

## Transitional Labor Markets – New Policy Approaches in Knowledge Economy: Insight for the Romanian Case

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**Abstract.** Knowledge economy generates public debates regarding Europe's new paradigm "Social Investment". This paradigm is centered on the individual and focused on improving employability, which indicates the restoring of a long-term perspective. In the context of the globalized economy and technological progress is manifesting the spatial labor market segmentation & specialization at the same time with increasing demand for flexibility. Before 2008 flexicurity was the main labor market policy paradigm, the key of the success in the new global economy, it was revised after the crisis, the institutional complementarities between flexibility and security being fragile, and needing to be adapted to new challenges. After the crisis the dualization of the labor market increases, the job duration is decreasing and the inter job periods increases in frequency and duration. The paradigm of Transitional Labor Markets (TLM), proposed by Schmid, is a conceptual system emphasizing labor market transitions during the lifetime. Integration and adaption are the new topics for the labor market policy reform TLM approaches and it is considered as the dynamic adaptation policy of labor markets to the globalized world. The purpose of our work is to point the recent theories progress in labor market conceptualization and, on this new labor market background to make a TLM profile for the Romanian case. The TLM methodology is the analysis of time changes of the job tenure and unemployment duration described by OECD aggregate indicators, by age and gender. Finally, it is made a diagnostic regarding Romania's presence of TLM and its associated policy specific profile characteristics under the background of knowledge economy expression.

**Keywords:** Knowledge economy; transitional labor markets; shock; adaptation; employability; job tenure.

### Introduction

The development of information and communication technology began in the 1970s but has undergone a radical transformation since the 1990s with the introduction of the Internet. With the advent of the Internet, computer-processed and managed content has been shifted from data/information to knowledge. If data management was focused on data processing, information management turned to support the management and management of information within an organization in order to make optimal decisions, and the main processed and managed the content of computers moved from data to information. So, the information can be transformed into organizational and/or personal knowledge that brings value and benefits to everyone... Thus, knowledge management becomes an important part of the informational era. "(UNPAN, 2008, p.2)

ADB (2007) defines Knowledge as “the ability to act effectively. Druker (1989) states knowledge as “the information that changes something or someone - either by becoming a basis for action or by making a person (or an institution) able to act differently or more effectively”. In this context, if knowledge is the information allows “knowing how” or “what works” in a certain context, information is generally “know what” or “what is” (ADB, 2007, p.3; Ruiz & all, 2014).

Davenport, (1994): “Knowledge Management (KM) is the process of capturing, distributing, and effectively using knowledge.” These stage processes are identifiable in the organization’s KM models (KMM), focused to create value. Nonaka and Takeuchi’s SECI Model (1990) of socialization, externalization, combination, and internalization stages shape the spiral knowledge creation is the first KMM. Dalkir (2011) points that KMM shapes KM cycles, notifying as major models: the Wiig’s KMM (1993) where knowledge is built and used by individuals and organizations; Mayer and Zack KMM (1996) looks each KM stage networked; Bukovitz and Williams Model (2000) outlines „how organizations generate, maintain and expand strategically correct stock of knowledge to create value” and the McElroy (2003) focused on complexity, learning, and sustainable innovation. Koenig (2018) states that KM evolves from information technology to HR and corporate culture to the actual stage of Taxonomy and Content Management, consisting of now “data analytics” and “machine learning” for “enterprise search”.

The Knowledge-Based Development Model (ADB) (Table 1) includes the development of human capital (education) of structural capital (innovation) and networks linking all stakeholders (networking) in all dimensions of human activity: economic, social and the environment (the natural environment).

**Table 1.** *An economic model based on knowledge*

	<b>Economic</b>	<b>Social</b>	<b>Natural</b>
<b>Education</b> - human capital development	<b>Education</b> for a competent workforce	<b>Education</b> for human development	<b>Education</b> for Sustainable Development
<b>Innovation</b> - the development of structural capital	Systemic processes and technological innovation	New institutions and protocols for peace, equity, and human rights	Environmental technologies - ex technologies for the production of renewable energy
<b>Networking</b> - Stakeholder Development Financial	Physical Networks: ICT Infrastructure Social	Networks, Social Trust and Cultural Integrity	Agreements/protocols to support and protect life-saving systems on a planetary scale.

Source: ADB, 2007 and Talisayon, 2007

This model has four dimensions called the pillars of the knowledge-based economy:

1. Education and skilled labor have expanded the institutional space of education and the organizational workplace training at the diaspora migration space:
  - Diaspora/migration of competent workers. Kuznetsov and Sabel (2006) refer to „diaspora networks” or “expatriate networks”, as “the locus of concerted action by expatriates to promote collective interests or to help to get involved in their countries of origin.”
2. National Innovation Systems: Science and Technology, Research and Development
3. Networks (construction, operation) - including ICT infrastructure and social networks
4. Establishment of policy and regulatory environments:
  - Policy: legislation, organization / reorganization and regulation
  - Planning: formulation of the vision, strategy, and roadmap
  - Infrastructure and programs: Establishing and implementing physical, institutional and social measures, including pilot projects in the three areas of human resource development, ICT infrastructure/institutions, and the development of science and technology or innovation.

Consequently, on the background of this model, the labor market role and functioning are changed. Saha and Rowley (2015) point as the knowledge economy value the efficiency, fact that changes the role of human resources. Lubis, Yani Nasution, and Safii (2018) found that the labor market flexible functioning is one crucial factor in the knowledge economy. Several studies (Giddens, 1995; Schlossberg, 1995; Schmid & Schomann, 1994a; Solow, 1990) point that flexible functioning is announced since the begging of the nineties under the concept of transitional societies and its transitional labor markets.

Laan (1999) remarks that the knowledge economy generates fundamentals of the labor market, manifested in an evolutionary process based on “information economy and heterogenization of labor supply”. Hope

and Martelli (2017) provides evidence that labor market institutions in “knowledge economy alleviate the upward pressure on income inequality arising from the continued shift of workers in advanced democracies into high-value-added, ICT intensive, service sectors”. Warhurst (2008) outlines the role of family and trade unions in a broader range of skills formation demanded by the knowledge economy, to counterbalance the oversupply graduates resulted from education policy only.

### **Transitional Labor Markets (TLM) - increased incidence in the knowledge/innovation economy**

The persistence of long-term unemployment, the growth of discouraged people, and the persistence of youth unemployment rates 2 times or even 3 times higher than for the working-age population indicates the persistence of structural unemployment. Exclusion from the labor market exposes people affected by this state to political non-participation and even indicates a high degree of social behavior (including increased violence and crime). At the same time, in the context of imposing an intelligent economy, by consistently producing innovation, the rate of destruction and job creation increases, often with the accumulation of structural unemployment. Naturally, the frequency and importance of “non - contractual” periods for active people increases, and periods corresponding to labor market transitions. This radical transformation requires an extension of labor market policies in the sense of preventing and covering transient periods with social protection mechanisms appropriate to new conditions, including the re-conceptualization of unemployment.

Schmid (1998) considers that “transitions of labor markets are part of the solution to support economic growth based on technological innovation and in the context of new services and products markets”. In the context of the knowledge economy, the labor market acts as a supporting and manifesting factor by increasing the flexibility of this market. New full employment has as reference the achievement of average working time of 30h / week in a life cycle, both for women and men.

In this context, we aim to respond to the research questions:

What are the new theoretical tendencies of the TLM concept lately?

What is the diagnostic of the presence of TLM in Romania? and

What is Romania’s TLM policy specific profile characteristics under the background of knowledge economy manifestation?

### **Literature review – labor market aspects in a global knowledge economy**

Before 2008 flexicurity was the main labor market policy paradigm, the key to the success in the new global economy. Bredgaard and Madsen (2018) revised the flexicurity concept after the crises, while the institutional complementarities between flexibility and security are fragile, and need to adapt to new challenges. Schmidt (2009) shows that TLM is a conceptual system emphasizing labor market transitions during a lifetime. Integration and adaption are the new topics for the labor market policy reform Schmid and Gazier (2002) under the TLM approaches. Gazier and Gautié (2009) found that TLM comes from “diverse theories of the labor market and of organizations, and are integrated into a systemic perspective”, with the European labor markets, collective and structured version of the “social investment” paradigm. Brzinsky-Fay (2010) improves the concept in theoretical and methodological terms. Gazier (2010) expands the flexicurity at a global scale and find the transitional labor markets as the dynamic adaptation policy of labor markets to the globalized world. Schmid (2017) enriches the TLM with “transitions from one employment status to the other, including combinations of work and education or work and unpaid care”, from a dynamic perspective. Gazier (2010a) announces that Europe is exploring a new paradigm “Social Investment”, centered on individual and focused on improving employability, the fact that indicates the restoring of a long-term perspective. In this context, the TLM policies go beyond the flexicurity policies.

The presence of shocks shifts expands and diversifies the segmentation of the labor market. Fischer & Njikamp (1987) call spatial labor markets the spatial concentration and accumulation of problem groups in the labor market, shaping spatial patterns of labor market segmentation. Morrison (1990) argues that segmentation theory and the operation of local labor markets request rigor in the conceptual distinction between ‘local’, ‘regional’ and ‘spatial’, especially in the large context of “spatial division of labor”. Raagma (2003) apply the Centre – Periphery theory explaining the regional development of the informational and transitional society. The emergence of the extremely flexible and transitional forms of work identity was shown by (Huws, 2006, p.141). The labor force supply is still embedded in national frameworks but the

effect of globalization is increasing. So is announced a new worker category" highly mobile and pro-active employees, with flexible and transitional forms of work identity, able to anticipate and internalize the requirements for continuous adjustment and changes at work. New career plans and professional development paths are developed, highly individualized", often "combining the desired mix of technical and hybrid social skills(Huws, 2006, p.141).

From the theoretical point of view, TLM is still in development, linking segments on the labor market, not in terms of skills but also in terms of spatial allocation (short term skills allocation). Schmid's (1998) TLM cases of the transitions of the individual (with or without family), under our opinion, need to be enlarged and revisited under the diverse cultural models in a globalized world, like posted workers, mobile workers, migrant workers cases, adult learning mobility, experience change, etc.

If TLM is a mark of the knowledge economy, their presence demands the flexicurity of smart support provided by appropriate security solutions. The TLM conceptual richness opens a large spectrum for research topics in the field. Under TLM theory, based on the TLM criteria of working time less than 30 hours/week we make a basic profile for Romania. For this purpose, we make an analysis for the last decade of the changes *in the job tenure and unemployment duration described by OECD aggregate indicators, by age and gender*.

Finally, it is made a diagnostic regarding Romania's presence of TLM and its associated policy specific profile characteristics under the background of knowledge economy expression.

### **Definitions and conceptual elements of TLM**

Schmid (1998) proposes a new approach to the EU Employment Strategy from the perspective of the TLM. By analogy with the theory of life transitions in psychology, "transition labor markets" can also be considered as institutional responses to critical events in labor markets. Transitional theories of psychology following the life event framework state that change induced by unexpected events is inevitable.

TLM "are defined as institutionalized arrangements that allow or support the change of employment status or the combination of work in the labor market with other socially useful activities (and, to a certain extent, even from an economic point of view (Schmid, 1998, p.5) The important elements of such a strategy are combining the reduction of working time with lifelong learning, the use of explicit wage subsidies for low-income groups or hard-to-reach persons, and the right to a legal transition job, or an contractual one.

The conceptual elements of the transition labor markets after (Schmid, 1998, p.6) are:

Labor markets are always exposed to shocks to which workers and / or employers need to adapt. The prevalence of internal risks (produced by the individual) against external risks as a result of human intervention in social and in-kind life is noted by Giddens (1995, p.4). Shocks coming from internal sources are positive or negative demographic events, major health problems, family breaks or the need to follow a partner in another region and therefore change the employer and the place for work. Shocks from external sources are rapid changes in actual demand or technological change.

Numerous authors (Schmid & Schomann, 1994; Solow, 1990) emphasize that labor markets are institutions and not commodity markets. The ability to adjust to internal and external shocks is limited. The classic mechanism of labor market adjustment is salary. Salary has adjustment limits imposed by social status and human dignity. The more the shock is, the longer the adaptation period and the need for adjustment is greater - a situation described by the transition labor markets. New "hinterland" / peri-urban social buffers for transitional employment are required to be built, replacing previous farm or large family models.

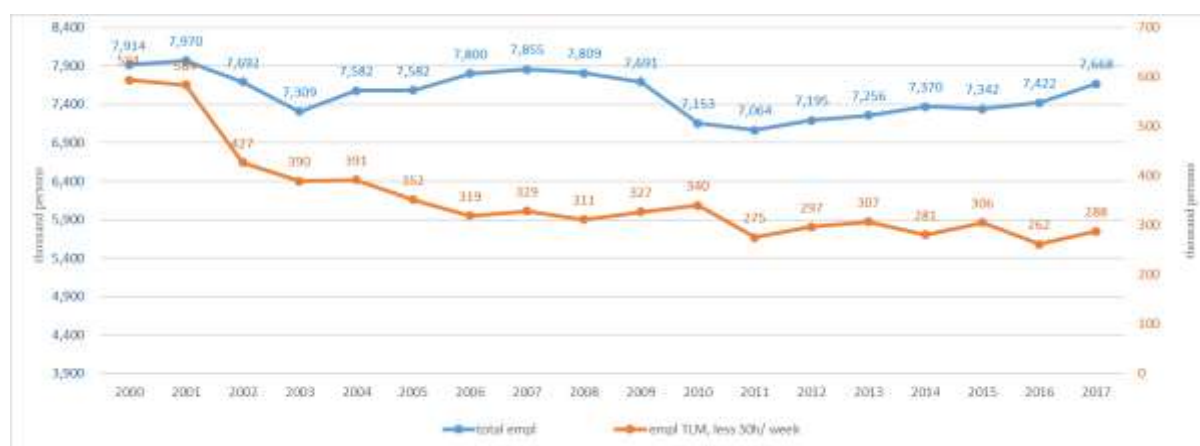
Critical transitions are episodic or accidental disasters that occur in human life. They have consequences in the perception of the individual on himself and the surrounding world. Several studies (Hartenstein & Waugh, 1994; Schlossberg, 1995) consider the loss of work a critical event. The critical aspect is given by the high degree of uncertainty in the context of the non-functioning of the traditional mechanisms, manifested by a major risk of social exclusion.

## Data and methodology

We browse the available macro aggregated databases available for the almost last two decades with data for Romania and we match them the basic concepts. The result of this activity is reflected by the set of the TLM core indicators, including the: Working hours profile, Job tenure, Unemployment duration, and involuntary part-time working incidence, all provided by OECD.stat. Data are broken down by professional status (employees or dependent employment / total employment), sex (men, women, total) and standardized age groups (15-24, 25-54, 55+, total). Supplementary, we add the job tenure by occupation provided by Eurostat.

### Working hours profile

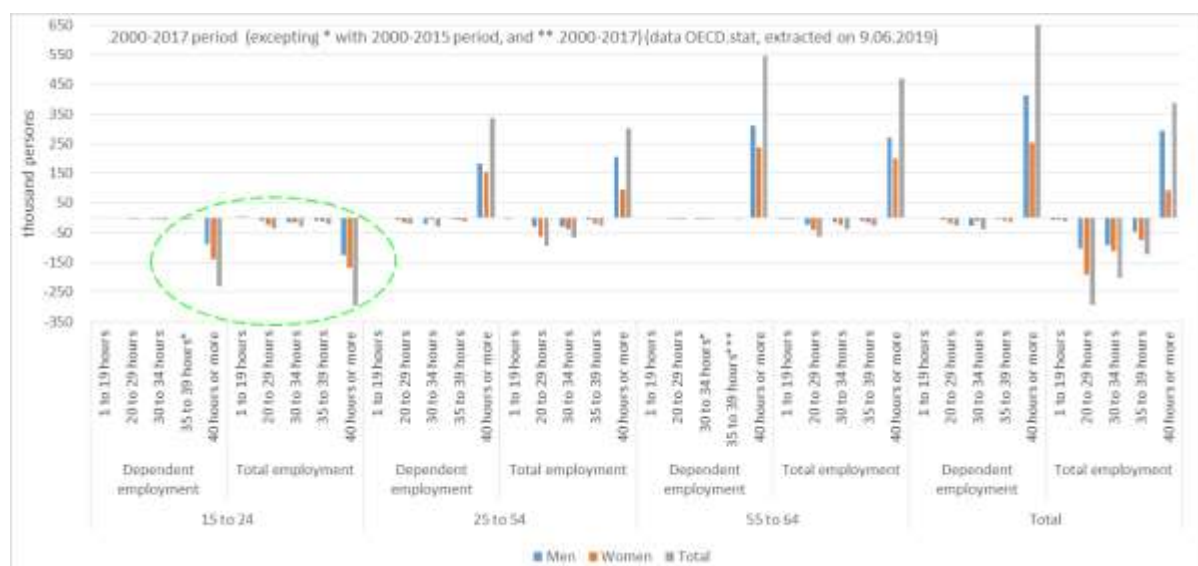
During the 2000-2017 period, total employment decreases with 246 thousand at 7668 thousand persons in 2017 (Figure 1). The number of persons working less than 30h/week – TLM employment was 288 thousand in 2017, lower with 306 thousand persons from 594 thousand in 2000. The share of TLM in total employment decreased during the 2000-2017 period decreased from 7.5% to 3.8% in 2017. The independent TLM employment represents 87.7% from total TLM in 2017, lower with 2pp than the level from 2000.



**Figure 1.** The number of employed persons and the number of employed persons working less than 30 hours/week during the 2000-2017 period

Source: Authors representation, Data OECD.stat, Dataset: Usual hours worked by weekly hour bands extracted on 9.06.2019

Figure 2 is visible the highest negative changes in the number of employment by age groups, gender, and type of employment. The number of Youth (15-24 years old) independent employment having their average working time 40 hours and more was 296 thousand in 2017, decreasing with 229.6 thousand comparing to 2000 level. The structure by gender was 44.7% women in 2017, less with 7pp than the level in 2000. The number of adults (25-54 years old) in employment having their average working time in the hourly band of 20-29 hours was 109 thousand in 2017, decreasing with 93.4 thousand, from which 2/3 was for women. The share of women decreases from 63.8% in 2000 to 60.4% in 2017. The last evident decrease is recorded for the number of old workers (55+ years old) in employment having their average working time in the hourly band of 20-29 hours. In 2017 were 42 thousand, less with 63 thousand than in 2000. Women's share was 58.9% in 2017, less with 3.1pp than in 2000.

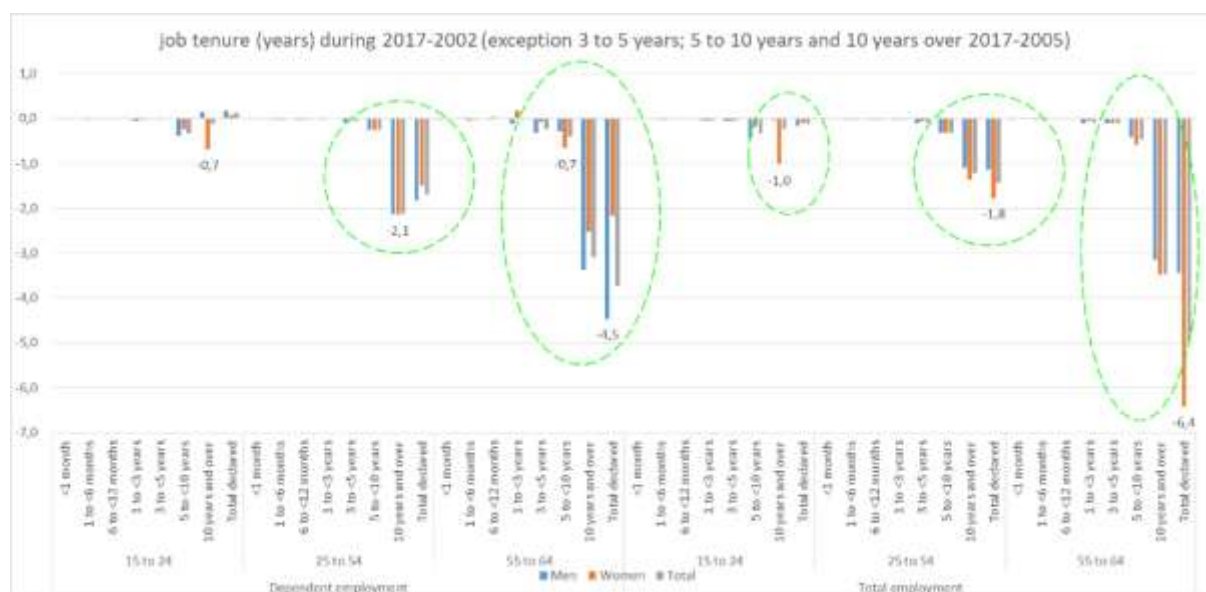


**Figure 2.** The changes in the number of employed persons by type of employment, age and usual hours worked by the by weekly hour bands during 2000-2017 period (excepting \* with 2000-2015 period, and \*\* 2000-2017)  
Source: Authors representation, Data OECD.stat, extracted on 9.06.2019

### Job tenure profile

OECD.stat Metadata defines Job tenure as the “measured by the length of time workers have been in their current or main job or with their current employer and are expressed in numbers of years.”

Figure 3 is visible the shrinking of the job tenure of 10 years and more for a person aged 25+ years. In 2017 the average job tenure was 16 years for persons aged 25-54 years old, lower with 2.1 years than in 2002, with no difference by gender. This tendency is accentuated for the persons aged 55+ years old, job tenure decreasing with 3.1 years from 24 years in 2002 to 20.9 years in 2017. The job tenure is shrinking more for men with 3.4 years than for women with 2.5 years, while the job tenure was 24.1years for men and 23.6 years for women in 2002, gender gap reducing sharply by 0.4pp in 2017.



**Figure 3.** Romania's changes in the employment by job tenure intervals (number of persons)- average tenure during 2002-2017 (and for interval over 5 years 2005-2017 period) Source: Authors representation, OECD.stat, LFS



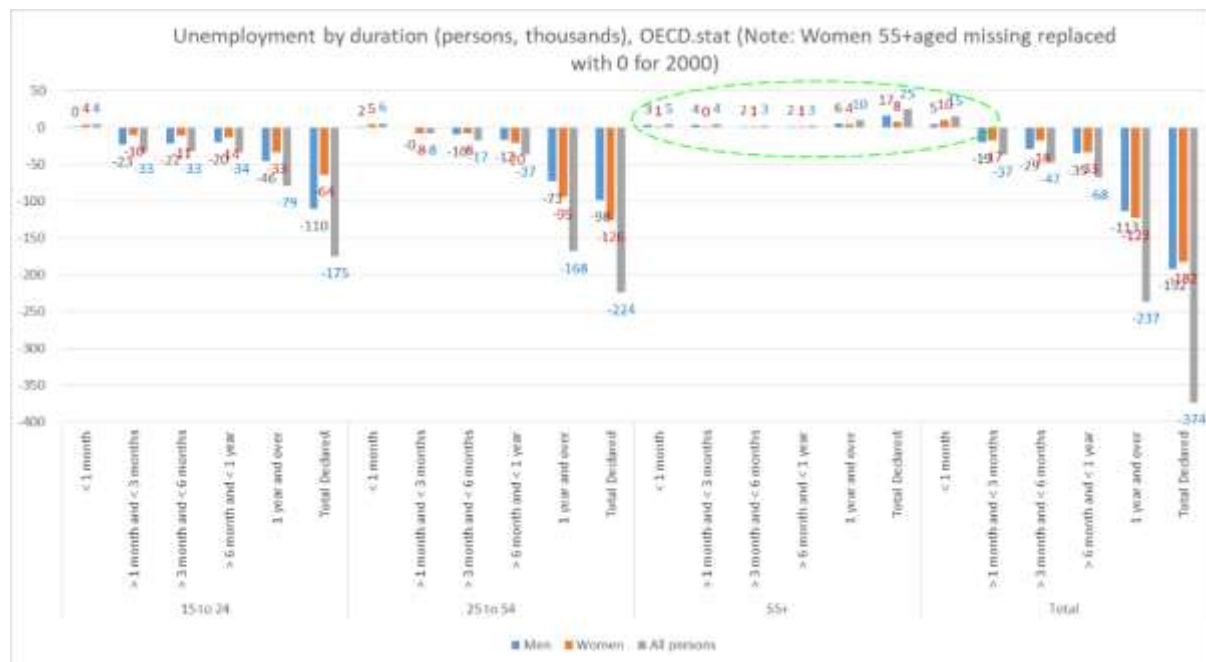
**Figure 4.** Changes in the shares of job tenure by sex, and occupation for employed persons aged 25+years old during 2008-2017 period (pp)

Source: Authors representation, Data extracted on 17 March 2019 from EUROSTAT, Job tenure by sex, age, professional status and occupation [lfsa\_qoe\_4a2]

### Unemployment duration profile

Unemployment by duration “data come from national Labor Force Surveys and are based on ongoing (incomplete) duration spells. Unemployment by duration (persons, thousands) during 2000-2017 is presented in Figure 5. In general, the unemployment duration decreases for youth (15-24 years old) and adult persons (25-54 years old). For these cases, even if the unemployment spell increases, it decreases the number of unemployed people (i.e. the unemployed males aged 15-24 years decreases with 110 thousand in 2017 compared to 2000). For unemployed persons aged 55+ years old is visible the reverse tendency, a tendency of long term accumulation – i.e. For 1 year and over the duration of unemployment is increasing in the number of unemployed with 6 thousand males and with 4 thousand men. The active measures are effective for youth and adults and less efficient for aged workers.



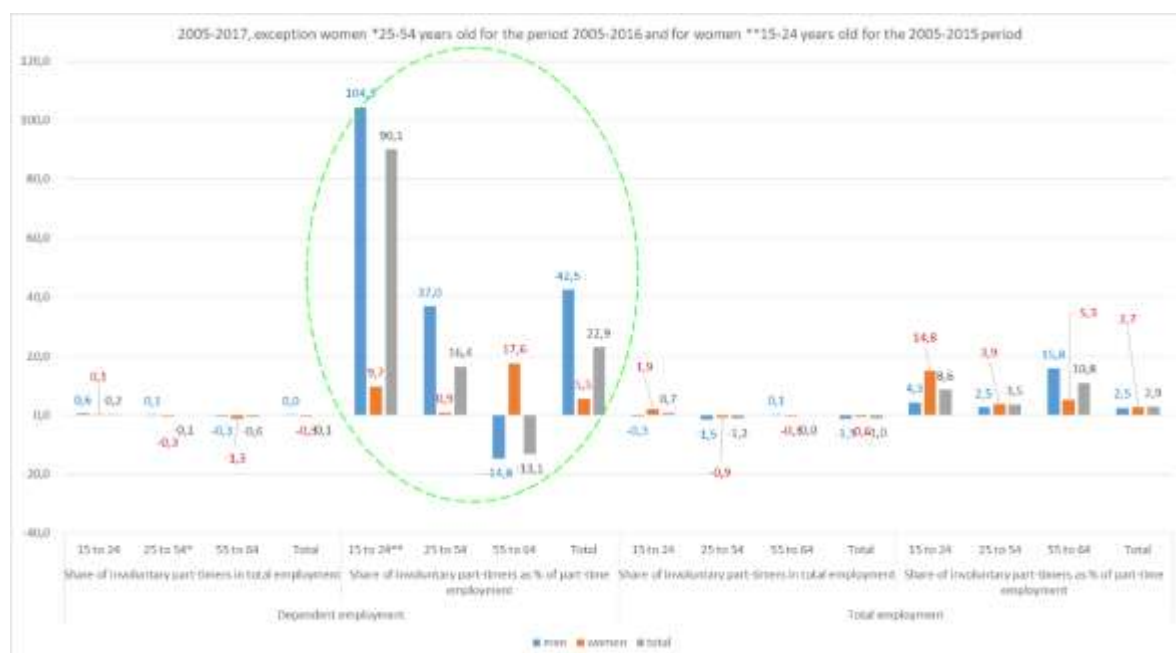


**Figure 5.** Unemployment by duration (persons, thousands) during 2000-2017 period, OECD.stat (Note: Women 55+aged missing's are replaced with 0 for the year 2000)

Source: Authors representation, Data extracted on 08 Jun 2019 20:28 UTC (GMT) from OECD.Stat, LFS

### Involuntary part-time working incidence profile

Involuntary part-time workers represent according to OECD Stat /LFS definitions: "Persons who declared to work part-time because they could not find a full-time job". A part-time worker is "an employed person whose normal hours of work are less than those of comparable full-time workers" (International Labor Conference, 81st session, 1994). The incidence of involuntary part-time workers during 2005-2017 is presented in Figure 6. Share of involuntary part-timers as a percent of part-time employment is 104.3% for males aged 15-24 years and is 37% for males aged 25-54 years, in 2017 compared to 2005! For women, this share is changing with 9.7% for youth (15-24 years old) and with 17.6% for adults (for 55-64 years old).



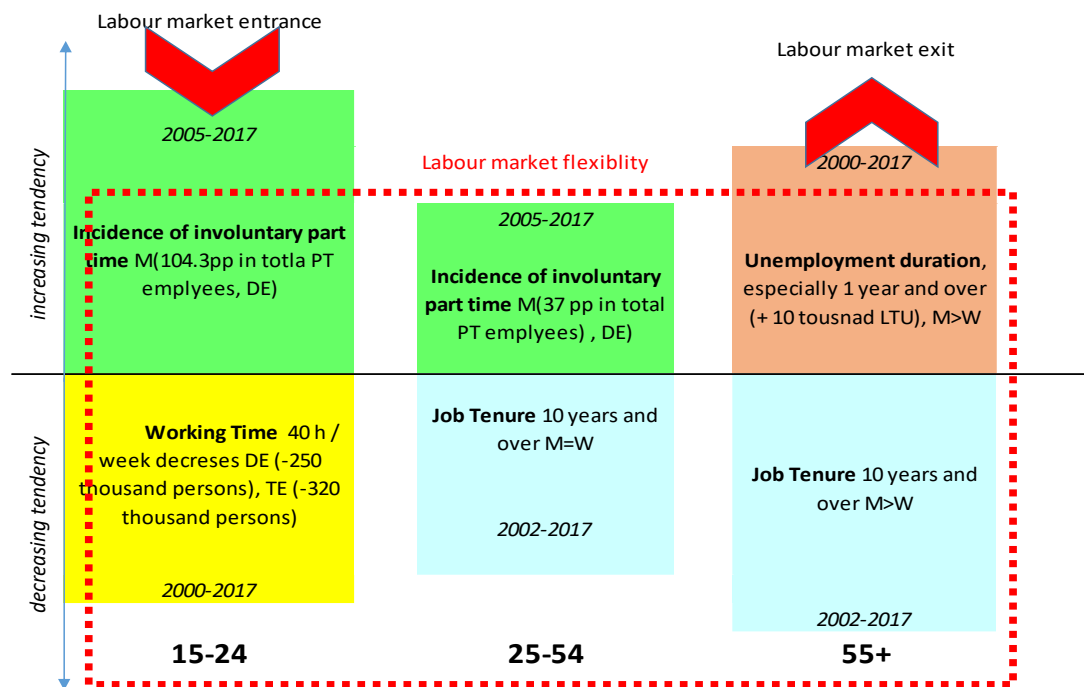
**Figure 6.** Incidence of involuntary part-time workers during 2005-2017 period

Source: Authors representation, Data extracted on 08 Jun 2019 20:28 UTC (GMT) from OECD.Stat, LFS



## Results and discussions

Romanian labor market presents the characteristic of halving the TLM employment and its share in the approximately last 20 years. This result could indicate a low presence of the knowledge economy. We gather the Romanian's TLM main indicators in a dashboard of tendencies visible in Figure 7 to sketch a diagnostic.



**Figure 7.** Romanian's TLM main indicators tendencies in the last (approximately) two decades

Source: Authors' representation based on the result shown in figures 1 to 6

Usually, the average working time 40 hours and more indicates the presence of open-ended working contracts. These indicators suggest some improvements of labor market flexibility like decreasing the full-time employment working program for the youth (15-24 years), decreasing the job tenure for adult workers and decreasing more job tenure for aged workers. These tendencies could increase flexibility in the case of increasing the reallocation inside sectors and between economic sectors. But, unemployment duration tendency to accumulation in long term unemployment for aged workers suggest the exit tendency of these workers from the labor market.

The presence of a huge increasing tendency for the incidence of involuntary part-time working, especially for youth males, points to a compromise solution against the searching tendency normal for the youth. Even if the unemployment duration is diminishing for the youth, access to the full-time programs is hindered and the alternative of the involuntary part-time program indicates the emergence of TLM exposed to a risk of vulnerable employment. In this model, the entrance on the labor market is made in jobs with short spells, with high frequency and high probabilities to experience with higher frequency intervals of the in-between jobs. This TLM regime, especially for the youth exposed them to the risk of hindering access to unemployment - becoming more and more difficult to acquire the contribution period and also the legibility period in between no working periods.

The adult case (25-54 years old) show also the presence of a TLM full-time job/part-time job but involuntary, indicating the difficulty to find a full-time job. The exit from a full-time job with a diminished tenure could be followed by an entrance in an involuntary part-time job. The problem is here, like in the case of the youths the danger to be trapped in vulnerability cycles, respectively the difficulty to overcome the labor market segmentation.

## Conclusions

The new theoretical tendencies of TLM concepts request special attention to the perspective of knowledge economy emergence. From the theoretical point of view, TLM is still in development, linking segments on the labor market, not in terms of skills but also in terms of spatial allocation (short term skills allocation). The Schmid's (1998) TLM cases the transitions of the individual (with or without family), under our opinion need to be enlarged and considered the diverse cultural models in a globalized world, like posted workers, mobile workers, migrant workers cases, adult learning mobility, experience change, etc.

The universe and complexity of the TLM approach start from some basic indicators: Working hour's profile, Job tenure, Unemployment duration, and Involuntary part-time working incidence. The list is open and for sure will be improved.

The diagnostic of the presence of TLM in Romania - Analysis for the last decade of the changes in the job tenure and unemployment duration described by OECD aggregate indicators, by age and gender indicate a decreasing of the efficiency of the labor market functioning. Following the crises, the segmentation of the Romanian labor market increases: youth are hindered to make the transition to the primary jobs, in the sense of (Reich, M., Gordon, D., & Edwards, R., 1973, p.360). On the other side, there are premature exits from the labor market.

Romania's TLM policy specific profile characteristics under the background of knowledge economy expression are given by a low incidence of TLM employment under the strict definition (Schmidt, 1998, p.5), more for independent employment. Some supplementary aspect is the increasing incidence of involuntary part-time employment for youth and adult males. This phenomenon requests further attention to avoid the substitution effect of unemployment, especially on the risk to enter vulnerability circles. Another worrying situation coupled with diminishing job tenure is an unemployment trap for aged workers. In all states, the skills improvement and innovation do not stay, new policy approaches in knowledge economy demand improved TLMs, better tailored to specific characteristics of the recipient.



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