending. One great example was The Depression of 1920 in America. The reason nobody heard about it, was because the government didn’t interfere in the market, and the fall was even greater than the first year of The Depression of the 1930’s, but government curtailed spending and the monetary base was left unchanged. The depression was over in a year.

Companies that shouldn’t have been created during the boom period, due to interest rates that were artificially lowered, have to be let to go bankrupt and all the bad debt has to be liquidated. Propping up AIG, General Motors causes capital distortion and will eventually lead to more debt, failed assets. Propping up failed assets only leads to so-called “zombie companies”; a term derived from the Japanese experience during the 1990’s when government decided to bailout every company and bank that had problems.

The Japanese stock market (Nikkei) is still 80% below what it was worth twenty years ago.

Only though the “laissez-faire” approach, recessions have been short-lived and the corrections were quickly overcome. Under a monetary system, this approach is the only one which works and in order to secure future prosperity for the following generations, it must be implemented again. The only time history has shown real rapid growth, was in America during the 1800’s. During that time, there were no central banks, government was a lot smaller and real goods were produced.

All that has to be done is to re-open the pages of history.
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SOCIOLOGICAL COMPETENCE IN CONTEMPORARY BUSINESS: CROSS-DISCIPLINARY APPROACH TO ECONOMIC EDUCATION

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Abstract:
These paper deals with the sociological dimension of business that has grown greatly over the past decades. The fact that the business in today's world is increasingly diverse can be attributed primarily to the process of globalization i.e. restructuration and networking of the world markets. Nevertheless, it still often occurs that our views of economic development are usually rooted in the images of the isolated companies that transacts with its customers or business partners in some kind of social vacuum.

These study aims to understand contemporary business in more interdisciplinary way by exploring significant connections and contributions of related social sciences (sociology and social psychology) to economics, which have become an important aspect of modern business education.

Keywords: economy, social sciences, interdisciplinary approach, sociological competence, business education.
Introduction

Observing people and human activities from the aspects of social relations is the most common definition of social sciences. Among them, specific science that deals with relations between people in the process of production, distribution, exchange and consumption of material goods is economic science. Economy can therefore be defined as a scientific discipline that explores how society uses its resources to produce goods and services, and how these goods and services are allocated to individuals or groups of individuals. Economic science is based on empirical objectivity in its research, that could be designated as a three-step method that consists of setting theory, collection of data, and final data analysis in order to proof (or disproof) set theory (Samuelson 2000). Despite empirical science, such method can limit economists’ observations, namely because of the impossibility of changing conditions that affect the result of research and must rely on the socio-historical dynamic of events that "naturally" occur in the world.

Our current views of economic competition are still rooted in the imagery of the isolated firm that transacts with its buyers, suppliers, and competitors via largely anonymous factor and product markets. Yet this view is fundamentally at odds with the growing importance of business groups in the global economy. We thus need a reconceptualized version of our idea of economic competition, which is capable of explaining competitive advantage at the group-versus-group rather than firm-versus-firm level of analysis. In this context these paper deals with the sociological competence that is build on insights derived from organizational sociology and organizational economics and has become an important aspect of contemporary among the business workers as well as business education.

In order to examine dynamic relationship of global market and its active participants, cross-disciplinary approach proves to be as undoubtedly necessary. The first step in this process is contextualization of contemporary economic activity, i.e. to develop a consequence that our views of economic development are rooted in the images of the isolated companies that transacts with its customers or business partners in some kind of social vacuum are absolutely wrong.
This article argues that in order to understand an event, process or reaction, it is necessary to analyze the circumstances and context in which it occurs. Since everything takes place in a sociological context this view is fundamentally directed to the existence of the growing importance of business groups and active individuals in the global economy. Therefore, the starting point of this article is referring to the economic activity as dynamical process of individual and social groups in specific context that determine their actions - when you are managing a company, you are managing people - employees and customers, that are trying to meet needs and wants. It presents an interdisciplinary approach to the understanding of contemporary business in more holistic way where sociological competencies contribute unique value by combining the three competencies of structural consciousness, scientific thinking and appreciation for diversity. In other word, this paper aims to critical reflection of contemporary business in cross-disciplinary way by exploring significant connections and contributions of related social sciences and their awareness in modern business education (cf. Magaz i Katulic 2008).

Perspective of Cross-disciplinary approach

Holistic approach is not a new phenomenon in science, but it is a relatively new (and still not renowned) phenomenon in the economic sciences. A holistic approach is often appears as a critique and "methodological opposition" unilateral use of analytical methods which lack a vision of a whole and the use of synthesis as a methodological process. The terms cross-disciplinary approach or holistic approach in this paper are employed as methodological standpoint that each object of research is necessary to first examine the broader framework of a whole which belong to, and only after that we can analyze its elements as parts of a wider whole. Since economic thought includes philosophical, ideological, political, business and other aspects, theorists who follow a holistic approach are trying to integrate lots of phenomena and elements of the idea world that is located within and / or around the concept of economy into a whole. (cf. Medić 1129).

Cross- disciplinary approach in analyzing contemporary business creates a correlation, describes relations in the wider social context, taking into account non-specific economic
phenomena - such as the view of the world, values, beliefs, norms and moral judgments, which indisputably affect on the economic behavior of individuals and social groups.

**Social context**

Analyzing, describing and understanding social groups and social dynamics from the scientific perspective, primarily falls under the area of sociology. Sociology as a systematic science indicates a systematic study of human society, and teaches how society largely affects all our life decisions and choices. In this sense, sociology reveals that "behind the surface (appearance) form of society there is a hidden invisible structure of interests and forces that are most visible on the margins of society, and during the social crisis" (Magzan and Katulić 2008: 4).

Since sociological perspective initiate our need to identify these "hidden" links, i.e. integrates network of social relations, power and action, once she was renowned as the habitus of action, it then becomes a sociological competence. It is of course about the contextualization that is primarily directing attention to the fact that not a single event or process does not exist in isolation but is connected with the events that surround it. In order to understand an event, process or reaction it is necessary to analyze the circumstances and context in which it occurs.

Today we live in globalised world, world where national markets become integrated in one global, world market. Globalization can also be defined as „intensification of social connections around the world, in a way that distant locations are linked to the extent that happenings in one place can be a cause or a consequence of the recent events in another, which is hundreds of kilometers away, and vice versa“ (Magzan and Katulic 2008: 12). This shows that context is first category of economic activity, whether it is on local or global level.

We witness the changes on the labor market that are a result of globalization processes. Global market of 21 century was increasingly filled with immigration, cheap labor, getting new subjects that resulted with changes in the scale of values, supply and demand. Once relatively well-paid jobs can experience financial degradation.
Irrefutable evidence for this is this year *credit crunch* that has changed not only the relations of power in world stock exchanges and between the richest business people, but has already caused the decline of factories, closure of jobs, leaving a large number of people without basic resources for life.

“If we want to ensure ourselves of the above-mentioned situation, the only thing that we can do is improve knowledge and skills so we could create our own advantage in the relentless race of life” (Magzan and Katulic 2008:5), i.e. to become aware of necessarily of contextualization (that it is necessary to analyze every process or reaction in circumstances and context in which it occurs) and social awareness when dealing with contemporary economic.

In his most famous book *Social constructions of reality* (Zagreb: 1992), Berger explains how common knowledge constitutes daily life and institutions of society. Therefore the entire social dimension, its understanding and finally adoption of sociological competence become unavoidable in contemporary economic.

*Psychological competence*

Society consists of individuals, however, in the process of contextualization is important to notice that although each individual is unique, society affect on the thinking, behavior, attitudes of its members. Each individual is a member of a several social groups. Knowing about the groups, their needs and wants, you become more effectively because it provides you the knowledge of people values and how do they interact. These are group tendencies of course, and individuals will each bring their unique perspective.

To understand unique perspective, how each individual chooses, interprets and uses the information in the deliberation and making decisions, it is necessary to address the psychology, to understand precisely how people create impressions and conclude on the causes of their own and someone else's behavior we need to contact social psychology (Cf. Leon and Kanuk 2000). Social psychology provides us basic knowledge about the attitudes and their change, important for understanding the social behavior of individuals and groups.
Understanding the differences of individuals and diversity among social actors, provide us with knowledge and ways of reducing prejudice, stereotypes and discrimination, and their application in business environment. It also provides an understanding of factors that influence the behavior of the group and group processes, especially the leadership, and exploring techniques and strategies to resolve conflicts and social dilemmas. It is of course again about a specific form of contextualization of economic activity.

Hence, psychology that is defined as a science that deals with mental processes and their expression in behavior, with the goal of systematic empirical research to acquire knowledge about the causes and manner of behavior of people, is recognized as essential for economic sciences in the 20th century and since then it constantly develops (Cf. Leon and Kanuk 2000). The various elements of psychology were introduced in economy, and explained often not logical decisions and reactions that traditional economic theories could not explain. The importance of psychology in economics testifies Nobel Prize for 'Psychology in the economy' that was given to two scientists in 2002. Daniel Kahneman, a psychology professor at Princeton University and Vernon Smith, professor of economics at Virginian George Mason University (Cf. Leon and Kanuk 2000:42). Thanks to them, the new branch, behavioral finance, were developed, which deals with the causes of rapid growth in the market price of shares or property, the so-called bubble or why would someone go to farthest store because of lower prices, although spent fuel will be greater than cost savings. Besides behavioral finance, there are other branches, such as consumer behavior and social psychology, which are also very important in the economy. They help us to estimate the consumer decision-making in unpredictable situations. It has been proved that the reactions of people in reality do not follow the assumptions of economic theory, by which people decisions are made systematically in accordance with available information and their own priorities. According to Kahneman research, in cases when a safe gain cannot be predicted, the individual will avoid the risk, regardless the possibility of greater gains. But in the case when an individual moves from the sure loss, risk becomes more tempting, although it may bring even greater loss. Smith, on the other hand, developed laboratory techniques that checks economic assumptions, particularly those related to negotiation of prices. His methods are used in planning privatization programs and different market projects (Cf. Mankiw 2006:73). It became obvious that it is important to observe the interdisciplinary approach to economics and psychology so we could understand human behavior as decision-makers on the micro and the macro level, i.e., regardless of whether it is about the company or transnational corporation.
Affirmation on holistic approach

In the previous chapter it is described perspective of cross-disciplinary between economics and two other social sciences – sociology and psychology. Nowadays both of them have been recognized as valuable for understanding and realization of modern business around the globe. These two, sociology and psychology, are not the only „partner sciences“ of economics (mathemic, history and political knowledge are also necessary for successful economic activity) (Cf. Samuelson 2007, Mankiw 2006). However, this paper reflects on sociological competence in contemporary business and therefore the focus is directed primarily to cross-disciplinarily with the science of society – sociology.

International competence

With intention to stress the importance of cross-disciplinary approach to economics, especially to the contextualization of economic activities in broader social context, it is also important to emphasize that sociological competence is not only important for national or international business, but the skills of analytical thinking, synthesis and critical thinking, and ability to effective team work and multi-cultural understanding is inevitable also within the companies, among coworkers.

Scholars studying the thinking and behavior of business people frequently encounter social conflicts between the values of their firm which provide patterns for how employees should behave. Before turning to the business corporative culture, it may be helpful o reflect on the shape or form of "culture". Culture can be conceptualized in a blindingly diverse number of ways, of course. Three very general approaches are: the anthropologist's notion of culture as a unified "whole"; the historian's familiar notion of culture as "context"; and a sociologist's approach to culture with a set of tensions (Cf. Misa: 1996:56-57)
Corporate culture usually has been conceptualized particular business’s organization’s culture as a unitary whole, whose components are articulated by top management and passed down. Culture refers to an organization's values, beliefs, and behaviors. In general, it is concerned with beliefs and values on the basis of which people interpret experiences and behave, individually and in groups (Cf. Misa: 1996:58). Cultural statements become operationalised when executives articulate and publish the values of their firm which provide patterns for how employees should behave.

Understanding the culture in a country or region in which you are doing business is a critical skill for the international business person. Without this knowledge, a successful outcome to the business venture can be in risk. When working in the global commercial environment, knowledge of the impact of cultural differences is one of the keys to international business success. Improving levels of cultural awareness can help companies build international competencies and enable individuals to become more globally sensitive.

**Economics of society**

Awareness of the importance of sociological competence is becoming increasingly evident in modern multinational companies. Nowadays, those companies are paying more attention to professional education of their employers. On the other hand deferent educational institutions are offering professional courses for business people to improve their skills of management in multicultural context or their knowledge of psychological dynamics among coworkers.

However, the biggest step forward is showing in the field of social sciences that produce new scientific sub-disciplines. One of them is economic sociology. Although a small number of universities use economic sociology as a subject of research in economics, different types of sociologies become more widespread in higher education institutions. Economic sociology has experienced a take-off from the end of 1980s and has continued to grow. "Economic sociology should not only be interested to the impact of social relations on economic actions, but should also take into account the interests, or in a broader sense, analyze the level of interest, similar to what Max Weber did in Protestant Ethics and the Spirit of capitalism." (Swedberg 2006: 132).
There are lots of topics that economic sociology has not yet taken into consideration, that cover the main areas of economic life. Today, the most frequently asked question is how to combine economic sociology with fields of economy such as entrepreneurship, stratification, theory of games. “Social scientists, along with sociologists, in the 20 century were not very interested in business, which has today turned into an inter-area” (Swedberg 2006: 285). One of the main approaches is to observe how entrepreneurs motivate other, connect them in working groups to accomplish certain goals, as well as the application of the idea of network theory (the definition of entrepreneurship as an attempt of gathering various resources, in which an entrepreneur makes a profit controlling transactions between networks). Furthermore, Swedberg says that ‘institutions should be understood as a particular constellation of interests and social relations, and if economic sociology ignore interests, there is the risk of converting to the trivial ‘discipline, because interests, much more than social relationships, run the economy’ (Swedberg 2006: 289).

Economic sociology consists of more social sciences such as law, economic science and sociology. It deals with appropriation (Weber), embedment (Polany) and networks (White), all thou understand the role of social relations much wider than economic (cf. Yenkey 2006:5)
Concluding remarks

Having in mind the necessity of cross-disciplinary approach, it is definitely time to rethink economics. In the accumulation of information which we are daily exposed sociological perspective helps us realize (recognize) single in general, distinguish relevant from un relevant and as easily and with the greater psychological safety work in the social context of various economic and political orientation, and theory. The need of understanding the social context that we are surrounded with is particularly expressed in the creation, keeping or changing the social and professional identity of individuals. "While the biological elements of identity are inherited, social, professional and spiritual elements of identity are elected and learned in the process of education" (Medic 1121).

Precisely for this reason awareness of the interdisciplinary of economic studies should rise. Today, on the national level in Croatia, on the economic faculties, cross-disciplinary approach is poorly recognized. According to the curriculum of teaching in the field of interdisciplinary, there are mainly elective courses that are offered (such as sociology, economic sociology, social psychology), which occupy a small number of classes (generally one hour per week).

Although the Bologna reform in Croatian universities allows attendance at specific courses on related faculties, due to mismatching of curricula and scoring of the course, the realization of such a form of study is difficult and the student generally very rarely use the opportunity to acquire holistic academic knowledge.

"A holistic approach to the economy integrates economic and social values, then the knowledge and skills into a higher level of consciousness that can be called - Economic wisdom" (cf. Medić 2001:1122). Selected system of economic-social values gives people answers to the question what and why they should (or should not) do, give them motivation, direction and meaning to their activities. Science that is grounded on this foundation, provides answers to the question of how the selected goal can be achieved in existing limited frames, i.e., at the present time and space, or how it was accomplished in the past, with which consequences and importance for the present.
Holistic approach to the economy has been partially established from knowledge of the sociological and psychological scientific fields. The connection between the mental (ideological) and material reality is much stronger and more important, than what people usually think. By adopting social and psychological knowledge we are getting more analytical and synthetic thinking skills as well as knowledge of critical thinking. We become able of effective team work, multi-cultural understanding and the understanding of demographic and ideological diversity and ethical understanding.

Dealing with any form of social activities in the global world of 21st Century, and especially with the economic activity, is impossible without the understanding of social forces and by contextualization. We should be aware that not a single event or process does not exist in isolation but is connected with the events that surround it - it exists within society, among people and social groups. In order to understand an event, process or reaction it is necessary to analyze the circumstances and context in which it occurs. All that together can be conceptualized as sociological competence, and need to be recognized in the modern business education.
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IMPRESSUM

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International Student Conference 2009
“Time to Rethink Economics”

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ISSN 1847-313X