THE RELATIONSHIP BETWEEN EMPLOYMENT, ECONOMIC GROWTH AND LABOR MARKET SCENARIO WITH RESPECT TO VISEGRAD COUNTRIES

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Abstract

This study is about analyzing labor markets and determinants of employment growth in Visegrad countries. The purpose of this study is to provide an overview of those aspects of economic growth with respect to labor market that are important for interpreting data on the trade strategies-employment relationship and to indicate how Visegrad countries covered in the project have fared with respect to growth of employment or reduce rate of unemployment, indirectly concerns with labor force and its market demand.

Another aim of the paper is to identify V4 labor market developments and to examine the impact of the economic development on them. The emphasis is being placed on the development of the selected specific unemployment issues youth and long-term unemployment as well as this allows us to identify several determinants which mitigate the effects of economic growth on employment.

Keywords: employment, labor, economy, growth, Visegrad

JEL classification: J0, J6, O1

1 Introduction

On 1 May 2004, the Czech Republic, Hungary, Poland and Slovakia and further six states joined the European Union. The Visegrad Cooperation is the regional
organization of the four countries's known as the Visegrad Group or the Visegrad Four (The Czech Republic, Poland, Hungary and Slovakia). As from the beginning the growth potential of all Visegrad countries is unquestionable. though, the global economic crisis strike doors of V4 countries labor markets considerably, but another way. The purpose of this study is to discover V4 labor market developments and to study the brunt of the economic development on them. The importance is being sited on the development of the preferred definite unemployment problem and long-term unemployment situation.

The Visegrad Four or also V4 demonstrate numerous general factors partially due to their common history and their location, and in some extent due to their various similar social characteristics. Today, they are coupled by their joint accession to the European Union (Nyikos, 2003).

In current years, the jobless growth trend attracts much attention both in the media and the academic literature. Authors using the employment elasticity term studied a broad cross-section of countries around the world to explain why such a experience occurred in economies during the last decade. Kapsos (2005) expected that worldwide world employment elasticity is approximately 0.3, with considerable differences from province to province. These results imply that the amount of the reply of employment to transform in economic growth is around 30%. With the help of sample of 10 major states in the US, Döpke (2001) expected the employment power of economic growth to be 0.5.

The purpose of V4 country’s cooperation is the united depiction of economic, diplomatic and political interests of these Central and Eastern European countries and the synchronization of their potential measures. The countries of the collaboration sustain good relationship with the nearby countries, which, as per to Balázs (1996), has a positive outcome on the procedure of the European incorporation. Relationship of the V4 countries shows a result of political debates in the 90s, but their agreement to the European Union initiate a new phase in the life of the four countries. According to Kégler (2003), Visegrad Cooperation characterizes an essential political incorporation within the European Union, whose members are concurrently partners and competitor in all sector of the economy. The main purpose of this group is to give most favorable assistance in all countries, specially their neighboring countries, for the reason that its most important concern is to accomplish democratic development in definite parts of Europe.

In this study, researchers try to find out determinants of employment growth in V4 countries. Although a standard approach relies on the parametric opinion of labor elasticity coefficients, we utilize a new move toward structural decomposition analysis. We crumble the general change in employment into the involvement of certain factors: changes in labor efficiency, changes in the import
of intermediary products. Here demonstrate that generally accepted persuade of labor efficiency growth on employment, further aspects such as structural changes and changes in final demand played an essential function in employment changes. These outcome lean-tos some light on less labor suppleness in V4 countries and go beyond the simple labor efficiency growth disagreement.

In spite of the evident importance of the topic, there are a imperfect number of research papers dealing with impacts of EU accession on the VC agriculture. Consequently, the aim of this study is to evaluate the status of the sector in the light of the latest available data as well as to identify the factors lying behind different country performances in the four Member States concerned.

1.1 Relationship between employment and economic growth

Relationship between economic growth and employment shows the aggregate production function. In other words, how much output produced for a given quantities of capital and labour. For example, we assume that aggregate production Y is using to inputs capital (K) and labour (L). It shows below equation. (But it is simple model)

\[ Y_t = A_t K_t^\alpha L_t^\beta \]

where:
- \( Y_t \) – Gross domestic production
- \( A_t \) – Factor of productivity
- \( K_t^\alpha \) – Quantity of capital
- \( L_t^\beta \) – Quantity of labor

Furthermore, Okun’s law shows the relationship between employment and economic growth. Okun’s law stated that on supply side for every one percentage point of the actual unemployment rate exceeds the natural rate of unemployment; real gross domestic product is reduced by 2.5%. Hence, economic growth is increasing depends on employment growth.

Before 1990, Visegrad group countries were based mostly extensive growth, the transformation of our economies led to a more intensive use of labor force. Later, in 2001-2006, labor productivity growth in the V4 countries was faster than the average of the EU-15 (P. Bielik, M. Rajčániová, 2008).

P. Bielik, M. Rajčániová, (2008) that paper study in employment growth in V4 country by shift-share analysis. Shift-share analysis enables the decomposition of employment growth into sectoral-mix effect, competitive effect and residual effect. The result, in Slovakia, the unemployment rate was relatively high which has barrier for economic growth. In Czech, labor market was most efficiency and in Hungary’s unemployment rate was from 6 to 8 percent. The most complicated
situation was observed in the labor market of Poland, where the employment rate has had a decreasing tendency since 1998 until 2004. In sector, the agricultural sector's employment decreased in all country. Especially, the most decrease was in Slovakia.

Katalin Lipták, (2010) studied analysis of employment situation in V4 countries who analyze employment policy, unemployment and about the economic situation. In this study, using the data between 1998 and 2009, showed the government deficit as a percentage of GDP, GDP per capita in percentage of the EU-25 and labor market which is employment rate, unemployment rate for V4 countries. Especially, unemployment rate was highest in Slovakia and Poland between 2000 and 2005. In Hungary, Czech Republic countries unemployment rate was fluctuated between 5 percent and 7 percent. These countries economic situation and employment growth were improved accession in EU from 2004. And, these countries economic and labour market situation was very different.

William Seyfried(2003)in this study, he examined relationship between employment and economic growth in the ten largest countries. He used the employment intensity of economic growth model developed by Boltho and Glynn (1995). In this study result, the elasticity of employment with respect to real GDP was estimated to be 0.47 using a pooled regression while ranging from 0.31 to 0.61. His result is similar to those found by Padalino and Vivarelli(1997). Results showed that though economic growth has effect on employment, the effects continue for a few quarters. In other words, economic growth has a positive impact on employment growth.

2 Research Methodology

The methodological approach is mainly descriptive; the analysis will be based on relevant statistical data from different research articles, reports and policy papers and comparative analysis of statistical data from national and international databases, in these research researchers choose Eurostat database till year 2013 due to availability of exact relevant numbers which was required for analysis of research.

If we will compare current situation i.e. 2017 with compare to 2013 there is not much difference with numbers which express today’s situation of economic growth with reference to labor market scenario of V4 countries.
3 Result and discussion

3.1 Economic growth in the V4 countries

Looking towards the previous data the pre-crisis economic growth accomplish around Visegrad countries come into sight to be sustainable and look like to make enough room for immediate catching-up with the economic intensity of the old member states (Fifeková, 2013). Both the prospect of utilizing the EU financial resources and the pledge to meet the union criteria encourage dynamic pro-growth impulses. As per outlook of investors the countries were consider to be safe as required for accomplishment of the convergence criteria formed fundamentals for good return on investment (Sass and Fifekova, 2011). On the same time the development of the situation for mobility of production features made scope for better assets flows into the region. The long-standing economic development rate athwart the V4 countries in 1995 -2015 was 1.7 % points greater than the EU15 associated states (Table 1), which outcomes essentially from the above-average real GDP growth rate in Poland and Slovakia. These finding point out dissimilarity between the V4 and old member states become principally visible in the pre-crisis phase after the V4 countries’ expansion vitality increased, particularly instantly after their EU accession.

Table 1 Long-run economic growth (in % based)

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>EU 27</td>
<td>1.55</td>
<td>2.2</td>
<td>0.67</td>
</tr>
<tr>
<td>EU15</td>
<td>1.45</td>
<td>2.1</td>
<td>0.61</td>
</tr>
<tr>
<td>V4</td>
<td>3.16</td>
<td>3.84</td>
<td>1.64</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>2.25</td>
<td>3.23</td>
<td>0.46</td>
</tr>
<tr>
<td>Hungary</td>
<td>1.85</td>
<td>2.88</td>
<td>0.41</td>
</tr>
<tr>
<td>Poland</td>
<td>3.89</td>
<td>4.32</td>
<td>2.38</td>
</tr>
<tr>
<td>Slovakia</td>
<td>3.71</td>
<td>4.7</td>
<td>2.02</td>
</tr>
</tbody>
</table>

Source: Eurostat.

From the time after EU accession in 2004 could be alienated into two periods, before and after crisis. The financial catastrophe has affect V4 economies in various ways, but it can be fulfilled that the familiar effects of the financial crisis were (Sobják 2013)

- Prickly decline level of GDP,
- drop off in exports due to less market demand in EU market,
Manufacturing production and the construction sector turn down,
Capital loss from the V4 region.

The considerable drop in GDP results momentous boost in unemployment rates transversely V4 countries. The nature of V4 economies is that they are open, small (except Poland) an extremely export-oriented, it means, their experience to negative trends in overall economy is pretty high. The economy of the Slovakia is most dynamic in the European Union. It is a small and open economy which means exports plays important role in GDP. Though the furthermost power can also be the key weak point. The duration 2004 to the beginning of the crisis, GDP enlargement was along with the highest in EU, also support by tough efficiency expansion. The drop down in GDP is awaken of the crisis was one of the utmost (OECD 2013). The phase after joining the European Union is distinguish by increasing economic growth, and their dynamics has important impact on the labor market in the route of a reduce in unemployment rate and generating further stable jobs. Nevertheless, in Slovakia stay put tough regional division of labor market, income discrimination within the state and the regions. In requisites of Slovakia there was a quick boost in GDP beginning of the crisis. The GDP escalation in 2007 pointed above 10%. Evaluating the other V4 countries which bring to a close that the decrease of GDP growth in Slovakia was huge, from 10.5% in 2007 to -4.9% in 2009. Represented Figure 1, revival was pretty fast. The strong increase in previous time crisis was determined by foremost export oriented FDI inflows,

The economy of Czech Republic is a constant, small and open economy, strongly incorporated with the European Union. The country is majorly as export economy with tough equipment and automotive industry, which is closely, associated with Germany whose major export partner. Prior to the economic crisis that arise in 2008, the Czech Republic practiced the greatest period of continuous increase yet (European Commission 2014a). There was a slow healing in 2010 and 2011. Though, in the upcoming year the Czech economy knock out back into the collapse. Evaluating the other V4 countries, the Czech Republic was the only V4 country with pessimistic GDP growth in 2013. The Czech economy has remained weak from long time than the majority of EU countries. The recovery started in the second half of 2013. The reasons could be seen in a lack of outside demand and because of serious actions taken by the government (OECD 2014b).

The expansion in the Hungarian economy is pretty different. The somber slowdown of the economy could be seen since the beginning of the year 2006. Concerning GDP growth is noticeable that the crisis has strike Hungary a bit previous than the other V4 countries. In April 2006, the Hungarian government implements a package of austerity measures in order to reduce the budget scarcity.
Further GDP decline (1.7%), Hungary gone through recession in 2013, with GDP growth of 1.1%. though, feeble investment, low employability of non skillful workers and non availability labor and product markets detained back growth potential. If we will compare current situation i.e. 2017 with compare to 2013 there is not much difference with numbers which express today’s situation of economic growth with reference to labor market scenario of V4 countries.

Figure 1 **GDP growth in V4 countries and EU-28 between 2004 and 2013 (in %)**

![GDP growth in V4 and EU-28 between 2004 and 2013](image)

*Source: Eurostat.*

*Note: GDP at market prices, percentage change over previous period.*

With comparison to all Visegrad countries, Poland is the only country who doesn’t count in negative GDP growth since joining the EU. The economic presentation has been remarkable since EU accession in 2004. The achievement of Poland in undertakes the crisis is rather notable. Various bases for positive expansion in GDP growth.
Table 2 Countries, 1995-2011 (average annual indices in %) decomposition Analysis of Employment Growth in V4 Countries, 1995-2013

<table>
<thead>
<tr>
<th></th>
<th>Employment growth index</th>
<th>Changes in labour productivity</th>
<th>Changes in import of intermediates</th>
<th>Changes in the structure of production</th>
<th>Changes in the industrial final demand structure</th>
<th>Changes in the final demand structure by sectors</th>
<th>Change in the final demand volume</th>
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<tbody>
<tr>
<td><strong>Czech Republic</strong></td>
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</tr>
<tr>
<td>1995–2002</td>
<td>99.56</td>
<td>96.24</td>
<td>99.19</td>
<td>100.87</td>
<td>99.42</td>
<td>99.73</td>
<td>104.28</td>
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<tr>
<td>2003–2008</td>
<td>100.97</td>
<td>95.94</td>
<td>99.47</td>
<td>100.23</td>
<td>99.37</td>
<td>99.14</td>
<td>107.15</td>
</tr>
<tr>
<td>1995–2008</td>
<td>100.02</td>
<td>96.1</td>
<td>99.32</td>
<td>100.57</td>
<td>99.4</td>
<td>99.46</td>
<td>105.59</td>
</tr>
<tr>
<td>2009–2011*</td>
<td>98.73</td>
<td>101.10</td>
<td>99.20</td>
<td>99.54</td>
<td>99.78</td>
<td>99.82</td>
<td>99.30</td>
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<tr>
<td><strong>Hungary</strong></td>
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<tr>
<td>1995–2002</td>
<td>100.69</td>
<td>97.32</td>
<td>98.65</td>
<td>90.78</td>
<td>98.65</td>
<td>98.97</td>
<td>107.67</td>
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<tr>
<td>2003–2008</td>
<td>99.57</td>
<td>96.92</td>
<td>99.36</td>
<td>100.16</td>
<td>99.44</td>
<td>98.79</td>
<td>105.07</td>
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<tr>
<td>1995–2008</td>
<td>99.79</td>
<td>97.15</td>
<td>98.95</td>
<td>99.94</td>
<td>98.99</td>
<td>98.89</td>
<td>106.54</td>
</tr>
<tr>
<td>2009–2011*</td>
<td>99.62</td>
<td>103.18</td>
<td>99.92</td>
<td>100.07</td>
<td>100.19</td>
<td>99.37</td>
<td>96.98</td>
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<tr>
<td><strong>Poland</strong></td>
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<tr>
<td>1995–2002</td>
<td>99.03</td>
<td>95.5</td>
<td>99.21</td>
<td>99.69</td>
<td>99.41</td>
<td>99.74</td>
<td>105.66</td>
</tr>
<tr>
<td>2003–2008</td>
<td>102.27</td>
<td>97.37</td>
<td>99.67</td>
<td>99.64</td>
<td>99.28</td>
<td>99.52</td>
<td>107.05</td>
</tr>
<tr>
<td>1995–2008</td>
<td>100.41</td>
<td>96.3</td>
<td>99.4</td>
<td>99.67</td>
<td>99.35</td>
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<td>106.25</td>
</tr>
<tr>
<td><strong>Slovakia</strong></td>
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<tr>
<td>1995–2002</td>
<td>99.53</td>
<td>95.83</td>
<td>99.1</td>
<td>99.85</td>
<td>98.91</td>
<td>100.08</td>
<td>106.03</td>
</tr>
<tr>
<td>2003–2008</td>
<td>101.59</td>
<td>95.91</td>
<td>99.48</td>
<td>98.85</td>
<td>98.69</td>
<td>98.48</td>
<td>110.84</td>
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<tr>
<td>1995–2008</td>
<td>100.41</td>
<td>95.87</td>
<td>99.26</td>
<td>99.42</td>
<td>98.82</td>
<td>99.39</td>
<td>108.06</td>
</tr>
<tr>
<td>2009–2011*</td>
<td>99.83</td>
<td>99.86</td>
<td>100.56</td>
<td>100.56</td>
<td>100.31</td>
<td>100.84</td>
<td>97.82</td>
</tr>
</tbody>
</table>

Note: For the years 2009-2011, the decomposition is based on data in current prices so the results are not comparable with previous periods.


In a standard move toward, the employment elasticity it is calculated by an elasticity constraint (e.g. employment intensity) acquire from reverting employment development on final requirement of growth and a set of other determinants,
labor efficiency enlargement in the first place. Here we can have look on disingen-
uous outcome from a center on labor productivity and final demand growth by a simple computational exercise. Time when multiply the alter in labor efficiency and the transformation in the amount of final demand; we get an estimate of the potential employment growth investing the other factors fixed. We will evaluate the probable employment growth with the actual employment development. The difference expressed in percentage points is shown in Table 2.

Table 3 **Difference between Real and Potential Employment Growth in p.p.**

<table>
<thead>
<tr>
<th></th>
<th>Czech Republic</th>
<th>Hungary</th>
<th>Poland</th>
<th>Slovakia</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995-2002</td>
<td>0.8</td>
<td>4.09</td>
<td>1.88</td>
<td>2.08</td>
</tr>
<tr>
<td>2003-2008</td>
<td>1.83</td>
<td>2.26</td>
<td>1.96</td>
<td>4.72</td>
</tr>
<tr>
<td>2009-2012</td>
<td>1.67</td>
<td>0.45</td>
<td>1.71</td>
<td>-2.14</td>
</tr>
</tbody>
</table>

**Source:** European Commission, 2012a.

Scenario of all V4 countries describe higher employment growth with any negative impact of changes in the structure of production and the structure of final demand by single exemption is the last period in Slovakia with steady effect of the structural changes. While difference in size is high. The results are noted down in above table because the economic developments are correlated with each. As well as these results spotted on the structural contribution changes to employment growth. At last analysis describe the final demand changes and fester the final demand changes into three components.

### 3.1 Labor market developments in V4

**Labor market situation**

The labor markets of Visegrad countries experienced considerable revolution afar accession to the EU. Several measures intended at put off important labor migration were steadily removed. There are tremendous developments in the labor markets from the time joining the EU can be differentiated into two periods which is explain well in below mention Figure 2, though, differed significantly in nature (Šikulová a kol. 2014). From the beginning of the crisis in 2009 represent the separating line and it left the major negative occurrence in the Visegrads’s labor markets which are very complex to conquer nowadays. Therefore, it is a critical subject to overcome with unemployment, because it corresponds to the unused value of the economy and it is a common indicator linked with unfavorable social phenomena (Pongráczová, 2011)
3.2 How employment can generate in Visegrad countries?

To generate high employment within the Visegrad group of countries with continuing high unemployment and low employment rate in the EU, in April 2012 the Commission introduced a situaté of actions with a understandable purpose, specifically to support job formation, permitted Employment Package. The Employment Package is a situaté of credentials exactness the options to link employment policy at the EU level with a number of other policies to endorse smart, sustainable and comprehensive growth. It identifies possible areas of job formation and the nearly all efficient way to generate them within the EU. The Commission projected measures in the following areas (European Commission 2012a): a) Promote job formation; b) Re-establish the dynamics of labor markets; c) Develop the EU governance.

In the area of promoting job creation, the measures can be divided into three sub-areas which are mentioned in below Figure 3.
4 Conclusion

After EU accession we say that it was the right decision for Visegrad countries, even though the positive developments since 2004 were strike by the crisis, the circumstances are better than at the beginning in 2004. These days, the Visegrad countries are cost-effectively stronger and if work together they have also stronger voice in the EU. The employment development, low labor mobility. Elasticity and existing problems with unemployment situation in V4 countries revitalized the debate about the opportunity that economic policy might persuade the association between economic growth and employment growth In conditions of labor market, the major concern that require to resolve are: a) high unemployment rates b) long-term unemployment and to discover how to get lasting unemployed for employment but one thing is relatively exciting. Although relating high unemployment rates crosswise the EU, nearby is more than 2 million employment opportunity. now and again the only matter is geographic People are not keen to move to another city/country since of social relationships. along with further employment problem, the for the most severe issues, enduring and youth unemployment and we need to pay staid consideration for solving them. Since
the longer you are jobless, the difficult it is to get hired and the more support is needed. Even though V4 countries have some targeted dynamic labor market programm for enduring and youth unemployed, Public Services lean to use the majority of the resources for further jobless people for the reason that this lead to enhanced results for searching jobs for unemployed.

References