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# "Greening" the Youth Employment—A Chance for Sustainable Development

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**Abstract:** Currently, at the European Union level, there has been an increase in unemployment, especially youth unemployment, as a result of certain imbalances in the labor market, exacerbated by the current financial and economic crisis. The sustainable economic development of each country is strongly influenced by the human resource in the context in which it is sought the creation of a strong, competitive and prosperous Europe. The human resource and especially young people are the most precious wealth of a nation. Therefore, solving the problem of youth unemployment is a matter of great concern and requires bringing to the forefront modern employment policies correlated with the economic reality, to which the EU attaches increasingly more importance, namely promoting green employment in a green economy. Our paper begins by analyzing the evolution, causes and differences recorded at the European Union level on the size and structure of youth unemployment and it ends with identifying some measures to reduce it, in the context of European sustainable development. The conclusions in our research highlight the importance of employment policies at both the micro and macro level and show the positive role of active policies, investment in education and green employment.

**Keywords:** youth unemployment; sustainable development; economic crisis; education; green employment; green jobs; European employment policies

#### 1. Introduction

Unemployment is considered a macroeconomic imbalance that affects all modern economies. The size and dynamics of unemployment influences and are influenced by the economic situation of each country, by investment in education, quality of life and other factors specific to each economy.

In recent years, an important issue of the European economies is increasing *youth unemployment*. This phenomenon has major long-term effects, creating imbalances in the labor market, especially when this unemployment is turning into long-term unemployed. This increase in youth unemployment has serious consequences on the economy because young people are a key-resource for economic growth and therefore in the European Union there are concerns about reducing unemployment and implementation of employment policies to support young people.

Given this context, we believe that a niche to solve this problem may be better training of young people in green activities and business, which support the development of a green economy, as a central element of sustainable development.

Our research aims at analysing the effects of youth unemployment on the economy, the unemployment situation and developments in various European countries and identifying key measures that can help reduce this phenomenon. This paper also includes, among other measures to reduce unemployment, the preparation of young people for green jobs in support of the transition to a green economy.

In terms of methodology, the analysis of youth unemployment has meant the study of books and literature as well as some EU reports on the evolution of youth unemployment and its peculiarities in different countries. The research methodology involves both qualitative as well as quantitative research, using analysis, synthesis and statistical methods.

# 2. Analysis of the Context

Approaches to economic growth research have experienced new aspects, with the emphasis on the process of globalization. Eco-development has been mentioned since the first UN conference on development held in Stockholm in 1972. Also in that year, the Club of Rome report entitled "Limits to Growth" forced humanity to understand that the problems of economic growth are inseparable from those of environmental pollution, explosive population growth, resource depletion, *etc*. Although in use since in the early 1980s International Conference on Environmental Conservation, the term "sustainable development" was launched with the publication of the Brundtland Report (named after the Prime Minister of Norway) of the World Commission on the Environment in 1987, suggestively entitled "Our Common Future". Pleading for a reconciliation between the economy and the environment, the report aims at finding a development path to support human progress not only in a few places for a few years, but for the entire planet and into the distant future [1]. Also in the view of this report, sustainable development is regarded as development that meets the needs of the present without compromising the ability of future generations to meet their needs.

Given these conditions, the relationship between development and the care for the natural resources must be viewed in the *double sense of ethics*: solidarity with our contemporaries and with future generations. Therefore, sustainable development must satisfy the needs of the present without affecting the ability of future generations to satisfy their needs.

Sustainable development does not imply only the economic, social and environmental development, but also human development. Human development means increasing the quality of human capital through education and training in line with labor market demands.

In fact, the development of human capital theory owes very much to the collective efforts of Theodore Schultz, Jacob Mincer, and Gary Becker, who highlighted the importance of investment in human capital for long-term economic growth. Theodore Schultz showed the role of education expenditure in labor productivity growth, which he considered investments. Jacob Mincer and Gary Becker focused more on studying the relationship between human capital and labor income, specifically on the study of variations in income, depending on the level of education of individuals. This is the purpose of human capital theory developed by Becker, G. [2], whose essence is that individuals' incomes grow substantially as the level of education increases.

Slaus, I. and Jacobs, G. [3] have analyzed the relationship between sustainability and human capital. In their research, they have shown that human capital development is a basic factor of sustainable development, particularly through education. The authors consider that the development of human capital has contributed in several ways to support sustainability, namely by accelerating innovation and green technologies, by increasing the capacity of the educated people who understand the role of sustainability, by creating a culture of consumption of intensive resources.

The role of education in ensuring sustainable development is supported by Murga-Menoyo, M.A. [4] who considers that, through school, we obtain skills that are useful both in preparing young people for green employment and in youth formation behavior as consumers or producers in a green economy.

Kopnina, H. [5] shows that the development of a sustainable business environment begins with informing pupils and students about the alternative conceptions as well as instructing them about potential solutions to the sustainability challenges. Sustainable economic development cannot be unless there is goal-oriented education for sustainability.

Thus, through greater investment in education, young people are more likely to enter the labor market. However, the chance for young people to get jobs depends on other factors, such as socio-economic context. If we consider that, at present, the labor market has been shaken by the economic crisis that peaked in 2008, we need to identify other ways to facilitate youth employment and therefore to reduce the youth unemployment.

The economic crisis that began in 2008 and its follow-up, show that the world is facing a prolonged increase in unemployment and its effects include deepening poverty and inequality. Bell and Blanchflower consider that this increase in unemployment has a negative result on both individuals and society, manifesting itself by low well-being and quality of life [6]. Simply returning to pre-crisis levels of employment is not enough to effectively contribute to economic recovery and ensuring decent employment for all [7]. It may insist on how to respond to these disruptive situations and identify the factors that can make it difficult to adapt to new conditions.

The literature highlights the negative relationship between education and unemployment, in that better education leads to lower unemployment rates. There is a general agreement that inadequate

training or lack of training is a major cause of unemployment, especially youth unemployment [8]. Nevertheless, although investments in education for youth were extended in recent years (as increased number of graduates shows), youth unemployment has increased in most European countries. An important factor of this process is the economic and financial crisis, tiggered in 2008, which has led to the loss of some jobs, entrepreneurship reduction, and lower consumption, thus affecting jobs creation. As a result of the crisis, the youth are facing two major obstacles in finding a job. First, firms tend to retain the existing workforce and not recruit new labor force in order to reduce costs; and second, firms prefer people with experience, so as not to invest in training new employees. Experience is an important prerequisite for being hired, making it very hard for youth to find a job when they do not have experience, however, they cannot get experience if they are not hired. Thus, there are situations where graduates enter the labor market with great difficulty.

Therefore, economic and financial crisis is reflected in longer job-search periods and a decrese in the number of jobs. The job search period has increased to an avearage of six months in most EU countries. This situation is directly related to the insufficient correlation between initial vocational education and training and labor market needs.

In terms of job quality, youth employment has increased in non-standard jobs, including temporary employment and part-time jobs. This practice is appropriate when they want to combine work with other activities, such as study or activities on their own. From the employer's perspective, this kind of employment is appropriate when its activity is increased only during certain periods, for example on weekends, or when the employer wants to correlate the size of the workforce with the business cycle. Nevertheless, increasing the number of youth employed in activities that require temporary or part-time work suggests that such activity is often the only option available for them [9].

The most important problem in the case of youth unemployment is that it should not become long-term unemployment. Young people can have short periods of unemployment during the transition from school to work, but there are factors that may cause the extension of the unemployment period. They include ack of skills, low education, presence of children in young families, additional welfare benefits, and family income [10].

Long-lasting unemployment and underemployment in Europe's youth generation could be associated in the future with high social and economic costs threatening the essentials of our societies. The gap between EU countries with the highest and lowest unemployment rates among youth has increased, which is a very negative signal for Europe's youth generation [11].

At the EU level, in addition to promoting traditional employment policies, it is increasingly brought into question the importance of developing a green economy that creates green jobs, as a measure to reduce unemployment. This concern became particularly important with the launch of the Europe 2020 Strategy that recognized the need for economic growth by putting in the spotlight, along with the other two priorities, sustainable growth by promoting a more efficient, greener and more competitive economy. Economic growth based on the inefficient use of resources or on generating additional pressures on the environment raises the issue of long-term sustainability. Therefore, it requires concerted action at the EU level to change the approach of the model of growth in the European Union. The green growth proposed by Europe 2020 Strategy is based on a low carbon, climate resilient, and resource-efficient economy. These EU projects especially concern the youth because they are the most receptive to new ideas and adapt easily to the new requirements of the green economy.

# 3. Green Jobs in a Green Economy

In recent years, at the European Union level, the concern for the development of a green economy and creating green jobs has increased in order to ensure sustainable economic development.

In a green economy, development of green jobs becomes the basis of sustainable economic development. Green jobs are central to sustainable development and respond to the global challenges of environmental protection, economic development, and social inclusion [12].

Green jobs are one of the basic components of the green economy, along with green production and services. These green activities involve greater care for the environment and will cause economic agents to change their behavior, production, and consumption. In this way they will lay the foundations for green economic growth as a result of increased environmentally friendly activities. This also means an increase in well-being and quality of life by living in a clean, healthy and productive environment. All these will help ensure sustainable economic development that will propel economies on a sustainable growth path.

An economy is considered green when it supports increased productivity and efficiency of natural resources, reduces pollution, improves environmental risk management, and invests in maintaining the stability of ecosystems [13].

Sustainable development means ensuring economic, social and environmental development through adequate policies at the microeconomic and macroeconomic level. Among these policies, the occupational ones take an increasingly important role, because by creating green jobs and greening existing jobs the transition to a green economy is provided and the economy is capable of supporting sustainable development.

The structure and level of employment have been affected in recent years by the financial and economic crisis, by global warming, and by pollution, which has negatively affected agriculture, fishing, and tourism. Therefore, the concerns of national and international organizations have pursued the adoption of employment policies appropriate to the new requirements of the sustainable economy, as well as workforce training so as to develop skills necessary for a green economy and cope with competition in the labor market.

So far there is no consensus on the role of green incentives in overcoming the current financial and economic crisis, but the transition to a green economy requires solving the problems related to the depletion of fossil fuels, rising energy prices, and climate change [14].

The concept of *green jobs* is already an emblem of sustainable economic development. Green jobs cover "all jobs that depend on the environment or are created, substituted or redefined in the transition process towards a greener economy" [15].

The International Labour Organization (ILO) defines green jobs as "being decent jobs, either in traditional sectors or in the new green ones, which contribute to preserving or restoring a sustainable environment" [16]. More precisely green jobs are decent jobs that: "(a) reduce consumption of energy and raw materials; (b) limit greenhouse gas emissions; (c) minimize waste and pollution; and (d) protect and restore ecosystems" [17].

According to Eurostat, an activity falls into the category of green jobs, if at least 50% of the time needed to carry out that work is spent to produce a product or service that involves environmental protection and the efficient management of natural resources.

According to the report *Green Jobs: Towards Decent Work in a Sustainable, Low-Carbon World* employment will be influenced by the increasing role of sustainable development in macroeconomic policies, by the following aspects:

- Additional jobs can be created in some sectors that require pollution control.
- Some jobs may be substituted by others that are greener, by switching from fossil fuels to renewable energy, by changing the qualification of workers, and/or by greening the working methods.
- Some jobs can be removed without being replaced by others as they no longer meet the new conditions of production [18].

The impact of economic policies that support the development of green economy on employment growth can be direct through the actual creation of new jobs in green areas, but also indirect through their contribution to the economic growth, later economic growth generating employment growth.

At the EU level, the creation of green jobs continued during the economic crisis, even if it reduced investment in developing green areas. In 2010, employment in green industries accounted for 1.5% of total European employment, which meant about 3 million jobs. However, the measures to improve energy efficiency through renewable energy will contribute further to increase the number of green jobs, according to EU studies and reports [19].

According to studies conducted by OECD, Eurostat and UNEP, investment in green activities plays an important role in job creation. This requires that environmental policies are linked to labor market and skills development policies. The promotion of green policies for the labor market can be achieved directly, by supporting the development of green jobs (through training or employment programs), or indirectly, by funding resource efficiency and wider climate and environment projects, which require new jobs and/or skills to be created. Within these policies, it can be supported graduates who, through proper training, can occupy these positions.

# 4. Effects of Youth Unemployment on the Economy

The effects of high youth unemployment generate costs that society must support economically, socially and even psychologically.

Firstly, the unemployed represent a financial cost to society in terms of the fact that society does not benefit from the knowledge acquired by them through education. On the other hand, the unemployed involve financial costs of unemployment benefits, retraining, and reintegration.

Secondly, if young people fall into the category of long-term unemployment, they are discouraged to even look for a job, which generates a psychological impact (anxiety, depression, decreased self-esteem, stress) and the loss of professional skills. These effects make it increasingly harder to adapt to labor market demands. Also, the efects on poverty are more perverse in the case of long-term unemployment, having as result a low quality of life, an increasing gap between the rich and the poor, and a decreasing demand for goods. All this affects the stability and economic growth as well as social cohesion.

Psychological implications of the social effects of unemployment can be analyzed with developmental theory. It explains how the human personality develops throughout life, being affected by environmental conditions that motivate individuals to act in a certain way, depending on how the

objectives were met in certain stages of life. On these lines the social context is particularly important, especially through the influence it has on the individual personality from an early age; certain crises in these periods can cause an increase in the vulnerability of the person for life.

When a high level of youth unemployment is accompanied by other labor market imbalances, negative effects will be felt more. For example, the labor market in EU countries does not only face the problem of youth unemployment, but also a high aging process. Moreover, steps should be taken to reduce youth unemployment and training them in accordance with the requirements of the labor market and sustainable development. The migration of elites are also added to the problem of youth unemployment, which affect the social systems and especially pension schemes. These imbalances cause an increase in the distrust of people in the socio-economic and political systems.

The economists Thomas A. Mroz and Timothy H. Savage draw attention to the immediate effects, especially to those affecting the long-term unemployed young people. Thus, youth will be paid less in the future because they become less selective in choosing a job and they will easily accept any alternative. At the same time they will have lower chances to find jobs if the unemployment period is extended, because the skills acquired are lost over time. Thomas A. Mroz and Timothy H. Savage observed that the chances of a person to find a job grow if that person has worked in the past year. The two economists demonstrate the increased role of education and work experience in reducing the risk of long-term unemployment among youth [20].

Other studies in the literature highlight this loss of income during the working life for young people affected by long-term unemployment. M. Schwerdtfeger shows several examples using statistical data [21]. His research suggests that training, educational upgrading and labor mobility reduce the effect of youth unemployment on the economy.

The ILO economist Salazar-Xirinachs, J.M. [22] highlights that the long-term consequences of persistently high youth unemployment rates include the loss of valuable work experience and the erosion of occupational skills. Moreover, unemployment experiences early in the career of a young person are likely to result in wage scars that continue to depress employment and earnings' prospects, even decades later.

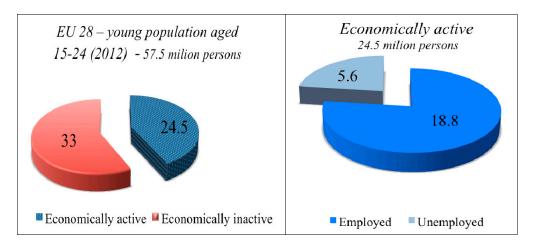
### 5. Youth Unemployment in the European Union

Given the increase in youth unemployment rates in recent years, the EU's concerns in this area have increased, especially in the developed countries. Increasing the level of education of the population has become one of the priorities of the Europe 2020 Strategy [23], along with labor productivity growth, lower unemployment, better insertion of young people in the labor market, increasing public participation in education, and lifelong learning.

Analysing the evolution of youth unemployment in the EU countries, we can say that the problem of youth is not only a challenge for national labor market policies, but also a threat at the European level. In the long-term, many young people may find it impossibile to find work in their own country, which could exacerbate social and political tensions and cause an increase in migration to areas with higher employment potential. Even with the free movement of the labor force, increased migration can generate discontent in receiving countries, due to concerns that immigrants hold jobs that they are not

entitled to, but also in leaving countries, which loses investment in training these young people and where imbalances may occur due to the lack of skills in certain areas.

In 2012 in the European Union youth unemployment represented 5.6 million people of the active young population of 24.5 million people. This represented 22.8% of the active youth population (Figure 1). This percentage continued to rise in 2013 due to higher youth unemployment rates in most European countries [24].



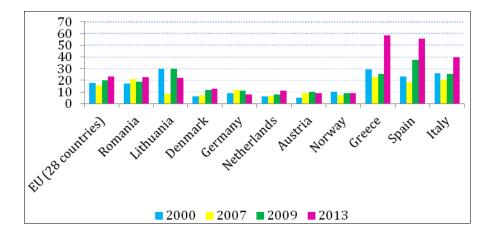
**Figure 1.** EU28-Young Population aged 15–24—total (57.5 milion persons) and Economically active (24.5 milion persons) in 2012. Source: Based on the data provided by Eurostat.

The report *Global Employment Trends For Youth* of International Labor Organization (OIM) shows that the unemployment rate among youth is more sensitive to the crisis than adult unemployment. Youth labor market recovery will be slower than for the adult population.

ILO studies show the existence of labor market imbalances reflected in the increased share of youth employees with temporary or part-time contracts, and increased involuntary unemployment among youth [9]. Both unemployment and temporary employment of youth are considered to be a lack of integration into the labor market. Young people experience fewer difficulties with labor market integration as the educational system is more vocationally specific. Intermediate and higher educated youth particularly profit from the positive effect of vocational specificity of the educational system. Because of employment protection legislation for existing workers, which is rigid, young people experience more difficulties with labor market integration [25].

The figure below (Figure 2) captures the evolution of youth unemployment in several European countries, some with very good results in the field of labor market policies, with an impact on reducing youth unemployment, such as Germany, Austria, and Norway. Other countries record high youth unemployment rates amid much larger imbalances at the macroeconomic level, such as Greece and Spain [24].

In our analysis we also chose two countries that are at the EU average in terms of the size of youth unemployment, namely Romania and Lithuania.



**Figure 2.** The unemployment rate among young people (15–25 years) in the EU, 2000–2013. Source: Based on the data provided by Eurostat 2014, *Sustainable Development Indicators*, Unemployment rate by age group (less than 25 years).

In general, at the EU level, 2009 marked an increase in youth unemployment, growth generated by the financial and economic crisis, which has affected job creation and the economic activity as well as business, both at the microeconomic and macroeconomic level. In 2010, the overall unemployment rate among people aged 15–64 amounted to 9.7%, whereas the rate among young people under 25 stood at 20.6% in the European Union [26].

After 2009, some countries managed to reduce the number of youth unemployed, such as Germany and Norway, and others faced a significant increase in youth unemployment rates, with an intensification of these problems (Greece and Spain). For countries that are at the EU average, we see that some have managed to reduce youth unemployment (Lithuania), others have achieved some increases of it, but not very large increases (Romania). For example, the reduction of jobs due to economy restructuring and difficulties in creating other, the scientific and technological progress that makes a difference in Romania labor market too diminishes the chances of youth to finding a job [27].

Estonia and Lithuania recorded before the financial and economic crisis, the highest economic growth rates in Europe and a significant reduction in youth unemployment; during this period being part of the Baltic tigers (Estonia, Lithuania and Latvia). But the economies of these countries were seriously affected by the crisis, which led to a significant increase in youth unemployment rates in 2008–2009. However, these economies have managed large reductions in youth unemployment in recent years, focusing on training programs.

According to Eurostat data, the countries experiencing the highest levels of youth unemployment are Greece and Spain, which recorded high youth unemployment rates of over 50%. The reasons are linked to a number of factors related not only to economic crisis but also to labor market rigidity. This concept does not have a precise definition, often being measured by the speed of adjustment to shocks [28] and by listing or assessing its effects [29]. Some authors [30,31] highlight the link between unemployment and labor market rigidity, this being determined by wage rigidity, workers mobility, level and conditions of unemployment benefits, employment protection legislation, and macroeconomic conditions. Labor market rigidities influence young people entering the labor market: in economies with rigid labor markets, school graduation is more or less the time when the port of

entry is wide open. In contrast, in economies with flexible labor-market institutions, such as low firing costs, employers fire workers, even from career jobs if the quality match turns out to be poor [32].

Also, factors such as the rise and the way of establishing the minimum wage affect youth employment. A study in this regard shows that at the EU level there is a negative relation between minimum wages and youth employment [33].

Moreover, we can see that there are about the same developments in youth unemployment in the group of countries that are part of the same pattern of employment. For example, the countries belonging to the Mediterranean model of employment, Spain, Greece, Portugal, face high levels of youth unemployment, while the Nordic model countries face the lowest levels of youth unemployment.

The Mediterranean model of employment, in Spain, Greece, Portugal, and Italy, is characterized by low security and flexibility in the labor market. In these countries, the labor market is segmented, with low internal geographical mobility of labor and wage rigidities. Both flexibility in companies and security of employees are relatively low and trade unions have an important role in the labor market. It is the model with the lowest share of expenditures and is strongly based on pensions and a low level of social assistance. For example, a study on the Italian labor market shows that this is rigid and youth have been affected by the crisis and the deep structural weakness of the Italian economic system [34].

High unemployment among youth registered in Spain is explained by the structural characteristics of the economy and the policies adopted before and after the crisis. Expanded lending led to imbalances in several sectors following the crisis, and made the Spanish economy suffer due to reduced economic activity, increased public debt, and imbalances in the labor market. Also, applying a policy of expanding immigration before the crisis to substitute the demographic decline of the domestic population increased unemployment after the crisis, especially among young people, women and those with low education. The causes of high youth unemployment rates in Spain are determined by the poor correlation of educational programs to labor market needs and the educational training of youth, which has declined in recent years.

A model considered to be of good practice in employment is the Danish model of flexicurity. It is also called Danish Golden Triangle and it combines employment protection measures with ensuring generous unemployment benefits and with the implementation of active labor market policies are aimed at helping people to cope with rapid changes through training, retraining and encouraging beginning an active job search. Within this model, there are projects and programs adapted to young people and their preparation correlation with the labor market needs. This model suggests that a flexible labor market can coexist with a generous social system, while maintaining a low unemployment rate, based on active policies and investment in education. Surely, the successful implementation of such a model depends on initial unemployment, and the current economic situation.

The Danish employment model has paid special attention to combating youth unemployment. The measures adopted were different, depending on the situation of youth. Thus, for the unemployed youth who failed to achieve a qualification (vocational education) were applied active policies aimed at preparing them, and in the case of unemployed youth who had studies were applied measures to improve their employment [35]. The link between generous unemployment benefits and extensive labor market intervention existing in the Nordic model shows, according to some studies, that although social assistance benefits are an important form of income protection for youth, it has decreased in the last two decades [36].

Youth unemployment is the lowest in countries like Germany and Switzerland, which have the most structured and efficient pathways between education, higher education and vocational education. These countries have strong systems that combine formal education and work experience. Efficient, well-connected educational systems create more paths for youth to enter the labor market. This system has proven effective by preparing young people in line with current labor market needs and training them in accordance with the qualifications required by companies. The involvement of the social partners in program design and implementation ensures that apprenticeship programs meet the labor market requirements.

Among the measures that helped Germany maintain a low unemployment rate among youth are maintaining apprenticeships and founding subsidizing jobs, including providing grants for young entrepreneurs. At the same time, the German system has the following characteristics: firms choose their own methods of training young people, training costs are shared between the government and the employer (the government covers training in school and the employer finances training in the company), training of young people is completed with obtaining recognized qualifications across the country, which gives the employee the opportunity to stay with the current employer or to change the employer.

The problems faced by some countries and the success of others in the field of youth employment depend on a number of factors related to the characteristics and specificity of each labor market. In addition, the measures taken to overcome the crisis have influenced the labor market and the size and evolution of unemployment. For example, the economist Christopher Pissarides believes that fiscal consolidation programs, although necessary, worsen the unemployment situation and the measures to combat unemployment contravene fiscal consolidation. Thus, the measures to improve employment in the labor market should be adopted in line with other economic policy measures and they should aim at the medium- and long-term to achieve long-term positive results and be much easier to overcome some cyclical imbalances.

#### 6. Measures to Reduce Youth Unemployment

#### 6.1. Education as a Factor to Reduce Youth Unemployment

Reports suggest that the transition of youth from school to work has become more difficult now, especially as a result of the current financial crisis. Today, in a few cases, young people leaving the education system manage to integrate quickly into the labor market and get hired in the field which they have graduated. High youth unemployment rates and the significant incidence of underemployment indicate important difficulties that youth face in their transition from school to work. This phenomenon occurs not only in developing countries but also in developed economies. The extension of the transition from school to work is explained by a number of factors, of which the most important are the economic restructuring, the financial and economic crisis, the changes in the social protection systems, and the extension of education, emphasizing the existence of skill mismatch on the labor market.

Given the increase of youth unemployment, it may be asked how the youths decision to continue their education will affect their employment. Truly, those who continue their studies are not included in unemployment among youth, but they can continue their studies in order to delay getting hired in the labor market, especially given that the labor market is experiencing imbalances generated by the crisis.

This could be a factor that causes the increase in the number of graduates. The problem arises, however, when young graduates find finding a job more and more difficult, and often the job is not consistent with their training.

The relationship between education and labor market success is discussed in numerous specialized studies. G. Becker, through the human capital theory, claims that education and training are the main sources of future income. So, the more investment in training an individual, the more he can earn in the future [2]. The economist Edmund Phelps also emphasizes the importance of studies in earning a respectable salary. He shows that such earnings have grown slowly for those at the bottom of the wage scale, the more so as productivity has to rely more on knowledge and skills [37].

Schultz, T.P. considers that skills and knowledge are forms of human capital that underpin future investment. The traditional model of human capital shows that there are differences between individuals with regard to future earnings as a result of differences in training and education. These gains depend on some innate characteristics of the individual, and on the other hand, on the investment in education, in shaping the individual [38].

According to Schooling's model, an individual's earnings are assumed to depend upon the earnings he would receive without any training, on his investment in training, and on the rate of return received from his investment. Training is defined in terms of both years of formal schooling completed and years of labor market experience [39].

Thus, an individual who finishes secondary education faces two situations, namely to continue the studies at college or become active in the labor market. This decision, according to Schooling's model will depend on the rate of return that the individual expects in the two situations. If the expected revenues after years of college are higher than those he would get in today's labor market, taking into account the costs of training, the individual will choose further study. In reality there are many more factors that influence the individual's decision presented above, *i.e.*, individual skills, which directly affects the duration of the studies and reduce the costs of education, family background, financial situation of the family where the individual comes from, information on employment of relatives with more or less education, *etc*.

Statistics show that, generally, individuals who have low income also have a low level of education, face difficulties in finding employment, have social integration problems, and the chance that their children go through the same situation are very high. Parents who have high levels of education are interested in ensuring their children obtain the same level of education, while parents with low levels of education, generally do not support the children in investing in their education. Therefore, the area of residence and level of education are important factors that contribute to increasing the inequality of opportunity of access and success in education of individuals and, consequently, to reducing the chances of having in the future better living conditions.

Moreover, there is a close link between education, employment, and quality of life. On the one hand, the influence of education is visible in all aspects related to the welfare of the individual and his level of satisfaction. On the other hand, employment, income levels and working conditions are influenced by the educational level of the individual. Studies show that a higher level of education enables the individual a better labor market insertion, increases the chance to adapt to the labor market demands, and it positively influences the quality of life.

Moreover, the high level of education is the gain of a greater stability in the labor market, which reduces the default risk of unemployment. The educated people have a higher participation rate on the labor market and their period of active life is generally greater than those with lower education. Education plays a central role in preparing the individuals to enter the labor market and in equipping them with the skills necessary to engage in lifelong learning experiences [40,41].

The Eurostat statistics show higher employment rate for graduates of higher education, even if it has decreased slightly in recent years in some European countries as a result of contraction of economic activities due to the crisis.

Education is the only way to overcome high unemployment and income inequality. In this regard, Lawrence Mishel [42] believes that the problem of unemployment, especially in times of crisis, is the lack of jobs, not the lack of adequate skills. Workers face a "wage deficit" much more than a "skills deficit." But better prepared people are more likely to find a job, even in crisis.

Sometimes education is a necessary but not sufficient condition for an individual to enjoy good labor market outcomes. In addition to education, good labor market opportunities for the skilled persons require an economy as a whole to be operating well, with macroeconomic stability, an attractive investment climate, and efficient labor markets, in addition to other factors. Christopher A Pissarides [43] explains the decrease in unemployment in some countries precisely by linking education and employment policies with flexibility policies of labor market and monetary reforms. If the economic environment is not favourable and does not provide opportunities for well-trained workforce, there is the risk to migrate to other countries that offer opportunities for development and higher income, making the country of origin lose investment in training these young people.

In conclusion, according to the literature and statistics, education positively influences youth employment by increasing the chances of finding a job, the opportunities to achieve higher incomes, and the possibility to adapt more easily to the changing labor market conditions. The problem of youth unemployment cannot be solved only through education, but by adopting measures linking education, training, and continuous training with job creation. In addition, in the current context of concerns for ensuring sustainable economic development, the education policies must be correlated with the environmental policies, that will prepare youth to meet the new requirements imposed by the transition to a green economy.

#### 6.2. Green Jobs—A Chance for Youth

Reducing youth unemployment requires the adoption of measures both in the short- and long-term. These measures should address both the *individual*, by increasing the incentive to invest in education and to adapt to the changes required by the labor market, and *firms*, by increasing investment in people through training courses and employment of young people as well as *governments*, by adopting employment policies related to macroeconomic policies and labor laws to boost youth employment.

Traditional employment policies and strategies contribute to reducing youth unemployment through measures such as:

- Stimulating employers to employ young graduates.
- Providing job counseling and training courses for youth.
- Advice for setting up small businesses and supporting entrepreneurship.

- Ensuring a competitive environment to stimulate competition, improve quality and professional performance of the human capital.
- Increasing wages and labor market flexibility.

The current financial and economic crisis has highlighted the imbalances in the labor market, especially in terms of linking educational programs with labor market requirements and it has showed that the efforts to solve these problems will bring results in time, depending on the reforms adopted. Europe needs a deep structural reform to become more competitive, and this cannot be achieved from one day to another. So, essential reforms must be accompanied by measures aimed at rapid effects to stimulate economic growth and support youthin finding jobs and acquiring essential skills. These measures will increase the confidence of youth that they can successfully cope with labor market.

Youth need to find opportunities for work, education or training even during economic difficulties. Short-term unemployment may be part of life, but mitigating long-term youth unemployment must be an global priority. Youth unemployment is always an early indicator of economic problems. If it is not addressed, it leads to longer-term economic problems.

However, improvement in youth employment requires good understanding of the specificity of the labor market in each country. The establishment of policies and intervention measures is very important in analysing youth labor markets, in order to know the characteristics of youth's transition from school to work.

According to ILO experts, in the resolution "The youth employment crisis: A call for action" [44], among the action measures necessary to support the policies to reduce youth unemployment there are:

- Economic and employment policies designed to support aggregate demand growth and facilitate and improve access to finance;
- Creating jobs for youth through macroeconomic policies that support employment;
- Investment in education and training to ease the transition from school to work and to prevent labor market mismatches;
- Labor market policies to target employment of disadvantaged youth;
- Supporting entrepreneurship;
- Labor rights that are based on international labor standards to ensure that youth receive equal treatment.

In the UK, the Confederation of British Industry, which is the main employer's association, has come up with a five-point plan to help reduce youth unemployment. This involves:

- Supporting employers to provide many internships, apprenticeships (grants, special funds).
- For youth, employment must be attractive (in terms of wages, working conditions).
- Helping youth get jobs through university and company programs.
- Supporting youth to gain more work experience through internships and schemes to increase work experience performed in public-private partnership.
- Education programs should also focus on developing communication skills and self-management, in addition to acquiring basic skills [6].

All these can be applied in terms of joint efforts taken both at micro and macro level. In order for these measures to be successful, sustainable policies in education, employment, entrepreneurship and economic development are needed. For example, small-sized companies are at the heart of the European Union sustainable development policy and are among the key factors for the success of the Europe 2020 Strategy, through their contribution to the economic growth and creation of new jobs [45].

However, these concerns of the EU are also related to ensuring sustainable development, which involves improving energy efficiency through green technologies, better waste management, reducing carbon dioxide emissions by using renewable energy sources, improving the production of biofuels and other environmentally friendly production systems. A green economy relates to the economic development, biodiversity, climate change, human health and environmental protection.

Creating green jobs is possible in all fields of activity, but some industries are more suited, such as renewable energy, construction, agriculture, transport, recycling. Thus, the development of these fields of activity offer significant opportunities for jobs creation, but also leads to some challenges for traditional jobs.

Creating green jobs varies according to the activity sector. Therefore, some sectors expect the decline in employment in terms of greening the economy, such as the sectors that produce cement, steel, and oil, and others expect employment growth in the coming years, such as renewable energy, construction and transport. The European Commission estimates that renewable energy sectors could create three million jobs by 2020, while energy efficiency improvements could sustain a further two million jobs [46]. Recent EU studies on green jobs show that by 2020 2.8 million jobs are expected to be created based on the increase in resource efficiency, particularly in construction, mechanical and electrical engineering.

According to EU strategies, it is desirable that new green jobs compensate for the losses of traditional jobs, and this requires the retraining of workers by acquiring skills and competencies necessary for the green economy, which can be more or less different from traditional ones, depending on the field of activity.

Sometimes the development of relevant skills to enable workers to meet the conditions of a green job requires skill training or adding to the existing core skills. For example, experienced workers in the shipbuilding and oil and gas sectors are highly sought after in the wind-turbine industry for their skills in welding, surface treatment and outfitting [47].

However, a mismatch between the demand of labor and supply of labor in terms of qualification can lead to unemployment and can slow the process of greening the economy. Also, the acquisition of skills necessary for a green job depends on the stock of knowledge and skills relating to environmental protection, acquired over years in school. Therefore, skill requirements must adapt to the new requirements of the green economy. In recent years, in terms of skill level, more and more highly qualified people in most sectors have been requested. The ILO, for instance, estimates that in the EU-15 the share of high-skilled labor in low-carbon intensive sectors is higher than those in high-carbon intensive sectors [48].

Considering the capacity of youth to adapt to the changes and their willingness to accept change, green employment policies need to be targeted at young people, especially those affected by unemployment. In this way, there are solutions to reduce youth unemployment, while supporting sustainable economic development.

Thus, economic policies to support the development of green jobs and to contribute to reducing youth unemployment must aim at:

- Developing educational programs in compliance with the green economy.
- Supporting youth entrepreneurship, especially those who develop businesses in the green economy.
- Reducing taxation of green activities.
- Facilitating youth access to finance, particularly for green activities.
- Developing a legislative framework to enable a better correlation between environmental and employment policies.
- Developing joint projects between universities, vocational schools and businesses in green areas.

The European Commission estimates [49] that 20 million new jobs in the green economy will be created by 2020. In this way, the importance of improving the qualification of the existing workforce and of increasing the number of people employed in this sector is highlighted. For the fast and efficient implementation of new technologies, knowledge dissemination is of major importance in order to provide the skilled workforce in this new field. The problem of persistently high rates of youth unemployment can be reduced by exploiting the potential of the green economy sectors to become an important source of jobs. Youth are the group most adaptable to the new, able to change, willing to experiment and learn, and to accept jobs in new areas, which represents precisely the elements that can boost the green economy towards achieving the proposed objectives.

Youth unemployment differs greatly from the unemployment of other age groups regarding both the causes and solutions [50]. Youth may lose their jobs due to reduced expenditures made by the employer in developing their skills, thus becoming a burden on society. Providing them with appropriate qualifications may turn them, however, into a strong growth factor. In this sense, it is true for youth, the assumption that the chances of finding a job are higher if the level of education is higher. Therefore, increasing the potential of youth in order to receive green jobs requires greater cooperation and partnerships between green enterprises and universities for training the current and the next generation of youth in order to achieve the Europe 2020 Strategy and the need for sustainable development [51].

Green jobs represent both a challenge and an opportunity for the labor market. Exploiting their growth potential for the transition to efficient resources and low carbon, the economy must cover *fostering skills development* as well as a better prediction of the skills needed to aim the structural changes in the economy that will facilitate the transition to the green economy.

In this sense, the anticipation of change requires continuous improvement of skills in the process of lifelong learning [51].

However, in recent years, many European countries (Belgium, Bulgaria, Denmark, Germany, Latvia, Romania, Slovakia, Sweden and Norway) have reconsidered their position on the economic and environmental policies. Thus, the green economy has been recognized as a potential source of employment and a contributor to economic recovery. These countries have developed correlations between environmental policies and the employment of labor, promoting green jobs.

#### 7. Conclusions

The current recession has affected the whole Europe, but the effect on the labor market has been different from one country to another, due to the level of economic development, labor market stability and policies adopted. Some countries have intervened more decisively than others in the labor market.

The most affected economies in terms of youth unemployment are Spain and Greece, whihe have faced many economic imbalances enhanced by the anti-crisis measures adopted. The countries with the best results include Germany and the Nordic countries, which were based tackling youth unemployment on active policies and investment in education and training, while achieving a good correlation between education and labor market requirements. These countries are the ones that have made the biggest progress in correlating the employment policies with the environmental ones, aiming thus creating green jobs and recognizing the potential of the green economy as a source of jobs for the unemployed and have developed vocational training courses in green skills. The literature supported by reports of international organizations as well as by the analysis based on econometric models claims that youth are very sensitive to the negative effects of unemployment, long-term youth opportunities being affected by adverse events early in their labor market experience. Therefore, labor market policies are needed to support youth.

Labor market policies and programs that mediate between labor supply and demand can improve the labor market integration of youth, especially if they are well targeted and sequenced.

Active labor market policies focusing on employment planning and job search assistance have proven to be effective in helping young people find jobs.

Bell and Blanchflower [6] claim active labor market policy hiring graduates for periods of one to two years in the public sector in exchange for receiving unemployment benefits. In this way, youth get a minimum work experience and do not feel the effects of unemployment.

At the EU level, efforts to match labor skills with green labor market requirements were amplified by specific measures, such as the creation of new qualifications, and/or new skills and occupational profiles; the provision of training; skills anticipation and forecasting exercises and supporting public employment services to understand the needs of green employers.

Specialized studies and EU reports showed that if correlation of environmental policies with employment policy is the beginning, this relationship is positive and can be a way to reduce youth unemployment.

Young people, who can liberate talents and new ideas, are willing to learn more, to experience new jobs or new skills, and can adapt most easily to the new "green" requirements that are needed in the labor market in the global economy. We consider that youth employment is the main challenge for the transformation of the economic growth process so as to meet the need for sustainable development. However, the path to achieving great things, such as sustainable development, must pass through achieving some partial objectives. A cathedral is nothing but a pile of stones put together. Nevertheless, the only method for building a cathedral is to lay one stone upon another. For the architect, the main goal is the entire project. For the builder, it is the wall considered separately, and for his help, every stone taken one by one [52].

In conclusion, we can say that the most important measures to reduce youth unemployment must aim at:

- Developing a strategy to create jobs and green jobs for young people; a strategy supported by public-private partnerships.
- The cooperation between governments, employers' organizations, and trade unions to promote decent work for youth and to create jobs and green jobs for youth.

- *Promoting the development and use of environmental technologies*, through research—innovation supported by subsidization, research grants and public and private investment and networking to promote knowledge transfer.
- Developing programs that combine skills with work experience.
- Programs to improve the transition from school to work, such as providing subsidies to encourage the private sector to hire youth, professional counseling and training in the workplace.
- Special programs to advise and direct the youth who cannot find work.
- Actions to support entrepreneurship, such as easy support and access to credit and training support.

Therefore, the youth employment problem still persists and is very important and requires efforts to apply measures that improve the skills and abilities of youth to join the labor market and face changes, combined with measures to support job creation and green jobs for the young. Attention paid to youth today will ensure success and economic development in the future.

#### **Author Contributions**

All authors contributed equally to this work. Aceleanu Mirela Ionela has designed the research and conclusions. Serban Andreea Claudia has made the literature review and performed the paper editing. Burghelea Cristina has collected and analyzed the data. Each author was involved in discussing the study. All authors read and approved the final manuscript.

#### **Conflicts of Interest**

The authors declare no conflict of interest.

# References

- 1. World Commission on Environment and Development. *Our Common Future*; Oxford University Press: New York, NY, USA, 1987. Available online: http://www.un-documents.net/our-commonfuture.pdf (accessed on 1 November 2014).
- 2. Becker, G.S. *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education*; All Publishing House: Bucharest, Romania, 1997.
- 3. Šlaus, I.; Jacobs, G. Human Capital and Sustainability. Sustainability 2011, 3, 97–154.
- 4. Murga-Menoyo, M.A. Learning for a Sustainable Economy: Teaching of Green Competencies in the University. *Sustainability* **2014**, *6*, 2974–2992.
- 5. Kopnina, H. Metaphors of Nature and Economic Development: Critical Education for Sustainable Business. *Sustainability* **2014**, *6*, 7496–7513.
- 6. Bell, D.; Blanchflower, D. *Youth Unemployment: Déjà vu?* IZA Discussion Paper No. 4705; Institute for the Study of Labour: Bonn, Germany, 2010.
- 7. International Labour Office (ILO). Recovering from the Crisis: A Global Jobs Pact, Geneva, Switzerland, 2009. Available online: http://www.ilo.org/wcmsp5/groups/public/@ed\_norm/@relconf/documents/meetingdocument/wcms\_115076.pdf (accessed on 1 December 2014).

- 8. Barbagelata, H.H. Youth, Unemployment and Education, in the Book Youth Unemployment and Joblessness: Causes, Consequences, Responses; Cambridge Scholars Publishing: Cambridge, UK, 2012.
- 9. International Labour Office (ILO). *Global Employment Trends for Youth 2013*; ILO: Geneva, Switzerland, 2013.
- 10. Kelly, E.; McGuinness, S.; O'Connell, P.J. Transitions to long-term unemployment risk among young people: Evidence from Ireland. *J. Youth Stud.* **2012**, *15*, 780–801.
- 11. Megyesiova, S.; Lieskovska, V.; Baco, T. Youth Unemployment in the Member States of the European Union. In Proceedings of the 7th International Days of Statistics and Economics, Prague, Czech Republic, 19–21 September 2013; pp. 984–995.
- 12. Aceleanu, M.I.; Grecu, E. Green Jobs in the Actual Employment Policies for a Sustainable Economic Development. In Proceedings of the Energy and Environment Knowledge Week, Toledo, Spain, 30–31 October 2014; pp. 203–205.
- 13. Poverty Environment Partnership (PEP). Building an Inclusive Green Economy for All: Opportunities and Challenges for Overcoming Poverty and Inequality; Poverty-Environment Partnership (PEP): Berlin, Germany, 2012.
- 14. Yang, P.; Chen, I. *Greening Economy as a Key Solution to the Economic Crisis, Global Perspective for Competitive Enterprise, Economy and Ecology Advanced Concurrent Engineering*; Springer: London, UK, 2009; pp. 215–222.
- 15. European Commission. Green Jobs and Related Policy Frameworks. An Overview of the European Union, 2013. Available online: http://www.sustainlabour.org/documentos/Green%20and% 20decent%20jobs-%20An%20Overview%20from%20Europe%20FINAL.pdf (accessed on 16 January 2015).
- 16. International Labour Office (ILO). What is a Green Jobs? Geneva, Switzerland, 2013. Available online: http://www.ilo.org/global/topics/green-jobs/news/WCMS\_220248/lang--en/index.htm (accessed on 19 January 2015).
- 17. GGGI; OECD; UNEP; World Bank. Moving towards a Common Approach on Green Growth Indicators, 2013. Available online: http://www.greengrowthknowledge.org/resource/moving-towards-common-approach-green-growth-indicators (accessed on 19 January 2015).
- 18. UNEP; ILO; IOE; ITUC. Green Jobs: Towards Decent Work in a Sustainable, Low-Carbon World, 2008. Available online: http://www.unep.org/PDF/UNEPGreenJobs\_report08.pdf (accessed on 17 January 2015).
- 19. ECORYS. The Number of Jobs Dependent on the Environment and Resource Efficiency Improvements, Rotterdam, Netherlands, 2013. Available online: http://ec.europa.eu/environment/enveco/jobs/pdf/jobs.pdf (accessed on 17 January 2015).
- 20. Mroz, T.A.; Savage, T.H. The Long-Term Effects of Youth Unemployment. *J. Hum. Resour.* **2006**, *XLI*, 259–293. Available online: https://www.epionline.org/studies/r51/ (accessed on 18 September 2014).
- 21. Schwerdtfeger, M. Assessing the Long Term Cost of Youth Unemployment; Special Report; TD Economics: Toronto, ON, Canada, 2013.
- 22. Salazar-Xirinachs, J.M. Long Term Youth Unemployment Causes Generation's Distrust; ILO Report; International Labour Office (ILO): Geneva, Switzerland, 2013.

- 23. European Council. *Europe 2020: A New European Strategy for Growth and Jobs*; European Council: Brussels, Belgium, 2010.
- 24. Eurostat. European Statistics Database: Labour Market Indicators, Population by sex, age, nationality and labour status, 2014. Available online: http://ec.europa.eu/eurostat/data/database (accessed on 1 September 2014).
- 25. De Lange, M.; Gesthuizen, M.; Wolbers, M.H.J. Youth Labour Market Integration Across Europe The impact of cyclical, structural, and institutional characteristics. *Eur. Soc. J.* **2014**, *16*, 194–212.
- 26. Kopycinska, D. Generation of Young People in the EU Member States—The Generation of Unemployed? *Transform. Bus. Econ. J.* **2011**, *10*, 281–291.
- 27. Grecu, E. The Prospect of the Diplomas Unemployment. In Proceedings of the Conference SGEM, Albena, Bulgaria, 17–23 June 2012; Volume III, pp. 1197–1202.
- 28. Pissarides, C.A. The Need for Labor-Market Flexibility in a European Economic and Monetary Union. *Swed. Econ. Policy Rev.* **1997**, *4*, 513–546.
- 29. Solow, R.M. What is Labour-Market Flexibility? What is it Good for? *Proc. Br. Acad.* **1998**, *97*, 189–211.
- 30. Tasci, M.; Zenker, M. *Labor Market Rigidity, Unemployment, and the Great Recession*; Federal Reserve Bank of Cleveland: Cleveland, OH, USA, 2011.
- 31. Guerrazzi, M.; Meccheri, N. From Wage Rigidities to Labour Market Rigidities: A Turning-Point in Explaining Equilibrium Unemployment? Dipartimento di Economia e Management (DEM), University of Pisa: Pisa, Italy, 2010.
- 32. Kawaguchi, D.; Murao, T. *Labour Market Institutions and Long-Term Effects of Youth Unemployment*; IZA Discussion Paper No. 8156; Institute for the Study of Labour: Bonn, Germany, 2014.
- 33. Laporsek, S. Minimum Wage Effects on Youth Employment in the European Union. *Appl. Econ. Lett.* **2013**, *20*, 1288–1292.
- 34. Mussida, C.; Lucarelli, C. Dynamics and Performance of the Italian Labour Market. *Polit. Econ.* **2014**, *31*, 33–54.
- 35. Maibom, J.; Rosholm, M.; Svarer, M. *Can Active Labour Market Policies Combat Youth Unemployment?* IZA Discussion Paper No. 7912; Institute for the Study of Labour: Bonn, Germany, 2014.
- 36. Lorentzen, T.; Angelin, A.; Dahl, E.; Kauppinen, T.; Moisio, P.; Salonen, T. Unemployment and economic security for young adults in Finland, Norway and Sweden: From unemployment protection to poverty relief. *Int. J. Soc. Welf.* **2014**, *23*, 41–51.
- 37. Phelps, E.S. *Rewarding Work. How to Restore Participation and Self-Support to Free Enterprise*; Harvard University Press: Cambridge, MA, USA, 1999.
- 38. Schultz, T.P. *The Economic Value of Education*; Columbia University Press: New York, NY, USA, 1963.
- 39. Chiswick, B.R. *Income Inequality: Regional Analyses within a Human Capital Framework, The Schooling Model*; National Bureau of Economic Research: Cambridge, MA, USA, 1974.
- 40. Giarini, O.; Maliţa, M. *The Double Helix of Learning and Work*; Comunicare.ro Publishing House: Bucharest, Romania, 2005.

- 41. Spence, M. Does Growth Have a Future? Available online: http://www.project-syndicate.org/commentary/mspence2/ (accessed on 17 September 2014).
- 42. Mishel, L. *Education is Not the Cure for High Unemployment or for Income Inequality*; EPI Briefing; Economic Policy Institute: Washington, DC, USA, 2011; p. 286.
- 43. Pissarides, C.A. *Unemployment in Britain: A European Success Story*; Centre for Economic Performance London School of Economics and Political Science: London, UK, 2003.
- 44. International Labour Office (ILO). The Youth Employment Crisis: A Call for Action, Geneva, Switzerland, 2012. Available online: http://www.ilo.org/wcmsp5/groups/public/@ed\_norm/@relconf/documents/meetingdocument/wcms 185950.pdf (accessed on 27 October 2014).
- 45. Trașcă, D.L. The Consequences of the Economic Crisis on Small Companies from Romania. In Proceedings of the 2nd Global Conference on Business, Economics, Management and Tourism, Prague, Czech Republic, 30–31 October 2014.
- 46. European Commission (COM). Renewable Energy: Progressing towards the 2020 Target, Communication from the European Commission (31); European Commission: Brussels, Belgium, 2011.
- 47. European Centre for the Development of Vocational Training (Cedefop). *Skills for Green Jobs, European Synthesis Report*; Publications Office of the European Union: Luxembourg, 2010.
- 48. International Labour Office (ILO). *Towards a Greener Economy: The Social Dimensions*; Social Affairs and Inclusion and the International Institute for Labour Studies of the International Labour Organisation: Geneva, Switzerland, 2011.
- 49. European Commission. Inteligent Enegy Europe Mag no 12/2012- Skills for Tomorrow's Green Economy. Available online: http://ec.europa.eu/energy/intelligent/files/library/mag/iee-mag-5\_en.pdf (accessed on 1 January 2014).
- 50. Gracey, K.; Davidson, M. Green Jobs for Youth, 2011. Available online: http://switchboard.nrdc.org/blogs/mdavidson/YouthGreenJobs%20-%20Gracey,%20Davidson.pdf (accessed on 5 November 2014).
- 51. European Commission. Green Employment Initiative: Tapping into the Job Creation Potential of the Green Economy, Brussels, 2014. Available online: http://ec.europa.eu/transparency/regdoc/rep/1/2014/EN/1-2014-446-EN-F1-1.Pdf (accessed on 10 November 2014).
- 52. Von Misses, L. *Human Action: A Treatise on Economics*; Ludwig von Misses Institute Romania: Auburn, AL, USA, 2014; pp. 44–46.
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