Business and labour dynamics in selected EU Member States and the United States: patterns and specific policies

Liana Son, Alexandru Jivan, Gratiela Georgiana Carica, Vasilica Ciuca, Daniela Pasnicu

***Abstract*—**The paper discusses and tests the link between business and labour dynamics, through a set of specific indicators for the business environment and employment and by analysing various types of policies that influence the fundamental factors generating economic growth and employment. We designed a model for the analysis of data from five countries, focusing on Romania and we identified a framework of analysis for the underlying factors of business and labour dynamics and a set of specific policies adopted and implemented during the analysed period, focusing on the education system, labour market policies and social protection measures implemented to reduce the impact of the financial crisis. Our main findings point that there is a significant correlation between the analysed variables, underlying a strong link between business and labour dynamics in some of the countries considered and that the anticrisis adopted measures have had a positive impact, revealed by the slight increase of employment, especially for women, within the European Union in 2010. The degree of influence and strong dependence between the business environment and employment are illustrated in various ways and discussed within the paper.

***Keywords*—**Business dynamics, Business ownership, Employment, Education system, Job creation, Job destruction, Labour dynamics, Labour market policies.

I. Introduction

STARTING with the last decade the key issues concerning employment have become essential for an inclusive labour market in the European area. Thus, in 1997 was launched a European strategy in order to coordinate national employment policies. The European Employment Strategy was constantly updated according to the evolution of various components of the labour market and to the changes in national employment policies, under the influence of some specific economic factors, including the current economic and financial crisis.

In 2000, the strategy was re-launched within a larger framework, the Lisbon Strategy, aiming to transform the European area in the most dynamic and competitive knowledge-based economy in the world by 2010, capable of sustainable economic growth with more and better jobs, increase social and economic cohesion and respect for the environment [3].

The Lisbon Agenda has had a significant role in advancing policy formulation and implementation in the areas of innovation and labour productivity.

The most valuable characteristics concern the emphasis on external competitiveness, the central role of innovation and the importance of human capital, by linking business and labour dynamics to economic growth.

Macro-economic imbalances and competitiveness problems were at the root of economic crisis and were not adequately addressed in the surveillance of Member States' economies carried out by the Lisbon Strategy, which tended to operate in parallel rather than completing one other [3]. The evaluation process of this strategy pointed out the slow progress in achieving the objectives, a lack of integrated communications strategy and generally a weak response to the process of globalization.

Therefore, the European Union framed in March 2010 a new strategy, Europe 2020, focusing on the development of exit strategies (out of the recession) and upon a set of policy actions that promote employment participation, social inclusion, labour productivity, competitiveness, knowledge and innovation [4]. The strategy builds on its achievements as a partnership for growth and job creation. The key drivers of Europe 2020 are: *(i) creating value by basing growth on-knowledge; (ii) empowering people in inclusive societies,* covering the acquisition of new skills, fostering creativity and innovation, the development of entrepreneurship and a smooth transition between jobs and *(iii) creating a competitive economy* [4].

The aim of the paper is to identify, motivate and recommend a series of selected indicators for monitoring the progress achieved in reaching the objectives of business creation and growth driven employment, in the short-run and to analyse various types of labour market policies that influence the fundamental factors generating economic growth and employment, by highlighting the effects of labour market factors on business dynamics and firm dynamic processes.

II. Research Methodology And Indicators

A. Methodological Stages

The research is based on a specific methodology that allows, *in the first part*, to identify and recommend some indicators characteristic to the business environment generating growth driven employment, proposed according to the following figure:

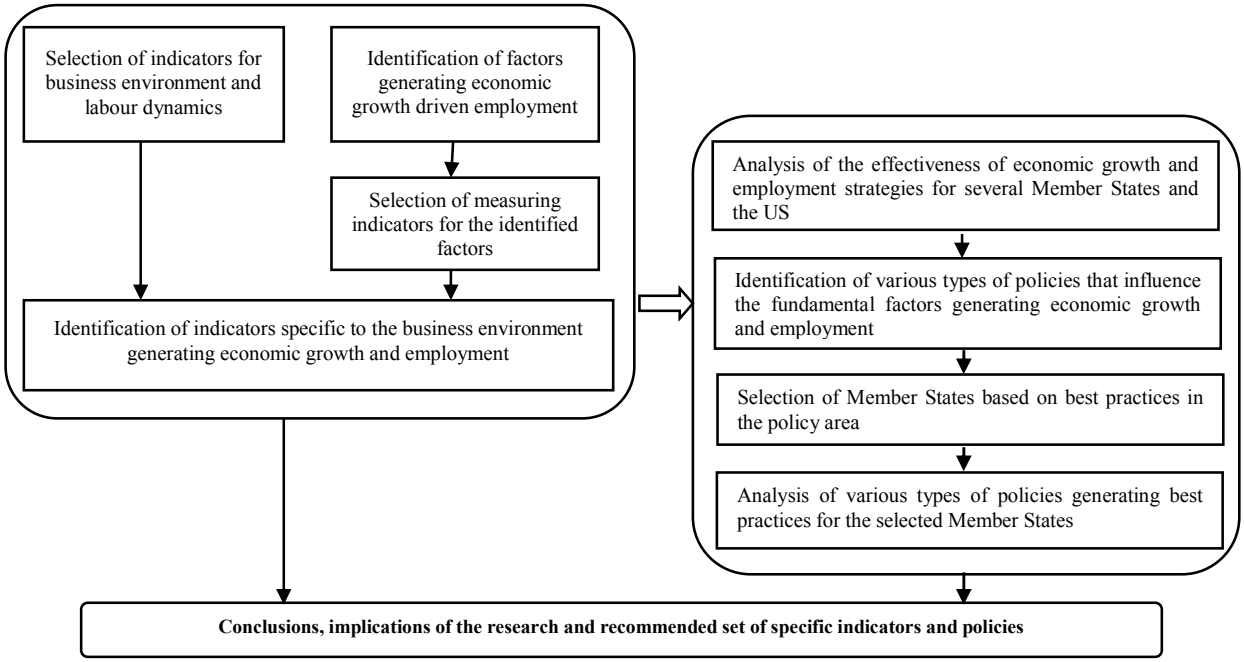

Fig. 1 Methodological stages for research and recommendation of the set of indicators and policies concerning business environment and growth driven employment

The research activity begins with the identification and accurate analysis of the specific business environment indicators (firm entry, survival, growth and firm exit) and labour dynamics indicators (job creation, job destruction, net employment growth).

The concept of „business dynamics" refers mainly to the dynamics of entry and exit process of new firms (entry rate, exit rate) and to the evolution of existing and stable firms (business ownership rate) [5].

The link between economic growth generated by the business environment dynamics and employment growth is pointed out through net employment growth within a specific growth-typology of firms [5]: *(i)* growth firms – firms with a positive net-employment evolution; *(ii)* stable firms – firms with a relatively stable employment evolution; *(iii)* shrinking firms – firms with a negative net-employment evolution.

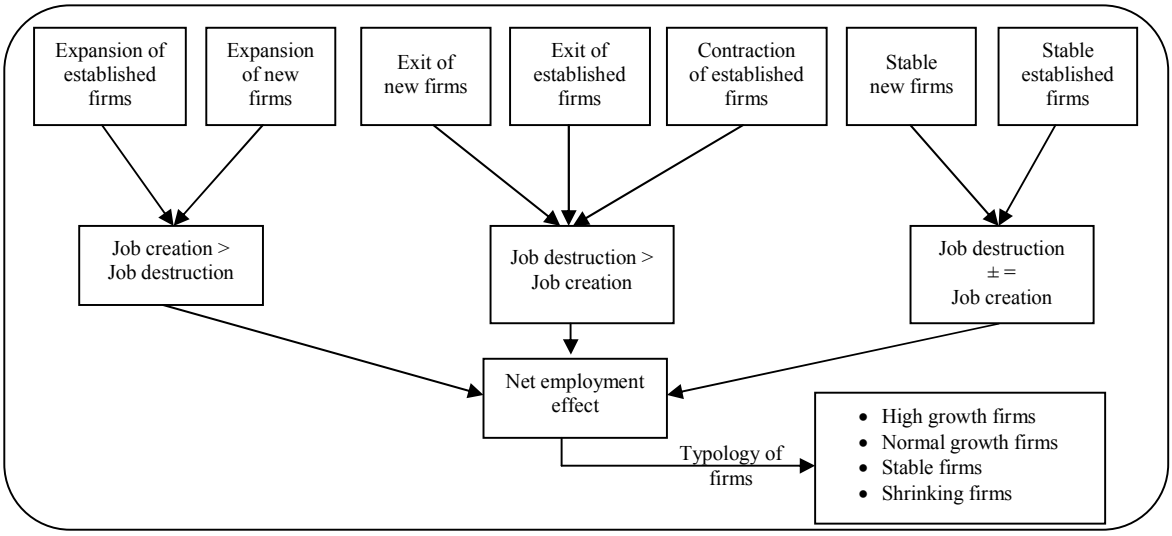

Fig. 2 Link between business and labour dynamics
Source: IDEA Consult, *Business demography and employment study*, Brussels, December 2006

According to the model of the European Commission, IDEA Consult [5], the net employment effect is given by the difference between job creation and job destruction, revealing three different situations: *(i)* an expansion of established firms

and of new firms generates an effect of job creation larger than job destruction, *(ii)* the exit of new and established firms, as well as the contraction of established firms lead to a job destruction effect larger than job creation and *(iii)* the balance between job creation and job destruction is generated by the stable new firms and stable established firms.

B. Indicators for Business and Labour Dynamics and Data Description

In order to measure labour dynamics in direct relation with business dynamics we use a set of specific indicators. Amongst these the following indicators are being tested within the analysis:

Table I Indicators for business and labour dynamics which can be used for statistical testing

Indicator for business dynamics	Indicator for labour dynamics	Database used
Annual growth rate of the number of new enterprises Entry rate	Annual growth rate of total employment in the private sector	International Benchmark of Entrepreneurs (EIM), Labour Force Survey (ILO)
Long-term growth rate of the number of active enterprises Business ownership rate	Short-term growth rate of total employment in the private sector (e.g. 3 years)	Business Demography (Eurostat) Entrepreneurs International (Compendia) Labour Force Survey (Eurostat)
Annual growth rate of the number of microenterprises, small and medium-sized enterprises, large enterprises	Long-term growth rate of total employment in the private sector (e.g. 10 or 15 years)	Observatory of European SMEs (EIM) Eurostat (Labour Market)

Source: IDEA Consult, *Business demography and employment study*, Brussels, December 2006

III. Regression Model For Business And Labour Dynamics

By using a regression model, we are exploring the relation between labour dynamics and business dynamics, considering an indicator of labour dynamics as dependent variable and an indicator for business dynamics as the main explanatory variable. The model is based on a model proposed by IDEA Consult and attempts to provide some empirical evidence for the explanation of labour dynamics through changes in the business dynamics. The model uses a control variable – the GDP growth rate - to explain part of the variability of the dependent variable, since the growth of GDP is expected to result into an increase in the employment growth and thus a reduction of unemployment.

One of the relations between labour and business dynamics is represented by the following formula [5]:

$$LD_{it} = \alpha_i + \beta_1 BD_{it} + \beta_2 CV_{it} + \varepsilon_{it} \quad (1)$$

LD_{it} = indicator for labour dynamics in country i at time t
BD_{it} = indicator for business dynamics in country i at time t
CV_{it} = control variables in country i at time t

LD_{it}, the indicator for labour dynamics (dependent variable) used is the Annual Employment Growth in the private sector.

BD_{it}, the indicator for business dynamics (independent variable) could be:

- Business ownership rate / Annual growth rate of the number of microenterprises;
- Entry rate / Yearly change in the birth rate;

CV_{it}, control variable, is represented by the Annual Growth Rate of GDP.

Time series are very important for the estimation of the regression model, pointing out the importance of business dynamics variables, since some of the indicators have too short time series to be included in the regression model, even though all the indicators for business and labour dynamics, presented in table I, were considered.

This type of analysis was also performed by the European Commission and IDEA Consult for EU15 countries over the period 1990 – 2006 [5]. The New Member States are mainly not included in the analysis due to a lot of missing data for business dynamics indicators. Their regression results were quite similar, using the annual growth rate of the number of small, medium-sized and large enterprises, but also for microenterprises that are closely related to firm start-ups, as business dynamics indicators. After testing different indicators, we present the results of two models on the relation between labour dynamics and business dynamics with two different business dynamics indicators in each as independent/ explanatory variable.

IV. Experimental Results

A. Business Ownership, Employment Growth and GDP Growth Correlation

Within our comparative analysis, the countries used in the panel are: France, Germany, Italy, Romania and United States. Taking into consideration the fact that we aimed at including Romania in the analysed panel, the available variables used are: LD_{it},- Annual Employment Growth in the private sector; BD_{it},- Business ownership rate (1990 - 2008) and Entry rate (1995 - 2008); CV_{it} - Annual growth rate of Gross Domestic Product (GDP).

Table II Business ownership rate, GDP growth, employment growth (selected data)

		Business ownership rate (%)	GDP Growth (%)	Employment growth (%)		Business ownership rate (%)	GDP Growth (%)	Employment growth (%)
France	1990	0.127	2.1	0.1	2005	0.099	0.7	0.6
	1995	0.112	2.8	0.9	2007	0.1	1.5	1.4
	2000	0.100	3.7	2.7	2008	0.101	-1.3	0.6
Germany	1990	0.084	2.0	0.4	2005	0.103	0.8	-0.1
	1995	0.089	1.9	0.2	2007	0.104	2.5	1.7
	2000	0.095	3.2	1.9	2008	0.103	1.3	1.4
Italy	1990	0.235	2.1	0.1	2005	0.228	0.7	0.6
	1995	0.234	2.8	-0.2	2007	0.226	1.5	1.3
	2000	0.233	3.7	1.9	2008	0.22	-1.3	0.3
United States	1990	0.122	1.9	0.1	2005	0.107	3.1	1.7
	1995	0.118	2.5	1.4	2007	0.106	1.9	1.1
	2000	0.110	4.1	2.5	2008	0.103	0.1	-0.4

Source: Business Environment Snapshot for Romania, World Bank; Measuring innovation: a New Perspective, OECD; Observatory of European SMEs, International Benchmark of Entrepreneurs: Firm dynamics; Eurostat

The results obtained through applying the regression equation concerning the relation between business and labour dynamics for the four developed economies are summarized in table III. The data shows a significant correlation between the three analyzed variables for France, Germany and United States. We can thus point out that the employment degree is influenced by a significant dynamics of business environment and of economic growth. This effect of the business environment on employment is shown also by the significant values of R Square. For Italy, the influence of business environment and GDP growth is much more fragile or even insignificant if we take into consideration the value of R Square.

Table III Correlation results between labour and business dynamics (business ownership rate)

Country	France	Germany	Italy	United States
Multiple R	0.819172017	0.738957969	0.542296523	0.76247271
R Square	0.671042794	0.546058881	0.294085519	0.58136463

Source: own calculations based on Observatory of European SMEs, International Benchmark of Entrepreneurs: Firm dynamics and Eurostat data

B. Entry Rate, Employment Growth and GDP Growth Correlation

The entry rate is the key indicator of entrepreneurship, defined as new firms (those that were registered in the current year) as a percentage of total registered firms (newly registered corporations divided by the number of total registered corporations). Entry rates range from about 7% for the European developed countries to 9.5% for the United States and about 12% for Romania. The dynamics of the entry rate was higher for Romania due to the process of economic development of a former communist country and was relatively stable (or even in a slight decrease) for developed countries.

Table IV Entry rate, GDP growth, employment growth (selected data)

		Entry rate (%)	GDP Growth (%)	Employment growth (%)		Entry rate (%)	GDP Growth (%)	Employment growth (%)
France	2000	6.9	3.7	2.7	2007	6.9	1.5	1.4
	2005	6.4	0.7	0.6	2008	7.1	-1.3	0.6
Germany	2000	9.6	3.2	1.9	2007	7.0	2.5	1.7
	2005	8.8	0.8	-0.1	2008	6.6	1.3	1.4
Italy	2000	7.7	3.7	1.9	2007	7.9	1.5	1.3
	2005	7.6	0.7	0.6	2008	7.1	-1.3	0.3
Romania	2000	6.0	2.4	-0.8	2007	12.0	6.3	0.4
	2005	10.7	4.2	-1.5	2008	-	7.3	-0.2
US	2000	10.1	4.1	2.5	2007	9.9	1.0	1.1
	2005	10.0	3.1	1.7	2008	9.6	0.1	-0.4

Source: Business Environment Snapshot for Romania, World Bank; Measuring innovation: a New Perspective, OECD; Observatory of European SMEs, International Benchmark of Entrepreneurs: Firm dynamics; Eurostat

Using the same equation 1, we have tested the influences of the entry rate and GDP growth as independent variable upon the dependent variable, employment growth. Thus, the two variables are positively and significantly correlated with the employment growth. The results obtained are presented in table V.

Table V Correlation results between labour and business dynamics (entry rate)

Country	France	Germany	Italy	United States	Romania
Multiple R	0.582427051	0.825881979	0.22157408	0.77660501	0.411033335
R Square	0.339221271	0.682081043	0.04909507	0.60311534	0.168948403

Source: own calculations based on Observatory of European SMEs, International Benchmark of Entrepreneurs: Firm dynamics and Eurostat data

Similar to the previous regression, the results in this case show a significant influence of the entry rate and GDP growth upon employment growth in Germany and United States, but much more volatile in the case of France. For Italy and Romania there is no direct influence of the two variables upon employment growth. In the case of Italy the data show that despite an entry rate of 7.1% (2008), the GDP growth is negative and the employment growth is insignificant. For Romania, even if the entry rate has a higher level (12% in 2007), pointed out also by a high rate of GDP growth, the employment growth was insignificant (0.4% in 2007) or even negative (-0.2% in 2008).

It is necessary to highlight that the limitations in the availability of data bound the explanatory power of the regression analysis, since longer time series data are needed in order to establish a link between labour and business dynamics. The results obtained after performing the regression analysis and the above mentioned limits are taken into consideration for further research in the area of labour market.

V. Framework Analysis For Labour Market Policies

The second part of the research methodology, based on the results obtained after performing the regression analysis and after concluding the first part of the methodology, focuses on identifying and analysing various types of policies that influence the fundamental factors generating economic growth and employment. In order to highlight the link between business and labour dynamics for the analysed countries, focusing mainly on the EU member states, France, Germany, Italy and Romania and less on United States, we identified a framework of analysis for the underlying factors of business and labour dynamics and a set of specific policies adopted and implemented during the analysed period.

We aimed at focusing on labour market policies and the effects of labour market factors on business dynamics and firm dynamic processes, due to the fact that after taking into consideration the business environment factors, we encountered limits of our research due to a lack of relevant available data. The factors of business dynamics taken into consideration were entrepreneur specific factors (gender, ethnic origin, age, individual competencies, professional background, motivations, personal situation) and their positive and negative impact on business creation and business growth and firm specific factors along with firm dynamic processes (firm entry, firm survival, firm growth, firm exit) [5]. Thus, we focused on two main factors: *(i) labour market regulation* (employment protection legislation and active labour market policies) and *(ii)* the *education system*, for France, Germany, Italy and Romania.

Employment Protection Legislation (EPL) refers to regulatory provisions relating to "hiring and firing", particularly those governing unfair dismissals, termination of employment for economic reasons, severance payments, minimum notice periods, administrative authorization for dismissals, and prior consultations with trade union and/or labour administration representatives [6].

Job protection is also called employment protection legislation, being considered that by relaxing job protection will raise the flexibility for firms to recruit and dismiss. Easing EPL for fixed-term contracts strengthens the bargaining power of permanent workers with a risk of wage push. "Insiders" on permanent contracts can raise their wage claims without much risk of job losses as any resulting negative effects on employment will be borne mainly by the "outsiders" who work on temporary contracts [6].

Active labour market policies (ALMPs) are public spending aiming at encouraging the unemployed to take up a job or remain in employment. The five main traditional categories of active labour market policies are: *(i) public employment services*: placement, counseling and vocational guidance, job-search courses, administration of unemployment benefits, all other administration costs of labour market agencies including running labour market programmes; *(ii) labour market training*: training for unemployed adults and those at risk, training for employed adults; (*iii) youth measures*: special programmes concerning measures for unemployed and disadvantaged youth, support of apprenticeship and related forms of general youth training; *(iv) targeted measures* to promote or provide employment for the unemployed and other priority groups (but not youth and the disabled); *(v) measures for the disabled*: special programmes concerning vocational rehabilitation and work for the disabled [6].

The analysed countries within our panel highlight some particularities concerning the employment protection legislation and measures adopted within the analysed period.

In the case of France, past attempts to make labour market more flexible mainly managed to reduce employment protection for temporary workers, which still remains at a high level for both fixed-term and temporary agency contracts [7]. These measures refer mainly to: *(i) individual dismissals,* which are considered unfair and subject to a period of notice ranging from one to two months for all workers, *(ii) temporary*

contracts, that are restricted to certain situations, as replacement, seasonal work, temporary increases in company activity and concern especially older workers, generating a new form of fixed-term employment contract for job seekers aged 57 or more, who either have been registered as jobseekers for more than three months or have signed a personal reclassification agreement [7], [8].

All these measures reveal that despite the strict regulation on the use of temporary contracts, employers largely recruit on flexible forms of employment by taking advantage of the various forms of fixed-term contracts for difficult-to employ target groups, especially young and low-skilled, contributing to shape a segmented labour market, as the low conversion rate from temporary to permanent contracts [8].

Active labour market policies for France focus more on activation strategies that should enhance the search effort of job seekers and facilitate their employability while reducing their welfare dependency and easing transitions from unemployment and inactivity to a working status. These strategies are based on the principle of mutual obligations, whereby benefit recipients are required to accept job or training offer as preconditions to get benefits, while receiving an adequate level training, of job-search assistance and counselling [7].

Germany managed to introduce only partial reforms over the last 20 years, which have lead to increased flexibility at the margin. In particular, the use of fixed-term and temporary agency work was gradually liberalized, resulting in relatively low EPL for temporary contracts. The employment relationship should meet some general criteria, respectively protection against individual dismissal is applicable only if the worker is employed in an establishment regularly employing more than 10 employees and has been working there without interruption for longer than the length of the trial period, 6 months [8]. Still, employees with special skills and employees necessary to maintain a well-balanced structure of the workforce can be excluded from dismissal. *Temporary contracts* can be concluded without any justification being required for a maximum term of up to 2 years, or up to 4 years (since 2004) for newly created enterprises during the first four years after start-up [8]. Temporary agency workers are entitled to equal pay and conditions with permanent workers in user-company, while collective bargaining over their terms and conditions are promoted, according to the principle of equal treatment.

Reform measures in the last years for Germany reversed the structure of active labour market policies towards more training and job search assistance while traditional active labour market policies such as large scale work provision schemes were cut. Therefore, more than a half of total expenditures (55%) are devoted to training, followed by start up incentives (16%), direct job creation (13%) and employment incentives (12%) [8].

Active labour market policies in the case of Germany refer mainly to activation policies, registration procedures and benefit entitlement, job-search requirements, direct referrals to vacant jobs and intensive interview. Activation strategies should therefore enhance the search effort of job seekers and facilitate their employability while reducing their welfare dependency and easing transitions from unemployment and inactivity to a working status [7], [8].

In the case of Italy, the employment protection legislation is relatively more stringent than in many Member States, individual dismissals being only allowed when there is a just cause. The provisions following unjustified dismissal differ, depending on the firm size, firms with more than 15 employees being required to reinstate an unfairly dismissed employee in his/her previous position and pay him/her the equivalent of the salary accrued between the date of dismissal and the date of reinstatement. Also, the period during which regular contracts are not covered by the protection legislation and workers cannot claim unfair dismissals, is short, about 1-2 weeks for blue collars and 3-8 for white collars against 6 months in Germany [8]. The small firm exemption also creates an asymmetry in the cost-reduction behaviour of small and medium/large firms, with the former adjusting more at the extensive margin and the latter more at the intensive margin and/or with a larger use of non-standard forms of work. Dismissed employees in the industrial and construction sectors are entitled to be in the so called mobility lists, from which other employers can hire at reduced social security charges. *Fixed-term contracts* are allowed when justified by technical, organisational and productive reason, including the need to replace other employees, except for companies engaging in collective dismissals [8].

In terms of both beneficiaries and type of instruments, active labour market policies in Italy are not less unbalanced than the unemployment benefit system. The lack of an efficient system of monitoring and sanctions obliges ALMPs to be based on automatic incentives, mainly tax credits granted to employers to hire young people [7].

Romania has strict employment protection legislation in the area of collective redundancies. In contrast, the legislation for full time employment is the less stringent than in any other new Member State. An individual employment contract may be suspended on the initiative of the employer in the following cases: *(i)* in case of temporary interruption of the activity, without a cessation of the employment relationship, in particular for economic, technological, structural or similar reasons; *(ii)* during the preliminary disciplinary hearing; *(iii)* as a disciplinary sanction; *(iv)* during the posting, i.e. when the employer decides the temporary change of the workplace to another employer; *(v)* in the case of unfair dismissal the employee is reinstated in the previous activity and receives an indemnification equal to the wage and the other rights he/she was deprived of during the suspension of the contract [8].

An individual employment contract of limited duration may only be concluded in writing, with the express mention of its length. An individual employment contract of limited duration may be extended beyond its original end date, but only with a total duration of up to 24 months and no more than two times consecutively. The same parties may successively conclude at

most individual employment contracts of limited duration. A work contract of limited duration may be used only for replacing an employee whose contract has been suspended, to cope with temporary fluctuations; to benefit certain categories of unemployed; for those that within 5 years from the date of employment fulfill the old age retirement conditions; to support employment of retired people, that may cumulate the retirement benefit with the wage [8].

Expenditures on active labour market policies in Romania (0.1 % of GDP) are among the lowest in the EU (0.5% of GDP at the EU27 average). More than 70% of expenditures are devoted to employment incentives measures and direct job creation. The coverage of persons wanting to work in regular activation measures is relatively low (about 7 persons out of 100 persons wanting to work benefit from regular activation compared to 36 persons at the EU27 average). Public expenditures on active labour market policies, which cover the costs of providing labour market services for jobseekers, as well as training, employment incentives and direct job creation, are at 0.08% of GDP (0.47% at the EU27 average) [7], [9].

The conclusions of the research on labour market policies in times of crisis within the European Union represent the basis of future research, revealing that after implementing a set of specific labour market measures unemployment registered a slight, but continuous decrease since 2000, even if during 2008-2009 the average unemployment rate reached 10%. Labour market policies and social protection measures implemented to reduce the impact of the financial crisis are in general classified in 9 categories (see Table VI), being assessed according to various criteria, like time period, target group, short-term support measures defined within the Lisbon Agenda and Europe 2020 Strategy [2].

Table VI Overview of labour market and social protection measures in Member States' recovery efforts (as of 31.03.2009)

Measure	No of measures	Countries
Encouraging flexible working-time	20	16 MSs: AT, BE, BG, CY, CZ, DK, **DE**, **FR**, HU, **IT**, LT, LU, NL, PT, SI, SK
Improving job placement and investing in re-training	64	20 MSs: AT, BE, BG, CZ, DK, **DE**, ES, FI, **FR**, HU, IE, **IT**, MT, NL, PT, **RO**, SE, SI, SK, UK
Maintaining/ reinforcing social protection	21	11 MSs: BE, BG, FI, **FR**, IE, **IT**, LV, PT, **RO**, SE, UK
Reinforcing activation	34	18 MSs: AT, BE, BG, CZ, DK, **DE**, ES, FI, **FR**, IE, **IT**, LT, LU, MT, PL, SE, SI, SK
Supporting employment by cutting labour costs	35	17 MSs: AT, BE, BG, DK, **DE**, ES, **FR**, HU, LT, LU, LV, NL, PT, **RO**, SE, SI, SK
Revising employment policies in line with flexicurity	2	4 MSs: BG, EE, CY, LT
Enhancing education and lifelong learning	10	7 MSs: AT, BG, DK, **DE**, LT, PT, SE
Supporting households purchasing power	48	18 MSs: AT, BE, BG, DK, **DE**, ES, FI, **FR**, **IT**, LU, LV, MT, PL, PT, **RO**, SE, SK, UK
Mitigating the impact of financial crisis on individuals	27	13 MSs: AT, BG, CZ, EE, ES, FI, **FR**, HU, IE, **IT**, LT, LU, PT
Others	12	11 MSs: AT, BE, CZ, DK, EE, FI, **FR**, LT, LV, **RO**, SE

Source: extracted from G. Carone, G. J. Koopman, K. Pichelmann, „Labour market prospects and policies to soften the impact of the financial crisis", European Commission, ECFIN Economic Brief, issue 1, May 2009

The main labour market measures adopted by all the analysed countries in order to mitigate the impact of economic and financial crisis reffer to improving job placement, investing in re-training and supporting households purchasing power. Towards the end of last year, the anti-crisis concerted measures were also reflected in slightly positive evolution of employment, indicating a decrease of European unemployment throughout 2010. The economic progress of EU member states that are still under the impact of the crisis and economic and financial failure, generates a significant decrease of the number of unemployed persons, due to a certain recovery of strategic economic areas, leading to an average unemployment rate of about 8.8% by the end of 2010 [15].

The anticrisis measures adopted and implemented by the selected EU Member States are quite different. Thus, the global reform of vocational training in France and the effects of the economic and financial crisis on the labour market have led to increase efforts in order to turn the crisis into an opportunity to improve workers' employability. Thus, there were implemented training measures for the most vulnerable groups of the workforce and a 'crisis fund' dedicated to the financing of such measures [10].

The fund has counter the effects of the crisis on the labour market in the short term and secured professional transitions in the long term, by taking into consideration the recommendations to modernise the labour market and implement a flexicurity strategy to secure professional transitions, targeted at those most in need of support in the labour market, like vulnerable workers, those unemployed and young people and by combining short-term and long-term

measures, with a positive structural impact on the French labour market.

Germany introduced an innovative policy, the parental allowance, for supporting young families through financial resources after the birth of a child, improving day care infrastructure and fostering a family-friendly working environment, all these measures in order to counter the challenges posed by demographic developments.

The parent's employment status before having a child strongly influences their employment behaviour after birth. Half of the women who were employed before giving birth and took a longer break than the obligatory maternity leave of 14 weeks were back in employment again one and a half years after birth [10].

The EU indicators to assess the impact of the measure, respectively to monitor the impact of parental allowance in order to observe differences in employment behaviour are mainly *(i) employment impact of parenthood*, which highlights the difference in percentage points in the employment rates of people aged between 20 and 49 without children and those with children from newborns to age 6 and *(ii) lack of care for children and other dependents*, that indicates the share of people aged between 15 and 64 years who would like to work but are either searching for a job or working part-time due to lack of suitable care facilities, in relation to the total population of the age group [10]. All these reveal that the number of children and the labour market participation rate of young mothers depend on the provision of childcare facilities rather than on public funding support.

In the case of Italy, the current economic and financial crisis generated serious consequences on labour market, including a high unemployment rate and a wide use of fixed-term contracts. The effects of the crisis are amplified by the complex and fragmented unemployment benefits system, due to the fact that different benefits are provided for different categories of workers, depending on the length and the typology of previous employment, firm size and sector of activity [10]. The business downturn and the unemployment crisis required an extension of measures to also cover other categories of workers previously not taken into consideration by those arrangements, like fixed-term employees, temporary agency workers and apprentices. Thus, the programme seems to provide an adequate response to the labour market consequences of the current business crisis. The main innovative features of the programme are related to the integration of active and passive measures, although some risks emerge in terms of a proper balance between these two components [10].

In Romania, the effects of economic and financial crisis required a set of specific labour market measures, focused on keeping wage developments in line with productivity and building a unitary salary system in the public sector. The immediate impetus for the changes stems from the country's dire conditions in the context of the economic crisis, worsened by the negative media reports and by hastily promoted measures. Such regulation was necessary to improve the wage setting mechanisms in the whole economy, given that the public sector serves in many cases as a benchmark for private enterprises [10]. The measure also has several links with the three key priority areas for action as identified by the EU in response to the economic crisis, respectively *(i)* maintaining employment, creating jobs and promoting mobility, *(ii)* upgrading skills and matching labour market needs and *(iii)* increasing access to employment.

The second labour market factor analysed according to the impact on business dynamics is the *education system* due to the fact that knowledge is recognized as an important ingredient for economic growth in addition to physical capital and labour [13]. Moreover, globalization of the higher education, seen as an essential condition for the competitiveness of national economies, is one of the major preoccupations of the last decade, especially at the level of the European Union [14].

The *Lisbon Strategy* established for the first time a solid framework for European cooperation in the field of *education and training*, based on common objectives and aimed primarily at supporting the improvement of national education and training systems through the development of complementary EU-level tools. The quality of communication determines the quality and efficiency of the learning process and the quality, depth and completeness of the acquisition of knowledge [12].

Europe 2020 Strategy emphasises that education and training have an essential role to play in meeting socio-economic, environmental and technological challenges, focusing on efficient investment in human resources through education and training systems in order to deliver high levels of sustainable, knowledge-based growth and jobs, with positive effects on business and labour dynamics.

The EU Member States, and especially the four analysed countries, explore ways of promoting entrepreneurship through mobility programmes for young professionals and promote recognition of formal and informal learning. At the same time, in the period up to 2020, the primary goal of European cooperation is to support development of education and training systems in the Member States, which are aimed at ensuring: *(i)* personal, social and professional fulfillment of all citizens and *(ii)* sustainable economic prosperity and employability, whilst promoting democratic values, social cohesion, active citizenship and intercultural dialogue [11].

VI. Conclusion

Based on our and previous econometric analyses, we can suggest three indicators as the most suitable to measure the causal relationship between business and labour dynamics:

- Business ownership rate / Growth rate of the number of micro enterprises
- Entry rate / The yearly change in the birth rate
- The annual growth rate of employment in the private sector

Business ownership rate varies significantly across analyzed countries ranging from less 0.084% to almost 0.235%. The most stable economies (France, Germany, United States) have closely related business ownership rates (about 0.1%),

compared to Italy where the rate over-passed 0.230%. The GDP growth varies significantly during the various periods in all analysed countries, registering a significant decrease in 2008 under the influence of the economic and financial crisis.

The dataset shows that the business dynamics matters for rates of employment growth in some countries, but not necessarily for all. In general, a favourable business environment for new firms' entry implies job creation, with positive effects on long-term economic development. However, this pattern was not revealed in the Romanian case, possibly indicating that job creation in new business is primarily based on the attraction of workers who are already successfully employed somewhere else.

Labour market is influenced by targeted employment and labour policies addressing the impact of the crisis, as well as by structural changes that may be caused by the economic crisis. Different labour market policies aim at lowering the impact of the crisis on workers and reducing the gap between economic growth and labour market improvements.

Towards the end of 2009, the anticrisis adopted measures have had a positive impact for the analysed countries, revealed by the slight increase of employment, especially for women, within the European Union in 2010.

In Romania, the entire period after 2000 has been a very difficult one, with significant quarterly changes in employment. This situation highlights the fact that the Romanian labour market has registered weak performances, being unable to ensure flexible conditions for job transition and security. Nevertheless, recent forecasts show that, after implementing various labour market policies, aimed at lowering the impact of the crisis, the unemployment rate will decrease by the end of 2010, at a level below the EU average.

ACKNOWLEDGMENT

This paper is a result of the project POSDRU/88/1.5./S/55287 „Doctoral Programme in Economics at European Knowledge Standards (DOESEC)". This project is co-funded by the European Social Fund through The Sectorial Operational Programme for Human Resources Development 2007-2013, coordinated by The Bucharest Academy of Economic Studies in partnership with West University of Timisoara.

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