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GOVERNMENT OF ROMANIA
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SOCIAL PROTECTION
MASOPHRD



European Social Fund
SOP HRD 2007 - 2013



Structural Funds
2007 - 2013



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EXECUTIVE AGENCY FOR
HIGHER EDUCATION, RESEARCH,
DEVELOPMENT AND INNOVATION

Romanian Universities and Labor Market

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20th- 21th September 2012, Praga, CONGRAD Meeting

EUROPEAN SOCIAL FUND

Investing in
PEOPLE



**University Graduates
and Labor Market**

Romanian Tracer Study



Strategic projects
for Romanian Higher Education

Project co-financed through European Social Fund by Sectoral Operational Programme Human Resources Development 2007-2013



Thematic Overview

Romanian Universities and Labor Market

Current needs (general)

- **information** about the graduates' insertion and their evolution on labor market
- **increasing institutional capacity** to perform national monitoring studies on a permanent basis
- **support** for the implementation of the national employment policy
- **increasing responsibility** of the social partners in relation with the educational issues
- **making investment** in human resources **more efficient**



Thematic Overview

Romanian Universities and Labor Market

Current needs (practical)

Higher education effectiveness parameters:

correlation between the higher educational output and competences the labor market needs

The step ahead:

a first comprehensive study at national level that monitors HE graduates' insertion on the labor market

- **a detailed “radiography”** of HE system's insertions on labor market
- ➔ • **durable tools:** methods, instruments for HE institutions
- **experts network:** training, experience and networking



Romanian Tracer Study Project: University Graduates and Labor Market

Implemented by

National Higher Education Funding Council (CNFIS)

The Executive Agency for Higher Education, Research, Development
and Innovation Funding (UEFISCDI)

Project Partner

**Kassel University, Germany – International Higher Education
Research Center (INCHER)**

The Main Project Beneficiaries

Romanian Public and Private Universities

Ministry of Education, Research, Youth and Sports – MECTS

Romanian Agency for Quality Assurance in Higher Education – ARACIS

STUDENTS – SOCIETY

EMPLOYERS - STAKEHOLDERS



Project purpose and objectives

Main purpose

Development of tools, at national level, for “tracer studies” - to follow-up the professional career of university graduates in relation with the labor market

General objective

Consolidate the role and capacity of universities in evaluating how the acquired knowledge, competences and abilities enable HE graduates to enter into the labor market or to continue their studies



Project research questions

- How to measure the relevance of higher education (HE) for an adequate insertion on the labour market of graduates?
- To what extent is the professional success/career caused by HE?
- Which indicators do we need? (search duration, employment status, income, position, level match, field of study match, work autonomy, job satisfaction, etc.)
- How to measure the labour market signals?
- Which factors are relevant to explain the success of the graduates besides higher education? (labour market, regional mobility, individual motivation, etc.)
- Which elements of HE (study conditions and provisions, etc) have an impact?



Project research topics

- Whereabouts after graduation
- Employment search
- Employment conditions
- Professional success
- Job activities and competencies
- Retrospective assessment of studies
- Individual study requirements



Project target group

Graduates of Romanian higher education system

(from all public and private HE institutions)

- **one year after graduation** (2009 cohort)

young graduates in transition between study and professional activity

- **five years after graduation** (2005 cohort)

employee with a relevant professional experience



Implementation stages

- Establishment of the collaborative framework with the universities
- Development of the questionnaire
(at national and institutional level)
- Consolidating and validating the graduates database
(before and during the field phase)
- The field phase of the questionnaire at institutional level
with a pretest phase of implementation (for questionnaire and process)
- Analyzing the results and writing the final report



Implementation stage (1)

Colaborative framework with universities (1)

55 universities participating in the survey (from 108 universities that provide bachelor degree programs)

41 public institutions (from 49 universities in total)

14 private institutions (from 59 universities in total)

Covering all the categories of HE institutions:

public and private

all across the country

large and small

specialized and comprehensive

221 635 graduates of bachelor and license programs from participating universities

148 165 graduates from the 2009 cohort (191 291 in total)

73 470 graduates from the 2005 cohort (108 475 in total)



Implementation stage (1)

Colaborative framework with universities (2)

42 universities that participated in the survey for the 2006 and 2010 cohorts

- *32 public higher education institutions*
- *10 private higher education institutions*

116 555 graduates of bachelor and license programs (based on the universities' reports)

63 835 graduates from 2010

52 720 graduates from 2006



Implementation stage (2)

Development of the questionnaire (1)

- at national and institutional level
- *with the contribution of national and institutional experts in strong cooperation with INCHER Kassel team*
 - Core set of questions (*baseline questionnaire*)
 - Some specific items/ questions for the graduates from psychology and law fields (*extended questionnaire*)



Implementation stage (2)

Development of the questionnaire (2)

Questionnaire Structure :

- Secondary studies
- University studies
- Other forms of education and professional training
- The study programme graduated in 2005/2009
- Study facilities and acquired competences
- After graduation
- Looking for a job
- First job after graduation
- Current employment
- Retrospective assessment of the study programme
- Biographical data
- Questionnaire evaluation



Implementation stage (3)

Consolidating and validating the graduates database (1) *before and during the field phase*

General steps

- Identification, at university level, of the existing information (on electronic and/or paper support)
- Uploading the existing information to a centralized database at institutional level, starting from a national pre-established database structure
- Filling out the missing data concerning graduates, using different types of specific searching methods
- Validating the information regarding the graduates, using specific methods and techniques



Implementation stage (3)

Consolidating and validating the graduates database (2) before and during the field phase

General remarks

- Major impact on the study results (*the purpose of a survey is gaining more reliable information from an adequate sample of respondents*)
- Differences between universities regarding the information administration
- Differences between the cohorts related with the data contact
- Need for a national database regarding the graduates, or at least an institutional database



Implementation stage (3)

The field phase of the questionnaire (1)

Preparation of the field phase:

- **The pretest of both the questionnaire and the process**
(through a declared and undeclared pretest, on voluntary basis)
Declared pretest (testing both the questionnaire's content and form)
Undeclared pretest (testing and checking the online questionnaire; identifying the appropriate means of sending the invitations; testing ways of monitoring the process)
- **The address management** *(A database system to manage the process of contacting the graduates and to match the sample with the population)*
- **Contact the target population** *(form letters/e-mails)*
- **Information material and promotion** *(websites, flyer / leaflet of the survey/project, incentives etc.)*
- **Timetable** *(countdown to the launch of field phase)*



Implementation stage (3)

The field phase of the questionnaire (2)

General framework for conducting the survey

- Using the online questionnaire and, only at request, the paper version of the questionnaire
- Setting up four stages of invitation (first contact and three reminders)
- Invitations letter sent by mail, with e-mails as back-up
- Permanent monitoring and reporting of activities through an e-mail group and online report
- Daily information concerning the university's graduate participation



Implementation stage (3)

The field phase of the questionnaire (3)

General steps

- Managing the different statuses of the graduates during the of process
- Sending the appropriate emails or letters to the graduates
- Documentation of the response behavior
- Answering questions and fixing problems coming from the graduates
- Find new addresses, if addresses are incorrect
- Communication to other departments, universities, partners and employees



Implementation stage (3)

The field phase of the questionnaire (3)

General framework for cooperation and implementation

- Common procedures (*recommended by the central team after taking into consideration suggestions from the university teams*)
- Common implementation timeline
- Unitary messages
- Online discussion group



Results of the contact process (1)

Invitations/Contacts (based on the universities reports):

- **155 165 graduates** were invited to participate
113 628 graduates from 2008 - 2009 cohort
41 537 graduates from 2004 - 2005 cohort
- **3 093 graduates** didn't want to participate
- **31 048 graduates** with undeliverable addresses

Responses

- **39 293 graduates responses**
28 766 graduates from 2008 - 2009 cohort
10 527 graduates from 2004 - 2005 cohort

➔ **Approximate
response rates**

20,88% gross response rate

(18,9%-2005; 21,72%-2009)

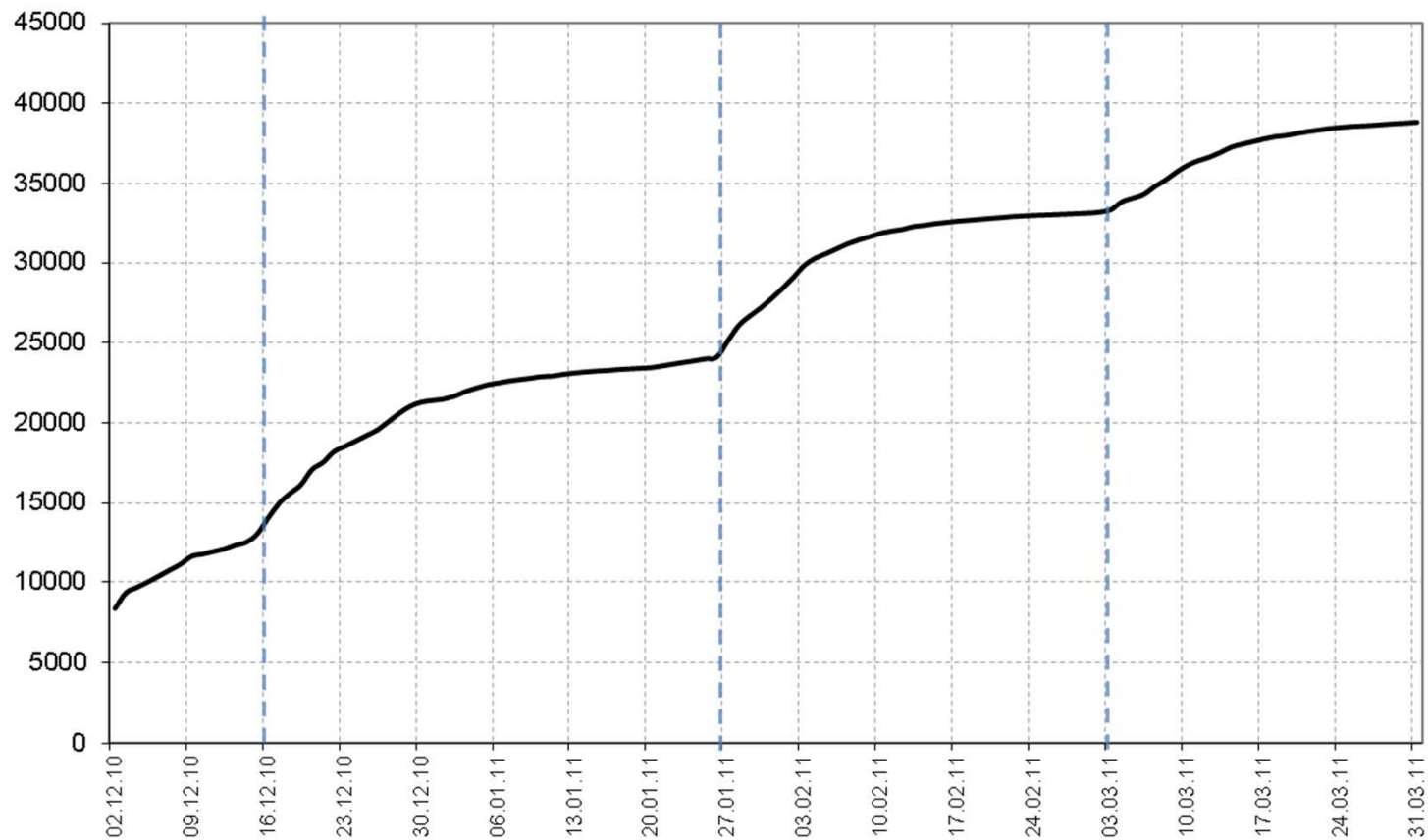
29,33 % net response rate

(29,84%-2005; 29,15%-2009)



Results of the contact process (2)

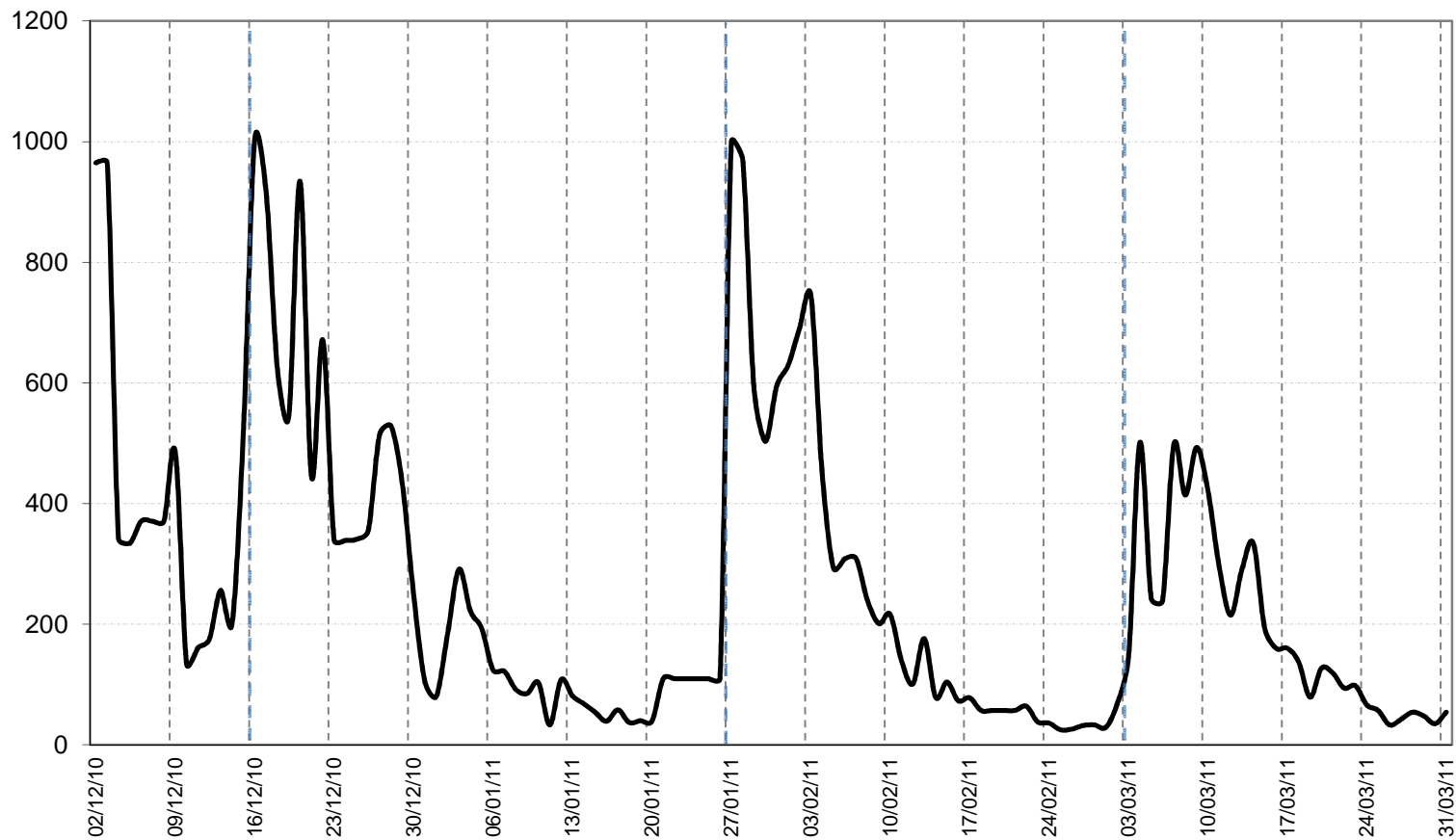
Fig.1: Cumulative responses at national level
(values)





Results of the contact process (3)

**Fig. 2 Daily accesses at national level
(values)**





Results of the contact process (4)

Invitations/Contacts for 2006 and 2010 graduates (based on the universities reports):

- **48 098 graduates** were invited to participate
 - 32 571 graduates from 2010 cohort (45 126 in database)
 - 15 527 graduates from 2006 cohort (34 050 in database)

Responses

- **9 294 graduates responses**
 - 5 935 graduates from 2010 cohort
 - 3 359 graduates from 2006 cohort



**Approximate
response rates**

19,32 % net response rate

(21,63%-2006; 18,22%-2010)



Selected results of survey (1)

Duration of the first job search:

- The average varies depending on the graduation year: 7 months for 2005 cohort and 9 months for 2009 cohort
- Female graduates are more likely to spend, on average, with 1 month more than male graduates looking for a job.
- Graduates from private higher education institutions search for a job even longer than 1 year (12,3 months on average).
- By fields of study:
 - graduates of Natural Science, Agricultural and Forestry Science, Social and Political Science, Law have the biggest difficulties in finding a job – approximately 1 year;
 - graduates of Military Science, Medicine and Veterinary Medicine register the fastest insertion on the labor market



Selected results of survey (2)

The most successful methods for job search :

- help of family, friends or acquaintances (*22% - 2005 and 18% - 2009*)
- application for a job vacancy (*19% - 2005 and 11%- 2009*)
- working for the same employer as before graduation
(*6% - 2005 and 15% - 2009*)
- through job portals on the internet (*10% - 2005 and 9%- 2009*)
- approached by an employer (*10% - 2005 and 6%- 2009*)
- direct contact of the employers (*9% - 2005 and 7%- 2009*)
- through the county school inspectorate (*9% - 2005 and 6% - 2009*)



Selected results of survey (3)

Situation of the graduates *(at the moment of filling in the questionnaire):*

- For the 2005 respondents *(at 5,5 years from graduation)*
 - 83% had a job,
 - 7% had a job and also studied,
 - 5% didn't have a job, but were looking for one
- For the 2009 respondents *(at 1,5 years from graduation)*
 - 50% had a job,
 - 22% had a job and also studied,
 - 16% were following in-depth university studies
 - 10% didn't have a job, but they were searching for one



Selected results of survey (4)

Form of employment

- For the 2005 respondents (*from 7691 graduates*)
 - 81% were full time employees
 - 83% had an unlimited term contract
 - 50% used the knowledge and competences acquired
(*to a high and very high extent*)
- For the 2009 respondents (*from 14827 graduates*)
 - 77% were full time employees
 - 75% had an unlimited term contract
 - 50% used the knowledge and competences acquired
(*to a high and very high extent*)



Selected results of survey (5)

Analysis of job and field of study match (1)

Based on a binomial logistic regression, that tried to see the match and mismatch of the occupation at the current job and the field of study (**dependent variables**), using the educational background of graduates, social-demographical profile and work experience as **independent variables**.

Analysis results:

- The educational background of the graduates of higher education and their investment in education - very important role in ensuring their success on the labor market, which persists even after the initial phase of their career.
- From the parameters that characterize the graduates' educational profile, the field of study has the highest rate of predicting the probability of adequate insertion.



Selected results of survey (5)

Analysis of job and field of study match (2)

Analysis results:

- In the case of the 2009 cohort, graduating from a public higher education institution and occupying an entirely budget funded place increase the chance of quality occupancy.
- As the graduates advance in their career, these factors lose their power of influence, the graduates' professional experience becoming more important.
- Public sector – higher absorption of those who work in the field they studied.
- Services sector – the occupational area that appeals mostly to higher education graduates that are inadequately occupied.



Selected results of survey (5)

Analysis of job and field of study match (3)

Analysis results:

- Labor market mobility decreases probability of adequate occupancy in the case of the graduates that finished their studies several years ago. The graduates that found a job fitting the study program they followed tend to keep their jobs, unlike those whose occupancy is inadequate and that changed several jobs.
- Graduates' **gender** confirms its influence on the labor market chance distribution, regardless of the time in their career – male graduates have higher access to adequate occupancy compared to women.
- **Regional and place of residence (rural/urban) differences** tend to influence adequate employment opportunities more **in the beginning of the graduates' career.**
- Older graduates have higher access to adequate jobs in their first years of career, later on this advance of age not bringing significant benefits.



Actual criteria used by ARACIS

Romanian Agency for Quality Assurance in Higher Education

Capitalization of university qualification through capacity of insertion on the labour market

- at least 50% of graduates find a job that matches their academic qualification
- at least 70% of the graduates find a job

Capitalization of university qualification continuing the academic studies

- at least 20% of the graduates are accepted at master studies



Confidence in a successful project based upon

Representativeness at the national level of the study results

Methodological unity

Scientific approach – experience of INCHER Kassel as a valuable asset

Collaborative framework for all participants

Sustainability of the study results

Thank you for your attention!