Abstract: - In the World Economy, it is known that industrialization is one of the certain way to increase the macroeconomic growth. More and more, in the last decades the international experiences show us examples of implementing special industrial politics in developing countries that contributed to their economical growth and, as a consequence, to their increasing developing level. This article tries to show some of those international experiences focusing especially on the Central and East-European experiences. Finally, the article tries to integrate in this idea the Romanian industrial experience.

Keywords: industrialization, Manufacturing Added Value, The Asian Tigers, foreign investments, Central and Eastern European Countries, industrial policy

1. Introduction

We live in a full of questions era. The World Economy tries to find new ways to manage the global capitalism crisis. Starting with the end of World War II, a new global economic order changed the old one. The G7/G8 countries are considered now the most developed countries in the world. They are named “The Group of the Most Industrialized Countries in the World” so we can assume there is a link between their economical power and their level of industrialization.

Also, the World Economy fights with the underdevelopment and poverty. A lot of international organizations are focused on solving those problems. Regarding the developing countries, some of them tried, especially during 80’s and 90’s, to increase their level of developing. “The Asian Tigers”, countries from Southern America, even countries from Africa developed politics to adapt their industries to the new challenges of the XXI century.

At the end of 90’s The Central and Eastern European Countries (CEEC) changed a type of economy -the centralized one- with a new type of economy – the market economy-, by restructuring and opening their economies to the international level.

In this new competitive market, CEEC had difficulties regarding their own products competitiveness, especially by three points of view:

1. their trade orientation (they are able to export especially primary goods, and they import especially industrial goods)
2. their external debts (most of them are carrying external debts starting from The Second World War and they can not extinguish them)
3. they lost their specific markets, with other types of commercial, monetary and financial relations, so they had to reoriented their international flows.

To solve this problems, one of their most efficient solution is to increase and develop their industrial sector.

2. International experiences

2.1. Korea

Until 1997 the main form of organizing the industrial activity was the so called chaebol (for instance, in 1995 16% of Korea’s GDP was obtained by chaebols) [1]. An important aspect of this type of organization is the political connections with the political world, so in the industrial sector chaebol was orientated to the industries encouraged by the government in strategic policies.

At the national level, at the end of 90’s, we can see the orientation to some main industrial domains: electronics
and communication equipments, automotive products, chemicals, machinery and equipment and basic metals. Also, we notice positive developments in the pharmaceutical industry.

Today, the Korean government focuses its industrial politic by integrating it in its exports strategies. As the World Bank shows, the Manufacturing Added Value in 2010 was 27%. Also, 4 of the first 30th multinational companies from developing countries are provided by Korea – Samsung (4), Hyunday (6), LG (22), STX Corporation (30) [3]

### 2.2. Taiwan

Taiwan is known as a “tiger”, meaning an economy with high level of economical growth. To assure this values, Taiwan encouraged the development of the economy considering two type of factors:

- Taiwan transferred its industrial production abroad
- Taiwan orientated its industry especially to high added value types of industry (electronics, optics, biotechnologies, etc)

As The World Trade Organization presents in its Report for 2010 regarding Taiwan, the agriculture plays a minor role in the economy and manufacturing continues to play a key role in the economic development; although the sector has seen declines in its contribution to GDP (26.6% in 2005 - 24.9% in 2009) it still accounts for 87.5% of merchandise exports, especially in manufacturing and exporting high-tech electronic products.[4]

The main subsectors are electronics, basic metal industries, chemicals and computer products.

<table>
<thead>
<tr>
<th>Type of industry</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics parts and components manufacturing</td>
<td>28.1</td>
<td>32.4</td>
<td>31.0</td>
<td>34.6</td>
</tr>
<tr>
<td>Basic metal industry</td>
<td>5.3</td>
<td>6.4</td>
<td>6.7</td>
<td>7.2</td>
</tr>
<tr>
<td>Chemical materials</td>
<td>8.7</td>
<td>5.8</td>
<td>6.9</td>
<td>5.0</td>
</tr>
<tr>
<td>Computers, electronic and optical products</td>
<td>8.8</td>
<td>10.0</td>
<td>10.1</td>
<td>10.0</td>
</tr>
</tbody>
</table>

Source: [www.wto.org](http://www.wto.org)

To increase the competitiveness of the manufacturing sector they realized structural changes to higher value-added sectors (in 2008 its main manufactured exports were electronic integrated circuits and micro-assemblies, liquid crystal devices and electric machinery and equipment).

### 2.3. Malaysia

According to World Bank the electronic sector appears to offer a striking example of the benefits of an open regime in developing through foreign investments. Taiwan is another example of a national economy with high rate of developing. Between 1991 and 1997 the average growth rate was 7.8%/year and after The Asian Crisis the government concerns about the country’s export competitiveness especially through manufactured products.

### 3. Industrialization in Central and East-European Countries

In the world economy, Central and East European Countries (CEEC) are specific forms of organizing at the national level. During the 90’s these countries tried to realize a transition to a new type of economy. This process supposed to achieve at least two major objectives:

- ideological and political objectives – by defining new concepts, theories and political orientation
- economic objectives – by reforming the property, the prices (through liberalization), trade reform, the financial sector new organization, etc.

These countries had specific structures in their economies that showed a quite important percent of industry in GDP, as following:

| Country    | Industry
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Czechoslovakia</td>
<td>53.2</td>
</tr>
<tr>
<td>Hungary</td>
<td>35.7</td>
</tr>
<tr>
<td>Poland</td>
<td>32.2</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>18.3</td>
</tr>
</tbody>
</table>

Source: Word Development Indicators
Today, these countries have a lower contribution of industry in GDP, showing that most of those economies were affected by the transition to the market economy.

Trying to explain this data, we can draw up some conclusions:

a. the transition process wasn’t proper evaluated (especially regarding the time and the costs)

b. the socialist market of CAER was very useful to the ex-communist economies, as sale markets

c. the international environment was most of the time to much competitive to the industrial goods coming from these countries

d. even if these economies became attractive by their markets and labour, they had serious problems with their productivity.

The CEEC tried to establish structural policies, including industrial politics. Here they are some examples: [5]

a. Czech Republic and Hungary - opened industrial policies, with high values of foreign investments

b. Slovakia, Hungary and Bulgaria - started later, in 1994

c. Poland – specific regional differences between regions regarding industrialization

Looking at the industrial structure, the main subsectors are: food industry (Bulgaria, Hungary and Slovakia), energy industry (Bulgaria), automobiles (Hungary and Czech Republic), telecommunication (Bulgaria and Slovakia), chemical industry (Hungary).

As a conclusion, we can appreciate that comparing with the Asian Tigers the CEEC’s industries are not so high added-valued.

**4. Romanian Industry**

According to World Bank Romania’s situation regarding industry’s developing should concern its Government. The 57.3% of industry in GDP in 1988 decreased more and more and became 43% in 1995 and 25% at the end of 2008. With this last value of that percent Romania (equal to Bulgaria) became the last in the CEEC. Also, one of the most representative industry in Romania – the clothes industry - decreased its contribution in the entire industrial production from 8.1% (2003) to 6% (2006) [6]. After attends of economical reform the situation of the industrial production can be described like this:

- the evolution of industrial production in Romania was in an growing trend starting from 2006, as results from Tabel 3

**Tabel 3 Index of industrial production in Romania 2006-2007**

<table>
<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Jan</td>
<td>95.9</td>
</tr>
<tr>
<td></td>
<td>Feb</td>
<td>99.5</td>
</tr>
<tr>
<td></td>
<td>Mar</td>
<td>112.8</td>
</tr>
<tr>
<td>2007</td>
<td>Apr</td>
<td>101.8</td>
</tr>
<tr>
<td></td>
<td>May</td>
<td>113.2</td>
</tr>
<tr>
<td></td>
<td>Jun</td>
<td>114.5</td>
</tr>
<tr>
<td></td>
<td>Jul</td>
<td>108.4</td>
</tr>
<tr>
<td></td>
<td>Aug</td>
<td>103.5</td>
</tr>
<tr>
<td></td>
<td>Sep</td>
<td>116.6</td>
</tr>
<tr>
<td></td>
<td>Oct</td>
<td>120.9</td>
</tr>
<tr>
<td></td>
<td>Nov</td>
<td>120.5</td>
</tr>
<tr>
<td></td>
<td>Dec</td>
<td>103.7</td>
</tr>
</tbody>
</table>

Source: Romanian National Institute of Statistics

Considering 2005 base for analyzing, the industrial production index started to grow from march 2006.

- the main industries in Romania are: basic metal industry, wood industry, chemical industry, electric equipments, energy

- the prognosis for industry’s contribution on GDP shows the following:

**Tabel 4 GDP’s future evolution and industry’s contribution**

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>544 426</td>
<td>599 060</td>
<td>659 429</td>
<td>722 918</td>
</tr>
<tr>
<td>%</td>
<td>1.5</td>
<td>3.9</td>
<td>4.5</td>
<td>4.7</td>
</tr>
<tr>
<td>Ind</td>
<td>2.7</td>
<td>3.8</td>
<td>4.3</td>
<td>4.1</td>
</tr>
</tbody>
</table>

Source: Romanian National Prognosis Center

More than this, we may have a complete image of prognosis by looking on the main industries that might contribute to the industrial and economical growth. Considering the previous year, the prognosis look like the following:
### 5. Conclusions

The international experiences can give to the World Economy examples to follow in the attending to achieve the economical growth. One of them is given by some south-asian economies that realized this objective by developing the industrial sector and much more, by developing the high added-value industries.

The CEEC tried in the last 30 years to establish industrial politics to develop this sector. Even if most of them have those types of politics, the result is not the expected one. At the end of 1980 most of the CEEC had lower levels of contribution of industry in GDP than at the end of 80’s. Also, the structure of this sector shows that CEEC are not competitive at the international level in high-tech industries. Most of them are not able to develop such industries at all.

In Romania the industry’s situation is not different than in other CEEC’s. But there are some specific issues. As the Romanian National Institute of Statistics specifies, Romanian industry started to grow its production in 2005. And the prognosis for Romania show an increasing for GDP and also an increased contribution of industry. In Romania the industry still have a low and medium added-value structure, meaning that the most important subsectors are specific to this type of industries.

So, to improve the competitiveness Romania needs a structured industrial policy. Its main objectives should be:

a. General developing of national industry
b. Structural developing of existing industries, especially in higher added-value industries (or instance, development of production of electric equipment instead of extraction of metals)
c. Creating new high-tech industries (electronics, biotechnology, etc)
d. Developing research centers in industry, regarding the fact that Romania was one of the most developed industrial country in CEEC until the end of 80’s
e. Creating special institutional instruments to develop the industrial sector.

[2]. wto.org 2000
[3]. worldbank.org
[4]. wto.org 2010
[6]. Romanian National Prognosis Center