

The Financial Dutch disease and Commercialization impact of the basic knowledge in Turkey & CEE on the FDI inflow rate

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FDI유입에 따른 금융 더치병(Dutch disease)과 터키 및 중·동부유럽 기초지식산업의 성장효과

본 연구는 중동부유럽 및 발칸지역이 1990년 개방, 2004년 EU가입, 2008년 미국발 금융위기 전후로 대규모 FDI 유입의 증감에 따른 터키로의 투자전환과 연계되고 있다. 이러한 FDI변동이 기초지식분야의 투자의 특성과 상용화를 분석함으로써 이 지역의 강점인 기초지식육성 측면에서 개선방안을 제시하고자 한다. 중동부 발칸유럽의 투자 감소시 상대적으로 터키로의 투자증가로 나타났다. 이 같이 재정립된 개선방안은 정부의 기초지식 인력정책과 민간기업의 고용확대 및 실질성장 간의 협력을 촉진함으로써 심리적인 정책안정이 EU와 중동부유럽 상호간에 정책격차가 없이 투자개발 및 지속적인 연구를 달성할 수 있다.

지난 10년 동안 터키국내 FDI 유입은 USD 1,300 억에 도달했지만 터키의 FDI 유입은 2012년 전년 대비 38%로 급감했다. 이 같은 FDI 유입변동이유는 그린 필드(green field)형 투자와 브라운 필드(brown field): M&A형 투자로 구분하여 신

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규투자의 문제점을 완화 및 적대적 M&A를 해결할 뿐만 아니라, 더 나아가 기초 지식산업의 구조적 및 기술적 실업을 완화시키면서 제품상용화와 설계능력에 대한 민간기업의 수요를 충족시킴으로써 산업구조조정 비용을 감소시키고, 대외 경쟁력을 제고함으로써 중·동부유럽으로 하여금 글로벌화와 지역화의 파고에 대응하면서도, 금융위기에 대한 기초지식의 성장 동력을 보다 적극적 자세로 정책방향과 투자지원차원, 프로젝트진행속도에 맞추어 경제력을 신장시키는데 기여할 수도 있다. 기존의 더치병(Dutch disease)은 자원개발에 대한 급격한 투자금의 유입이 금융 불안정과 물가상승과 환율하락 등의 경기침체를 거론하였다. 그러나 본 연구는 심리적인 기대치가 평가절상 된 통화가치로 인해 수출의 감소를 가져오지만, 기대치의 실망에 따른 심리적위축이 기초지식의 개발 등 성장 동력의 약화로 인한 도약의 기회를 놓치게 되는 요소로 분석되었다. 다니엘 커너만의 정의처럼, 투자손실의 위축으로 기초지식분야는 상대적으로 더 감소하게 된다. 기대치가 컸던 만큼이나 투자실망이 더 크게 작용한 결과였다. 예를 들면, 중동부유럽 지역은 여러 다양한 형태의 지역적인 위기를 겪었으나 EU자금유입이 주는 성장 기대치가 터키보다 크게 나타났고, FDI가 발칸인근 이머징 국가인 터키로의 전환되는 일부 현상도 있었다. 세계금융위기가 왔을 때 FDI의 기대치가 일정한 터키는 기초지식의 혁신 의지력이 크고 경제위기 대응능력도 보다 빠르게 나타났다.

[주제어: 금융더치병(Dutch disease), CEE, 터키, 비회원, 기초 지식산업, 외국인 직접 투자의 유입, 경제혁신]

I. Introduction

1. The purposes of the study

The Dutch disease in economics, if a country relied on only resource development, and to grow rapidly its economy, the phenomenon means rather return to negative effect of economic growth. It is the negative impact on an economy of anything that gives rise to a sharp inflow of foreign currency, such as



the discovery of large oil reserves under North Sea in 1959. As Dutch enters the oil and gas era there were high expectations about. Like this Eastern Europe have also had negative effects due to a rapid influx of FDI since 1989 or 2004. So call the financial Dutch disease. They need to commercialize the basic knowledge and skills with FDI in order to grow the scale of economy. The commercialization means the development of knowledge-based SMEs. However, wages and prices rise due to the large influx of FDI will be weakening the relative competitiveness of domestic industries and the price, the MNE's manufactures was meant for the relocation. It did not join the EU, In comparison of North Africa' case which is the role of the manufacturing base for the EU is quite understandable. In December 2011 the advent of the Arab Spring in Tunisia was the case the problem is youth unemployment. Also at that time many investors transited neighboring regions to invest as Turkey and Armenia have relatively increased investment inflows, has not led a complete failure but it can be seen rather bigger depend on manufacturing and trade. North Africa was also biased higher dependence on Europe. Both areas in the future is to overcome them with market diversification, and I suggest that it needs to foster innovation within the domestic industry.

Daniel Kahneman's definition, like the loss of a contraction in investment sector is relatively more basic knowledge decreases. Investment expectations are just as big disappointment was the result of a larger action.

For example, Central and Eastern Europe, Balkans suffered a number of various forms of regional crisis, but the well expectation according to EU funds inflows is larger than Turkey, which appeared when the global financial crisis came, this Turkey appeared more robust and faster than CEE to the economic innovation willpower to overcome.



2. The research methods and limitation

The subjects of this study introduced through local investment in Eastern Europe as the Dutch disease which was happening with a financial investment. Central and Eastern Europe (CEE), while economic cooperation area joined EFTA and the EU member countries in Eastern Europe, the Balkan countries, it is a representative hub. Eastern Europe and other parts of the Balkans, Turkey and Armenia, North Africa, the object of study is meant to deal with them for several reasons that had developed the knowledge industry in Central and Eastern Europe in the 19th century, so first look at the status of CEE to compare with the EU's non-members or non-Eurozone like Turkey, etc.

Until 2004 joining the EU, the growth expectations of companies and government has been growing further. However, the rate of growth in the neighboring Eastern Europe was lower than the increase of the Western Europe and it showed the relative deprivation. This phenomenon is possibly due to the effect of the financial Dutch disease. This occurs that the gap between the growth expectations and reality, the EE's basic knowledge of the industry has changed into introductions and transfers of innovative technology development with 360-degree by western companies, but the basic academic research and industry in CEE & Balkan countries was becoming relatively reduced by investors own financial planning.

This however, study had several limitations that restrict its reliability. First, the subject is not segmented it by a wide range of areas, second, that the academic fusion research can be restrained.



II. Investment strategy of the EU to Turkey

1. Previous studies of financial Dutch disease

Temiz, D., & Gökmen, A. (2014) mentioned that FDI to Turkey is the fixed form of international business operation made across the national borders made mostly by the multi-national corporations (MNCs). The positive impact of FDI inflow in Turkey like a host country is expected to emerge as capital accumulation, technology transfer, know-how acquisition, innovative capacity and economic growth eventually.

Therefore by Lartey, Emmanuel K, K, (2011), the financial liberalization and FDI inflows were analyzed according to the Dutch disease effect. He In particular, researched that FDI was compared to non-trade sector that promote trade sector. According to the degree of opening of the capital account, the real exchange rate focuses on the appreciation of the currency. Each of the countries of CEE, the financial openness difference with its regulation seems to affect growth. Due to FDI inflows, the higher income is because that leads to the excess demand of the non-trade sector. The appreciation of the real exchange rate in the non-trade sector will be raising the relative price too. When the real exchange rate rises in the relative price appreciation, it reaches its highest point. Searching CEE based on this, the largest financial portion of the non-trade sector is the Czech Republic, Lithuania and Croatia respectively.

Let these countries to consider the real exchange rate and inflation. Since 2004, the Czech economy has been continued growth more than 6% of three years, the economic downturn in the second half of 2008 was caused by the real GDP growth



rate reduced to 4.6%. The largest obstacle of the Czech economy in 2007 results from the continued appreciation of the domestic currency, reached the crown currency exchange rate by 20% for one year. Products made in the Czech Republic that weakened the global competitiveness have been tough to export. Lithuania inflation rate 2007 brought up sharply to 7.6 % in the 10 months.

Saborowski, Christian (2011) applied the various policies of the emerging market economies in order to avoid the Dutch disease effects. Of these foreign exchange intervention, the modest capital controls, strict financial management, the results were remarkable. With a sample using dynamic panel data in 85 countries of the developing and the developed economies from 1997 to 2006, he has demonstrated. Finally, Broz & Dubravčić (2011) also compared the development between Croatia and Slovenia in many ways, and verified the Dutch disease caused by exceeding inflows of the foreign exchange. The bulk of FDI inflows in Croatia like foreign tourists, workers' remittances, capital gains were inlet more than three times as much as Slovenia's. As a result, Croatia has faced the problem of de-industrialization.

This revealed situation in Turkey and CEE, the investment in science and technology based on high-risk investment with high expectations, it is a problem that would become commercialized.

However, the de-industrialization, FDI inflows in Croatia which brought from foreign tourists, workers' remittances, capital gains are because that is unrelated with the investment of basic knowledge and the development of the industry. Only people just feel like to be developed externally, there is no internal innovation for further development.

Through the above previous studies, Compared to the global financial crisis,



Poland or Russia is also coping well than Hungary. Not in terms of investment in resource development, but in accordance with industrial production base in the development of European integration for the role of FDI, the certainty of the investment performance appears on a slightly different character. Especially the capital inflows in terms of basic knowledge share within Hungary, how contribute to economic growth and industrialization, so let's take a look how much commercialize on the basic knowledge share by FDI.

2. Basic knowledge industries of Turkey & CEE

It is to prove indirectly that the strengths of CEE basic knowledge through the case study of the background of the past were refocused their innovation and competitiveness that has had the effect of foreign capital after opening in 1989.

(1) In the 16th century, creative ideas of Europe in 1543 advocated the Copernican theory Copernicus in Poland (about one thousand rotation) toward the agrarian economy, engineering science and application of measurement as influenced.

(2) In the 19th century, Hungarian Tivadar Puskás (Tiber different Puskas) while working at the Thomas Edison invented the telephone exchange to have been installed in Boston and in Paris in 1879, was the start of the commercial electronic exchange system.

(3) In 1920th, The term was first applied in 1920 state-of-the-art industrial robot is going to be an important innovative ability.

(4) In 1940th, János Neumann computer's basic principles, such as the current CPU, memory, and the program structure is the establishment of a general-purpose computer architecture.

(5) Turkey from cheques to coffee, it's cheques were used to provide the option



for travellers to deposit money in one city and withdraw it in another. In fact, Roman cheque or the modern cheque comes from the Arabic saqq as Turkish kahve became the Italian caffè and then English coffee.

In conclusion, when viewed from the outside of the era distinction, Eastern Europe was one of the basic knowledge of the initiative with the participation of foreign capital or enterprises and the commercialization successes were made possible. They have been due to play an important role for economic growth of the country what more commercialize on the BK (basic knowledge) than the first to invent the technology.

3. Knowledge centers reduced in the EU

The basic knowledge to create high value-added, firstly needs the creative support worldwide. The state should direct them to apply for changing the speed of a lot of information and knowledge how not to be organized. Second, in order to create new value that comes from the intersection between knowledge and science technology, it is related to the epi-Centre innovation. Here in Europe what the role of the epi-center commercializing knowledge can be called is EUREKA, FP, etc., CEE R&D has been because of just a part under the impact of the European EUREKA. In support of research funding it has been enhanced through contributions of countries. However, by forming a consortium CEE is involved in some projects, but the situation is not a leading role. Research Network for European integration has extended, however, of a real connection with a corporate R&D program for the commercialization of new challenges as EUREKA, average fund sizes of research are divided into before and after the 1989 opening of CEE. They reduced from € 39.1 million in 1986 to € 3.25 million in 1995 and the



average study time has been slashed to two or three years in 1995, from five or six years in 1985.

Table 1. The commercialized data within the EUREKA framework in participating Eastern Europe (2002~2012, 5)

Nation	Eurozone			None-Eurozone									
	Slovenia	Slovakia	Estonia	Czech	Hungary	Poland	Croatia	Romania	Latvia※	Lithuania	Russia	Turkey	Korea
The number of participating EUREKA Success Stories (2002~2012,5)	14	3	5	17	11	14	8	1	6	10	2		2

Source: analyzed & data collected by authors, ※ joined Euro (2013,7)

III. The enable funding for basic knowledge

1. MNEs and SMEs

It has occurred at the same time to be opened in the capital and the knowledge and knowledge systems of the CEE region, they can make up the system. This is because outsourcing in Europe and the sharing of knowledge is emerging as a new face of globalization. European companies pay on average 30 percent of the cost of R&D in foreign and the case of Switzerland is the ratio of 50%. High-tech engineering company specialized in providing technical services, such as research institutes firms why is becoming more important in the innovation process. Joint collaborative R&D methodology means because it provides effective access to new knowledge. So that CEE revealed in the transitional economies that by financial



anxiety innovation was going to affect weakening the willingness to invest. Hungary and Poland, that are important to them strengthening of the currency trend rather than the funds from the bank regulatory pressures.

Brown, et al. (2012), what have lost the motivation to invest in Eastern Europe, he shall be deemed to have been induced rather the presence of a foreign bank than the lack of creditor protection to be considered, a high proportion of companies and macro-economic environment. Also he did not find enough evidence that foreign banks had more stringent loan approval. He argues that Credit constraints in Eastern Europe are denied credit or frustrated supporting companies and they were the real costs associated with new product introductions and appeared to tend to reduce R&D investment.

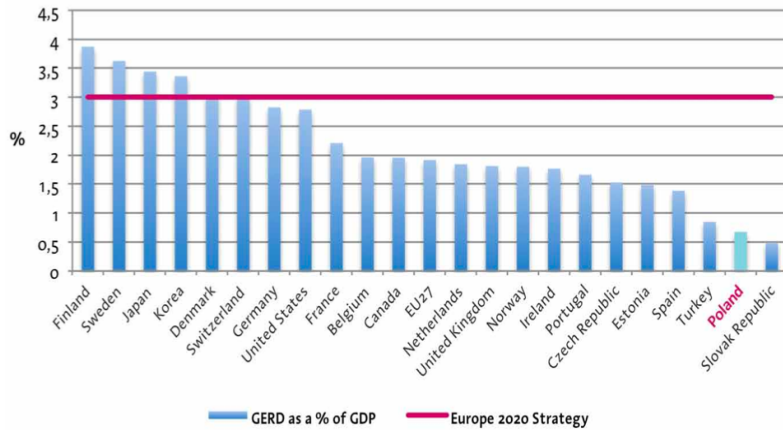
2. The role of government and the industrial effect of FDI

It is a continuous effect that technology transfer and utilization of local knowledge resources according to the FDI type between MNEs and SMEs. So much better from Dutch disease, the case of Poland of 4.4% (GDP) 2011, can be seen clearly with a comparison of Hungary 1.69% (GDP).

Ministry of science and higher education of Poland suggested that the new regulations were set forth to promote economic growth and innovation. Poland for the advancement has proposed on the 6 items named as science reform and knowledge construction. There is the national reform program (NRP) to establish a vision planning as another important means. NRP is to do all the activities and the availability of resources to the other side as Poland's R&D intensity in 2009 just stay on the level of 0.68% Figure 1.



Figure 1. R&D intensity in Poland & Turkey

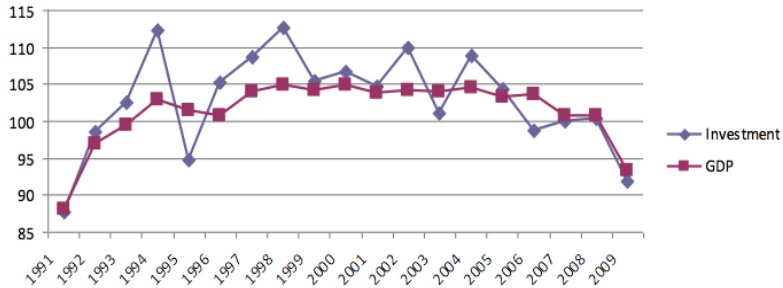


Source : OECD Main Science and Technology Indicators (2011), author' own elaboration,

Hungary has brought rapid economic growth since the political and economic transformation between 1989-1990 Figure 2. In terms of value, such as the relationship between investment and economic performance it is more evident indirectly. The investment boom of the early 1990s was absolutely led to GDP growth. CEE & Balkan countries shifted from investment-led growth to a more balanced, consumption-based system. Its investment surge has prompted plenty of bad debt. I.e. As this correlation is greater than the investments, then not diversified therefore, the effect was biased on stock or bond market.



Figure 2. The correlation between investment and GDP (preceding year=100)



Source : KSH, 2010

Hungary was established the privatization plan in 1997, then gradually being destroyed it between 2001-2008 years, which was canceled by subsequent ruling governments. The market between 2001~2008 with a decrease in capital expenditures and an increase in government intervention overall got slow economic growth. It seems obvious to Hungary becoming a cause of current market structure. This entering the market by the new company was not observed in the Budapest Stock Exchange.

In 2005 or 2006 Budapest airport and Malev aviation including all the major privatization efforts, one appeal means what policymakers were selected on their own only to strategic investors and other capital market declined. In 2007, the expectation that Hungary will soon join the Eurozone, became a significant surge more than 50% of FDI to the GDP, Until the global financial crisis of 2008 through this, which of following led to such financial Dutch disease.

IV. Turkey & Eastern European perspective

Turkey is aiming to join the EU in 2015, but Cyprus independent state



recognized status, such as the Kurds and joined the delay in the conflict, and in recent years due to the recession in Europe interested in EU membership decline.

Recently, Pravda magazine mentioned that they have to coordinate every action both in politics and in the economy with the EU. Was it worth berating the USSR only to give up sovereignty again? Some have a strong psychological element of Behavioral economics. There were such expecting that the inflow of FDI will make the growth and development of knowledge, however a gap between the expectations and reality grows so large that it became the greater the outflow of FDI.

To some extent this point is appreciated. However, the actual EU member like in Finland, etc. since 1995, then they had achieved prosperity. In the past even though it was an agricultural nation, they became created their own multinational companies. In particular, Spain has the current financial crisis in the largest economy, whose EU membership in 1986 had been boomed on own economy, having reduced the agricultural portion of the industrial structure, and putting in his manufacturing and service center. Since the time, between 1994-2007 CAGR of 3.6% was recorded.

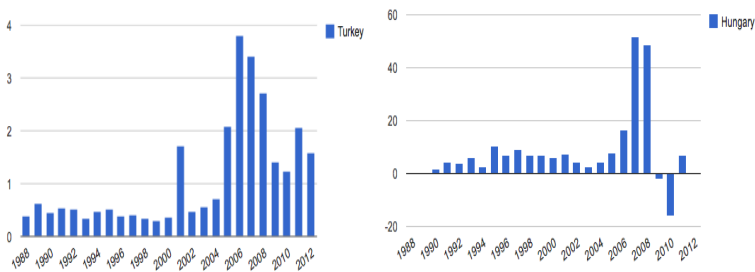
Eastern Europe have suffered diversity of changed in Economy. Every Eastern Europe after EU accession in 2004 and Opened in 1989, their economy have undergone a variety of change. And between 2006-2007 in Hungary case, due to a huge surge in FDI as more than 50% of total production(GDP) compared to the economy it has externally too much grown in foreign investment, but this case is not well enough to fast substantial measures for the development of the domestic industry. In accordance with the shortage of the desired manpower by FDI investors, the structural unemployment of unskilled workers have occurred. Looking at the type of the foreign investment, it is the result of an expression that produce goods for exporting in Eastern Europe for the purpose like Brownfield (brown

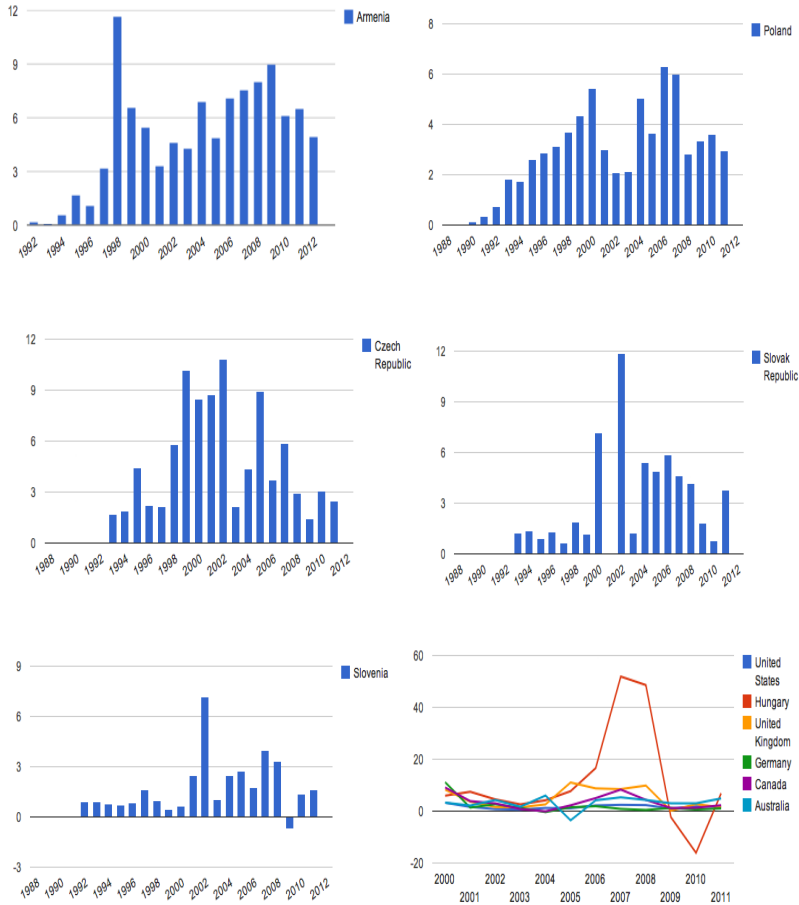


field) owned by foreign investors for M&A rather than invest Greenfield in industries. It is not always invest in the new industries but how to take over an existing industrial facilities and many of them were invested in stocks or bonds. The industry was also left intact rather than redevelopment to innovation after the M&A for the growth, The cause for this is in the process of switching existing manufacturing industries to foreign companies, Foreign companies were not pay for the cost of raising professional Hungarian workforce, scaling down in Eastern, its Western Europe products however, were exported.

That can sign in because of insufficient policy response in Hungary. The lack of manpower to meet tastes of Western technologies leads to rise in unemployment as Figure 2. In early greater openness in 1989 the unemployment rate fell in most Eastern Europe. The domestic industries had expanded in openness to world, however after joined EU and the financial crisis of Europe, the unemployment rate surged to a step change.

Figure 2. East European countries & Turkey, Armenia by the ratio of FDI to GDP





Source: world bank, 2013.

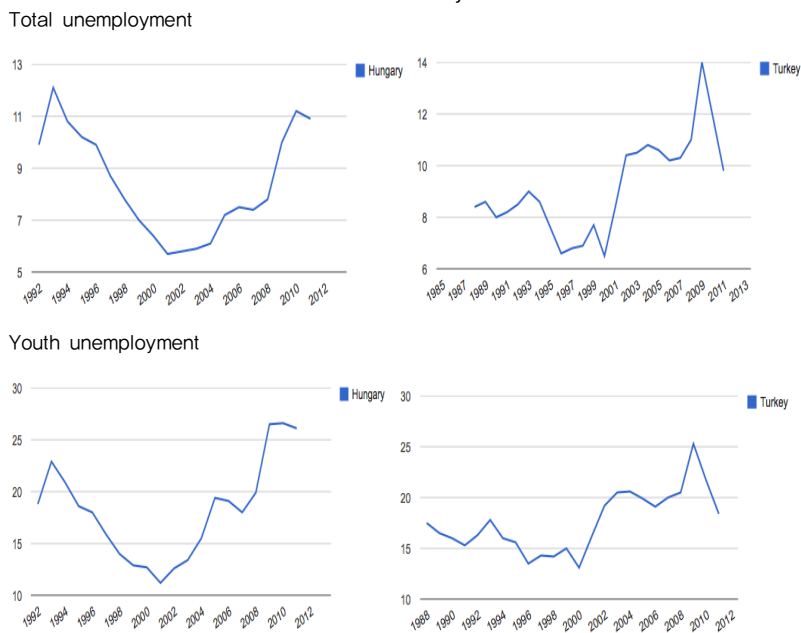
In 2013, the current youth unemployment across Europe under the age of 25, has increased to 24% in March, In particular, the youth unemployment rate in Spain went up to 56% and Portugal has also recorded 38%. The International Labor Organization (ILO) also expected that until 2015 the regional youth unemployment



rate through Europe will be reached more than 17%.

Pravda has commented with the IMF data and statistics presented however, Because Southern Europe's income per capita caused by the appreciation of the real exchange rate, Euro-zone membership will be granted to the one higher than Eastern Europe. So the economic environment should be compared to not in the difference of the level of income but in the unemployment rate. The ILO and the OECD survey on recent examination of youth unemployment, approximately 56% of Spain and Portugal had risen to 38%, etc., it makes no difference from or worse than those Eastern European countries.

Figure 3. Recover rate of total and youth unemployment between Hungary & Turkey



Source: World bank, 2013.



Unemployment rate in Eastern Europe in 2004 can be divided into two stages such as unemployment due to EU membership due to unemployment and the European debt crisis. First, the unemployment rate in Eastern Europe after joined in th EU 2004 is less than its width since the EU financial crisis 2010, the tendencies of the transition to an integrated European capitalist were strong. In fact, after opening in 1989 until 2001, the unemployment rate is because the maximum decreased. For example, the Hungarian youth unemployment rate in 2001 was 11.2% at the lowest level ever, but Turkey was higher as 16.2%.

Western Europe has shown the same or decrease in youth unemployment, while the increase in Eastern Europe since 2011. Germany for instance, the youth unemployment rate from 10.3% in 2008, declined to 9.7~8.5% in 2010~2011 however, the Czech Republic from 9.9% in 2008, increased to 18.3~18% in 2010~2011, Hungary in 2008 suddenly soared from 19.9 %to 26.6% in 2010 and then not back into place again still 26.1% in 2011. But Turkey 20.5% in 2008 and 21.7% in 2010, drop sharply to18.4% in 2011. Turkey's recovery speed was faster than Hungary as Figure 3.

It was the reason that the young people in Eastern Europe trying to get hired (part-time) were moving into Western Europe. In some ways, the production base in Eastern Europe who acts to shrink its role appeared in a natural phenomenon. It means that Eastern Europe was under the influence of Western Europe, or highly dependent on them.

It was the reason that the young people in Eastern Europe trying to get hired (part-time) were moving into Western Europe. In some ways, the production base in Eastern Europe who acts to shrink its role appeared in a natural phenomenon. It means that Eastern Europe was under the influence of Western Europe, or highly dependent on them. After the financial crisis, uneasy investors were moving to similar opportunities to perform around the emerging area, so that Turkey was



decreased unemployment, Turkey and Armenia have a relatively stable source of energy that can last for investments of multinational companies.

V. Korea perspective

1. Strategy of Korea leading edge companies

There is three key elements of strategy by Korea leading edge companies. Firstly, first products, first provides, it is possible to make innovative product so fast. Secondly, Korean consumers are always very responsive to new products. Thirdly, immediate action on their own reaction and so revised or new products. The commercialization is just innovation, FDI is just commercialization, in process to make it come true overweight, they get a sick like a financial Dutch disease.

Commercializing basic knowledge through innovations is completed and foreign capital is the requirements for the commercialization, However, if it too much rely on FDI, that is the hypothesis that takes the disease. First, FDI, basic knowledge industry, expectation on R&D investment. All commercialization on them is the extended line of industrialization. Second, the basic knowledge education or R&D in CEE has very effective on it with connecting between the company and university. Third, According to market performances(trend) or to demand, innovate technology then develop so fast.

Before Asian financial sanctions between 1997-98, when checking Korea that even high investment in short-term grew up in Asia Tiger. Korean's export has been low and a poor investment that exposed to outflows of foreign capital severely, so the fragile financial structure was developed.



One of the characteristics of FDI in Korea appearing is to focus on the financial services industry. By the IMF's policies, unlike other countries, it is because the investment of the financial sector in Korea was fully open. From the center of manufacturing on FDI inflows since IMF, they were concentrated in financial services in 2003.

During the period of IMF in 1997 Korean government controlled economy and the sustainable development of IT was emphasized as a potential breakthrough for easing the crisis. So the co-effort toward R&D intensity in the field of IT innovation policy is reviewed as a key factor in overcoming it. Korea could overcome and develop as moved from the willpower and R&D co-effort among government and corporate, people after the IMF crisis. They contend that the focus has changed from government and Chaebol-initiated R&D into small business and university-initiated R&D. The government emphasized on nurturing high-technology venture businesses.

2. IT and Energy exploit with FDI

With overcoming Plan whenever the crises come, government and domestic companies performed it. As Korea perspective, It totally focused on IT industry like internet, mobile, semiconductor, etc. to be easily commercialized the involving IT industries even though weakening the basic knowledgement. Actually they would rather commercialize than create the basic knowledge on it. Korea companies had a strong point to quickly commercialized the new technology or industries from the basic knowledge. When reviewed on Crisis and Recovery in South Korea, the Korea economy was able to rapidly recover from the late 1990s currency crisis.

Korean needed cheaper energies in order to recover quickly, and already had several Nuclear Power Plants, it is possible to be recovered faster in the crisis by



concentrated on ICT industries with a cheaper electricity. Even today, industrial electricity is 30% cheaper than household, and top 30 companies from the past have led the development of innovative business uses a lot of electricity. Residential electricity consumption of GDP in the world 8th is much lower than industrial, 53% of the total power for industrial and Chaebol which has been led advanced industry are 21%. Industrial electricity consumption of GDP in the world 4th is very high up. When Korea converted to 100-point scale, which is Japan 244, Germany 214, English 174. France have been using majority of nuclear power plants is 166, which lower than developed countries. Under the largest financial crisis with FDI fluctuations, of which energy research and development of innovative companies and the IT industry innovation had been become the most important factor by a stable energy budget.

Specific gravity of Its oil fuels was lower and then easing the impact of exchange rate fluctuations, so stabilized electric power supplies led to ongoing research and innovation. Before and after 1990 openness nuclear ratio (51.4%) in Hungary had reached a peak that Consistently has lowered for various reasons. while Slovakia (47.0%) and Bulgaria (47.1%) has increased by 1999. What about Hungary or CEE when the global financial crisis of 2008 occurred? The state of nuclear power (37%, 14.8 billion KWh) in Hungary compared to 10 years ago, was decreased by approximately 15%. Poland, on the other hand, instead without of nuclear power generation in 2009, one of the world's most coal dependent country (94.7%,143 TWh) was stable within CEE.

The decrease in proportion of nuclear energy makes an increase of energy imports and the funds of FDI inflows were being replaced by energy imports, increased development costs. The sharp decline in FDI has led to an increase in energy imports which made the development of the existing innovation even stop. Thereby slowing the commercialization of the basic knowledge is demonstrated



indirectly.

They cannot invest on the growth power for the innovation or commercialization if have no money to be extending on it. The independent Energy, which Korean did not able to depend on FDI in energy fields, could be continuous developing and fast Innovating IT industries on adopting its basic knowledge.

VI. Conclusion and Implications

The CEE Joined the EU is rather than being a failure to growth due to FDI in-flows, it seems to difficult to cope with the rapid economic changes of the society. This relatively became turning a point of the investment into inflow to a similar emerging area around like Turkey, the reasons that have developed let the technology commercialization and innovation in these areas focus further.

In Turkey, also it wanted to take these effects according to join the EU, the impact has been greater. However, since the financial crisis, people have reduced in the interest of the EU joining,

But FDI gives to Turkey the greater expectations of economic growth. With a reduction of FDI in 2012, it is a difficult situation as the role of the knowledge industry in neighbouring countries.

In addition, Eastern Europe was rising only expectations and what made up the closest substitutes in the midst of non-member countries was Turkey, who has led to substantial growth and recovery.

If FDI in-flow was less than 4% of GDP as the case of Russia's economic growth, it has been increasing stably. Because 7~50% of GDP in FDI flows to the small countries like Hungary, there were difficult to cope with the tough economy like



inflation, unemployment and unbalanced energy budget by the financial Dutch disease. As results, it makes a weaken of the base knowledge and innovation what were factors slowing down in order to focus on developing their own basic knowledge industries domestically like Korea IT policy. This is to prove indirectly that Turkey & Eastern Europe has played an important role within the knowledge framework of the European like EUREKA. They're however, were very low compared to the advanced countries in the EU and a lack of commercial focus against the rapid outflow of FDI.

[Key Words : Financial Dutch disease, CEE, Non-members, Basic knowledge, FDI inflow, Commercial focus, Innovation]



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