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THE EFFECT OF CHANGE IN MAIN ECONOMIC FACTORS IN CHINA AND OECD COUNTRIES

By

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Abbreviations

ABMI	Asian Bond Market Initiatives
ACMF	ASEAN Capital Market Forum Brunei Darussalam, Cambodia, Indonesia, Laos PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam. Established in 2004 under the auspices of the ASEAN Finance Ministers
ACD	Asia Cooperation Dialogue, its member states: ASEAN+3 and Russia, Bahrain, Bangladesh, Bhutan, India, Iran, Kazakhstan, Kuwait, Mongolia, Oman, Pakistan, Qatar, Saudi Arabia, United Arab Emirates, Sri Lanka
AGE	UN High-Level Advisory Group on Climate Change Financing
ASEAN	Association of Southeast Asian Nations, its member states: Indonesia, Malaysia, Philippines, Singapore, Thailand, Laos, Cambodia, Myanmar, Vietnam, Brunei
ASEAN+3	China, Japan, South-Korea
APEC	Asia Pacific Economic Cooperation Forum, member states: Indonesia, Malaysia, Philippines, Singapore, Thailand, Vietnam, Brunei, +3 = China, Japan, South-Korea; Australia, New-Zealand, Hong Kong, Papua New Guinea, Taiwan
CDM	Clean Development Mechanization
CM	Chiang Mai, as a name of a place
CMI	Chiang Mai Initiatives
CMIM	Chiang Mai Initiatives Multilateralization
EFSF	European Financial Stability Facility
EMEAP	Executive's Meeting of East Asia Pacific Central Banks, its member states: Indonesia, Malaysia, Philippines, Singapore, Thailand, +3: China, Japan, South-Korea; Australia, New-Zealand, Hong Kong
EU	European Union
FDI	Foreign Direct Investment
FSB	Financial Stability Board, organization created by G20 in 2009

G20	US, European Union, Canada, Mexico, Brazil, Argentina, Japan, UK, Germany, France, Italy, Russia, China, India, Indonesia, Korea South of, Turkey, Saudi Arabia, Australia, South-Africa Republic,
GDP	Gross Domestic Product
HRM	Human Resource Management
IMF	International Monetary Found
ILO	UN International Labour Organization
ILOSTAT	UN International Labour Organization Statistics
IOSCO	International Organization of Securities Commissions, The global standard setter for securities markets regulation
ISDA	International Swaps and Derivatives Association;
IT	Information Technology
JI	Joint Implementation
LDC	least developed countries
MENA	Middle East and North Africa
MNC	Multinational Corporations
OECD	Organisation for Economic Co-operation and Development (OECD)
PPP	purchase power parity
SCF	Strategic Climate Fund
SDGs	Sustainable Development Goals
SHRM	Strategic Human Resource Management
SME	small and medium-sized enterprise
SOE	State-owned enterprise
SPE	special purpose entity
SPSS	Special Program for Social Sciences
SREP	Scaling Up Renewable Energy Program in Low Income Countries
TNCs	Transnational Corporations
UNCTAD	UN Conference on Trade and Development
UNFCCC	UN Framework Convention on Climate Change
VAT	value added taxes
VDU	Visual Display Units
WB	World Bank
WDI	World Development Indicators

WEF	World Economic Forum
WIPS	World Investment Prospects Survey
WRI	World Report Index
WTO	World Trade Organization

Economic variances

GovDebtGDP	-1	Average Central government debt, total in % of GDP 2000-2014 http://stats.oecd.org/Index.aspx?DataSetCode=GOV_DEBT World Development Indicator, 2016, World Bank
GDPEmployed	-2	GDP per Employed from 2000, 2014/2000, 2000= 100, based 2011 PPP, World Development Indicator, 2016, World Bank
GDPGrowth	-3	Average GDP growth rate between 2000.-2015. in % http://stats.oecd.org/Index.aspx?DatasetCode=SNA_TABLE1 World Development Indicator, 2016, World Bank
BalaPayInGDP	-4	Average of Balance of Payment in GDP in %, 2005-2015
LabourProd	-5	Average Labour Productivity in 2000-2015 in Million Dollar (2011) ILOSTAT, 2016 http://www.ilo.org/ilostat/faces/oracle/webcenter/portalapp/pagehierarchy/Page3.jspx?MBI_ID=49
ConsPrice	-6	Average of consumer price change, in 2000-2011 in % http://stats.oecd.org/Index.aspx?DatasetCode=SNA_TABLE1 World Development Indicator, 2016
TaxRevenue	-7	Average Tax revenue in % of GDP 2000-2014 World Development Indicator, 2016, World Bank
FDIinFlow	-8	FDI Inward 2005-2015, 2015/2005, 2005= 100, Million US dollar, in percent
FDIoutFlow	-9	FDI Outward 2005-2015, 2015/2005, 2005=100 Million US dollar, in percent
BalanPayment	-10	Balance of payment 2005-2015, 2005= 100, in million in US $ in percent, 2005 = 100, 2015/2005 UNCTAD Handbook of Statistics, 2016, New York, Geneva, p. 264

Component-1:	(Minus) GovDebtGDP, GDPEmployed, GDPGrowth
Component-2:	BalaPayInGDP, LabourProd, (Minus) ConsPrice
Component-3:	(Minus) TaxRevenue, FDIinFlow, FDIoutFlow
Component-4:	BalanPayment

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1. INTRODUCTION

The study analyses the main economic developing trends of the highly developed economies and China by several economic variances namely the GovDebtGDP (Average Central government debt, total in % of GDP 2000-2014), GDPEmployed (GDP per Employed from 2000, 2014/2000), GDPGrowth (Average GDP growth rate between 2000.-2015), BalaPayInGDP (Average of Balance of Payment in GDP in %, 2005-2015), LabourProd (Average Labour Productivity in 2000-2015), ConsPrice (Average of consumer price change, in 2000-2011 in %), TaxRevenue (Average Tax revenue in % of GDP 2000-2014), FDIinFlow (FDI Inward 2005-2015), FDIoutFlow (FDI Outward 2005-2015) and BalanPayment (Balance of payment 2005-2015) These economic variances have correlations and significances based on the economic differences and similarities among 30 selected countries most of them OECD countries and EU member states with China.

The majority of the EU member states are also member states of the OECD, as organization for the highest developed economies of the world economy. The 30 selected countries including China and 29 selected mostly OECD and EU member states, namely Australia, Austria, New-Zealand, Japan, USA, Canada, Korea (Republic of), Israel, UK, Germany, France, Italy, Mexico, Brazil, Norway, Switzerland, Turkey, Sweden, Finland, Denmark, Spain, Netherlands, Belgium, Poland, Czech Republic, Hungary, Greece, Portugal, Slovak Republic. These countries are form four continents, namely Europe, Asia, North- and South-America and Australia.

The reason of the topic in the Dissertation is that at present the most of the OECD (Organisation for Economic Co-operation and Development) countries including the most of the European Union (EU) and China have important role in the developing process of the world economy and also the economic cooperation among these selected 30 countries has considerable influences on the actual changes of the world economy. Their cooperation effects on the technological development, the economic growth of the world economy and their owned economies and also the setting up financial connections to strengthen the mutual foreign economic relations to continue financial stability and their investment in these

selected 30 countries and rest of the world economy even by system of FDI (Foreign Direct Investment). For the latest two decades China has strengthened its economic growth and its developing trends and its influences on the world economy. Also China has implemented very important and attractive economic results, which can be descripted and analysed by the economic variances presented in the Dissertation. Additionally to descripting Chinese economic growth and conditions these economic variances also help to understand and know some specifies, similarities and differences of the selected countries' economies. Also there is a large economic competition between US and China for the first or second economic position in the world economy. These economic analyses connecting with ten economic variances used in the Dissertation can help us to understand how the economic position and conditions of China are changing to strengthen its world economic influences.

Therefore it is important to analyse the general economic conditions of the selected 30 countries including most the OECD member states and China. Also China has some more positive economic results, which are missing in other developed economies, for example China has less government debt in GDP, increasing GDPEmployed, increasing GDPGrowth, less increasing TaxRevenue and strengthening positive balance of payment (BalanPayment) against the other highly developed economies.

Earlier I analysed the economic growth and the GDP structure based on the different economic sector and branches in China concerning the FDI inflow into the China and the economic activities of China into the world economy and the South-East Asian and Pacific regions. My earlier scientific experiences and knowledge collected by me could become possible to be built into a dissertation.

In spite that China has not been member state of the OECD, the economic role of the China has considerably very much increased for the latest decades in the world economy, therefore Chine should be for analysing within the 30 selected economies for extending the international compare at the level of the possible world-wide side. The importance of the research is, because of the selected countries mostly developed one of the world economy, therefore their performance has determine the role for the developing trends of the world economy and for the rest of the world. The SPSS statistical analysing system demands that if I would like to analyse economic processes or trends by wide-side method system, the

researcher should use wider statistical data-base concerning the economic variances as the most important elements determining the economic process of economies, as I used in my scientific study. But each economic variance needs for three country, therefore ten variances demand 30 countries. If I do not use 30 selected countries, the SPSS statistical system cannot implement wide-side compare among selected economies based on the economic variances. There will not be logical conception in my analyses from approach of the SPSS system.

The reason of analysing Chinese economy is that China could have realised a fast economic growth for the last thirty years. Also it is important that in China, as the second largest economy of the world economy how the real DGP has realised its changes based on the different economic variances. Also every changes of this economic activity of China has deep effect on the world economy. China has very strong investment activities, which can be characterized by 38,0 percent as average share of GDP between 1980-2009. The investment as share of GDP in China has increased from the level of the investment's average share of GDP to 48 percent for short time. The trend of the investment share is very considerably large one and it has consequently been going on for longer time by decades in XX and XXI centuries. The considerable large investment can result very intensive economic and real GDP growth in China. The opposite to the investment share of GDP the export share of the GDP has been at the average level of 18,3 percent of GDP before 2009, but by the end of 2009 also this export trend was strong and increased to 25 percent of GDP. Naturally this export as share of GDP cannot be so high, because the domestic national market has been very-wide side, in spite that the saving has been at high level and the private consumption has been at low level in China for several decades in both of centuries (Török, 2015b; World Bank Group, 2015).

China had become since 1990, an energetic part of a rapidly growing and globalizing region of the world economy and this country is now the main driver of regional and global growth at the international level. The economic growth focuses on developing export oriented manufacturing branches, based on which other Asian countries became suppliers or subcontractors for providing different inputs, for example capital and technology (ASEAN+3, 2012; World Bank Group, 2015 and Drysdale – Huang, 1997 and Commission on Growth and Development 2008). *A growth rate similar to that of the past 25 years will allow China to overtake the United States as the world's largest economy during the 2020s*, putting North

America, the European Union (EU) and China in approximate economic equivalence (Morris 2010; Lin - Monga, 2010; Gilbertson-Reyes, 2009; Bretton Woods Project, 2011; China CDM Fund, 2011; World Economic Forum, 2009).

The ranking economies based on their economic performance and economic development shows that China has share by 15,1% of the world economy behind US by 24,9% in field of nominal GDP growth in 2017, when the prosperity of an economy is measured by several indicators used. Growth rate in changes of real GDP, GDP per capita government debt in GDP ratio, employment, productivity, R+D+I per GDP ratio, in spite that the actual wealth and income are inequality.

The main research focuses on the GDP growing trends based on the correlations mostly with central governmental debt calculated in the GDP for each country of the 30 selected one. The central governmental debt and the GDP growing rate are correlating with some other economic changes, which have strong effects for the whole economic situation including the GDP per each employed inhabitant of the selected countries. The whole general economic situation includes also labour productivity and the foreign direct investments influencing on the financial conditions of 30 selected economies. The labour productivity has important role to develop production and obtain the international competitiveness at the national and international markets. The FDI can strengthen the development of the advanced technology to extend the international competitiveness in developing countries.

There are several similar characters of selected 30 countries mentioned in the research in field of the GovDebtGDP, GDPGrowth, BalaPayInGDP, ConsPrice, TaxRevenue and the other economic variances can be much different in fields of GDPEmployed, LabourProd, FDIinFlow, FDIoutFlow and BalanPayment.

Because of the scientific research concerns deeply the performance of the world economy, therefore the study and research analyses are based on the international-wide-side statistical data bases coming mostly from ILO, ILOSTAT, UNCTAD, World Bank an EU dataset from the year of 2000 till the end of the year of 2015.

Hypothesis

The key assumptioins that there are correlation between the main economics indicators or economic variances as:
Growth rate measured by GDP growing government debt to GDP ratio, FDI inflow and outflow, productivity, consumepr rice level and balance of payment to GDP ratio.

Hypothesis-1
The main source of poor result of the world economy and in majority of OECD countries is the low or lowering level of productivity combined with high government debt to GDP ratio and these negative effects are interrelated and accelerated.

Hypothesis-2
In China and some other countries where the growth rate is high, the productivity increased fastly, partly because of FDI Flows spillover and the moderately less Government debt to GDP ratio. In these countries the increasing consumption of population also one of the drivers of economic grorwth.

Hypothesis-3
Contributions of different interrelated macroeconomic factors to economic growth are very complex and the final effects are different by countries, however there are some tipical groups.

Hypothesis-4
The missing balance of FDI inflow and outflow also can have negativ effect on economic growth through its effect on other macroeconomic indicators.

Hypothesis-5
The government debt (GovDebtGDB, BalanPayment) are negatively correlated with economic growth and this correlation becomes particularly strong when debt reaches a certan threshold.

The analyses for the economic processes and performance of the selected countries can make clearly discover the possible development capacity for these countries and improving directions of different parts and sectors of their performance based on the variances. For example the GDPEmployed and LabourProd should be developed mostly within corporation and company scheme for the future prosperity of countries. While the GovDebtGDP and BalaPayInGDP should be met demands of ensuring better economic and financial background for the economic interest of the firm-development based on the many-side firm-management. Therefore the harmonization should be created between the GDPGrowth at the national economic level and the LabourProd at the firm level. From this approach the balance of both of them can be the TaxRevenue, which should be moderate in order to make balance of the economic interest between the importance of economic growth and interest of the consumption. If the TaxRevenue is too large, the economic growth and the consumption will be less, if the TaxRevenue is too small, the consumption side will be too much against the economic growth and the advanced technological development, and therefore the international competition will be less.

The international side can make influences on the domestic economic growth mostly by FDI flow through financing the domestic investments and the finance through the GovDebtGDP, as share of the foreign financial resources for the GovDebtGDP, and also the BalanPayment partly based on the foreign trade balance.

GovDebtGDP (Average Central government debt, total in % of GDP), GDPEmployed (GDP per Employed), GDPGrowth (Average GDP growth rate) BalaPayInGDP (Average of Balance of Payment in GDP in %), LabourProd (Average Labour Productivity), ConsPrice (Average of consumer price change in %), TaxRevenue (Average Tax revenue in % of GDP), FDIinFlow (FDI Inward 2005-2015, 2015/2005, 2005= 100, Million US dollar, in percent), FDIoutFlow (FDI Outward 2005-2015, 2015/2005, 2005=100 Million US dollar, in percent), BalanPayment (Balance of payment 2005-2015, 2005= 100, in million in US $ in percent, 2005 = 100).

2. LITERATURE REVIEW

Actually and generally the economic development and the GDPGrowth in economic strategies of international agreements, national governments, private sector and countries need more for transfer from the fossil energy to renewable energy resources. The basic issue is for the world economy that the fossil energy use results considerable gas emission, therefore the internationally accepted economic strategy is the environmental conservation concepts for the GDPGrowth, GDPEmployed and LabourProd, even in cases of the FDIinFlow and FDIoutFlow, which are bases for creating the new economic structure based on the remaining the positive BalanPayment, BalaPayInGDP and GovDebtGDP. When governments of the national economies create their financial policy including the *TaxRevenue* and its effects on the ConsPrice, they have to follow the environmental strategy for giving financial supports for companies and enterprises in direction to technological production development. This economic issue accompanying with saving energy strategy has also been emerging in China for the last three decades. The Chinese energy consumption grew by almost 140% in this period, although energy use per capita remains below the international average in China, the growing population and its needs will maintain a strong demand for this (Baietti et al, 2012).

In China the impact of foreign investment on the country as a whole has been huge. Jiang (2007) while examining the impact of foreign investment on the Chinese culture argues that in the last 20 years foreign investment has affected the hiring process, training processes and management of Chinese workers. Foreign investment has also influenced the Chinese media; it has enabled the creation of joint ventures with domestic firms, and has provided a platform for creating interactions with the Chinese government at all levels. China has introduced major economic reforms since 1979 which have led to the attraction of a huge amount of foreign investment to the tune of $875.3 billion at the end of 2008.

Specifically Jiang (2007) also argues that foreign invested enterprises account for 31.18% of total industrial output in China in 2003. The positive effects of foreign investment on the Chinese economy as a whole suggest that there are no negative influences of foreign investment on the country as a whole. Koi and Tang (2011) argue that foreign investment has

had negative effects on China by; worsening environmental pollution in China; Exacerbating inter-regional economic disparities as a result of the uneven distribution of foreign investment; bringing up issues of transfer pricing; and Encouraging round tripping of the capital of Chinese domestic firms.

China has emerged as a strong force to reckon with its outward foreign investment initiatives over the last 30 years, but as an emerging nation the literature focusing on foreign investment has been replete with outward foreign investment from developed countries to the emerging economies. Ramamurti (2004) and Janet et al, (2009) claim that the trend of focusing on this type of foreign investment has changed in recent times and since the past two decades many emerging markets have increased investments in outward foreign direct investment to other nations around the world. The new law system started by new steps is to open wider side possibility for using renewable energy resources (Ellis, L.2008; WRI, 2002; Tung, 2009). The plan decide the support system for the developing clean technologies, also the tax system as part of the Enterprise Income Tax for CDM (CDM = Clean Development Mechanism) projects (China CDM Fund, 2011; Government of China, 2008).

China established 10 green technology related objectives for its 12th Five Year Plan declared in 2011. Also in China 10% of new vehicles will be law-carbon models by 2012, leading to one million low-carbon vehicles while carbon emissions reduce by 2,3 million tonnes. Since the beginning of industrialization in China the continuous economic growth has needed for dramatic actions to reduce energy intensity, to abate the use of fossil inputs such coal, which are essential in the same time with increasing the rate of renewable energy The renewable energy use and green technology extending became very important as the former international data base show, namely how the gas emission has sharply been increasing for the last four decades between 1971.-2007 based on the international compare. China has provided many efforts to realise the considerable CDM (Clean Development Mechanism) in the economy. The created CDM Fund provides supports for enterprises and 5 companies to implement main aims of energy conservation, emission reduction and control of greenhouse gas emission in. The CDM Fund supports investment for emission reduction of emerging industries and technological instruments based on market-mechanism. The CDM Fund emphasizes the support development technological instrument and innovative growth to increase industrial competition for the Chinese enterprises on the national and international market in the same

time. Within this strategy of CDM Fund they support for extending new energy equipment and material manufacturing in direction to developing renewable energy sectors based on using renewal resources, as wind, solar and water energy (China CDM Fund, 2011; Government of China, 2008).

In China, there were some main positive results for environment friendly technological development based on the green policy, China became the fourth largest wind power supplier in the world economy and favourable economic and financial background were created for the corporations to follow green policy in this country (Gál et al, 2016). There is a lot of water resources in Egypt, as Neszmélyi (2013) wrote about that Egypt has natural resources as energy and for agriculture and huge amount of human resources, for example renewable energy resources in MENA (Middle East and North Africa). This plan concerns some experiences implemented in Three Gorges water dam project in China. Based on the sustainable development the natural resources should be managed, like water and sanitation, clean development mechanization (CDM) for sustainable human health.

The practical implementation of the environmental conservation and environmental economic strategy needs for the introducing the private capital and sector into cooperation of the international organizations and national governments. The one of the bases of the private sector is the FDI (Foreign Direct Investment), which within more green investment could be realised. By the end of 2014 the share of the renewable energy resources in all of the used energy resources was unfavourable, because this was at very low level. This share was 18,9% in the ones of the world, 11,7% in the share of the highly developed economies and 15,6% in the middle upper income economies. This share was less in cases of the highly developed economies, as 8-9% in US and Canada, also this share was 5,5% in Japan. China reached 17,1% in use of the renewable energy resources, the share of used renewable energy resource was 36,5% in India and 63,2% in Vietnam. China reached the level of 2% of GDP for the Research and Development, which was closed very much to the share of the highly developed economies. In China the share of the poorest people was only 25,2% in all of city inhabitants or population, which was closed to the level of the 23,3% of the middle upper income economies' once. The future research is needed for the sustainable economic development, decreasing the gas emission responsible for the global warming and poverty (Gan Quan et al, 2017; China CDM, 2011).

The international organizations and international cooperation among, developing countries and developed countries would like to implement these important aims concerning the SDGs (Sustainable Development Goals) and concepts of environment friendly technological development and mitigation, but the main issue that the economic interests of country groups, public-private sectors and different companies can be harmonized for these SDGs. Also companies need for financial resources, even for investment relevant to the reducing gas emission, in any case the financial institutes should follow the financial conditions and risk management of the firms or small-medium enterprises. For example analyse all business cycles, evaluate the risks and determine risk sensitivity of any company (see detailed in Zéman at al, 2014b, p. 196; Zéman et al, 2014a; and Végh et al, 2014, p. 184.).

Some authors of international study materials examine one of the most current topics, namely the environmental changes and how economic development can be realised in the area of sustainable economic growth and strengthening international relations. The primary goal relevant also to the Dissertation today is to increase the GDPGrowth to reduce the GovDebtGDP and also protect the national economic interests against the negative economic influences of the world economy.

The study of the World Bank and UNCTAD analyses the importance of sustainable development goals (SDGs) established by the (UNCTAD = Conference on Trade and Development). This SDG strategy focuses on the economic growth of developing countries by ensuring financial supports from different developed countries and international organizations based on the foreign direct investment (FDI) system mobilizing foreign financial resources (World Bank, 2013, Kettunen, et al, 2013). This study emphasizes some financial issues concerning the economic conditions of SDGs and countries with importance of the FDI for development of this region.

These *experiences of Germany* can be followed by the ASEAN+3 countries. Financial strategy and management at national level should be extended similarly to the firm –level, in which role of governance, organizing, planning and controlling according to well-defined goal criteria; preparation and realization of raising capital owners (Zéman et al, 2014b, p. 206 Toon Otten et al, 2014; Zéman et al, 2013). Also Zsarnóczai (1996, p 231 and p 232) gave

some examples from Germany how the concentration of land use and agricultural production with increasing plant-production and developing farming systems closed to towns, as markets.

The personal income taxes and the corporation income taxes made considerable influences on the personal, corporation income conditions in two directions, namely to promote the consumption of the labour force, inhabitants mostly the population, and the other direction to stimulate corporations and companies to increase their investments in order to increase the jobs, by which the purchase power parity of the consumers can be strengthened (Vörös, 2011). The different kinds of taxes as revenues of the governmental budget can make influences on the governmental balance, which this one can continuously have negative balance, therefore this can accumulate the governmental debt of the EU member states from year to year (Lentner, 2014).

The central government debt (state debt) can result the devaluation of the national currencies or the common currency of the EU, namely Euro (Herich, 2011). Therefore the main aim of any country is to strengthen its economy and performance and decrease the negative balance of the payment in order to avoid of the economic fall and economic and financial crisis, as Domokos (2016) declared "The debt rule has been placed at the heart of legislation on public finances. Fulfilling the debt rule depends not only on reducing public debt but also on increasing the gross domestic product (GDP), as a precondition of which the principle of a competition-based economy has also been strengthened at the constitutional level" (Domokos et al., 2016a; and Domokos, 2016b).

Some international authors analysed the governments' financial issues around the world implemented important *fiscal stimulus*. More than ever it is im portant to rstand the effects of government debt on growth, Capital accumulation and productivity, particularly when associated with financial crisis (Bai et al, 2006; Calderon - Serven, 2005).

Also in most countries, large *budget deficits* have coincided in the past with less efficiency government spending, large bureaucracies and other counterproductive economic policies. Hence, amongst the factors that determine economic growth, fiscal policies in general are of particular interest and such fiscal-growth nexus (see Cecchetti et al, 2010). for a survey) is particularly important in situations of economic downturns where tax revenues tend to flee

rather quicklv and the spending side adjusts more slowly, which builds up larger deficits and accrues fiscal sustainability problems. On the latter, paper by Cecchetti (et al, 2010) takes a longer-run perspective of fiscal sustainability via a systematic analysis of the stationaritv properties of first differenced level of government debt series and disentangling their components using Structural Time Series Models, between 1880 and 2009 for a set of 19 countries. Also they conclude that the solvency condition would be satisfied in mostly all cases and therefore, longer-run fiscal sustainability could not be rejected. For instance, Checherita and Rother (2012) examine optimal debt reorganization strategies in the presence of agency problems in times of financial distress.

The linkages between *fiscal policy and growth* have been the object of several analyses. For instance, Goldsmith (1998) has summarised many existing empirical works dividing it into three generation studies depending on the econometric methods used. Even though our main purpose is empirical in nature, it is worth referring to some initial theoretical contributions which serve as the underlying basis for our analysis. In particular, Modigliani (1961) and Diamond (1965) first, and later Sin (2005). take a theoretical approach based on a neoclassical growth model and suggest that an increase in public debt will always decrease the growth rate of the economy. Regarding the developments of government debt, Checherita and Rother (2012) and Cecchetti (2011) in their works they discuss the importance ofthe reversal of significant fiscal imbalances, to ensure the curbing of government debt, notably in a context where monetary policy is limited by a zero lower bound regarding policy interest rates.

Determination is for China's economy, whic is over-indebted, authors must have a standard for comparison. In this study authors employ two measures, as debt –to-GDP ratio and debt-to-asset ratio. Debt-to-GDP ratio is the usual variable for International comparisons. Experts employ a debt-to-asset ratio for China’s own intertemporal comparison. Unlike countries such as Greece, which consumes most of its debt revenue without accumulating assets (Cecchetti et al, 2011). China invested a large amount of its fiscal and debt revenue and SOE profit, which acculmulates a large amount of assets. At least some of the public assets are in good condition and can be used to pay off debts when necessary. Therefore experts analyse both debt and assets of the government and public sector.

The study is closely related to literature on the estimation and construction of national and government balance sheets. The literature can be traced back at least to Dickinson and Eakin (1936), who systematically discuss the Balance Sheet Approach (BSA). Goldsmith and Lipsey (1963) construct a governmental balance sheet fór the United States. National and government balance sheets were alsó constructed fór other countries, including the United Kingdom by Revell (1966) and Canada and other OECD economies by Holder (1998). Their calculations generally follow a stock-based method. That is, they classify assets into different categories, including fixed assets, inventories, land, and financial assets, and estimate and add the value of these assets.

Experts construct China's government and public sector balance sheets. To our knowledge, this is the first paper to construct government and public sector balance sheets for China. Their methodology is also different from existing studies. Instead of applying the stock-based method used in existing studies, they employ a "flow-based method". That is, instead of estimating the market value of all assets, they accumulate historical revenues and expenditures to construct the balance sheet, taking asset value depreciation and asset price appreciation into consideration. The method has been more appropriate in the context of China since comprehensive and detailed government and public asset statistics are not available. Estimating the market value of these assets also involves making debatable assumptions. Therefore, experts adopt this flow-based method. The data needed are available from public statistics.

Their study also relates to the literature on the impact of public debt on economic growth. Existing studies argue that large-scale public debt raises interest rates, crowds out private investments deteriorates firm balance sheets, and enlarges short-term fluctuations (Modigliani, 1961; Diamond, 1965; Woodford, 1990; Goldsmith, 1982; Feldstein, 1998; Bernanke et al, 1999). Empirical studies find that government debt has a significantly negative impact on economic growth (Reinhart - Rogoff, 2010; Caner et al, 2010; Kumar-Woo, 2010). Based on these arguments, it is important to ask whether China's public debt is excessively high and potentially harmful.

The rest of the analyse proceeds as follows: construct balance sheets for both China's government and public sector through a detailed analysis of historical data. Results show that

the debt levels of China's government and public sector are much lower than in major developed countries. The balance sheets of China's government and public sector are overall healthy. Experts analyze the origins of the recent local government debt erisis. They find that the lack of fiscal income and long-term financing instruments for infrastructure investments is directly responsible for local government debt risk. In addition, they find that the rate of retum to Capital is still high. Based on these findings, it is premature to say that China's investment is excessive. The fundamental solution for China's sovereign debt "erisis" is to reform the fiscal and financial systems. Experts set up a simulation model to project the future debt burden. The debt burden increases with interest rates bút decreases with Capital returns and government surplus.

With respect to the empirical evidence most papers have focussed on advanced countries. These authors looking at mixed samples such as He, P (2003) focusing on a panel of 59 developing and 24 advanced countries for the period 1970-2002 conclude that, for developing countries, there is always a negative and significant relation between debt and growth. For advanced countries, he does not find any robust evidence, suggesting that higher *public debt* levels are not necessarily associated with lower GDP growth rates. Checherita and Rother (2012) look at the Euro-area from 1970 to 2010 and fmd a nonlinear impact of debt on growth with a turning point at about 90-100% of GDP. On the same line, Kumar and Woo (2010) used 38 advanced and emerging countries from 1970 to 2007 and also find an in verse relationship between initial debt and subsequent growth controlling for other determinants of growth. On the other hand, Fang (1998) using OECD countries between 1965 and 1995 reports evidence of a sizeable negative externality effect of government on the level of productivity. In addition to Liu and Zhao, (2002) for a sample of 19 OECD countries find that *Total Factor Productivity (TFP)* growth and productivity of Capital are weaker in countries with larger government, which can be proxied by the debt-to-GDP ratio.

The authors above mentioned use cross-sectional/time series data for a panel of 155 developed and developing countries for the period 1970—2008. They do not present or test a comprehensive theory of economíc growth. Rather, they are investigating the stability of coefficients over time and across countries, means as groups of homogeneous economies. In the empirical estimation, the paper makes use of growth equations and growth accounting techniques - to explore different channels of impact - and focus on a number of econometric

issues that can have an important bearing on the results. In particular, authors assess such issues as simultaneity, endogeneity, the relevance of nonlinearities, and the importance of outliers.

Therefore, this analyses contribute to the literature by assessing the debt-growth nexus with a diversified variety of methods, providing sensitivity and robustness, and, in more specific terms, by addressing the following issues (Kornai et al, 2003; Kumar and Woo, 2010):

i) The impact of government debt and its maturity on growth, the existence of nonlinearities and the relevance ofdebt thresholds.

ii) The relevance of Financial development (e.g., banking sector development, stock markét development, fór which we build several financial development proxies) and the impact of Financial crises (debt, currency and banking) on the debt-growth relationship.

iii) On a growth accounting perspective, the impact on 'TFP growth (fór that purpose we build a measure of TFP), Capital stock accumulation, priváté and public investment.

iv) Differences between country groups (OECD vs. Emerging and Developing).

Main results can be summarised as follows based on their works (Also see detailed in Lin, 2010; Lu et asl, 2008)*:*

i) there is a negative effect ofthe government debt ratio for the full sample;
ii) a quadratic debt term is not statistically significant;
iii) for the OECD, the longer the average debt maturity the higher the economic growth;
iv) financial crisis is detrimental tor growth, notably with high debt ratios;

v) fiscal consolidation promotes growth in a non-Keynesian fashion;
vi) for countries with debt ratios above (below) 90% (30%) the growth impact of a 10% increase in the debt ratio is - 0.2.% (0.1%);
vii) an endogenous debt ratio threshold of 59% can be derived for the full sample;

viii) Financial development, stock market development, Financial efificiency and bond market development positively affect growth in the OECD;

ix) higher debt ratios are beneficial to TFP growth, the growth of Capital stock per worker, and detrimental to the levels of private and public investment;
x) the higher the household's debt burden coupled with higher government debt, the lower the output growth;
xi) most results are confirmed even after we address cross-sectional dependence.

China's Central government began to issue debt in 1981 when the government passed the "Treasuries Regulations of the People's Republic of China." After 1981, Central government debt gradually increased. The balance of Central government debt, fiscal deficits, and their percentage of GDP have been since 1998. Overall, China's budget deficit is low. It was slightly higher in 1999-2003 and 2009 when proactive fiscal policies were implemented, but never exceeded 3%. Experts notice a rebound of debt level in 2012, but the overall balance of Central government debt has also been low, accounting for only 22,9% of GDP by the end of 2012. Compared to the debt-deflation erisis of a decade ago, the current debt erisis could be even worse due to three considerations. First, the absolute amount of public debt is much larger. Second, joining the World Trade Organization (WTO) in 2001 greatly helps China stimulate growth and stem deflation by allowing access to inter- national markets. The recent deterioration of the intemational economy induces weak external demand, leading to a more difficult situation. Third, the scale of investment in China is already very large. Further increasing investment to stimulate domestic demand is not only difficult bút also possibly problematic. There is a big debate over whether investment in China is excessive. On the one hand, investment accounts for nearly half of GDP in recent years, suggesting that investment may be excessive. On the other hand, the rate of return to Capital is also high, suggesting that these investments are economically sensible (Bai et al, 2006).

Local government debt appeared in 1979. Its scale was quite small until recently. Experts combine Central and local government debt to obtain totál govemmental debt. Overall, China's government debt is not high, accounting for only 53.5% of GDP in 2012. The government debt-GDP ratio in other major economies, such as France, Germany. Japan, the

United States, and the United Kingdom, is about twice that of China. The average of OECD countries is even higher, due to higher debt levels in several smaller OECD countries. The average debt level of the other four BRICS countries is comparable with that of China. Since 2000, there has been a slight increase in the debt burden. The debt-GDP ratio increased from 40,1% in 2005 to 53,5% in 2012. The debt increase in recent years is mainly due to increase in local government debt. It should be noted that the rise in China's government debt is minor compared to the increase in other major economies. For example, the average debt-GDP ratio in OECD countries rose from 71 % in 2007 to 105% in 2012. ín sum, China's government debt is not high either in absolute level or growth rate.

Experts note that our statistical coverage of China's government debt is broader than other economies because we incorporate debts for which the government provides guarantees and debts the government has potential bail-out responsibility. In fact, most debts on which the government provides guarantees or has potential bail-out responsibility can be covered by corresponding operating revenue. Only when the warrantee and obligor are faced with repayment difficulties, will the government take over the repayment responsibility. As reported by the National Audit Office, the Central treasury has paid 19,1% and 14,6% of the principals for these two types of debts since 2007. Using these two proportions, experts can calculate the weighted debt-to-GDP ratio of China's government. In 2012, this ratio was 39,4%, significantly lower than other economies. It was also lower than the 53,5% obtained if all guarantees and potential bail-out responsibility debt were taken at face value.

China's government debt-GDP ratio remains low for three reasons. First, the budget deficit remained less than 3% for nearly 10 years. Second, the issuance of local governmr s limited most of the time; it began to grow rapidly only after 2009. Finally, China's economy has enjoyed rapid growth for 30 years, enlarging the denominator of tee ratiro. This particularly important because it reminds us that rapid economic growth greatly helps digest debt and alleviates debt risk. As a counter-example, the European sovereign debt crisis is not only due to increases in debt but also due to stagnation in growth. Increasingly heavy debt further drags economic growth, which sets a vicious cycle into motion. The lesson is clear: an economic slowdown will enlarge debt risk. (Hsueh – Li, 1999; Jia - Zhao, 2001).

The initial level of income per capita is not only a robust and significant variable for growth (in terms of conditional or convergence) but output is generativ correlated with fiscal variables, in particular, tax revenues and government expenditures. The underlying model has its theoretical underpinnings ideas (Lin- Tan, 1999; Lu et al, 2008; Lin, 2010). If open economies are especially exposed to shocks, it may be especially important for the government to facilitate private consumption smoothing via counter cyclical (Moccero, 2008). On the other hand, integrated international financial markets mav offer more scope to absorb shocks through risk sharing, suggesting there is less need for governments to step in. For instance, Caner (Caner et al, 2010) finds that such risk sharing is lower aniongst the EU countries than in the US states.

The argument for cross-section studies over long time spans has been that less interesting short- to medium-term effects, such as business cycle effects, are thereby eliminated. However, a number of problems with cross-section studies using long time spans need to be addressed. The most important of these may be a potentially severe simultaneity problem. The cross-country regressions are usually based on average values over long time periods. In such cases, e.g., the level of government spending is likely to be influenced by demographies, in particular an increasing share of elderly. At the same time the share of elderly is correlated with GDP. Thus, errors in the growth variable will affect GDP, demographics and fiscal variables as a share of GDP, which are then correlated with the error term in the growth regression.

A second problem is that cross-section studies using long observation periods give rise to an endogenous selection of government spending (tax) policy. For example, countries that raise taxes and experience lower growth during the observation period are more likely to change the policy stance afterwards and, for instance, reduce taxes, such as Ireland did during the 1980s. A third related problem is that cross-section analysis may be inefficient since it discards information on within-country variation. Whilst both the simultaneity effect and the use of within-country variation are arguments in favour of panel regressions with shorter time spans, there are also risks. When the period of observation is short, it is less likely that errors in the growth regression may be correlated with government debt which may, in turn, affect the latter's estimated coefficient (Caner et al, 2010).

But also additionally the *decreasing tax, the productivity is important* in development of the economy. As Palánkai (2006, p. 314) declared that ”The rapid growth of productivity is still of key importance, and much difference is made by how fast and successfully these countries can enter the knowledge-based society. An encouraging sign is that transnational companies in Central and Eastern Europe have made increasing investments in the R and D sector.”

Hegedűs – Zéman (2016, p. 1038) authors emphasize that also the main aims for creating municipal companies are to manage the economic performance of the towns and to operate the infrastructure. Therefore the decreasing rate for the creating municipal waste by waste operation is very considerable aim for the EU and the Hungarian environmental political strategy.

Financial strategy and management at national level should be extended similarly to the firm –level, in which there is a role of governance, organizing, planning and controlling according to well-defined goal criteria; preparation and realization of raising capital owners. (Zéman et al, 2006, p. 16). Also when companies need for financial resources, even for investment relevant to the reducing gas emission, in any case the financial institutes should follow the financial conditions and risk management of the firms or small-medium enterprises, for example analyse all business cycles, evaluate the risks and determine risk sensitivity of company (see detailed in Hegedűs-Zéman, 2016, p. 1038 and Kalmár et al, 2015, p. 110.). Herzer (2012) argues that there is an outward foreign direct investment as opposed to the traditional view held about investments moving from a foreign country into a host country. Many proponents of outward foreign direct investment argue that outward foreign direct investment enables firms to enter new markets, to import intermediate goods from foreign affiliates at lower costs, and to access foreign technology (Herzer, 2012). But in sharp contrast to this view, opponents of outward foreign investment argue that outward investment substitutes foreign for domestic production when firms shift parts of the production abroad, and accordingly, outward investment inevitably reduces domestic investment, employment, productivity, and thereby economic growth (Herzer, 2012).

Some other experts aware ofthe potential issue (in particular, bias in coefficient estimates) that can arise from a significant cross-sectional dependence – also within similar groups of

countries in my dissertation - in the error term of the model. As put forward by Eberhard, Helmers, and Strauss (2010), the so-called unobserved common factor technique relies on both latent factors in the error term and regressors to take mto account the existence of cross-sectional dependence. Developed with the panel-date/time-series econometric literature over the course ofthe past few years, this method has been largely employed in macroeconomic panel data exercises (see Pesaran -Chudik, 2015; Coakley, Fuertes, and Smith, 2006; Bai et al, 2006; Eberhard et al, 2011). This common factor methodology takes cross-sectional dependence as the outcome of unobserved time-varying omitted common variables or shocks which influence each cross-sectional element in a different way. Cross-sectional dependence in the error term of the estimated model results then in inconsistent coeffícient estimates if independent variables are correlated with the unspecified common variables or shocks. If economic variables are uncorreiated with the omitted variables, then results may be unbiased. Thus, if authors do not use any predictors that might be correlated with what authors imagine to be an important omitted variable, they may be able to reduce the bias. That is why they do not wish to have too many variables in the model. If they use a predictor that is correlated with an omitted variable, they generate endogeneity bias. On the other hand, the more variables they consider the less likely it is that they are omitting something. Kiviet (2014) uses asymptotic expansion techniques to approximate the small sample bias of the standard LSDV estimator for samples where this is a small or only moderately large. Kiviet (2014) extends the bias approximation formulas to acoommodate unbalanced panels with a strictly exogenous selection rule. Where endogenous variables are instrumented by appropriate lagged levels and tested by looking at first-stage regression estimates, as common practice ín the literature. There are different ways to account for such error cross-sectional dependenees (see Sarafidis-Wansbeek, 2010).

With this in mind, experts test for the presence of cross-sectional dependence using Pesaran - Chudik (2015) CD test statistic. They rely on the Pesaran - Chudik (2015) common correlated effects pooled (CCEP) estimator, a generalisation ofthe fixed effects estimator that allows fór the possibility ofcross section correlation. Including the (weighted) cross sectional averages ofthe dependent variable and individual specific regressors is suggested by Pesaran - Chudik (2015) as an effective way to filter out the impacts of common factors, which could be common technological shocks or macroeconomic shocks, causing between group error dependence. The authors investigate the relationship between government debt and real per

capita GDP growth and TFP growth in a sample of 155 countries over the 1970—2008 period. The dataset excludes countries with poor data collection, as measurement error is likely to be large. All variables are in logs with the exception of shares and growth rates.

According to the growth accounting — as the Total Factor Productivity (TFP) in order to assess how fiscal developments may impinge on TFP we construct a new dataset for this variable, for a large number of developed and developing countries, in the periods 1960-2007 and 1970-2007, depending on the availability of investment data for the periods 1950-1960 and 1960—1970, respectiveiy. Naturally, the TFP construction based on the latter period encompasses a larger number of countries. National income and product account data and labour force data are obtained from the latest version 6.3 of the Penn World Table (PWT) of Klenow and Rodriguez-Clare (2005). The authors gathered the following variables: "rgdpwok" (real GDP per worker) and "Ky" (physical Capital to output ratio). To construct the labour quality index of human Capital (H), they take average years of schooling in the population over 25 years old from the international data on educational attainment (E) by Barro and Lee (2010). Annual data on years of schooling from 1960 up to 2000 were retrieved from Klenow and Rodriguez-Clare (2005) dataset and then complemented with Information up to 2007 using the Barro and Lee (2010) dataset together with linear interpolation methods.

According to the financial development proxies the authors also chose to take a further step into combinmg different proxies of fmancial development, which will then be interacted with the debt variable in our regressions, by using Principal Components Analysis (PCA). The conventional measures of financial development are based on Ross Levine's database,12 on which the principal component analysis is applied (following Barro-Lee 2013 approach). For a detailed description on how authors constructed the different financial development proxies: overall financial development, financial intermediary development, stock market development, fmancial efficiency, fmancial size development and bond market development.

According to the debt—growth relationship the experts begin analysis by estimating a growth regression using annual data, for the period 1970-2008, using as regressors the initial level of GDP, population growth, trade openness, private investment (gross fixed capital formation), education and government debt (our variable of interest). Results (not shown for reasons of parsimony) are in line with the growth literature, as experts find significantly negative

coefficients for the initial level of per capita GDP (conditional convergence hypothesis, confirming the catching-up process underlying a longer distance to the steady-state) and population growth, and significantly positive coefficients for trade openness, 13 - 14 private investment and education levels. The experts refrain from commenting on these results again for the remainder of the paper as they are generally consistent and robust throughout. As for the debt-to-GDP ratio evidence points to a statistically significant negative relationship with GDP per capita growth rates for the full sample (pooled OLS system and outlier robust estimators). In Checherita - Rother (2012) the authors address how government size affects economic performance by constructing first a theoretical growth model and then testing the relationship in an empirical section. This translates the successive openness process to internatíonal trade flows (removal of trade barriers and other sort of protectionism duties) by many countries, which has been intensified over the last few decades. Estimations with outlier-robust teehniques don't change qualitatively the main results. The observations excluded are: Angola. Argentina, Azerbaijan. Belize. Chad, Congo (Rep.). Gabon, Iran, Jordan, Kuwait, Lebanon, Malawi, Nicaragua. Nigeria, Oman, Paraguay, Qatar, Sierra Leone, St. Lucia, Swaziland, Syria, Togo, Trinidad and Tobago, UAE, Uruguay, Vanatu, Venezuela and Zimbabwe.

It is important to acknowledge that private credit may bear a complementary relationship with government debt, notably in the context of economic growth. Therefore, we have included an interaction term between a measure of credit issued to the private sector by banks and other financial intermediaries (divided by GDP), excluding credit given to the government, government agencies and public enterprises, and government debt-to-GDP ratio. Experts still obtain statistically significant negative estim ates of the debt-to-GDP ratio on output growth and, additionally, a negative coefficient for the interaction term, meaning that the higher the household's debt burden coupled with higher government debt, the lower output growth will be.

As a robustness exercise axperts have also estimated a model excluding the debt-to-GDP ratio, but explicitly including private credit the interaction term between the two variables. Results suggest that private credit by itself has a statistically negative effect on growth, however, the interaction term yields statistically negative coefficients for the all sample which are robust across econometric specifícations (OLS, FE and SYS-GMM). The negative

coefficient makes not only the effect of the debt-to-GDP ratio conditional on the level of private credit, but vice versa. In fact, it implies that private credit itself boosts growth given a low level of the debt-to-GDP ratio. However, the negative coefflcient on the interaction term has the interesting implication that there exists a threshold level ofthe debt ratio above which private credit can actually dampen growth. For the remainder ofthe paper experts focus on 5-year averages, as cornmon practice in the literature. Regarding the full sample they find evidence that an increase in the debt-to-GDP ratio is detrimental to output growth and this is robust across econometric specifications.

Moreover, for the OECD sub-group the same conclusion seems to apply when running pooled OLS (and the coefficient is now significant at 5% level). It is instructive to briefly discuss the size of the standardised coefficients — these indicate the relatíve importance of the variables included in the model, as a big impact comes from the initial level of per capita GDP as well as from the population growth rate. Also the private investment accounts for a sizeable share and the negative impact ofthe debt-to-GDP ratio is confirmed (an increase of 10 pp in the debt ratio reduces the growth rate of reál per capita GDP by 0.2% per year).

An interesting issue to explore is debt maturity, which experts did using information from the World Bank. Data base shows that when short-debt-to-GDP ratio (defined as public debt with maturity up to 5 years) is included in our growth specifications they still get a negative and statistically significant coefficient (for the full sample). The same applies when long-term debt is used instead, although in this case there is a less detrimental effect on growth. Due to limitations in data retrieved from the WDI, experts used the OECD's own measure ofaverage debt to maturity (in years) to construct additional dummy (binary type) variables. For the average maturity above 5 years we have classified it as long-term debt (dumlong) and attributed a value 1; the complement (short- and medium-term) takes the value zero. Data presents the results from these estimations. In only one case experts find evidence supporting the claim that the higher the debt maturity the higher the economic growth rate (specification 3). As for the interaction term it appears not to be significant.

Also the authors Szabó-Zsarnóczai (2004) declared for case of agricultural sector, that the income conditions made a significant influence on the capacity of the agricultural sector in fields of investments and accumulation. The main problem was the decline of real value of

investments. For example the real value of investments in 2001 had not implemented half of investments realised in 1989. This situation showed the low level of technological and technical development in the agricultural sector during a longer period, than a decade. It was important to increase different kinds of supports for agricultural producers, for example: export subsidies, interests of credits, supports for establishing new farmland structure (Szabó-Zsarnóczai, 2004). As Borszéki, Éva declared: "One fifth of the total income produced by agricultural producers could be obtained by them, and this form of net capital outflow from the agricultural sector, this process makes them be weak regarding their self-financing capacity. This stimulates the producers to get more external financial resources, like credits to finance agricultural development and investments" (Borszéki, 2001).

The other sensitivity question is the profitability and liquidity of typical bank and firm risk factors (see in detailed in Zéman et al, 2006, p. 17.) based on the possible security policy aspects, when firms decide to implement environment friendly investments and renewable energy use. Final solution will be realised by decisions of firms and banks in the private sector of mostly developed countries. Also the different kinds of taxes as revenues of the governmental budget can make influences on the governmental balance, which can continuously have negative balance, therefore this can accumulate the governmental debt of the EU member states from year to year (Lentner, 2010, p. 125).

From point of view of the natural resources there is a lot of water resources in Egypt, as Neszmélyi (2013, p. 62) wrote that Egypt has natural resources as energy and for agriculture and huge amount of human resources, for example renewable energy resources on the Nile river in MENA and ASEAN countries and human resources in China, Japan, and South – Korea (Kozár – Neszmélyi 2014, pp. 94-95; Neszmélyi 2014, pp. 23-24; Neszmélyi, 2016). Based on the sustainable development the natural resources should be managed, like water management, sanitation and clean development mechanization (CDM) for sustainable human health.

Therefore the environmental policy and strategy of EU member states should increase to concentrate the national economic resources to decrease the negative effects of the human activities on the nature. The policy handling crisis and the increasing role of state in the national economy can be seen in detailed in Lentner et al, (2015, p. 98) and Lentner, (2010, p.

122) and Lentner-Farkas, (2004, p. 8; Lentner, 2007) based on the unorthodox policy strengthening at present.

The other countries have little better conditions, for example Russia, Algeria and Kazakhstan, which are at middle level among economies with the worst and the stabile economic conditions (Sebestyénné, Szép, 2016). Mika (2016) declared that the GHG emission should decrease by 60-80%, because if the temperature increases by 3^{o}C, the global warming effects cannot be turned back, therefore the temperature should be kept within 2^{o}C increase in order to avoid of the more negative influences of the global warming.

At present the mitigation of gas emission is became considerable strategic aim to be implemented, but contradict economic interests of economies in the world economy make its solution be implemented so far in time. In spite that the interests and political economic conflicts are very strong there are some initiatives from sides of different country-groups, as High, Middle and Low income country-groups. These initiative steps can be monitored, when the different UN organizations declared and implemented some of their decisions, including financing projects, programs and investment to decrease gas emission by extending environment friendly technologies (see in detailed in Bahaa Al Asmi et al, 2015).

Some issues in controlling, financial and enterprise management

Some authors emphasized the importance of the well operating and operative bank system and bank controlling, namely: “So the strategic controlling activity regarding the bank as a whole deals with only developmental, structural and security issues; mostly with the balance sheet structure risks, market risks, structural yield options, and growth potentials.” (Kalmár et al, 2015, pp. 108-109). Also according to the innovative development, this needs to extend the knowledge of human resources, even for environment friendly technology to be introduced, as Staniewski declared that “The area of human resource management is one of the basic elements of an effectively managed company. In the era of the knowledge-based economy, its importance becomes strategic as the effectiveness of activity within this scope largely determines the achievement of the company’s competitive advantage. Knowledge-based

resources can be particularly important to ensure this advantage" (Staniewski, 2011; also in detailed in J. Szopiński - T. Szopiński, 2013).

Strategic human resource management (SHRM) and development for increasing GDPEmployed and LabourProd. For example according to Mello (2002) SHRM involves the development of an integrated collection of practices, strategies, and policies to facilitate the achievement of the organization's strategic goals. According to Nankervis (Nankervis et al, 2000) the SHRM literature is based on 'manpower' planning, but it is the work of influential management experts (e.g., Inyang, 2010; Ouchi, 1981; and Pfeffer, 2001) stating the significance of the effective management of people as a source of competitive advantage, that encouraged academic to develop framework emphasizing the strategic role of the human resources function (e.g., Huselid - Becker, 2005; Bowen - Ostroff, 2004; Lefter et al, 2007a; Lefter et al, 2007b; and Porter, 1985) and link the prefix 'strategic' to the term 'HRM'; and the result of this linkage is SHRM.

According to Buller-McEvoy (2012) measures of performance must move beyond simple *financial measures and incorporate more comprehensive* tangible and intangible outcomes. One example is provided by Ulrich-Brockbank (2005) and Ulrich-Smallwood (2005; UNCTAD, 2008a; UNCTAD, 2008b) who introduced metrics which provide a potentially more complete and accurate assessments of the performance impacts of HRM practices linked to strategy for assessing the intangible returns on investments in HRM practices. It is important to note that strategic management can be defined as "the art and science of formulating, implementing, and evaluating multi-functional decisions that enable an organization to achieve its long-term goals" (Nandwani, 2013). It is goal oriented in turbulence environment to provide organization business needs, individual and group work needs by designing and implementing the policies and programs of HR (Nandwani, 2013). Organizations need to utilize complex sort of resources to grow, survive and achieve the ultimate objectives that ensure their existence or creation. The deployment of these resources (such as human, financial and material) in the right way helps organizations reach their desired end. (Inyang, 2010).

Wright and McMahan (Wright -McMahan, 1992; Wright et al, 2007) defined SHRM as "the pattern of planned HR deployments and activities intended to enable the firm to achieve its

goals". According to Allen (Allen, 2006; Anca-Ioana, 2013; and Wright-Snell, 1998) there are two assumptions implied in this definition; (a) organizations are able to affect firm level outcomes through their HRM, and (b) it is the combination or system of HRM activities working in concert rather than single practices that defines the ability of HRM to affect the firm at a strategic level. Also the organizational performance increased when HRM practices are 'strong' (Bowen - Ostroff, 2004), and when these practices themselves are integrated with firm's strategy. The emergence of SHRM as a paradigm shift generated more value-added core responsibility, and emphasized the need to integrate HR practices with business strategy (see more detailed in Inyang, 2010). Also the SHRM is evolving as a new approach to the management of people, and specifically focusing on integrating the human capital to business strategy to enhance organizational strengthen (Inyang, 2010). Takeuchi (2003) mentioned that three differences between HRM (traditional HRM) and SHRM as the followings:

The first difference is the level of analysis, which has shifted from a traditional micro focus on examining individual HRM functions (selection/recruitment, training and development, compensation, performance appraisal, job design, etc.) to a firm level of analysis by adopting a system approach to HRM practices. This involves examining the entire system of HRM practices as a whole, rather than examining individual sub-functional practices in isolation (Takeuchi, 2003). Thus, the notion of synergy of HRM practices became particularly important (Lengnick-Hall et al, 2009; Marchington - Wilkinson, 2008; Wright & Snell, 1998).

According to Körmendi-Tóth (1996) and Francsovics (2005, p. 20. and Francsovics – Kadocsa, 2001, p. 112-113), *controlling consists of the following functions*:

1) Determining the corporate goals, and goal setting process (strategic and operational level), economic planning,
2) Reviewing of results, comparison of plan- fact values (detailed cost, earnings and performance settlement system (management oriented accounting), development of index number systems, examination of the deviations from pl,
3) Data collecting, processing for decision preparation and selecting intervention areas,
4) Information service for the correspondent management levels, and the improvement of management information system (Zéman *et al*., 2014a, p. 35).

"The content of information system depends on the size, level of improvement, branch of activity and the position of the life cycle" (Hanyecz, 2009). The task of *controlling as an information system* is the procession of and framing these data into information (Zéman *et al*., 2014a, p. 36). Francsovics (2005) determines the information demand as a social- economics environment, the organizational and legal form of the company, its size, proper scope, the type of information, frequency (periodical or occasional) and the determination of cost/benefit (Zéman *et al*., 2014a, p. 36).

Also it is important that the balance contents the all income coming from the international connections and expenditure implemented by all participants of the national economy – as firms, entrepreneurships, natural private persons and the government (state) – in the given year. The balance of payment consists of two parts: current balance of payment and balance of capital and finance. (Lentner - Farkas, 2004; and Lentner, 2013).

The technological development makes effect on the rentability and income capability. Like other technological marvels, Information Technology (IT) presents opportunities as well as threats to employees (Peppers - Rogers, 2005; Vorley, 1993). Briefly the advantages and disadvantages of IT are as follows all of the qualified demands are needed for implementing to obtain the competitiveness for the firms. (Burns –Stalker, 1961; Davis - Canter, 1955; Taylor, 1911). Office workers might become 'machine minders', individuals may become tied to their workstations, health problems associated with VDU's/printers etc, difficulties of learning to operate electronic machines, strong competition between employees for available jobs, loss of personal contact as information is passed by machine instead of by mouth, (VDU= Visual display units and see in detailed in Davis -Taylor, 1979; Craciun, 2002).

Prätsch *et al*. (2007) posts the reporting and documentary, system developer (besides the system usage) and corporate economic advising tasks to financial controlling. In the concept of Witt - Witt (1994, p. 20), these standpoints are also to be found, but highlight the role of liquidity, the forecast of balance shield, and income statement, the budget calculations, and the development of financial index numbers. According to the size of the company, they mark the necessity of integration to a unified controlling concept as the most important building stone. Additionally, in the phases of the financial department's leading and decision-making processes (financial planning, realization, control) the following tasks has to be done.

The CMIM, the international *financial organization* within ASEAN+3 has main important original basic initiative resources, namely a US$100 million network of bilateral FX (Foreign Exchange) swap lines have been established in 1977 by ASEAN's five founding member state, and a web of bilateral repo lines initiated by EMEAP (Executives' Meeting of East Asia Pacific Central Banks including semi-formal gathering of 11 central banks) in 1995-1997. The research method is to compare and overview the development steps of ASEAN+3 in financial cooperation among member states and IMF, and how financial influences of ASEAN+3 are going in the international financial markets and strengthen their position for economic growth of Asia and world economy. ASEAN+3 connections were bilateral and later on multilateral connections for their economic growth to obtain financial resources of highly developed economies mostly in Asia.

Also the Post-Asian crisis in 2008 was an attention to regional capital market development initially to be focused on national debt and money markets, but more recently considered wider securities reform and capital market development. Collaborative debt market development has comprised efforts to incentive for emerging states in Asia to gather reserves. For the latest decade and future, Asian economies could realise a considerable economic growth, which resulted in increasing their as 24% share of the world economy's GDP. That approach may soon begin influence on a consensus in development policies elsewhere as a direct result of Asia's experience, especially with China becoming highly influential as a strategic trading partner and FDI (Török et al, 2015a; Török et al, 2015b; G20, 2009).

According to the financial crises, the experts turn to a different, but equally important topic. In line with researeh by Caner (et al, 2010) on fiscal developments and financial crises, the Reinhart and Rogoff (2010) database on banking, debt and currency crisis and study the relevance of these phenomena, when interacted with the debt-to-GDP ratio, in expíaining differences in output growth. According to Jia - Zhao (2001), econometric tests and fiscal solvency accounting carried out in his paper confírm the important role of debt crises. Data base presents the results from adding government debt in % of GDP with an interaction term for each type of crisis introduced one at a time, plus a dummy variable (available in the same dataset) taking the value „1" when a debt restructuring occurred and zero otherwise. The first aspect to notice is that government debt in % of GDP retains its negative and is statistically

significant. We do find somé evidence supporting the detrimental effect of financial crises when associated with higher government debt in % of GDP levels on output growth, in particular those related to debt and currency crises (robust across econometric methodologies). For the OECD sub-group the experts lose statistical significance ofthe debt-to-GDP variable entirely, but they retain statistically negative coefficients for most interaction terms with different types ofcrisis (in pooled OLS and FE cases; not in the SYS-GMM though). Moreover, they now have evidence of negative effects of both banking crises and debt restructuring operations on per capita GDP growth. This seems to be in lime with Reinhart and Rogoffs (2010) fínding that banking crises are typically accompanied by large increases in government debts. Moreover, in a companion paper— (Cecchetti et al, 2011) — results suggest that when a financial crisis occurs, government spending tends to be stickier than revenues.

According to Calderon - Serven (2005) study of 39 low income countries (during the 1990s) initial conditions also have a bearing on the nexus between fiscal variables and growth, and an avenue is also explored by Kumar and Woo (2010). Therefore, we similarly include the initial government size (from Cecchetti et al, 2010), in light ofthe robust results obtained by Calderon – Serven (2005). In addition, we include initial trade openness, initial financial depth and initial inflation. For reasons of parsimony results are not shown but they are available from the authors on request. Given data availability a number of observations were lost due to data transformations. One related but unaddressed topic in this paper is the role of oil price shocks in sovereign debt financing. A paper by Fang (1998) looked at this issue more carefully. Fiscal sustainability can also be a motivation in line (Wang, 1997; Lu et al, 2008).

The other international organizations have published their important printed materials concerning the main financial issues of ASEAN +3 member states in order to describe their conceptions to issue financial credits and financial resources for economic growth of ASEAN+3 (ASEAN = Association of Southeast Asian Nations, its member states: Indonesia, Malaysia, Philippines, Singapore, Thailand, Laos, Cambodia, Myanmar, Vietnam, Brunei, ASEAN+3: China, Japan, South-Korea) and APEC (Asia Pacific Economic Cooperation Forum, APEC has member states: Indonesia, Malaysia, Philippines, Singapore, Thailand, Vietnam, Brunei, +3: China, Japan, South-Korea; Australia, New-Zealand, Hong Kong,

Papua New Guinea, Taiwan), also concentrate their financial restores and reserves in their national central banks.

Also it is important to describe their debts and reserve management issues (FSB, 2009, Financial Stability Board, organization created by G20 in 2009). Compare and structure set up of ASEAN+3, International connections, analysing the economic growth of ASEAN+3, data IMF (ISDA, 2010; IOSCO, 2011; Jansson, 2007). Impediments to new issue and *trading activity remain common but national limits to issuance are the most significant* (Acharya, et al, 2007). Most of these schemes *lacked commercial vision*, and provided a functional specificity 'so trivial as to remain outside the stream of human expectations and actions vital for integration' (Vassiliou, 2003; Vassiliou, 2006; ACMF, 2008). ASEAN+3 renewed its objectives for ABMI (Asian Bond Market Initiatives) in May 2012 (ASEAN+3, 2012). At the regional level, bilateral and multilateral swap arrangements can diversify risks and the extension of the Chiang Mai, as a name of a place (= CM; within CMI=Chiang Mai Initiatives and later on CMIM = Chiang Mai Initiatives Multilateralization) reserve pool is a welcome development. The largest degree of risk diversification could be achieved at the global level. (Kato 2009). *The CMIM organization based on the ASEAN+3 tries to increase their share in IMF* in order to increase the larger economic and financial influences on their own economic growth, to create cooperation with highly developed economies and obtain easier more capital investment from IMF financial resources. (Kato 2009).

Asia has far lesser endowments of non-renewable energy resources compared to Africa or the Middle East, and its renewable energy resources endowment is mixed. But some of the most successful East Asian economies have relatively resource scarce except for human capital, including Chine, Japan, South Korea and Taiwan. Analyse some characteristics of the East Asian Region in its economic growth, while the role of state is dominant based on the market orientation; strong orientation towards production for export; relatively high savings from side of consumers and corporations. The case-study uses comparisons of relative income disparities based on Gini coefficients showing contrast in shares of national income or accumulated wealth of the richest and poorest percentiles of population and the GDP growth in main economies of ASEAN in Asia.

Analyse the reasons of economic success in China, namely thirty years of unusually rapid and consistent growth led China to overtake the United States during 2010 to become the world's leading producer of manufactured goods. China's economy has doubled in terms of annual output every seven to eight years since the early 1980s with striking results in those regional economies with which it engages in trade. ASEAN should improve its economy, because it is weaknesses such as underdeveloped financial sectors, poor corporate governance and narrow corporate ownership, incomplete legal systems and inconsistent judicial enforcement, and widespread cronyism or political corruptions that erode the rule of law are continuing vulnerabilities (Török et al, 2015b).

Also this accords with G20 decisions, that the IMF joins the FSB (Financial Stability Board, organization created by G20 in 2009) in multilateral systemic surveillance (G20, 2009). This multilateral system became basic connection system within CMIM and ASEAN+3 to use more capital power and financial resources from *strong capital power member states* to *less capital power states* in ASEN+3 for increasing economic growth. Analysts suggest that member states might make 'greater use' of CMI or CMIM and neglect its lack of utility in all but trivial circumstances (see in detailed in Aizenman, et al, 2010: 19; AFD et al, 2012), and that institutionalization is unlikely to include automatic in drawings.

A CMIM agreement of the same detail as the EFSF (European Financial Stability Facility) framework agreement would consider requirements for at least six variables (Aizenman, et al, 2010: 19; ISDA, 2010, ISDA = International Swaps and Derivatives Association; IOSCO, 2011):

.- Decision making in swap negotiation and operations;

.- Accession and withdrawal of members;

.- CMIM's standing, and relationship with other organizations.

.- More limited work by members of the Asia Cooperation Dialogue (ACD, and its member states: ASEAN+3 and Russia, Bahrain, Bangladesh, Bhutan, India, Iran, Kazakhstan, Kuwait, Mongolia, Oman, Pakistan, Qatar, Saudi Arabia, United Arab Emirates, Sri Lanka).

.- EMEAP's contributions of reserves to two Asian Bond Funds in 2004-2005 (EMEAP: Executive's Meeting of East Asia Pacific Central Banks, its member states: Indonesia, Malaysia, Philippines, Singapore, Thailand, +3: China, Japan, South-Korea; Australia, New-Zealand, Hong Kong).

Some issues of the foreign direct investment

The case for *foreign direct investment* has been strengthened by globalization and trade liberalization that have permeated many economies around the world. These globalization and trade liberalization activities have resulted in the promotion of growth, alteration of the composition and geographical distribution of economic activities which have stimulated competition and the facilitation of international diffusion of technologies with significant positive and negative effects for sustainable development (Zekos, 2016, Australia, 2012). Thus foreign investment has emerged as a strategic tool by organizations to achieve various strategic objectives (Zekos, 2016; Zeile, 2000). According to Chakrabarti (2002), nearly 58% of 30 global foreign investment flows went to the industrialized countries, 37% to developing countries and 5% to the transition economies of Eastern Europe. Many developing countries with weak financial institutions and low corporate governance and accounting standards usually catch the attention of a higher share of their capital inflows in the form of foreign investment (Loungani - Rezin, 2001; Australia, 2013).

Foreign direct investment (FDI) initiatives are usually commenced when a company possesses an ownership advantage such as patents, which it wishes to exploit in the foreign market, and locational considerations such as tariffs and transport costs (Zekos, 2016). Foreign direct investment has been used by many organizations in the past to improve global bottom line results of business operations.

The qualitative research conducted in this study which was built largely on secondary data and a phenomenological research paradigm has revealed a number of interesting concepts in the foreign investment of supermarkets into China. Easson (1992) stage method was adopted and the following represents the findings and taxation arrived at in this research and a direct comparison between these findings and the literature studies examined at the beginning of the study.

- The findings in this research which were gathered from the literature review and the cross-sectional case study of two major foreign retailer into China revealed that foreign direct investment can be outward or inward and it is generally adopted whenever businesses are

looking for obvious location advantages such as economies of scale, increased revenue and reduced cost of labour

- China is currently far above all other Asian economies in terms of the value of its foreign investment total value and it has received at least $86.5 billion in foreign investment since it joined the WTO. China is also constantly adapting its foreign investment and economic policies to create friendly investment environment for potential foreign investors.

For example Dunning (1994; Dunning, 1993) argues that foreign direct investment has the potential of improving the competitiveness of an organization, and thus create employment which ultimately improve the welfare of the host nation. Pelmutter and Heenan (1986) also argue that a successful foreign investment program is typically achieved by way of a joint venture between a foreign company and an indigenous company and this may bring advantages such as risk diversification, capital requirement reductions and lower start-up costs. One of the main channels through which foreign direct investment flows to a host country is through multinational corporations (Liu, 2007). Many research activities and efforts focused at understanding the basis behind foreign direct investment decisions typically emanate from an intention to reduce external market transaction costs by internalizing foreign operations (Buckley, 1998 Buckley- Casson, 1998). So within this framework firms that decide to invest in foreign operations and businesses do so when they can identify firm-specific or ownership advantages where they enjoy some advantages over firms operating in other countries and can exploit these advantages over time (Dunning, 1993).

Foreign direct investment decisions are also implemented when the foreign firm identifies specific location advantages like greater marketing opportunity to penetrate or defend against competitors (Gorard - Taylor, 2004), lower operational costs and greater ease with which to exploit ownership advantages (Dunning, 1993), greater opportunity to create advantages abroad than at home (Saeed et al, 2004; Saunders, 2007), and lower costs associated with divestment and closure of operations (Buckley - Casson, 1998). These numerous factors are part of the business case that justifies the decision to move to foreign countries for business purposes. Foreign direct investment initiatives vary from country to country. For example the USA was adjudged the largest receiver of foreign direct invest in the whole world (Bostan, 2010). As at 1998 report had it that the total value of all foreign investment inflow to the USA was $3.5 trillion. Other statistics received on the foreign investment strength of the USA at

that period was a total sales of $1.9 trillion for the whole affiliate of these MNCs (Multinational Companies) with the entire industry employing 5.6 million people which also accounted for 6% of the entire USA gross domestic product (Zeile, 2000). The value of this volume of foreign investment inflow to the USA represents the total value of some nation's annual budget figure as at the period this research was conducted. This strongly supports the dominant position of the USA in foreign direct investment decisions all over the world. This regional perspective of foreign investment flows was further examined by Lu Jiang et al (2010) where the distribution of foreign investment to other nations apart from the USA was examined. In specific terms Lu Jiang et al (2010) argues that the MENA (Middle East and North Africa) region has attracted a lot of foreign investment due to a growing number of energy and construction projects as well as other business activities. Global Market Information Databases (UNCTAD, 2010; UNFCCC, 2010) states that foreign investment inflows to the MENA region increased by $104,777 in year 2008 which made that to be the sixth consecutive year of increase in the foreign investment figure of that region.

ASEAN Capital Markets Integration Plan in 2009, which has six principles (ACMF, 2008; FSB, 2009) to strengthen the mutual investment and the FDI system in Asian countries' organizations:

.- Adopt international standards to the greatest possible extent possible;

.- Progressive liberalization;

.- Sequencing of reforms;

.- Coordination for investment;

.- Consistent implementation with effective monitoring; and

.- Communication and consultation to set priorities and build consensus.

.- The development was given a forward-looking orientation, with growth sustained through relatively high rates of savings and investment rather than a reliance on external finance. Savings and investment were encouraged through institutional incentives and policies in which the state was directly or indirectly involved (Commission on Growth and Development 2008; Aizenman, et al 2010: 19; ISDA, 2010).

Rasiah et al (2010) argues that outward foreign investment from emerging economies have expanded enormously in the last ten years. The reason for this was attributed to the ability of

these transnational corporations (TNCs) to build up sufficient capabilities in products, processes, organizations and management to venture abroad (Rasiah et al, 2010). Available statistics and research outputs on foreign investment still favour developed economies above emerging economies, but the increasing trend of outward foreign investments from emerging economies began in the 1990s when deregulation and liberalization of many economies began across the globe. Between 1995 and 2005 total outward foreign investment from developing or emerging economies rose from USD$335 in 1995 to USD$1.4 trillion in 2005 (UNCTAD, 2006). Other statistics to support this also stated that the number of developing economies with Oforeign investment stocks exceeding US$5 billion increased from six in 1990 to 27 in 2005 (Rasiah et al, 2010).

Within the Chinese context the subject of outward foreign investment is not new since China as a nation has been involved in different facets of foreign direct investment since it enacted the go-global policy (Wei, 2010). Statistics on the value of the Chinese outward foreign investment reveals that China's Outward Foreign Direct Investment (OFDI) has increased almost twenty times during the last 10 years, reaching $55.9 billion in 2008 (UNCTAD, 2010). This suggests that apart from the location preference of China for many foreign MNCs, China as a nation itself has been involved in series of foreign expansions and internationalisation of domestic businesses. Ramamurti (2004) and Jansson (2007) claim that the trend of focusing on this type of foreign investment has changed in recent times and since the past two decades many emerging markets have increased investments in outward foreign direct investment to other nations around the world.

This also brought about the opportunity for foreign investors to invest in the industry after licenses are granted to them, and manufacturing plants were constructed in the country which led to the diffusion of several technological capabilities (Sternquest, 2007). The retail distribution network was also revamped and deregulated by allowing alternative sources of product distribution which eliminated the under-supply situation in the country and paved way for competition through product quality and efficient distribution capabilities (Strenquest, 2007). These developments resulted in the issuance of licenses to several foreign retailers to establish joint ventures with local retail companies in China (Gale-Reardon, 2004). Within the context of supermarket and grocery sector of the entire Chinese retail industry Khawar (2003) examined the dynamics of this sector relative to the entire retail industry of China, and the

forces that have enabled and retarded the growth of this sector of the industry. China is acclaimed to have one fifth of the world's consumers and is viewed as a very attractive destination for giant supermarket retailers in a global perspective. In assessing the dynamics of the industry in which the supermarket and grocery sectors stand it is important to note that only very few Chinese consumers shop in supermarket (Khawar, 2003; Lin-Monga, 201-) and this has greatly affected the output of the domestic supermarkets in China as well as some of the giant super stores like Wal-Mart in Beijing.

The scientific international literature overviews some issues concerning the environmental conservation issues, controlling, financial and enterprise management difficulties and their possible solution by emphasizing the human resource management, technical development, and some organization background for the international cooperation among main Asian countries by emerging economic issues of China based on approaching economic role of China in the world economy. The international literature focuses on the different roles of the FDI (foreign direct investment) for strengthening the international cooperation among economies of different continents. The FDI has become leading role in the strategy of China to increase their world-wide side economic importance mostly in highly developed economies and the Asian economies closed to borders of China.

The FDIinFlow mostly stimulates the flow of the production input, first the advanced technology, financial resources for toward investment and human resources and also the foreign trade cooperation among the OECD countries and rest of the world. For the last two centuries the international economic and financial cooperation have strengthened among member states of OECD and China, also among ASEAN countries including China. China has started to build more economic affairs either with OECD economies or the Asian countries as neighbouring economies closed to China. These economic cooperation can help the countries to decrease the economic developed gap among themselves and make developed levels of the different countries be closer to each other.

3. RESEARCH METHODS

The statistical analyses are needed to describe the correlations and significance among the variances meaning the economic conditions in detailed for each country. In order to determine the similarities and differences based on the compering system among 30 selected countries, the best way to use the internationally accepted statistical method, namely the SPSS in detailed in Special Program for Social Sciences (Sajtos-Mitev, 2007).
The statistical analyses are set up the SPSS (Special Program for Social Sciences), which scientific methods were worked by Sajtos - Mitev (2007). Based on this research method the analyses need for describing the results by Factor Analysis, Descriptive Statistics, Regression Method, Graphs and Hierarchical Cluster Analysis with setting Dendrogram based on the Ward's Method. Naturally all of the researching methods can make possibility to compare the EU-28 based on the different economic conditions with variances used in the research process.

The special variances as economic conditions are including the GovDebtGDP, as Average Central government debt, total in % of GDP between 2000-2014, GDPEmployed, namely GDP per Employed from 2000 till 2014, GDPGrowth, as average GDP growth rate between 2000-2015 (WDI, 2016), BalaPayInGDP, as Average of Balance of Payment in GDP in %, 2005-2015, LabourProd, as Average Labour Productivity in 2000-2015 in Million Dollar (ILOSTAT, 2016), ConsPrice, Average of consumer price change, in 2000-2011, TaxRevenue namely Average Tax revenue in % of GDP between 2000-2014 (WDI, 2016), FDIinFlow, namely FDI Inward for the period of 2005-2015, FDIoutFlow, namely Outward between 2005-2015, BalanPayment, namely the Balance of payment 2005-2015 (UNCTAD, 2016). Therefore the statistical analyses are based on the 10 variances within four components for 30 selected countries. The statistical analyses include correlation matrix, factor analyses, and cluster analyses for dendrogram using ward linkage. Also the statistical analyses include descriptive statistics and processing summaries to discover measure of the correlations and significance among different variances concerning the economic conditions and performance of the 30 selected economies in this researching work.

The study focuses on the analysing the economic conditions of the selected 30 countries from four continents and correlations and significance among different economic situations as variances mostly based on the performance of the countries accompanying with their central government debt and the GDP growth for the period of 2000-2015. The used SPSS statistical analysing system classified the 10 different variances into four components for applying score system, which are as follows:

Component-1: (Minus) GovDebtGDP, GDPEmployed, GDPGrowth
Component-2: BalaPayInGDP, LabourProd, (Minus) ConsPrice
Component-3: (Minus) TaxRevenue, FDIinFlow, FDIoutFlow
Component-4: BalanPayment

The SPSS statistical system selects ten economic variances into 4 components based on the characters of each variances. Within each component the variances are similar to each other, therefore the statistical analysing system could automatically select them to one-one component. The Component-1's economic variances are existing at principle line "X" and the other variances of other components are at principle line "Y". The statistical analyse uses only secondary statistical research, because the key-questions could not solve the wide side data based analyse, such this was needed for the wide-side data analysing.

China has a favourable economic positions, because the country has reached the increasing GDP growing (GDPGrowth) rate by 9,6% and increasing GDP per employed (GDPEmployed) by 109% since 2000 by the end of 2015, and low share of the central government debt in GDP (GovDebtGDP) in China has been 11,5% annual averagely for period of 2000-2014. The second position was for Slovak Republic and Turkey by 3,9% increasing GDP of two countries, then Poland and Israel by 3,6%, Korea Republic of by 3,55%, Australia by 2,97%. Also Israel from these countries has reached the negative trend of the GovDebtGDP, therefore the balance of the GovDebtGDP shows more debt for this country from year to year.

In cases of some countries it can be declared that the *GDPGrowth rate was at highly or higher level in countries, in these countries the GovDebtGDP was less share*, for example in

China, Belgium, Mexico, Czech Republic, Switzerland, Norway, Korea Republic of, Poland, Australia, New-Zealand, Canada, Sweden and Turkey.

The increasing level of complexity and intricate nature of research in this decade is attracting the attention of many management researchers who are of the opinion that newer and up to date methodologies should be employed (Jogulu-Pansiri, 2011). The methodology of a research work is often a collection of the paradigm, philosophies and methods adopted to execute the aim and objectives of the research as effectively as possible (Oprean, 2002; Morris, 2010). Within this context Gormon and Clayton (2005) argue that management research projects may either be qualitative or quantitative with each requiring different paradigm and philosophical background. Other researchers who have advocated for a third approach called the mixed method are Gorard and Taylor (2004; see more in Simonds - Gorard, 2010; Roman et al, 2007; see more in Széles et al, 2010).

SHRM came to existence and developed in organizations. Further, it is important to note that Lengnick-Hall et al. (2009; and Lefter et al, 2007a) presented an evolutionary and chronological perspective on the development of SHRM. Davoudi, et al. (2012; Drysdale–Huang, 1997) identified the following seven themes, which influenced the development of the field of SHRM:

Explaining contingency perspective and fit; Shifting from a focus on managing people to creating strategic contributions; Elaborating HR system components and structure; Expanding the scope of SHRM; Achieving HR implementation and execution; Measuring outcomes of SHRM; Evaluating methodological issues.

Fully Integrated Type: For this type, the HR specialist is intimately involved in the overall strategic process in both formal and informal interactions - a real reflection of SHRM in practice (Nandwani, 2013). Thus, SHRM is concerned with ensuring a strategic integration between business strategies and HRM. Wright - McMahan's (1992) definition of SHRM illustrates that the main focus of the field should be on integrating HR with firm strategies.

Roman et al, (2007, p 24) the following extremely simple yet equally effective recommendations must apply (Bostan, 2010, p. 79):

.- Financial control must not demand inadequate information and situations, which would require an allocation of time and create psychological strain, to the detriment of regular activity;

.- Financial control must consider the fact that economic phenomena and processes tend to be repeated to a certain degree, therefore at a given stage the same dysfunctions will be observed in most entities, which enables control agencies to identify them more rapidly and therefore to improve the efficiency of their own activity.

In this context, the author quoted above (Cocoara, 1999) makes the following recommendations, which are as follows:

- When any deficiencies are discovered, they will be recorded either directly in the objective that is analysed in the control brief or in the personal record;
- In order to clarify those issues which require discussions, the parties concerned will be invited, after a brief period, to save time, as this creates an opportunity to tackle several issues during the same appointment;
- To ensure that changes can be made during the period of control, in the first days the analysis will focus on accounts such as: "accounts payable", "accounts receivable", "suppliers of current assets", "advance payments to suppliers", "cash advances", "suspense accounts", "expense accounts".

The methodological system of financial control

The control establishes if the economic and financial activity is being organized and carried out according to the established norms, principles or rules. In order to know and improve the economic-financial activity a methodological system is needed that contributes to the reflecting of reality, legality and efficiency (Lefter *et al*., 2007b, p. 30).

From a methodological point of view, the control is a knowledge process that needs several moments: knowing the established situation, knowing the real situation, knowing the deviations by comparing the real situation with the established one, conclusions, proposals and measures (Craciun, 2002). Being a process structured on the basis of the enumerated moments, the control methodology needs:

- formulating the control's objectives;
- defining the objectives depending on the forms of financial control (preventive, operative, subsequent control);
- the organs or the areas that are legally competent to carry out the control upon the established objectives;
- the information sources needed for control (primary documents, technical-operative records, and accounting records);
- using the control proceedings and techniques that contribute to knowing the controlled activity.

The main techniques of control are (Lefter *et al*., 2007, pp. 32-34):
a) The chronological control is carried out as the documents are drawn out, booked and filed. The documents are examined every day, in a raw, in the order in which they are kept, without any previous grouping or systematization.
b) The chronologic control in reverse order is carried out from the end towards the beginning of the control period. One begins with the control of the most recent operations and documents and the control is conducted from the present to the past. It is used when it is \ necessary to establish the moment in which the deviation happened or to follow the development process of the operations that are connected with the deviation.
c) The systematic control requires grouping the documents depending on problems (bank, cash register, supply, etc.) and then requires their control in chronological order.

Lefter *et al*., (2007, p. 35) mentioned that the method of the economic-financial analysis is a research method based on splitting up or separating an object or a phenomenon into component parts. By means of the techniques typical for this method, each element is being separately examined, the cause/effect causes are established, and are determined the trends and fluctuations of various indicators (Oprean, 2002). The analysis completes the control with some aspects that cannot be pointed out by other control methods. It contributes to focusing the control on the essential problematical aspects.

Moreover, the different controlling activities of centralized/decentralized tasks are summarized as the followings (Zéman *et al*., 2013, p. 15; Zéman et al, 2014c):

- Centralized tasks: developing business policy, profitability and risk analysis, profit requirement calculation, expenditure plan calculation, systematic evaluation of target theme implementation, development of integrated plan-fact controlling system, developing business policy alternatives, developing managerial information system.
- Decentralized tasks: developing decision oriented mentality, decentralized expenditure plan, implementing certain planning and controlling tasks, regulation of information process.
- *Types of competitive factors*
- Factors such as quality and quantity of the services, price competition, availability, promotions and public relations play an important role.

Is there an adequate situation for technological environment?

Basically the banks' current situation are defined by communication systems and information technology. The more innovation are introduced, the more old products disappear. (Zéman *et al*., 2013, p. 15).

4. RESULTS AND DISCUSSION

All of the economic variances are correlating among themselves but by different levels to create the special direction for development of performance belonging to the countries in researching works. The study would like to proof strengthens and weaknesses, the favourable and non-favourable correlations and significance among these countries from economic approaches. The economic growth, the GDP growth of countries are usually effected by the central government debt, GDP per employed, labour productivity, domestic consumer price level, tax revenues of the central governmental budget and positive or negative balance of payment generally or calculated in GDP per each country from this 30 country-group. Naturally beyond the inside economic and social background of the performance of the countries the international economic or world economic conditions strongly effect on the national performance development. Mostly these international effects can clearly be followed by flow of FDI (foreign Direct Investment) inflow into the countries and outflow from the countries. The tax revenue calculated in GDP can make influences on the measure of FDI inflow and outflow processes.

The *study would like to analyse* that how the each economic variance can make effect on the other economic variances for development and GDP growth for the national economies of these selected countries. The study would like to measure the level of the correlations and significance among variances and strengthen of each variance in its role for creating influences on the other variances and the main developing direction of the national economies.

The *actuality of my research* that the international economic cooperation has become more important for the individual economic development of any country for the last decades than before. The foreign direct investment activities of the transnational or multinational corporations play important role in the technological development and extending the unified qualified demands and standards internationally accepted by the international organizations for the production process in highly developed or developing economies.

The *importance of my research* that these selected countries mostly are at highly developed economies and they play important significant role for the main economic development trends first in field of technological development and second to extend these technological results and techniques in the world-wide side. The continuous developing processes in these highly developed economies ensure their first position in the world-wide-side economic competitiveness on the world market and the local or national markets. Their highly developed technologies can be extended by the cooperation of the international transnational corporations within transferring the foreign direct investments of theirs in other countries either developed or developing even less developed economies. The FDI inflow can ensure that advanced technological development for any country by which any country can strengthen and increase its competitive level at national and international markets.

The *analyse summarises the main statistical data* collected from different international statistical bases created and issued by ILO, ILOSTAT, UNCTAD and World Bank, and also from EU statistical data bases published in the other international statistical books, also from different published statistical issues of different national statistical offices. The SPSS statistical system summaries the statistical data bases of the selected countries, based on which the SPSS system decided the measure and order of the 10 economic variances and classified these one into four components. Therefore the SPSS system realised the clustering analyses by which this system classified the 30 selected countries as OECD countries and China into five country clusters or groups, which are as follows (see Table-4-1, ILOSTAT, 2016 UNCTAD, 2016; WDI, World Bank, 2016):

Country-group-1: Finland, France, Austria, Italy, Greece, Australia, New-Zealand, UK

Country-group-2: Germany, Netherlands, Switzerland, Denmark, Sweden, Belgium, Norway, Spain

Country-group-3: Canada, USA, Israel, Portugal, Japan

Country-group-4: Brazil, Mexico, Turkey, Czech Republic, Poland, Korea Republic of, Hungary, Slovak Republic

Country-group-5: China

The classification of the 30 selected countries was created by the economic variances and measure of their correlations and significance among themselves. The economic characters and performance process of each country of the selected one determined their cluster and which countries were clustered into each cluster based on the cluster analyses in the SPSS system (see Table-4-1 in detailed).

The ***Table-4-2*** shows the correlation matrix, which provides the measure of the correlations and the significance among the variances concerning different economic process or different parts and sectors of the performance belonging to the countries. The strongest correlation is value of 0,799 or in percent 79,9% between GDPEmployed (GDP per Employed from 2000, 2014/2000, 2000= 100, based 2011 PPP = Purchase Power Parity, WDI, 2016), and GDPGrowth (Average GDP growth rate between 2000.-2015, in %, WDI, 2016), which is a direct correlation one. This means that if the GDPEmployed increases the GDPGrowth also increases in the same period. When the GDP per employed increases the whole value of the GDP should increase, therefore the correlation should be the strongest between themselves, this correlation is strongest from all of the correlations among the variances. Therefore this correlation mostly determines the economic growth and the development trends of the 30 selected countries. If the value of the correlation is closed to value of 1,000 or 100%, generally more than 0,500 or 50%, the correlation can be titled as strong.

The second biggest strong correlation is between LabourProd (Average Labour Productivity in 2000-2015 in Million Dollar calculated in currency rate in 2011; ILOSTAT, 2016) and ConsPrice (Average of consumer price change, in 2000-2011 in %; WDI, 2016) by value of -0715. The strong correlation is contradiction, which means as “Minus” between both of them, because if the LabourProd increases the ConsPrice decreases or opposite, if the LabourProd decreases the ConsPrice increases. This means that the labour productivity increase results increasing products per each worker or employee, therefore the market price or consumer price of the more products should decrease at market in order that the more products can be able to be sold.

The middle strong contradiction correlation by value of -0,489 is between GovDebtGDP (Average Central government debt, total in % of GDP 2000-2014, WDI, 2016) and GDPGrowth. This is also means that increasing trends of the GovDebtGDP results less

investment and less activity of the national performance of any country, therefore the GDPGrowth can decline. The increasing GovDebtGDP also leads to decrease financial support to stimulate the performance of the private sectors including entrepreneurship, private companies and small and medium scale companies.

The middle strong correlation is between BalaPayInGDP (Average of Balance of Payment in GDP in %, 2005-2015; ILOSTAT, 2016) and LabourProd in cases of the 30 selected economies, because this last one can increase therefore the income positions of the employees and employers stimulate them to increase their investment and jobs and also the consumption level of the employees and consumers at the national-wide-side. The increase of the product sells results the tax revenues for the governmental budget as an important element of the balance of payment calculated in GDP. The tax revenues can increase from the value added taxes, personal income taxes and the profit taxes of the companies. The increasing level of the social supports also can stimulate more consumption than the value of the supports.

The *middle strong contradiction correlation* is by -0,416 between LabourProd and GDPGrowth, which means that sometimes and in special cases of the 30 selected countries and because of economic crisis of 2008 the decreasing LabourProd could result a little increase of GDPGrowth for contemporary period. Even this process can effect price-increase of some kinds of services with more increasing number of the employees, which could lead to contribute to increasing of the GDPGrowth, but the value calculated per employee decreased. It can occur in the selected countries at averagely level.

The middle strong correlation by 0,414 between the FDIinFlow (FDI Inward 2005-2015, 2015/2005, 2005= 100, Million US dollar, in percent; UNCTAD, 2016) and the FDIoutFlow (FDI Outward 2005-2015, 2015/2005, 2005=100 Million US dollar, in percent, UNCTAD, 2016). This means that when the FDIinFlow increases this can lead to increase the FDIoutFlow, which can be experienced in cases of the 30 selected countries, as the Table-4-1 provides data about these flowing conditions, all the time this individually depends on the economic conditions of each country.

There is not a considerable correlation and significance between BalaPayInGDP and BalanPayment (Balance of payment 2005-2015, 2005= 100, in million in US $ in percent,

2005 = 100, 2015/2005; UNCTAD, 2016) as this can be seen in the Table-4-1; Table-4-2 and Table-4-9 (WDI, 2016; ILOSTAT, 2016 and UNCTAD, 2016).

The ***significance*** is strong among the GovDebtGDP, GDPGrowth, FDIoutFlow, ConsPrice and GDPEmployed. The significance is the strongest between the GovDebtGDP and GDPGrowth, which was proofed by the correlation analyses. The significance is the second strongest between the GovDebtGDP and FDIoutFlow, because if the GovDebtGDP is at highly level, this can stimulate to increase the level of the taxes as burden even on the foreign companies responsible for the FDI, and in this case these companies increase their FDIoutFlow from countries, where the tax-conditions are not favourable for them. From this approach naturally they decreased their FDI activities by increasing the FDIoutFlow.

Also the ***significance*** is strong between the GovDebtGDP and ConsPrice, because the ConsPrice increase can concern the value of the governmental investment and expenditures by the general price increase based on the ConsPrice level. Mostly the expenditures of the governmental budget and population consumption are set up the bank credits coming from either international, foreign or domestic, national financial institution, which finally these are contributing to increasing the central governmental debt calculated in GDP. This process can have been followed in cases of the 30 selected countries for the period of mostly 2000-2015. Also the ***significance*** is strong between the GovDebtGDP and GDPEmployed, which was explained by the strong correlations between both of them. The significance is strong between the BalaPayInGDP and LabourProd, which also was explained by the strong correlations between both of them.

The significance is strong between the BalaPayInGDP and ConsPrice. The BalaPayInGDP is also annually consisting of two main sides of the balance concerning the current expenditures of governmental budget and population consumption and their incomes calculated in the GDP. Therefore increase of the ConsPrice means that the expenditures are increasing yearly and in case of decreasing of incomes, therefore the balance of the payment at the national level will increase or opposite in case of the decreasing expenditures and increasing incomes of them. Therefore if the BalaPayInGDP increases, this should accompanying with the level of the ConsPrice. Also the Figure-1 shows the significance, when the GovDebtGDP is minus at the principle line “X” concerning the first and the third sessions of the score, and also when

ConsPrice is minus at the principle line "Y" concerning the first and the second sessions of the score. The values of both of them, as two variances, are going to the same direction either to the minus or to plus value in this statistical analysis (Table-4-1 and Table-4-2; WDI, 2016; ILOSTAT, 2016 and UNCTAD, 2016).

The significance is strong between the GDPEmployed and GDPGrowth, which was explained by the correlations. The significance is strong between the GDPEmployed and LabourProd, because if the LabourProd increases, this means that the production value per employed increases, even this can be calculated at national level, therefore also in GDP. This significance is at the top level by 0,02, as mostly closed to zero, which is very strongest. The significance is strong by 0,011 as between the FDIinFlow and the FDIoutFlow, which means that if the FDIinFlow increases within this large 30 selected country-group, therefore the FDIoutFlow decreases. At the world-wide-side the value of the FDIinFlow and FDIoutFlow can be balanced at the closed level, as the data show this process in the Table-4-1.

The significance is strong between the ***TaxRevenue*** (Average Tax revenue in % of GDP 2000-2014, WDI, 2016,) and LabourProd, because if the TaxRevenue increases, this leads to decrease profit income of the firms, companies and corporations, therefore the expenditure of the firms by increasing taxes, therefore the net income and net profit per employed decrease leading to the decreasing the LabourProd. This process proofs the strong significance between both of them. The significance is strong between the TaxRevenue and GDPGrowth, because the TaxRevenue increase can control the and strongly effect on measure of the production and service values, therefore for the developing rate of the GDPGrowth. The size of the TaxRevenue is internationally accepted mean in hands of central governments to decide the volume of production and services, therefore this strongly effects on the GDPGrowth. Therefore the activities of the foreign companies are effected by the TaxRevenue, therefore the significance is strong between the TaxRevenue FDIinFlow. The measure of the TaxRevenue can obstacle or limit the foreign companies to increase their FDIinFlow activities, by the other words to increase the work-jobs in given country.

The significance is strong between the GDPEmployed and GDPGrowth, which means that the increase of the GDPEmployed can stimulate the increase of the GDPGrowth by increasing the products and services per employed. This is proofed in opposite case as for example decrease

of the GDPEmployed can stimulate the decrease of the GDPGrowth. Also the significance is strong between the GDPEmployed and LabourProd, because the increase of GDPEmployed can be realised by increasing LabourProd, to produce more products and to provide more services per employed.

The significance is strong between the LabourProd and ConsPrice, if the price level of products and services increases, which means that the *value of produced products and services increases per employed at the fixed level of employment level*, by the other words the LabourProd increase. Naturally the contradiction conditions are true, when if the price level of products and services decreases, which means that the *value of produced products and services decreases per employed at the fixed level of employment level*, by the other words the LabourProd decrease. The significance is strong between the ConsPrice and GDPGrowth, which means that if the ConsPrice increases, this means that the value of the products and services accepted by consumers in market price on the market increases, therefore increasing market price level of all of products and services contribute to increasing the GDP of the given national economy (Table-4-1 and Table-4-2; UNCTAD, 2016; ILOSTAT, 2016; WDI, 2016).

*There are some conclusions summarized, which are as follows**:***

.1- The significance is strong between the TaxRevenue and GDPEmployed, because increase of the TaxRevenue increases withdraws of incomes of firms and corporations, therefore the GDPEmployed decreased. This shows the strong significance between both of them. Also it is proofed in this 30 country-group that, because the significance is strong among the GDPEmployed, LabourProd and GDPGrowth, this means if the TaxRevenue effects on changing one from these three variances, naturally the TaxRevenue has also the same effect on the other two variances.

Also it is true, that in case of the strong significance between GDPEmployed and GDPGrowth, therefore if the GovDebtGDP effects on the changes of the GDPGrowth, naturally this also effects on the GDPEmployed (see Table-4-2)

In cases of other variances there are not so strong correlations like in cases of TaxRevenue, GDPEmployed, LabourProd and GDPGrowth and in the other cases of GovDebtGDP GDPEmployed and GDPGrowth.

.2- The GovDebtGDP and the TaxRevenue have strongly effected on the GDPGrowth and generally for the performance of the countries, and influences of both of them are more dominant than the other variances in cases of the 30 selected countries for the period of 2000-2015. This is proofed in spite that there are no strong correlation and significance between these two variances.

.3- The significance is strong between FDIoutFlow and LabourProd, which means that if the FDIoutFlow increases, the work-jobs will decrease, therefore the employment will increase and the unit of products and services per employed increases, therefore the LabourProduct also increases. This means that the FDIoutFlow from any country could have contemporary resulted a relative increase of LabourProduct in cases of the 30 selected countries in four continents for period of 2000-2015, but for longer future time period this FDIoutFlow can lead to decrease the level of the LabourProduct. In these both of ways the strong significance between FDIoutFlow and LabourProd can be proofed and also the contradiction in fields of significance approaches is not remarked by minus code or sign, because the strong significance should be closed to the level of "zero" as value of 0,000, in this case there are not important plus or minus values. The zero cannot be plus or minus in the significance of the SPSS system.

Table-4-1: Summarised Table, Economic conditions of OECD countries and China

Countries	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Finland-1	**50,2**	**13**	**1,5**	**0,5**	**84,3**	**1,87**	**21,1**	**60**	**-74**	**-96**
France	83,3	2,9	1,3	-0,6	87,4	1,75	22,4	30	-49,5	-22
Austria	82,1	8,7	1,5	1,8	81,6	2,1	26,2	-63,7	11,3	54
Italy	121	9,2	0,22	-0,1	81,4	2,2	22,3	-13	-30	133
Greece	147,7	19,8	0,2	-4,3	54	3,3	13,1	-62	-74,2	-99,4
Australia	27,8	16,8	2,97	-4	70,9	3,18	23,1	-56	-53	-34
New-Zeala.	48,2	12	2,3	-3,7	55,2	2,6	29,1	-55	86	-37,5
UK	63,4	14,9	1,9	-3,8	82,5	3,0	25,5	-78	-60	-387
Germany-2	**53,7**	**7,8**	**1,3**	**6,6**	**78,7**	**1,7**	**11,2**	**-51,5**	**25,3**	**117**
Netherlands	54,1	7,8	1,3	8,5	83,3	2,1	21	87,2	6,6	65,3
Switzerland	28,9	7,8	1,9	12	102,8	0,9	9,5	138	37,3	32
Denmark	47,1	9,6	0,9	6	95,8	2,2	32,4	-58	0,5	86,3
Sweden	42,3	21,6	2,3	6	88,7	1,6	27,4	8,6	-14	10
Belgium	6,9	8,1	1,5	0,6	91	2,23	25,4	-8,8	18,2	97
Norway	32,1	9,4	1,7	11,8	128,6	2,1	26,6	-66	-17	-30
Spain	50,8	6,5	1,7	-1,5	63,5	2,9	14,23	-64	-17	622
Canada-3	**50,5**	**8,7**	**2,2**	**-2,1**	**70,8**	**2,15**	**12,8**	**88,5**	**140**	**-70**
US	70	9,9	1,93	-3,2	91,3	2,5	10,4	262	8	-35
Israel	97,5	2,5	3,6	3,7	54	2	24,3	240	234	257
Portugal	118,6	9,9	0,42	-3,6	39,9	2,6	20,9	71,4	300	95,6
Japan	190,3	13,3	0,83	2,5	72,5	-0,3	9,9	-40	180	-20
Brazil-4	**60,9**	**15**	**2,9**	**-2,6**	**11**	**6,7**	**14,8**	**4,3**	**20**	**-23**
Mexico	22,4	1,7	2,4	-1,7	19,9	5,1	9,9	15,4	23	-251
Turkey	44	5,8	3,9	5,6	23,6	8,72	20,2	65	34,9	53
Czech Rep.	25,9	32,2	2,7	-0,8	29,1	3,1	13,8	-9,7	92	24
Poland	45,7	43	3,6	-2,3	22,1	3,5	16,6	-9,7	123	-85,7
Korea Rep of	36,3	24,5	3,55	4,6	42,3	3,18	14,5	-64,3	23,2	73,7
Hungary	72,8	37,7	2,1	0,7	27,6	5,9	21,8	-83,2	-32	140
Slovak Rep	40,4	52,7	3,9	-2,9	30,5	4,95	11	-74,2	-68	78,2
China-5	**11,5**	**109**	**9,6**	**3,4**	**43**	**2,94**	**9,9**	**88**	**86**	**15**
Variances	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Components	**(-)1**	**1**	**1**	**2**	**2**	**(-)2**	**(-)3**	**3**	**3**	**4**
OECD	93,1	13,2	1,73	0,4	71,4	--	15,2	63,8	54,4	101
World	84,6	17,9	2,87	2,3	16,9	--	14,3	85,5	80	385

Source: Owned calculation based on the international Data bases, WDI, 2015; ILOSTAT, 2016; UNCTAD, 2016

Component-1: (Minus) GovDebtGDP, GDPEmployed, GDPGrowth

Component-2: BalaPayInGDP, LabourProd, (Minus) ConsPrice

Component-3: (Minus) TaxRevenue, FDIinFlow, FDIoutFlow

Component-4: BalanPayment

Clustering the OECDD countries and China

Country-group-1: Finland, France, Austria, Italy, Greece, Australia, New-Zealand, UK

Country-group-2: Germany, Netherlands, Switzerland, Denmark, Sweden, Belgium, Norway, Spain

Country-group-3: Canada, USA, Israel, Portugal, Japan

Country-group-4: Brazil, Mexico, Turkey, Czech Republic, Poland, Korea Republic of, Hungary, Slovak Republic

Country-group-5: China

Ten Variances:

GovDebtGDP -1	Average Central government debt, total in % of GDP 2000-2014 http://stats.oecd.org/Index.aspx?DataSetCode=GOV_DEBT World Development Indicator, 2016, World Bank
GDPEmployed -2	GDP per Employed from 2000, 2014/2000, 2000= 100, based 2011 PPP, World Development Indicator, 2016, World Bank
GDPGrowth -3	Average GDP growth rate between 2000.-2015. in % http://stats.oecd.org/Index.aspx?DatasetCode=SNA_TABLE1 World Development Indicator, 2016, World Bank
BalaPayInGDP -4	Average of Balance of Payment in GDP in %, 2005-2015
LabourProd -5	Average Labour Productivity in 2000-2015 in Million Dollar (2011) ILOSTAT, 2016 http://www.ilo.org/ilostat/faces/oracle/webcenter/portalapp/pagehierarchy/Page3.jspx?MBI_ID=49
ConsPrice -6	Average of consumer price change, in 2000-2011 in % http://stats.oecd.org/Index.aspx?DatasetCode=SNA_TABLE1 World Development Indicator, 2016
TaxRevenue -7	Average Tax revenue in % of GDP 2000-2014 World Development Indicator, 2016, World Bank
FDIinFlow -8	FDI Inward 2005-2015, 2015/2005, 2005= 100, Million US dollar, in percent
FDIoutFlow -9	FDI Outward 2005-2015, 2015/2005, 2005=100 Million US dollar, in percent
BalanPayment -10	Balance of payment 2005-2015, 2005= 100, in million in US $ in percent, 2005 = 100, 2015/2005 UNCTAD Handbook of Statistics, 2016, New York, Geneva, p. 264

Table-4-2: Correlation Matrix

		GovDebtGDP	BalaPaylnGDP	BalanPayment	TaxRevenue	FDIinFlow	FDIoutFlow	GDPEmployed	LabourProd	ConsPrice	GDPGrowth
Correlation	GovDebtGDP	1,000	-,213	,035	-,056	-,003	,265	-,249	,020	-,262	**-,489**
	BalaPaylnGDP	-,213	1,000	,197	,108	,133	-,006	-,077	**,465**	-,243	,051
	BalanPayment	,035	,197	1,000	,006	,034	,142	-,050	-,004	-,048	-,019
	TaxRevenue	-,056	,108	,006	1,000	-,226	-,122	-,302	,370	-,087	-,273
	FDIinFlow	-,003	,133	,034	-,226	1,000	**,414**	-,083	,075	-,121	,198
	FDIoutFlow	,265	-,006	,142	-,122	,414	1,000	,008	-,268	-,186	,126
	GDPEmployed	-,249	-,077	-,050	-,302	-,083	,008	1,000	-,370	,157	**,799**
	LabourProd	,020	,465	-,004	,370	,075	-,268	-,370	1,000	**-,715**	**-,416**
	ConsPrice	-,262	-,243	-,048	-,087	-,121	-,186	,157	-,715	1,000	,320
	GDPGrowth	-,489	,051	-,019	-,273	,198	,126	,799	-,416	,320	1,000
Sig. (1-tailed)	GovDebtGDP		,129	,426	,384	,493	**,078**	**,093**	,459	**,081**	**,003**
	BalaPaylnGDP	,129		,149	,285	,241	,488	,342	**,005**	**,098**	,394
	BalanPayment	,426	,149		,488	,428	,226	,396	,492	,400	,459
	TaxRevenue	,384	,285	,488		**,114**	,261	**,052**	**,022**	,324	**,072**
	FDIinFlow	,493	,241	,428	,114		**,011**	,332	,347	,263	,147
	FDIoutFlow	,078	,488	,226	,261	,011		,483	**,076**	,163	,253
	GDPEmployed	,093	,342	,396	,052	,332	,483		**,022**	,204	**,000**
	LabourProd	,459	,005	,492	,022	,347	,076	,022		**,000**	**,011**
	ConsPrice	,081	,098	,400	,324	,263	,163	,204	,000		**,043**
	GDPGrowth	,003	,394	,459	,072	,147	,253	,000	,011	,043	

Source: Owned calculation based on the SPSS and the international Data bases

Table-4-3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,400
Bartlett's Test of Sphericity	Approx. Chi-Square	118,541
	df	45
	Sig.	,000

Source: Owned calculation based on the SPSS

Table-4-4: Anti-image Matrices

		GovDebtGDP	BalaPaylnGDP	BalanPayment	TaxRevenue	FDIinFlow	FDIoutFlow	GDPEmployed	LabourProd	ConsPrice	GDPGrowth
Anti-image Covariance	GovDebtGDP	,530	,054	-,010	,042	-,055	-,095	-,096	,020	,022	,149
	BalaPaylnGDP	,054	,578	-,168	,117	,086	-,131	,021	-,142	-,093	-,050
	BalanPayment	-,010	-,168	,923	-,025	,005	-,021	,012	,036	,027	,007
	TaxRevenue	,042	,117	-,025	,624	,218	-,160	,033	-,138	-,129	-,013
	FDIinFlow	-,055	,086	,005	,218	,521	-,181	,118	-,098	-,064	-,117
	FDIoutFlow	-,095	-,131	-,021	-,160	-,181	,355	,066	,148	,176	-,041
	GDPEmployed	-,096	,021	,012	,033	,118	,066	,216	,026	,067	-,153
	LabourProd	,020	-,142	,036	-,138	-,098	,148	,026	,134	,139	,010
	ConsPrice	,022	-,093	,027	-,129	-,064	,176	,067	,139	,209	-,032
	GDPGrowth	,149	-,050	,007	-,013	-,117	-,041	-,153	,010	-,032	,159
Anti-image Correlation	GovDebtGDP	,**534**[a]	,098	-,015	,072	-,104	-,219	-,283	,075	,065	,515
	BalaPaylnGDP	,098	,**410**[a]	-,230	,195	,158	-,290	,060	-,510	-,267	-,166
	BalanPayment	-,015	-,230	,**486**[a]	-,032	,007	-,036	,026	,102	,061	,019
	TaxRevenue	,072	,195	-,032	,367[a]	,383	-,340	,091	-,479	-,356	-,042
	FDIinFlow	-,104	,158	,007	,383	,271[a]	-,420	,353	-,372	-,195	-,409
	FDIoutFlow	-,219	-,290	-,036	-,340	-,420	,223[a]	,237	,679	,648	-,171
	GDPEmployed	-,283	,060	,026	,091	,353	,237	,**473**[a]	,155	,315	-,826
	LabourProd	,075	-,510	,102	-,479	-,372	,679	,155	,**407**[a]	,830	,068
	ConsPrice	,065	-,267	,061	-,356	-,195	,648	,315	,830	,357[a]	-,175
	GDPGrowth	,515	-,166	,019	-,042	-,409	-,171	-,826	,068	-,175	,**516**[a]

a. Measures of Sampling Adequacy(MSA)

Source: Owned calculation based on the SPSS

The Table-4-3 shows the value of the KMO at first line of the Table, which is under the 0,500, as 50%, which means that the correlations are middle weak among the different ten variances in cases of the selected 30 countries. But the Bartlett's Test of Sphericity Approx. Chi-Square is quietly good, because it is over 100, and Significance is 0,000, which has been the best value of significance among variances in this selected country-group for the period of 2000-

2015. At the first line of the Table-3 the value of KMO is calculated from the average of figures remarked by “a” in the diagonal line of the down session of the Table-4. The remark “a” means as Measures of Sampling Adequacy (MSA), the values of the figures provides that how much each variance is important in this SPSS analysis in percent. If the value of each figure concerning the given variance in this Table-4, its title as Anti-image Matrices, is over 0,500 as 50% concerning the given variance, this variance is strongly important in this analysis, but if it is under 0,500 as 50%, the given variance based on its figure is middle weak important in this analysis.

In cases of the values concerning the variances of the Table-4-4 the variances have strong importance, namely the GovDebtGDP by 0,534 (53,4%), GDPGrowth by 0,516 (51,6%) have values over 50%. The variances have middle strong importance, namely the BalanPayment by 0,486 (48,6%), GDPEmployed by 0,473 (47,3%), BalaPayInGDP by 0,410 (41%), LabourProd by 0,407 (40,7%), because their values are over 40%. The variances have weak importance, namely the TaxRevenue by 0,367 (36,7%), ConsPrice by 0,357 (35,7%), FDIinFlow by 0,271 (27,1), FDIoutFlow by 0,223 (22,3%), because their values are under 40%. The figures of the variances are numbers showing the measure of the importance of variances in this SPPSS statistical system.

The figures show that the most important variances are the GovDebtGDP and GDPGrowth for the economic growth of the selected countries and therefore the correlations of them are the strongest between themselves or sometimes with other variances as this processes can be followed in the Table-4-2 (Correlation Matrix). The other four variances namely BalanPayment, GDPEmployed, BalaPayInGDP and LabourProd are also important, but little less than the two one mentioned above. The other two variances TaxRevenue and ConsPrice are middle weak important, but the last two variances, namely the FDIinFlow and FDIoutFlow are weak important. This process can be followed in the Table-4-4 in detailed.

The Table-4-5 also connects with Table-4-4 for cases to show how importance is for each variances but from other approach, namely the extraction of values belonging to the variances of the statistical analyses. TaxRevenue has the lowest level by 0,449 (44,9%) from all of ten variances, but other variances are more than level of 0,500 as 50%, therefore all of the other variances have strong correlations in this analysis. The LabourProd and GDPGrowth

variances have the highest level of extraction concerning the initial basic level in case of the comparison.

Table-4-5: Communalities

	Initial	Extraction
GovDebtGDP	1,000	,696
BalaPayInGDP	1,000	,693
BalanPayment	1,000	,806
TaxRevenue	*1,000*	*,449*
FDIinFlow	1,000	,583
FDIoutFlow	1,000	,705
GDPEmployed	1,000	,685
LabourProd	**1,000**	**,929**
ConsPrice	1,000	,744
GDPGrowth	**1,000**	**,905**

Extraction Method: Principal Component Analysis.

Source: Owned calculation based on the SPSS

Table-4-6: Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,769	27,693	27,693	2,769	27,693	27,693	2,232	22,321	22,321
2	1,715	17,152	44,845	1,715	17,152	44,845	2,111	21,110	43,431
3	1,658	16,583	61,429	1,658	16,583	61,429	1,737	17,367	60,798
4	1,052	10,520	**71,949**	1,052	10,520	71,949	1,115	11,152	71,949
5	,913	9,127	81,076						
6	,781	7,808	88,884						
7	,540	5,404	94,288						
8	,409	4,087	98,375						
9	,092	,922	99,297						
10	,070	,703	100,000						

Extraction Method: Principal Component Analysis.

Source: Owned calculation based on the SPSS

Also the Table-4-6, namely Total Variance Explained based on the Extraction Method: Principal Component Analysis, shows that the all of the ten variances are explained by four components by 71,949% about by 72% based on the correlations and significance among all of the variances based on the Extraction Method: Principal Component Analysis. This Table-4-6 also explains the correlations of the variances, but in this case it is not enough to explain the importance of each variance from all of them, but this Table-4-6 adds all of the variances to determine their importance in percent and every each one. Only variances of the first components were explained of by 27,693%, but the other rest of the variances were explained the remaining percent as 44,256%.

The Table-4-7, namely Rotated Component Matrix shows values of the variances and these are clustered into four components, of which variances of the first component are at the principle line "X", while the other variances of the other three components are at the principle line "Y" in score system of these statistical analyses (see Figure-4-1; Figure-4-2 and Figure-4-3). Also these figures show the places of the 30 selected countries in the four sessions of the score. The clustering variances into four components are realised based on the Extraction Method: Principal Component Analysis and the Rotation Method: Varimax with Kaiser Normalization.

Also the Table-4-8, namely Descriptive Statistics shows the different values of economic conditions of the 30 selected countries in fields of each variances in these statistical analyses. The values of variances for the countries are ordered by their measures. For example Minimum value of the different variances per countries of 30 selected one also the same method is applied for the Maximum values in fields of all variances, Mean is applied for calculating the average value of the 30 countries in each variance and also the Standard Deviation, which show the average difference among the minimum and maximum values of selected 30 countries in fields of the all variances. From all of the Minimum values the lowest Minimum value is 0,20 in the field of GDPGrowth and from all of the Maximum values the highest Maximum value is 622 in the field of the BalanPayment and the highest Mean average value from all of the Mean average values is 63,5767 in the field of the LabourProd in the 30 selected countries. Also the Table-4-8 shows that the largest Std. (Standard) Deviation value from all of the Std. Deviation values is 164,44252 also in the field of the BalanPayment in cases of the selected 30 countries. These Minimum, Maximum and Mean also the Std.

Deviation values show that where these values can be found in cases of different variances concerning the countries.

Table-4-7: Rotated Component Matrix[a]

	Component			
	1	2	3	4
GovDebtGDP	**-,741**	-,132	,337	-,128
BalaPayInGDP	,258	**,684**	-,012	,398
BalanPayment	-,062	-,018	,109	**,889**
TaxRevenue	-,242	,277	**-,521**	,207
FDIinFlow	,109	,257	**,708**	,053
FDIoutFlow	-,134	-,086	**,798**	,204
GDPEmployed	**,755**	-,235	,160	-,187
LabourProd	-,234	**,912**	-,198	-,059
ConsPrice	,306	**-,743**	-,272	,157
GDPGrowth	**,898**	-,193	,247	-,003

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Source: Owned calculation based on the SPSS

Component-1: (Minus) GovDebtGDP, GDPEmployed, GDPGrowth
Component-2: BalaPayInGDP, LabourProd, (Minus) ConsPrice
Component-3: (Minus) TaxRevenue, FDIinFlow, FDIoutFlow
Component-4: BalanPayment

Table-4-8: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
GovDebtGDP	30	6,90	190,30	**60,8800**	**40,43576**
BalaPayInGDP	30	-4,30	12,00	1,2367	4,66228
BalanPayment	30	-387,00	622,00	25,4167	**164,44252**
TaxRevenue	30	9,50	32,40	18,7110	6,78553
FDIinFlow	30	-83,20	262,00	10,0433	**89,59806**
FDIoutFlow	30	-74,20	300,00	32,0200	**90,36876**
GDPEmployed	30	1,70	109,00	18,0600	21,01939
LabourProd	30	11,00	128,60	**63,5767**	29,36990
ConsPrice	30	-,30	8,72	2,9590	1,77913
GDPGrowth	30	,20	9,60	2,2707	1,73050
Valid N (listwise)	30				

Source: Owned calculation based on the SPSS

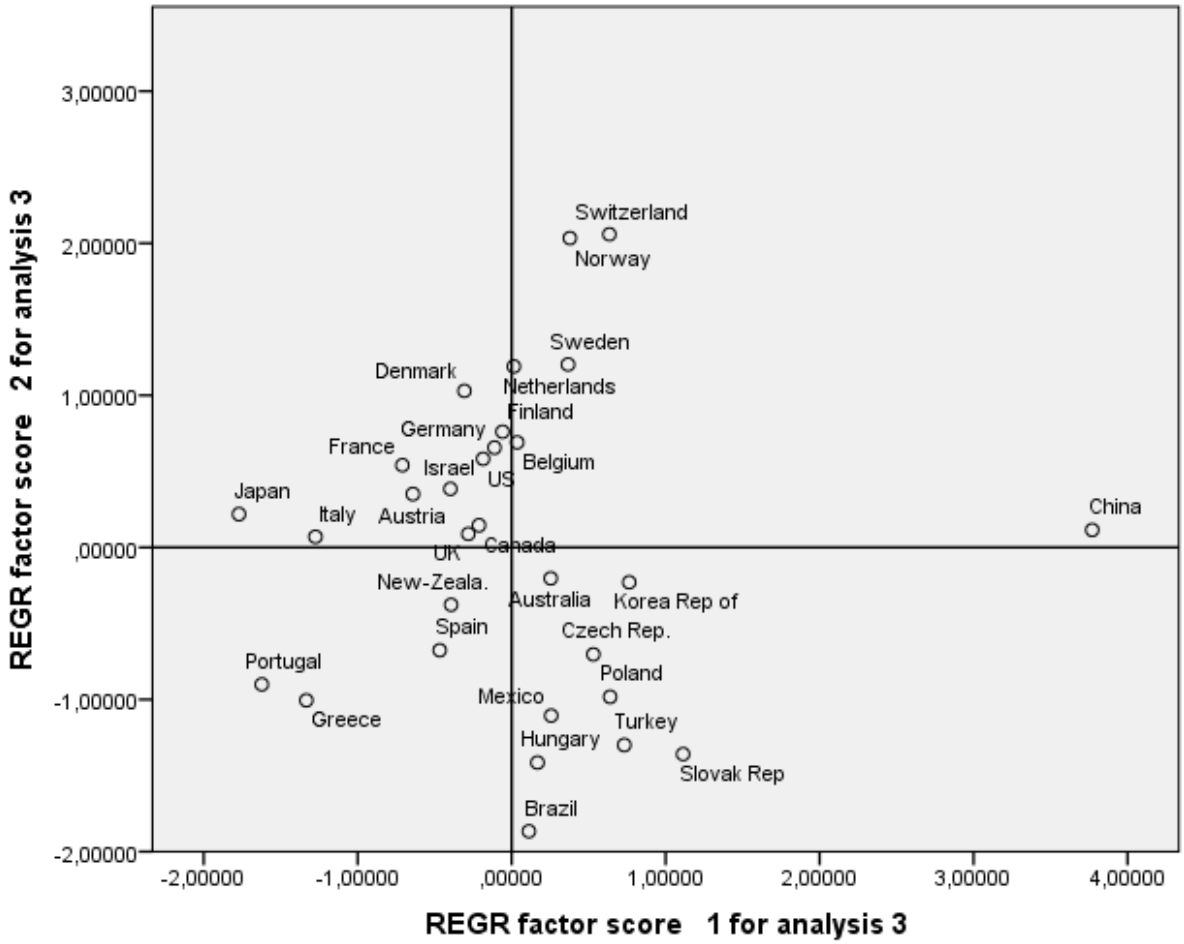

Figure-4-1: Factor Analyses for the REGR factor score 1 and REGR factor score-2 in cases of OECD countries and China
Source: Owned calculation based on the SPSS

Component-1: (Minus) GovDebtGDP, GDPEmployed, GDPGrowth
Component-2: BalaPayInGDP, LabourProd, (Minus) ConsPrice

Country-group-1: Finland, France, Austria, Italy, Greece, Australia, New-Zealand, UK
Country-group-2: Germany, Netherlands, Switzerland, Denmark, Sweden, Belgium, Norway, Spain
Country-group-3: Canada, USA, Israel, Portugal, Japan
Country-group-4: Brazil, Mexico, Turkey, Czech Republic, Poland, Korea Republic of, Hungary, Slovak Republic
Country-group-5: China

In the ***Figure-4-1*** *in the first quarter* of the score is above principle line "X" turn to right side from the "Origo" and the countries, which are as follows: China, Switzerland, Norway, Sweden, Netherlands and Belgium, 6 countries. In general in these countries the GovDebtGDP decreases, which trend is opposite to increasing growing rate of GDPEmployed and GDPGrowth. Also the ConsPrice decreases and the LabourProd and BalaPayInGDP increase.

This is a natural contradiction, because if the government debt in percent of GDP is increasing, this can occur, when the performance of countries falls based on the GDP decrease and GDP per employed decrease. If the GDP and GDP per employed increase, these can lead to increase the possibility for decreasing the central government debt even it is calculated in GDP. The production increase leads to increase the level of salaries and personal income taxes and the willingness of consumers to purchase more products by increasing value added taxes for governmental budget and therefore to decrease the central government debt accounted in percent of GDP.

In cases of Countries: In the first quarter at principle line "X" ***China*** has a favourable economic positions, because the country has reached the increasing GDP growing (GDPGrowth) rate by 9,6% and increasing GDP per employed (GDPEmployed) by 109% since 2000 by the end of 2015, and low share of the central government debt in GDP (GovDebtGDP) in China has been 11,5% annual averagely for period of 2000-2014. Chine has the top increasing in these fields, because after China in field of GDPGrowh, the second position was for Slovak Republic and Turkey by 3,9% increasing GDP of two countries, then Poland and Israel by 3,6%, Korea Republic of by 3,55%, Australia by 2,97%. Also Israel from these countries has reached the negative trend of the GovDebtGDP, therefore the balance of the GovDebtGDP shows more debt for this country from year to year in this session (see Figure-1; Table-1 and Table-9; WDI, 2016; ILOSTAT, 2016 and UNCTAD, 2016).

In Figure-4-1, in countries of this score, the first was China, which could have decreased the negative trend at the low level of the central government debt calculated in GDP, while the other countries have less favourable conditions in field of the central government debt in GDP (GovDebtGDP). In the field of the GovDebtGDP first was Japan by 190,3%, after that Greece was the second by 147,7%, Italy by 121%, Portugal was 118,6, Israel by 97,5% in GDP. The data show that how the highly developed economies have so high share of their governmental

debt in the GDP. In the world economy generally the average level of the central government debt also was at the very highly level by 84,6%, while in cases of OECD countries as the highest developed economies of the world economy was at level of 93,1%. This shows that the OECD economies are more debated than the developing countries. In spite that these OECD countries have highly developed economies and performance with more competitiveness in the world market against developing countries, they could not regular their economies to keep back the inflation effects and therefore to stop their quick price level increase and cut the governmental budget's negative deficit. Generally low level of the GDPEmployed and GDPGrowth contributed to increase the central government debt in GDP (GovDebtGDP) in most of these selected counties. Also the Euro introducing has a main criteria, namely that the GovDebtGDP cannot be more than the level of the 60%, but additionally to Greece, Italy and Portugal, also some other former EU-15 member states have more than 60%, namely France by 83,3%, Austria by 82,1 and UK by 63,4%. This considerable large debt weaknesses the financial and economic stability of the EU member states and other developed economies. Therefore France has GDPGrowth by 1,3%, Austria has by 1,5% and UK has GDPGrowth by 1,9% under the 2% level (Table-4-9). Mostly these countries withdrew their capital capacity and power from the economic development to cover their central government debt and to decrease the deficit of balance of payment in GDP. These countries mostly spent their financial and capital power to increase their consumption either at level of the central government or population instead of covering expenditures of the economic growth.

In case of the GDPEmployed (GDP per employed from 2000 to 2014, 2000= 100) is important economic indicator for economic development and the measure for the efficiency of the labour force by determining value per employed or employees in GDP. In this field China has increased the GPDEmployed by 109% since 2000 until the end of 2014, by this result China became at top of the country list. The other countries having enough adequate economic growth by GDPGrowth rate in the same time have implemented considerable results in the field of the GDPEmployed, but mostly about less than half of China's one since 2000. The second country in this country list is Slovak Republic by 52,7%, while Poland by 43% and Hungary 37,7% within the same period. From the level of 20% of GDPEmployed additionally to countries mentioned before Czech Republic was by 32,2%, Korea Republic of 24,5%, Sweden 21,6% and Greece was by 19,8%, which can be seen as 20% in essence. In

spite that Greece had 0,2% in field of GDPGrowth for period of 2000-2015, mostly the Greek economy was stagnated therefore after Japan, Greece had GovDebtGDP by 147,7% averagely from 2000 by the end of 2014, this GDPEmployed rate of Greece can be declared as good growing result. In spite that less investment was realised in Greece, this results could be implemented because of the active performance of the Greek service sector and within this one the tourism, therefore the tourism could play leading role for the increasing GDPEmployed.

In the Figure-4-1 and the Table-4-9 well show the special contradiction among the ConsPrice (average consumer price change in period of 2000-2011) and the LabourProd and BalaPayInGDP (average balance of payment in GDP in % in period of 2005-2015). This means that if the ConsPrice decreases, the other two variances increases.

When the ConsPrice decreases, the consumption and the purchasing are increasing, therefore the production is increasing per employed, which means the LabourProd (average labour productivity in 2000-2015 in million dollar of 2011) increases and also the positive balance of payment in GDP can increase (BalaPayInGDP). Also if the ConsPrice decreases the GDPgrowth and the GDPEmployed increase, also the GovDebtGDP decreases, the GDPEpmloyed and the GDPGrowth increase (Figure-1, first session of the score, above line "X", turn to the right side).

In the Figure-1 in first session of the score, at principle line "Y" China has a moderately level in field of increasing BalaPayinGDP, LabourProd and decreasing ConsPrice. China has reached annual averagely 3,4% in field of the BalaPayinGDP for period of 2005 and 2015, which means that China keeps a good moderately strong positive balance for the payment in GDP, which can be created within a harmonized economic growth in China. In this field Switzerland has had the top result with 12% for BalaPayInGDP for the same period since 2005, because of its internationally accepted strong banking sector. China is in the tenth position from the thirty selected countries in this field. In fields of LabourProd and ConsPrice China also has a moderately middle strong place in the international compare within the 30 selected countries, of which are mostly OECD economies. In field of LabourProd China has the 21st position by remark as 43, which can ensure a good international competition on the world market., while most of the highly developed economies have more remark in this field for the period of 2000 and 2015.

These developed economies are mostly from former EU member states. These examples also strengthened that the highly level of GovDebtGDP effects the low level increase of GDPEmployed and the GDPGrowth. For China and the domestic consumers there have been favourable economic conditions, namely the really low level increasing ConsPrice (consumer price) for the same period. This low level price increase is favourable in order:

.- to keep back the considerable inflation rate;
.- to strengthen the purchase power parity of domestic consumers;
.- generally to remain the lower level of salaries by keeping the low level of the consumer prices;
.- by keeping low levels of salaries and consumer prices the human resources can be relatively cheaper in the international compare;
.- therefore the comparative advantages can be extending on the world market, by which the export oriented policy and strategy of the country can be easierly realised;
.- therefore to extend the domestic market in China;
.- the ConsPrice (consumer price) increase by mostly 3% can also stimulate the producers to increase their production, but generally higher price level obstacles consumers to extend their purchases, therefor the domestic can be narrow in the near future.

In field of ConsPrice China has had 2,94% mostly 3% very less increase since 2000 until 2011, which this consumer price increase can be accepted in international wide side level as low level. China is in the first session of the score because its ConsPrice increased not so considerable, therefore China is just little over the line "X". This means that China could defence the power purchase parity of the population and generally the consumers in the national market. The biggest consumer price increase was in Turkey by 8,72% and Brazil by 6,7%.

Naturally the LabourProd needs to be developed because China and its producers, as factories, corporations, companies and small and medium scale enterprises have little backwardness in the world economy, which can be deleted by increasing the knowledge and skills of the employees accompanying with innovative improvement for the technological development in China. In the country-list 20 countries have more competitive advantages against China, but

China has wider possibility for developing growth, which can be proofed by GDPEmployed by 109% and GDPGrowth by 9,6%, where China is the first at the top list (see Table-1 and Table-9; WDI, 2016; ILOSTAT, 2016; UNCTAD, 2016).

In the Figure-4-1, *in the first session or quarter of the score* Norway and Switzerland have very highly level of LabourProd at level of 128,5 and by 102,8%, because they could remain their ConsPrice at low increasing level by 2,1% and 0,9% and also they have been at highly level of positive balance of payment in GDP (BalaPayInGDP). 15 OECD member countries and highly developed economies could have averagely kept their labour productivity level (LabourProd) above the average level of 70, as closed to average of OECD by 71,4% for the period of 2000-2015, for example like, US, Canada, Japan, Australia, UK, Germany and Denmark.

Also the OECD has a highly level of increasing LabourProd, but positive BalaPayInGDP of OECD has averagely increased mostly very closed to zero level, namely by 0,4% for period of 2005 and 2015. This was resulted by highly level of their central government debt in the same time. But the average increasing level of the developing countries' LabourProd was at very low level therefore the LabourProd of the world was at average level of 16,9 which led to also very low level of the positive BalaPayInGDP, namely 2,3% of the world average by the end of 2015. Also the GovDebtGDP of developing economies was at very low level therefore this led to 84,6% of the world average level, which was closed to 93,1% of the OECD.

Generally the average values of the selected 30 countries, of which mostly OECD economies is 60,88% in field of GovDebtGDP, which is favourable data concerning the 93,1% of OECD value and world average data, while GDPGrowth of 30 selected countries by 2,27% was hardly better than average GDPGrowth of OECD by 1,73% and closed to the world economic average rate, as 2,87%. In spite that the 30 selected countries achieved more favourable economic conditions by lower level of the GovDebtGDP, less than world's average value, their economic growth rate has been less than the world economic GDPGrowth rate for the period of 2000-2015. Even the average GDPEmployed of 30 selected economies by 18,06% was little higher than the average one of the OECD and the world economy, the selected countries could not have possibility by their favourable debt conditions for realising higher economic growth than the world economy.

Also there is another approach for the comparing basic economic data among OECD, 30 selected countries and the world economy. The 30 selected countries had about lower level of their ConsPrice increase by 2,96% and their LabourProd increase was at average level of 63,58, but the selected countries could not have achieved considerable results in field of positive average balance of payment calculated in GDP (BalaPayInGDP), which was originally as 1,24%, under the level of the world's 2,3%. In the same time the OECD achieved only by 0,4% of average positive balance of payment in GDP. The level of the positive average balance of payment in GDP (BalaPayInGDP) of OECD countries was closed to the level of the 2005' one, mostly this was stagnate. The BalaPayInGDP data of OECD show that the low level of the positive average balance of payment in GDP resulted the highly level of the GovDebtGDP of OECD countries, which means that for the longer period and possible long future period the low level of the BalaPayInGDP consequently will lead to increasing share of GovDebtGDP in OECD countries. Also these data of BalaPayInGDP mean that the GovDebtGDP of OECD countries will accumulate, the negative balance of payment in GDP accumulate the share of the central government debt in GDP. Also these data show that developing economies contributed to decrease the GovDebtGDP and increase the positive BalaPayInGDP to the better positions of the world economy more than the OECD and highly developed economies in this period (see data of OECD and world in Table-4-9). In highly developed economies the governmental budget and the population consumption and expenditure increase was based on the increasing credits, which increased debt at both of levels.

The average value of the countries in the first and third sessions of the score in Figure-4-1 is 36,8% in field of the GovDebtGDP at the principle line "X", where the GovDebtGDP, as variance of the component-1 decreases. But the other countries of the second and the fourth sessions of the score have double times more as 84,96% in field of the GovDebtGDP at the principle line "X" after "Origo" turn to the left side. These values proof that the GovDebtGDP decreases from Origo to right side, which means that this variance is negative (see Table-4-7: Rotated Component Matrix), but turn to the left side from Origo this variance becomes positive, this means it increases, therefore the GovDebtGDP of this country-group of second and fourth sessions increased more than the country-group of first and third sessions of the score.

Also value-changes of variances belonging to the component -1 can be followed, namely that the GDPEmployed and the GDPGrowth are increases at the principle line "X" from Origo turn to the right side by 26,25% and 3,088% of countries of the first and second sessions of the score, while their values increased but less one by 9,91% in field of GDPEmployed and 1,45% in field of the GDPGrowth. The decreasing trend means that this is less increasing in the countries of the second and fourth sessions, than the one of countries of first and third sessions. This means that the economic conditions were less favourable for the countries of the second and fourth sessions of the score.

Also the trends can be followed as SPSS system shows in cases of the variances at principle line "Y". Countries of the first session and the second session of the score over Origo achieved decreasing trend or less increasing trend in field of ConsPrice by 1,94%, when the LabourProd increased to the average level of 83,4 for period of 2000-2015 and BalaPayInGDP increased by 3,15%. In the same time the countries of the third and fourth sessions have achieved by increasing trend by 4,29% in field of the ConsPrice with higher increase level than one of countries of the first and second sessions of score. But countries of the third and fourth sessions have achieved less increasing trends in field of Labour Product by 37,7% in field of the LabourProd and decreasing trend by -1,27% in field of the BalaPayInGDP.

The data show that mostly the countries of the fourth session is the most unfavourable for economic development, also China considerably contributed to the better economic growth at level of the world economy. In China instead of the developing growth based on the fossil energy in the first half of the first century in the XXI. Century, China turned its economic growth in direction to use mostly renewable energy resources, for example water, wind, solar and geothermic energy resources in order to decrease or mitigate the gas emission responsible for the global warming. Therefore the share of renewable energy resources has increased in all of the energy resource used in China.

THESIS

In spite that the OECD countries and the highly developed economies have implemented considerable growth in field of the LabourProd they could not have realised highly level of the GDPEmployed increase. The growth LabourProd is calculated within companies and

corporations mostly in production scheme, but the GDPEmployed growth is calculated by all of the employees including less competitive service sector and the state owned sectors, governmental staff.

At the international level the world economy has implemented by very poor results, namely by 17,9% in this field for this period, and the OECD implemented even less than this level by 13,2%. This poor result was mostly coming from decreasing level of the labour productivity in majority of the OECD economies. In essence the low level or lower level of the labour productivity has resulted the low level of the GDPEmployed and the GDPGrowth rate and led to the increasing measuring of the GovDebtGDP for the period of 2000 and to about middle of the second decade of the 21st century.

The second main issue is that the low level of the GDPEmployed increase in cases of some OECD countries, for example in Germany and US was resulted by the quietly developed and highly level of GDPEmployed , which to be increased can be difficult. Toward possible increase of the GDPEmployed can be realised by increasing the consumption of the population, but which is limited by toward increasing consuming credit, which shows the mostly highly level of the GovDebtGDP. Because of this highly level of the GovDebtGDP the finance from more credits for the more population consumption can be difficult. Therefore the production cannot increase even in case of the GDPEmployed, while the unemployment level cannot increase easierly. In case of the less production level the national central governments try to remain mostly higher employment level to avoid of more economic and political crisis. Therefore the decreasing trend or less increasing trend of the GDPEmployed would remain.

In cases of some countries it can be declared that the GDPGrowth rate was at highly or higher level in countries, in these countries the GovDebtGDP was less share, for example in China, Belgium, Mexico, Czech Republic, Switzerland, Norway and Korea Republic of, Poland, Australia, New-Zealand, Canada, Sweden and Turkey.

Naturally in those countries, where the GDPEmployed increase has been at highly or higher level since 2000 until 2014 (2000 = 100%), the GovDebtGDP was moderately less, for example in cases of China, Slovak Republic, Poland, Czech Republic, Korea Republic of and Sweden.

In this analysis for this thesis, I declare that the countries have central governmental debt in GDP under 50% and the GDP per employed from 20% as increasing rate from 2000 to 2014, and the GDP growth rate is more than about 2,0% from 2000 to 2015.

The correlations among the variances of Componenet-1 and Component-2 focuses on the balance of payment in GDP (BalaPayInGDP), Labour productivity (LabourProd) and consumer price (ConsPrice).

In the Figure-4-1 *in the second quarter* of the score is above principle line "X" turn to left side from the "Origo" and the countries, which are as follows: Denmark, Finland, Germany, USA, France, Israel, Austria, Japan, Canada, UK and Italy, 11 countries.
At the principle line "X" therefore in countries of the second session of the score the GovDebtGDP increases and the GDPEmployed and the GDPGrowth decrease and at the principle line "Y" the ConsPrice decreases the other two variances, namely BalaPayInGDP and the LabourProd increase.
In this session the lowest level of GovDebtGDP increase was in Denmark by 47,1% and highest level of its increase in Japan by 190,3%, while the GDPEmployed decreased or increased by very little measure in Denmark by 9,6% and GDPGrowth increased mostly stagnated by 0,9%. In Japan the GDPEmployed increased by very little measure by 13,3% and GDPGrowth decreased, mostly stagnated by 0,83%. It is true that the GovDebtGDP relatively increased against decreasing rate of GDPEmployed and GDPGrowth in both of countries.

Also similarly this trends can be experienced in other countries of this session. In Finland the GovDebtGDP increased by 50,2% and other countries of this session had more increase in GovDebtGDP, while in Finland the GDPEmployed increased by very little measure, namely by 13% and GDPGrowth by 1,5%. The other countries of this session reached only between 2,5% - 14,9% in field of the GDPEmployed and between 0,22-3,6% in field of the GDPGrowth. This statistical overview shows the large contradiction between two sides, one of GovDebtGDP and other of GDPEmployed and GDPGrowth Table-4-1; Table-4-9 and Figure-4-1).
In the same period, as it can be seen in the Figure-4-1, when the GovDebtGDP increases the ConsPrice decreases at the principle line "Y" in these countries. In these countries of the second session of the score the ConsPrice little increased from -0,3% in Japan to 3% in UK, while the BalaPayInGDP increased more than ConsPrice from -3,8% in UK to 6,6% in Germany, also the LabourProd increased from 54% in Israel to 95,8% in Denmark. The statistical data show that the ConsPrice mostly decreased or increased by not considerably, while the other two variances could increase. Naturally the increase was at higher level in

case of the LabourProd than in case of BalaPayInGDP, but the trend generally also was little increase in this last one (see Table-4-1 and Table-4-9).

In the Figure-4-1 *in the third quarter* of the score is under the principle line "X" turn to right side from the "Origo" and the countries, which are as follows: Australia, Korea Republic of, Czech Republic, Poland, Mexico, Turkey, Slovak Republic, Hungary and Brazil, 9 countries. At the principle line "X" the GovDebtGDP decreases and the GDPEmployed and the GDPGrowth increase and at the principle line "Y" the ConsPrice increases the other two variances, namely BalaPayInGDP and the LabourProd decrease.

In this third session of the score the data of the nine countries summarized in the Table-4-10 originally is based on the data bases of the Table-4-1 and Table-4-9, economic positions coming from the international data sources (WDI, 2016, ILOSTAT, 2016 and UNCTAD, 2016). In this session Hungary had the top level of the GovDebtGDP, which resulted 2,1% in field of the GDPGrowth, as a quietly middle good level of the economic growing performance. But the GDPEmployed has been quietly good after China, Slovak Republic and Poland within the 30 selected economies in this study. Increase of Hungarian BalaPayInGDP was not considerably by 0,7% as positive one and the LabourProd has been 27,6 averagely for the period of 2000-2015, which was not so at highly level comparably to the other countries in this session of the score. But the GDPGrowth of Hungary was good comparably to the other highly developed economies and OECD countries in European Union, for example where 1,5% was in Austria, Belgium, Finland, and 1,3% was in France, Germany and Netherlands, 0,9% in Denmark and 0,2% in Italy and Greece for period of 2000-2015. In spite that in Hungary the GovDebtGDP was 72,8%, which has decreased for the last years and this one could accompanying with middle level good in the field of GDPGrowth, while in spite that the most of the highly developed economies with less GovDebtGDP than in Hungary, they - as countries mentioned above – have also achieved less GDPGrowth rate than in Hungary for the same period. It can be declared that the real GDPGrowth was realised in Central-East Europe of the EU, as it is called as Visegrad-Four including Poland, Slovak Republic, Czech Republic and Hungary. Also it is important that the GovDebtGDP in Visegrad-Four countries except in Hungary was less than in Hungary and the most of the highly developed EU member states and other developed economies. Poland had 45,7%, Slovak Republic had 40,4% and Czech Republic had 25,9% in field of GovDebtGDP, while the most of developed

economies had from 190,3% in Japan to 47,1% in Denmark in field of the GovDebtGDP in the same time (see Table-4-1; Table-4-9; Table-4-10 and Figure-4-1, UNCTAD, 2016).

In the Figure-4-1 *in the fourth quarter* of the score is under the principle line "X" turn to left side, the countries, which are as follows: New-Zealand, Portugal, Spain and Greece, 4 countries. *In the fourth quarter* of the score at the principle line "X" the GovDebtGDP increases and the GDPEmployed and the GDPGrowth decrease and at the principle line "Y" the ConsPrice increases the other two variances, namely BalaPayInGDP and the LabourProd decrease.

The opposite condition that when the ConsPrice increases, the consumption and the purchasing are decreasing, therefore the production is decreasing per employed, which means the LabourProd (average labour productivity in 2000-2015 in million dollar of 2011) decreases and also the positive balance of payment in GDP (BalaPayInGDP) can decrease or less increase. In the countries of this session of the score the economic conditions are less favourable than in the countries of other three session of the score. Their GovDebtGDP has been between 48,2% in New-Zealand and 147,7% in Greece, while the GDBEmployed was from the level of 19,8% in Greece to the level of 6,5% in Spain and also GDPGrowth from the level of 2,3% in New-Zealand to the level of 0,2% in Greece. The data show that the GovDebtGDP was very considerable, which could lead to low level of the GDPGrowth rate.

The GDPGrowth rate was very seriously affected by the *not considerable GDPEmployed*. This last one could not ensure enough competitiveness in the world market against products made by highly developed corporations or international transnational companies. Also the ConsPrice increase can be seen as considerable, because this one extended from the level of 3,3% in Greece to the level of 2,6% in Portugal, the other two countries had values in this field between two marginal maximum and minimum values in cases of four countries of this session. The increasing trend of the ConsPrice creates non favourable economic background to extend the national-domestic market and makes wronging for the purchase power parity of the consumers and make devaluation of the governmental supports for population and companies.

Generally the *low level of the price incomes of companies*, because of the decreasing sales by increasing consumer price level, the companies cannot increase the innovative investments to improve their technology, therefore the LabourProd is decreasing or less increasing. This issue can be experienced in these countries of the fourth session of the score (see Figure-4-1; Table-4-9).

The LabourProd of these four countries was at hardly middle level of the 30 selected countries, which average LabourProd was at level of 63,58 value in million US dollar for period of 2000-2015. The level of the LabourProd was extending from 63,5 value in Sapin and to 39,9 value in Portugal, as marginal values of four countries of this session, while the average level of the 30 selected countries in this study was at the level of 63,58 value, which just hardly over than the Spain's level as top of the fourth session. Also the average level of the countries of the first and second sessions was 83,4 value, which was basically more than the level of the top value of Spain in the fourth session of the score. These data proof how this country group of the fourth session could lose their international competitiveness even on the world market, which can result loss of the foreign trade exchange by less export income and value added taxes after the exports of domestic producers for the governmental budget. The loss of the foreign trade exchange of any country can lead to more negative balance of foreign trade and BalaPayInGDP and even to increase negative GovDebtGDP. Naturally these economic and financial difficulties also appeared in these four countries of the fourth session.

The BalaPayInGDP was from decreasing minus trend as 1,5 in Spain to 4,3 in Greece, which show that the negative trend of this variance has been consequently extending for the period of 2005 and 2015. These negative trends of the BalaPayInGDP in this country-group are proofed or based by the longer time less favourable foreign trade exchange, less reserves of national banks, the consequence negative balance of governmental budget of the countries. Naturally the negative BalaPayInGDP affected on the wronging financial conditions of the consumers and the increasing rate of the interests for products, flats bought by population, which can make cost of every-day-life be at higher level accompanying with increasing unemployment rate. All of these financial-economic issues and difficulties accumulated and led to increase the GovDebtGDP of these four countries (see Table-4-1 and Table-4-9).

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The GovDebtGDP and the ConsPrice increase make very unfavourable economic background for the producers and the consumers, because the ConsPrice increase decreases the purchase power parity and makes domestic market be narrow for the producers. Also the GovDebtGDP increase results less central governmental support for producers to transit their technological development from the using fossil energy to using renewable energy use by applying advanced technology saving energy use, therefore decreasing the production cost and increasing their competitiveness on the domestic and world markets. Also the GovDebtGDP increase makes devaluation of the central governmental supports either for producers or companies or for the consumers, therefore the efficiency of the central support will also be decreasing.

The LabourProd decrease results less price income for companies and less tax income for the governmental budget, which can lead to increase the negative BalaPayInGDP, which negative balance can be covered by more central government budget calculated in GDP (GovDebtGDP).

The increase of the taxes can also increase the level of the ConsPrice, which decrease the purchase power parity of the consumers by narrowing the domestic markets. These two variances as GovDebtGDP and ConsPrice are important index number showing the basic economic and financial difficulties of any country.

Table-4-9: Order of the countries based on the different 1, 2 and 3 variances at principle line "X" according to the Table-4-1

Countries	**1**
Japan	190,3
Greece	147,7
Italy	121
Portugal	118,6
Israel	97,5
France	83,3
Austria	82,1
Hungary	72,8
US	70
UK	63,4
Brazil-4	**60,9**
Netherlands	54,1
Germany-2	**53,7**
Spain	50,8
Canada-3	**50,5**
Finland-1	**50,2**
New-Zeala.	48,2
Denmark	47,1
Poland	45,7
Turkey	44
Sweden	42,3
Slovak Rep	40,4
Korea Rep of	36,3
Norway	32,1
Switzerland	28,9
Australia	27,8
Czech Rep.	25,9
Mexico	22,4
China-5	**11,5**
Belgium	6,9
Variances	**1**
Components	**(-)1**
OECD	93,1
World	84,6

GovDebtGDP-1

Countries	**2**
China-5	**109**
Slovak Rep	52,7
Poland	43
Hungary	37,7
Czech Rep.	32,2
Korea Rep of	24,5
Sweden	21,6
Greece	19,8
Australia	16,8
Brazil-4	**15**
UK	14,9
Japan	13,3
Finland-1	**13**
New-Zeala.	12
Portugal	9,9
US	9,9
Denmark	9,6
Norway	9,4
Italy	9,2
Austria	8,7
Canada-3	**8,7**
Belgium	8,1
Germany-2	**7,8**
Netherlands	7,8
Switzerland	7,8
Spain	6,5
Turkey	5,8
France	2,9
Israel	2,5
Mexico	1,7
Variances	**2**
Components	**1**
OECD	13,2
World	17,9

GDPEmployed-2

Countries	**3**
China-5	**9,6**
Slovak Rep	3,9
Turkey	3,9
Israel	3,6
Poland	3,6
Korea Rep of	3,55
Australia	2,97
Brazil-4	**2,9**
Czech Rep.	2,7
Mexico	2,4
New-Zeala.	2,3
Sweden	2,3
Canada-3	**2,2**
Hungary	2,1
US	1,93
Switzerland	1,9
UK	1,9
Norway	1,7
Spain	1,7
Austria	1,5
Belgium	1,5
Finland-1	**1,5**
France	1,3
Germany-2	**1,3**
Netherlands	1,3
Denmark	0,9
Japan	0,83
Portugal	0,42
Italy	0,22
Greece	0,2
Variances	**3**
Components	**1**
OECD	1,73
World	2,87

GDPGrowth-3

Source: Owned calculation based on the international Data bases, WDI, 2016; ILOSTAT, 2016; UNCTAD, 2016

Table-4-9: Different 4, 5 and 6 variances at principle line "Y" (Continued)

Countries	**4**
Switzerland	12
Norway	11,8
Netherlands	8,5
Germany-2	**6,6**
Denmark	6
Sweden	6
Turkey	5,6
Korea Rep of	4,6
Israel	3,7
China-5	**3,4**
Japan	2,5
Austria	1,8
Hungary	0,7
Belgium	0,6
Finland-1	**0,5**
Italy	-0,1
France	-0,6
Czech Rep.	-0,8
Spain	-1,5
Mexico	-1,7
Canada-3	**-2,1**
Poland	-2,3
Brazil-4	**-2,6**
Slovak Rep	-2,9
US	-3,2
Portugal	-3,6
New-Zeala.	-3,7
UK	-3,8
Australia	-4
Greece	-4,3
Variances	**4**
Components	**2**
OECD	0,4
World	2,3

BalaPayInGDP-4

Countries	**5**
Norway	128,6
Switzerland	102,8
Denmark	95,8
US	91,3
Belgium	91
Sweden	88,7
France	87,4
Finland-1	**84,3**
Netherlands	83,3
UK	82,5
Austria	81,6
Italy	81,4
Germany-2	**78,7**
Japan	72,5
Australia	70,9
Canada-3	**70,8**
Spain	63,5
New-Zeala.	55,2
Greece	54
Israel	54
China-5	**43**
Korea Rep of	42,3
Portugal	39,9
Slovak Rep	30,5
Czech Rep.	29,1
Hungary	27,6
Turkey	23,6
Poland	22,1
Mexico	19,9
Brazil-4	**11**
Variances	**5**
Components	**2**
OECD	71,4
World	16,9

LabourProd-5

Countries	**6**
Turkey	8,72
Brazil-4	**6,7**
Hungary	5,9
Mexico	5,1
Slovak Rep	4,95
Poland	3,5
Greece	3,3
Australia	3,18
Korea Rep of	3,18
Czech Rep.	3,1
UK	3
China-5	**2,94**
Spain	2,9
New-Zeala.	2,6
Portugal	2,6
US	2,5
Belgium	2,23
Denmark	2,2
Italy	2,2
Canada-3	**2,15**
Austria	2,1
Netherlands	2,1
Norway	2,1
Israel	2
Finland-1	**1,87**
France	1,75
Germany-2	**1,7**
Sweden	1,6
Switzerland	0,9
Japan	-0,3
Variances	**6**
Components	**(-) 2**
OECD	--
World	--

ConsPrice-6

Table-4-9: Different 7, 8, 9 and 10 variances at principle line "Y" Continued

Countries	**7**	**Countries**	**8**	**Countries**	**9**	**Countries**	**10**
Denmark	32,4	US	262	Portugal	300	Spain	622
New-Zeala.	29,1	Israel	240	Israel	234	Israel	257
Sweden	27,4	Switzerland	138	Japan	180	Hungary	140
Norway	26,6	**Canada-3**	**88,5**	**Canada-3**	**140**	Italy	133
Austria	26,2	**China-5**	**88**	Poland	123	**Germany-2**	**117**
UK	25,5	Netherlands	87,2	Czech Rep.	92	Belgium	97
Belgium	25,4	Portugal	71,4	**China-5**	**86**	Portugal	95,6
Israel	24,3	Turkey	65	New-Zeala.	86	Denmark	86,3
Australia	23,1	**Finland-1**	**60**	Switzerland	37,3	Slovak Rep	78,2
France	22,4	France	30	Turkey	34,9	Korea Rep of	73,7
Italy	22,3	Mexico	15,4	**Germany-2**	**25,3**	Netherlands	65,3
Hungary	21,8	Sweden	8,6	Korea Rep of	23,2	Austria	54
Finland-1	**21,1**	**Brazil-4**	**4,3**	Mexico	23	Turkey	53
Netherlands	21	Belgium	-8,8	**Brazil-4**	**20**	Switzerland	32
Portugal	20,9	Czech Rep.	-9,7	Belgium	18,2	Czech Rep.	24
Turkey	20,2	Poland	-9,7	Austria	11,3	**China-5**	**15**
Poland	16,6	Italy	-13	US	8	Sweden	10
Brazil-4	**14,8**	Japan	-40	Netherlands	6,6	Japan	-20
Korea Rep of	14,5	**Germany-2**	**-51,5**	Denmark	0,5	France	-22
Spain	14,23	New-Zeala.	-55	Sweden	-14	**Brazil-4**	**-23**
Czech Rep.	13,8	Australia	-56	Norway	-17	Norway	-30
Greece	13,1	Denmark	-58	Spain	-17	Australia	-34
Canada-3	**12,8**	Greece	-62	Italy	-30	US	-35
Germany-2	**11,2**	Austria	-63,7	Hungary	-32	New-Zeala.	-37,5
Slovak Rep	11	Spain	-64	France	-49,5	**Canada-3**	**-70**
US	10,4	Korea Rep of	-64,3	Australia	-53	Poland	-85,7
China-5	**9,9**	Norway	-66	UK	-60	**Finland-1**	**-96**
Japan	9,9	Slovak Rep	-74,2	Slovak Rep	-68	Greece	-99,4
Mexico	9,9	UK	-78	**Finland-1**	**-74**	Mexico	-251
Switzerland	9,5	Hungary	-83,2	Greece	-74,2	UK	-387
Variances	**7**	**Variances**	**8**	**Variances**	**9**	**Variances**	**10**
Components	**(-)3**	**Components**	**3**	**Components**	**3**	**Components**	**4**
OECD	15,2	OECD	63,8	OECD	54,4	OECD	101
World	14,3	World	85,5	World	80	World	385

TaxRevenue-7 FDIinFlow15-8 FDIoutFlow15-9 BalanPayment-10

Source: Owned calculation based on the international Data bases, WDI, 2016; ILOSTAT, 2016; UNCTAD, 2016

Table-4-10: The first six variances in cases of countries from 30 selected countries mostly from OECD in the fourth session of the score in 2000-2015 in the Figure-4-1

	Principle Line "X"			Principle Line "Y"		
Variances Countries	**1**	**2**	**3**	**4**	**5**	**6**
Australia	27,8	16,8	2,97	-4	70,9	3,18
Korea Rep of	36,3	24,5	3,55	4,6	42,3	3,18
Czech Rep.	25,9	32,2	2,7	-0,8	29,1	3,1
Poland	45,7	43	3,6	-2,3	22,1	3,5
Mexico	22,4	1,7	2,4	-1,7	19,9	5,1
Turkey	44	5,8	3,9	5,6	23,6	8,72
Slovak Rep	40,4	52,7	3,9	-2,9	30,5	4,95
Hungary	72,8	37,7	2,1	0,7	27,6	5,9
Brazil-4	**60,9**	**15**	**2,9**	**-2,6**	**11**	**6,7**

Source: Owned calculation. Owned calculation based on the international Data bases, WDI, 2016; ILOSTAT, 2016; UNCTAD, 2016

In the ***Figure-4-2*** *in the first session* of the score is above principle line "X" turn to right side from the "Origo" and the countries, which are as follows: China, Switzerland, Poland, Czech Republic and Netherlands, 5 countries.

In the first session the first three variances at the principle line "X" are the same as in the Figure-1, namely in these countries the GovDebtGDP decreases, which trend is opposite to increasing growing rate of GDPEmployed and GDPGrowth. But the other three variances from 7 to 9 variances are different namely (Minus) TaxRevenue, FDIinFlow and FDIoutFlow at the principle line "Y". In the countries of the first session the TaxRevenue decreases or less increases, therefore this variance is "minus" over line "X" at the line "Y", but the other two variances are increasing or less decreasing share of the GDP. In China the TaxRevenue has been at the very low level, as percent of GDP by 9,9%, lower level than most of countries within 30 selected country-group in its share of the GDP for the period of 2000 and 2014. In cases of the international compares the low level of China in field of TaxRevenue share of the GDP was lower than the average share of the TaxRevenue in GDP in cases of OECD countries by 15,2%, in case of the world level by 14,3% and in cases of the 30 selected countries by 18,7%. Because the share of the TaxRevenue of Mexico and Japan was 9,9% of GDP as same as 9,9% in GDP of China, therefore only Switzerland had had less share of

TaxRevenue in GDP than China's one in the GDP for the period of 2000-2014 within 30 selected country group. This means that China and the Chinese Government stimulated the private sector at the best level to increase their economic activity and their investments for the economic growth by increasing jobs and innovative technological development more than other majority countries. Naturally it is important to declare that the US has little more TaxRevenue share in GDP by 10,4%, namely more by 0,5% than China's one. Therefore US also stimulated the private sector to increase their economic activity and investments based on the increasing jobs.

The Netherlands, Poland and Czech Republic had more considerable average share of their TaxRevenue in GDP than China, and also their share in this filed was partly less, for example in Czech Republic by 13,8% or partly in Poland by 16,6%, in Netherlands by 21% more than the average of countries' share in the first and second score concerning, namely by 14,572% at the principle line "Y" above Origo. This shows that in Netherlands the tax policy was stronger than the most of countries' one in the first and second sessions of the score, which can have been explained by the considerable GovDebtGDP as 54,1% in GDP averagely for the period of 2000-2014 and also not high level of ConsPrice increase namely by 2,11% average increasing level for the period of 2000 and 2011. In Poland the relatively high level of the TaxRevenue has been explained by the considerable large deficit of the BalanPayment by 85,7%.

Also it is proofed that the share of the TaxRevenue is lower, this means "minus" or "negative" value at the principle line "Y" above "Origo" in countries concerning the first and second sessions of the score by 14,572% has been less than its share in GDP of countries concerning the third and the fourth sessions of the score by 21,1068% averagely in the period of 2000-2014. This means that the share-value of TaxRevenue is higher in the third-fourth sessions than in the first and second sessions of the score.

The other two variances are namely FDIinFlow and FDIoutFlow, which have increased since 2005 to 2015 by growing percent in the countries concerning the first and second sessions of the score. In the 30 selected countries the US has been the first country by 262% – even in the world economy – in the field of the FDIinFlow and after that Israel by 240%, Switzerland by 138% and Canada by 88,5% since 2000 till 2015. China had been in the fifth country within

the 30 selected country-group, as a strong position by 88% since 2000. In the international compare China had increased the FDIinFlow more than the world's increasing rate by 88,5%, by 63,8% of OECD countries and 10,43% of the 30 selected countries for the same period. Also China had achieved higher level of the FDIinFlow growing rate within the countries concerning the first and the second sessions of the score, of which average growing rate has been 78,6% for the same period. This means that China was very famous country for the FDI of the international transnational corporation to increase their activities and investments in China. Generally the low level of the TaxRevenue could also contribute to the stimulating the FDI increasing rate into these countries, which made possibility for the foreign transnational corporations to extend the jobs and increase the employment level also the advanced technologies for increasing level of the international competitiveness for those countries, into where they have been inflowing their investments. Therefore the FDIinFlow has been strong into US, Canada, China and Switzerland.

The average growing rate of the countries concerning the third and the fourth sessions of the score in the field of FDIinFlow has decreased very considerably by 29,626%, for the same period. This shows a very large difference between two country groups as one over Origo and one under Origo at the line "Y". Mainly countries under the Origo or under the line "X" have less favourable economic conditions to stimulate the FDI to inflow into these countries.

In general China had considerable FDIinFlow, which has been 388 021 million US dollar for the last three years, in 2013-2015, but the FDIoutFlow was 358 524 million US dollar, which means that the balance of three years were 8,3, as difference, the FDIintFlow was more than FDIinFlow by 8,3%. The US had had 698 009 million US dollar of FDIinflow, but the FDIoutFlow was 924 445million US dollar for the same period of the last three years, between 2013 and 2015. The difference was about 24,5%, which means that the FDIoutFlow was higher than FDIinFlow by 24,5%, if the FDIoutFlow value is calculated in 100%. Switzerland had had 76 119 million US dollar in field of FDIinFlow, when the FDIoutFlow was higher as 105 507 million US dollar for the same period, which means that the FDIoutflow was higher by 28,5%. The less favourable position was for Japan form these four countries, China, US, Switzerland and Japan – because the FDIoutFlow was 377 998 million US dollar, while FDIinFlow of Japan was only 2144 million US dollar for the same period,

which means that the FDIinFlow was equally with 0,52% of all FDIoutFlow of Japan in the same period.

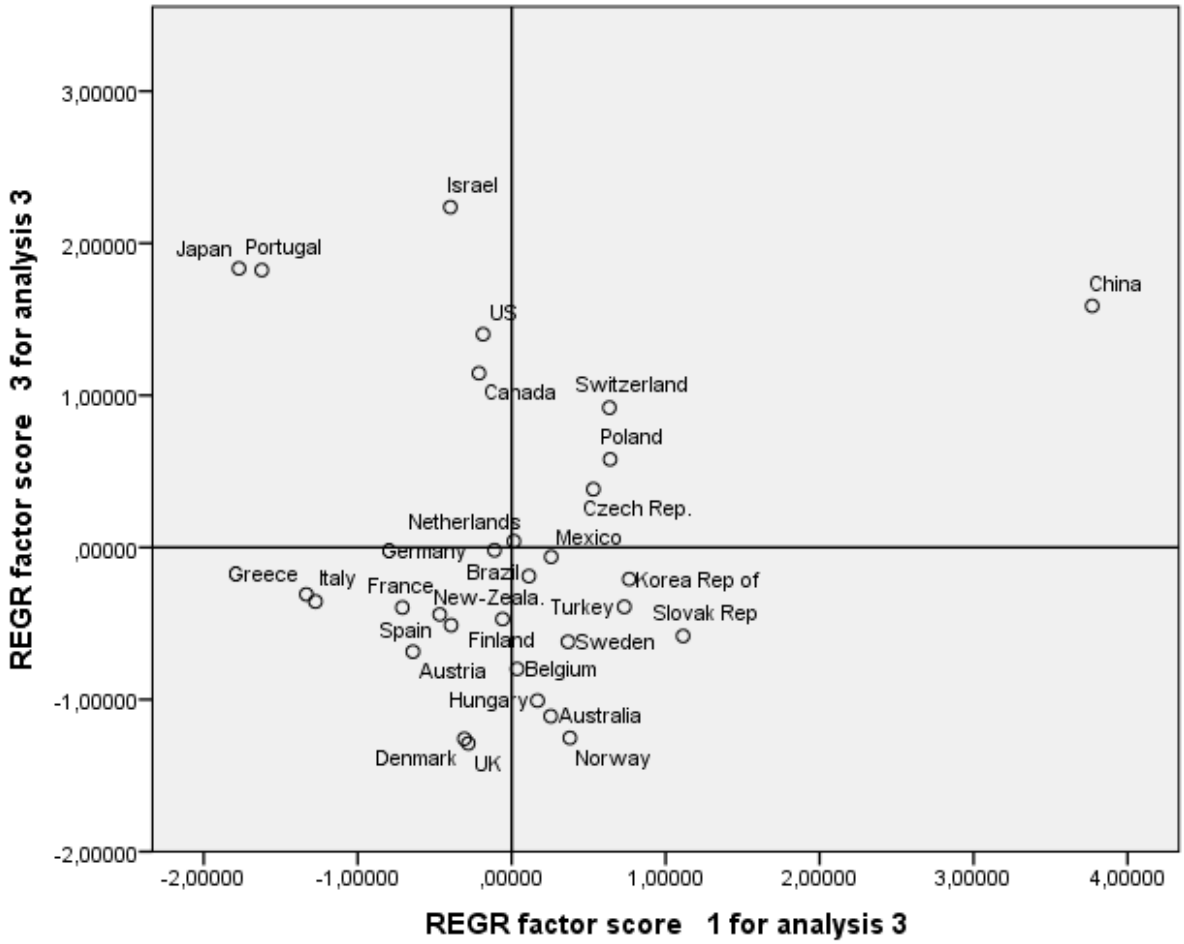

Figure-4-2: Factor Analyses for the REGR factor score 1 and REGR factor score-3 in cases of OECD countries and China
Source: Owned calculation based on the SPSS

Component-1: (Minus) GovDebtGDP, GDPEmployed, GDPGrowth
Component-3: (Minus) TaxRevenue, FDIinFlow, FDIoutFlow

From this statistical data shown above mentioned China had the second position in field of the FDIinFlow after US, but China had had more FDIinFlow than its FDIoutFlow for the last three years, which positive balance was 8,3% for FDIinFlow than FDIoutFlow. The US the balance of its FDIinFlow and FDIoutFlow was more for the FDIoutFlow than FDIinFlow by 24,5%, if the FDIoutFlow is calculated as 100% (24,5% for FDIinFlow +75,5% for the FDIoutFlow). (See international data bases in UNCTAD, 2016 on pp. 217-218).

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In general the FDIinFlow is very weak in the 30 selected countries, which has been proofed by the low level of the average growing rate of the FDIinFlow by 10,43% and by considerable decreasing level of the FDIoutFlow by 32% for the period of 2005-2015, where the 2005 = 100%. This means that the balance of the FDIinFlow and FDIoutFlow is very much negative because of the more growing rate in field of the FDIoutFlow. This shows that the FDIoutFlow has consequently been increasing to decrease the role of FDI in the innovative development process in this 30 selected countries and in the most of the OECD countries. This increasing negative process can be explained by increasing TaxRevenue by 18,7%, but the highly developed economies have more about 20 and 32% as considerable burden on the private sector in the developed economies, and strongly increasing the GovDebtGDP by 60,88%, the less increasing the GDPEmploy by 18,06%, the GDPGrowth by 2,27%, the positive BalanPayment by 1,24%. Finally all of these negative trends make lower level increasing of the FDIinFlow rate by 10,43%.

In the Figure-4-2 *in the second session* of the score is above principle line "X" turn to left side from the "Origo" and the countries, which are as follows: Israel, Portugal, Japan, USA, Canada and Germany, 6 countries.

The first three variances at the principle line "X" are the same as in the Figure-1, also the other three variances from 7 to 9 variances are the same with the session first's one namely (Minus) TaxRevenue, FDIinFlow and FDIoutFlow at the principle line "Y". Also in countries of second session the TaxRevenue decreases or less increases, therefore this variance is "minus" over line "X" at the line "Y", but the other two variances are increasing or less decreasing share of the GDP. This process can be followed in cases of these countries. The TaxRevenue is quietly higher level in Israel by 24,3% and Portugal by 20,9% in GDP for the period of 2000 and 2014 than the average level of the OECD, the world and the 30 selected countries and also countries in the first and second sessions of the score over line "X", above Origo. Germany, which is exactly on the line "X", have had moderate level of the TaxRevenue by 11,2% in GDP for the same period. In spite that Israel had considerable increase by 240% and Portugal also had increase by 71,4% in field of FDIinFlow since 2005, both of them were at top level in field of the FDIoutFlow increase by 300% in Portugal and by 234% in Israel. This negative trend of the FDIoutFlow contributed to increase

TaxRevenue, which was negative unfavourable economic and financial background for the FDI of the foreign transnational corporations. In case of Germany the FDIinflow has been unfavourable, because of its decrease by 51,5%, but the FDIoutFlow has only increased by 25,3% since 2005 till 2015. The negative trend of the FDIoutFlow in case of Germany was better than other two countries, Israel and Portugal, which also was effected by the low level of the TaxRevenue of Germany. It is clearly seen that the level of the TaxRevenue became as threaten element for foreign investors to decide their economic activities and increasing investments for increasing jobs in EU member states.
Also as it was seen in case of the US in field of the FDIoutFlow that the FDIoutlow increase was higher than the increase of the FDIinFlow. This trend was influenced by partly the TaxRevenue, because in US this was moderate by 10,4% in GDP averagely for the period of 2000-2014, but the salary level and the social secure expenses are mostly at highly level, which can difficulty be accepted by the foreign investors.

After the analyses for the countries above principle line "X", the other larger country-group can be analysed under the line "X" with start of the countries of the third session. In the Figure-4-2 *in the third session* of the score is under principle line "X" turn to right side from the "Origo" and the countries, which are as follows: Mexico, Brazil, Korea Republic of, Turkey, Slovak Republic, Sweden, Belgium, Hungary, Australia and Norway, 10 countries.
Generally in the countries of the third session of the score the GovDebtGDP decreased or less increased, and the GDPEmployed and the GDPGrowth increased or less decreased in the same period. But the TaxRevenue has increased and the FDIinFlow and the FDIoutFlow have decreased or less increased for the same period.

There are some contradiction situations among countries of this session. In case of Norway the TaxRevenue increased at the level of 26,6% averagely for the period of 2000 and 2014, which resulted a sharp decline in FDIinFlow by 66% since 2005 till 2015, which could not be balanced by the decreasing trend of FDIoutFlow by 17 for the same period. Similarly this situation in Australia and Hungary, because in Australia the TaxRevenue was 23,1% leading to decreasing trend of FDIinFlow by 56% and also decreasing FDIoutFlow by 53% from 2005 to 2015, also in Hungary the TaxRevenue decreasing was 21,8% averagely in years of 2000-2014, which resulted decreasing trend in field of FDIinFlow by 83,2% and decreasing trend of 32% in field of FDIoutFlow. In Hungary the FDIinFlow decrease was the biggest or

highest level of decreasing FDIinFlow in 30 selected countries, as the biggest negative decline in this field. In spite that in Slovakia the TaxRevenue has only been at level of 11% of GDP averagely for the period of 2000-2014, the FDIinFlow decreased by 74,2%, which could not enough be balanced by decreasing trend of the FDIoutFlow by 68%.

In cases of Mexico and Brazil the FDIinFlow increasing trend has shown better conditions for the foreign transnational corporations, because in Mexico had increased the TaxRevenue averagely by 9,9% in GDP for the period of 2005 -2014. Only this low level of TaxRevenue could result 15,4% increase in field of FDIinFlow since 2005 till 2015, but the FDIoutFlow has increased by 23%, which weakened the positive effects of the FDIinFlow on the performance of Mexico for this period. Therefore the balance of FDIinFlow and FDIoutFlow in case of Mexico was deficit, because the FDIinFlow has increased by less trend than the increase of the FDIoutFlow. This means that in Mexico the foreign capital and investment has decreased their role in development of the performance in this country. Also in Brazil the FDI conditions have been more unfavourable, because the TaxRevenue of Brazil in GDP has annually averagely 14,8% for the period of 2000-2014, while the FDIinFlow increased only by 4,3% from 2015 and the FDIoutFlow increased by 20% for the same period. The Brazil had worse situation in the FDI activities than in Mexico, because the FDIoutFlow increase was mostly five times more than the FDIinFlow increase, while in Mexico the difference between both of them was about only one and half times. Generally the TaxRevenue played negative role in the reason of the declining trend of the FDIinFlow in the most of 30 selected countries.

THESIS

In the country-group above the line "X" the negative trend can be experienced in country-group above line "X" in the first and second sessions, when the FDIinFlow has increased by 78,564%, while the FDIoutFlow has increased more than increase of the FDIinFlow by 112,018% since 2005 until 2015. In the country-group under the line "X" the negative trend can clearly be followed in cases of the FDIinFlow and FDIoutFlow, when the FDIinFlow has decreased by 29,626% in spite that the FDIoutFlow has also decreased by 14,295 for the same period. This means that the FDI activity has continuously been decreasing, when the FDIinFlow decreased, and also the FDIoutFlow has been going on, in spite that the outflow intensity has weaknesses.

Also average of 30 countries has reached negative trend, because the FDIinFlow has increased by 10,43%, but the FDIoutFlow reached 32,0% for the same period. These negative trends were resulted by the negative economic trend in selected economies and unfavourable economic growth in the world economy.

In the Figure-4-2 *in the fourth session* of the score is under principle line "X" turn to left side from the "Origo" and the countries, which are as follows: Greece, Italy, France, New-Zealand, Finland, Spain, Austria, Denmark and UK, 9 countries.
The first three variances at the principle line "X" after "Origo" turn to the left side are the same as in the Figure-4-1, also the other three variances from 7 to 9 variances at the principle line "Y" are the same with the session above line "X", but under line "X" namely TaxRevenue increases or less decreases, FDIinFlow and FDIoutFlow decrease or less increase at the principle line "Y" in the countries of the fourth session. This process can be followed in cases of these countries.
In Greece the GovDebtGDP has been at the second highest level by 147,7% in GDP for the period of 2000-2014 after Japan in the 30 selected countries, and also in the countries of the fourth session of score in Figure-4-2. The highly level of the GovDebtGDP in Greece resulted a relatively highly level of TaxRevenue even less than average TaxRevenue level of OECD, world and 30selected countries, which is not enough to cover re-payment for the credits and its interests. But this was enough highly level to decrease the FDIinFlow by 62%, but also the FDIoutFlow also decreased by 74,2% which provided a hope to keep back the foreign corporations from withdrawal from Greece. Therefore the staying foreign corporations with large national corporation could increase and contribute to the increase of the GDPEmployed since 2000 till 2014 by 19,8%, which was little better than the average level of 30 selected countries by 18,06% in this field. Also the highly level of the unemployment rate and decreasing employment conditions also could contribute to increase the level of the GDPEmployed. The highly level of the GovDebtGDP resulted less central governmental supports for the small and medium scale enterprises, which has led to low level of the GDPGrowth rate by 0,2% for period of 2000-2015.

The highly level of the TaxRevenue has been 25,5% in GDP in UK and 32,4% in Denmark for period of 2000-2014, which last one was the top highest level in 30 selected countries and higher than the average level of the world. Naturally this highly level of TaxRevenue

remained the GovDebtGDP at quietly internationally accepted low level of the debt, but this tax level effected the considerable level of the FDIinFlow in both of countries. The TaxRevenue of Denmark was at very highly level therefore the FDIinFlow decrease by 58% accompanied with increasing level of FDIoutFlow by 0,5%, while in UK the decreasing level of the FDIinFlow by 78% accompanying with decreasing FDIoutFlow by 60%, which means that the foreign corporations could stay more in UK or their withdrawal was not so intensive opposite to Denmark, where the FDIoutFlow did not decreased, but moderately increased because of the highly level of TaxRevenue. The higher unemployment in UK with less FDIoutFlow from UK resulted to higher level of the GDPEmployed by 14,9% than in Denmark by 9,6%, while in Greece this was 19,8% because of the higher unemployment level. In UK relatively lower level of the TaxRevenue and less decreasing rate of the FDIoutFlow than in Denmark, this resulted higher GDPEmployed and 1,9% in GDPGrowth rate in UK more than 9,6% of GDPEmployed and 0,9% of GDPGrowth rate in Denmark.

In spite that France has had a considerable TaxRevenue by average 22,4% in GDP for period of 2000-2014 and its GovDebtGDP was 83,3%, France could reach increasing trend of the FDIinFlow by 30% and decreasing trend of FDIoutFlow by 49,5% since 2005 till 2015. These economic trends of France contributed to increase GDPEmployed by 2,9% and GDPGrowth rate by 1,3%. These results could be realised by strong tax policy, relatively low unemployment rate and stimulating the performance of the foreign corporations based on the low level of the GDPEmployed and GDPGrowth rate in France (See Table-4-9 and Table-4-11 and Figure-4-2).

The economic conditions of New Zealand had a special economic situation that this country had the second biggest TaxRevenue within 30 selected countries by 29,1% to narrow the GovDebtGDP, to the level of 48,2%. But this low level of the GovDebtGDP could not stimulate the increase of the FDIinFlow, because this one had been decreasing by 55%, while the FDIoutFlow has increased by 86% since 2005 till 2015. The GDPEmployed rate was by 12% and the GDPGrowth rate was by 2,3%. This means that the economic policy of New Zealand focused on the decreasing GovDebtGDP, to increase the GDPGrowth rate, the FDIinFlow and to develop the GDPEmloyment. In this country group of the fourth session of the score the GDPGrowth of New Zealand by 2,3% was satisfactory middle highly level, which could be realized by increasing financial support for the small and medium scale

enterprises, the most of them were farmers and the agricultural production and export, because New Zealand is typical agricultural country with considerable manufacturing light industry. Sometimes there was an agricultural war between one side of the EU and the other side of Australia and New Zealand to decrease their support for farmers and agricultural-food export of these last two countries (See Table-4-9 and Table-4-11 and Figure-4-2).

Table-4-11: The third three variances (7,8,9) and the first three variances (1,2,3) in cases of countries in the fourth session of the score in 2000-2015 in the Figure-4-2

Variances Countries	**Principle Line "X"**			**Principle Line "Y"**		
	TaxRevenue 7	**FDIinFlow 8**	**FDIoutFlow 9**	**GovDebtGDP 1**	**GDPEmployed 2**	**GDPGrowth 3**
Greece	13,1	-62	**-74,2**	**147,7**	19,8	**0,2**
New-Zealand	29,1	-55	86	48,2	12	2,3
UK	25,5	**-78**	-60	63,4	14,9	1,9
Denmark	**32,4**	-58	0,5	47,1	9,6	0,9
France	22,4	30	-49,5	83,3	2,9	1,3

Source: Owned calculation. Owned calculation based on the international Data bases, WDI, 2016; ILOSTAT, 2016; UNCTAD, 2016

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Based on the examples of the countries of the fourth session of the score in Figure-2, mostly four countries, namely UK, France, Denmark and New Zealand can be emphasized as countries having strong highly developed agricultural sector with advanced manufactured food industries. In spite Greece is also agricultural country, but with less advanced food manufactured economy comparably with other four one.

When the highly level of TaxRevenue could remain the GovDebtGDP at quietly internationally accepted low level of the debt, but this tax level considerably effected the decreasing level of the FDIinFlow. Where the TaxRevenue was at very highly level, therefore the FDIinFlow decreased considerable accompanying with increasing level of FDIoutFlow, therefore the foreign corporations decrease their investment activity in these countries. While the decreasing level of the FDIinFlow could accompany with decreasing FDIoutFlow, therefore the FDI can mostly or partly remain in countries. The FDIinFlow and the

FDIoutFlow can be effected by either highly level of the TaxRevenue or GovDebtGDP. Naturally this last both of them are also strongly correlating between themselves.
This can mean that in some of cases the foreign corporations could stay more in any country or their withdrawal was not so intensive opposite to other country, or the FDIoutFlow did not decreased, but even moderately increased because of the highly level of TaxRevenue. The higher unemployment with less FDIoutFlow can result higher level of the GDPEmployed in one country than in other one, while this GDPEmployed can be even higher if only the higher unemployment level is.
The relatively lower level of the TaxRevenue and less decreasing rate of the FDIoutFlow can be, which result higher GDPEmployed and GDPGrowth rate. In the given country the GDPGrowth rate can be more than in other country, even if in this given country the GDPEmployed less than GDPEmployed rate in other countries (New Zealand). The higher GDPEmployed can result a lower GDPGrowth rate (Greece, UK) in one country than the other one depending on the FDIinFlow and FDIoutFlow.

In the ***Figure-4-3*** *in the first session* of the score is above principle line "X" turn to right side from the "Origo" and the countries, which are as follows: Turkey, Hungary, Netherlands, Belgium, Korea Republic of, Norway, Switzerland, Sweden, Brazil and Czech Republic, 10 countries.
In the first session the first three variances (1-2-3) at the principle line "X" are the same as in the Figure-4-1 and Figure-4-2, namely in these countries the GovDebtGDP decreases, which trend is opposite to increasing growing rate of GDPEmployed and GDPGrowth. also the other tenth variance, namely BalanPayment is at the principle line "Y", and above line "X", which this variance increases in the countries of the first and second sessions, which can be followed in cases of these countries.
In this session the study focuses on the first five countries, namely Turkey, Hungary, Netherlands, Belgium and Korea Republic of, where the BalanPayment was at highest level. In this session Hungary has reached the top level of the BalanPayment by 140% since 2005 till 2015, which was quietly good in the international compare, because after Spain by 622% and Israel by 257%, Hungary was the third country within the 30 selected countries. The biggest negative BalanPayment was 387% in case of UK. This shows how UK has had weak financial conditions in actual years for the period of 2005 and 2015.

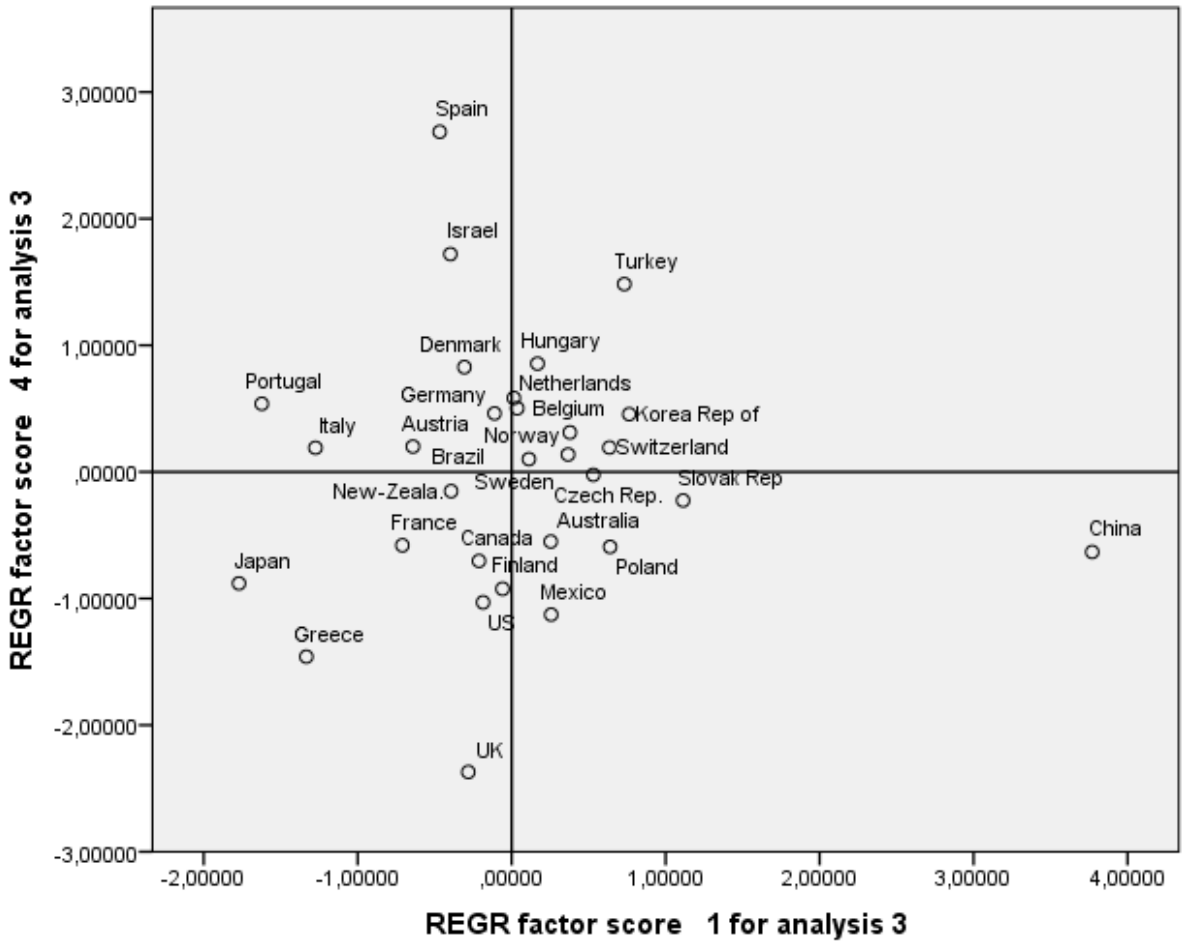

Figure-4-3: Factor Analyses for the REGR factor score-1 and REGR factor score-4 in cases of OECD countries and China
Source: Owned calculation based on the SPSS

Component-1: (Minus) GovDebtGDP, GDPEmployed, GDPGrowth
Component-4: BalanPayment

The average level of the BalanPayment of the 30 countries was 25,4%, because 13 countries of the 30 selected countries had had minus BalanPayment since 2005 till 2015, and also the average level of the BalanPayment had been 101% for the same period. After Hungary, Belgium had BalanPayment by 97%, Korea Republic of had 73%, Netherlands had 5,3% and Turkey had 53% in the same time.

The average level of the BalanPayment in countries concerning the principle line “Y” in the first and second sessions above line “X” has been 106,3% for the same period, while countries of third and fourth session of score at the principle line “Y” has had negative BalanPayment by 80,3% also for the same period. The unfavourable economic conditions were that the negative BalanPayment has been in cases of the highest developed economies of the world economy from the 30 selected countries namely UK, Finland, Canada, New Zealand, US, Australia, Norway, France and Japan since 2005.

Generally the highly level of the increasing rate of the BalanPayment does not mean that the BalaPayInGDP will be at highly level or just only considerable. For example in Hungary the BalanPayment has been increasing rate by 140% since 2005 till 2015, while the BalaPayInGDP has been 0,7% (share of the BalanPayment in GDP) for the period of 2005-2015. In case of Belgium the situation was similarly, because the Belgium had had increasing rate by 97% in BalanPayment since 2005, while the BalaPayInGDP had been 0,6% for the same period, therefore the increasing rate of the BalanPayment was not so quietly considerable comparably to the share of the BalanPayment in the GDP (BalaPayInGDP). In those countries, where the increasing rate of the BalanPayment was less than in Hungary and Belgium, for example in the other three countries, the BalanPayment could get more share of GDP, namely in Korea (Republic of) increasing rate of BalanPayment has been 73% since 2005, but the BalPayInGDP was 4,6%, in Netherlands its 65,3% increasing rate and its share in GDP was 8,5%, while in Turkey 53% increasing rate of the BalanPayment, but its share in GDP was 5,6%, which last one was 5 times more than the Hungary’s BalanPayInGDP for the same period (see Table-4-9 and Figure-4-3).

Generally it can be declared that the BalanPayment cannot effect strongly on changes of the first three variances (see Table-4-9), namely GovDebtGDP, GDPEmployed and GDPGrowth, because different growing or declining rates of BalanPayment has resulted different changes in countries of the first session of the score (Figure-4-3). The large scale differences among changes of the first variances strengthen the weak correlation among BalanPayment and three variances. Also these correlations can be seen in its correlations with other variances at principle line “Y” in the Figure-1 and Figure-4-2. By the other ways the BalanPayment as variance in this analyses has important role to determine the economic conditions of the countries for their payment capability for other countries and shows wholly the financial

conditions of elements including in the balance of payment, for example foreign trade exchange rate concerning the export-import balance, financial demands of countries against themselves, financial reserves and the governmental budget balance.

In the Figure-4-3 *in the second session* of the score is above principle line "X" turn to left side from the "Origo" and the countries, which are as follows: Spain, Israel, Denmark, Portugal, Germany, Austria and Italy, 7 countries.
In the second session the first three variances (1-2-3) at the principle line "X" are the same as in the Figure-4-1 and Figure-4-2, namely in these countries the GovDebtGDP increases, which trend is opposite to decreasing growing rate of GDPEmployed and GDPGrowth. Also the other tenth variance, namely BalanPayment is at the principle line "Y", and above line "X" this variance increases in the countries of the first and second sessions, which can be followed in cases of these countries.

Based on the weak correlation of variance namely BalanPayment with other variances, the country list of this field shows how some countries have considerable large increasing rate of BalanPayment since 2005 till 2015, while their other variances show weak or less favourable economic conditions of any countries comparably to other countries of the 30 selected one. In the second session of this Figure-3, for example Spain has achieved considerable increasing rate in its BalanPayment by 622% since 2005, but Spain had only decreasing rate as negative BalaPayInGDP by 1,5% averagely for the period of 2005-2015. Also Spain had had 50,8% GovDebtGDP averagely for period of 2000-2014, which was not so considerable, but the GDPEmployed was at very low level as 6,5% since 2000 till 2014, which resulted only 1,7% GDPGrowth equally to average GDPGrowth of OECD in the same period. The relatively low level of the GDPEmployed in Spain resulted a not so considerable GDPGrowth, while the unemployment rate has been at very highly level for the same period.

The other example is Israel, which country also had had considerable increasing rate in field of BalanPayment by 257% since 2005, which also was seen as large scale one. But Israel has reached only 3,7% in field of BalaPayInGDP for the same period. The GDPEmployed of Israel has little increased by 2,5%, which was just only hardly more than the growing rate of Mexico in this field since 2000 till 2014. Mexico had the lowest level of the GDPEmploed level and after that Israel within the 30 selected countries. In spite this low level of the

GDPEmployed Israel could have achieved by 3,6% in field of GDPGrowth for the period of 2000-2015.

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Based on the weak correlation of variance namely BalanPayment with other variances, the country list of this field shows how some countries have considerable large increasing rate of BalanPayment since 2005 till 2015, while their other variances show weak or less favourable economic conditions of any countries comparably to other countries of the 30 selected one. In some examples it can be shown that one country can have achieved considerable increasing rate in its BalanPayment, but while this country had only decreasing rate as negative BalaPayInGDP by the low level averagely for the period of 2005-2015.

Also this country can have not so considerable growing rate in field of GovDebtGDP averagely for period of 2000-2014, the GDPEmployed can be at very low level since 2000 till 2014, which resulted also only less or little GDPGrowth rate equally to average GDPGrowth of OECD in the same period. The relatively low level of the GDPEmployed could result a not so considerable GDPGrowth, while for example the unemployment rate has been at very highly level for the same period.

In the Figure-4-3 *in the third session* of the score is under principle line "X" turn to right side from the "Origo" and the countries, which are as follows: China, Slovak Republic, Australia, Poland, Mexico, 5 countries.

In the third session the first three variances (1-2-3) at the principle line "X" are the same as in the Figure-4-1 and Figure-4-2, also the other tenth variance, namely BalanPayment is at the principle line "Y", and under line "X", which this variance decreases in the countries of the third and fourth sessions, which can be followed in cases of these countries.

In China the increasing rate of the moderate level of the BalanPayment has been by 15% since 2005, the BalaPayInGDP was quietly satisfactory by 3,4% in the international compare, while the GDPEmployed of China was the first position in the 30 selected countries and seven times more than 17,9% as average level of the world. Therefore China achieved 9,6% in field of GDPGrowh for period of 2000 and 2015.

The basic favourable economic conditions were for China, namely the low level of the GovDebtGDP and the GDPEmployed, which created successful bases for the GDPGrowth for

China, and in spite of the low level of the TaxRevenue China could have realised a continuously good level of the BalanPyamnt and BalaPayInGDP in the international compare. Naturally China has to improve the LabourProd, because this has a little backwardness for the highest developed economies of the world economy. The FDIinFlow increase by 88% can be titled as favourable for China to obtain the highest developed technology and advanced manufacturing process within the international technological transfer to China by the cooperation with international transnational corporations. This technological transfer can ensure for China to increase the developed level of the LabourProd and GDPEmployed and therefore the international competitiveness of the country.

In case of China it is very clearly seen that the correlation and significance are very strong between GDPEmployed and GDPGrowth, also among GovDebtGDP, GDPGrowth, and ConsPrice, and also LabourProd and ConsumPrice. These strong correlations provide proof and the future possible developing trends for China that how the GovDebt, TaxRevenue and ConsuPrice should be at the low level and GDPEmployed, LabourProd, GDPGrowth and FDIinFlow with positive BalaPayInGDP at increasing highly level are important for the future economic successful and international competitiveness on the world market. Naturally if the BalaPayInGDP is quietly at highly level, therefore the BalanPayment can be accepted for the interest of the international economic competitiveness. Also if the FDIinFlow into China has strongly trends, in contradiction the FDIoutFlow can be weaker, which means that the foreign technology is extending in wide side China.

In the Figure-4-3 *in the fourth session* of the score is under principle line "X" turn to left side from the "Origo" and the countries, which are as follows: New-Zealand, France, Canada, Japan, Finland, USA, Greece, UK, 8 countries.
In the fourth session the first three variances (1-2-3) at the principle line "X" are the same as in the Figure-4-1 and Figure-4-2, namely in these countries the GovDebtGDP increases, which trend is opposite to decreasing growing rate of GDPEmployed and GDPGrowth, also the other tenth variance, namely BalanPayment is at the principle line "Y", and under line "X", which this variance decreases in the countries of the third and the fourth sessions, which can be followed in cases of these countries.

In cases of some countries of the fourth session of the score namely for example Japan US, UK, France and Greece this can clearly be seen that the BalanPayment did not affect considerably on the other variances, by the other word there is not a strong correlation or significance among variances. In spite that the BalanPaymernt can have changed considerably since 2005 till 2015, this change could not result serious trends in portion of BalanPayment in the GDP, for example in UK the negative BalanPayment has decreased by 387% since 2005, this change resulted only in value of the negative balance of payment in GDP in its share from the GDP of UK by 3,8%. This means that the value of the change of the BalanPayment was not so highly level, which could have considerably increased in percent or share the GDP averagely for the period of 2005-2015. But when in US the negative BalanPayment has increased by 35% since 2005 till 2015 for this period, this change has appeared as negative BalanPayInGDP by 3,2%, mostly the same share of negative BalaPayInGDP of the UK for the same period. But in Greece the negative BalanPayment has considerably increased by 99,4% but much less than case of the UK for the same time and in spite this less change, the negative BalaPayInGDP of Greece was minus 4,3%.

In France the decreasing trend of the BalanPayment has declined by 22% since 2005, but this resulted only the negative BalanPayIn GDP by 0,6% of the GDP. In this case Japan had a good adequate result, because here the negative BalanPayment has increased by negative increase, namely 20% since 2005. Japan could have only reached positive BalaPayInGDP by 2,5% and in spite that this result was far from the first place of Switzerland by 12% wihin the 30 selected countries, the result of Japan can be titled as good results in the international compare. Also the different GDPGrowth changing rates in these countries could proof that not the measure of the BalanPayment decided or determined the GDPGrowth rate, because in cases of US and UK the GDPGrowth rates were similarly the same, when the difference of their BalanPayment was considerable. Also in spite that all of these emphasized countries have reached negative trends of the BalanPayment, only Japan realized positive BalaPayInGDP from them. Even Japan had low level of the TaxRevenue by 9,9, and lower than one of other four countries namely 10% and 25,5% averagely in GDP for the period of 2000-2014 in this session, Japan could get positive BalanPayInGDP in the same period.

Solution for the economic difficulties of the 30 selected economies of the research is that the GovDebtGDP should be decreased by decreasing the domestic consumption and transfer the capital and financial resources to increase the advanced technology, therefore the GDPGrowth can be going on in direction to increase.

In order to decrease the GovDebtGDP the domestic consumption based on the increasing credit financed by the financial institutions should be decreased in two fields namely expenses of the governmental budget and consumption of population in any country of the 30 selected one. Also the *TaxRevenue* should be at either low level or the level accepted by the foreign international large companies or the corporations in order to increase their FDI performance in any country of the selected 30 one. Therefore the FDIinFlow can increase, while the FDIoutFlow can decrease.

Also the LabourProd should increase in order to increase the profit and price income of the companies for interest of companies, while the GDPEmployed can also increase to ensure more income even for the employees and the whole population. Also the ConsPrice should moderately increase for interest either of companies or the consumers to stimulate the companies to increase products and to stimulate consumers to increase their consumption. All of the performance of the economies, also the 30 selected countries develops harmonized, only this can lead to harmonized positive BalaPayInGDP and BalanPayment.

Summarised THESIS of correlations and significance of the variances of 30 countries

.1- In spite that the OECD countries and the highly developed economies have implemented considerable growth in field of the LabourProd they could not have realised highly level of the GDPEmployed increase. The growth LabourProd is calculated within companies and corporations mostly in production scheme, but the GDPEmployed growth is calculated by all of the employees including less competitive service sector and the state owned sectors, governmental staff.

The world economy has implemented by very poor results, namely by 17,9% in this field for this period, and the OECD implemented even less than this level by 13,2%. This poor result of the world economy was mostly coming from decreasing level of the labour productivity in majority of the OECD economies. In essence the low level or lower level of the labour productivity has resulted the low level of the GDPEmployed and the GDPGrowth rate and led to the increasing measuring of the GovDebtGDP for the period of 2000 and to about middle of the second decade of the 21st century.

The second main issue is that the low level of the GDPEmployed increase in cases of some OECD countries, for example in Germany and US was resulted by the quietly developed and highly level of GDPEmployed, which to be increased can be difficult. Toward possible increase of the GDPEmployed can be realised by increasing the consumption of the population, but which is limited by toward increasing consuming credit, which shows the mostly highly level of the GovDebtGDP. Because of this highly level of the GovDebtGDP the finance from more credits for the more population consumption can be difficult. Therefore the production cannot increase even in case of the increasing GDPEmployed, while the unemployment level does not increase. Because of the national central governments try to remain mostly higher employment level to avoid of more economic and political crisis therefore the less production level is continuing. Therefore the decreasing trend or less increasing trend of the GDPEmployed would remain.

In cases of some countries it can be declared that the GDPGrowth rate was at highly or higher level in countries, in these countries the GovDebtGDP was less share, for example in China, Belgium, Mexico, Czech Republic, Switzerland, Norway and Korea Republic of, Poland, Australia, New-Zealand, Canada, Sweden and Turkey.

Naturally in those countries, where the GDPEmployed increase has been at highly or higher level since 2000 until 2014 (2000 = 100%), the GovDebtGDP was moderately less, for example in cases of China, Slovak Republic, Poland, Czech Republic, Korea Republic of and Sweden.
In this analysis for this thesis, I declare that the countries, which have central governmental debt in GDP under 50% and the GDP per employed from 20% as increasing rate from 2000 to 2014, and the GDP growth rate is more than about 2,0% from 2000 to 2015.
The correlations among the variances of Componenet-1 and Component-2 focuses on the balance of payment in GDP (BalaPayInGDP), Labour productivity (LabourProd) and consumer price (ConsPrice).

The GovDebtGDP and the ConsPrice increase make very unfavourable economic background for the producers and the consumers, because the ConsPrice increase decreases the purchase power parity and makes domestic market be narrow for the producers. Also increase of the GovDebtGDP results less central governmental support from the governmental budget for producers to transit their technological development from the using fossil energy to using renewable energy use by applying advanced technology saving energy use, therefore decreasing the production cost and increasing their competitiveness on the domestic and world markets. Also increase of the GovDebtGDP makes devaluation of the central governmental supports either for producers or companies or for the consumers, therefore the efficiency of the central support will also be decreasing.
The LabourProd decrease results less price income for companies and less tax income for the governmental budget, which can lead to increase the negative BalaPayInGDP, which negative balance can be covered by more central government budget calculated in GDP (GovDebtGDP).
The increase of the taxes can also increase the level of the ConsPrice, which decrease the purchase power parity of the consumers by narrowing the domestic markets. These two variances as GovDebtGDP and ConsPrice are important index number showing the basic economic and financial difficulties of any country.

Correlations and significance among variances:
Middle Strong contradiction correlation is between GovDebtGDP and GDPGrowth.
Middle Strong correlation is between BalaPayInGDP and LabourProd.

Strong correlation is between GDPEmployed and, GDPGrowth.
Middle Strong contradiction correlation is between LabourProd and GDPGrowth.
Strong contradiction correlation is between LabourProd and ConsPrice.
The significance is strong among the GovDebtGDP, GDPGrowth, FDIoutFlow, ConsPrice and GDPEmployed.
The significance is strong among the BalaPayInGDP, LabourProd and ConsPrice.
The significance is strong among the GDPEmployed, GDPGrowth and LabourProd.

.3- In general the FDIinFlow is very weak in the 30 selected countries, which has been proofed by the low level of the average growing rate of the FDIinFlow by 10,43% and by considerable decreasing level of the FDIoutFlow by 32% for the period of 2005-2015, where the 2005 = 100%. This means that the balance of the FDIinFlow and FDIoutFlow is very much negative because of the more growing rate in field of the FDIoutFlow. This shows that the FDIoutFlow has consequently been increasing to decrease the role of FDI in the innovative development process in this 30 selected countries and in the most of the OECD countries. This increasing negative process can be explained by increasing TaxRevenue by 18,7%, but the highly developed economies have more about 20 and 32% as considerable burden on the private sector in the developed economies, and strongly increasing the GovDebtGDP by 60,88%, the less increasing the GDPEmploy by 18,06%, the GDPGrowth by 2,27%, the positive BalanPayment by 1,24%. Finally all of these negative trends make lower level increasing of the FDIinFlow rate by 10,43%.

.4- In the country-group above the line "X" the negative trend can be experienced in country-group above line "X" in the first and second sessions, when the FDIinFlow has increased by 78,564%, while the FDIoutFlow has increased more than increase of the FDIinFlow by 112,018% since 2005 until 2015. In the country-group under the line "X" the negative trend can clearly be followed in cases of the FDIinFlow and FDIoutFlow, when the FDIinFlow has decreased by 29,626% in spite that the FDIoutFlow has also decreased by 14,295 for the same period. This means that the FDI activity has continuously been decreasing, when the FDIinFlow decreased, and also the FDIoutFlow has been going on, in spite that the outflow intensity has weaknesses.
Also average of 30 countries has reached negative trend, because the FDIinFlow has increased by 10,43%, but the FDIoutFlow reached 32,0% for the same period. These negative

trends were resulted by the negative economic trend in selected economies and unfavourable economic growth in the world economy.

Correlations and significance among variances:
Middle strong correlation between the FDIinFlow and the FDIoutFlow.
The significance is strong between the FDIinFlow and the FDIoutFlow.

.5- Based on the examples of the countries of the fourth session of the score in Figure-2, mostly four countries, namely UK, France, Denmark and New Zealand can be emphasized as countries having strong highly developed agricultural sector with advanced manufactured food industries. In spite Greece is also agricultural country, but with less advanced food manufactured economy comparably with other four one.
When the highly level of TaxRevenue could remain the GovDebtGDP at quietly internationally accepted low level of the debt, but this tax level considerably effected the decreasing level of the FDIinFlow. Where the TaxRevenue was at very highly level, therefore the FDIinFlow decreased considerable accompanying with increasing level of FDIoutFlow, therefore the foreign corporations decrease their investment activity in these countries. While the decreasing level of the FDIinFlow could accompany with decreasing FDIoutFlow, therefore the FDI can mostly or partly remain in countries. The FDIinFlow and the FDIoutFlow can be effected by either highly level of the TaxRevenue or GovDebtGDP. Naturally this last both of them are also strongly correlating between themselves.
This can mean that in some of cases the foreign corporations could stay more in any country or their withdrawal was not so intensive opposite to other country, or the FDIoutFlow did not decreased, but even moderately increased because of the highly level of TaxRevenue. The higher unemployment with less FDIoutFlow can result higher level of the GDPEmployed in one country than in other one, while this GDPEmployed can be even higher if only the higher unemployment level is.
The relatively lower level of the TaxRevenue and less decreasing rate of the FDIoutFlow can be, which result higher GDPEmployed and GDPGrowth rate. In the given country the GDPGrowth rate can be more than in other country, even if in this given country the GDPEmployed less than GDPEmployed rate in other countries (New Zealand). The higher GDPEmployed can result a lower GDPGrowth rate (Greece, UK) in one country than the other one depending on the FDIinFlow and FDIoutFlow.

Correlations and significance among variances:
The significance is strong among the TaxRevenue, LabourProd, GDPEmployed, GDPGrowth and FDIinFlow.
The significance is strong between FDIinFlow and FDIoutFlow
The significance is strong between FDIoutFlow and LabourProd.
The significance is strong among the GDPEmployed, GDPGrowth and LabourProd.
The significance is strong between the LabourProd and ConsPrice.
The significance is strong between the ConsPrice and GDPGrowth.

.6- Based on the weak correlation of variance namely BalanPayment with other variances, the country list of this field shows how some countries have considerable large increasing rate of BalanPayment since 2005 till 2015, while their other variances show weak or less favourable economic conditions of any countries comparably to other countries of the 30 selected one. In some examples it can be shown that one country can have achieved considerable increasing rate in its BalanPayment, but while this country had only decreasing rate as negative BalaPayInGDP by the low level averagely for the period of 2005-2015.
Also this country can have not so considerable growing rate in field of GovDebtGDP averagely for period of 2000-2014, the GDPEmployed can be at very low level since 2000 till 2014, which resulted also only less or little GDPGrowth rate equally to average GDPGrowth of OECD in the same period. The relatively low level of the GDPEmployed could result a not so considerable GDPGrowth, while for example the unemployment rate has been at very highly level for the same period.

Correlations and significance among variances:
The strong correlation is between GDPGrowth and GDPEmployed.
There is not a considerable correlation and significance between BalaPayInGDP and BalanPayment.

.7- The significance is strong between the TaxRevenue and GDPEmployed, because increase of the TaxRevenue increases withdraws of incomes of firms and corporations, therefore the GDPEmployed decreased. This shows the strong significance between both of them. Also it is proofed in this 30 country-group that, because the significance is strong among the

GDPEmployed, LabourProd and GDPGrowth, this means if the TaxRevenue effects on changing one from these three variances, naturally the TaxRevenue has also the same effect on the other two variances.
Also it is true, that in case of the strong significance between GDPEmployed and GDPGrowth, therefore if the GovDebtGDP effects on the changes of the GDPGrowth, naturally this also effects on the GDPEmployed (see Table-4-2)
In cases of other variances there are not so strong correlations like in cases of TaxRevenue, GDPEmployed, LabourProd and GDPGrowth and in the other cases of GovDebtGDP GDPEmployed and GDPGrowth.

.8- In the field of significance the GovDebtGDP and the TaxRevenue have strongly effected on the GDPGrowth and generally for the performance of the countries, and influences of both of them are more dominant than the other variances in cases of the 30 selected countries for the period of 2000-2015. This is proofed in spite that there are no strong correlation and significance between these two variances.

.9-The significance is strong between FDIoutFlow and LabourProd, which means that if the FDIoutFlow increases, the work-jobs will decrease, therefore the employment will increase and the unit of products and services per employed increases, therefore the LabourProduct also increases. This means that the FDIoutFlow from any country could have contemporary resulted a relative increase of LabourProduct in cases of the 30 selected countries in four continents for period of 2000-2015, but for longer future time period this FDIoutFlow can lead to decrease the level of the LabourProduct. In these both of ways the strong significance between FDIoutFlow and LabourProd can be proofed and also the contradiction in fields of significance approaches is not remarked by minus code or sign, because the strong significance should be closed to the level of "zero" as value of 0,000, in this case there are not important plus or minus values. The zero cannot be plus or minus.

Table-4-12: Case Processing Summary[a]

Cases					
Valid		Missing		Total	
N	Percent	N	Percent	N	Percent
30	100,0%	0	0,0%	30	100,0%

a. Squared Euclidean Distance used

Source: Owned calculation based on the SPSS

The Table-4-12 namely Case Processing Summary based on the Squared Euclidean Distance used shows that statistical analyses of SPSS system completely was realised for all of the 30 selected countries, in 100% and no any missing from these countries.

The Table-4-13, namely Proximity Matrix, Squared Euclidean Distance shows the distance among 30 selected countries in economic fields, but the distance is calculated statistically and mathematically, which don't mean in any case, that one country should be more developed than the other one, but probably this can occur, or any economic condition can be better in case of one country than the other one. Based on the measure of numbers in this Table-4-13 the first biggest distance was mostly between China and the other all of the 30 selected countries except Slovak Republic. The second biggest distance is differently appearing among other countries. China has favourable conditions in field of the Squared Euclidean Distance, which mostly has come from the increasing trend of the GDPGrwoth rate based on the low level of the GovDebtGDP for the analyse period, namely 2000-2015.

The other distance among countries is less than in case of China with compared countries and in cases of the other different countries with their compared countries, as it can be clearly seen in the Table-4-14, namely Country list according to the Table-4-13. This Proximity Matrix, Squared Euclidean Distance can be important in order to understand and see the real differences among selected 30 countries participated in this statistical SPSS analysis, which can show somehow economic favourable economic conditions of each country or sometimes can show differences in developed levels of countries, but not in all cases. In some cases the distance can simply be large and this doesn't proof a serious difference in field of economic developed levels among countries (see Table-4-14).

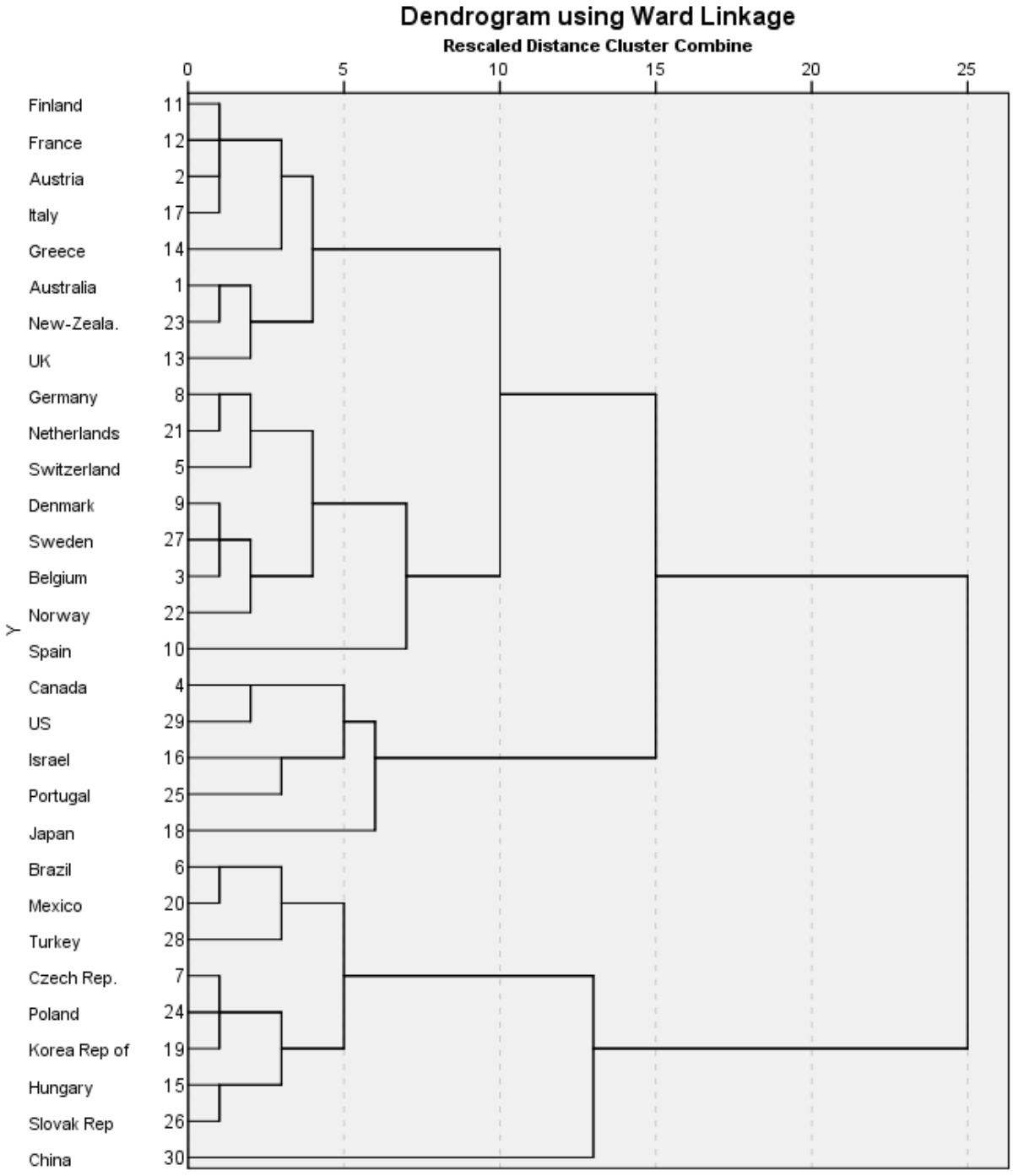

Figure-4-5: Dendrogram using Ward Linkage for Cluster Analyses for the order of OECD countries and China

Source: Owned calculation based on the SPSS

Country-group-1: Finland, France, Austria, Italy, Greece, Australia, New-Zealand, UK

Country-group-2: Germany, Netherlands, Switzerland, Denmark, Sweden, Belgium, Norway, Spain

Country-group-3: Canada, USA, Israel, Portugal, Japan

Country-group-4: Brazil, Mexico, Turkey, Czech Republic, Poland, Korea Republic of,

Hungary, Slovak Republic
Country-group-5: China

This SPSS analysing statistical system includes the clustering analysis, which shows that how the analysing system classifies different countries into different clusters based on their economic specific elements, namely by variances. In the cluster analysis as the Figure-5 based on the Dendrogram using Ward Linkage for Cluster Analyses for the order of OECD countries and China, clearly demonstrates the classification of the 30 selected countries in case of five clusters, which are as follows (see Figure-4-4 and Figure-4-5):

Country-group-1: Finland, France, Austria, Italy, Greece, Australia, New-Zealand, UK
Country-group-2: Germany, Netherlands, Switzerland, Denmark, Sweden, Belgium, Norway, Spain
Country-group-3: Canada, USA, Israel, Portugal, Japan
Country-group-4: Brazil, Mexico, Turkey, Czech Republic, Poland, Korea Republic of, Hungary, Slovak Republic
Country-group-5: China

The first, the second and the third country-groups mostly include the highly developed economies either in the world economy or in the 30 selected economies. The fourth country-group includes countries, which are less developed than the one of the first three country-groups. The fifth country-group is equal with only China. Because of China has had emerging considerable results in its economic development for the last two decades in the international compare and even in cases of the 30 selected economies in this analyse. Chins became its own one country as one cluster in this cluster analysis, which could come because China could have achieved attractive economic growth for the last two decades.

Table-4-15, namely Agglomeration Schedule and Table-4-16, namely Cluster Membership show how the clustering can be realised in cases of more clusters in the field of 30 selected countries. Table-4-17, namely Case Processing Summary and Table-4-18: Case Summaries show that how the statistical analyses have been realized for applying 30 selected countries concerning the 10 variances by level of 100% totally analysed form.

The Table-4-18 generally shows (Total – from the table) the Minimum, Maximum, Mean and St Deviation values for the every clustered country-groups based on the variances for economic conditions of each country-group. The Total of selected 30 countries directly have data for Minimum and Maximum summarized in the Table-4-18 and also in the Table-4-1. For example China has reached the top Maximum value by 109 in the field of GDPEmployed and 9,6 in field of GDPGrowth for the period of 2000-2015. These two data are written also 5th Number of country-group session of the Table-4-11 is equally to only one country, also China. Generally the Table-4-18 is useful to determine easierly the five different kinds of statistical data mentioned for the selected 30 countries.

5. CONCLUSIONS AND SUGGESTIONS

5.1 Conclusions for the analysing the economic conditions of the 30 selected countries

In the dissertation the study wanted to analyses that how the correlations were and possibly would be at present among some economic conditions of 30 Asian and European different countries. Most of them are OECD countries and EU member states accompanying with China as considerably developing countries with more developed rends than the world economy and most of the highly developed economies' one.

The study of the dissertation focuses on the analysing and describing the economic role of the China showing the highest level of economic developing trend in all of the world economy. China and the selected countries, of which mostly developed one of the world economy have potential possibility to increase the developed level of the world economy. China has a favourable economic positions, because the country has reached the increasing GDP growing (GDPGrowth) rate by 9,6% and increasing GDP per employed (GDPEmployed) by 109% since 2000 by the end of 2015, and low share of the central government debt in GDP (GovDebtGDP) in China has been 11,5% annual averagely for period of 2000-2014. The main issue of these selected countries, mostly OECD highly developed economies is to develop the labour productivity, which is the essence for the economics and from which the GDP growing rate and the GDP employed.

In those countries, where the government debt in GDP was considerably at highly level (GovDebtGDP), in these countries the GDP growing rate (GDPGrowth) could not develop enough in order to decrease the negative balance of payment in GDP (BalaPayInGDP). Also the balance of the FDIinFlow and FDIoutFlow is very much negative because of the more growing rate in field of the FDIoutFlow. This shows that the FDIoutFlow has consequently been increasing to decrease the role of FDI in the innovative development process in this 30 selected countries and in the most of the OECD countries.

Solution for the economic difficulties of the 30 selected economies of the research is that the GovDebtGDP should be decreased by decreasing the domestic consumption and transfer the capital and financial resources to increase the advanced technology, therefore the GDPGrowth can be going on in direction to increase.

5.2 New Scientific Results

For cases of the 30 selected countries the study focuses on the GDPEmployed and the GDPGrowth rate concerning the GovDebtGDP. Also the LabourProd has strong correlation with TaxRevenue (tax income) for the governmental budget, and the changes of the BalaPayInGDP, which has been influenced by central government debt calculated in GDP (GovDebtGDP). The highly level of TaxRevenue could remain the GovDebtGDP at quietly internationally accepted low level of the debt, but this tax level considerably effected the decreasing level of the FDIinFlow. Where the TaxRevenue was at very highly level, therefore the FDIinFlow decreased considerable accompanying with increasing level of FDIoutFlow, therefore the foreign corporations decrease their investment activity in these countries. While the decreasing level of the FDIinFlow could accompany with decreasing FDIoutFlow, therefore the FDI can mostly or partly remain in countries. The FDIinFlow and the FDIoutFlow can be effected by either highly level of the TaxRevenue or GovDebtGDP. Naturally this last both of them are also strongly correlating between themselves.

The GDP per employed increase can result the economic growth rate and the GDP growth rate, because this GDP per employed increase can set up the increasing of the labour productivity mostly in cases of companies. The decreasing government debt (state debt) and positive balance of the payment also stimulate the GDP growth rate by strengthening the national currencies and purchase power parity of consumers and population in direction to increase the domestic market and stimulate supply as production. The increasing or decreasing TaxRevenue does not make direct influences on the GDPEmployed and LabourProd. Because the increasing LabourProd can make influences on the increasing GDPEmployed, but if the TaxRevenue increases, therefore the number of employed in governmental administration or staff members can increase, which lead to the less GDPEmployed, in spite that LabourProd increases.

.1- The poor result of the world economy was mostly coming from decreasing level of the LabourProd (labour productivity) in majority of the OECD economies. In essence the low level or lower level of the LabourProd has resulted the low level of the GDPEmployed and the GDPGrowth rate and led to increasing measure of the GovDebtGDP for the period of 2000 and to about middle of the second decade of the 21st century. The LabourProd decrease results less price income for companies and less *TaxRevenue* (tax income) for the governmental budget, which can lead to increase the negative balance of payment to GDP ratio (BalaPayInGDP), which negative balance can be covered by more central government debt calculated in GDP (GovDebtGDP).

.2- Toward possible increase of the GDPEmployed can be realised by increasing consumption of the population, but which is limited by toward increasing consuming credit, which shows the mostly highly level of the GovDebtGDP. Because of this highly level of the GovDebtGDP the finance from more credits for the more population consumption can be difficult. Therefore the decreasing trend or less increasing trend of the GDPEmployed would remain. In those countries, where the GDPEmployed increase has been realised at highly or higher level since 2000 until 2014, the GovDebtGDP was moderately less.
In China the increasing GDP growing (GDPGrowth) rate by 9,6% led to low share of the central government debt in GDP (GovDebtGDP), which has been decreasing to level of 11,5% annual averagely and increasing GDP per employed (GDPEmployed) by 109% since 2000 by the end of 2015. Therefore Chine has the top increasing in these fields within 30 selected countries.

.3- The relatively lower level of the TaxRevenue and less decreasing rate of the FDIoutFlow can be, which result higher GDPEmployed and GDPGrowth rate. The GDPGrowth rate can be more than in other country, even if in this given country the GDPEmployed less than GDPEmployed rate in other countries (New Zealand). The higher GDPEmployed can result a lower GDPGrowth rate (Greece, UK) in one country than the other one depending on the FDIinFlow and FDIoutFlow. The significance is strong between the TaxRevenue and GDPEmployed, because increase of the TaxRevenue increases withdraws of incomes of firms and corporations, therefore the GDPEmployed decreased. This shows the strong significance between both of them. Also it is proofed that, because the significance is strong among the GDPEmployed, LabourProd and GDPGrowth, this means if the TaxRevenue effects on

changing one from these three variances, naturally the TaxRevenue has also the same effect on the other two variances.

China has a favourable economic positions, because the country has reached the increasing GDP growing (GDPGrowth) rate and increasing GDP per employed (GDPEmployed) for the same period of 2000 and 2015. In China the TaxRevenue has been at the very low level, in percent of GDP, therefore China increased the FDIinFlow into country by 88,5%, more than by 63,8% of OECD countries and 10,43% of the 30 selected countries for the same period. China had the second position in field of the FDIinFlow after US, but China had had more FDIinFlow than its FDIoutFlow for the last three years, which positive balance was 8,3% for FDIinFlow than FDIoutFlow. In China the increasing rate of the moderate level of the BalanPayment has been increasing by 15% since 2005, and the GDPEmployed of China was even higher increase, while the BalaPayInGDP was quietly satisfactory low level.

.4- In general the FDIinFlow is very weak in the 30 selected countries, which has been proofed by the low level of the average growing rate of the FDIinFlow by 10,43% and by considerable decreasing level of the FDIoutFlow by 32% for the period of 2005-2015. This means that the balance of the FDIinFlow and FDIoutFlow is very much negative because of the more growing rate in field of the FDIoutFlow. This increasing negative process can be explained by increasing TaxRevenue by 18,7%, but the highly developed economies have more about 20 and 32% as considerable burden on the private sector in the developed economies, and strongly increasing the GovDebtGDP by 60,88%, the less increasing the GDPEmploy by 18,06%, the GDPGrowth by 2,27%, the positive BalanPayment by 1,24%. Finally all of these negative trends make lower level increasing of the FDIinFlow rate by 10,43%.

.5- Where central governmental debt in GDP under 50% and the GDP per employed 20% as increasing rate from 2000 to 2014, and the GDP growth rate is more than 2,0% from 2000 to 2015 in cases of 30 selected countries, therefore the correlation is strong among the balance of payment in GDP, the labour productivity and consumer price. The GovDebtGDP and the ConsPrice increase make very unfavourable economic background for the producers and the consumers, because the ConsPrice increase decreases the purchase power parity and makes domestic market be narrow for the producers. Also the central governmental supports decresased because of increasing GovDebtGDP.

6. SUMMARY

The study analyses the correlations among some economic conditions of 30 selected countries most of them OECD countries and EU member states with China. The majority of the EU member states are also member states of the OECD, as organization for the highest developed economies of the world economy. The economic role of the China has considerably very much increased for the latest decades in the world economy. The main research focuses on the GDP growing trends based on the correlations mostly with central governmental debt calculated in the GDP for each country. The importance of the research, because of the selected countries mostly developed one of the world economy, therefore their performance has determine the role for the developing trends of the world economy and for the rest of the world.

The statistical analyses are needed to describe the correlations and significance among the variances meaning the economic conditions in detailed for each country. In order to determine the similarities and differences based on the compering system among 30 selected countries, the best way to use the internationally accepted statistical method, namely the SPSS in detailed in Special Program for Social Sciences. The statistical analyses include correlation matrix, factor analyses, and cluster analyses for dendrogram using ward linkage.

China has a favourable economic positions, because the country has reached the increasing GDP growing (GDPGrowth) rate by 9,6% and increasing GDP per employed (GDPEmployed) by 109% since 2000 by the end of 2015, and low share of the central government debt in GDP (GovDebtGDP) in China has been 11,5% annual averagely for period of 2000-2014. The second position was for Slovak Republic and Turkey by 3,9% increasing GDP of two countries, then Poland and Israel by 3,6%, Korea Republic of by 3,55%, Australia by 2,97%. Also Israel from these countries has reached the negative trend of the GovDebtGDP, therefore the balance of the GovDebtGDP shows more debt for this country from year to year.

In cases of some countries it can be declared that the *GDPGrowth rate was at highly or higher level in countries, in these countries the GovDebtGDP was less share*, for example in China, Belgium, Mexico, Czech Republic, Switzerland, Norway and Korea Republic of, Poland, Australia, New-Zealand, Canada, Sweden and Turkey.

Naturally in those countries, where the GDPEmployed increase has been at highly or higher level since 2000 until 2014 (2000 = 100%), the GovDebtGDP was moderately less. The LabourProd decrease results less price income for companies and less tax income for the governmental budget, which can lead to increase the negative BalaPayInGDP, which negative balance can be covered by more central government budget calculated in GDP (GovDebtGDP).

In general the FDIinFlow is very weak in the 30 selected countries, which has been proofed by the low level of the average growing rate of the FDIinFlow by 10,43% and by considerable decreasing level of the FDIoutFlow by 32% for the period of 2005-2015, where the 2005 = 100%. This means that the balance of the FDIinFlow and FDIoutFlow is very much negative because of the more growing rate in field of the FDIoutFlow. This shows that the FDIoutFlow has consequently been increasing to decrease the role of FDI in the innovative development process in this 30 selected countries and in the most of the OECD countries.

Solution for the economic difficulties of the 30 selected economies of the research is that the GovDebtGDP should be decreased by decreasing the domestic consumption and transfer the capital and financial resources to increase the advanced technology, therefore the GDPGrowth can be going on in direction to increase.

7. REFERENCES

.1 ACMF (ASEAN Capital Markets Forum). (2008) ASEAN and Plus Standards. ASEAN Equity Securities. Disclosure Standards and ASEAN Debt Securities Disclosure Standards. Online. Available HTTP: http://www.aseal1sec.orglacmf/il1troduction.htm (accessed 1 October 2012).

.2 Acharya, V.- Franks, J. - Servaes, H. (2007) Private Equity: Boom and Bust? 19 Journal of Applied Corporate Finance 4, 1.

.3 ASEAN+3 (Finance Ministers). - (2012) Joint statement. & Annex 1. Key Pointsfor Strengthening the CM/M, Manila, 3 May. Online. Available HTTP: <http://www.aseansec.orglJoint%20Media%20Statement%2001..102Ű1he%20 15th%20ASEAN+3%20Finance%20Ministers%20and%20Central%20Bank%20Governors' %20Meeting.pdf> (accessed 1 October 2012).

.4 Aizenman J - Jinjarak Y, - Park D. (2010): International reserves and swaps lines: substitutes or complements? National Bureau For Economic Research Working Paper, No: 15804

.5 AFD, ADB, EBRD, EIB, IDB, IFC and WB (2012), Joint Report on MDB Climate Finance 2012. November. (2012).

.6 Allen, M.R. (2006). Strategic Human Resource Management and Firm Performance: What can We Learn from Small Businesses? A Dissertation Presented to the Cornell University Faculty of the Graduate School of Cornell University In Partial Fulfilment of the Requirements for the Degree of Doctor of Philosophy.

.7 Anca-Ioana, M. (2013). New Approaches of the Concepts of Human Resource, Management and Strategic Human Resource Management. University of Oradea, Faculty of Economics, Romania. *The Journal of the Faculty of Economics - Economic*, *1*(1), 1520-1525. Retrieved from http://anale.steconomiceuoradea.ro/volume/2013/n1/161.pdf

.8 Australia, Bureau of Infrastructure, Transport and Regional Economics (2012*), Australian Infrastructure Statistics: Yearbook 2012*. July. Canberra: Commonwealth of Australia.

.9 Australia, Reserve Bank (2013), "Financing infrastructure: A spectrum of country approaches", Bulletin: September Quarter.

.10 Bahaa Al Asmi – Gan, Quan – Zsarnóczai J S (2015): A Világbank szerepe a környezetvédelem fejlesztésében (Role of the World Bank for the environmental conservation development). *Controller Info*. III. year, 4th number. pp. 54-59. ISSN 2063-9309

.11 Bai, C, - Hsieh, C, - Qian, Y. (2006). The retum to Capital in China. Brookings Papers on Economic Activity, 2.

.12 Baietti A - Shlyakhtenko A - La Rocca R - Patel D U (2012): Green infrastructure finance: leading initiatives and research, World Bank Study, Washington, D.C.

.13 Barro R - Lee J W (2013): "A New Data Set of Educational Attainment in the World, 1950-2010." Journal of Development Economics, vol 104, pp.184-198.

.14 Bernanke, B.S. - Gertler, M., - Gilchrist, S. (1999). The finanrial accelerator in a quantitative business cycle framework. Handbooks in Macroeconomics, 1341-1393.

.15 Borszéki É. (2001): Capital and income transfers in agricultural economy. Scientific conference on "The role and possibilities of co-operation, co-ordination and integration in agricultural and rural economy", Vol 1., Szent István University, Gödöllő, Nov. 10: 4–25.

.16 Bostan, I. (2010): Performance of Financial Control. *Theoretical and Applied Economics*, *17*(7), 77-86. Retrieved from http://store.ectap.ro/articole/485.pdf

.17 Bowen, D.E., - Ostroff, C. (2004). Understanding HRM-Firm Performance Linkages: The Role of the 'Strength' of the HRM System. *Academy of Management Review*, *29*(2), 203-221.

.18 Bretton Woods Project (2011): Update on the Climate Investment Funds: February 2011, Summary, Bretton Woods Project, February 2011, Retrieved on 04/10/2011 from http://wivw.bretlonwoodsproject.org/doc/env/cifupdatefeb2011 .pdf Capoor K. - Ambrosi P. (2009): State and Trends of the Carbon Market: 2009, World Bank, 2009, Retrieved on 12/20/2010 from http://siteresources.worldbank.org/INTCARBONFINANCE/ Resources/State_Trends_of_the_Carbon_Market_2009- FINAJL_26_May09.pdf

.19 Buckley P.J-Casson M.C (1998) Models of the multinational enterprise, Journal of international business studies, Vol 29, No 1, pp 21-24

.20 Buckley P.J (1998) The limits of explanation: testing the internationalization theory of the multinational enterprise, Journal of international business studies, Vol 19, PP 181-93

.21 Buller, P.F., - McEvoy, G.M. (2012). Strategy Human Resource Management and Performance: Sharpening Line of Sight. *Human Resource Management Review*, *22*(1), 4356.

.22 Burns, T. - Stalker, G.M. (1961) The Management of Innovation, Tavistock

.23 Calderon, C M - Serven, L. (2005). The effects of infrastructure development on growth and income distribution. World Bank Working Paper, No. 3400.

.24 Caner, M., - Grennes, T., - Koehler-Geib, F. (2010). Finding the tipping point: When sovereign debt turns bad. World Bank conference on debt management,

.25 Cecchetti, S. G., - Mohanty, M. S., - Zampolli, F. (2010). The future of public debt: Prospects and implications. B/S working paper.

.26 Cecchetti, S. G., - Mohanty, M. S., - Zampolli, F. (2011). The reál effects of debt. BIS working paper.

.27 Chakrabarti A. (2002): Elements of Ordinary Differential Equations and Special Functions. New Age International, New-Delhi

.28 Checherita C - Rother, P. (2012). The impact of high govemment debt on economic growth and its channels: An empirical investigation fór euro area. European Economic Review, 56(7), 1392-1405.

.29 China CDM Fund (2011): Annual Report 2011, Beijing, p. 45

.30 Coakley J- Fuertes A M - Smith R (2006): Unobserved heterogeneity in panel time series models. Computational Statistics & Data Analysis, 2006, vol. 50, issue 9, 2361-2380

.31 Cocoara, M. (1999): "Conceptul de eficienţa…" *Revista Controlul economic financiar*, No. 3.

.32 Commission on Growth and Development (2008): The growth report: strategies for sustained and inclusive development, Washington DC, World Bank.

.33 Craciun, Șt. (2002): *Control și audit financiar. Expertiza contabilă*, Editura Economică, București.

.34 Davis, L.E. - Canter, R.R. (1955) "Job Design", Journal of Industrial Engineering, Vol. 6, p. 3

.35 Davis, L.E. - Taylor, J.C. (1979) Design of Jobs (2nd. edn) Goodyear

.36 Davoudi, S.M. - Cherati, H. - Kaur, R. (2012). Strategic Human Resource Management: Providing Sustained Competitive Advantages for Organizations. *Asian Journal Research in Social Science and Humanities*, *2*(5), 289-303.

.37 Diamond, P. A. (1965). National debt in a neoclassical growth model. American Economic Review, 55,1125-1150.

.38 Dickinson, F. G., - Eakin, F. (1936). A balance sheet ofthe nation's economy. University of Illinois.

.39 Domokos, L. – Pulay, Gy. – Palyi, K. – Nemeth, E. – Meszaros, L. (2016a): A legfőbb ellenőrző intezmenyek hozzajarulasa a jo kormanyzashoz (The contribution of supreme audit institutions to good governance), In. Nemeth E. (editor): A jo kormanyzas epitőkovei – fokuszban a legfőbb penzugyi ellenőrző szerv, az Allami Szamvevőszek (Building Blocks of Good Governance – The Supreme Audit Institution, the State Audit Office of Hungary in Focus). Online: https://www.asz.hu/storage/files/files/a_jo_kormanyzas_epitokovei/1.pdf?download=tru

.40 Domokos L. (2016b): *Culmination of the Powers of the State Audit Office of Hungary within the Scope of New Legislation on Public Funds Journal of* Public Finance Quarterly, 2016/3 291

.41 Dunning, J.H. (1994), "The prospects for foreign direct investment in Central and Eastern Europe", in Buckley, P.J. and Ghauri, P.N. (Eds), The Economics of Change in Eastern and Central Europe: Its Impact on International Business, Academic Press, London

.42 Dunning J.H (1993) Multinational enterprise and the global economy, Addison-Wesley, New York, New York

.43 Drysdale P. – Huang, Y, 1997, Technological catch-up and economic growth in East Asia and the Pacific, 73 Economic Record, 222, 201.

.44 Easson, A.J. (1992), "Tax incentive for foreign direct investment in developing countries", *Australian Tax Forum*, Vol. 9 No. 4, pp. 387-439

.45 Eberhardt M - Helmers C - Strauss H (2010). "Do spillovers matter when estimating private returns to R&D?," Economic and Financial Reports 2010/1, European Investment Bank, Economics Department.

.46 Eberhardt M - Helmers C - Yu Z (2011): "Is the Dragon Learning to Fly? An Analysis of the Chinese Patent Explosion," CSAE Working Paper Series 2011-15, Centre for the Study of African Economies, University of Oxford.

.47 Ellis L (2008): *Efforts in Moving towards a Low Carbon Future: China's Energy Conservation and Renewable Energy Laws*, The Wilson Center, February 13,2008. Retrieved on 11/25/2010 from

http://www.wilsoncenter.org/index.cfm?topic_id=1421&fuseaction=topics.event_summary&event_id=370725

.48 Fang, H. (1998). The estimádon of implicit public pension debt in China. Statistical Research, 4, 61-63.

.49 Feldstein, M. (1998). The effects of fiscal policies when incomes are uncertain: A contradiction to Ricardian equivalence. American Economic Review, 79(1), 14-23.

.50 Francsovics A (2005): Controlling theory and methods (Controlling elmélet és módszertan). Ligatúra Kiadó. Budapest. p. 202.

.51 Francsovics, A - Kadocsa Gy. (2001): Management of enterprise (Vállalati gazdaságtan). Amicus Kiadó, Budapest. pp. 1-226. (Francsovics Anna pp.112-226)

.52 FSB (Financial Stability Board) and others, (2009): Guidance to assess the systematic importance of Financial institutions, markets and instruments: initial considerations, Basel, 28 October

.53 G20 (2009): Leaders' Statement: the Pittsburgh, 25 September Summit

.54 Gale, F. - Reardon, T. (2004), "China's modernizing supermarket sector presents major opportunities for US agricultural exporters", AgExporter, November, pp. 4-8

.55 Gan Quan – Zéman Zoltán – Zsarnóczai J. Sándor (2017): Környezetvédelmi stratégia finanszírozásának nemzetközi tapasztalatai (International experiences of financing the environmental conservation strategy). *Controller Info*, 5 year, 2 issues, p 14, In Press

.56 Gál Zs – Zsarnóczai J. S - Szűcs G (2016): Green policy in East Asia and Pacific Region. *Economics and Working Capital*. Number October, London, ISSN: 2398-9491

.57 Gilbertson T. - Reyes O. (2009): Carbon trading: How it works and why it falls, The Dag Hammarskjold Foundation, Uppsala. Retrieved on 11/25/2010 from http://www. dhf.uu. se/pdffiler/cc7/cc.7_web. pdf *Global Climate Network (2010):* Investing in Clean Energy: How to maximize clean energy deployment from international climate investments. Global Climate Network discussion paper no. 4, Centre for American Progress, November, 2010. Retrieved on 12/22/2010 from http://www.americanprogress.org/issues/20 10/1 1/pdf/ gcnreport_nov2010.pdf

.58 Goldsmith, R. W. (1982). The national balance sheet ofthe United States, 1953-1980. The University of Chicago Press.

.59 Goldsmith, R. W., & Lipsey, R. E. (1963). Studies in the national balance sheet ofthe United States. Princeton University Press.

.60 Gorman G.E. – Clayton P. (2005): Qualitative Research for the Information Professional: A Practical Handbook. 2nd, ed London: Facet Publishing, 2005. p 28, ISBN 978-1-85604-472-1. Library and Information Research, Volume 33 Number 104 2009

.61 Gorard, S. - Taylor, C. (2004) Combining methods in educational and social research, London: Open University Press

.62 Government of China (2008): *China's Policies and Actions for Addressing Climate Change*, Information Office of the State Council of the People's Republic of China, October 2008. Retrieved on 11/25/2010 from http://www.gov.cn/english/2008-10/29/content_1134544.htm

.63 Hanyecz L (2009): Controlling és üzleti tervezés., Saldo Kiadó, Budapest. ISBN 978 963 638 321 3, p. 263

.64 Hegedűs Sz - Zéman Z (2016): Tőkeszerkezeti elméletek érvényesülésének vizsgálata a hazai önkormányzati tulajdonú gazdasági társaságok körében (Analyse capital-structure theories implementation in economic companies owned by local authorities). STATISZTIKAI SZEMLE /Statistical Review/ 94:(10) pp. 1032-1049.

.65 He, P. (2003). Pension insurance fund balance and countermeasures. Economics Research Reference, 9, 20-44.

.66 Herich Gy. (szerk.) (2011): International Taxation. Taxation in EU (*Nemzetközi adózás. Adózás az Európai Unióban*. III. átdolgozott kiadás), Penta Unió, Budapest, pp. 296-297., pp. 305-308., p. 315., p.320., pp. 507-513.

.67 Herzer, D (2012): How Does Foreign Direct Investment Really Affect Developing Countries' Growth? Review of International Economics, Volume 20, Issue 2, May 2012 Pages 396–414. DOI: 10.1111/j.1467-9396.2012.01029.x

.68 Holder, A. (1998). Developing the public-sector balance sheet. Economic Trends, 540, 31-40.

.69 Hsueh, T., - Li, Q. (1999). China's national income: 1952-1995. Boulder: Westview Press.

.70 Huselid, M.A., - Becker, B.E. (2005). Improving Human Resources Analytical Literacy: Lessons from Money-Ball. *In*: Losey, M., Meisinger, S., & Ulrich, D. (Eds.), *Future of Human Resource Management: 64 Thought Leaders Explore the Critical HR Issues of Today and Tomorrow*, John Wiley & Sons, USA, p. 281.

.71 ILOSTAT, 2016 http://www.ilo.org/ilostat/faces/oracle/webcenter/portalapp/pagehierarchy/Page3.jspx?MBI_ID=49

.72 Inyang, B.J. (2010). Strategic Human Resource Management (SHRM): A Paradigm Shift for Achieving Sustained Competitive Advantage in Organization. *International Bulletin of Business Administration, 7*, 1-14.

.73 IOSCO (IOSCO = International Organization of Securities Commissions), (2011): Investor warm to Dum Sum bonds, 21 May

.74 ISDA (International Swaps and Derivatives Association) (2010), ISDA to publish Auction Terms for Japan Airlines Corporation, press release, 21, January

.75 Janet Haddock-Fraser -- Nigel Poole -- Mitsuhiro Doishita, (2009) "The failure of multinational food retailers in Japan: a matter of convenience?", British Food Journal, Vol. 111 Iss: 4, pp.327 – 348

.76 Jansson, H. (2007), International Business Marketing in Emerging Country Markets. The Third Wave of Internationalisation of Firms, Edward Elgar, Cheltenham

.77 Jia, K., - Zhao, Q, (2001). The size of China's national debt. World Economy and China, 9,24-29.

.78 Jiang, X. (2007), China's Economic Globalization and Growth: 1980-2005, Renmin Publishing House, Beijing

.79 Jogulu, U. D. - Pansiri, J. *(*2011*).* Mixed methods: A research design for management doctoral dissertations. Management Research Review, 34(6), 687701.

.80 Kalmár P - Zéman Z - Lukács J (2015): Bankcontrolling marketing szemléletben: Alkalmazott statisztika a kontrolling szolgálatában (Bank-controlling marketing conceptions: adapted statistics for aim of controlling). HITELINTÉZETI SZEMLE /Credit Institutional Review/ 14:(4) pp. 108-123. 21

.81 Kato T. (2009): Impact of the global financial crisis, and its implications for the East Asian Economy, speech, Seoul, 16 October

.82 Kettunen, M., D. D'Amato, P. Brink, L. Mazza, A. Malou, S. Withana (2013). "Potential of sectoral resource mobilization to implement the Aichi targets in developing countries: A scoping study", Brussels: Institute for European Environmental Policy (IEEP).

.83 Khawar M (2003) "Productivity and foreign direct investment – evidence from Mexico", Journal of Economic Studies, Vol. 30 Iss: 1, pp.66 – 76

.84 Kiviet J F (2014): Improved variance estimation of maximum likelihood estimators in stable first-order dynamic regression models (with Garry D.A. Phillips). Journal of Computational Statistics & Data Analysis 2014, 76, 424-448.

.85 Klenow P J - Rodriguez-Clare (1997): The Neoclassical Revival in Growth Economics: Has It gone to far? National Bureau of Economic Research, Macroeconomics Annual 1997, Volume 12. pp 73-114

.86 Koi Nyen Wong and Tuck Cheong Tang, (2011) "Foreign direct investment and employment in manufacturing and services sectors: Fresh empirical evidence from Singapore", Journal of Economic Studies, Vol. 38 Iss: 3, pp.313 – 330

.87 Kornai, J., - Maskin, E., - Roland, G. (2003). Understanding the soft budget constrain t. Journal of Economic Literature, 41(4), 1095-1136.

.88 Kozár L – Neszmélyi Gy (2014): Water Crisis in the Nile-Basin -: Is It Really a Zero Sum Game? JOURNAL OF AMERICAN BUSINESS REVIEW, CAMBRIDGE 2:(2) pp. 91-98. (2014)

.90 Körmendi, L. - Tóth, A. (1996): Controlling in the Hungarian enterprise experiences Kontrolling a hazai vállalakozások gyakorlatában, Tudex Kiadó Kft., Budapest, p. 245.

.91 Kumar M -Woo, J. (2010). Public debt and growth. IMF working paper, no. 10.

.92 Lefter, V., - Marincas, C., - Puia, R.S. (2007a). Strategy and Human Resource Management. *Review of Management and Economical Engineering*, *6*(5), 349-353.

.93 Lefter, V. - Roman, C. - Șendroiu, C. - Roman, A.G. (2007b): Improving the Financial Control - A Priority of Corporate Management Nowadays. *Theoretical and Applied Economics*, *4*, 29-36. Retrieved from http://store.ectap.ro/articole/204.pdf

.94 Lengnick-Hall, M.L. - Lengnick-Hall, C.A. - Andrade, L.S. - Drake, B. (2009). Strategic Human Resource Management: The Evolution of the Field. *Human Resource Management Review*, *19*, 64-85.

.95 Lentner Cs - Farkas R (2004): Kritische Punkte der Wirtschaftsentwicklung in Ungarn ZEITSCHRIFT FUR GEMEINWIRTSCHAFT: ZGW 39:(6) pp. 7-18.

.96 Lentner Cs (2007): The Competitiveness of Hungarian University Based - Knowledge Centres in European Economic and Higher Education Area. TRANSFORMATIONS IN BUSINESS & ECONOMICS 6:(2) pp. 87-100.

.97 Lentner Cs (2010): The Macro-Economical Environment of Public Accountancy and Financial Regulation. ECONOMY AND SOCIETY 1-2: pp. 121-132.

.98 Lentner Cs (2013): Közpénzügyek és államháztartástan (Public financial issues Government economics), Nemzeti Közszolgálati Egyetem, Nemzeti Közszolgálati Tankönyvkiadó, (National University of Public Service, National Public Service Study-Book Publishing) Budapest, p. 341

.99 Lentner Cs. (2014): Blessing or Curse? Foreign Exchange Credit in Hungary (Áldás vagy átok? Devizahitelezés Magyarországon), LUDOVIKA Szabad Egyetem, Budapest, p. 21.

.100 Lentner Cs. - Szegedi K. - Tatay T. (2015): Társadalmi felelősségvállalás a bankszektorban PÉNZÜGYI SZEMLE/PUBLIC FINANCE QUARTERLY 60:(1) pp. 96-104.

.101 Lin J Y - Monga C, 2010, The growth report and new structural economics, World Bank Policy Research Working Paper 5336

.102 Lin, J. Y., - Tan, G, (1999). Policy burdens, accountability, and the soft budget constraint. American Economic Review: Papers and Proceedings, 89(2), 426-431.

.103 Lin, S. (2010). China's fiscal deficit and government debt analysis. Economic Science, 3, 5-16.

.104 Liu, S., - Zhao, Q, (2002). Government debt: A preliminary analysis of the risk profile. Management World, 5, 22-41.

.105 Liu, Katherine (2007) "Unfolding the post-transition era: the landscape and mindscape of China's retail industry after 2004", Asia Pacific Journal of Marketing and Logistics, Vol. 19 Iss: 4, pp.398 – 412

.106 Loungani, P. - Razin, A. (2001), "Foreign direct investment: a critical view", Finance and Development, Vol. 38 No. 2, pp. 6-10.

.107 Lu Jiang - Qiangbing Chen, -Yali Liu, (2010) "foreign investment and the change of the Chinese culture", International Journal of Social Economics, Vol. 37 Iss: 2, pp.101 – 118

.108 Lu, F., -Song, G., -Tang, J., - Zhao, H,, - Liu, L (2008). Profitability of China's industrial firms. China Economic Journal, 1(1), 1-31.

.109 Marchington, M., - Wilkinson, A. (2008). *Human Resource Management at Work: People Management and Development* (4th ed.). Harlow: Pearson Education.

.110 Mello, J.A. (2002). Strategic Human Resource Management. South-Western Publications.

.111 Mika, J. (2016). Stop the climate change: Issue, p. 49. Eger, Lecture-Manuscript, (In Hungarian: A klímaváltozás megfékezése: feladat, ígéretek és realitás Párizs után)

.112 Moccero, D. (2008). Improving the business and investment climate in Indonesia. OECD working paper no. 638.

.113 Modigliani, F. (1961). Long-mn implications of altemative fiscal policies and the burden ofthe national debt. The Economic Journal, 71 (284), 730-755.

.114 Morris I, (2010): Why the West rules – for now: the patterns of history and what they reveal about the future, New York NY, Farrar, Straus and Giroux,

.115 Nankervis, A. - Compton, R. - Baird, M. (2000). Human Resource Management. Nelson Publishing, Australia.

.116 Nandwani S (2013): Human resource management. SCMS Journal of Indian Management, Vol.10(2), pp.115-116 [Peer Reviewed Journal] Pages : 401 Publisher : Vrinda Publications Pvt Ltd., Delhi Human Resource Management has simple and impressive front cover page.

.117 Neszmélyi Gy (2013): Az arab tavasz politikai és gazdasági hatásai Egyiptomban (Political and economic influences of Arab Spring in Egypt)
KÜL-VILÁG (ONLINE) (External World) 10. évf.:(3-4) pp. 71-85.

.118 Neszmélyi, Gy. (2014): The Impacts of the Arab Spring on the Egyptian Economy Selye E-Studies (ISSN: 1338-1598) 14 p. http://www.ujs.sk/gtk/e-studies/hu.html?start=5

.119 Neszmélyi Gy (2016): Társadalmi és gazdasági kihívások Nigériában (Social and economic challenges in Nigeria) FÖLDRAJZI KÖZLEMÉNYEK (Geographical Reviews) 140:(2) pp. 107-123.

.120 Oprean, I. (2002): *Control și audit financiar-contabil*, Editura Intelcredo, Deva.

.121 Ouchi, W.G. (1981). Theory Z: How American Business can meet the Japanese Challenge. Reading, MA: Addison-Wesley.

.122 Palánkai T. (2006): Theoretical relevances of our integration maturity. Journal of Public Finance Quarterly. Volume 51, 3 issue.

.123 Peppers D – Rogers M (2005): "Customers Don't Grow on Trees", *Fast Company*, July pp. 26.

.124 Perlmutter, H.V. - Heenan, D.A. (1986), “Cooperate to compete globally”, Harvard Business Review, Vol. 64 No. 2, pp. 78-86

.125 Pesaran M H - Chudik A (2015): Common correlated effects estimation of heterogeneous dynamic panel data models with weakly exogenous regressors. Journal of Econometrics, 2015, vol. 188, issue 2, 393-420

.126 Pfeffer, J. (2001). *Fighting the War for Talent is Hazardous for your Organization*. Stanford: Pearson Education.

.127 Porter, M. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*. New York: Free Press.

.128 Prätsch, J. - Schikorra, U. - Ludwig, E. (2007): Finanzmanagement, Springer-Verlag Berlin Heidelberg, p. 315.

.129 Ramamurti, R. (2004), "Developing countries and MNEs: extending and enriching the research agenda", Journal of International Business Studies, Vol. 35 No. 4, pp. 277-83.

.130 Rasiah Rajah - Peter Gammeltoft - Yang Jiang, (2010) "Home government policies for outward foreign investment from emerging economies: lessons from Asia", International Journal of Emerging Markets, Vol. 5 Iss: 3/4, pp.333 – 357

.131 Reinhart, C. M., - Rogoff, K. S. (2010). Growth in a time of debt. American Economic Review, 100(2), 573-578,

.132 Revell, J. (1966). The national balance sheet of the United Kingdom. Review of Income and Wealth, 12(4), 281-310.

.133 Roman, C - Tabara, N. - Roman, A.G. (2007): *Control financiar și audit public*, Editura Economică, București.

.134 Saeed S- Leslie S.C. Y - Sherriff T.K. L (2004) "International marketing in Southeast Asia: Retailing trends and opportunities in China", International Marketing Review, Vol. 21 Iss: 3, pp.247 - 254

.135 Sajtos L – Mitev A (2006): SPSS kutatási és adatelemzési kézikönyv (Handbook of SPSS researching and data analyse). Alinea Kiadó, p. 402

.136 Sarafidis V - Wansbeek T (2012): Cross-Sectional Dependence in Panel Data Analysis. Econometric Reviews, , vol. 31, issue 5, 483-531

.137 Saunders, M (2007) Research Methods for Business Students. 4th ed. England: Pearson Education Limited.

.138 Sebestyénné, Szép, T. (2016). Energy economics or periphery of the economics, Miskolc, Lecture-Manuscript p. 17 (In Hungarian: Energia gazdaságtan, avagy a közgazdaságtan perifériája)

.139 Sin, Y. (2005). Pension liabilities and reform options for old age insurance. World Bank working paper series on China no. 1.

.140 Staniewski, M. W. (2011). Management of Human Resources in the Aspect of Innovativeness. pp. 84-91. *CONTEMPORARY ECONOMICS*, Vol. 5 Issue 1 2011, DOI: 10.5709/ce.1897-9254.7
https://scholar.google.pl/citations?view_op=view_citation&hl=pl&user=hDoMRq0AAAAJ&citation_for_view=hDoMRq0AAAAJ:KlAtU1dfN6UC

.141 Sternquest, B. (2007), International Retailing, Fairchild, New York, NY.

.142 Symonds J. - Gorard S (2010): Death of mixed methods?: Or the rebirth of research as a craft. London: Open University Press
Death of mixed methods?: Or the rebirth of research as a craft (PDF Download Available). Available from:
https://www.researchgate.net/publication/228411715_Death_of_mixed_methods_Or_the_rebirth_of_research_as_a_craft

.143 Szabó L – Zsarnóczai J S (2004): Economic conditions of Hungarian agricultural producers in 1990s. p. 249, AGRIC. ECON. – CZECH, *50*, 2004 (6): 249–254

.144 Szopiński, J., - Szopiński, T. (2013). The Influence of Family Relationships on Creativity in the Workplace, "Gifted and Talented International" 2013, vol 28, nr 1-2, 185-196;

.145 Széles I - Al-Boainin M R - Zsarnóczai J S (2010):"Territorial differences or territorial similarities? – The analysis of regional competitiveness examining the 8 statistical regions of Bohemia". pp. 139-169. In: Szűcs I. et al (edited): *Economics of Sustainable Agriculture.* 216 p. Gödöllő: Szent István University Publishing, p. 251.

.146 Takeuchi, R. (2003). How Do We Get There from Here? Understanding the Black Box in Strategic HRM Research from Resource-Based and Social Exchange Perspectives. Dissertation Submitted to the University of Maryland, US.
Faculty of the Graduate School of College Park in Partial Fulfilment of the Requirements for the Degree of Doctor of Philosophy.

.147 Taylor, F.W. (1911) Principles and Methods of Scientific Management, Harper

.148 Toon O. - Zéman Z. - Gácsi R. (2014): The theory of bank controlling. pp. 216-220. In: *Controller Info Studies.* Copy&Consulting and Unio Publishing, Budapest, p. 220.

.149 Török T - Vajda A - Bahaa Asmi (2015a): Role of CMIM in integration of Asian Region, pp. 27- 34.

5th International Conference of Economic Sciences and 5th Climate Change, Economic Development, Environment and People (CCEDEP) Conference of the Alliance of Central-Eastern European Universities (ACEU) Session: COLLABORATIVE FINANCE, Editors: Katalin Szendrő, Viktória Szente, Róbert Barna, Kaposvár University – Kaposvár – Hungary - 7-8 May 2015, Published and distributed by Kaposvár University, Faculty of Economic Science, ISBN: 978-963-9821-86-6

.150 Török T - Szabó Z L - Bahaa Asmi (2015b): Economic growth of ASEAN country group in Asia, pp. 41-49.

5th International Conference of Economic Sciences and 5th Climate Change, Economic Development, Environment and People (CCEDEP) Conference of the Alliance of Central-Eastern European Universities (ACEU) Session: COLLABORATIVE FINANCE, Editors: Katalin Szendrő, Viktória Szente, Róbert Barna, Kaposvár University – Kaposvár – Hungary - 7-8 May 2015, Published and distributed by Kaposvár University, Faculty of Economic Science, ISBN: 978-963-9821-86-6

.151 Tung C A (2009): *Low Carbon Economy for China, Implications for Foreign Investors*, Mallesons Stephen Jaques, 2009. Retrieved on 03/18/2011 from http://www.advantageaustria.org/cn/office/tung.pdf

.152 Ulrich, D., - Brockbank, W. (2005). *The HR Value Proposition*. Boston: Harvard Business School Press.

.153 Ulrich, D., - Smallwood, N. (2005). HR's New ROI: Return on Intangibles. *Human Resource Management*, *44*(2), 137-142.

.154 UNCTAD (2006), "foreign investment from the developing and transition economies: implications for development", World Investment Report, United Nations Conference for Trade and Development, Geneva.

.155 UNCTAD (2008a), UN Conference on Trade and Development, 2008

.156 UNCTAD (2008b), UN Conference on Trade and Development, 2008: World Investment Report

.157 UNCTAD (2010), "World investment report 2010: transnational corporations and the infrastructure challenge", available at: www.unctad.org/en/docs/wir2010_en.pdf

.158 UNCTAD (2016): Handbook of Statistics, New York, Geneva, p. 264

.159 UNFCCC (2010): Outcome of the work of the Ad Hoc Working Group on long-term Cooperative Action under the Convention, Draft decision -/CP. 16, Advance unedited version, UNFCCC, 2010. Retrieved on 01/02/2011 from

http://unfccc.int/files/meetings/cop_16/application/pdf/copl6_ lea.pdf

.160 Vassiliou, L. (2003) The Asian Recovery: Progress and Pitfalls, presentation to Global Forum on Insolvency Risk Management, Washington DC, 28-29 January.

.161 Vassiliou, L. (2006) The Restructuring Revolution in the Asia-Pacific Region, in Asian Development Bank, Asia-Pacific Restructuring and Insolvency Guide, London, Globe White Page.

.162 Végh K.- Zéman Z. - Lukács J. (2014): The impact of the economic crisis on mutual funds in Hungary, pp. 179-185, in (edited by Zéman Z): Controller Info Studies, Copy & Consulting and Unio Publishing, p. 220, ISBN 978-963-08-9751-8

.163 Vorley, G, 1993. *Quality Assurance Management*, Quality Today: Nexus Business Communication Ltd, Warwick House Azalea Drive, Swanley, Kent

.164 Vörös Gy. (2011): Az adók versenyképességre gyakorolt hatása az Európai Unióban. PhD. értekezés, *Szent István Egyetem*. http://szie.hu//file/tti/archivum/Voros_Gyula_disszertacio.pdf (letöltve: 2012.11.09.)

.165 Wang, X. (1997). The calculation and forecast for pension liability in China. Forecasting, 21, 29-40.

.166 WDI (World Development Indicators/Data) 2015. http://data.worldbank. org/prod ucts/wdi

.167 Wei, Z (2010) "The Literature on Chinese Outward foreign investment", Multinational Business Review, Vol. 18 Iss: 3, pp.73 – 112

.168 WHO (2012). "Global costs and benefits of drinking-water supply and sanitation interventions to reach the MDG target and universal coverage", Geneva.

.169 Witt, F.J. - Witt, K. (1997): Controlling for the small and medium scale enterprises (Kontrolling- Kis- és középvállalkozások számára), Springer Hungarica Kiadó, Budapest, p. 278.

.170 Woodford, M. (1990). Public debt as private liquidity. American Economic Review, 80, 382-388.

.171 World Bank (2013), "Long term investment financing for growth and development", Umbrella Paper, February. Washington, D.C.: World Bank

.172 World Bank Group, 2015, Flagship Report, Global economic prospects, Having fiscal space and using it, Washington DC, 2015 January, in PDF: GlobalEconomicProspect_15a_web_full_2015 april

.173 World Economic Forum (2009): Task force on low-carbon prosperity: recommendations, 2009, World Economic Forum, 2009. Retrieved on 09/07/2010 from http://www.weforum.org/documents/gov/Environment/TF%20 Low%20Carbon%20Prosperity%20Recommendations.pdf

.174 WRI (World Resources Institute, 2002), *China: Cleaner Production Promotion Law,* World Resource Institute (WRI), 2002. Retrieved on 12/15/2010 from http://projects.wri.org/sd-pams-database/china/cleaner-production-promotion-law

.175 Wright, P., - McMahan, G. (1992). Theoretical Perspectives for Strategic Human Resource Management. *Journal of Management*, *18*(2), 295-320.

.176 Wright, P.M., - Snell, S.A. (1998). Toward a Unifying Framework for Exploring Fit and Flexibility in Strategic Human Resource Management. *Academy of Management Review*, *23*, 756-772.

.177 Wright, P.M., - Dunford, B.B., - Snell, S.A. (2007). Human Resources and Resource-Based View of the Firm. *In*: Schuler, R.S., - Jackson, S.E. (Eds.), *Strategic Human Resource Management* (2nd ed., p. 76). Blackwell, USA.

.178 Zeile W.J (2000) US affiliates of foreign companies, Survey of current business, Vol 80, No 8, pp 141-54

.179 Zekos G (2016): Law and Economics of Corporate Governance and Insider Trading. Nova Science Publishers, Incorporated, 2016 – p. 430

.180 Zéman Z - Fónagy-Árva P - Tóth M (2006): Die Rolle dér Kapitolkosten bei der mehrperiodischen Kalkulations - und Messmethoden von Führungsrechnungswesen 22 CONTROLLING: ZEITSCHRIFT FUR ERFOLGSORIENTIERTE UNTERNEHMENSSTEUERUNG Sonderausgabe: pp. 15-18.

.181 Zéman Z - Gacsi1 R - Lukács J - Hajós L. (2013): Management control system in banks. Ročník *21*, 14-17. Retrieved from http://www.nbs.sk/_img/Documents/_PUBLIK_NBS_FSR/Biatec/Rok2013/06-2013/04_biatec13-6_zeman.pdf

.182 Zéman Z - Komáromi K - Bárczi J, (2014a): The role of financial controlling, *Controller Info, Studies*, pp. 205 – 209, edited by Zéman Z and drs. Toon Otten, Lecturer: Zsarnóczai, J. S, Copy & Consulting and Unio Publishing, Budapest, p. 220, ISBN 978-963-08-9751-8

.183 Zéman Z – Szabó Z - Bárczi J (2014b): Controlling aspects of risk management,[In: Zéman (edited) *Controller Info Studies*] Copy & Consulting and Unio Publishing, p. 220, ISBN 978-963-08-9751-8, pp. 186-197

.184 Zéman, Z. - Komáromi, K. - Kapsdorferová, Z. - Hajós, L. - Bárczi, J. (2014c): Tasks of Financial Management and Controll. *Ekonomika poľnohospodárstva - ročník, XIV*. (3), 30-39. Retrieved from http://www.vuepp.sk/EP2014/3/2_Zem.pdf

.185 Zsarnóczai J S (1996): Németország mezőgazdasági helyzete az 1990-es évek első felében. (Agricultural condtions of Germany in second half of 1990-ies). *Statisztikai Szemle*. Statistical Review, 74. year, No: 3, pp. 230-238. ISSN 0039 0690

APPENDIX

Table-4-13: Proximity Matrix, Squared Euclidean Distance

Case	1:Australia	2:Austria	3:Belgium	4:Canada	5:Switzerland	6:Brazil	7:Czech Rep.	8:Germany	9:Denmark	10:Spain
1:Australia	0	5,731	4,535	10,677	25,03	11,449	7,906	12,129	10,163	19,267
2:Austria	5,731	0	4,097	10,992	18,774	18	12,018	6,705	2,811	16,847
3:Belgium	4,535	4,097	0	9,613	15,425	19,743	10,574	7,901	3,891	15,853
4:Canada	10,677	10,992	9,613	0	13,362	13,832	5,914	9,298	18,62	24,019
5:Switzerland	25,03	18,774	15,425	13,362	0	34,267	20,418	7,534	19,24	30,552
6:Brazil	11,449	18	19,743	13,832	34,267	0	6,818	19,507	27,354	24,66
7:Czech Rep.	7,906	12,018	10,574	5,914	20,418	6,818	0	9,694	19,027	18,666
8:Germany	12,129	6,705	7,901	9,298	7,534	19,507	9,694	0	10,399	13,672
9:Denmark	10,163	2,811	3,891	18,62	19,24	27,354	19,027	10,399	0	22,021
10:Spain	19,267	16,847	15,853	**24,019**	30,552	24,66	18,666	13,672	22,021	0
11:Finland	4,702	4,961	4,704	7,983	12,973	17,302	11,434	8,402	8,148	23,532
12:France	5,685	2,507	5,266	8,388	15,889	18,113	13,463	8,015	6,983	19,863
13:UK	6,133	9,904	13,281	16,309	33,221	19,669	18,104	20,632	15,202	**41,594**
14:Greece	14,104	12,018	22,163	16,834	34,151	14,936	17,1	16,152	23,928	27,084
15:Hungary	9,31	11,046	15,023	19,863	33,944	5,821	8,56	15,649	16,437	17,022
16:Israel	31,228	21,922	22,996	14,742	22,882	29,672	22,073	24,496	26,624	30,536
17:Italy	10,44	2,733	9,185	12,971	21,266	19,579	16,064	8,561	8,109	14,98
18:Japan	**33,951**	18,824	**32,419**	18,029	28,598	36,641	**26,307**	17,314	31,14	36,798
19:Korea Rof	7,396	8,776	9,299	10,044	15,708	9,086	3,04	5,246	13,663	15,579
20:Mexico	11,934	20,388	18,988	10,103	27,231	4,789	7,331	17,52	**29,264**	34,016
21:Netherlands	12,722	5,994	5,943	9,948	5,318	21,415	13,441	4,865	6,032	20,693
22:Norway	16,824	9,068	9,008	23,241	13,292	**37,126**	26,147	10,721	4,426	32,53
23:New-Zeala.	4,001	4,405	5,466	9,227	28,653	13,291	8,021	14,463	8,658	22,72
24:Poland	9,885	15,057	15,811	8,218	28,259	7,001	1,718	16,531	23,605	27,778
25:Portugal	26,556	17,798	22,875	10,782	**34,333**	21,963	16,093	22,814	27,062	30,064
26:Slovak Rep	9,955	19,802	20,216	19,276	34,53	7,629	6,779	18,297	28,77	20,688
27:Sweden	7,266	3,341	3,397	12,472	12,021	22,681	12,87	7,742	2,503	22,814
28:Turkey	20,485	**24,153**	23,872	23,127	33,127	6,6	16,172	**25,071**	27,828	31,661
29:US	18,771	20,395	17,87	6,895	14,838	22,204	17,816	18,257	28,439	30,945
30:China	**46,344**	**59,172**	**55,353**	**45,278**	**52,643**	**45,773**	**31,946**	**53,005**	**66,863**	**65,367**

8. *Source:* Owned calculation based on the SPSS, This is a dissimilarity matrix

Table-4-13: Proximity Matrix, Squared Euclidean Distance (Continued)

Case	11:Finland	12:France	13:UK	14:Greece	15:Hungary	16:Israel	17:Italy	18:Japan	19:Korea R	20:Mexico
1:Australia	4,702	5,685	6,133	14,104	9,31	31,228	10,44	33,951	7,396	11,934
2:Austria	4,961	2,507	9,904	12,018	11,046	21,922	2,733	18,824	8,776	20,388
3:Belgium	4,704	5,266	13,281	22,163	15,023	22,996	9,185	32,419	9,299	18,988
4:Canada	7,983	8,388	16,309	16,834	19,863	14,742	12,971	18,029	10,044	10,103
5:Switzerland	12,973	15,889	33,221	34,151	33,944	22,882	21,266	28,598	15,708	27,231
6:Brazil	17,302	18,113	19,669	14,936	5,821	29,672	19,579	36,641	9,086	4,789
7:Czech Rep.	11,434	13,463	18,104	17,1	8,56	22,073	16,064	26,307	3,04	7,331
8:Germany	8,402	8,015	20,632	16,152	15,649	24,496	8,561	17,314	5,246	17,52
9:Denmark	8,148	6,983	15,202	23,928	16,437	26,624	8,109	31,14	13,663	29,264
10:Spain	23,532	19,863	41,594	27,084	17,022	30,536	14,98	36,798	15,579	34,016
11:Finland	0	1,41	7,374	12,498	15,514	25,114	6,578	26,071	10,274	14,372
12:France	1,41	0	8,283	9,498	15,299	22,346	2,631	19,802	11,795	17,562
13:UK	7,374	8,283	0	12,802	18,994	**44,419**	14,737	33,119	18,045	15,545
14:Greece	12,498	9,498	12,802	0	13,493	39,971	7,128	16,385	17,508	17,618
15:Hungary	15,514	15,299	18,994	13,493	0	32,274	12,771	34,719	6,936	15,364
16:Israel	25,114	22,346	**44,419**	**39,971**	32,274	0	22,965	27,692	24,327	35,44
17:Italy	6,578	2,631	14,737	7,128	12,771	22,965	0	15,173	13,838	24,057
18:Japan	**26,071**	19,802	33,119	16,385	**34,719**	27,692	15,173	0	**26,214**	**36,974**
19:Korea Rof	10,274	11,795	18,045	17,508	6,936	24,327	13,838	26,214	0	10,458
20:Mexico	14,372	17,562	15,545	17,618	15,364	35,44	24,057	36,974	10,458	0
21:Netherlands	4,896	5,561	19,452	21,007	17,428	15,876	8,162	23,741	9,346	20,443
22:Norway	11,603	12,495	19,58	32,54	26,569	35,942	16,42	35,938	16,833	34,166
23:New-Zeala.	8,479	7,279	8,603	16,689	11,219	22,12	10,093	26,975	10,011	15,049
24:Poland	15,008	17,035	17,115	18,194	9,619	23,807	20,044	27,56	6,152	8,793
25:Portugal	25,002	20,121	32,53	23,254	25,006	11,858	16,945	15,259	23,686	26,582
26:Slovak Rep	18,019	20,816	21,846	16,939	5,968	41,611	22,059	40,558	6,888	13,088
27:Sweden	3,904	4,959	12,61	21,412	15,026	21,61	8,682	27,87	8,533	22,571
28:Turkey	24,65	**26,394**	31,596	31,874	11,147	27,882	**28,579**	**51,736**	13,837	13,728
29:US	9,666	11,101	24,769	21	29,814	19,064	16,869	28,66	21,875	19,094
30:China	**52,823**	**61,217**	**62,987**	**68,421**	**44,976**	**54,87**	**68,476**	**73,496**	**32,804**	**50,491**

Source: Owned calculation based on the SPSS, This is a dissimilarity matrix

Table-4-13: Proximity Matrix, Squared Euclidean Distance (Continued)

Case	21:Netherlands	22: Norway	23: New-Zeala.	24: Poland	25:Portugal	26:Slovak Rep	27:Sweden	28:Turkey	29:US	30: China
1:Australia	12,722	16,824	4,001	9,885	26,556	9,955	7,266	20,485	18,771	46,344
2:Austria	5,994	9,068	4,405	15,057	17,798	19,802	3,341	24,153	20,395	59,172
3:Belgium	5,943	9,008	5,466	15,811	22,875	20,216	3,397	23,872	17,87	55,353
4:Canada	9,948	23,241	9,227	8,218	10,782	19,276	12,472	23,127	6,895	45,278
5:Switzerland	5,318	13,292	28,653	28,259	34,333	34,53	12,021	33,127	14,838	52,643
6:Brazil	21,415	37,126	13,291	7,001	21,963	7,629	22,681	6,6	22,204	45,773
7:Czech Rep.	13,441	26,147	8,021	1,718	16,093	6,779	12,87	16,172	17,816	31,946
8:Germany	4,865	10,721	14,463	16,531	22,814	18,297	7,742	25,071	18,257	53,005
9:Denmark	6,032	4,426	8,658	23,605	27,062	28,77	2,503	27,828	28,439	66,863
10:Spain	20,693	32,53	22,72	27,778	30,064	20,688	22,814	31,661	30,945	65,367
11:Finland	4,896	11,603	8,479	15,008	25,002	18,019	3,904	24,65	9,666	52,823
12:France	5,561	12,495	7,279	17,035	20,121	20,816	4,959	26,394	11,101	61,217
13:UK	19,452	19,58	8,603	17,115	32,53	21,846	12,61	31,596	24,769	62,987
14:Greece	21,007	32,54	16,689	18,194	23,254	16,939	21,412	31,874	21	68,421
15:Hungary	17,428	26,569	11,219	9,619	25,006	5,968	15,026	11,147	29,814	44,976
16:Israel	15,876	35,942	22,12	23,807	11,858	**41,611**	21,61	27,882	19,064	54,87
17:Italy	8,162	16,42	10,093	20,044	16,945	22,059	8,682	28,579	16,869	**68,476**
18:Japan	23,741	35,938	26,975	27,56	15,259	**40,558**	**27,87**	**51,736**	28,66	**73,496**
19:Korea Rof	9,346	16,833	10,011	6,152	23,686	6,888	8,533	13,837	21,875	32,804
20:Mexico	20,443	34,166	15,049	8,793	26,582	13,088	22,571	13,728	19,094	50,491
21:Netherlands	0	7,244	13,343	19,034	22,417	24,816	3,075	20,872	13,338	54,139
22:Norway	7,244	0	19,123	31,87	41,18	35,611	4,76	33,739	32,09	65,902
23: New-Zeala.	13,343	19,123	0	8,262	14,207	17,683	8,05	22,059	22,729	53,099
24:Poland	19,034	31,87	8,262	0	16,081	7,683	16,272	17,285	21,422	27,403
25:Portugal	22,417	41,18	14,207	16,081	0	35,163	26,12	32,209	23,271	68,197
26:Slovak Rep	24,816	35,611	17,683	7,683	35,163	0	21,387	18,428	27,433	28,173
27:Sweden	3,075	4,76	8,05	16,272	26,12	21,387	0	24,241	19,392	47,626
28:Turkey	20,872	33,739	22,059	17,285	32,209	18,428	24,241	0	**30,141**	49,558
29:US	13,338	32,09	22,729	21,422	23,271	27,433	19,392	30,141	0	53,35
30:China	**54,139**	**65,902**	**53,099**	**27,403**	**68,197**	28,173	**47,626**	**49,558**	**53,35**	0

Source: Owned calculation based on the SPSS, This is a dissimilarity matrix

Table-4-14: List of countries based on the system of SPSS analyses

First biggest distance between China and the other all of the 30 selected countries except Slovak Republic	
China	Finland, France, Austria, Italy, Greece, Australia, New-Zealand, UK, Germany, Netherlands, Switzerland, Denmark, Sweden, Belgium, Norway, Spain, Canada, USA, Israel, Portugal, Japan, Brazil, Mexico, Turkey, Czech Republic, Poland, Korea Republic of, Hungary
Second biggest distance among the other 30 selected countries	
Spain	Canada
UK	Spain, Israel
Japan	Austria, Belgium, Czech Republic, Finland, Hungary, Korea Republic of, Mexico, Slovak Republic, Sweden, Turkey
Mexico	Denmark
Norway	Brazil
Portugal	Switzerland
Turkey	Austria, Germany, France, Italy, US
Israel	Greece, Slovak Republic

Table-4-15: Agglomeration Schedule

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
1	11	12	,705	0	0	11
2	7	24	1,564	0	0	9
3	9	27	2,816	0	0	6
4	2	17	4,182	0	0	11
5	1	23	6,183	0	0	15
6	3	9	8,195	0	3	14
7	6	20	10,589	0	0	17
8	8	21	13,022	0	0	13
9	7	19	15,799	2	0	18
10	15	26	18,783	0	0	18
11	2	11	21,916	4	1	19
12	4	29	25,364	0	0	23
13	5	8	28,837	0	8	21
14	3	22	32,570	6	0	21
15	1	13	36,815	5	0	20
16	16	25	42,744	0	0	23
17	6	28	48,722	7	0	22
18	7	15	54,770	9	10	22
19	2	14	61,957	11	0	20
20	1	2	70,995	15	19	26
21	3	5	81,627	14	13	25
22	6	7	92,676	17	18	27
23	4	16	104,952	12	16	24
24	4	18	118,549	23	0	28
25	3	10	135,375	21	0	26
26	1	3	159,021	20	25	28
27	6	30	190,025	22	0	29
28	1	4	226,713	26	24	29
29	1	6	290,000	28	27	0

Source: Owned calculation based on the SPSS

Table-4-16: Cluster Membership

Case	5 Clusters	4 Clusters	3 Clusters	2 Clusters
1:Australia	1	1	1	1
2:Austria	1	1	1	1
3:Belgium	2	1	1	1
4:Canada	3	2	2	1
5:Switzerland	2	1	1	1
6:Brazil	4	3	3	2
7:Czech Rep.	4	3	3	2
8:Germany	2	1	1	1
9:Denmark	2	1	1	1
10:Spain	2	1	1	1
11:Finland	1	1	1	1
12:France	1	1	1	1
13:UK	1	1	1	1
14:Greece	1	1	1	1
15:Hungary	4	3	3	2
16:Israel	3	2	2	1
17:Italy	1	1	1	1
18:Japan	3	2	2	1
19:Korea Rep of	4	3	3	2
20:Mexico	4	3	3	2
21:Netherlands	2	1	1	1
22:Norway	2	1	1	1
23:New-Zeala.	1	1	1	1
24:Poland	4	3	3	2
25:Portugal	3	2	2	1
26:Slovak Rep	4	3	3	2
27:Sweden	2	1	1	1
28:Turkey	4	3	3	2
29:US	3	2	2	1
30:China	5	4	3	2

Source: Owned calculation based on the SPSS

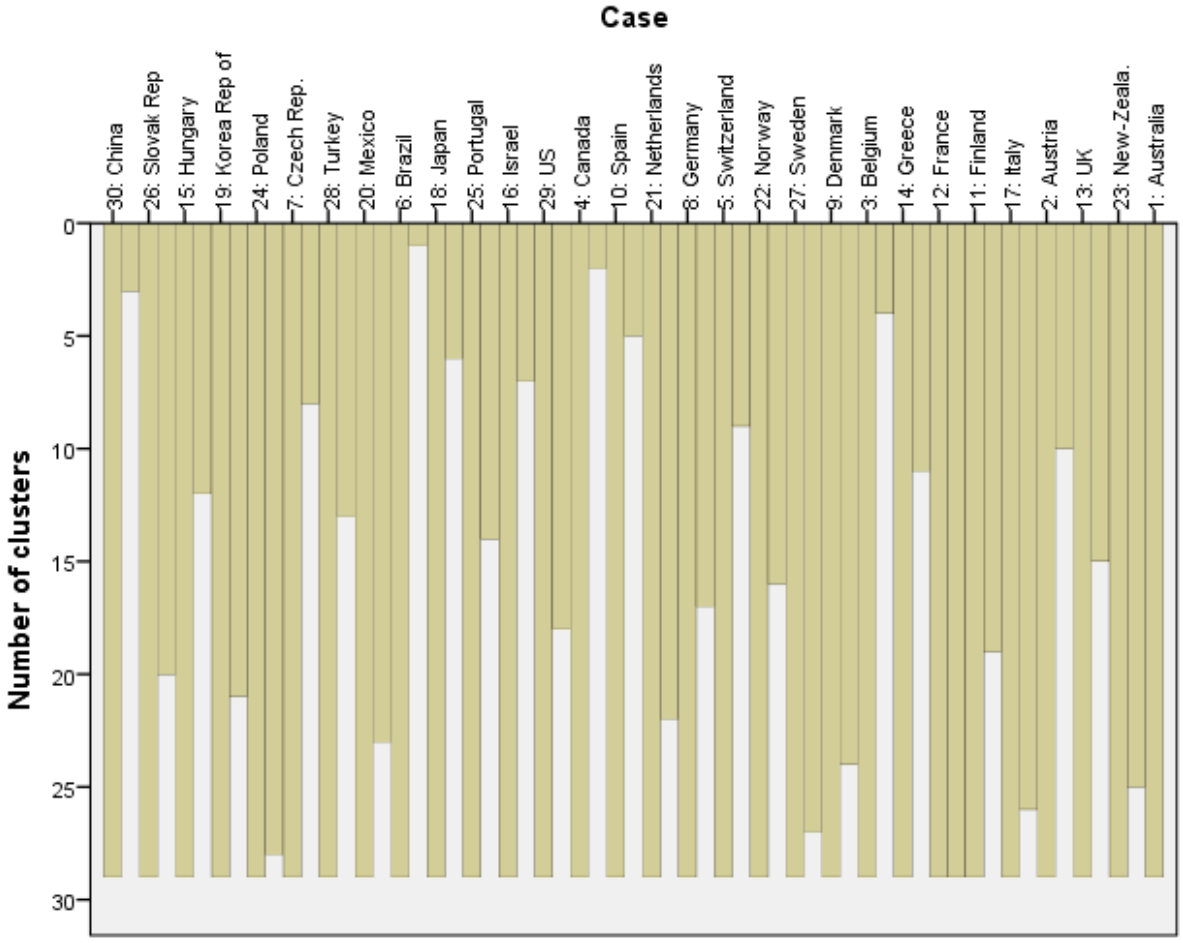

Figure-4-4: Cluster Analyses for the order of OECD countries and China
Source: Owned calculation based on the SPSS

Table-4-17: Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
GovDebtGDP * Countries * Ward Method	30	100,0%	0	0,0%	30	100,0%
BalaPayInGDP * Countries * Ward Method	30	100,0%	0	0,0%	30	100,0%
BalanPayment * Countries * Ward Method	30	100,0%	0	0,0%	30	100,0%
TaxRevenue * Countries * Ward Method	30	100,0%	0	0,0%	30	100,0%
FDIinFlow * Countries * Ward Method	30	100,0%	0	0,0%	30	100,0%
FDIoutFlow * Countries * Ward Method	30	100,0%	0	0,0%	30	100,0%
GDPEmployed * Countries * Ward Method	30	100,0%	0	0,0%	30	100,0%
LabourProd * Countries * Ward Method	30	100,0%	0	0,0%	30	100,0%
ConsPrice * Countries * Ward Method	30	100,0%	0	0,0%	30	100,0%
GDPGrowth * Countries * Ward Method	30	100,0%	0	0,0%	30	100,0%

Source: Owned calculation based on the SPSS

Table-4-18: Case Summaries

Countries			GovDebtGDP	BalaPaylnGDP	BalanPayment	TaxRevenue	FDIinFlow	FDIoutFlow	GDPEmployed	LabourProd	ConsPrice	GDPGrowth
Total	1	N	8	8	8	8	8	8	8	8	8	8
		Mean	77,9625	-1,7750	-61,1125	22,8500	-29,7125	-30,4250	12,1625	74,6625	2,5000	1,4863
		Median	72,7500	-2,1500	-35,7500	22,7500	-55,5000	-51,2500	12,5000	81,5000	2,4000	1,5000
		Minimum	27,80	-4,30	-387,00	13,10	-78,00	-74,20	2,90	54,00	1,75	,20
		Maximum	147,70	1,80	133,00	29,10	60,00	86,00	19,80	87,40	3,30	2,97
		Std. Deviation	39,903356	2,42826	152,42736	4,72077	50,36017	54,58824	5,27282	13,25550	,60614	,95077
	2	N	8	8	8	8	8	8	8	8	8	8
		Mean	39,4875	6,2500	124,9500	20,9663	-1,8125	4,9875	9,8250	91,5500	1,9663	1,5750
		Median	44,7000	6,3000	75,8000	23,2000	-30,1500	3,5500	7,9500	89,8500	2,1000	1,6000
		Minimum	6,90	-1,50	-30,00	9,50	-66,00	-17,00	6,50	63,50	,90	,90
		Maximum	54,10	12,00	622,00	32,40	138,00	37,30	21,60	128,60	2,90	2,30
		Std. Deviation	16,203932	4,79821	206,61135	8,41558	76,75677	20,63779	4,85820	19,07032	,58233	,42678
	3	N	5	5	5	5	5	5	5	5	5	5
		Mean	105,3800	-,5400	45,5200	15,6600	124,3800	172,4000	8,8600	65,7000	1,7900	1,7960
		Median	97,5000	-2,1000	-20,0000	12,8000	88,5000	180,0000	9,9000	70,8000	2,1500	1,9300
		Minimum	50,50	-3,60	-70,00	9,90	-40,00	8,00	2,50	39,90	-,30	,42
		Maximum	190,30	3,70	257,00	24,30	262,00	300,00	13,30	91,30	2,60	3,60
		Std. Deviation	54,11060	3,39455	133,55992	6,54087	125,91891	109,78524	3,94816	19,55850	1,19394	1,25121
	4	N	8	8	8	8	8	8	8	8	8	8
		Mean	43,5500	,0750	1,1500	15,3250	-19,5500	27,0125	26,5750	25,7625	5,1438	3,1313
		Median	42,2000	-1,2500	38,5000	14,6500	-9,7000	23,1000	28,3500	25,6000	5,0250	3,2250
		Minimum	22,40	-2,90	-251,00	9,90	-83,20	-68,00	1,70	11,00	3,10	2,10
		Maximum	72,80	5,60	140,00	21,80	65,00	123,00	52,70	42,30	8,72	3,90
		Std. Deviation	16,82999	3,31566	122,70513	4,11851	50,95317	61,04898	18,11217	9,10917	1,94782	,69844

Table-4-18: Case Summaries (Continued)

Countries		GovDebtGDP	BalaPaylnGDP	BalanPayment	TaxRevenue	FDlinFlow	FDloutFlow	GDPEmployed	LabourProd	ConsPrice	GDPGrowth
5	N	1	1	1	1	1	1	1	1	1	1
	Mean	11,5000	3,4000	15,0000	9,9000	88,0000	86,0000	109,0000	43,0000	2,9400	9,6000
	Median	11,5000	3,4000	15,0000	9,9000	88,0000	86,0000	109,0000	43,0000	2,9400	9,6000
	Minimum	11,50	3,40	15,00	9,90	88,00	86,00	109,00	43,00	2,94	9,60
	Maximum	11,50	3,40	15,00	9,90	88,00	86,00	109,00	43,00	2,94	9,60
	Std. Deviation										
Total	N	30	30	30	30	30	30	30	30	30	30
	Mean	60,8800	1,2367	25,4167	18,7110	10,0433	32,0200	18,0600	63,5767	2,9590	2,2707
	Median	50,3500	,2000	19,5000	20,5500	-9,7000	14,7500	9,9000	70,8500	2,5500	1,9150
	Minimum	6,90	-4,30	-387,00	9,50	-83,20	-74,20	1,70	11,00	-,30	,20
	Maximum	190,30	12,00	622,00	32,40	262,00	300,00	**109,00**	128,60	8,72	**9,60**
	Std. Deviation	40,43576	4,66228	164,44252	6,78553	89,59806	90,36876	21,01939	29,36990	1,77913	1,73050

Source: Owned calculation based on the SPSS

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