# **Economic Lessons from the Crisis - The Professionals Saved the Estonian Economy**

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#### **Abstract**

The aim of this article is to analyse the lessons learned during the economic crisis in Estonia, a successful small country. The main emphasis of the analysis is on the professions that primarily define economic results - managers and top specialists. On the other hand, Estonia can be used to make generalisations about other countries, especially in a situation, where in 2012, the gross domestic product (GDP) of the euro zone as a whole was negative and South European countries are experiencing great financial difficulties. The Estonia can be viewed as a small economic model that not only allows making generalizations about the new European Union (EU) Member States in Eastern European, but also for other states. The development of the Estonian economy before and after the crisis was one of the fastest in the EU. Yet, the crisis led to a very deep recession. The current government has followed sound fiscal policies that have resulted in balanced budgets and low public debt. Analysis concentrates mainly on professions (workforce) in relation to the economic crisis. What are the lessons learned?

Keywords: economic crisis, lessons, Estonia, top specialists or professionals, managers.

### 1. Introduction

Estonia forcibly incorporated into the USSR in 1940 - an action never recognized by the US - it regained its freedom in 1991 with the collapse of the Soviet Union. 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. [1]

Estonia, a member of the European Union and the euro zone since 2004, has a modern market-based economy and one of the higher per capita income levels in Central Europe and the Baltic region. Estonia's successive governments have pursued a free market, pro-business economic agenda and have wavered little in their commitment to promarket reforms. The current government has followed sound fiscal policies that have resulted in balanced budgets and low public debt. Estonia adopted the euro on 1 January 2011. [1]

Working efficiency in the Baltic countries has been analysed. The analysis focuses on the main branches of the Estonian national economy in connection to the economic crisis. The situations before, during and after the crisis will be viewed. [2,3]

How has the economic crisis affected business and specific sectors of the economy, and what are the lessons learned? This is discussed in the following analysis on the basis of Estonian companies. [4,5,6,7,8]

The efficiency of the work performed by companies in Estonia, but also in Latvia, Lithuania and Eastern Europe in connection to the crisis period, has been discussed in other articles, which provide the according methodological and theoretical foundations. [4,6] The techniques and labour market survey definitions used by the authors have been specified in Eurostat [9].

The Estonian Labour Force Survey is based on the definitions devised by the International Labour Organisation (ILO) that enable us to compare the collected data to other countries. The data are in compliance with International Standard Classification of Occupations (ISCO 08) ILO [10]. Estonia can be viewed as a small economic model that not only allows making generalizations about the new EU Member States in Eastern European, but also for other states. [4,5,6,7,8]

Analysis concentrates mainly on the primary sectors of the Estonian national economy and professions (workforce) in relation to the economic crisis. The analysis will focus on the professions that have experienced the greatest changes and have affected the process of overcoming the economic crisis the most. The situation before, during and after the crisis will be viewed. We will analyse the dynamics from the time when Estonia regained its independence, until 2012, but generally from 2004 onward, when Estonia joined the EU. The analysis of the labour market, i.e. workforce, focuses primarily on occupational engagements, as the authors feel that this should be the most objective indicator of changes in the labour market.

### 2. Estonian economy growth

The economy of Estonia benefits from strong electronics and telecommunications sectors and strong trade ties with Finland, Sweden, Russia, and Germany. Tallinn's priority has been to sustain high growth rates - on average 8% per year from 2003 to 2007. Estonia's economy fell into recession in mid-2008 with GDP contracting 14.1% in 2009, as a result of an investment and consumption slump following the bursting of the real estate market bubble and a decrease in export demand as result of economic slowdown in the rest of Europe. Estonia rebounded nearly 8.3% in 2011 and the Estonian economy now has one of the higher GDP growth rates in Europe. [1]

In 2012 the lowest *government deficits* in percentage of GDP were recorded in *Estonia* (-0.3%) [2011=+1.2%], Sweden (-0.5%), Bulgaria and Luxembourg (both -0.8%) and Latvia (-1.2%), while Germany (+0.2%) registered a government surplus.

At the end of 2012, the lowest *ratios of government debt* to GDP were recorded in *Estonia* (10.1%)[2011=6.2%], Bulgaria (18.5%), Luxembourg (20.8%), Romania (37.8%), Sweden (38.2%), Latvia and Lithuania (both 40.7%). [11]

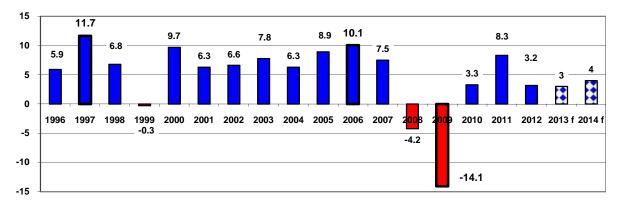


Figure 1. Real GDP Growth Rate in Estonia. Percentage Change during the Previous Year [12]

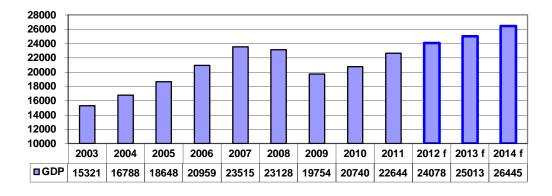
Source: the authors' illustration

f=forecast

The trend line shows the cyclical development of the Estonian economy (GDP). In addition to the economic decline during the years 2008 – 2009, there was also a decline in 1999. If annual real GDP increments of more than 10% can be considered excellent, then the result in 2009 (-14.1%) was one of the largest recessions in the world. The development of the Estonian economy before and after the crisis was one of the fastest in the EU. Yet, the crisis led to a very deep recession, which was one of the greatest in the world, as well as in the EC, and lasted for nine quarters. Thus, the country covered two extremes. On the other hand, it also shows that the reforms carried out in the past were successful and established a base that enabled exiting the crisis successfully. In particular, this meant creating favourable conditions for business. Again, GDP growths in 2011 and also 2012 are among the highest in the EU.

If an annual real GDP increment of more than 10% can be considered excellent, then the result of the GDP growth rate in 2003 - 2007 was among the largest in the world. The development of the economy of the Baltic countries before and after the crisis was one of the fastest in the EU. Yet, the crisis led to a very deep recession, which was one of the greatest in the world, as well as in the EU. A larger or smaller recession took place in 2009, which is called the crisis year. In the following years economy grew.

Thus, the country covered two extremes. On the other hand, it also shows that the reforms carried out in the past were successful and established a base that enabled a successful exit from the crisis. In particular, this meant creating favourable conditions for business. Again, GDP growths in 2011 and also in 2012 are among the highest in the EU. [12]



f=forecast

Figure 2. Gross Domestic Product of Estonia. Millions of PPS (Purchasing Power Standard) [13]

Source: The Authors' Illustration

Estonia's GDP surpassed only 2012th in the pre-crisis, 2007th year's level.

### 3. Employment in Estonia

While the size of the population of Estonia in 1989 was 837,900, in 2011, it was only 609,100. This means a decrease of 228,800, which constitutes more than one quarter (27.3%). The number of employed decreased by about the same ratio. [11]



Figure 3. Employment in Estonia, 1993 – 2012 [14] Source: the authors' illustration

For several reasons, a large number of immigrants entered Estonia during the Soviet times. After the Soviet Union collapsed and the Russian army left, the majority of the migrants went back to their historical homeland. This process lasted for years, and it is characterized by the employment curve.

We get a better picture, if we analyse it by the key sectors of the economy. Let us see how employment, the number of companies and their main characteristics have changed. According to the number of employees, the largest sectors of the economy were industry, trade, construction and transport. [14] Analysis concentrates mainly on the primary sectors of the Estonian national economy and professions (workforce) in relation to the economic crisis. Let us look at the four major sectors of the economy with the largest gross domestic product and the greatest number of employees: industry, construction, trade and transportation. The analysis will focus on the professions that have experienced the greatest changes and have affected the process of overcoming the economic crisis the most. The situation before, during and after the crisis will be viewed. We will analyse the dynamics from the time when Estonia regained its independence, until 2012, but generally from 2004 onward, when Estonia joined the EU, but at times also from 1989, when Estonia was still part of the decaying Soviet Union.

	1989	1992	1995	2000	2006	2007	2008	2009	2010	2011	2012
Economic activities total	837.9	761.4	633.4	572.5	646.3	655.3	656.5	595.8	570.9	609.1	624.4
Manufacturing	213.9	183.9	157.4	127.5	132.9	131.2	135.0	113.8	108.4	121.0	117.5
Construction	68.7	62.8	35.3	40.7	63.6	82.1	81.0	58.3	47.9	59.0	58.7
Wholesale and retail trade	61.2	70.5	79.2	77.5	88.1	86.9	92.5	83.2	80.0	81.3	80.7
Transportation and	61.3	58.6	57.8	51.5	56.5	52.9	49.9	49.7	43.6	48.3	50.5
storage											
Accommodation and food	20.2	19.0	16.8	20.1	22.0	22.3	23.6	20.1	19.4	19.2	19.3
service											

Table 2. Employed Persons, Proportion of the Employed (Economic Activities Total=100), % (EMTAK 2008) [14]

	1989	1992	1995	2000	2006	2007	2008	2009	2010	2011	2012
Manufacturing	25.5	24.2	24.9	22.3	20.6	20.0	20.6	19.1	19.0	19.9	18.8
Construction	8.2	8.3	5.6	7.1	9.8	12.5	12.3	9.8	8.4	9.7	9.4
Wholesale and retail trade	7.3	9.3	12.5	13.5	13.6	13.3	14.1	14.0	14.0	13.4	12.9
Transportation and	7.3	7.7	9.1	9.0	8.7	8.1	7.6	8.3	7.6	7.9	8.1
storage											
Accommodation and	2.4	2.5	2.6	3.5	3.4	3.4	3.6	3.4	3.4	3.1	3.1
food service											

Footnote: 1989-1996 - employed persons aged 15-69; from 1997 - employed persons aged 15-74.

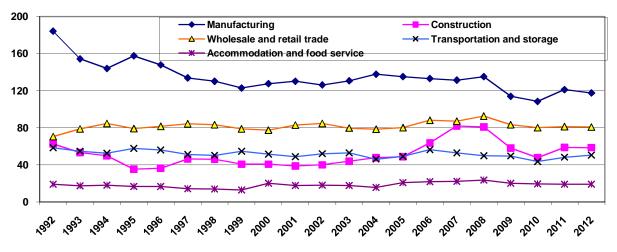


Figure 4. Employed Persons of Estonia, Thousands, Branches, 1992 – 2012 [14]

Source: The Authors' Illustration

Table 3. Employed Persons by Occupation. Employed Persons, Thousands. [16]

	2006	2007	2008	2009	2010	2011	2012			
Employed persons, thousand										
Total occupations	646.3	655.3	656.5	595.8	570.9	609.1	624.4			
Managers	72.5	74.5	69.7	64.1	61.2	54.9	55.9			
Specialists	99.2	96.5	89.9	96.5	114.1	118.9	120.2			
Clerical support workers	31.9	30.1	31.1	29.1	29.9	33.1	37.7			
Service and sales workers	85.3	83.8	92.7	85.7	82.1	80.7	83.4			
Craft and related trades workers	101.3	111.4	114.2	88.9	81.1	94.2	93.8			
Plant and machine operators, and assemblers	93.0	90.3	92.0	82.1	73.9	79.4	81.5			
Elementary occupations	64.2	65.9	62.2	53.8	52.8	55.4	52.0			

Footnote: annual average. Employed persons aged 15-74.

Table 4. Employed Persons by Occupation. Proportion of the Employed (Total=100), %. [16]

	2006	2007	2008	2009	2010	2011	2012
Total occupations	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Managers	11.2	11.4	10.6	10.8	10.7	9.0	9.0
Specialists	15.3	14.7	13.7	16.2	20.0	19.5	19.3
Technicians and associate professionals	12.8	13.2	13.6	14.0	10.9	12.9	13.6
Clerical support workers	4.9	4.6	4.7	4.9	5.2	5.4	6.0
Service and sales workers	13.2	12.8	14.1	14.1	14.4	14.4	13.3
Craft and related trades workers	15.7	17.0	17.4	17.4	14.9	14.2	15.5
Plant and machine operators, and assemblers	14.4	13.8	14.0	14.0	13.8	12.9	13.0
Elementary occupations	9.9	10.1	9.5	9.5	9.0	9.2	9.1

Next, analyze the two main indicators, managers and specialists or professionals.

Table 5. Employed Persons by Indicator and Occupation of Estonia, Thousands. [15]

	1991	1994	1997	2000	2003	2004	2005	2006	2007	2008	2009	2010
Total	92.1	86.5	84.6	72.4	69.8	73.6	76.9	83.0	83.1	79.5	72.0	65.6
CM	72.7	57.3	51.1	45.9	40.9	42.8	48.3	34.8	45.9	49.6	43.8	38.9
GM	15.8	25.8	31.7	25.4	27.6	29.5	26.8	43.7	31.8	24.5	23.6	23.5
<b>Professionals</b>	104.7	82.0	69.0	75.7	82.6	78.9	85.9	94.8	95.2	90.3	95.5	108.9

**Total** – total legislators, senior officials and managers

CM - Corporate managers or Directors-General

**GM** - General managers or managers of small businesses (SME)

**Professionals** - top specialists or higher or senior professionals.

Table 6. Employed Persons by Indicator and Occupation, Employed Persons, Proportion of the Employed (Occupations Total=100), %. [15]

	1991	1994	1997	2000	2003	2004	2005	2006	2007	2008	2009	2010
Total	11.4	12.8	13.7	12.6	11.7	12.4	12.7	12.8	12.7	12.1	12.1	11.5
CM	9.0	8.5	8.3	8.0	6.9	7.2	7.9	5.4	7.0	7.6	7.4	6.8
GM	2.0	3.8	5.1	4.4	4.6	5.0	4.4	6.8	4.9	3.7	4.0	4.1
Professionals	13.0	12.1	11.2	13.2	13.9	13.2	14.1	14.7	14.5	13.8	16.0	19.1

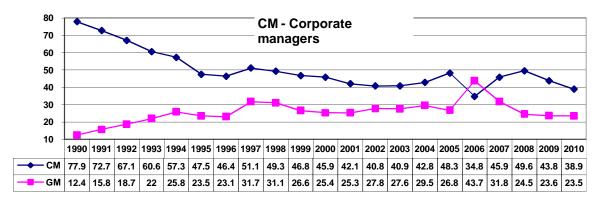


Figure 5. Employed Persons in Estonia, by Occupation, Thousand[16]

Source: The Authors Illustration

A number of large companies and thus also their managers from the Soviet times remained active during the first years of the restored independence. However, the radically changing markets resulted in the liquidation of many of them, while others were restructured. The situation stabilized in 1995. The number of large company managers also stabilized.

However, a noticeable CM (corporate managers) decrease took place in 2006; interestingly, a large increase in the number of small company (SME) managers also took place during the same year. The strategic plans of larger companies are created in advance; cooperation agreements and the sort are sought out and concluded with business partners. Compared to 2006, the number of managers in Estonia grew significantly in the two following years, while the trend was the contrary for SME. In 2008, the number of managers was already 49,600, which is the highest it has been since 1994. The number decreased to 38,900 in 2009 and 2010. This showed that the economic crisis reduced their number by more than one fifth (21.6%) in two years. But again, this decline was significantly smaller than the same ratios for SME managers.

When the Estonian economy was prospering, the number of managers also increased sharply from 2005 onward. CM managers increased 2008th was the last 10 years record highs. That same year, but the entire economy (GDP) fell by 4.2%. Bankruptcy proceedings in Estonia may sometimes take years, but the decrease in the number of managers provides more operative information. Sadly, a large number of the managers were incompetent; they lacked both economy and management related knowledge and experience. There was a shortage of information capital. There were also differences in the way they regarded work, here meaning the success of the company, as well as the managers' abilities. Managing private businesses requires great efforts, especially during difficult times. Not everyone was capable of that; for some the reasons had health issues – low capacity for work. Connections that enabled getting better orders also played their part. Corruption, indecent competition and other actions unacceptable in business must also be mentioned.

Thus, leaders, especially leaders of CM, could not slow decline in the Estonian economy. It was not realized until two years later, than in 2010. CM managers had declined over the heads of 10,700, or 21.6%.

Hence, another lesson: after the restoration of part of the former state-owned enterprises were owned by suspicious financial transactions. Since it was a relatively small company, most of them worked as well as leaders. Simultaneously, there was a lack of education and experience to manage a business necessity. As the chief of knowledge was missing, then it had to buy the service. Recruitment was invited to a number of top professionals. The number of managers in Estonia was record high in 2007 – 74,500; by 2011, their number had dropped to 54,900. The decrease was 19.6 thousand, i.e. 26.3%. Than in 2004, when the economy expanded successfully, accounted for professionals only 13.2% of employment, but in the following year, their share increased significantly, growth from the 2010th was in 19.1%, respectively. From 2004 to 2010, the number increased by 30 thousand, or 38.0%. Greater increment gave other specialists, growth was 17 700.

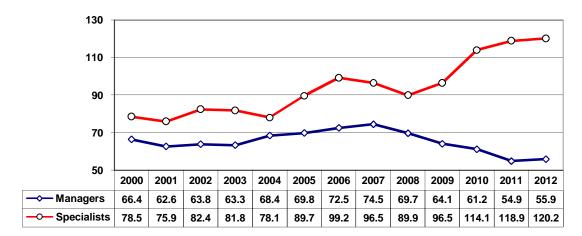


Figure 6. Employed Persons in Estonia, by Occupation, Thousand [16]

Source: The Authors' Illustration

The trend in the change in the number of top specialists was the contrary and had a one year shift. Their numbers increased from 89.9 thousand to 120.2 thousand during the years 2008 to 2012. The increase was 30.3 thousand. If someone had received a fortune during the good times and created a company (the time of rampant capitalism), they soon discovered that in difficult times they lacked information capital. People thought that if God gave the profession, he would also give the brains. But that was not always the case. The managers, who realised this, hired someone smarter than themselves – a professional; while those that didn't went bankrupt during the economic crisis. The number of top specialists began to slowly rise already several years before the peak of the crisis, and continued to increase sharply during the crisis.

Their numbers increased by 30.3 thousand, i.e. 33.7% (!) during the years 2008 to 2012. Thus, incompetent managers led the state into the crisis and top specialists brought it out of the crisis. These trends are pertinently illustrated by the figure. While in 2004 there were only 9.7 thousand top specialists more than there were managers, then in 2012, the indicator was 64.3 thousand – a 6.6 time increase in difference. In 2012, 66.5% were in urban settlements and the rest in rural settlements. This is indicative of the regional distribution of the economy, especially keeping in mind that central settlements are in cities. According to ethnic nationality, in 2007, 80% of the managers and 76.9% of top specialists were Estonian. In 2012, the indicators were 85.9% and 78.4% respectively. Their share was slightly larger than the percentage of Estonians in the entire population. Thus, Estonia was brought out of the economic crisis by the main population, whose ancient homeland the country is. Regardless, the contribution of non-Estonians cannot be overlooked. Nearly a quarter of the managers were working in the public sectors (2012 = 26.5%) and three quarters in the private sector. This ratio was the same both during and after the crisis. Slightly more managers worked in the private sector during the pre-crisis years. The share of top specialists was greatest in 2001 (65.6%) and smallest in 2011 (51.1%). During the same time, the share of top specialists working in the private sector grew one and a half times, reaching 48.9%. There was a small decrease in 2012.

While in 2007 there were 2,400 managers employed with more than one job, their numbers decreased to two thousand in 2010, the year with the largest unemployment levels; but after that, their numbers increased again, rising to 3,100 in 2012. This indicates that some managers were not entirely occupied with the work of their company. The number of top specialists employed with more than one job decreased twofold during the years 2000 to 2004, and then remained stable for the following four years; it began to increase sharply from 2009 onward, reaching 14.9 thousand in 2012. This indicates that their main jobs could not use their knowledge to the fullest and also that demand for them increased. On the other hand, small companies (SME) only needed them partially, because many could not afford to pay wages for fulltime employees.

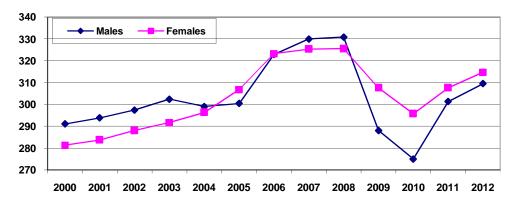


Figure 7. Employed Persons in Estonia, by Sex, Thousand [16]
Source: The Authors' Illustration

When the 2012th came from every male driver of one of the top specialist, then each female driver on 4.5 professional excellence.

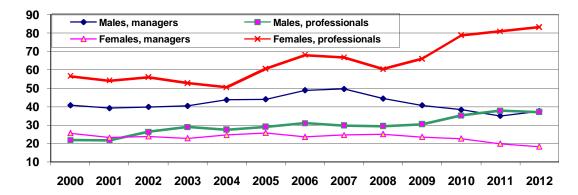


Figure 8. Employed Persons by Occupation of Estonia, Thousand [16]

Source: The Authors' Illustration

In 2007, 49.7 thousand of the 74.5 thousand managers were men (66.7% share) and 24.7 thousand were women. In 2012, the indicators were respectively 37.6 thousand (67.3% share) and 18.3 thousand. The relative share was practically the same. In 2012 there were 83.2 thousand women (69.2% share) and 37.6 thousand men among top specialists, i.e. 2.2 times less. Is this enough to make the conclusion: the economy of the country was saved by smart women?

Regardless, managers and top specialists comprised only 28.2% of employed persons in 2012. Thus, the representatives of other professions also need to be considered to give the final evaluation. There were very diligent people in each group of professions, but also lazy people. A thorough and substantial in-depth analysis would provide a more detailed overview of the issue. Regardless, their contribution to the economy as a whole is different. The final result depends most on the managers' decisions and on their skills or how much they take other people's advice into consideration.

#### Summary

- Estonia was brought out of the economic crisis mostly through the sharp incorporation of top specialists. Using their information capital skilfully was the key to success.
- The majority of the top specialists were women. Smart women saved the Estonian economy.
- After the crisis, the age of the managers increased, and thus also their experience. The age-old truth one also needs experience in addition to money.

- A crisis inevitably cleans the economy with its harsh market economy laws; the weaker fail to keep up.
- The share of the main nationality, Estonians, was larger both among managers, as well as top specialists. Thus, patriotism plays its part in difficult situations.
- The new, more flexible Employment Contracts Act of Estonia also helped exit the crisis better.
- An increasingly important problem is that there is not enough qualified workforce, which is already hindering the development of business. A seeming contradiction has appeared: on the one hand there is relatively large unemployment and on the other, an increasingly large amount of vacant positions.
- The need to constantly increase people's qualifications also falls into this category, because outdated knowledge and experience soon becomes obsolete; changes in the economy are quick to occur.
- An increasingly important problem is that local people move abroad in search of work and higher wages.
- This is directly related to the need to raise the low wages and thus also increase labour productivity and the quality of the workforce.
- People are already recommending bringing cheap workforce in from where wages are even lower than here. At first just unskilled workers, but also skilled workers and specialists.
- The fact that the public debt was very small and that the state budget was balanced for most years, was important.
- Still, the basis for exiting the crisis was already created with the large-scale market economy reforms initiated and implement since the time Estonia regained its independence.
- Let us repeat the main position of the data, i.e. information society: information capital (education + experience) is the greatest asset. This was also confirmed by Estonia's experience in exiting the crisis.

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