

The ageing workforce and employability

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Abstract: *One of the most concerning contemporary developments in the European Area is population and workforce ageing, even the negative dynamics of working age population for the 2010-2030 time-horizon. Ageing triggers not only major challenges for economy and society, but also opportunities when the human capital represented by older workers together with other target-groups such as low-skilled adult population, early school leavers and migrants is valorised efficiently. The complex requirements and the rapid development on the labour market impose as sine qua non condition for valorising the human potential of elderly their responsible involvement in continuing vocational education and training, for maintaining and developing work ability. The concept of work ability is developed within the specialised literature from the perspective of its determinants and triggered effects. Its major determinants are: physical and mental health, the social relationships skills, educational level and competences' enhancement; values, attitudes, motivation and the working environment, and leadership. Satisfying this work ability conditioning has the following certain effects: employability, productivity and quality of work, productive ageing, quality of life and well-being. Unfortunately, the investment in learning later in life presupposes also the existence of some barriers: on the side of the elderly employees we mention the closeness to the pensioning age and the inadequate support of the employer in terms of allotted time and training costs; on the side of the employer very often the perception that elderly have lower training openness prevails. Consequently, employers would have to be the main providers of the training, even though they are aware of the negative impact of ageing that does not always provide for an adequate training infrastructure within the company, which constitutes the content of the so-called "ageing paradox".*

Keywords: *ageing workforce; work ability; determinants; effects; employability; productive ageing*

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Introduction

Combating the effects of population and labour force ageing turned into a top priority on the European policy agenda by virtue of the incontestable challenges posed to the economy, society and individuals, in the form of implications at the level of the labour market, of the social security systems' sustainability, as these were already under pressure and also regarding the security at the third age.

The synthetic macroeconomic dimension of the rapid ageing of the population consists in the fact that in accordance with the most recent projections, the total number of hours worked will decrease by 1.2% in EU28 for the forecast period 2013-2060. This means that the resources of GDP growth will change dramatically. "Labour input contributes negatively to output growth on average over the projection period (by 0.1 p.p. in the EU and in the Euro Area)", so that "labour productivity growth is projected to be the sole source for potential output growth in both the EU and in the Euro Area over the entire projection period" (The 2015 Ageing Report).

Higher valuation of the human capital represented by older workers, women and other target groups, to which are added the migration inflows could compensate, even if only partially, for the effects of the rapid ageing of the population

From the perspective of work ability, a concept approached by means of its determinants and triggered effects as developed in the specialised literature, the valuation of the human potential of older workers cannot be achieved without their responsible involvement in education and training.

2. Population and labour force ageing within the EU

European population ageing and its dynamics are one of the most concerning contemporary developments.

This major demographic change is characterised by two processes that develop independently: the decreasing fertility and birth rates, and the very high increase in the life expectancy.

For the largest part of the western industrialised world, a more or less sudden decrease of the birth rate was noticed in the mid-sixties, the level of the indicator being currently in almost all EU Member-States under the generations' replacement level of 2.1 children per women.

This trend was not triggered only by the changes in the social-economic landscape, but even to a larger extent by the social-cultural changes at the level in mentalities that led to an emancipation movement that had as outcome the change in relationships between genders, the multiplication of the cohabitation arrangements (more singles, divorced, and mono-parental families) and important changes of the fertility models and in the traditional, multigenerational family.

The process took place also in East-European countries, but here it was characterised by an even swifter and higher decline of the birth and fertility rates after the collapse of the Eastern bloc. Even if the period of the extremely low birth rates seems to be over, reaching again the replacement level of the generations is not expected in the near future.

The second process is a very high increase in the life expectancy that led and leads to an increase in the share of elderly and especially to a quick growth in the numbers of “fourth age” individuals that is the oldest of the old. A deceleration of this constant increasing trend by life expectancy was not yet noticed.

The population structure on ages, for the present and future, shows a significant ageing (Table 1). The trends in the weight of the analysed age segments, during the forecast period are the following: a by and large constant development of the population aged 0 to 14 years of age; a significant narrowing of the weight for the working age population (15-64 years of age); also a significant increase, in the weight of the individuals aged 65 years of age and over; a considerable swift increase of the “fourth age”, i.e. of the weight of individuals aged 80 years and over.

The weight of the population aged 0-14 years recorded in the year 2013 an EU average level of 16%, with a maximum one of 22% in Ireland and 18% in the United Kingdom, and a minimum level of 14% in the following countries: Bulgaria, Italy, Hungary, Malta and Austria. The EU average level will remain relatively constant (15%) also in 2060, but the maximum weight of this age segment, save for Lithuania (18%) will be of only 17% (in Belgium, France, Luxemburg, Sweden, and the United Kingdom) and the minimum level will decrease even to 11% (in Portugal, and Slovakia). Also a low level for this weight (of only 13%) will be recorded in Germany, Poland, but also in the southern countries, such as Greece, Spain and Italy.

**Table 1 - Decomposition of the population
by age groups**

	2013				2060			
	(0-14)	(15-64)	(65+)	(80+)	(0-14)	(15-64)	(65+)	(80+)
EU	16%	66%	18%	5%	15%	57%	28%	12%
EA	15%	66%	19%	6%	15%	57%	29%	12%
BE	17%	65%	18%	5%	17%	59%	24%	9%
BG	14%	67%	19%	4%	14%	54%	32%	12%
CZ	15%	68%	17%	4%	15%	56%	28%	12%
DK	17%	65%	18%	4%	16%	59%	25%	10%
DE	13%	66%	21%	6%	13%	55%	32%	13%
EE	16%	66%	18%	5%	15%	55%	30%	12%
IE	22%	66%	12%	3%	19%	60%	21%	10%
EL	15%	65%	20%	6%	13%	54%	33%	15%
ES	15%	67%	18%	6%	13%	57%	30%	15%
FR	19%	64%	18%	6%	17%	58%	25%	11%
HR	15%	67%	18%	4%	14%	57%	30%	11%
IT	14%	65%	21%	6%	13%	57%	30%	13%
CY	16%	70%	13%	3%	15%	58%	27%	9%
LV	15%	67%	19%	5%	16%	56%	28%	11%
LT	15%	67%	18%	5%	18%	56%	26%	11%
LU	17%	69%	14%	4%	17%	61%	22%	8%
HU	14%	68%	17%	4%	14%	56%	29%	12%
MT	14%	68%	18%	4%	15%	56%	29%	10%
NL	17%	66%	17%	4%	15%	57%	27%	11%
AT	14%	67%	18%	5%	14%	57%	29%	11%
PL	15%	70%	14%	4%	13%	54%	33%	12%
PT	15%	66%	20%	5%	11%	54%	35%	16%
RO	16%	68%	16%	4%	15%	56%	29%	12%
SI	15%	68%	17%	5%	15%	56%	29%	12%
SK	15%	71%	13%	3%	11%	53%	35%	13%
FI	16%	65%	19%	5%	16%	58%	26%	10%
SE	17%	64%	19%	5%	17%	58%	24%	9%
UK	18%	65%	17%	5%	17%	58%	25%	9%
NO	18%	66%	16%	4%	17%	60%	23%	8%

Source: Commission services based on Eurostat EUROPOP 2013 data, in The 2015 Ageing Report, p.21

The trend in the weight of the working age population during the 2013-2060 forecast period will be a decreasing one for all EU member-states. The decrease, both in the case of the average EU level, but also in the case of the Euro Area

will be 9 pp. Comparable decreases will take place in the following countries: Spain, Croatia, Italy, Luxemburg and the Netherlands. Maximum variations in this weight will occur in Slovakia and Poland. An absolute significant decrease (12 to 13 pp.) in the weight of the working age population will be recorded in numerous member-states: Bulgaria, the Czech Republic, Cyprus, Hungary, Malta, Portugal, Romania and Slovenia. The decline in the weight of the working age population will occur to a lesser extent (only 6 to 7 pp.) in Belgium, Ireland, France and the northern countries such as Finland, Sweden and the United Kingdom.

In contrast to the trend in the weight of the working age population, is the trend in the weight of the individuals aged 65 years of age and over, that will be in all instances an increasing one. At EU average level, the increase will be 10 pp. Some countries will see spectacular increases in the indicator of about 15 to 20 pp.: Slovakia (from 13% to 35%); Portugal (from 20% to 35%); Poland (from 14% to 33%); Cyprus (from 13% to 27%). Increases, but of smaller amplitude, placed in the interval of 5 to 7 pp. will be registered in the Northern countries, respectively Sweden, Finland, Denmark, but also in Belgium and France.

As for the fourth age, we find an amazing homogeneity of the individual variations by countries which oscillates very close around the variation registered at the EU average level which was higher than from one to double. The share of the individuals aged 80 years and over will not double during the forecast period, but for a few countries: the United Kingdom, Sweden, Belgium and France. In Luxemburg, the share increases from one to double, but under the conditions of registering the lowest level (by only 8%) in the year 2060.

The structure of the labour force (20-64 years of age) is marked for the forecast period by the increase in the weight of the elderly on labour market, and that of the individuals aged 55 to 64 years (Table 2). The average EU weight registers an increase by 4.6 pp. The variations by countries for the indicator are distributed somewhat balanced: some countries record variations of this weight similar to the average weight, other have inferior variations to the average variation, or even a weight diminishment, up to the end of the forecast period, in the case of the Baltic countries. Yet, there is also a series of countries where the weight of elderly on labour market registers dramatically increases by 8-10 pp.: in southern countries such as Greece, Spain, Italy, and Portugal, to which Slovakia is added.

Table 2 – Share of older workers aged 55 to 64 as percentage in the labour force aged 20 to 64

	Total		Men		Women	
	2013	2060	2013	2060	2013	2060
EU	13,7	18,3	14,1	17,8	13,3	18,8
EA	13,6	18,9	13,9	18,4	13,2	19,4
BE	11,8	14,7	12,4	14,4	11,1	15,0
BG	14,9	15,8	14,5	16,5	15,4	14,9
CZ	14,5	17,9	15,2	17,0	13,6	19,0
DK	16,2	20,0	16,7	19,8	15,7	20,3
DE	17,0	20,6	17,1	20,1	16,8	21,2
EE	16,5	15,9	13,9	14,7	19,2	17,2
IE	11,8	14,2	12,4	13,6	11,1	15,0
EL	9,8	20,1	10,7	20,1	8,5	20,1
ES	10,1	18,7	10,8	17,8	9,4	19,7
FR	13,0	15,9	12,7	15,4	13,3	16,6
HR	12,5	16,2	13,5	15,3	11,3	17,1
IT	13,1	22,2	13,6	21,7	12,3	22,7
CY	11,1	16,9	12,8	17,1	9,2	16,6
LV	14,5	12,7	12,7	12,0	16,3	13,4
LT	13,7	11,1	12,7	10,4	14,8	11,8
LU	9,6	12,6	10,5	11,9	8,4	13,5
HU	12,7	21,1	12,8	20,2	12,6	22,2
MT	11,9	16,3	14,3	16,8	8,1	15,6
NL	15,9	20,4	17,3	20,5	14,3	20,2
AT	11,0	16,4	12,3	16,4	9,6	16,5
PL	12,4	17,6	13,5	17,0	11,1	18,2
PT	12,6	21,0	13,3	20,5	11,8	21,5
RO	13,3	15,3	13,7	16,1	12,8	14,2
SI	9,8	15,3	11,4	14,9	7,9	15,8
SK	12,0	20,9	12,4	20,0	11,5	22,1
FI	17,6	16,8	16,2	16,0	19,1	17,7
SE	17,8	17,3	17,7	17,7	17,9	17,0
UK	14,4	16,8	14,8	16,3	14,0	17,3
NO	17,1	18,2	17,2	18,2	16,9	18,1

Source: Commission services, EPC, in The 2015 Ageing Report, p. 68

The differentiation on genders in the case of the average level of the indicator is obvious: in the case of men the average weight will increase by 3.7 pp., and in the case of women by 5.5 pp. With some variations in amplitude, this distinction between genders is maintained in all member-states, save for the Baltic

countries. In Latvia and Lithuania, for both genders the weight of elderly decreases up to the year 2060, the diminishment being more significant in the case of women.

Population and labour force ageing poses major challenges for the economy and society, mainly due to the pressure on the social security systems, but also due to the effects generated on labour market.

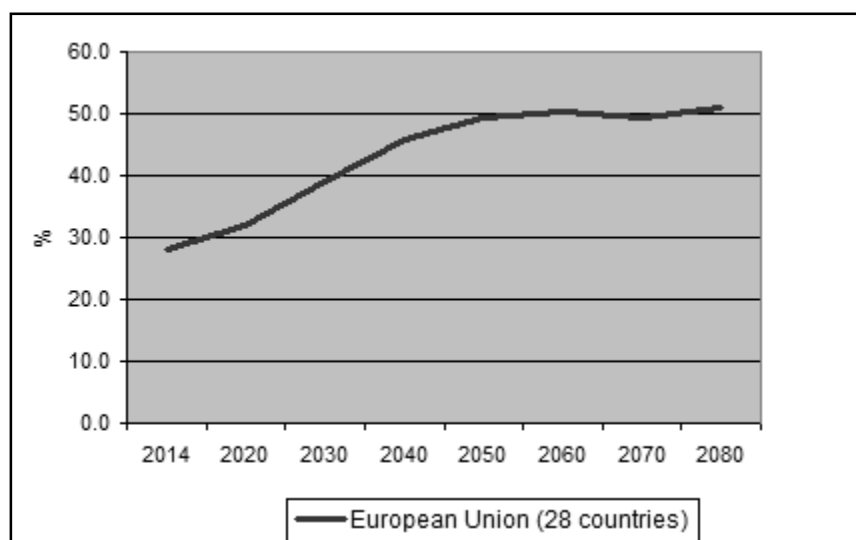
The sustainability of the social security systems is under the direct impact of the evolution of the dependency rate for elderly (the population aged 65 years and over, in relationship to the population aged 15 to 64 years). In accordance with the demographic projections of Eurostat, this indicator will undergo the following development: from four persons aged 15 to 64 years for one old individual of 65 years and over currently, to a ratio of only two to one in 2060 (Figure 1). This indicator will also know a spectacular increase in the period 2015-2035, when the "baby boom" generation (born between the years 1945 and 1965) will begin to retire

In the labour market, from among the multiple effects we mention: the change of the structure on ages in enterprises, the increase in the exit rates on the labour market in the following years; a potential loss of the critical mass of knowledge and experience; and last, but not least, difficulties in substituting older workers exiting the labour market with recruits of a similar professional level.

In the attempt of generating a satisfying mitigation capacity of the society to these major challenges of ageing, the initiative of "active ageing" emerged which is promoted at international and European level alike.

In our opinion, we consider that a clear delimitation should be operated between the concepts of "active ageing" and "productive ageing" which the literature dedicated to this topic brings into debate.

Active ageing as promoted under the aegis of the United Nations Organisation for more than two decades assumes that elderly grow old under conditions of full health and welfare, leading an independent, autonomous, and involved life within the community, and the society that provides for a high standard of living.

Figure 1. Old age dependency ratio

Source: Eurostat Code: [proj_13ndbims] Update: 08.12.2014.

This understanding of active ageing is included also in the European initiative for promoting this process, which culminated in declaring 2012 as the “Year of Active Ageing and Inter-generational Solidarity”. Yet we stipulate that within the statistic, analytical and policy European approach consecrated to active ageing a completely major emphasis is laid on productive ageing, which assumes first and foremost the extension of active life, and “seniors” remaining in the labour market for a longer period of time within the labour force.

This process triggers for economy, society and the individuals agreeing to be involved major benefits but only provided that an adequate mitigation reply is given in the form of some important adjustment changes of the labour force to the complex requirements that are quickly developing on the labour market, and which will be further approached hereunder.

3. Work ability of older workers. Determinants and effects

Productive ageing cannot be conceived outside maintaining and developing the “ability to work” (work capacity), a concept elaborated within the specialised literature from the perspective of its determinants, and from the viewpoint of the effects these determinants generate.

In our opinion, three of the determinants constitute the common backbone, both for the process of productive ageing, and for the one of active ageing, that is: a solid state of physical and mental health, the capacity of establishing social relationships, the level of education and attitude, the perception towards age and elderly; the valuation of the involvement potential of the seniors, by virtue of their gathered experience and knowledge.

The importance of productive ageing, as major European policy desiderate results from the explicit formulation, within the European analytical and policy approach (dedicated to the employment of elderly and women) of the fact that for achieving the ambitious European target of 75% employment, for the age segment between 20 to 65 years both employment of elderly and of women must contribute. The quantitative and qualitative increase in employment for these two segments is regarded as an important direction for the optimum valuation of the entire human capital, and an important stake for both economic growth and social development.

Maintaining and developing the ability to work for the older on labour market is perhaps the most important outcome of the investment in the elderly labour force, with certain benefits that exceed the boundaries of the labour market.

Very briefly characterised, the ability to work can be described as representing the balance between the individual resources of the employee and the demands on the job.

The theoretic framework of the concept is the outcome of the activity of a multidisciplinary research team within the Finnish Institute for Occupational Health (Ilmarinen et al. 2003, in CEDEFOP, 2012) and is described as being an edifice with four levels represented by the following four determinants of the concept:

- Physical and mental health, the capacity to establish social relationships
- Education and competences strengthening
- Values, attitudes and motivation
- Work environment and leadership

These four determinants of the work ability ensure a useful framework for identifying the determinants of a successful investment in the ageing labour force which are interconnected.

3.1. Physical, mental health and the capacity to establish social relationships

In accordance with performed researches, the physical and mental functional capacity is changing by advancing in age and the attempt was made to analyse the potential effect of this change on the work performance.

Thus, to the extent in which the physical functional capacity weakens with age, a negative correlation was identified with the work performance when factors such as muscular force and action speed represent the essentials of the developed activity.

If we consider the mental functional capacity, the relationships are more complex because increases and decreases of the latter are registered, with a different impact on work performance.

The researches in the field (Horn and Cattell, 1966; 1967, in CEDEFOP, 2012) have developed the concept of crystallised and fluid intelligence. Fluid intelligence refers to the capacity of solving issues in new circumstances and of logical thinking, whereas crystallised intelligence presupposes the capacity to act by virtue of gathered knowledge and experience.

It was proven that with age a stabilisation and even increase of the crystallised intelligence takes place, and a decrease in the fluid intelligence. Still, individuals seem to develop and adopt compensatory strategies for these functional losses and to counteract them by increases of experience, wisdom, determination and motivation. The knowledge level is still rather low regarding motivation and other mental factors (emotions, social factors), even if it is acknowledged that they play a key-role.

The implications of these trends for the developed activity could be briefly resumed, as follows: to the extent in which the physical functional capacity decreases, the hard physical work becomes more problematic for older workers, not only from a purely economic perspective (productivity decline), but also due to the impact on the health state and on the ability to work.

Under these circumstances it is recommendable to adopt some adequate measures, such as the investment in special equipment to diminish the physical burden or internal transfer between jobs. The latter presupposes the transfer of elderly from jobs with higher physical demands to others that imply less such demands, and where they can put to good use their experience and expertise.

Also, occupational health and labour safety, the development of some new integrated concepts of health management (physical, mental, and emotional), as

well as the implementation of some preventative, ergonomic health programmes, adequate to the age can play a core role in building adaptive strategies beneficial to an ageing labour force.

3.2. Education and competences' strengthening

To the extent in which permanent change has turned into the basic characteristic of active life we consider that education and competence constitute the crucial determinants of the ability to work and therefore they are of increasing relevance.

In this context, the core place is taken by the concept and process of lifelong learning, to the extent in which the conventional education and training models, and formal skills seem to no longer satisfy the new requirements not only in the labour market but also in the society, in general. Lifelong learning is vital for the entire population, for all age groups but in particular for elderly, to the extent in which their participation is significantly lower than the one of the young generation.

The most suitable learning form for the older population and of high effectiveness proved to be learning on the job, as it is strongly related to the professional practice and to the previous professional and learning experience. Therefore, a trend that should be favoured with priority regarding education and continuing vocational training is the one of increasing learning opportunities on the job and the design of "learning-conducive workplaces".

On the job learning proved to have even a yet higher potential if it takes the form of intergenerational learning. Intergenerational learning could be defined as an interactive process, between individuals of different generations and which can take place during the working process or in the framework of training courses and which is always beneficial for all involved parties. Intergenerational learning allows for updating knowledge and strengthening the competences of elderly, but also for the transfer of knowledge to young generations and for strengthening their expertise. The most known forms of intergenerational learning are mentoring, tutoring, and coaching based on one to one individual relationships, but also on the intergenerational working teams.

3.3. Values, attitudes, motivation

A negative perception on age and older workers was created in time, and was rendered concrete in stereotypes and negative attitudes against them, and these can turn into a major hindrance in the way of investing in the older workforce and in learning in the later stages of active life.

The effects are not felt only by the employers that must provide for an adequate infrastructure for the education and training of their employees, but also on the latter from the viewpoint of the availability to get involved in this process.

Aspects such as attitudes and stereotypes of the employers, the relationship between age and the participation to various types of learning enjoyed a significant attention in time. In turn, the individual and society's perspective about age and the impact on active life, learning and the pensioning decision enjoyed attention to a far less extent.

The importance of this aspect derives from the fact that policies and practices regarding active ageing can create the conditions for the participation in training of the elderly, but the decision to be involved in the process or to retire is, lastly, individual. In time, the fact that the attitude of the employee is a very important motivating factor for continuing active life after the age of 60 years took an increasingly clearer shape.

The individual attitude towards learning, motivation, positive self-perception are all very important factors when the issue about learning in the later stages of active life is posed. The negative perception can lessen the individual capacity to learn and to be productive. Under these conditions, it was acknowledged that the negative perceptions about age must be firmly fought against at all levels: at individual level, at enterprise level and at the level of the entire society.

3.4. Work environment and leadership

The work environment is a crucial determinant for the work ability of older employees, assuming not only changes of the job due to the physical aspect, but also new management approaches for the human resources and for the leadership.

From this perspective, the demographic change within the labour force triggers a role reversal on the job. Thus, an increasing number of older workers must relate to much younger superiors, and this fact constitutes a challenge for tradition, usage norms and thus has the potential to generate issues such as: the reluctance of young superiors to give instructions to the older workers, and the older workers' perception of such an instance as uncomfortable.

Perceptions and expectations play a major role. Such an example is represented by the expectations of older workers regarding the lack of mentoring and leadership skills of the young superiors, by virtue of less experience on the job and in life. The trend that should be prevailing is to get over such negative perceptions and expectations.

During the last decade several management models of the labour force in the process of ageing were developed and many of them attribute an essential role to leadership as means of managing a labour force of various age structures. Leadership can be defined as the ability to influence a group in reaching its objectives, with a particular role in motivating labour force.

It is necessary to emphasise that the challenge is not limited to the management and the leadership of elderly workers which assumes motivation strategies of these workers, i.e. discerning their concerns and stimulating confidence in their own forces.

To an equal extent the issue of managing a labour force with various age structures is posed. Otherwise said, it is necessary to acknowledge the age dynamics on the job, to generate multigenerational work teams, but also intergenerational learning teams as well thereby combating stereotypes.

Promoting the ability to work among elderly on the labour market registers the following certain and major effects:

- better employability and adjustment of increasingly complex working tasks in time;
- better work productivity and quality;
- productive ageing under satisfying conditions and unimpeded transition to retirement;
- better quality of life and welfare.

In our opinion, the first mentioned effect (“employability”) attracts automatically the effect of job security, the latter being even more important for the elderly than for the younger generations, by virtue of their low mobility.

4. Responsible involvement in CVET, professional imperative for older workers

The sine qua non condition of gaining employability by older workers is their responsible involvement in “continuing vocational education and training” (CVET), which has an established policy, analytical and statistical framework at European level. The policy approach was discussed in previous studies, so that in the present one the attention is focused on the analytical and statistical approach.

Yet, we draw attention to a single document of the European policy approach dedicated to CVET (European Commission, 2012), which we regard as of major significance, by setting this process within the contemporary economic-social context with its exigencies, and also by emphasising the key-challenges which it presupposes.

The identified challenges and the proposed actions have the following direction:

- promoting quality in VET with emphasis on targeted learning that would lead to gaining specific skills and competences;
- facilitating the access and designing training under the form of work-based learning both within initial VET courses but also in lifelong information that would allow young adults successful insertion in the labour market, but also to the other generations, including older workers a successful career path;
- satisfying these orientations would lead certainly to changing the learning choice in the European area in an attractive and inclusive one.

The context that makes an absolute imperative of the involvement in CVET of several target groups, among which the older workers, for gaining specific skills and competences is the one of innovation processes, of restructuring and of economic growth.

Thus, innovation today, next to traditional innovation and fundamental research developed in the research-development sector assumes technical change on the factory floor which characterises the contemporary economies and is realised by skilled workers and engineers. This increased competitiveness at enterprise level constitutes the backbone of some major macroeconomic results under the form of intensive and inclusive growth.

Education and training for innovation and competitiveness is substantiated by the following two reasons:

First of all, innovation today cannot be limited to high-tech industries, but is extended to all economic activities, including the low-tech industries for allowing them to develop products and strengthen their position in the competition for new market segments.

Second, this orientation is compulsory considering the globalisation which assumes the inclusion of these industries in global value chains, where they must keep up with competitiveness in a global context.

The analytical approach regarding CVET practices in the European area is actively supported by the European Centre for the Development of Vocational

Training (CEDEFOP). From among the studies under its patronage we will retain only the message of some studies developed during the recent years.

All these studies propose as the most efficient form of training for older workers among other target-groups, the work-based learning and the while-working learning (the workplace turning into a major learning provider) with increased positive outcomes for the benefit of all involved parties, when it takes the form of intergenerational exchange of knowledge and experience.

Already a few years ago (CEDEFOP, 2011) an alarm signal was given about the access inequalities to training as the employers tend to focus training on younger employees and on those that have a higher skills' level, because of higher expectations from these segments of the human capital in the form of higher returns on investment.

A major finding, in our opinion, is the one about the existence of some contradictory goals between public policies on adult learning and company training actions. Thus, the public sector aims to "the employability and mobility of workers across enterprises, sectors and eventually occupations, while companies tend to focus on higher ranking employees and on very specific training needs related to work processes" (CEDEFOP, 2011, p. 9).

In our opinion, if the practice of on-the-job-training in continuing form is one generalised at the level of the entire labour market, than the above-mentioned objectives, pursued by training are no longer contradictory.

The finality of CVET was eloquently substantiated recently (Dehmel, CEDEFOP, 2014) based on structuring at individual, enterprise, economy and society level all the benefits that it triggers.

Due to the increased productivity and professional competence of the individual, the effects at the level of employment will take the form of job security, career development, but also of some higher returns from work.

The professional competence of employees will induce directly increased productivity and performance of the enterprise, including the innovative ability.

At the level of the national economy, the effects will be felt under the form of labour market outcomes at the level of competitiveness and innovation and synthetically in the form of intensive and inclusive economic growth.

In addition, to the economic benefits, the social benefits will take the form of personal development and self-confidence, loyalty towards the company, and at

social scale the professional insertion promoted also for the disadvantaged groups will constitute the actual way of achieving social inclusion and cohesion.

The statistical approach dedicated to CVET is captured from the perspective of the following coordinates: the share to which enterprises ensure CVET and the main reasons for which the non-training enterprises fail to ensure training; the share to which training enterprises evaluate the effect, but also the need of training; the share of enterprises that substantiate a planning and budget for training.

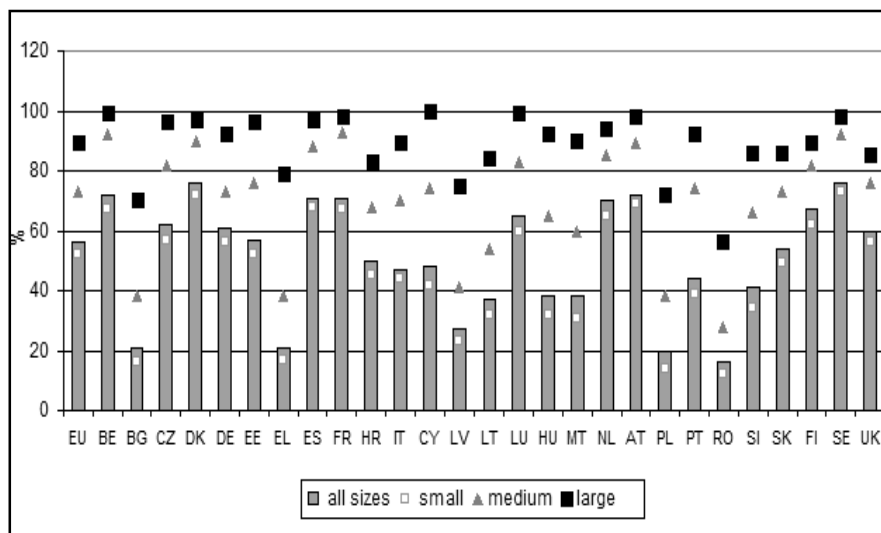
Enterprises, by size class provide CVET to the following shares (Figure 2): in the case of large enterprises the EU average level is 89%. Extremely high levels are registered in Cyprus (100%), Luxemburg (99%), France (98%), Austria (98%), Sweden (98%) and Denmark (97%). A sufficient number of countries register shares close to the European average level: southern countries such as Italy, Malta, Portugal, but also Germany and Hungary. The minimum level is registered by Romania (56%), followed at a certain distance by countries of the Eastern Bloc: Bulgaria, Poland and Lithuania.

Medium enterprises ensure CVET to a lower average share, by only 75%. Very high levels, comparable to the average share registered by large enterprises are held by the following developed European countries: France, Belgium, Denmark, Austria and Sweden. To a smaller share, by only 50%, medium enterprises ensure CVET in Romania, Bulgaria, Greece and Latvia.

We consider that the shares registered by small enterprises indicate that the CVET practice represents a true challenge in their case. The average EU share is of only 52%, with levels in the proximity of this value registered in Estonia, but also in Germany and the United Kingdom. Very high levels, placed in a variation interval around the share of 70% are recorded in Sweden, Denmark and Spain, France and Belgium. The CVET supply was ensured by small enterprises to extremely low shares in a series of countries in transition: Romania (12%), Poland (14%), Bulgaria (16%) and to somewhat higher levels in Latvia (23%), Lithuania and Hungary (32%), but also by Malta (31%).

With some variations by countries, we consider that large enterprises constitute an important CVET provider, while in the case of medium enterprises the picture is a modest one, and in the case of small enterprises this image captures even deficits. Thus, the statistical approach is in accordance with the analytical approach which indicates the need of intensifying efforts with respect to this orientation in the case of small and medium enterprises.

Figure 2 – Training enterprises (as % of all enterprises) providing CVET by size class in 2010



Source: Eurostat Code: [trng_cvts02] Update: 22.07.2014.

By analysing comparatively the shares to which enterprises ensure the CVET provision and the shares to which training enterprises evaluate their effect (Figure 3) we have reached the following findings:

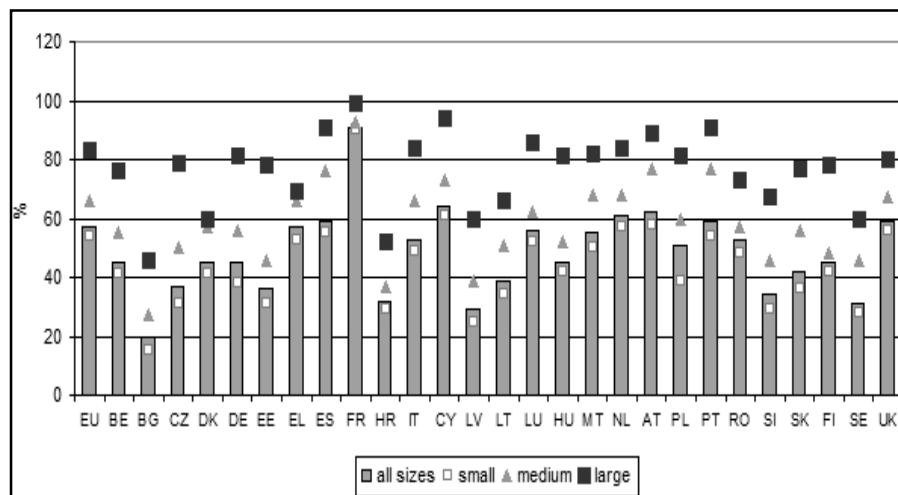
In the case of large enterprises, the general feature is that all other countries (including the EU average) have lower shares in evaluating the effects of CVET courses, save for Romania and Poland. The highest discrepancy between the two shares was registered in two developed countries like Denmark and Belgium, to which are added some countries in transition like Bulgaria, the Czech Republic, and Lithuania. The two shares are close in Spain, Italy, Cyprus, UK and approximately identical in France. An atypical case is represented by Romania and Poland. Romania registers a share by 56% in the case of CVET supply, but 73% from the training enterprises evaluate the effect of the latter. In a similar manner, Poland has shares by 72%, and respectively 81%.

In the case of medium enterprises we no longer distinguish a predominant trend, but richer instances. The prevalent trend in the case of large enterprises is found also in northern countries like Sweden, Finland, Denmark, and in the south-eastern European countries like the Czech Republic, Estonia, Slovakia, and in

Germany and Belgium, as well. In the atypical case, next to Romania and Poland is placed Greece. The two compared shares have approximately identical levels in France, Cyprus, Portugal, Latvia and Lithuania.

Small enterprises register the same prevalent trend as large enterprises, save for the following countries: Greece, Cyprus, Malta, Portugal, but also Romania, Poland, Hungary and France.

Figure 3 – Enterprises evaluating the effect of CVT courses as % of training enterprises, by size class in 2010



Source: Eurostat Code: [trng_cvts18] Update: 22.07.2014

Of equal importance to evaluating the effect of courses we regard the evaluation of the training need of the employees that should be the starting point in the approach of providing for CVET. The average EU shares in this instance are of about 90% for large enterprises, about 80% for medium enterprises and 70% for small enterprises.

From among the reasons based on which enterprises justify their failure to get involved in the training supply, we retained as most relevant the following three: the cost of training, the existence of the professional skills required on the job, and the evaluation difficulty of the training need (Table 3).

Table 3 – Percentage of all non-training enterprises, by reason for not providing CVET and size class

	Too expensive			The existing skills of the person employed corresponded to the current needs of the enterprises			Difficult to assess enterprise's needs		
	Small	Medium	Large	Small	Medium	Large	Small	Medium	Large
EU	31	37	37	77	75	65	13	14	17
BE	15	21	28	76	73	29	7	4	28
BG	49	55	42	77	78	59	14	17	18
CZ	10	14	10	73	60	54	0	1	2
DK	28	28	:	93	83	:	26	40	:
DE	26	39	42	80	83	74	11	15	23
EE	47	43	35	65	66	100	15	17	35
EL	36	43	40	75	76	80	9	12	3
ES	15	20	32	69	65	46	5	9	16
FR	41	40	27	79	65	61	33	55	71
HR	28	26	39	71	72	77	3	7	7
IT	28	23	38	83	69	70	9	14	26
CY	29	34	:	72	70	:	9	8	:
LV	47	41	38	82	84	79	26	23	19
LT	69	62	56	85	81	75	45	42	30
LU	12	11	:	80	62	:	3	6	:
HU	15	13	14	73	73	75	3	3	11
MT	23	29	21	90	77	79	10	6	:
NL	20	28	12	72	57	31	6	4	8
AT	39	32	25	81	93	42	31	23	25
PL	43	46	43	82	79	73	9	9	11
PT	54	44	51	74	63	52	30	19	41
RO	30	30	31	64	64	59	4	5	5
SI	40	44	58	90	76	50	6	6	:
SK	32	34	26	84	88	79	8	12	3
FI	25	37	100	76	59	8	12	29	94
SE	:	:	:	:	:	:	:	:	:
UK	24	46	17	82	93	55	20	35	16

Source: Eurostat Code: [trng_cvts08] Update: 04.09.2014

The first finding that we regard as necessary is about the absolute majority share to which both small and medium enterprises show their satisfaction with respect to the existing competences of their employees, but which we regard somewhat

circumspectly, considering the current complex and in swift development requirements on the labour market.

Perhaps a validation of our opinion is represented even by the sensibly lower shares corresponding to this reasoning, in the case of large enterprises that could have higher exigencies with respect to the professional performance of the employees.

Similarly, we consider that there is a certain discrepancy between the conclusions that can be drawn from the statistical and, respectively, analytical approach regarding the cost of training. Thus, all three categories of enterprises regard training as being expensive only to low shares, while the analytical approach indicates the cost of training several times as possible access barrier, while the practice of some financing instruments in this direction did not always prove a successful at European scale.

The evaluation of the training needs is regarded as difficult by all categories of enterprises only to extremely low shares for. If we analyse these shares, in correlation with the extremely high shares to which training enterprises evaluate the training need, we can conclude that the evaluation of the training need as starting point in this approach does not represent a challenging issue.

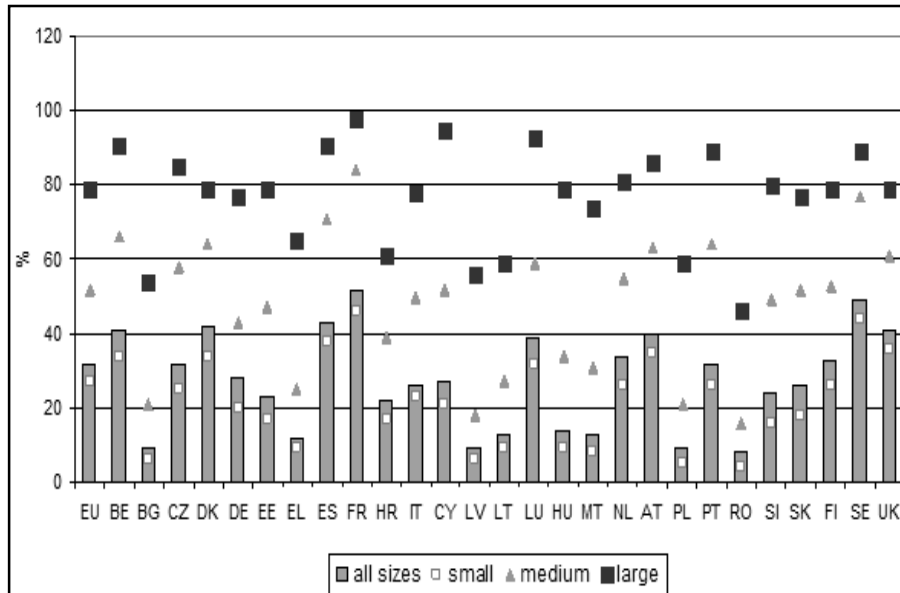
To the extent in which enterprises, but not in their entirety, ensure the CVET supply, it should be expected that not all of them will also provide for a budget, or will substantiate a training planning (Figure 4).

Large enterprises, as already mentioned, are to very high shares major CVET providers, including the entire approach that this practice presupposes: the evaluation of the need and effect of CVET, including the substantiation of a planning and of a budget.

Medium enterprises have an average EU share of about 50%. The lowest levels of this share are placed under about 25%, and the highest levels are approximately in the interval 60% to 80%.

Small enterprises have only to an average share of about $\frac{1}{4}$ a planning or a budget for training. The variation range in which are placed several European countries is of about 20% to 40%, in the case of high shares, and these coexist with very low shares in the case of a sufficiently high number of countries which are placed under 10% or, at most, at about 15%.

Figure 4 – Percentage of training enterprises having a training planning and/or budget, by size class in 2010



Source: Eurostat Code: [trng_cvts96] Update: 31.03.2015

Conclusions

Two independent processes, such as the decrease of the fertility and birth rates and, respectively, the significant increase of life expectancy have induced in the European area a process of marked population and labour force ageing.

We attempted to capture population ageing by indicating the evolution of the weights in total population for some segments of relevant ages: 0 – 14 years, 15 to 64 years, 65 years and over and 85 years and over.

The ageing of the labour force was reflected by us by indicating the evolution in the weight of elderly on labour market (55 to 64 years of age) and in the labour force (20 to 64 years of age). Both developments, i.e. the one regarding population ageing and the one of labour force ageing refer to the period 2013-2060.

Population and labour force ageing is of major significance due to the economic and social implications, which are felt mainly at the level of the labour market and

at the one of the social security systems' sustainability, as these systems are already under pressure.

In the labour market, from among the induced effects we mention: the change of the structure on ages within enterprises, the increase in the exit rates from the labour market in the following years; difficulties in substituting elderly employees which exit the labour market with recruits of a similar level of expertise.

The sustainability of the social security systems is under the direct impact of the evolution of the dependency rates of elderly which will undergo the following development: from four individuals aged 15 to 64 years for one individual aged 65 years and over currently, to a ratio of only two to one in 2060.

In this context, the need to generate a satisfying mitigation capacity of the society to these major challenges of ageing led to the emergence of the concept and initiative of "active ageing" and "productive ageing".

This last concept, productive ageing assumes the extension of the active life which cannot be conceived without important adjustment changes of the labour force to the complex requirements and quick developments of the labour market. From this perspective, the major requirement for the elderly in the labour market is to maintain and strengthen their ability to work, a concept that we have developed from the perspective of its determinants and of the effects they have. At the level of the generated effects, productivity and increased competence of the individual in the work process are found synthetically in the following attributes of the labour force: employability and mobility across enterprises, sectors and even occupations.

The sine qua non condition in gaining employability by the labour force, and the more by the older workers is the responsible involvement of the latter in CVET which benefits at European level by a policy, analytical and statistical framework approach.

We have highlighted the fact that within the European policy approach, the importance of CVET is placed in the contemporary economic-social context with its exigencies, from viewpoint of the innovation, restructuring and economic growth processes, as well as from the perspective of globalisation.

The European analytical approach, having as backbone the professional practice proposes the most efficient form of training – work-based learning – and even the learning while working form that have better outcomes when taking the shape of intergenerational exchange of knowledge and experience.

The statistical approach leads to the following remarks about the CVET practice within the Member-states:

Large enterprises ensure CVET to high shares, followed with a certain gap by medium enterprises, while in the case of small enterprises the CVET practice represents still a true challenge.

Evaluating the CVET effect has as aim to provide useful information about a better substantiation of such provision, but both large enterprises and medium enterprises to lesser extent evaluate rather the effect, than ensuring the supply. In this case, medium enterprises do not show a predominant trend within the Member-States, but provide for richer instances.

We consider of equal importance to the evaluation of training the evaluation of the training need of the employees which should represent always the starting point in this approach, and the shares to which it is achieved are already high for all categories of enterprises.

With respect to the reasons for which non-training enterprises do not ensure CVET we have the following remarks:

While small and medium sized enterprises ascertain in majority shares their satisfaction about the existing competences of the employees, large enterprises that can have higher exigencies in this respect, show their satisfaction to lower shares.

Another reason, the cost of training is deemed only in low shares as being costly, while the analytical approach indicates this repeatedly as a concerning issue.

If large enterprises prove to be major CVET providers, it should be expected that they would ensure a budget and would substantiate a planning in this respect, while in the case of medium enterprises, this occurs only to modest shares, and in the case of small enterprises these shares are even very low.

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