Estonian Economic Policy during Global Financial Crises

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Introduction

Estonia was in the final phase of economic transformation when it was struck by the financial crisis. Its population was shrinking thanks to emigration (Friedrich *et al.* 2014), people working outside Estonia and a low national birth rate. Traditional markets had vanished, the economy had to be rebuilt and the country's agricultural sector underwent severe crises (Eesti Instituut 2015). To attract foreign direct investment and offer investment opportunities, Estonia's government implemented some very attractive, entrepreneur-friendly policies (Estonian Chamber of Commerce 2015). In addition to a currency reform, these policies included trade liberalisation, a reformulation of private law, rapid privatisation in the manufacturing, trade, service and transportation sectors, a system of Scandinavian-owned banks and capital market development (Estonian Chamber of Commerce 2015).

The taxation of profits was low and re-invested profits were kept tax-free (Lundeen and Pomerlau 2014). The theory holds that firms should create reserves, and not depend solely on loans for their development. Participation in the European Union helped Estonia to establish a market-oriented economy. Its exchange rate was rather fixed due to the introduction of a currency board mainly linked to the Deutsche Mark, and subsequently thanks to the introduction of the euro as Estonia's national currency (Staehr 2013). An imbalance in foreign trade and a pre-boom occurred before the banking crisis in 2008. However, decision-makers accustomed to high growth in inflation and growing consumption proved unwilling to take any measures to curb this boom.

As a result, Estonia managed the financial crises differently to the neighbouring Baltic countries and Scandinavian countries like Finland and Sweden. This paper therefore deals with the following questions:

1. Why didn't Estonia pursue traditional monetary and fiscal policies to combat the crises?
2. Which measures were chosen to overcome the crises?
3. How has Estonia developed in the wake of the crises?
4. Such differences in Estonia's fiscal policy compared to that of other EU countries are highlighted by an analysis of data concerning those countries and their policies.

Anti-crisis policy recommendations based on macroeconomic theory

There is a never-ending debate over the best macroeconomic policies for overcoming a depression (Blanchard *et al.* 2012), and particularly over whether to apply monetary or fiscal measures. However, there are few insights that can be used as a basis to formulate new policies (Davies 2015). Moreover, recent discussions primarily focus on asset price booms, which were of extraordinary importance in the United States (Blanchard 2009). In Estonia, real-estate prices also increased significantly, but the boom of the 'Baltic Tigers' was primarily due to an acceleration in growth (Staehr 2013) once the key steps of economic transformation had been performed successfully (Erikson 2010); although this growth was necessarily supported by inflows of foreign capital. The Scandinavian-owned banks in particular flooded Estonia's private households and enterprises with cheap, euro-based loans.

With respect to an asset price boom, the main policy recommendations (Blanchard 2009) concern monetary policy. They stipulate that this policy should not

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only consider price stability targets, but also systematic risks related to asset price booms, but difficult to identify in the course of a transformation process. Estonia followed these recommendations to some extent by trying to restrain credit growth before the crises. Higher capital down payments were requested from mortgage applicants and bank reserve requirements were increased. Moral suasion and talks with individual banks were also used to restrict the credit boom, but the build-up of imbalances could not be avoided.

As far as fiscal policy is concerned, countries are advised to avoid and reduce budget deficits during an asset boom (Blanchard 2009). In the pre-boom years, Estonia followed up on its commitment to downsizing government activities and pursued a budget surplus policy, despite tax cuts. Yet this policy did not restrain the pre-boom significantly. These measures have to be distinguished from those that seemed adequate when the asset bubble burst.

However, the pre-boom in Estonia was not only asset-driven. It was also triggered by the success of Estonia's transformation (Erikson 2010) and inspired by the EU integration and accession process, as well as sharp increases in GDP (see Table 1).

The aforementioned credit and high, uncurbed demand led to an inflation rate of 10.6 percent in 2008 (see Table A1 in annex). As the exchange rates were fixed by Estonia's currency board and as a result of necessary investments and high imports, foreign trade (in terms of the difference between exports and imports) turned negative. The boom was therefore not only driven by asset prices, but also reflected the impact of Estonia's transformation and adaptation to the European single market. It was difficult to predict whether it was a long-lasting phenomenon caused by the inherent characteristics of the Baltic Tigers, a deviation from a smooth transformation path or related to a short-term real-estate boom.

However, developments in Estonia certainly proved that its anti-crisis policy had to differ from standard anti-cyclical policy. The policy primarily signalled an end to Estonia's smooth transformation, at least as far as the private sector was concerned. Secondly, it had to ensure a fixed exchange rate policy to preserve the gains and wealth created by Estonia's transformation in the ongoing process of European economic, market, legal and monetary integration. Some traditional anti-crisis policy measures concerning external policy – including flexible exchange rates and fiscal policy measures like huge budget deficits – could not be implemented as a result. The priority was not a short-term recovery from the crises, but rather the stability and security of the country, especially in Europe. This led to the dominance of an integration policy in 2004, with accession to the EU and the introduction of the euro in 2011.

Estonia's national anti-crisis policy was only viable insofar as it supported the country's long-term stability within the EU. Monetary policy was also only effective to a limited degree, as Estonia had established a currency board and entered the ERM II. As a result, Estonia's basic interest policy was dictated by the ECB, which also influences the fiscal policy pursued by the euro countries through its new debt management policies. For this reason the traditional recommendations for combating recessions in a self-determining national country could no longer be applied to Estonia. Even predicting the state of cyclical processes and forecasting and calculating fiscal measures became more difficult. Estonia's inflation rate was far too high for it to join the Eurozone, although it satisfied the EU's debt and budget deficit criteria. However, the currency flexibility required to enable prices to drop and bring the current balance deficit into line with the Maastricht requirements had already been lost, and the euro debt levels of Estonian citizens were too high. The austerity policy pursued to overcome the banking crisis gave Estonia the chance to address problems created by its transformation and adapta-

Table 1

Real annual GDP volume growth rate (%) 2005–2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
EU28	2.0	3.4	3.1	0.5	– 4.4	2.1	1.7	– 0.5	0.2	1.4
Estonia	9.4	10.3	7.7	– 5.4	– 14.7	2.5	7.6	5.2	1.6	2.9
Latvia	10.7	11.9	10.0	– 3.6	– 14.3	– 3.8	6.2	4.0	3.0	2.8
Finland	2.8	4.1	5.2	0.7	– 8.3	3.0	2.6	– 1.4	– 1.1	– 0.4
Sweden	2.8	4.7	3.4	– 0.6	– 5.2	6.0	2.7	– 0.3	1.2	2.3

Source: Eurostat.

tion boom, which was on the verge of collapsing anyway.

Estonian economic policy to combat the crises and its results

The banking crisis led to a sudden halt in capital flows to Estonia. Demand for investments dropped as a result and the negative current account balance turned positive in 2008 and 2009 (Staehr 2013), financial markets were disrupted, credit standards were tightened and stock markets became less accessible. Production in the construction, manufacturing and retail sectors were particularly affected. Output in Estonia dropped by around 20 percent. Unemployment rose to over 19.5 percent in 2010 and started to fall to 12 percent in 2013, partly due to emigration to other countries (see Table A2 in annex).

The problem of how Estonia should react to the crisis raised the question of whether to apply monetary or fiscal measures, although this was no longer a central issue, as the interest policy was heavily influenced by the ECB by that point due to fixed exchange rates and obligations within the ERM II system. Fiscal policy therefore constituted the best instrument for taking action. The 'normal' fiscal policy strategy in such cases is to opt for a deficit budget strategy by accepting falling tax revenues and increasing expenditure to create a budget deficit with payment. However, this would have stabilised demand and prevented prices from falling substantially, thus reducing the inflation rate to 0.2 percent in 2009.

This expansive policy would have lowered Estonia's chances of fulfilling the price level criterion for the introduction of the euro, and the same would have applied to the deficit criterion. Estonia's public debt to GDP ratio would also have deteriorated and a strong floating currency would have harmed the currency stability criterion for introducing the euro. The long-term interest rate requirements in ERM II and the euro system also had to be taken into consideration. Prior to the crisis Estonia had no problem meeting the other Maastricht criteria (see Table A3 in annex). In addition, its government wanted to protect borrowers who had to service credits in a foreign currency from higher interest payments and amortisations. Moreover, the Estonian government was not forced to bail out ailing banks *via* budget expenditure, as the latter were saved by their Scandinavian owners and governments.

The government tried to address the development crisis by applying a short-run, austerity-oriented fiscal policy to get rid of inflation, weaken external trade positions through internal devaluation, and to promote integration with the common market and overcome the banking crisis at the same time. Estonia's hard-working population showed no discontent with austerity measures and re-elected the government in 2011. It was convinced that budget surpluses were in accordance with positive economic growth and accepted unequal income developments.

The Estonian government therefore tried to increase and stabilise revenues by:

- Increasing the Estonian tax burden by stopping decreases in income tax, raising VAT from 18 percent to 20 percent, eliminating tax exemptions for student loans (Mezö and Bagi 2012) and raising excise taxes (Staehr 2013);
- Increasing social security contributions, stopping planned pension increases, transferring social insurance payments partly to central government;
- Allowing transfers from state-owned enterprises to the central government to take place (Staehr 2013) and selling land;
- Selling shares in Estonian Telecom;
- Selling pollution quotas;
- Using reserve funds accumulated in pre-boom times; and
- Attracting EU structural funds (Trasberg 2012).

There were also some reductions in expenditure:

- Cutbacks in public employment and public sector wages were implemented (Akkermann 2013);
- Investment cuts and delays;
- Downscaling of social programmes, pension cutbacks, restrictions on health care benefits (Parts 2013); phase-out of sickness payment (Mezö and Bagi 2012);
- Mergers of hospitals and schools (Staehr 2013);
- Reductions in defence spending; and
- Decreases in farming subsidies (Parts 2013).

These fiscal policy measures were also accompanied by a shift in means between central government and the municipalities *via* cuts in block grants, purpose grants, and the refusal of financial assistance, which resulted in many unfunded mandates and forced the municipalities to cut their budgets (Friedrich and Reiljan 2015). The Estonian public sector ended up

with small deficit budgets of – 3 percent in 2008 and – 2 percent in 2009, still satisfying the Maastricht deficit criterion before they turned into budget surpluses (Table A3 in annex).

These fiscal measures were also flanked by additional measures. There was a labour market reform featuring programmes for job seekers. Measures to support companies and boost innovation were implemented, while firms were also offered financial assistance. Infrastructure projects were enforced, e.g. for roads, airports, and broadband networks (Parts 2013). Finance was provided by the EIB, European Union funds and Estonian funds.

These policy measures achieved:

- A short-term containment of the crises;
- Correction of Estonia's economic transformation and adaptation crises; and
- More intensive integration into the EU, strengthening economic and political ties to Middle, Western, Scandinavian and Baltic Europe.

As Table A4 in annex shows, Estonia increased the ratio of budget revenues to GDP from 36.7 percent in 2008 to 42.8 percent in 2009.[1] This was mainly achieved thanks to an increase in tax revenues as a share of GDP from 30.8 percent to 35.5 percent in 2009 (Table A5 in annex).[2] After joining the Eurozone, Estonia reduced this ratio by 3 percent, but it still remains higher than in the neighbouring states.

The situation described is also reflected in the ratio of budget expenditure to GDP. A low ratio of 33.6 percent[3] prevailed in 2006, whereas by 2009 this figure had reached 44.7 percent (Table A6 in annex).[4] The budget expenditure ratio was decreased, but it is still higher than in other Baltic states.

During the pre-boom times, the rise of the ratio of government output and services to GDP was rather high at 5.1 percent.[5] It turned negative in Estonia, where the level shrunk by 2.5 percent (Table A7 in annex). Estonia also pursued a pro-cyclical investment policy, with the ratio of general government relations increasing during periods of fast economic growth and declining during the crisis years.[6] In Finland and Sweden, as well as in the EU on average, a slightly anti-cyclical policy took place. The ratio of government expenditure on social protection to GDP was 12.1 percent prior to the crisis (Table A8 in annex). It rose by 7.9 percent between the crisis period of 2007 to 2009, or more strongly than in the other Baltic and Scandinavian states. After the crises, Estonia decreased this ratio by 2.5 percent.

Estonian fiscal policy led to the lowest debt burden in the EU, at about 10 percent of GDP in 2013 (see Table A9 in annex). Before the crises this level ranged between 5.7 percent and 3.7 percent. The level increased after the crises in 2008 from 7.1 percent to 10 percent. The EU28 average, for instance, was 58.8 percent and rose after the crises to an average of 97.1 percent. In addition, the other Baltic States increased their public debt ratio from under 20 percent before the crisis to around 40 percent after it. They increasingly resorted to a deficit spending policy to overcome the crisis (European Commission 2010), although not as intensively as the other EU member states on average did.

The impact on Estonian macroeconomic policy

Estonia underwent an internal devaluation with falling employment and prices and a kind of parallel policy by fighting the tax decrease and reducing expenditure. The internal devaluation was eased because falling income and higher unemployment were accompanied by a drop in prices. Some of the measures to increase revenues like the transfer of public profits and the sale of land did not have a short-term impact on private households. The diversion of pension payments into the budget instead of private funds (Staehr 2013); or the additional attraction of EU funds did not negatively affect private households.

It was not easy for private households in Estonia to see consistent policies behind the public sector wage cuts, sales reductions, and project management measures. Estonian society is accustomed to flexible legal relations in the private and the public sector, where the transformation process is still ongoing and few power

[1] Latvia and Lithuania have overcome their decrease in public revenues in the course of the banking crises and the transformation and adaptation crises by increasing public debts and budget deficits. They had to bail out banks and were less advanced in the transformation and adaptation process. There the level was quite stable whereas for the EU average it decreased from 44.6 percent in 2008 to 44.1 percent in 2009.

[2] In 2006 the budget revenues and tax to GDP ratio was similar to the Baltic States, but now the Estonian level is higher.

[3] Estonia was followed by Lithuania (34.2 percent) and Latvia (38.3 percent).

[4] This value is close to that of Lithuania with 44.9 percent and Latvia with 43.6 percent.

[5] It was higher than in Finland, Lithuania, Latvia and Sweden and the average of the EU28.

[6] In Lithuania the reduction rate was higher.

positions and social claims are fixed in laws, planning and binding social rules. The power enjoyed by trade unions in Estonia is also restricted. This meant that there was little opportunity to develop social resistance and organise countervailing power, and public discontent was relatively low. Even the central government responsible for the internal deviation policy was re-elected.

Estonians accept that the government budget needs to be balanced. Moreover, it is argued that a deficit fiscal policy with or without spending would have required too much time to predict and analyse the crisis and plan the appropriate measures. Estonia lacks debt management experience, has no national bond market (Staehr 2013) and the Central and European Bank is not allowed to support deficit policies.

As previously mentioned, the transformation process was driven by externally financed demand for FDI and consumption demand of private households in the framework of an open economy with almost fixed currency rates. In a large closed economy, the transformation process is easier to steer using supply side measures based on predictions of necessary and desired industrial structures. The change process can also be promoted *via* the independent development of core industries the pursuit of a sophisticated FDI and joint venture policy, and by opening up the economy slowly and more gradually introducing the key features of a social market or market economy. This path was not available to Estonia, which, due to general external political necessities, also had to integrate as quickly as possible with the EU and Scandinavian economies.

However, the demand-driven transformation processes led to imbalanced developments and structures, which had to be corrected through adaptation crises. The banking crises and their consequences partly superseded the need for such adaptation crises. The breakdown in demand, free capacities and lower revenues forced companies to focus on the export market, which also enhanced Estonia's economic recovery in the relatively short term and ensured the survival of the fittest enterprises. The banking and transformation crises, as well as the integration drive related to the introduction of the euro were therefore harmonised using internal devaluation.

There are still some discussions whether a different fiscal policy – such as a deficit policy linked to a flexible floating currency policy and a nationally-defined monetary policy, would not have been more effective than Estonia's internal devaluation. In the framework of an effective European CGE-model (Donaghy 2009), prevailing economic circumstances were analysed to identify the effects of deficit policy and those of Estonia's chosen policy of internal devaluation. However, such a model including Estonia does not yet exits for such purposes.

We therefore embark on a very simple two country model featuring a goods and capital market. The competitive situation between the two regions, the EU without Estonia and Estonia, can be interpreted as a two-person non-zero-sum game, in which the regions as decision makers represent the players, who apply fiscal policy measures as strategies to maximise their revenues (Friedrich 1986). The currency values are either fixed or one currency like the euro is in use in both countries. The strategies are deficit spending, Haavelmo policy (no deficit) and no fiscal activity. The latter strategy would be just to accept the budget situation, or to reduce expenditure to decreasing tax receipts if a formal budget balance is legally necessary.[7] Both players seek to maximise income. Inserting the fiscal policies of the players into the equation system leads to pay-off matrices for region 1 (EU) and region 2 (Estonia). These matrices have 3 columns and 3 rows. If we assume no financial crowding-out effect in region 1 (EU), but such a financial crowding-out effect arising in region 2 (Estonia), the EU would increase its income by choosing deficit-spending policy 1. Estonia, by contrast, would have to opt for the Haavelmo strategy to avoid crowding-out effects in its region. The outcome of the game would therefore be deficit spending for region 1 (EU) and Haavelmo policy for region 2 (Estonia), with both regions actively implementing fiscal policy measures.

The results are influenced by the parameter values, the size of the countries (EU and Estonia) and the possibilities of selecting strategies. With respect to the parameters the crowding-out parameter turns out to be low during crises (Mirdala 2009; Borys, Cizkowicz and Rzonca 2011; Müller 2013), or partly different (Broner *et al.* 2014). During crises the EU country stand to benefit (reduce its revenue drop) by applying a deficit-spending policy. This becomes a dominating

[7] In the model presented by Friedrich (1986) only the effects of policy changes are shown. Here, the result without active policies pursued by both players will result in income change produced by the crises for the regions if one or both players are inactive. The payoffs from the other strategies show the change in this 'inactive' income as determined by the strategies chosen.

strategy whatever strategy Estonia would have chosen. As previously mentioned, the Estonian government had to choose a kind of Haavelmo strategy to fulfil the Maastricht criteria and overcome difficulties accessing capital markets, implying a high degree of crowding-out in the country. This outcome conforms with the model.

The question of whether Estonia would have experienced higher growth rates in future if it had adopted another policy is hypothetical, as no other policy was viable. If Latvia and Lithuania are experiencing higher growth rates than Estonia at present (see Table 1), this does not mean that they pursued a more effective policy, as their policy was similar and also dealt with austerity. Moreover, Latvia and Lithuania are undergoing transformation processes and their higher growth in the last two years may indicate that they are still being in the earlier stages of development.

Conclusion

Estonia's fiscal policy for combatting the crises shows that golden rules for anti-cyclical economic policies are very difficult to postulate. Political reactions to crises differ according to a country's size, its exchange rate and currency system, the power of its national bank, its stage of economic development or transformation, its economic structure and prevailing credit conditions, labour markets, goods markets, the nature of the crisis in question, the stage of a country's integration with other countries; and the general political dependencies to be taken into consideration by politicians.

In the case of Estonia, the banking crisis triggered a general crisis, at a time when the country was already struggling with the process of economic transformation and integration with the economic union of the EU. In the case of Estonia, the effects of the banking and transformation crises had to be dealt with at a time when Estonia was entering the EU currency union and introducing the euro. This heavily restricted the range of policy instruments available – especially in terms of floating the Estonian kroon, pursuing a nationally-determined monetary policy and a special Estonian capital market policy – and led to the selection of internal devaluation as the main policy strategy. The policy measures were shaped so as to minimise the impact of the Haavelmo-type policy on private households.

As most other European countries tended to pursue a deficit policy, this boosted the success of Estonia's policy. Assistance from the EU was welcomed. The accumulation of reserves in boom periods helped to shape the austerity policy and enabled the central government to gain electoral support. The question as to which fiscal policy will prove most effective in the long run has yet to be answer, as scope for political action in Estonia was limited in the past and the three problems cited above had to be solved simultaneously. Experiences with the economic policies pursued by Estonia as an EU member highlights the need to analyse and further develop theories of regional anti-cyclical economic policy.

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Annex

Table A1

HICP – Inflation rate in (annual average rate of change, %) 2003–2014

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
EU28	2.1	2.3	2.3	2.3	2.4	3.7	1.0	2.1	3.1	2.6	1.5	0.6
Estonia	1.4	3	4.1	4.4	6.7	10.6	0.2	2.7	5.1	4.2	3.2	0.5
Latvia	2.9	6.2	6.9	6.6	10.1	15.3	3.3	-1.2	4.2	2.3	0.0	0.7
Lithuania	– 1.1	1.2	2.7	3.8	5.8	11.1	4.2	1.2	4.1	3.2	1.2	0.2
Finland	1.3	0.1	0.8	1.3	1.6	3.9	1.6	1.7	3.3	3.2	2.2	1.2
Sweden	2.3	1.0	0.8	1.5	1.7	3.3	1.9	1.9	1.4	0.9	0.4	0.2

Source: Eurostat.

Table A2

Total unemployment rate in % 2005–2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
EU28	9.0	8.2	7.2	7.0	9.0	9.6	9.7	10.5	10.9	10.2
Estonia	8.0	5.9	4.6	5.5	13.5	16.7	12.3	10.0	8.6	7.4
Latvia	10.0	7.0	6.1	7.7	17.5	19.5	16.2	15.0	11.9	10.8
Lithuania	8.3	5.8	4.3	5.8	13.8	17.8	15.4	13.4	11.8	10.7
Finland	8.4	7.7	6.9	6.4	8.2	8.4	7.8	7.7	8.2	8.7
Sweden	7.7	7.1	6.1	6.2	8.3	8.6	7.8	8.0	8.0	7.9

Source: Eurostat.

Table A3

General government budget deficit (–)/surplus (+) (% of GDP) 2003–2013

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
EU28	– 3.2	– 2.9	– 2.5	– 1.5	– 0.9	– 2.4	– 6.9	– 6.5	– 4.4	– 3.9	– 3.3
Estonia	1.7	1.6	1.6	2.5	2.4	– 3.0	– 2.0	0.2	1.1	– 0.2	– 0.2
Latvia	– 1.6	– 1.1	– 0.4	– 0.6	– 0.7	– 4.4	– 9.2	– 8.2	– 3.5	– 1.3	– 1.0
Lithuania	– 1.3	– 1.5	– 0.5	– 0.4	– 1.0	– 3.3	– 9.4	– 7.2	– 5.5	– 3.2	– 2.2
Finland	2.6	2.5	2.9	4.2	5.3	4.4	– 2.5	– 2.5	– 0.7	– 1.8	– 2.1
Sweden	– 1.0	0.6	2.2	2.3	3.6	2.2	– 0.7	0.3	0.2	– 0.6	– 1.1

Source: Eurostat.

Table A4

General government budget revenues (% of GDP) 2004–2014

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
EU28	43.8	44.2	44.0	44.0	44.0	43.6	43.6	44.0	44.7	45.4	45.2
Estonia	35.6	35.2	36.5	36.8	37.1	43.8	40.7	39.2	39.6	38.5	39.4
Latvia	34.8	35.4	35.5	33.3	33.0	34.5	35.9	35.5	35.7	35.3	35.5
Lithuania	32.5	33.5	34.0	34.4	35.0	35.8	35.4	33.6	33.0	32.9	34.3
Finland	52.5	53.0	52.3	51.9	52.4	52.2	52.1	53.3	54.0	55.2	55.5
Sweden	54.6	55.8	53.5	53.0	52.3	52.4	52.0	51.4	51.7	51.9	51.1

Source: Eurostat.

Table A5

General government budget tax revenues (% of GDP) 2005–2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
EU28		39.4	39.4	39.2	38.6	38.5	39.0	39.6	40.0	
Estonia	30.0	30.5	31.2	31.4	35.1	33.4	32.1	32.2	32.0	33.1
Latvia	28.0	28.9	28.4	28.0	27.4	27.6	27.9	28.3	28.1	
Lithuania	29.2	30.0	30.0	30.6	30.2	28.5	27.4	27.2	27.2	
Finland	42.3	42.3	41.6	41.3	41.1	40.9	42.2	42.8	44.0	
Sweden	47.5	46.8	45.8	44.9	45.1	45.0	44.3	44.4	44.7	44.6

Source: Eurostat.

Table A6

General government budget expenditures (% of GDP) 2004–2013

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
EU28	46.7	46.7	46.2	45.5	47.0	51.0	50.6	49.0	49.4	49.1
Estonia	34.0	33.6	33.6	34.0	39.7	44.7	40.5	37.6	39.5	38.3
Latvia	35.9	35.8	38.3	36.0	39.1	43.6	43.4	38.4	36.5	36.1
Lithuania	34.0	34.0	34.2	35.3	37.9	44.9	42.3	38.7	36.1	34.4
Finland	50.2	50.3	49.2	47.4	49.2	56.1	55.8	55.1	56.7	58.5
Sweden	54.2	53.9	52.7	51.0	51.7	54.9	52.3	51.5	52.0	52.8

Source: Eurostat.

Table A7

General government investments to GDP in 2003–2012

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
EA17	2.56	2.48	2.50	2.52	2.59	2.64	2.82	2.56	2.35	2.13
Estonia	4.36	3.79	3.96	4.68	5.06	5.39	5.07	3.87	4.13	5.43
Latvia	2.38	3.11	3.11	4.63	5.69	4.86	4.29	3.72	4.25	4.39
Lithuania	2.99	3.48	3.48	4.17	5.20	4.93	3.89	4.56	4.36	3.67
Finland	2.79	2.81	2.51	2.33	2.44	2.53	2.83	2.49	2.52	2.59
Sweden	2.94	2.95	2.99	3.05	3.07	3.29	3.52	3.48	3.40	3.53

Source: Eurostat.

Table A8

General government expenditure on social protection (% of GDP) 2004–2011

	2004	2005	2006	2007	2008	2009	2010	2011
EA18	27.6	27.6	27.3	26.8	27.5	30.4	30.3	30.0
Estonia	13.0	12.6	12.1	12.1	14.9	19.0	18.0	16.1
Latvia	13.2	12.8	12.7	11.3	12.7	16.9	17.8	15.1
Lithuania	13.4	13.2	13.3	14.4	16.1	21.2	19.1	17.0
Finland	26.7	26.7	26.4	25.4	26.2	30.4	30.6	30.0
Sweden	31.6	31.1	30.3	29.2	29.5	32.0	30.4	29.6

Source: Eurostat.