THE FACTORS INFLUENCING ON INVESTMENT ACTIVITY AND THEIR ESTIMATION

Revaz Shengelia,
PHD, Professor at Georgian Technical University,
Chief in Editor of Journal “ Economics” ;

Zhuzhuna Tsiklauri-Shengelia,
PHD, Professor at Georgian Technical University;

Natia Shengelia, PHD

Investment, Investment Activity can play a significant role in economy. First, it can increase a country’s productive capasity; Second, it can be discussed as a mean of reinvesting, expansion of a company and so on. In the third place, Investment is an important determinant of the long-term improvement of an economy’s competitiveness. Generally, Investment may take many forms such as training of human resources, increase in fixed capital and so on; The last form is the most popular and essential form both for companies and for the economic future of the country in which firms operate.

Nowadays there is a big competition to receive investments between the recipient countries, more precisely between Post-Soviet Union and transitional countries. In our opinion different investors, no matter they are corporations or business-angels, require different business environment, policy like they are accustomed to have in highly-developing countries. That is because of capital and also the investment type can be various: trading, lending, industrial, share equity capital and so on and that is why a differential approach should be used to different kind of investors. Orienting on getting maximum profit, lending capital act with financial, portfolio investment, f. ex.: in Russia, there is not still achieved the desirable political and economical stabilization, but rich resources enforce foreign investors not to pay attention to this and take a risk. However, as Russian experts mention, there entered only speculating investments where investors are interested only in short-term investments and high profit. Generally, Industrial capital intends to have a great influence on a company or region. Such kind of capital is ready to establish long-term relations and to participate in managing companies, to adapt to the fall of profitability in short-term perspectives. This capital acts as of invested in real Assets, Human resources and so on.

Moreover, as it appears, Investment Attractiveness is somehow subjective, individual and varies according to country or business . It is necessary to know what kind of factors and investment environment make a region or country attractive for investors. One of the main indexes that European Union take into its consideration while giving out permits to become a member country, discusses the investing opportunity and safety of Foreign Investment . Please see below the table 1. From analyzing the data from this table, it seems that good ranking for "Protecting investors" and "Starting Business" have United States, Georgia, Armenia, Azerbaijan that create a desirable investment climate. If we have a look at the number of days for starting business the first place takes Georgia, then comes United States, Armenia and Azerbaijan. The most low and liberal Tax rate have 2 countries: Georgia and Armenia

Doing Business According Countries 2013 (Rank) Table 1[1]

Country/ Factor	Starting Business/ days	Protecting Investors	Registering property	Getting credits	Tax Rate (% of profit)	Getting Electricity	Trading Across borders	Dealing with construction permits
Georgia	7/ 2	19	1	4	16.5	50	38	3
Armenia	11/ 8	25	4	40	38.8	101	107	46
Ukraine	50/ 22	117	149	23	55.4	166	145	183
Russian Federation	101/ 18	117	46	104	54.1	184	162	178
Czech Republic	140/ 20	100	27	53	49.2	143	68	74
Romania	68/ 10	49	72	12	44.2	168	72	129
Azerbaijan	18/ 8	25	9	53	40	175	169	177
Germany	106/ 15	100	81	23	46.8	2	13	14
Usa	13/ 6	6	25	4	46.7	19	22	17

Furthermore, it is significant to estimate the Investment activity level considering the following factors:

1) Deposit Rate %- when a foreigner investor starts a company, it is more stimulating to exist high deposit rates. They are interested in investing temporarily in excess cash amounts again and get benefits parallel every day. The company can also acquire equity shares in other organization but deposit the money is the easiest and fastest way to invest money. It is common for companies, instead of leaving cash on their current bank account, they transfer money balance on deposit accounts (in this case some type of deposit still enables to defer some percent of income on

1 http://www.doingbusiness.org/~/media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB13-Chapters/Country-tables.pdf

this amount) and in case of necessity they return back again on current account f. ex. before giving salaries or purchases of materials and resources.

2) Lending Rate % - Financial resources are significant component for starting business, expansion or for normal every day functioning. If taking a loan in Georgia is annually 15-20 % and 5-7 % in Czech republic, than certainly investors would prefer investing in Czech republic.

3) Inflation rate can also have a big influence on the Country's economy.

4) Tax rate %- The more light, liberal is the Tax burden, the more preferable is the environment to start a business in this country, not saying anything about "Tax Holidays", "Tax Credits", "Golden Business List" and other reforms' benefits.

5) Investment Freedom – Protecting Investment is a quite actual and important issue.

Table 2

Investment Activity Factors according to countries and analyzing years

country	1 year deposit rate	1 year lending rate	inflation rate[1]	Tax rate [2]	Investment freedom [3]
	2007/2008 / 2010/2011	2007 / 2008 / 2010/2011	2007 / 2008 / 2010/2011	2007 / 2008 / 2010/2011	2007 / 2008 / 2010/2011
Georgia	11,7/13,3/ 10,84/10,7	10,9/10,9/ 15,7/25,9	9,7/9,7/ 8,7/8,5	38,6/38,6/ 15,3/16,5	60/70/70/70
Armenia	31/29/ 10/10	11,3/10,4/ 10,3/17,8	4,2/6,0/ 9,2/7,7	40,7/40,7/ 40,7/38,8	60/70/75/75
Ukraine	8,1/9,9/ 10,6/10.8	5,8/7,5/ 5,3/15,9	22,8/28,6/ 15/8	56,6/57,2/ 55,5/57,1	30/30/20/20

1 http://data.worldbank.org/indicator/NY.GDP.DEFL.KD.ZG
2 http://data.worldbank.org/indicator/NY.GDP.DEFL.KD.ZG
3 http://www.heritage.org/index/explore.aspx?view=by-region-country-year

Russian Federation	**30/32/ 28/26**	**4,9/6,5/ 4,8/8,5**	**13,8/18/ 11,4/8,4**	**51,2/48,3/ 46,5/46,9**	**30/30/25/25**
Czech Republic	**25/25/ 21/23**	**4,6/4,5/ 4,8/5,7**	**1,8/3,4/ -1,2/1,9**	**48,6/48,6/ 48,8/49,2**	**70/70/ 70/70**
Romania	**21/23/ 26/26**	**6,6/5,5/ 6,8/12,1**	**13/11,6/ 3,6/5,8**	**46,9/46,8/ 44,9/44,4**	**50/60/ 75/80**
Azerbaijan	**11,6/12,2/ 11,6/11,6**	**7,6/7,5/ 9,1/19**	**21/27,7/ 11,2/7,9**	**40,9/40,9/ 40,9/40**	**30/30/ 55/55**
Germany	**27/26/ 23/24**	**5,96/5,96/ 9,6/9,6**	**1,6/0,8/ 0,6/2,3**	**50,1/50,5/ 48,2/46,7**	**90/80/ 85/85**
United States	**14/12/ 11/12**	**8,1/5,1/ 3,3/3,3**	**2,9/2,2/ 0,8/3,2**	**46,2/46,6/ 46,8/46,7**	**80/80/ 75/75**

For analyzing data from the above mentioned table it is necessary to create a formula including 5 factors:

$$IA = \frac{I_{dep} + I_{\%} + I_{Infl} + I_{Tax} + I_{Inv.\,Fr.}}{5}, \text{ where}$$

1) I_{dep}--1 year short-term deposit rate ;
2) $I_{\%}$- -- 1 year short-term Interest rate on loans ;
3) I_{Infl} -- Inflation rate ;
4) I_{Tax} - Tax Rate ;
5) I_{IF} - Coefficient for Investment Freedom;

According to this formula, the Investment Activity level were calculated for the following countries: Georgia, Armenia, Ukraine, Russian Federation, Czech Republic, Romania, Azerbaijan, Germany, the USA;

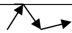
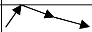
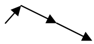
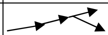
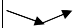
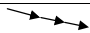
IAL^{GEO}_{2011} = (10,7+25,9+8,5+16,5+70) / 5 = 131,6/5= 26,3
IAL^{GEO}_{2010} = (10,8+15,7+8,7+15,3+70) / 5 = 120,5/5= 24,10
IAL^{GEO}_{2008} = (13,3+10,9+9,7+38,6+70) / 5 = 142,5/5= 28,5
IAL^{ARM}_{2011} = (10+17,8+7,7+38,8+75) / 5 = 149,3/5= 29,86
IAL^{Czech}_{2010} = (21+4,8-1,2+48,8+70) / 5 = 143,4/5 = 28,68
IAL^{Czech}_{2007} = (25+4,6+1,8+48,6+70) / 5 = 150/5 = 30
IAL^{GERM}_{2010} = (23+9,6+0,6+48,2+85) / 5 = 166,4/5 = 33,28

IAL^{UKR}_{2010} = (10,6+5,3+15+55,5+20) / 5 = 106,4/5 = 21,28

The other countris' coefficients were calculated analogically (For comparing results please see table 3).

Investment Activity Level coefficients according to countries

Table 3

country/year	2007	2008	2010	2011	2007/2008	2007/2010	2007/2011	Tendency-graphically (2007-2010)
Georgia	26,18	28,5	24,10	26,35	+2,32	-2,08	+0,17	
Armenia	29,44	31,22	29,04	29,86	+1,78	-0,4	+0,42	
Ukraine	24,66	26,64	21,28	22,32	+1,98	-3,38	-2,34	
Russian Federation	25,98	26,96	23,14	23,36	+0,98	-2,84	-2,62	
Czech Republic	30	30,3	28,68	29,56	+0,3	-1,32	-0,44	
Romania	27,5	29,94	31,26	33,66	+2,44	+3,76	+6,16	
Azerbaijan	22,22	23,66	25,56	26,7	+1,44	+3,34	+4,48	
Germany	34,93	32,65	33,28	33,32	-2,28	-1,65	-1,61	
United States	30,24	29,18	27,38	27,84	-1,06	-2,86	-2,4	

Analyzing the table 3, the Investment Activity level in all transitional countries are increasing in 2007-2008 (See above graphical tendency), except from 2 high-developed countries: Germany and the USA, of which indexes are decreasing. This tells about that these 2 countries receive less foreign investments and do not necessitate them, because they are not dependent on the foreign resources.

By comparing 2010 year to 2007, we can see that Investment Activity Level (IAL) is decreasing by 1-5 % in Georgia, Armenia, Ukraine, Russian Federation, Czech Republic, except from Romania and Azerbaijan. This remarks that more foreign recourses should be attracted in transitional countries. Increase of (+3.76) coefficient in Romania can be explained by average high Investment freedom and in Azerbaijan (+3,34) by low tax rate. Discussing Germany and America, as high- developed countries and less dependent on FDI, here the tendency is decreasing -1,65 and -2,86.

Referring 2011 year data, as it was expected Germany (-1,61) and United States'(-2,4) coefficients are decreasing dramatically as they are not depending on resources entering from outside the country. Furthermore, dramatically decreasing indexes for Ukraine and Russia can be caused by political destabilization; as from table 3 it appears the investment activity is improved and is increasing and increasing by 6.16 and 4.48 in Romania and Azerbaijan. In 2011 the Investment activity level for Georgia, Armenia and Czech Republic has not significantly changed.

In Summary, on the base of analyzed data after receiving high coefficients (Germany-34,93 and the USA-30,24 in 2007) the average coefficient of Investment Activity Level was belonged to Georgia in 2007-26,18, in 2008-28,5; in 2010- 24,1; in 2011-26.35; That was enhanced by the low tax rate (38%, 16.5 %) and by high Investment freedom index (60/70/60) ,comparing to developing countries. Whereas the tax rate is from 40-51%, in Ukraine, Romania, Czech Republic, and the Investment freedom indexes begin from 20. Thus, the above mentioned factors could have significant policy implications in the country's investment and economic environment.