

GERMANY & ESTONIA

Comparison of two countries and their economies

In my work I would like to compare economies of two countries, each of them, member of the EU, Germany and Estonia. I base my work on publicly accessible data. Currently as I said both of them are members of the EU but according to the historical point of view they differ significantly.

While Estonia was part of the Soviet Union and functioning under the hard socialist regime, Germany divided into 2 parts: eastern (DDR-German Democratic Republic) and western (Federal Republic of Germany) was the big economy, which symbolized on the west side, the western way of life and followed perfectly this model of capitalist country and experienced also the economy of command principle on the eastern side.

The economy is the sector which keeps the society alive, it “feeds” it and so it affects the situation in the country significantly. As the economy is the part of the society, of the nation, it has to respect social establishment, behave in accord to the philosophy and can very easily become some kind of tool of control of leading power. The look on these two countries enables us to compare current situations in two countries which functioned under these two antagonistic establishments, so they were developed in opposed way, opposed rules, conditions and so absolutely different principles and trends. The main difference as we already know it was the position and role of state. Projected into economy, the economy became the tool of the policy and of the control. That’s why the development of Estonia should be described as the stately predetermined race (path) which was limited and had to follow the plan of government (in term of products, quantity, production, technologies and so on). It was the case till 1991 when Estonia was re-established as an independent country.

It is interesting to take a look on the current economies (economic results) of these two countries. Paradoxically Estonia succeeded to get rid of the state’s plannification of economy, its control over the market, to reform whole system, to diminish all the gaps issued from socialism and finally to become one of the world’s iconic example of economic freedom and nice example of successful emergent economy.

Germany with its big and stable economy remains on the front of the European ranking since their history and remains on this head-position also after its reunification in 1990 and continues in this trend of growing prosperous economy what improves its stability even more. After reunification it took a profit from the prosperous economic results and well developed and well-functioning western capitalist market. They picked up on it and with combination with accessible capital they achieve great economic results.

In my work we will observe the current situation between these two countries which results from historical evolution of both of them. We will observe the trends followed by both countries as well as the results of their economic activities.

BASIC INFORMATION AND CONTEXT

GERMANY :

Germany is a key member of the continents economic, political, and defence organizations. Even the fact that Germany was divided into two completely antagonistically-based parts it didn't shake its potential and Germany end up on the leading position.

With the advent of the Cold War, two German states were formed in 1949: the western Federal Republic of Germany (FRG) and the eastern German Democratic Republic (GDR). FRG was the icon of Western principles, of all we name as Western Life. It was included in EU and NATO while The Germany in the east opposed absolutely. The communist GDR was on the front line of the Soviet-led Warsaw Pact. The decline of the USSR and the end of the Cold War allowed for German reunification in 1990. Since then, Germany has caught up this gap, and has established western principles on the whole territory. It followed the philosophy of market and was led by capitalistic values. It has expended considerable funds to bring eastern productivity and wages up to western standards. In January 1999, Germany entered monetary Union. It has left Marks instead of Euro. Together with 10 other EU countries, Germany became the member of Eurozone.

Actual situation for Germany is such as : the biggest contributor on the EU's GDP (share of 21,1%) (Estonia only 26th place with a share of 0,1%; or 35th place in ranking of whole Europe continent)

ESTONIA:

Even before WWI, Estonia wasn't an independent country. It was always under rule of any other neighbours' nations, under Danish, Swedish, German and Russian rule. It attained its independence in 1918 but it could enjoy it only until 1940 when it was forcibly incorporated into the USSR in 1940. It has to wait till the collapse of The Soviet Union when it regained its freedom in 1991. Since the last Russian troops left in 1994, Estonia has been free to promote economic and political ties with the West. It joined both NATO and the EU in the spring of 2004, formally joined the OECD in late 2010, and adopted the euro as its official currency on 1 January 2011.

Actual situation of Estonia is such as: the 7th country in the world according to the economic freedom, and after the Switzerland and Ireland the 3rd on the European-level country while Germany is on the 25th place worldwide and on the 14th place in the Europe.

If we compare these two countries, we can say that Estonia get to the semblable institutionally-administrative position as the Germany did in 1999, it means 12 years later.

Physical differences

This is not only the history in what these two countries differ significantly. We have to mention and to be conscious all along our study about their size differences. They differ significantly in size and in number of inhabitants that's why all the values expressed in total amounts such as volumes, nominal values, numeric values and so on not reported per capita valuation or with not respect to the GDP can be misleading. It could be (potentially) interesting to compare them but rationally it does not make sense.

While Germany has 82,67 million of inhabitants Estonia has only 1,32 million. The surface area of Estonia is 45,2 thousands of km² and the surface of Germany is 357,4 thousands of km². These facts leads to the density of population 236,4 people/km² in Germany and 31 people/km² in Estonia. It means that Germany is comparing to Estonia approximatively 79,1 times bigger, 7,6 times more populated with 62,6 times more people living there.

All these facts are significant proves that according to size and its weight German economy is much bigger.

According to the data provided by data.oecd.org the profile Society; Population growth: estonia -0,2%, Germany +0,4%; if we take account about the fertility rate this one is below the natural replacement value. It is about 1,5 in Germany and 1,7 in Estonia. It means that the positive population growth in Germany reflects the positive migratory flows.

Elderly population 18,38% in Estonia and 21,45% in Germany

Working age population 65,82% in Estonia and 65,48% in Germany, so that's the portion of the society which is statistically available to contribute on the GDP. As this portion doesn't differ so much for both countries while the portion of elderly population does a little bit more, we can better understand the 2nd position of the Germany in the total immigration flows' ranking within all OECD countries.

From the point of view of physical (real) differences of these countries such as size or population , the comparison could seem to be irrational. But in my studies I don't want to focus on the nominal results of these two countries but more about their stability, growth, trends, global levels, values per head and analyse if these two countries, more especially Estonia converges by its development to the same state as Germany.

Main Indicator - GDP

The key of any economic analysis studies or comparison is GDP. To study the economic activity we start by focusing on the GDP calculated by *Central Intelligence Agency*

In nominal terms but to have better view on the real social situation we have the following PPP values depicting the economic activities of our countries:

	GDP (ppp)			estimation of 2017 - GDP official exchange rate	
	2015	2016	2017		
ESTONIA	29 600	30 200	31 500 estim	ESTONIA	25,68 billion
GERMANY in trillion	3,992	4,066	4,15 estim	GERMANY	3,652 trillion

<https://www.cia.gov/library/publications/the-world-factbook/geos/en.html>

We see that the economic activity of Germany is much higher in the term of volume. But to study these two economies we have to take account about the size differences we've already mentioned.

As the Germany is big, highly populated developed country, big and very important economy, big market and Estonia is small Baltic country with emergent small market economy we have to respect these differences. That's why we have to instead of volume focus on the values recalculated per capita term.

GDP per capita

Let's look on the GDP per capita in US\$ in each country. To understand better the context I fill the table below with the corresponding values for The European Union and the Euro Zone of which both countries are members. I based my study on OECD's publications of GDP

	1993	1995	99	2000	2003	2005	2008	2010	2011	2012	2014	2015	2016
Estonia	5573	6 234	8 435	9 391	13 021	16 466	22 642	21 573	24 501	25 973	28 511	28 735	29 741
€ Zone		20 463	23 927	25 420	28 079	30 238	35 889	35 988	37 405	37 759	39 965	40 907	42 140
EU		18 059	21 223	22 634	25 406	27 587	33 034	33 318	34 670	35 214	37 495	38 449	39 622
GER	21893	23 687	26 580	27 547	30 350	32 414	38 663	39 955	42 693	43 564	47 092	47 811	48 943

<https://data.oecd.org/chart/59pb>

5 years after Estonia became independent country (market economy) GDP per capita was at almost ¼ level of the German gross domestic products per capita that was what represented 1/3 of the GDP in the rest of the European Union (still non-member of The EU).

At this same time (5 years after its reunification) Germany made accounted more than 5 000 \$ per capita more than the rest of the Union European and more than 2000\$ more than the rest of € Zone.

GDP growth

	1999	2000	2001	2002	2003	2004	2005	2006	2007
ESTONIA	-0,4	9,8	6,4	6,1	7,5	EU member 6,4	9,1	10,5	7,2
GERMANY € area member	1,8	3,2	1,8	0	-0,7	0,7	0,9	3,9	3,4

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
ESTONIA	-5	-14,2	1,6	7,5	4,3	2	2,8	1,8	2,2	4,4
GERMANY	0,8	-5,6	3,9	€ area member 3,7	0,7	0,6	1,9	1,5	1,9	2,5

Regarding the evolution of their GDP we can properly see how the trend of growth was kept and intensified in both case. We had some perturbation during the crisis of 2008. These troubles were much more alarming for the Estonia while Germany was doing solidly also during the crisis.

They succeeded to keep growing also during the year 2008. Even it turned into recession in 2009, they recovered at the same year and successfully continued in the positive growth. Despite of the post-crisis year of 2009, Germany keeps growing and doesn't divert its upward sloping shape of economic activity (the same for the economy of EU and € Zone as whole).

While Estonia fell into recession in 2008 and sank even deeper in the following year 2009 with hardly below optimistic view: -14,7%.

Another important periods as the year in which countries became members of EU (Estonia in 2004) and EuroZone (Germany in 1999 and Estonia 2011) didn't affect significantly their GDP just remained in their GDP growing trend which is marked during these periods.

GDP-BASED STATEMENT:

GDP facts affirm the leading and dominant position of Germany. The economy of Germany remains growing and it grows faster and much more significantly than the economy of the whole EU, currently its GDP per capita is higher by almost 10 000\$. Its importance was proved during the economic crisis of 2008 when with only slight perturbation recovered in one year and continue to perform in its upward sloping trend. Currently it performs great (almost) 49 000\$ of GDP per capita.

Looking at the Estonia we see a very nice example of little emergent economy. Starting with an significant gap of GDP per capita which was at the poor 5,5 thousand \$ it succeeded in catching this gap and its current GDP is at the solvent and solid level of almost 30 000\$ of GDP per capita. Of course this reflects the limited capacities and turbulent historical background. We can conclude that the Estonia is doing very well because instead of regarding at the nominal values it is more reasonable looking at the rate of growth. In the table below we see that both Estonia and Germany are doing very well but Estonian's rate of growth is even higher. That's what reflects the more space to develop in the case of emergent economy but also the successful way how to deal with potential opportunities and implementing of changes.

It gives us the average rate of 1,1% for Germany and 4,1% for Estonia. It proves that Estonia is dealing well with its challenge of emergent economy. It is recovering well but its limits and dependence is easily visible during the crisis. Year 2008 but especially 2009 are touched by very deep and huge recession. While Germany handled this situation by the recession of 5,6% in absolute value the Estonian economy suffered almost 3times harder.

Breaking down GDP

To break down current GDP we continue further in the Central Intelligence Agency data publication

According to <https://www.cia.gov/library/publications/the-world-factbook/geos/en.html> and <https://www.cia.gov/library/publications/the-world-factbook/geos/gm.html>

GDP decomposition by end use %

<u>ESTONIA</u>	<u>GERMANY</u>
household consumption: 52.2%	household consumption: 53.7%
government consumption: 20.5%	government consumption: 19.9%
investment in fixed capital: 24.7%	investment in fixed capital: 20.1%
investment in inventories: -1.1%	investment in inventories: -1%
exports of goods and services: 85.9%	exports of goods and services: 47.3%
imports of goods and services: -82.2% (2017 est.)	imports of goods and services: -40% (2017 est.)

The decomposition of the GDP shows us that in both cases the main part of GDP is *consumption*; It presents almost the same portion of GDP in both countries.

The things which differ a little bit more is *investment in fixed capital* this one is higher by almost 5% in the case of Estonia and it could be explained by the fact that we have to keep on mind that Estonia is the emergent economy with still many opportunities for investment.

The components which differ the most and very significantly are exports and imports. In both case the Estonians portions are 2times as high as German portions. It means that Estonia is more dependent economy comparing to the Germany. Germany is more independent and so autonomous. If we combine this fact with the fact that it is a big and stable economy we can very easily explain its good dealing with the global crisis.

Unemployment and income redistribution

To deal further with the household consumption it is interesting to mention the unemployment and income redistribution

unemployment			population below poverty line current estimations	
	2016	2017		
ESTONIA	6,80%	8,4% estim	ESTONIA	21,30%
GERMANY	4,20%	3,8% estim	GERMANY	16,70%

Average wage is 23 621\$ in Estonia and 46 389\$ in Germany. This difference is very significant but the indicator of household disposable income's growth is in favour for Estonia. Annual growth rate of disposable income is 3,8 %in Estonia and 2,5%in Germany. This trend is in favour for Estonian sustainable growth. It shows that situation and life-conditions in Estonia are improving and getting better.

Unemployment

The unemployment rate is much higher in Estonia. Actually there could be more potential explanation behind. We could start with the fact that even Estonia succeeded to get the rid of communism, it is performing very well with deleting the gap comparing to the other western countries, it is always classified as an emergent market in the process of development. So there are always potential and market opportunities to growth and to enlarge the businesses. More capital supposes to stimulate the economic activity even more, and to create new vacancies.

Another explication could be abilities and education of people. We will use already now few facts about the population which are treated a little bit further in my analysis. Within the population in age of 25-64years there are more people with tertiary education in Estonia but more people with high school or secondary education in Germany. Because in reality we need more staff than executive, the labor market is more adapted in Germany. The labor force is then more qualified in Germany so more adapted to be hired.

Another fact is that Germany has better level of technology, high technology and qualified workers then lead to lower unemployment and very performant economic activity.

GDP decomposition by sector of origin in %

ESTONIA	GERMANY
agriculture: 3.4%	agriculture: 0.6%
industry: 27.8%	industry: 30.1%
services: 68.8% (2017 est.)	services: 69.3% (2017 est.)

In both countries the main sector of the economic activity are services followed by industry and it is almost in the same portions for both case. The agriculture is less important component of the GDP in both economies but with higher importance in Estonia. In Estonia the agriculture contributes on the GDP by 3,4% while in Germany by only 0,6% that can be explained by the fact that Germany is known for its technologies and industry which contribute on the GDP by approximatively 2% more than in the case of Estonia.

Already at this point of analysis we can conclude that the economy of both countries is based on the industrial and technological sector. Both countries are exporters of their products provided by this industrial sector.

To be more concrete about the industry in both countries:

Industry in Germany : *among the world's largest and most technologically advanced producers of iron, steel, coal, cement, chemicals, machinery, vehicles, machine tools, electronics, automobiles, food and beverages, shipbuilding, textiles*

Industry in Estonia: *food, engineering, electronics, wood and wood products, textiles; information technology, telecommunications*

In the case of Estonia the economy benefits from strong electronics and telecommunications sectors and strong trade ties with Finland, Sweden, Germany, and Russia.

Germany is as we said very large economy worldwide and the largest in the Europe and this is mainly due to its leading position as an exporter of vehicles, machinery, chemicals, and household equipment. It is known for its advanced technologies, products of high quality and know-how which is also thanks to the skilled labour force.

OTHER INDICATORS

To be able able to get deeper and further in our analysis we will observe the population composition, government role in the economy, trade partners, investments trends and other important indicators.

Population facts

According to:
OECD (2018), Population (indicator). doi: 10.1787/d434f82b-en (Accessed on 26 April 2018)

OECDs data provides us with following information about the population of these two countries:

More than total number of inhabitants; which is 80,9 million for Germany and only 1,3 million for Estonia; it is the structure of the population what we will be interested in.

Population decomposition by nationality

In Estonia we can recognize the narrow links with Russia. It is reflected also by the fact that Russian people represent almost 25% of the total population. In Germany there is no so significant portion of only one nationality but the leading and the most present nation in Germany are Turkish. They represent 2,5% of total population and the 6,1% stands for the mix of the other nations (mainly polish, greek, Romanian, Syrian, Italian ...) Another fact that we have to take into the consideration is that there is a very big portion of people originally from other countries (actually a huge group of migrants) who took this opportunity to get the German nationality status. So they don't appear in these statistically minority groups of foreign nations but they do their parts in reality. Nor children born in Germany but grown in these sub-population environment do so. Very misleading fact about these results is the possibility of the double-nationality that can influence and soften the result.

Population decomposition by age

The working age (15-64y) portion of population is in both case about 65% while the portion of elderly persons is higher in Germany. In Germany elderly population represents 21,45% and in Estonia 18,38% and young population (up to 14 years) represents 13,1% of total German population and 15,8% of total Estonian population.

This result shows that Estonian population is younger. There is higher portion of young people and lower portion of elderly population. It leads us to the following dependency ratios which are in favour for

DEPENDENCY RATIO	TOTAL	YOUNG	ELDERLY
ESTONIA	52,1	19,9	32,1
GERMANY	53,7	24,8	28,9

Estonia : total dependency ratio is 52,1, elderly dependency ratio is 32,1 and youth dependency ratio is 19,9

In Germany we face total dependency ratio of 53,7, young dependency ratio of 24,8 and elderly dependency ratio of 28,9

Life expectancy in Estonia is 76,9 in general. 72,1 for men and 81,9 for women. In Germany Life expectancy at birth is 80,8 in general where 78,5 for men and 83,3 for women. It means that overall expectancy of life is higher for Germany. It can reflect higher living standards, social conditions, working conditions and so on in Germany comparing to Estonia.

If we focus on the population between 25-64years , the portion of people with tertiary education is about 29% in Estonia and about 39% in Germany. This difference is considerable to take into account because it means that there is 10% more tertiary educated people in Estonia. But another maybe even more important for life and professional sphere is the portion of people with upper and secondary education. The result is following 58,2% of the population between 25-64years in Germany has upper or secondary education while only and 45,7% in Estonia. This is even higher difference which can explain the well-educated labour in Germany. Human capital in Germany is of very good potential and quality which with advanced technology lead to great economic result.

THE PLACE OF GOVERNMENT

The government budget differs significantly within these two countries.

Estimations do for 2017 are following:

In Estonia the government expenditures was \$9.89 billion and revenues: \$9.772 billion; where taxes and other revenues represent 38% of GDP

In Germany the government expenditure was \$1.573 trillion and its revenues: \$1.598 trillion; where taxes and the other revenues represented 43.8% of GDP

BREAKDOWN the Government global expenditure

Spending of government in different sectors as the portion of global government expenditure

<i>Government global expenditure breakdown</i>		
	Germany	Estonia
Health	7,1	1,7
Public order and safety	1,3	5,8
Economic affairs	8,3	11
Environmental protection	1,47	1,22
Education	2,5	7,5
Social protection	44,8	31,4
General Public Service	30,6	26,9
Defence	8,2	5,5

We can see some significant differences. Estonian government spends much more on public order and safety and also on economic affairs and education. It could be explained by the fact that Estonia is one of the post-soviet emergent market so the government tries to finance also economic affairs in the view to support the economic activity and engagement. Public order and education spending just prove the developing trend of Estonia as well as its social improvement.

In the case of Germany we see more important spending oriented on public and social sphere: social protection, general public service, defence and health. In the case of Germany there is lower expenditure on public order and safety and also lower expenditure on economic affairs. It shows us that Germany is a very good example of developed country. The social system is developed so the spending in this sector this is the same for the health and well-functioning health care system. The Germany is known also for its big public sphere. So having so huge public sector needs also the financial resources so the cost for government. Nowadays with threaten of attacks and large waves of immigrants the Defence is even more important as usually in such "attractive" country as The Germany is.

To break down a little bit further the global social spending

Social Spending breakdown		
as % of GDP		
TOTAL SOCIAL SPENDING	GERMANY	ESTONIA
	25,30%	17,40%
Pension spending	10,10%	6,40%
Family benefits spending	1,20%	2,20%
Benefits to households	15,50%	11,72%
Spending on labor market	1,55%	0,60%

As we could already see social expenditure is higher by 10% in Germany than in Estonia. We could mention also the fact that the economic freedom of Estonia is very high so higher prosperity with lower intervention of government. We can also say that Germany is social state with high governmental contribution into social segment. The significant differences stand for pension spending and family benefits, here German government spend more. According to pension we can say that pension system in Germany is well developed and supported by government but we could mention and interlink here the composition of population in Germany. The German population is more elderly. Dependency ratio is also higher (53,7) in Germany. Pensions in Germany are also higher. That is what leads to much higher expenditure on pensions for German government.

GLOBAL TRADE AND INTERNATIONAL POSITION

and also the interaction between Estonia and Germany

	GERMANY	ESTHONIA
Current account balance	291,7 billion	-0,003 billion
as % of GDP	8,10%	0%
Exports as % of GDP	46,80%	79,30%
Shares in world total merchandising export	8,10%	0,08%
Shares in world total commercial services export	5,20%	0,10%
total exports	1,283 billion	12,3 billion
exported commodities	Motor vehicles, machinery, chemicals, PC and electronic products, electrical equipment, pharmaceuticals, metals, transport equipment, foodstuffs, textiles, rubber and plastic products	Machinery and electrical equipment 34%, food products and beverages 9%, mineral fuels 9%, wood and wood products 10%, metals 7%, furniture 9%, vehicles and parts 6%, chemicals 5%
exports partners	US 9.6%, France 8.6%, UK 7.5%, Netherlands 6.6%, China 6%, Italy 4.9%, Austria 4.8%, Poland 4.4%, Switzerland 4.2% (2015)	Sweden 18.8%, Finland 16%, Latvia 10.4%, Russia 6.7%, Lithuania 5.9%, Germany 5.2%, Norway 4.1%
total imports	987,6 billion	13,5 billion
imported commodities	Machinery, data processing equipment, vehicles, chemicals, oil and gas, metals, electric equipment, pharmaceuticals, foodstuffs, agricultural products	Machinery and electrical equipment 28 %, mineral fuels 11%, food and food products 10%, vehicles 9%, chemical products 8%, metals 8%
imports partners	Netherlands 13.7%, France 7.6%, China 7.3%, Belgium 6%, Italy 5.2%, Poland 5%, US 4.7%, Czech Republic 4.5%, UK 4.2%, Austria 4.2%, Switzerland 4.2% (2015)	Finland 14.5%, Germany 11%, Lithuania 9%, Sweden 8.5%, Latvia 8.3%, Poland 7.4%, Russia 6.1%, Netherlands 5.5%, China 4.8%
global competitiveness ranking	5/138	30/138

Results above permit us to analyse the situation in both of our countries from the point of view of global trade and international economic position.

While the Global current account balance is highly positive for Germany, Estonia marks the deficit. It means that Germany exceeds its exports and so contributes significantly on the World GDP, it exports much more than imports. It reflects that Estonia is small open economy.

Estonian exports represent almost 79,3% of its GDP what is in nominal 12,3 billion USD and its imports value 13,5 billion (if we compare it to GDP it represents over 87%). So there is an important dependence in both ways in exports and imports. That proves, another time, the small size of Estonian market. But if we evaluate the Estonian exports from the global point of view its importance on the worldwide scene is insignificant, less than 1% of global exports. Estonia isn't an important player in international trade. It trades mainly with its neighbours as we see that the most important Estonian partners are Sweden, Finland, Latvia, Russia, Lithuania respectively with the Germany on the 6th place with the share of 5,2% of total Estonian exports. If we go further we can say that more than 4% of Estonian GDP is destined to Germany. It exports mainly machinery and electrical equipment but other important exports components are food product and beverages as well as wood and wood products, furniture or also metal, vehicles and parts.

Germany is very important partner for Estonia in both exports and imports flow. According to imports Germany is after Finland the second most important partner with the share of 11% of total Estonian imports (than followed by Lithuania, Sweden, Latvia, Poland, Russia, Netherlands and China with contribution of 4,8% of all Estonian imports)

From the point of view of Germany Estonia is not an important trade partner. Only 0,1% of total German exports is destined for Estonian market.

Results for Germany prove its high degree of development and the largeness of its economy. It has large surplus of current account balance. It contributes on 8,1% of world total merchandising exports and on 5,2% of world total commercial services export. It trades mainly with the biggest world economies (not only with its neighbours) the most important partners are US 9,6 % , France 8,6%, UK, Netherlands, China 6%, Italy, Poland and Switzerland 4,2% respectively. The most exported commodity are motor vehicles or any other industrial and technical, electronical devices. The German Comparative Advantage is motor industry.

From the point view of imports, the most important partners are following: Netherlands 13,7% than France, China, Belgium, Italy, Poland, US, Czech Republic, UK, Austria, Switzerland respectively. German most important partners according to export/import relation are among European countries France, Netherland, UK, Switzerland, Austria, Italy and also Czech Republic and Poland. Apart from European countries it is USA and China.

If we class our countries according to the global competitiveness ranking, The Germany is on the 5th position and Estonia on the 30th position from all 138 countries classified.

FDI

GERMANY in USD	2013	2014	2015
FDI inflows	11 671 million	880 million	31 719 million
FDI outflows	40 632 million	106 246 million	94 313 million
(inflow-outflow)	-28 961 million	-105 366 million	-62 594 million
ESTONIA in USD	2013	2014	2015
FDI inflows	546 million	507 million	208 million
FDI outflows	431 million	230 million	306 million
(inflow-outflow)	115 million	277 million	-98 million

According to the data we see that even the values of FDI in Germany are higher there is much more FDI outflows than inflows. There is an increase of outflows in 2014 and 2015 comparing with the year 2013. But it is important to mention that even the decrease in 2014 the FDI inflow increased in 2015 according to 2013. It means that Germany is always attractive for foreign investor.

Looking at Estonia, Even that there is a decrease of FDI inflows comparing to the year 2013, Estonia remains attractive for foreign investors. The important fact is that FDI outflows decreased also, so it means that FDI invested into Estonia stay mainly in the national economy.

Conclusion

Our analysis proves the statement we are all supposed to have about our studied countries. Germany and Estonia are two pretty different countries. It is hard to compare them because their size differences are more than significant. The economic importance and nominal facts of each of them differ hugely and it is irrelevant to compare them in the term of nominal values. But it was interesting to compare these two countries following per capita data or values reported to country's GDP or break down the data to see its composition. We could also observe trends in our countries and discover more profoundly their economic activities.

It was very interesting for me to observe Estonia as the Small Open Economy and the development of this emergent market after becoming independent country in 1991.

The very interesting fact about Estonia is its historical part of Soviet Union, current membership of European Union and Euro Zone and its very high level of economic freedom.

After this comparison we can state that we observed: an emergent market following the trends of the big economies (as for example Germany) to improve its situation and sustain the economic growth. We observe how after a systemic change of the society, the pass from communism to capitalism, from command to market economy needs the overall adaptation across the society and then copy and follow the global trends typical for this functioning.

While Estonia isn't important country for Germany in respect to the trade partnerships, Germany is one of the most important import/export partners of Estonia.

The development of Estonia is visible and its fruit is harvested. It became one of the most iconic countries thanks to its economic freedom. It is actually on the 7th place in world ranking standing for economic freedom. So it proves the prosperity, growth and success of its economy. Actually it is remarkable how an small and not so far in the past communistic so stately controlled country turned into this status. To being economically free in the country means that now in Estonia we prosper without intervention from a government or economic authority and it incorporate other civil liberties to be deemed as truly free. Estonians are free to secure and protect his/her human resources, labor and private property.

Conclusion by country

To make a point on every of these country separately we can confirm that :

The data we have about these countries support perfectly the globally-spread image about them.

Germany represent great example of big and stable economy which remains growing at actual rate of 1,9%. Its developing trade is also visible in its R&D expenditures. Its investment in R&D represents 2,8% of GDP and explain also the importance of technology in its economy. As the main sector is industry and automobile, with machinery, electrical equipment or chemical products. It is the social state where government contributes significantly. It is an developed country with high living standards and HDI of 0,926 and average wage is 46 400USD. The worldwide economic importance is proved by the fact that it contributes on 3,477% of total World GDP, and honours Germany as the 4th biggest economy in the world and as the 1st economy of the EU. It is an important element of Global trade.

Estonia is the post-soviet economy very successful in its “recovery”. It is improving significantly and at very good level. It is a successful emergent developing country. Its economy is growing at current rate of 2,1%. It improves its conditions and increase standard livings of population and caught the level of “western” countries. Actually its HDI stands for 0,865. The very important fact is that Estonia became the member of European Union and also entered its monetary Union. It allowed Estonia to benefit from its memberships and to use the European Funds and subsidies to its development. It is the perfect example of small open Economy. The trade is very important factor in Estonia as its combined exports and imports value exceeds 155% of GDP. This SOE is characterized by slight deficit of current account balance, so the dependence on other countries. Its economy is not big and stable enough to face shocks as such as the crisis, so vulnerable to the external factors. It is mainly traded with its neighbours so not an important player in the global international trade.

<https://www.cia.gov/library/publications/the-world-factbook/docs/notesanddefs.html>

<https://www.cia.gov/library/publications/the-world-factbook/geos/gm.html>

<https://www.cia.gov/library/publications/the-world-factbook/geos/en.html>

<https://data.worldbank.org/country/estonia>

<https://data.oecd.org/germany.htm>

<https://data.oecd.org/pop/population.htm>

<https://data.oecd.org/searchresults/?hf=20&b=0&q=education&l=en&s=score>