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MICROFOUNDATIONS OF ECONOMIC SUCCESS

Lessons from Estonia

Edited by

DAVID G. MAYES

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Foreword

Since the middle of the 1990s the performance of the Estonian economy has exceeded expectations. During 1995–2007 we have experienced the fastest economic growth in the enlarged European Union. As a result, our relative income level vis-à-vis the other EU countries has doubled from 35 per cent of EU average in 1995 to 70 per cent in 2007. The anti-inflationary nature of our monetary regime – the currency board arrangement – and disciplined fiscal policy has led to the lowest public sector debt in the EU and nominal interest rates comparable to the euro area countries. Although recently inflation has increased due to commodity price shocks and cyclical factors, the average inflation rate during that period has remained below 4 per cent.

In addition to these favourable macroeconomic developments, an important aspect of Estonia's success has been the ability to cope with significant changes in both the domestic and foreign environments. The main shocks from the external environment – the economic and financial crises in Asia and Russia in 1997–98 – had a strong impact on the Estonian economy. They led to significantly tighter financing conditions and lower foreign demand. The most revealing characteristic of the subsequent decline in economic activity was its short-lived nature. In less than two years the Estonian financial sector was on a considerably stronger foundation and exports underwent a significant reorientation from the CIS markets to EU countries.

As important as the successful handling of external shocks has been the ability of the corporate sector to cope with constant restructuring. Although less noticed, high economic growth has masked different trends in different sectors. Indeed there has been surprising heterogeneity in the performance of the different sectors of the economy. This is most evident in manufacturing, where labour and resource-based industries have seen a constant decline and the share of more knowledge and technology-based sectors has expanded.

Successful managing of external and internal shocks requires considerable economic flexibility. Such flexibility stems from the micro-foundations of the economy – the ability of the firms and individuals to react to changing market conditions, to innovate, taking advantage of new ideas and opportunities, and to survive in strong competitive pressures. All these topics are covered in the chapters of this book. Specifically, the authors analyse how innovation and competitive pressures have influenced the productivity of the Estonian firms, how firms set their prices and wages and react to various economic shocks. The authors also address the question how individuals shape their decisions regarding consumption, saving and working.

While these chapters may be seen as case studies of academic interest, their importance for policy makers is not limited to explaining the past success of the Estonian economy. These questions remain crucial also for the foreseeable future. The slowdown in economic activity that started in 2007 and has lately been reinforced by the unprecedented financial sector difficulties in both the US and several European countries will certainly test the flexibility of the Estonian firms and individuals in the coming years. Looking at the longer perspective, the maintenance of the currency board arrangement until the adoption of the euro and the subsequent participation in the euro-area, which both eliminate the possibility to conduct independent discretionary monetary policy, will place increased importance on the flexibility of the economy to cope with the changes in the economic environment. Therefore the topics covered in the book will remain an integral part of the economic analysis in Eesti Pank.

The Research Department in Eesti Pank has deliberately followed a programme of research into the nature of the flexibility in the Estonian economy and its causes. We have seen this as a key priority for the success of a currency boards-based monetary policy. With monetary policy unable to respond to shocks that are specific to Estonia, other facets of behaviour must respond instead to limit the impact on incomes and employment. If other countries have discovered routes to flexibility that Estonia has not then clearly we would want to know about it and see how they could be emulated. However, in most respects this work can be of benefit to other countries. The currency board forces flexibility and hence the Estonian experience may offer ideas for others.

Unlike many sources of economic benefit, flexibility is not something whose benefit diminishes if others adopt it. Rather the opposite – if other countries can also weather shocks at lower cost and recover more rapidly some of this will spin over to the benefit of Estonia. I hope therefore that others will also find the work of Eesti Pank valuable in this regard.

Andres Lipstok
Governor of Eesti Pank

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1. The Path of Transition in Estonia

David G. Mayes and Martti Randveer

Almost all transition countries have been through a very fraught process of rapid economic collapse on their emergence from the communist regime, accompanied by high inflation. After a few years they managed to turn the economy round, get inflation down and start to rebuild only to be faced by a second setback associated with the Asian crises in 1997 and the Russian default in 1998. Following a further recovery, the economies have begun to take off in a serious manner with growth rates well ahead of their western counterparts, reaching double figures in some cases. The path to convergence therefore seems well set, although 2007 and 2008 have shown that some of these growth rates were not sustainable and the Baltic States in particular have encountered a sudden stop, albeit one that is likely to be temporary.

Not surprisingly, each country has faced its own unique problems but in this book we look at the case of Estonia, for two main reasons. First of all, Estonia started from one of the more difficult positions as it was actually part of the Soviet Union. Its position was not as difficult as countries such as Ukraine that had been part of the Soviet Union from the outset and had hence had over 70 years of communist rule, long enough that there was no-one with knowledge and experience of how to operate in the modern western system. While the diaspora may have that knowledge, they lack the local experience. Estonia became independent after World War One and was only absorbed into the Soviet Union at the outset of World War Two (and occupied by Germany for a substantial period during it). Nevertheless, nearly 50 years without the opportunity to gain western-style experience (except perhaps for the opportunity to watch Finnish television illegally in the North) meant that the challenge for change was enormous.

Our second reason is simply that Estonia has been one of the most successful countries in making the transformation and has moved from a per capita income 33 per cent of the EU average in 1995 to 70 per cent in 2007. Another decade of that sort of performance would close the gap with the West.

West. We seek to investigate what lies behind that success through a detailed study of the operation of the Estonian economy.

It is normally argued that an economy will succeed for four main reasons.

- Its economic structure is focused on rapidly growing sectors of world demand.
- It has an advantageous structure of inputs, such as raw materials, a growing and highly qualified workforce, good access to deep capital markets.
- Its ability to innovate and respond rapidly to the changes in demand and shocks to supply that affect its competitiveness.
- It has a set of economic and political institutions, regulatory framework and attitude to the rule of law that facilitates growth.

These four facets can be put together in a variety of ways, one of the best known of which is the Porter diamond (Porter, 1990). There the focus is very much on how competition actually operates and spurs action. In all such explanations success comes from an appropriate combination of inputs and assets, markets, the competitive process and the public legal and institutional environment.

Estonia is not an obvious choice for success under these criteria. It is not particularly well positioned to address the major markets of Europe and the rest of the world. Its location is relatively peripheral, but then the success of Ireland and Finland among others suggests that peripherality per se is not necessarily a drawback. It does not have any good natural resource base and the climate is relatively unfavourable. Moreover it is small, so it is difficult to reap economies of scale, impossible to develop market power and hence may have relatively high cost structures.

Nevertheless, much of the source of growth for the transition economies comes from the disparity between their potential and their initial performance. Put another way, it is difficult to see what Estonia has that would make it unable to compete directly with its successful neighbour Finland. In many respects the position of Finland is worse, although it is seven times as large a country geographically and has three times the population of Estonia. It has fewer natural resources, an even harsher climate and is slightly more peripheral in location. In simple terms, therefore, other things being equal, the question is simply how long will it take Estonia to acquire similar levels of physical capital and business reputation and intellectual capital. Like other transition economies the requirement is to move to the frontier of feasible activity. Only later will it be a question of advancing the frontier. However, in practice economic development is a much more uneven process. Estonia is already at the frontier in some areas. The Skype inter-computer communications system that permits video-telephoning between countries at the cost of a local call was developed in Estonia, thus some of Estonia's growth is at, not inside the frontier.

The key to the successful growth is thus likely to lie, in part, in markets and the highly skilled workforce but mainly in the structure of competition, the legal framework and the role of the public sector. Estonia is not simply a highly dynamic economy but one that can change readily. Firms are able to react swiftly to changes in demand and to new ideas and opportunities. The labour market is similarly flexible with relatively limited costs of hiring and firing. Part of this reflects the fact that social benefits and other aspects of social protection were at a low level initially. The chronic inflation had eroded the real value of benefits from the previous regime and there was no basis on which a new safety net could be built up except slowly. The effect was extremely harsh on those who were not readily able to get a new job, either through age or lack of relevant skills. Yet on the other hand, low tax rates meant that the incentives to work harder, get training and look for better jobs were very strong.

In this book we look at how these incentives work, focusing on how firms and households have managed to be so flexible. However inward investment also has a strong role to play with its embodied technological advance that enables very high growth rates. Those employed can adopt new technologies and increase their output markedly. Estonia's proximity to Finland and the enormous attractiveness of its capital Tallinn in particular has been given a huge boost from tourism. Proximity to much higher-income countries in the Nordic region has meant that Estonia is not just a cheap and attractive location to visitors but also that relatively high prices can be charged compared to what locals pay, to enable good profitability and investment.

THE STRUCTURE OF THE BOOK

The chapters in this book all reflect work done in the Bank of Estonia as part of a continuing research programme to understand how the Estonian economy responds to shocks. Since monetary policy in Estonia is passive, as it runs a currency board with a fixed exchange rate with the euro, all adjustment to shocks has to occur through other mechanisms in the economy. Indeed fiscal policy is also somewhat restrained compared to most other European countries. Part of the task of the central bank is to help decision makers in the public and private sectors both inside and outside the country understand the challenges the economy faces from shocks and the way in which known and potential shocks may impact over the coming years. The currency board exists to maintain price stability and confidence in the currency. By providing better information the Bank of Estonia can help the adjustment process.

The book begins therefore in Chapter 2 by looking directly at the inflationary process in Estonia. Aurelijus Dabušinskas, and Martti Randveer explore how firms actually set prices through a detailed survey of a large sample of firms in the economy. This study was undertaken in parallel with a similar study done by the European System of Central Banks (ESCB) for each of the then twelve euro area countries (Fabiani et al. 2005) so it is possible to compare the experiences in Estonia directly with those of much of the rest of Europe. The ESCB study was primarily aimed at finding out how persistent inflation is after a shock and how that persistence is generated in the way that firms set prices. If firms pass on cost increases in full and other firms try to keep relative prices the same, and then wage earners seek to have this increase in prices reflected in their wages, any shock will be very persistent and monetary policy will need to react very firmly if overall price stability is to be maintained. Something that will not happen for a shock that simply affects Estonia and not the euro area as a whole.

Fortunately the finding in the chapter is that Estonian firms seem to be more flexible than their competitors. As can be expected in a small country, most firms are price-takers – they look at market prices and follow them. However, rather fewer firms simply revise prices by a particular formula at regular intervals. Firms tend to respond more directly to shocks but prices appear to be relatively flexible in respect to both downward and upward shocks. In countries where inflation is more firmly rooted there is a tendency for firms to react quite quickly to positive price shocks and to errors where they have set prices too low but to be more inclined to wait for time to erode negative shocks and positive errors. In Estonia the process seems to be a little more symmetric and prices are adjusted more rapidly than in most of the euro area. However, price setters in Estonia appear to be more backward-looking than their euro area counterparts, which will help to make inflation rather more persistent.

There are thus pluses and minuses in the nature of Estonian price-setting that will affect the adjustment to shocks that are specific to Estonia. Clearly the impact on export competitiveness will depend on the behaviour of exporters, not picked up in this study, but import competitiveness will tend to be maintained with a preponderance of price taking. The key question will then be how other aspects of competitiveness respond and chapters 4 and 5 consider productivity.