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Employability of Graduates & Higher Education Management Systems: Abstracts of Conference Contributions¹

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HIRSCHMAN MOBILITY AMONG ACADEMICS OF HIGHLY RANKED EU RESEARCH UNIVERSITIES

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European universities have lost—and partially regained—key research academics to North American and other attractive university systems. EU efforts to reverse the cycle revolve around the establishment of an attractive European Research Area (ERA), within which future academic mobility might be confined with improved policies and reformations. The mobility of European university academics is analyzed by use of data that result from a large web-survey in the first half of 2009 drawn from six disciplines (Physics, Biological Sciences, Chemical Engineering, Computer Science, Economics and History) in the top 201 European research universities. Two mobility models are explored; one considers the factors that contribute to an academic's decision to relocate to another university and the second examines whether that relocation would occur within the ERA or elsewhere. Both models draw heavily upon Hirschman's seminal work that conceives career relocation as an "exit" decision, one which can be compared to the principal rationales for remaining (being "loyal" or having "voice") at the same post. The mobility model findings strongly support Hirschman's view of academic relocation, whereby academic relocation is often motivated by the relative limitation of voice in governance compared to management or demonstrated loyalty in terms of long-term engagement at their university. The results from logit modeling of choices and options indicate clearly that academics who exercise either "loyalty" or "voice" are significantly less likely to be mobile. Moreover, those who are mobile refuse to restrict possible destinations to within the ERA if they value better material conditions or better quality of colleagues, students or university reputation. These findings have important implications for the governance and resource commitments under review by Europe's leading universities.

GRADUATE EMPLOYABILITY: A TWILIGHT ZONE OF HIGHER EDUCATION AND EARLY SUCCESS OF GRADUATE NURSES

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The paper explores the relation between the teaching at universities and success at the workplace. An early success is essential in medical profession where there is a constant fight to save people's life. There is discontent in some registered nurses about the fact that university education is unable to build the skills and competences in the student nurses which are needed to work as a competent registered nurse. This paper focuses on the survey of university mechanisms which are designing curriculums in the nursing courses and the extent to which these are helping the students to be successful when they join the graduate entry programs for nurses. This survey looks at the feedback mechanisms of both the sides and their usefulness in continuous improvement of curriculums as well as graduate entry programs. Nurses' perception of the performance of new graduates in the clinical setting constitutes an important feedback mechanism for the university. At the same time, no matter how much the registered nurse dislike university educated students, education of nurses has become more important to equip them with the competence which is needed for this profession which is becoming more and more technical and knowledge based. The skill gaps in the experienced nurses can provide an opportunity to continuously refine our curriculum in nursing. For example, it is quite dangerous for the nurses not to understand the ECG reading of a critically ill patient or not know the reason a medication has been ceased in a patient before surgery. This constitutes the second feedback mechanism for the university.

A VIEW ON NEW SKILLS FOR BETTER EMPLOYABILITY

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Employability of graduates depends on the development level of a country. But, recognition of new skills of graduates might also improve the progress of a country. We point out which skills are important for better employability and which stakeholders play a role in the achievement of some skills. Of course, the role of formal education to achieve some skills and competences is on the first place. Anyhow, more and more the role of career centers, incubators of technical faculties, IAESTE and others in this framework is also recognized. Some strategies, established on a state level and on a higher education institution level improve some creation of solution of employability problem in a right way.

**GRADUATE RECRUITMENT AND GRADUATE ATTRIBUTES IN AN INTEGRATED LABOUR
MARKET: A STUDY OF FOUR EUROPEAN COUNTRIES**

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Recent studies have concluded that there is a gap between the demand for and supply of graduates in the EU (European Union) labour markets (CEP 2004; CIPD 2007a; Eurostat 2007; Weitzel et al. 2008). Therefore, it seems paradoxical that many European graduates are finding it increasingly difficult to gain appropriate employment at a time when they have freedom of movement and a choice of jobs in over twenty countries. The challenges they face in a large and highly competitive labour market partly arise because there are different higher education (HE) systems. On the supply side, the European labour market reflects a wide variety of educational systems, qualifications and academic disciplines, but the graduate jobs that are available - the demand side - are relatively homogeneous, and increasingly competitive. Recent studies have attempted to explore this phenomenon (Anderson and Witvliet 2008; Sackett and Lievens 2008) but have mainly concentrated on the relationship between the applicant (person) and the recruiter (organization), and have overlooked the role of HE institutions (HEIs) that prepare the person for work in the organization. The person-organization fit analysis that has dominated the literature has restricted the scope for analysing and, hence, understanding the process of graduate recruitment because it excludes the role that HE can play in the transition from study to workplace. Moreover, there is limited information about the type of methods organizations throughout Europe use to select graduates from different countries, or about the successfulness of such methods. This study aims to go beyond the person-organization fit perspective by exploring the organization (university)-graduate (person)-organization (employer)-relationship.

FACTORS INFLUENCING THE EMPLOYABILITY OF INTERNATIONAL GRADUATES

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Currently there is a global tendency that the employability of graduates is used as a benchmark to measure the quality of higher education, hence the concept gaining an important place in higher education policies and strategies (Teichler, 2009, p. 15, 16). “In general terms, employability is defined as having the skills and abilities to find employment, remain in employment or obtain new employment as, and when, required” (Crossman & Clarke, 2010, p. 602). We follow Harvey (2001) who states that graduate employability cannot be a purely institutional achievement, it is rather contingent on a number of variables such as “students’ previous experience, their extracurricular activities, their career intentions and networks, [...]” and the peculiarities of the recruitment procedures used by the employer (Harvey, 2001, p. 102). However, despite an increasing number of studies dealing with the various aspects of employability, the transition of the international graduates to the world of work has not been properly researched. This study tries to fill in the gap by investigating what factors affect employability of international graduates from the point of you various stakeholders. We start with featuring the preliminary outcomes of the study on employers’ beliefs vis-à-vis Chinese graduates who were educated in Finland. Furthermore, the extensive review of literature will be used to develop a more holistic perspective and suggest a few tentative hypotheses for further research.

**PROFESSIONAL PATHS OF FRENCH YOUNG PHD EARNERS: "TASTE FOR SCIENCE"
FACES LABOR MARKET'S REALITY**

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In the knowledge society (Foray, 2009) young PhD graduates should have a major role in our economy. They play a central part in the dissemination of "scientific and technical human capital" in the the academic sector but also in the private sector. However, data in several countries shows that PhD graduates are facing growing difficulties in the labor market (Enders, 2002; Ma and Stephan, 2005, Bonnal and Giret, 2009). In France, more than 70 % of them wants to work in public research or academic sector when they enter in the labor market but only 40 % of them manage to find a job in this two sectors. Also when they don't find this kind of job, some of them are unemployed (10 %), in fact PhD earners have much more probability to be unemployed 3 years after graduation than graduates from engineering or business school or graduates from master degree. The aim of this article is to study PhD graduate's paths during their first 3 years in the labor market. We use the Generation surveys made by the Cereq (Centre d'Etudes et de Recherches sur les Qualifications). In terms of methodology, we will study paths of PhD graduates who wanted to work in academic sector at time of graduation. Our idea is to define a concept of "typical path" in order to obtain several representative and homogeneous. A multinomial model will give us "all things being equals" the impact of graduates' characteristics on their path.

**MEASUREMENTS AND POTENTIAL OUTCOME MODELS FOR ESTIMATING THE OUTCOME
EFFECT OF ITALIAN UNIVERSITIES REFORM: DELAY AT GRADUATION, INCOME,
EMPLOYMENT**

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The paper is aimed at providing a draft evaluation of the impact the reform, implemented in 1999 and better known as the “3+2 reform”, has had on the Italian university system. The graduates’ viewpoint has been adopted, with their characteristics and performances, in relation to both their course of study and placement in the labour market. More specifically, the main research question the paper intends to reply to is: how has the delay at graduation been changing because of the reform, given the characteristics of students, context and university?

Evidently, since the reform has structurally changed university studies, it actually defines now different “objects” than the old courses of study. In theory, since they are different, they cannot be compared in the changeover from the pre- to the post-reform system.

Moreover, in order to reply to the question mentioned above, it is also possible to claim that the issues about measurement and treatment of delay at graduation (whether exogenous or endogenous) must be dealt with, provided that the reform intervened exactly by changing the definition and structure of the prescribed graduation time. It is furthermore necessary to keep in mind that the reform is not a past event which can be clearly defined over time, and yet, 13% of Italian graduates earned an “old system” qualification still in 2008.

The paper is divided into paragraphs and starts with the description of the database employed. Further on, through an entirely data-driven approach, the focus is on some measurement tests performed by means of micro-econometric models and other multi-varied tools so as to estimate the differential impact of the four different types of treatment, namely three-year degree courses (L), master’s degree courses (LS), single-cycle specialist degree courses (LSE) and old-system degree courses (CDL). Those tests were all checked by using individual-level covariates related to all graduates’ socio-demographic characteristics, their university and pre-university education career, along with environmental and geographical variables that can potentially impact on their labour market performance.

The present analysis was made possible thanks to the survey on graduates’ employment status the AlmaLaurea Interuniversity Consortium carries out on a yearly basis.

**THE RELATIONSHIP BETWEEN GRADUATES' PROFESSIONAL IDENTITY DEVELOPMENT,
FIRST CAREER CHOICE AND EARLY CAREER SUCCESS**

ANS DE VOS

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In this project we study how graduates (Masters in Management) from a business school located in Flanders form their professional identity during their final year of graduation, how this results in a first career choice after graduation and is related to career success afterwards. We are working on the design and roll out of a survey to study these relationships departing from our earlier studies among the population of graduates (e.g. De Vos, De Wilde & De Clippeleer, 2009; De Vos & De Hauw, 2010). We depart from the observation in these earlier surveys that graduates often have unrealistically high expectations about their future career, which is reflected in an anticipatory psychological contract including high expectations about a wide range of employer inducements that is in kind of an imbalance with their own intended loyalty. This is often a reason for early deceptions once starting to work. Also, the extent to which graduates take charge of their career differs widely but at the same time this has a strong influence on their early feelings of career success. We therefore propose that the process of professional identity development that takes place during the final year before graduation is an important factor in affecting graduates' first career choice and their early feelings of career success. In turn, we believe that career support – both in terms of stimulating self-reflection and learning the necessary career self-management behaviors - offered by their institution is an important factor in facilitating this professional identity development. This is the subject of the project we want to set up and which we would like to discuss further during the DEHEMS conference. De Hauw, S., & De Vos, A. (2010). Millennials' career perspective and psychological contract expectations: Does the recession lead to lowered expectations? *Journal of Business and Psychology*, 25(2), 293 – 302. De Vos, A., De Clippeleer, I., & Dewilde, T. (2009). Proactive career behaviours and career success during the early career. *Journal of Occupational and Organizational Psychology*, 82, 761-777.

PROMOTING LEADERSHIP SKILLS IN HIGHER EDUCATION

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SCOPE AND PURPOSE The development of leadership skills by higher education graduates is thought to be influenced by their educational path along with their early work experiences.

METHODOLOGY AND DATA Structural equation models (SEM) are used to estimate the effects of higher education and earlier work experience on the development of professional competencies shaping graduates leadership skills on a sample of some 5,000 recent graduates from Spanish universities.

RESULTS The results show that individual's leadership capacities depend on the development of specific professional skills. Competency development, in turn, emerges from university education and early career experiences. The characteristics of university education analyzed include programme followed, teaching and learning modes applied, and student effort and behavior.

CONCLUSIONS AND IMPLICATIONS The analysis contributes to identify those teaching and learning modes with stronger marginal effects on the development of leadership skills during university education. The main implication is that the promotion of adequate learning environments at university may foster the development of leadership skills by graduates at the time of graduation, which in turn would improve the chances of further development of leadership competencies in earlier career stages.

**POLITICAL SCIENTISTS': A PROFESSION IN DECLINE? FACTORS CO-DETERMINING THE
EMPLOYABILITY AND CAREER SUCCESS OF POLITICAL SCIENCE GRADUATES**

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Political science has established itself as a relatively autonomous academic discipline as well as a viable profession, especially in the context of the professionalisation of politics and policymaking. Political scientists play an important role in democratic society, acting as experts and consultants for policymakers, for professionally trained advisers, or for career politicians. The recent transition to democracy has only accentuated this trend. The political science profession has recently faced a series of challenges. The first is its public image, which has suffered as a result of the negative perception of politics combined with the public's lack of comprehension of the difference between politics and political science. Another challenge is the Bologna education reform, which, contrary to initial expectations, compromised several of political science's comparative advantages when competing with compatible profiles from the field of law and economics. In addition, the state's regulation of social sciences and humanities research as well as the tertiary education sector has both revealed and impacted on the weak points of political science development.

Our proposed research focuses on the factors co-determining the employability and career success of political science graduates primarily the following: a) the employability of graduates and the position they occupy; b) the strengths and weaknesses of political science education as perceived by political science graduates in their work place; c) the position of political science as a profession compared to other competing profiles; d) the response to this feedback by the educational system. Our research is based on a range of surveys of political science graduates carried out from the beginning of the 1980s onwards. The latest set, incorporating the first generation of Bologna graduates, is analysed and compared to the 2005 survey (Fink Hafner et al., 2005), the 2002 survey data (Fink Hafner and Boh, 2002) and the survey of alumni in the early 1980s (Bibič, 1982). Since the data was gathered in several waves over nearly thirty years it reveals the impacts of the modernisation, democratisation and Europeanisation processes on the development of political science as a profession and on political science as an academic discipline in tertiary education in Slovenia.

**UETPNET- UNIVERSITY ENTERPRISE TRAINING PARTNERSHIP NETWORKING FOR
DEVELOPING SKILLS USING ONLINE TOOLS**

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The promotion of the collaboration between universities and enterprises is crucial for the increase of the employability of the university graduates. The project UETPNET- University Enterprise Training Partnership Networking for Upgrade Skills Using online tools is a project co-funded by Lifelong Learning- Erasmus programme aiming at the promotion of this collaboration through the development of online tools. The main outcome of the project will be an online "matching skills" tool that will be used by the Universities in order to publicize the skills of their graduates and by the enterprises in order to describe the skills needed for their job/ internship positions. This tool will automatically "match" the skills offered by the universities and the skills needed by the enterprises in order to allow from the one hand the universities to increase the employability of their graduates and from the other hand the enterprises to find the most suitable candidates for their job/ internship positions. In order to complement this process, together with this tool (the main outcome of the project), two other web tools (an e-learning platform and a collaborative tool for publication of joint activities) will be developed as supportive tools for this process. The target groups of the project are universities, enterprises, students/ graduates and their associations (together with the employment agencies in the longer term). The consortium of the project is made of 9 partners from 6 countries (Greece, Cyprus, Italy, Spain, United Kingdom, and Romania).

**THE PLACE OF INTELLECTUAL CAPITAL IN SUPPORTING INTERNATIONAL
ENTREPRENEURSHIP AMONG YOUNG GRADUATES**

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The paper is based on the early findings of the EU Erasmus-funded ELIE project and the potential for work-based learning within Higher Education to further support and develop entrepreneurship amongst young graduates. ELIE is an acronym for 'Employability: Learning from International Entrepreneurship' and the first stage of the project has involved interviewing people who have started a business as immigrants to a new country. A striking feature of the interviews has been that amongst younger interviewees intellectual capital has been a significant feature in the impetus for both mobility and entrepreneurship. Our innovative student workshops have further supported the development of knowledge on the place of intellectual capital in encouraging international entrepreneurship. This paper will consider how the entrepreneurial experiences of younger ELIE participants differ from older participants and will note significant policy and practice implications for educators. It will also consider how traditional work-based learning modules can be modified to encourage mobility and entrepreneurship during difficult economic times and will offer a model of WBL that builds on the findings of ELIE in relation to young graduates.

OVERLAPPING OF VET AND HE - EUROPEAN EXPERIENCE

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Promoting flexible pathways between vocational education and training (VET), general education (GE) and higher education (HE) is one of the strategic objectives of the Bruges Communiqué (2010). The Copenhagen process specifically calls for assuring open pathways and parity of esteem between vocational education and training, and general/higher education. The learning outcomes approach to define and describe qualifications – promoted by the Bologna as well as the Copenhagen processes – is questioning traditional distinctions between higher education and vocational education and training. It might lead to overcome traditional dividing lines rooted in institutional boundaries, level assignments and qualification types (Cedefop/Dunkel et al., 2009). VET in Europe is characterised by the large variety of national VET systems, contexts and traditions. This is especially true for VET at higher qualification levels (EQF levels 6 to 8). This contribution seeks to identify offers across the boundaries of well established education and training sectors (VET and HE) and for overcoming their institutional divide. Taking into account academisation and vocationalism trends, it reviews the definitions in use and discusses current developments and understanding in policy and practice. The evidence gathered based on selected case studies supports a better understanding of VET at higher qualification levels in the context of related labour market needs, learning outcomes orientation and parity of esteem as well as cooperation models at tertiary level (Cedefop, forthcoming).

HOW THE ACADEMIC AND SOCIAL BACKGROUNDS OF CATALAN UNIVERSITY GRADUATES INFLUENCE THEIR OCCUPATIONAL INSERTION?

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Our goal is to analyze the influence of the academic and social background on the employment insertion of university graduates in 2008 and 2011. The analysis will be done through the use of two proxy's employability: a) the monthly income of graduates and b) the occupational quality of their work in order to observe the change with the economic crisis. Previous results show that overall social origin has not been an obstacle in the occupational insertion of the graduates. Taking into consideration as a whole all of those who graduated from university in 2004 and who were working full-time in 2008 and by applying the abovementioned methodology, it turns out that the explanatory power of the model used was only 9%. This means that the relationship is weak between university graduates' earnings and the other variables analysed. This low level influence of 9% can basically be explained by gender, due to the fact that males receive higher earnings than females and, to a very slight degree, because the children of people who are either professionally qualified or in management have higher earnings than the children of skilled workers and those with a higher entrance grade and better transcript of records earn slightly more than the rest. In the case of occupational quality of graduates we find that the explanatory power of the model used was 2%, that is, that when considering all of the variables overall there is practically no relationship between the occupational quality of university graduates and the variables analysed (academic background, academic achievement and family status) Finally, the database used is the survey of graduates of Catalonia, undertaken by the Agency for the University Quality of Catalunya (AQU).

EFFECTS OF HIGHER EDUCATION PROGRAM CHARACTERISTICS ON UNIVERSITY GRADUATES' PERFORMANCE

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The role of universities in the process of local and regional economic development has attracted considerable interest among scholars and policy makers. There is ample evidence confirming that the presence of skilled labor force contributes local economic development by fostering productivity effects via local knowledge spillovers and human capital externalities. In this context, educational programs are designed aiming at the preparation of the high qualified young population for fulfilling responsible roles in professional life in specific and in society in general. In this paper, the focus of the analysis is thereby on the efficiency by which the programs of the higher education systems in some European countries allocate their graduates over the various domains in the labor market and how these graduates perform in their jobs obtained. For that purpose, we use the REFLEX (Flexible Professional in the Knowledge Society) data set. Our preliminary results show that the generic versus discipline-specific competencies orientation of the educational program strongly influences the allocation graduates over different occupational domains. Moreover, educational programs with a strong relation between learning and direct working experience acquisition provide a better link to occupations inside their graduates' discipline-specific domain.

SCHOOL TO WORK TRANSITIONS IN EUROPE: SPEED OF CONVERGENCE TO PERMANENT EMPLOYMENT

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In a context of intensive and global economic competition, European countries are growingly concerned with the consequences of increasing numbers of young people temporarily or permanently prevented from entering the job market and the difficulties faced by college and university graduates to find adequate employment. This study is concerned with analyzing the speed of transition of students to permanent employment, as a proxy of professional stability, and by identifying possible discriminatory effects, in selected countries.

Among school leavers, who transits faster to permanent employment? Is the transition faster for highly skilled workers than for lower skilled workers? Is it faster for men than for women? Is it slower for young workers of non-native origins? Is it faster for participants to apprenticeship programmes?

The research questions are addressed with a continuous time Markov chain model where each individual can transit non-sequentially between the following Markov states: (1) education; (2) inactivity; (3) unemployment; (4) fixed-term/temporary employment; and (5) permanent employment, where the 5th state is a non-absorbing steady state. The model is tested using the longitudinal ECHP data in twelve EU member countries, over the period 1994-2001, controlling for individual and household characteristics, including, among other things, gender, education level and training, parents' educational attainment, ethnic and immigration status, and predispositions (voluntary or involuntary) to remain in fixed-term employment. In addition, we also include some institutional controls, such as the employability rate of the 20 to 34 years-old and some variables characterizing the level of flexicurity of the countries.

CAREER GUIDANCE IN THE EUROPEAN CONTEXT - NEW KNOWLEDGE, SKILLS AND COMPETENCIES FOR CAREER COUNSELLORS

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High quality guidance and counselling services play a key role in supporting lifelong learning, career management and achievement of personal goals. The shift to lifelong guidance can best be supported through European cooperation and partnerships with higher educational institutions. In the context of lifelong education the career counselling represents a set of activities that allow to citizens of every age and in every stage of life to identify their possibilities, competencies and interests, to be able to decide about their education, vocational training and employment, and to master his personal career in education, work and other areas in which they adopt and/or use these capabilities. In the frame of the Project ERASMUS, Multilateral projects "Development and Implementation of Common Bachelor's Programme in the European Context", eight universities from EU (SK, CY, EE, ES, GE, HR, PL, UK) are developing common study programme with joint diploma/Diploma Supplement for career counsellors. OBJECTIVES OF THE PROJECT - Harmonization of higher education and postgraduate education for career guidance in partner countries, by accepting comparable academic degrees, joint diploma / Diploma Supplement - Securing the transparency of existing national systems of career counsellors' (CC) education, to improvement of recognitions of their qualifications, support of international mobility of students and graduates - Improvement of quality in provided higher education, its further internationalisation as well as employment of higher education graduates at domestic and international labour markets.

ASPECTS OF TRANSITION AND PROFESSIONAL SUCCESS – FINDINGS FROM AUSTRIAN GRADUATE SURVEYS

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1. There were three graduate surveys with members of the Klagenfurt Department of Sociology participating: CHEERS (1997-2000), REFLEX (2004-2007) and ARUFA (2009-2010). – I will point out some findings on transition and early professional success.
2. HE researchers critically observe the implementation of the Bologna process. Meanwhile there is some experience with its challenges, and some empirical evidence on its problems. The employability as a result of the new Bachelor degrees was a topic in ARUFA, as was student mobility.
3. In Austria at least two matters for public concern are evident: “poor” (or precarious) occupation and “unemployment” (i.e. no occupation) for university and Fachhochschule graduates. Graduate surveys contribute to a factual and data-based discussion about the vocational practicability of academic degrees.
4. Up to now there are only “ad hoc” graduate surveys in Austria. But obviously there is a need for periodical surveys, to support “national” Higher Education politics as well as to shape the European Higher Education Area. Politics, to be successful, are dependent on data, information and knowledge about their HE systems including actors and stakeholders, and above all – students and graduates.
5. Facing the growing importance of “new” degrees, there is no way back. But the Bologna Process still involves a series of challenges: We face a lot of heterogeneity – combinations of studying and working, types of degrees completed back-to-back ... – and have to cope with this, in the organisational and the didactical respect.

HAI GUI: JOB-SEEKING EXPERIENCES OF SEA TURTLES UPON TO CHINA

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The University of Sydney, Australia

Against the backdrop of the rapid increase in Chinese students undertaking higher education overseas, then returning home for career development, this article examines their job seeking experience in today's China. It outlines the current employment situation for high-skilled international graduates, analyses their key advantages and disadvantages in China's labour market in comparison with indigenous graduates, and examines the key re-integration issues. China's labour market is already crowded, with an average 4.5 million local graduates every year in the past five years (at an average 0.6 million increase each year), and on-going reforms of Chinese higher education enhances their competitiveness in the labour market. Nonetheless, after some years of international education and living experiences abroad, many returning graduates experience re-integration problems due to their altered mentalities, and ways of working. Re-embracing the home culture, however, is an extremely important factor for their successful career development in China. This research provides efficient feedbacks to international higher education institutions as many of them recruit overseas-educated Chinese students, which contributes to the internationalization process within their institutions. The research also provides valuable information to current Chinese international students on how to negotiate the changing labour market in China.

TYPOLOGIES OF LIFELONG LEARNERS IN PROFESSIONAL HIGHER EDUCATION

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In an EU-funded project (FLLLEX) focusing on the Impact of Life Long Learning Strategies on Professional HE, 2010–2012) 3s undertook an online survey with non-traditional students in 8 European countries: Belgium, Finland, France, Ireland, Lithuania, Netherlands, Turkey, UK. Approximately 2000 students took part, results will be presented following a multidimensional typology of lifelong learners in HE, firstly designed by Markowitsch/Hefler. This typology goes beyond usual descriptions of student typologies (e.g. formal/non-formal education, admission criteria, mode of attendance, target award, student profiles, duration/ECTS, purpose/motivation, learning location, funding source, pedagogic style), and uses a life cycle approach with focus on education and work. The following types of lifelong learners with focus on education are identified: _ Completing ("finishing": working while completing formal education without particular connection of work and education; "entering": being hired in late phases by an employer in need of graduates) _ Re-entering HE and revising a temporary transition from learning to work _ Significant transformation of existing career pathway and/or individual development Types of lifelong learners with focus on work are: _ Reinforcing an existing career pathway (use offers of formal HE to solve developmental issues or to support progress within the chosen line of occupational/professional development) _ Compensating for shortcomings of an existing career pathway The results of the online survey will be measured and analysed against this typology of lifelong learners and situated within the preliminary results of the entire project.

THE IMPLEMENTATION AND USE OF GRADUATE SURVEYS AT GERMAN HIGHER EDUCATION INSTITUTIONS

KERSTIN JANSON

INCHER-Kassel, University of Kassel, Germany

Since the introduction of Bachelor and Master programs, accreditation and re-accreditation are part of the daily life of German HEI. As part of the re-accreditation of a study program, the higher education institution must not only document the employability of its graduates based on empirical data but should also show how this data is used for further development and improvement of the study program. Based on this demand, the interest for and the conduction of graduate surveys has increased massively in Germany. The focus of this presentation will be how this requirement for graduate surveys is fulfilled by the universities in Germany. It will be shown how the graduate surveys were implemented in the higher education management structure regarding hierarchy, function (department) and resources. Secondly, the information about and publication of the data inside and outside the institution will be illustrated. Finally, the use of the graduate surveys will be discussed. Were there any consequences, changes or decisions based on the data? Who was informed about the results? Who discussed the results and finally, who got the data?

**IS SOVIET LEGACY A HINDRANCE? ADVANCEMENT OF BOLOGNA PROCESS IN ARMENIA,
GEORGIA AND UKRAINE**

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Armenia, Georgia and Ukraine share the same Soviet legacy. Today, all three are developing independent countries with free market and high level of unemployment, their higher education systems under the reform. Armenia, Georgia and Ukraine joined Bologna process in 2005, thus expressing their wish to belong to European educational space. However, the reforms in the higher education system develop differently in these three countries. Georgia and Armenia share the same three cycle education with each other and with Europe, while Ukraine has combination of European and Soviet styles: three cycles and an integrated 5 year master degree program is maintained from Soviet times. The analysis of these systems, based on document review, shows that Ukrainian model of higher education is the closest to that of the former Soviet Union, followed by Armenia. Georgia's model is closest to the European understanding of how higher education has to be organized: minimum involvement and regulations from the state, relative freedom of universities. Despite differences, lack of interest in job market and student employability is shared by universities in these three countries. Lack of initiative from universities as well as employers in Armenia, Georgia and Ukraine can be explained by shared Soviet legacy with highly centralized system of decision making and no space for individual initiatives.

**THE DEMAND FOR SPECIFIC COMPETENCES IN TEACHERS AFTER GRADUATION FROM
UNIVERSITY – FIRST RESULTS FROM A SPECIALISED TEACHER QUESTIONNAIRE
IMPLEMENTED IN GRADUATE TRACER STUDIES IN GERMANY**

MAREIKE JUNGHANNS

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Education Sciences, Germany

In the course of the KOAB-Project (Cooperation Project for Graduate Tracer Studies, INCHER Kassel) the universities' need for specific information on professional demands encountered and addressed by graduates training to become teachers emerged. After all, students studying to become a teacher are prepared for a specific profession – often in contrast to their fellow students in higher education, who have more choices when it comes to deciding on their place in the world of labour. This question of specific professional demands has led to the development of a specialized teacher module in the graduate questionnaire tackling the issue of which demands students should be prepared for in the course of their teaching studies and how well they are able to meet these demands today. To test validity of the first version of the 40-items-strong scale on the professional demands of teachers, a confirmatory factor analysis (CFA, AMOS) was conducted. On the foundation of these results the scale was adjusted leading to a second version, which again is subject to validation by the means of CFA. Analyses are based on a sample of 937 teachers in training who graduated from the universities Cologne and Münster, North Rhine-Westphalia, Germany, between 1st October 2007 and 30th September 2008. The implications of the CFA for the scale will be presented alongside first results on the professional demands in the areas 'teaching', 'moral education', 'student evaluation', 'school development' and 'subject areas' encountered by teachers in training in Germany and their ability to cope with these demands.

GENERAL COMPETENCIES IMPORTANT FOR GRADUATES AND EMPLOYERS IN HUNGARY

PASZKÁL KISS

Eötvös Loránd University, Hungary

A set of general competencies was assembled and asked on a national representative sample of employers and on a national representative sample of graduates in Hungary. The factor structure of these competencies was mapped and turned out to be similar to that of other European surveys conducted before. The answers of employers and graduates were analyzed to reveal the differences and agreements in these perspectives. Job satisfaction of young employees was also assessed in relation to the perceived competences needed for the job. In all, the use of general competences proved to be a good tool to assess important aspects of the transition from HE to a professional career.

THE ANALYSIS OF THE IMPLEMENTATION OF THE BOLOGNA PROCESS AT UNIVERSITY OF LJUBLJANA

ANDREJ KOHONT, SAMO KROPIVNIK AND MONIKA KALIN GOLOB
University of Ljubljana, Faculty of Social Sciences, Slovenia

The presentation focuses on the implementation of the Bologna process in the Slovene Higher education area. Authors are interested in the processes that contributed to the current performance of the renewed programs at the University of Ljubljana. They will present the preliminary research results. The authors have collected, reviewed and analyzed the existing research on the implementation of the Bologna reform in Slovenia. In this text analyses they highlighted in particular: a.) a basic understanding of the Bologna Process at HE institutions, the methods of implementation, the instruments to identify learning requirements, the aims and orientations of the HE institutions in the programs renewal, b) the type, scale, range, availability of data that were gathered during the implementation process, and c) the possibility of secondary analysis. In the next step they have developed and used the questionnaires to get pro deans insights into the Bologna reform process. Around 60% of HE institutions at University of Ljubljana participated in this part of the research. In the last step they analyzed the reform process at Faculty of Social Sciences. The preliminary data show there is no national in-depth evaluation of the implementation process yet and that the implementation processes at HEI were quite diverse.

INTERNATIONAL EXPERIENCES AND EARLY CAREER SUCCESS OF RECENT GRADUATES

FABIAN KRATZ

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Hypothesis about the effect of international experiences on early career success of recent graduates are formulated, drawing on a combination of the microeconomic human capital model as well as the job-search-theory. The analysis is based on the Bavarian Graduate Study (Bayerisches Absolventen Panel, BAP), a representative data base for a wide array of fields of study at Bavarian universities and universities of applied sciences. Methods of multilevel modeling are employed to identify individual gains to international experiences during the course of study. It is shown that international experiences during the course of study are positively associated with the readiness to move for a job as indicated by the radius considered when searching for a job. As a result, graduates who have had international mobility experiences during the studies consider a wider spatial range of job offers. This leads to a systematic advantage when analyzing income development as well as wage-levels five years after graduation.

VET AND HIGHER EDUCATION: TWO WORLDS, TWO FRAMEWORKS?

LORENZ LASSNIGG

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The paper is related to (F) Policy Development, and addresses the question of how VET and higher education (HE) might be combined in a Qualification Framework (QF). It starts with the experience in Austria, where an overarching national QF has been envisaged at the beginning of the process, however, has been turned down afterwards. Two research questions will be specifically addressed: First, how does the Austrian experience fit into a comparative picture? Is the gap between VET and HE a common phenomenon, or specific to certain structures of systems? Second, which factors can explain a gap between VET and HE? Is it the gap between different kinds of knowledge, or a certain relationship to the social structures, or have political mistakes been made during the implementation process? These questions are approached by institutional analysis, taking material from the policy process as a main source of research. The hypotheses which are tried are the following: (1) There is a lack of language for the political communication of the different kinds of knowledge processed in different parts of education, in particular about knowledge needed for innovation; because of this lack the relationships of VET and HE tend to be posed into a contradictory frame (2) a tendency to increase a social gap and competition between VET and HE is inherent in systems which are still resembling to past structures of elite HE systems; (3) a political structure related to status competition makes the development of an overarching qualification framework particularly difficult. Austria will be shown as an example of having all of the three traits and contrasting systems will be tried to be found, which might contradict the hypotheses.

DEVELOPMENT OF COMPETENCIES: MIND THE GAP AND MIND THE STEP! EMPIRICAL EVIDENCE FOR ITALY

RICCARDO LEONI
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European policy makers are focusing on the gap between the competencies required of graduates by the modern production context and the knowledge that university systems traditionally transfer to students. Their objective is to significantly transform the higher education system so that it adheres more closely to the new needs generated by the vigorous technological and organizational innovations in production and work. For the time being, the outcome is constituted by the so-called Bologna Process and the Dublin Descriptors, relating to the educational objectives expressed by the expected learning results. These policy decisions attempt to change the university's mission and unit of measure: seeking to move from the transfer of knowledge from the teacher to that of learning by the student, and from disciplinary knowledge to competencies. The European project "Tuning Educational Structures in Europe" (2006), in addition to a survey in the field, indicated to European universities the opportunity to make a distinction between generic (or transversal) competencies and specific competencies (in the personal area of discipline), also suggesting methodological indications to design degree courses and 'constructivist' pedagogy. Economic analysis has long shown that the considerable gaps between competencies required and those held on entering the labour market have serious consequences both in the short and long term. A recent survey, carried out on a sample of entrepreneurs and/or recruiters working in the Lombardy region in Italy, shows that the biggest gaps are to be found not within the remit of disciplinary knowledge as such, but in the competencies themselves: i) know-how, i.e. application of knowledge, ii) cognitive, iii) management and iv) relational. These gaps wrongly force firms to sustain higher new-graduate entry costs with respect to a counterfactual constituted by the equilibrium between supply and demand. In the paper, it is argued that these gaps are not only responsible for the medium-low positioning of the competency profile that develops during the working life of a graduate with respect to a counterfactual constituted by a graduate with a good match between the competencies required and those held. They also tend to affect the growth path of the competencies themselves: the bigger the gap, the smaller the steps in competency growth. Moreover, the competencies that are developed most during the course of a working life tend to be those that at the time of entry into the labour market had the largest gaps. At this regards, with reference to a forthcoming paper in Industrial and Labor Relations Review, we document that the development of a worker's 'key' competencies also depends on the organizational design of the workplace and the work practices that are 'practised'. The paper also documents, through an econometric analysis controlling for a number of factors, that the level of competencies expressed significantly influences graduate remuneration, while the cultural background of the family of origin tends to assume greater importance than the educational background. The results are confirmed by controlling for endogeneity of schooling as well as of competencies. The paper concludes with a series of policy indications.

**IMPLICATIONS OF THE BOLOGNA PROCESS FOR GRADUATE EMPLOYMENT AND
THROUGHPUT IN THE HIGHER EDUCATION SECTOR: AN EMPIRICAL ILLUSTRATION
BASED ON FINNISH-BRITISH COMPARISON**

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Hastening the throughput of the Finnish higher education (HE) sector is considered essential for improving the system's efficiency and lowering its financial burden on the national economy. In the Finnish context, the policy discussions that have been held to address the problems with the delay in the average beginning of the graduates' working careers have primarily emphasised the structural organisation of the pro-grammes and degree system in the framework of the Bologna process. Consequently, less attention has been given to the dynamics of the HE-to-work transition and the market mechanisms related to graduate employment. By comparing the HE-to-work transitions of Finnish and British graduates, this paper intends to illustrate the challenges the Finnish HE system will face as it attempts to hasten the throughput of students. The Finnish HE system is representative of a system that operates in an occupation-specific and relatively strictly-regulated labour market context, whereas the labour market context for the British HE system is essentially the most liberal in Europe. The results of the study suggest that it is not the length of the first degree programmes per se that determines the throughput of the HE sector, but the relative emphasis placed on the opportunity structures pertaining to HE participation and on career mobility in the labour market. The data used for the empirical analysis come from a project commonly known as the REFLEX. Additional data is used for illustrating recent developments in the Finnish context.

CLOSING THE GAP – THE BENEFITS AND CHALLENGES OF EMBEDDING WORK-RELATED LEARNING IN THE UNIVERSITY CURRICULUM

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The presentation focuses on the findings of five pilot studies carried out as part of the Real WoRLD project at Glasgow Caledonian University. Given the confusion surrounding the terminology, the project team devised a set of five key ‘principles of work-related learning’ (McKinnon and Margaryan, 2008) which are based on the latest research findings in learning design to make them credible and universally applicable. To test their feasibility in different subjects and years of study five pilot studies were carried out. All of them embedded work-related learning activities such as client-based projects, accredited internships and assessed teamwork in the taught curriculum. A mixed-method research design included quantitative surveys with students (n=386) supplemented by focus groups with students (n=81) and qualitative interviews with academics (n=5) and employers (n=5). Students were asked to assess how confident they felt in their own employability skills in questionnaires at the beginning and the end of the pilots. Interviews with staff and employers focused on their perceptions of the benefits and challenges involved in embedding work-related learning. The findings reveal wide-spread agreement on the benefits. 89% of students reported that their learning on the pilots had improved their employability skills. Academics saw their students’ confidence levels increase and welcomed their enhanced independent learning skills. Employers appreciated the knowledge transfer opportunity and valued their work with the students as a useful recruitment tool. The challenges included raised anxiety levels amongst students who are not used to such a teaching approach and an increased workload for academics.

**A SURVEY OF THE RELATIONSHIP BETWEEN QUALITY ASSURANCE AND EMPLOYABILITY
FOR GRADUATES OF JAPANESE ENGINEERING PROGRAMS**

MINORU NAKAYAMA

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Engineering Faculties at Japanese universities augment the high level of economic development in Japan. Though the capacity of these faculties and the ratio of advancement to Master's courses are growing, Bachelors of Engineering comprise 15.7% of all Bachelor students, and Master's of Engineering comprise 41.5% of all Master's students, currently.

Several financial crises have resulted in recessions and reduced levels of employment. Recently, many new employees have been hired without the use of conventional networks such as referrals by alumni. Also, structural changes in industry and the globalization of the economy have upset university students' conventional career development paths, making it difficult for them to make suitable choices. Employment rates for Engineers are currently 78.7% for Bachelors and 92.7% for Masters.

These changes have been observed in various spheres of higher education, and the University Council of Japan has begun promoting the introduction of "career education", which consists of courses designed in collaboration with companies, short term internships at companies, and support services. These have been introduced as a part of university education to help students get jobs.

As the Japanese custom is for graduation from university and employment at a company to occur simultaneously, students have to look for the most appropriate jobs before they graduate. These job searches require from six months to a year, often causing faculty members to question whether this contributes to or detracts from academic activities, and whether this is consistent with the calibre of higher education in the rest of the world.

**IMPLEMENTATION AND EVALUATION OF AN INTERNSHIP PROGRAM IN RELATION TO
ACADEMIC DEPARTMENT'S QUALITY ASSURANCE SYSTEM AND GOALS**

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Internship Programs (IP) function as a bridge of the “classroom” to “action”. The aim of this paper is to present the evaluation of the IP, which took place from 2005 until 2007 and its connection with the Department of Economics, Aristotle University, Greece self-assessment report. The evaluation consisted of the opinion of more than 300 participant students, 110 employers, and 15 faculty professors and staff participated in its IP. Data collected by using questionnaires and used to inform the department self-assessment report. The evaluation of IP operated as a measure of the capacity of the market to absorb the graduates. In addition, it used as a compass for possible revision of the curriculum. The department will make decisions in judging the quality of its program of studies and the results of IP project. Specifically, students' and employers' perceptions were part of Department's self-assessment report which was recently adopted by the department as part of its quality assurance system. The authors will also present the new evaluation version that will take place for the 2010-2013, supported by blackboard, included electronic surveys. In our future IP (2010-2013), we plan to administrate another survey in order to have our students' expectations from their internship and their final satisfaction towards internship (in progress). Thus, this technique will help us to define gaps, deficiencies, or problems (if any) and the data provided will suggest room for improvement in order to develop and implement IP successfully in relation to our quality assurance system and Department's goals.

EARLY CAREER EXPLORATION IN THE CONTEXT OF THWARTED CAREER AMBITION

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The literature on careers is replete with examples of changes in direction and people studying fields and topics that are under-utilised in their subsequent working lives. This paper focuses on the thwarted career plans of young Indian men and women living in the UAE who embarked on undergraduate studies in a variety of chosen subject disciplines, but since graduation have felt under pressure to seek, accept and remain in employment working in a job that is definitely not their first priority of choice.

The paper reports the findings from an interview study of young people who graduated over the last two years and are not employed in a job specialising in their area of undergraduate study. These individuals may be described as somewhat unhappy with their current job or jobless situation, and are generally de-motivated with the work they are doing. Moreover, they feel under pressure from their families who often expect them to be doing better than they currently are.

The interview research methods focus on narrative and episodic approaches, seeking to characterise interviewees' life stories and emergent career narratives in the contexts of disappointment and unfulfilled, early ambitions. The reported interviews consist of three meetings held over a period of two months. We conclude this paper with a schematic analysis of the past and present coping strategies deployed by the participants, as expressed through their interview accounts.

GRADUATES' COMPETENCIES FOR SUCCESSFUL JOB MATCHING AND PROFESSIONAL CAREER

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During the 1990s the theoretical concepts and empirical approaches on higher education have to turn focus from long lasting statement that education level is key for obtaining suitable employment and successful professional career to the problem of the gap between higher education outputs and (youth) labour markets` demands, since the economic crises, rationalization of working places and changed employers` demands pushed to the margins of unemployment also some of the higher educated job seekers and the mismatch of proper job has increased. Employers have been increasingly on the lookout for staff that have more than merely formal education and are equipped with the added value of profitable skills and equipment. New problems for the high educated first job seekers have been opened, like: the un-adequate equipment with additional skills and competencies; the changing career paths – from linear to multiple. From the viewpoint of the theoretical approach the concepts of interrelatedness between investments in higher education and theirs results have gained the importance. Prevailing concepts try to capture the inter-dependencies among different education subjects, demands for working force on labour market, indicators of economic development and human capital as individual job seekers resource. Human capital approach has gained the importance during the last decade since it highlights the problem of employability from the viewpoint of effectiveness of the individual investments in education. In presented paper besides some changes in higher education inputs and outputs; changes on (youth) labour market (Podmenik at all, 2006; Ivančič, 2008), also the investments in human and social capital are exposed. The main goal of the paper is: try to answer the question if the social capital (besides the human capital) could be defined for one of the crucial personal resources, which enable highly educated young (first) job seekers for smoother and successful enter into labour market and proper (career enabling) job. Paper introduces the results of the the explorative study on the inter-relatedness between human and social capital, conveying on the sample of Slovene students and graduates in the years 2003-2004 and again during the years 2011-2012. *Podmenik, D., at all. (2006): Evaluation of Investments in Educational Capital and Youth Labour Market, Research project, National Frame Programme Competitiveness of Slovenia , 2003-2006, Institute of Nova Revija, Ljubljana, Slovenia. Results were presented on conference Development of Competencies in the World of Work and Education (DECOWE), Ljubljana,2009.

CHANGE OF THE UNIVERSITY MANAGEMENT SYSTEM FOR ENHANCING THE EMPLOYABILITY OF GRADUATES

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Due to globalization of all social and economic processes in modern society the system of higher education was presented with new demanding challenges. It is especially true for the Russian universities since Russia entered the transition to a market economy quite recently. The most important challenges for the Russian universities were: 1) how to become competitive on the world educational market, and 2) how to train graduates who could be competitive on the international labor market. As industry is more sensible to a market those challenges were addressed to the industrial employers. In order to bring together the standpoints of academia and industry a series of special training sessions has been conducted under supervision of Tomsk Polytechnic University and Tomsk Chamber of Commerce and Industry. Academics, university administrators and employers from industry took part in the trainings. Trainings allowed developing a set of competences that are necessary for the university graduates to be employable and competitive on the labor market. However, the trainings demonstrated some divergences of opinions of academics and employers. A special research showed that these divergences rooted from the difference between business and academic organizational cultures which are a factor highly influencing on the management systems. Also, the peculiarities of the academic organizational culture were studied as well as the way of adjusting of the academic organizational culture to the market conditions were explored in this research. Implementation of the research results allowed enhancing employability of graduates of the Tomsk Polytechnic University.

TRANSITION FROM UNIVERSITY TO WORKING LIFE — THE CASE OF FINLAND

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According to a nationwide survey ($n = 6\,692$) the employability of Finnish University master level graduates is on a high level. The survey was administrated in 2008 to those who graduated from Finnish universities in 2003, so five years after their graduation. Well over half (56 %) of the graduates responded. Even one out of three of the graduates had been unemployed for a short period, five years after graduation 84 % of respondents were employed and only 2 % of them were unemployed. Majority (73 %) of those in working life considered that their occupation corresponds with their academic education. The results of the survey show that the most important work-related skills that the respondents claimed to need in their work included problem-solving skills, team working skills, communication skills, information acquisition skills and organisation skills. These skills and competencies are transferable and enable them to be employed in jobs of many kind. Instead of celebrating the successful transition from university to working life of the Finnish master graduates the Finnish Education Evaluation Council suggested in their report in 2010 that bachelor degree should be the intended degree in Finnish universities and the amount of Master's degree student should be limited. The results of the survey do not support this kind of policy. For example, the proportion of clearly over-educated master graduates in Finland is very small (3 %). Moreover, many bachelor graduates in working life have completed Master's degree - to improve their competitiveness in labour markets.

THE SKILL MATCH OF YOUNG GRADUATE EMPLOYEES: AN EMPIRICAL ANALYSIS BASED ON REFLEX DATA

FRANCESCA SGOBBI

DIMI - University of Brescia, Italy

The match between required and provided skills plays a crucial role for economic growth. However, the growing diversification of both educational and career paths typical of post-industrial economies increases the chance that also at the early stages of an employee's career his/her actual human capital diverges from the standard human capital corresponding to his/her educational qualification. Not surprisingly, recent empirical analyses devote significant effort to understanding the relationship between educational mismatch and skill mismatch, with a special emphasis on graduate employees. Several studies have questioned the "genuine" nature of education-based measures of skill mismatch. An apparent mismatch could result from a different distribution of either skills or individual preferences among employees with the same educational qualification (Robst, 2008). Information on schooling should be consequently complemented by additional measures of the effectiveness of the labour effort provided by employees, such as information on skill shortages and over-skilling (Allen and van der Velden, 2001; Green and McIntosh, 2007) or information on employees' satisfaction (Lindley and Chevalier, 2009; McGuinness and Sloane, 2011). Building on the above literature, this paper proposes an approach to discriminate between "genuine" and "apparent" skill mismatch for young graduates and argues that only "genuine" skill mismatch is associated with significant lower employability or poor employment conditions (i.e. overeducation or employment in a different area from tertiary education). The empirical analysis is based on REFLEX data, which provide rich information on the education and the early careers of young graduates from 13 EU countries and Japan.

RECOGNIZING NEW CHALLENGES: CURRICULUMS ADDRESSING NEW EUROPEAN PRIORITIES

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Global economic crisis, migration, unfavorable demographic trends – mentioning only some of them – is raising new challenges the European Union has to face with. Recently developed strategies like the Lisbon treaty are designating those directions where with unified efforts the Union hopes to find a long-term solution. One of the most significant factors whether member states can work out and implement a rapid response is the availability of specifically trained human workforce capable to cope with the new tasks and fulfill the expectations. Employability of freshly graduated students significantly depends on whether their newly acquired knowledge and skills are matching those fields where there is a rapidly growing need for human resource capacity building. There is significant shortage of formal higher education programs in Europe aiming to build the human resource capacity that will address the new challenge: the rapidly growing migration and its health aspects. It has also a significant impact on the workforce market of EU where – as a result of the demographic developments – a serious shortage could be well forecasted. The smooth and successful integration of the migrants – where health is an essential issue – is a clear economic interest of the majority societies. University of Pécs as initiator and leader of a consortium of six EU academic institutions within the frame of ERASMUS curriculum development programs is going to develop and implement an EU level MA curriculum on migration health. During the evaluation process this project has received 100% of the scores in the item: European added value.

**JOB SEARCH METHODS USED BY YOUNG PROFESSIONALS AND RECRUITMENT METHODS
USED BY EMPLOYERS: WHAT WORKS**

CEM TANOVA

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Informal methods are used both by job seekers and firms to find jobs and to fill vacancies. Pellizzari (2004) has shown that personal contacts are among the most important channels that match job seekers and jobs. This study investigates the use of informal methods to find employment at the individual level using the European Community Household Panel (ECHP) data and the use of informal recruitment methods by firms using the Cranfield Network on Comparative Human Resource Management (CRANET) data. In the current study issues such as the impact of gender on the use of informal networks to find employment, the starting pay and the pay after several years of work, the type of jobs (permanent or non permanent), level of job satisfaction and actual voluntary turnover are taken into consideration from the perspective of job seekers. Comparisons between countries and industries are also carried out. Whether informal contacts are more likely to lead to jobs in smaller businesses is also investigated. From the perspective of the firms the prevalence of informal recruitment methods by country, the size of the organizations that prefer informal methods and possible organizational and employee outcomes associated with the use of informal methods are investigated. Managerial and policy implications are made in the light of the findings.

LONG-TERM CAREER TRACKING OF GRADUATES USING DATA FROM THE SOCIAL SECURITY SYSTEM

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In a project with the University of Graz, we are tracking all graduates of the university since 2002 using administrative data of the Austrian social security system. The data contains – on a daily basis (!) – information about labour market status, income, and encoded data about the employer (branch, region, number of employees etc.) of all graduates remaining in Austria. This data is matched with data from the University (like field of study, duration, gender, age, other degrees or studies and so on). Hence, our database is large enough to provide detailed information about labour market performance of graduates even on detailed sub-levels.

In the paper, we will first focus on a certain aspect of the results, which might also be very valuable for the planning of graduate surveys: We will show different patterns of labour market integration by field of study (e.g. Pharmaceuticals, Law, Biology and Humanities) and type of degree (Bachelor, Master, Diploma) which differ greatly depending on the time-span after graduation. E.g., in some subjects, nearly all graduates are integrated in the labour market within 6 months, others show immediately after graduation no problem of integration, but between 1 and 2 years after graduation, and in a certain area, we see rising unemployment after 4 years of graduation. We will also propose explanations for these different patterns. However, surveying graduates 1, 3 or 5 years after graduation will deliver results depending on these overarching patterns.

The second part of the presentation will focus on the use of the data by the University itself. What kind of information is helpful, what for and by whom will it be used? Which additional information would the university need to improve the transition of their graduates on the labour market?

WHAT EMPLOYERS REALLY LOOK FOR: THE EMPLOYERS AND GRADUATES PERCEPTIONS?

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It has been argued that the labour market entry process and the early career have changed tremendously since the 1980s in Europe. Major factors behind these changes are growing economic globalization and economic restructuring (Blossfeld, Buchholz, Bukodi, Kurz, 2008). As the upskilling of occupational structure has occurred at the much lower speed than educational expansion, it means that youth faces growing competition on the labour market. Also the economic crisis since 2008 has contributed to the rising unemployment rates of youth (Unt, Saar, in press). Most previous studies concentrate on supply side and analyzed the role of education in the youth labour market entry as the explanatory variable of different labour market outcome equations (Blossfeld et al 2008; Kogan, Gebel, Noelke 2010; Saar 2005; Unt 2010). The demand side, specifically the actions of employers, has gained much less attention (Jackson 2001, 2002; Jackson, Goldthorpe, Mills 2002). We would like to combine the perceptions of two key actors in labour market entry process on micro level: employers and graduates. Specifically, we would concentrate on the actions of employers and on the ways in which the educational attainments of potential employees, will enter into the personnel decisions. We would contrast employers perceptions about key competencies of employee's with graduates perceptions. What is the role of education in recruitment process? Does it differ by activities of employers and by graduated field of study? What are the other factors contributing to the success at the job interview? How the graduates' perception of key selection criteria of employers differs by employers' perception?

Thus, the aim of our paper is to analyze the role of education and other factors in recruiting tertiary graduates in case of Estonia. Our analysis is based on various data sources. Firstly, we use semi-structured interviews with 15 biggest employers with different economic activities. Secondly, focus groups with 65 recent graduates from tertiary level institutions. For the general context, we use Estonian Labour Force Survey and Estonian Social Survey (part of EU-SILC).

DO YOUNG PEOPLE ACQUIRE ADDITIONAL SKILLS IN THEIR FIRST JOBS OR NOT? AND IF YES, WHO DOES (OR DOES NOT) AND HOW?

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Although the mechanism causing the relationship is far from clear (Bills, 2003), the empirical relation between educational outcomes and labour market outcomes has long been established. In a knowledge economy with a transitional labour market, one might expect that acquiring (additional) skills after leaving the educational system (for the first time) acquires a growing importance for maintaining one's employability. Even to the point of making the opportunity to acquire additional skills an important characteristic of job quality (Green, e.a., 1998) and a potentially important source of cumulative advantage or growing division between the have's and have not's in terms of skills and labour market opportunities. In an impressive series of papers Nobel Laureate James Heckman and his collaborators (a.o. Cunha, e.a., 2006, Heckman, 2008) developed a model of skill production technology which leads one to conclude that the most important factor determining the acquisition of additional skills in later phases of the life-cycle is one's 'self-productivity'. A potential backlash of the Heckman position is the neglect of factors developing and repairing the lack of skills later in life or the over-emphasizing of those enhancing 'skill-productivity' in the early years. Using data from a cohort of Flemish youngsters this paper aims at determining what explains acquiring additional skills during the first job. The paper shows that characteristics of the first job – like educational match, being in an active job or the type of employment relationship – are as important as “self-productivity” (proxied by educational level) for acquiring additional skills in the initial part of the occupational career.

**DETERMINANTS OF THE LABOUR MARKET SUCCESS OF GRADUATES — THE CASE OF
LIFE SCIENCE DOMAIN**

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The article studies the problem of success in the labour market entry of higher education graduates in the European perspective. The core of the analysis is the study of determinants of widely defined labour market success. Differences between countries and study domains are analysed in the aspects of the influence of various socio-demographic characteristics as well as market environment and process of learning, modes of teaching and study programmes characteristics. Specifically, the Life Science domain is taken under focus. Data used in the analysis comes from two special surveys of European research projects REFLEX and HEGESCO. The research shows important role of factors related to study programmes modes and processes as well as individual graduates' study and early work-related experience.

**COMPETENCIES OBTAINED DURING STUDIES AND PROFESSIONAL SUCCESS OF HIGHER
EDUCATION GRADUATES IN CZECH REPUBLIC**

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The topic of transition from higher education to the labour market is becoming an increasingly important as rapidly growing numbers of graduates are leaving higher education in Czech Republic. In 2010 a national survey called REFLEX 2010 was conducted. More than 8.5 thousand of electronically completed questionnaires were collected from those who graduated in years 2005 and 2006. It builds on similar international project REFLEX that was conducted in 2005 and 2006. It touches many subjects such as evaluation of study, transition period, first job and professional success. It is important to understand how school leavers value their school and education attained and how that translates in the labour market. The focus of the paper will be to analyze the relationship between different characteristics of education (types, fields) and professional success which will be expressed by several objective and subjective measures. The paper will also try to answer what competencies have graduates obtained during their higher education studies, how are they useful in their jobs and what kind of competencies are expected in their jobs?