Vahur Kraft: A successful Estonia - in a successful Europe

Speech by Mr Vahur Kraft, Governor of Eesti Pank (Bank of Estonia), at the Euro Conference of Eesti Pank, Tallinn, 3 May 2004.

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This year spring is going to be different,
chirp-chirp! Different, this year different…

These are the words by Henrik Visnapuu, an Estonian poet, in his third letter to his beloved Ing in May 1919.

May has been a month of important events in the history of Eesti Pank. 85 years ago, on 3 May 1919, the first entry regarding the fixed capital of Eesti Pank was made into the general ledger, and the first payment was accepted into the current account. Thus, 3 May 1919 was the actual day the doors of the Bank opened. *(By the way, the historical entry into the general ledger can now be viewed at the Museum of Eesti Pank.)*

Today, on 3 May 2004, Eesti Pank made its first share capital transfer to the European Central Bank. Eesti Pank has become a member of the European System of Central Banks, one of the owners of the European Central Bank. Today, 3 May 2004 is already the third day of being a fully-fledged member state of the European Union. Two out of three Estonian citizens **voted for accession to the European Union in the referendum held last September.**

What is going to happen now? This is largely up to us. Becoming a member of the European Union does not mean that Estonia has become 'ready'. **Every other Estonian resident believes that by becoming a fully-fledged member of the European Union, Estonia will be able to influence the decisions of the European Union in the future.** Having faith in the possibility to influence decision-making largely shapes the attitutes of Estonians regarding the European Union as a whole.

The Estonian country and society have changed profoundly during the past 10-15 years - maybe even faster than we would have believed, and others would have expected us to change. Does anyone still remember that in 1992 the inflation rate in Estonia stood at 1,077 per cent? In 2003 prices rose by just 1.3 per cent. In place of long waiting lists for having a telephone installed, Estonia has evolved into a country enjoying one of the best communication networks in Europe with diverse mobile telephony and Internet solutions, with active use of such facilities surpassing that of many European Union member states. The daredevil slogan of 1988, 'An Independent Estonia to the 1992 Olympic Games', has been replaced by actual membership not only in the Olympic family or the UN, but also by full membership in the European Union and NATO...

- On the 80th anniversary of Eesti Pank five years ago I spoke about the broader economic policy role of our central bank. The right and obligation of the central bank to contribute to shaping Estonia's economic policy has been set down in the Bank of Estonia Act. But this task can only be performed in cooperation with the Government and other constitutional institutions. Today we can acknowledge that regardless of the fact that both the central bank and other state institutions employ Estonians who are known as great individualists, our cooperation in the field of economic policy has been smooth and yielded results.
- Five years ago I also spoke about the essential developments and necessary reforms facing Estonia. Today, many structural reforms under discussion at the time have been successfully launched, including the pension system reform, which has given a completely new dimension to the saving patterns of the Estonians. As regards the changes that the financial system was facing, my anniversary speech mentioned the plans to set up a universal financial supervisory body, which has also successfully materialised. Today we have a banking sector that is very up-to-date and successful on the international banking scene as well.
- According to the World Economic Forum, Estonia **is the most competitive country today among the new European Union member states** with its competitiveness index of 4.64 points. With this score Estonia is also ahead of four 'old' member states (Spain - 4.47, Italy - 4.38, Portugal - 4.25, and Greece - 4.00), while narrowly falling behind Ireland (4.69). Our open market economy, development of the information society and the financial sector

as well as the quality of our business environment have been considered Estonia's strongest areas.

- **In conclusion we can say that Estonia has been quite successful so far.**

For a successful future, we should first realise how far Estonia has progressed. Then we can decide where Estonia wants to be headed. When we know what we want to achieve in the future, we have to answer another, often an unpleasant question: how, through which measures, and at what price can we achieve the desired result? And then there is nothing more to it but to embark on taking purposeful action... It is as easy as that. Or is it?

- It is a fact that as Estonia is evolving into a ‘boring and stable European country’, our society is supporting change for the sake of itself less and less. Stability, keeping one's word, and honouring contracts concluded either directy or indirectly is becoming an increasingly highly regarded value in the Estonian society.
- As Governor of Eesti Pank I would hereby like to recall that **if anyone in Estonia has the right - and obligation - to stress the importance of stability, it is the central bank.** Some very successful examples illustrating the fact that stability is held in high regard are the Estonian kroon that has held out splendidly for twelve years and the Estonian monetary system that has not been ‘copied from Europe’ but has been structured bearing in mind our specific situation. The fact that we have been wise enough to keep to our principles also in tougher times, and that we have not succumbed to the temptation ‘to try something better’ when times have been easier has in the end only benefited the Estonian economy.
- Today, the central bank maintains that **considering the specific conditions and related changes now that Estonia has become an EU member state, our agenda for the coming years should include an upgrading of our monetary system to be completed with the changeover to the euro.** Namely upgrading, not a radical monetary reform: the Estonian kroon will maintain its value, and the central bank will continue to exchange it at a fixed rate for euros without any time or quantity restrictions. This promise is as binding to the central bank as the word given in June 1992 that from that day on it was possible to exchange eight Estonian kroons for one German mark every single day.
- **By June at the latest, the central bank will announce a competition for finding the design for the national side of the euro coin.** As we all know, there are altogether eight euro coins. The side with figures is identical everywhere while the other side is different in all member states. The look of Estonia's euro coins will become clear this year. To find the best solution, Eesti Pank wants the Estonians to have a say and a right to decide the matter.
- As of 1 May 2004, ALL new member states will have to treat their monetary and exchange rate policy as an area of common interest for all member states. Price stability is the main aim of Estonia’s monetary policy already now, and it MUST remain so also according to the principles of the European Union. But as far as the choice of strategies for managing the monetary and exchange rate policy is concerned, this will still be decided by each member state individually.
- Therefore ALL the countries joining the European Union together with Estonia face another important merger in the near future - accession to the Economic and Monetary Union (prior to that the countries are EMU members with limited rights). Only after completing this change can we be sure that our state is capable of fully utilising the possibilities that the merger with a powerful economic area offers. Estonia hopes to be among the very first member states to do that.
- At some forums outside Estonia we have been asked why we are rushing to the euro zone. Actually, the question should be formulated the other way round - why are some countries incapable of taking this next step in the near future? Estonia has pursued conservative economic policy and achieved success. Thus it is inappropriate to imply that we should wait for others for whom our pace of movement is too fast. **The changeover to the euro does not call for extensive reforms in Estonia, rather, it is a more exhaustive utilisation of the opportunities Europe has to offer.**
- The changeover to the euro cannot and must not be a seasonal election issue but an area where we proceed from Estonia's interests - hence, common sense, analysis of the economic situation, and knowledge of the theoretical foundations of the EMU.

- The European Central Bank has indicated that due to the differences in the economies of the new member states, a single approach suitable for everyone for joining the exchange-rate mechanism, ERM II, and adopting the euro cannot be suggested. Besides, a common approach was not possible for the present member states either. **An approach that takes into account Estonia's particulars means that accession is going to be based on the present currency board arrangement and that our application to join ERM II will be submitted as soon as possible**. Prior to adopting the euro a country has to be a successful member of ERM II for at least two years. Also Estonia's technical readiness for changing over to the euro should be achieved by mid-2006. If such a scenario materialises, we will be among the first new EU members to adopt the euro. I would like to stress that being among the first is not an aim in itself but arises from the acknowledgement that Estonian economic fundamentals have stood firm and that our economy will be ready for joining the mechanism in a few years.
  - Joining the Economic and Monetary Union is a crucial step for the Estonian economy, which will secure the sustainability of a favourable investment climate and strengthen the prerequisites for a continued long-term and balanced economic growth;
  - The estimates by foreign investors and rating agencies on the reliability of Estonian economy have already taken into account the imminent membership of the EMU, which is evidenced by the interest margins and credit ratings that are already on the levels comparable to the old member states;
  - A prerequisite for **sustaining** the outstanding reliability achieved to date is as fast as possible changeover to the euro, i.e. becoming a full member of the Economic and Monetary Union.

An important argument in favour of a comparatively swift changeover to the euro is Estonia's current economic situation. What are the grounds for such a claim? In order to evaluate the broader economic impact of joining the euro system and choose the right accession moment, the UK has adopted five 'euro tests'. These are the following:

1. Have the economic structures and cycles of the accession country and the euro zone converged sufficiently for a successful application of the common monetary policy?
2. Is the economy flexible enough to accommodate country-specific economic problems and unexpected shocks that do not affect the whole euro zone?
3. Will joining the euro zone create better long-term investment conditions for companies?
4. How would joining the euro zone affect the financial sector?
5. Will joining the euro zone promote economic growth, economic stability, and long-term employment?

Estonia scores five out of five on these tests.

The European Union gauges an applicant country's readiness for successful participation in EMU according to the Maastricht criteria (inflation, interest rates, exchange rate, budget balance, and public debt criteria).

- **The Estonian economic situation today is in many ways unique compared to the other accession countries:** the inflation rate is low - 1.3% in 2003; Estonia is one of the few new members states where the state budget balance is under control; public debt is one of the smallest in the EU; and the exchange rate of the Estonian kroon has been fixed against the euro for some time already.
- Still, meeting all the Maastricht criteria requires major efforts also from Estonia. Difficulties might arise both from the ideosyncrasies of the Estonian economy as well as from the results of economic policy decisions.
- From the standpoint of the Maastricht criteria, the greatest peculiarity of the Estonian economy **is the comparatively low level of income**, but on the other hand, the country´s economic growth is faster compared to the current EMU member states.
  - *Estonia's GDP per capita currently amounts to about 42% of the respective EU figure; Estonia´s price level is about 56% of the EU level.*

- *Meanwhile, according to different studies, Estonia´s potential GDP growth is 5-6% per year - in a situation where the pace in the EU would be 2-2.5% per year.*

- If the current growth rate differences are maintained, the level of income in Estonia should reach the current EU average in some 20 years. **Hence - the average price level will be reached in the course of the following *decades*, not in months.**

- **However, as many as every fourth Estonian believes that on account of the changeover to the euro the prices will rise fast, which will have a significant impact on their welfare.** These people are worried about their primary subsistence - above all, growth in food and housing costs is feared. I can assure you - based on the experience of other countries - that the adoption of the euro in itself will not bring about any price rises. It is a different matter that people sometimes perceive rises in prices to be steeper than they actually are, e.g. if a cup of coffee at one's favourite corner cafe becomes more expensive. Namely such rises contributed to the price growth after the changeover to the euro. According to studies, adopting the euro cash boosted the inflation rate ACTUALLY only by 0.1-0.2 percentage points. Even if we compare the price increase in the year of the final changeover to the euro, i.e. in 2002, to the inflation rate in earlier years, we can see that the price rise in the euro zone did not accelerate. The rate of inflation in neighbouring Finland was even lower than in 2000 or 2001. Meanwhile in Denmark, which had postponed the changeover to the euro, growth in prices accelerated and was even faster than in Finland, which had adopted the euro.

- Unsubstantiated price rises under false pretences in the conditions of market economy are above all prevented by competition between companies, both in Estonia and in the 'old' Europe. In the 'old' Europe, also consumer protection agencies have been of help, which will hopefully be the case also in Estonia.

- Administrative rises in excise duties related to the accession to the European Union and **increase in the prices of a few other individual goods (such as sugar) cannot and must not be associated with the adoption of the euro as a single currency**. These two factors are not related, except for the fact that in order to adopt the euro a country has to be a member of the European Union first.

- The following six months will indeed bring about several ***one-off*** **price rises** related to the accession to the European Union - **all in all, according to our current analysis, these should escalate Estonian consumer prices 1-1.4%.**

- **But none of these price rises is even slight related to the fact whether and when Estonia adopts the euro in the future.**

- In the conditions of market economy, price stability does not mean that prices do not change at all, but that they fluctuate moderately and that price movements can be anticipated. The price of sugar may slightly rise or fall both in Estonia as well as elsewhere in the European Union in the future.

  It is most likely that a piece of meat on the dinner table here in Estonia will at the time of adopting the euro cost more than today. It is integral to market economy that inflation goes in line with the increase in income. But the price will not rise due to the fact that the denomination of payment is the euro and not the kroon. It will be so because the incomes of people will have gone up and they can afford more and better goods. One thing is sure - there is going to be a rise in the standard of living. It is the pace of growth that is the issue here. And the European Union will significantly contribute to the increase in our income.

Next I will provide a more general background to the coming developments in Estonia.

Why is the European Union useful to us? In the past few years it has been customary that every regular quarterly economic survey of Eesti Pank includes a reference to the economic standstill in Europe. But today I would like to stress that even as such, at a standstill, Europe's economic power and extensive market suffices for it to remain one of the most important engines of the global economy.

It is difficult to overestimate the role of the European Union in the world trade. One can, of course, be ironic about some fruit standards but, meanwhile, the same EU standards and product safety requirements affect the rest of the world. It is worth mentioning once again that 80% of Estonia's exports go to the EU member states while 85% of the direct investments made into Estonia are related to the European Union. I think that this calls for no further commentary.

Europe's core economic policy goals are embodied in the **Economic and Monetary Union**. Such goals are **stable economic growth** and **price stability**. And this is what we all want. The EMU signifies the common monetary policy and coordinated economic policy.

- **Why a common monetary policy and a single currency?** The aim of the common monetary policy is to guarantee a *low level of inflation* (below but close to 2% a year) through a common currency, a common central bank system, and common interest rates. Several studies and decades of experience in the industrial countries have shown that a stable, low, and easily predictable inflation rate leads to the most favourable conditions for *long-term economic growth*.

- The notion of a monetary union is based on the *optimum currency area theory* formulated by *Robert Mundell* in the early 1960s*.* Multilateral fixing of currency rates and joining of monetary policies offers several benefits:

  - excessive fluctuations in exchange rates, i.e. in the price of money will disappear; it will be easier to predict the price of money in the future and therefore, <u>easier to plan the future;</u>

  - improved certainty will reduce the cost of hedging currency risks and will avoid such undesirable developments like the ones in Estonia that accompanied the Russian crisis in mid-1990s; the costs related to currency exchange can, of course, only be eliminated by a common currency;

  - most importantly, pegging the currencies should lead to <u>faster economic and financial integration,</u> boost the flow of goods between countries, and enable convergence of market interest rates and improved price comparison.

- An additional advantage of a large currency area is greater seigniorage income earned on issuing bank notes, since the money can be used outside its own economic zone. **The role of the euro as an international financing, settlement, and reserve currency has been consistently growing.** For example, of all the bonds issued in foreign currencies by world governments and the private sector, bonds denominated in euros accounted for more than 30% in 2003 (prior to launching the euro the overall amount of the bonds denominated in the national currencies of the current euro zone totalled 20%). The share of the euro in the currency reserves of the world amounted to some 19% in 2003.

- The larger the common currency zone is, the smaller the transaction costs, and the more it will support economic development, increase stability and future security.

- Whether joining the monetary union is useful depends on the ratio of the costs of the lost monetary policy independence to the gains arising from the accession. Since the exchange rate is not an adaptation tool in the monetary union, prices and salaries must be flexible and factors of production (capital and labour) have to move freely. In general terms, open economies (and Estonia is a very open economy) and countries with similar economic cycles gain more from the monetary union.

- **Why coordinated economic policy?** Coordinated economic policy must contribute to creating a favourable environment for stable and sustainable economic growth.

- The most closely coordinated area between the EMU member states and institutions is the budgetary policy. This is based on the framework established by the Stability and Growth Pact: the budgets of the member states must be balanced or show a surplus during at least several consecutive years and in no year must the deficit rise above 3% of the GDP. Besides budgetary policy, most other economic policy sectors (e.g. labour market policy, structural policies, etc.) are coordinated between the members states and institutions.

- The economies of the European Union member states are closely intertwined. Of the external trade of the EU, some 65% is with other member states, and only a third with the rest of the world. The more the economies of the member states depend on each other, the greater the gain arising from the single currency. Then it will also be unlikely that economic growth in some member states might be significantly slower, which could potentially threaten the stability of EMU.

What does such a framework mean for the future of the European Union? Above all, economic success of the European Union - hence also of Estonia - depends on whether the economy in Europe manages **to be sufficiently flexible and competitive** so as to utilise the opportunities offered by the single currency and attract more investments than before.

- **Economic flexibility is the trump card Estonia as a small country holds in the European Union. It is very important for our small and open economy that the powerful common market we are joining would operate as efficiently as possible** and that a climate favouring innovative ideas would be predominant in Europe. According to the economic theory, the aim of the economic policy of a small country is to react fast in the changing circumstances and respond to the changes in the global economy in time. Our Estonian experience confirms this economic principle. The first prerequisite for a flexible economy is the faith in the durability of the core values of economic policy. This means abiding by the law and the fact that contracts are honoured and ownership relations stable. It certainly involves faith in the stability of the currency. The latter in turn is inseparably linked to the reliability of the financial system.
- Another prerequisite for flexible economy is education and openness to new ideas.
- Flexible economy also requires a favourable public attitude towards entrepreneurship. Entrepreneurs must have the opportunity to implement their ideas and engage capital, labour, and information at a fair market price and with as little trouble as possible.
- To sum up what has been said above, we could say that creating a flexible and competitive economic framework is the main economic policy task for Estonia. With this task we would also adopt the principal viewpoints of the **Lisbon strategy** comprising the economic policy priorities and directions for development in the European Union today. The economy policy priorities specified for the years 2003-2006 in Europe are the following: (i) promoting economic growth, (ii) creating jobs, and (iii) sustainability of public finances.
- Economic growth in Europe has fallen behind its potential in the past three years. This again seems to point to the *need for structural reforms*. It is in the interest of Estonia that structural reforms targeted at improved efficiency in the use of resources would continue both in the recently joined countries as well as in the old EU member states.
- Regardless of the fears prevalent in the ‘old’ Europe, extensive labour influx from the new member states in the near future is unlikely. Therefore, the insufficient flexibility of the pan-European labour market has to be counterbalanced by as efficient as possible internal market, high mobility of capital, and as flexible as possible internal labour market.
- Estonia is building up a modern pension and health insurance system. This is an area where also the current ‘old’ member states will probably have to focus more on individualised contributions and securing more extensive employment.
- Yet the greatest problem the European Union faces is the **budget issue** due to the need to reform the pension system and in particular the healthcare system in the light of long-term sustainability and on account of the budgetary positions of the member states that deteriorated in 2003. The excessive budget deficit procedure was initiated against Germany and France which exceeded the maximum budget deficit allowed according to the Growth and Stability Pact, 3% of the GDP - and the number of such member states will probably grow. At the same time, the situation initiated a discussion regarding sufficient flexibility of the Growth and Stability Pact, first and foremost in the context of a weaker economic situation.
- Estonia's budgetary policy is and has been strict and balance-oriented. This gives us a competitive advantage over others and does not place us in an inferior position, contrary to what has been erroneously claimed. The current debt burden of the Estonian government sector is about 5% of the GDP (the lowest in the EU accession countries); the budget deficit of the government sector rose above the maximum level allowed under the Maastricht criteria only in 1999.

- While assessing the relevance of the budgetary balance requirement from the viewpoint of Estonia's future competitive ability, one certainly has to bear in mind that merely meeting the budget criterion might not be a sufficient success guarantee. In the conditions of the common monetary policy, the budgetary policy will become the principal economic policy tool through which the government can independently influence economic development (e.g. stimulate its economy in the period of slow growth). But in order to actually use such budgetary policy tools flexibly, the budget has to be balanced not in the course of just one year but across the whole economic cycle - posting a <u>surplus</u> in the periods of fast economic growth while showing not a very large deficit, a maximum of 3% of the GDP, in the period of downturn.

There has been a notion spreading among Estonians that we are extremely good... Hence the biggest threat facing us is complacency.

- Besides its significant role in the world trade, the European Union has long been a net investor in the rest of the world. But the level of investments within the European Union, at least in the old member states, remains lower than it could and should be. <u>A well-considered investment policy</u> is one of the key issues from the point of view of European economic development prospects. Creating an attractive investment environment and utilising the know-how accompanying the investments is an area where Estonia has (at least in the case of the financial sector) successful experience to offer to Europe. At the same time, Estonia as an EU member state should learn from the experiences of other states.
- In 2004-2006 an average of 2.7 billion kroons per year is flowing into Estonia from the European Union. According to the present financial estimates, the inflowing amount will be around 40 billion kroons in 2007-2013, an average of 5.6 billion kroons a year. At the moment we have managed to make use only over half of these funds. It is quite another matter HOW to use the inflowing money IN A SENSIBLE WAY.
- **Estonia hopes to be successful in Europe like many other small countries, e.g. Finland and Ireland.** However, this does not mean that copying the solutions and development approaches of these countries would necessarily guarantee success. For example, it would undoubtedly be of great use to learn about the experience of Finland's SITRA, Ireland's Forfas and ICSTI, and other similar state-owned structures designed to promote modern knowledge, product development, and manufacturing. But Estonia has to face the fact that the majority of the projects successfully launched with SITRA's co-financing are related to innovations that have received an additional quality guarantee - a patent or a useful model certificate - considered essential by venture capital investors. According to the Estonian Patent Office, considering the number of globally innovative products per 100,000 inhabitants and the products' patents, Estonia is lagging behind the EU member states up to 50 times - in Finland an average of 40-50 patent applications per 100,000 inhabitants are submitted per annum; in Ireland the respective figure is 30, and in Estonia less than one. Naturally, this is just a single indicator among many others and other factors should be taken into account, but still...
- Maybe this is where we should start? It is quite obvious that Estonians have no other way of achieving success than using their knowledge and skills. As we all know very well, Estonia does not have oil fields at the expense of which we could become rich. Innovation and willingness to develop should become a pervasive way of thinking for us, there should be a change in our values.
- The world economy is currently going through changes in its fundamental paradigm and turning into a knowledge- and innovation-based economy, founded on creating, introducing, and applying knowledge. And the focus is on the latter, application of knowledge, i.e. innovation.
- Innovation can be defined as a novel and successful application of knowledge and technology *in order to achieve a competitive advantage*. The competitiveness of companies in knowledge-based free market economy essentially narrows down to their innovation, i.e. their ability to find and sustain their *originality* and thus a market position enabling high returns. It is international competition between companies that ultimately creates an opportunity for economic growth and thus for the increase in the society's welfare.

- Innovation requires at least three factors: firstly, educated and competent people; secondly, a well-functioning financial system covering the whole chain of innovation; and thirdly, a culture favouring innovation and entrepreneurship.
- **Is Estonian labour really competitive? Do we want to be price or quality leaders?** If the goal is to be price leaders, our salaries should be as low as possible. If we want to be quality leaders, the situation is vice versa. In order to generate innovation, innovative people have to be raised in Estonia, brought to Estonia - and kept in Estonia, hence the aim should be to create more high-productivity jobs.
- I maintain that being a part of Europe, we should become quality leaders since we have already lost the price leader position to Asia. This is undoubtedly easier to say than to do. Here we face the threat of outpacing the so-called natural development, which calls for step-by-step industrial development towards manufacturing products with increased added value - such a development is in fact currently under way in Estonia. On the other hand, the payback period of such investments is very long and the experience of several countries (including Finland and Ireland) has shown that success often arrives only decades later. Consequently - **if it is our goal to become a quality leader, development activities in this direction should be launched as soon as possible.**
- Here we come to the question, WHERE to start? The answer requires **a good prediction or even a vision: which areas have enough potential in Estonia** that are worth to be given systematic development priority. It is possible that due to its small size Estonia lacks any potential for developing high-technology industry since this would require the emergence of clusters. Even if we manage to develop our own high-technology industry, sufficiently high-level know-how will most likely emerge only in few fields. However, this does not mean that we should develop just a few areas. According to the principle of risk-spreading, it would still be better to support research and development activities on quite a broad basis.
- The economic analyses by the central bank consistently emphasise that in order to obtain financial capital required for development, Estonia must remain attractive in the eyes of foreign investors also in the future. However, in order to boost the country's competitiveness it would be a good idea to adopt a more carefully planned system of ***investments into human capital and set up a framework for financing innovation*****.**
- There are many possibilities to do that. Firstly, large companies could train their own staff. This would require strong public secondary education, diploma studies, and postgraduate studies, and not necessarily public vocational education. (There are examples of such an approach primarily in the IT and telecommunications areas.)
- The second possibility is state-commissioned education. Since investments into human capital promote innovation and bring about other positive effects, state investments into the area are justified as the private sector invests less than is socially optimal. Estonia is quite progressive in that field - we spend 6-7% of the GDP on education, which is more than in other transition countries and similar to the respective levels in Finland and Sweden.
- Even though state-controlled development of human capital requires increased spendings from the national budget, it is relevant that some of the expenditure will be later recovered through additional receipts since rising productivity and employment boost tax revenues.
- The third option is to secure as efficient as possible operation of the education market in the private sector where people themselves pay for their education. One possibility to contribute to this is, for example, through carefully planned implementation of the system of education capital units that has already been under discussion, in the similar way to the pension insurance system that has been successfully launced. **When we know which areas will boost Estonia's competitiveness, we should make sure that those who pay for their education themselves would choose the right specialities** (they should be motivated by the fact that their anticipated pay is going to be higher - hence they would be willing to bear higher costs). Currently the problem in Estonia is that people choose law and business specialities where the external impact is small, and fewer engineering professions, mathematics, etc. where the external impact is presumably high.
- Probably the main problem here is lack of information. In order to secure improved circulation of information, future students should be systematically informed of the

differences in pay and the opportunities of finding employment in different areas - however, pay differences today do not always reflect what is to become in the future. For example, the excessive supply in business specialities compared to other areas should lower entry-level salaries. Another area about which students should be systematically informed is the level of schools. If the aim of the upper secondary school is to send students on to higher educational establishments, the percentages of those admitted to universities should be publicised on a permanent basis. This requires the state to take action.

- **Developing an INTEGRAL framework for supporting innovative activities** - including measures related to labour quality and promoting innovation as well as venture capital funds helping to implement good ideas in manufacturing - similarly requires contemplation and support by the state. I say again that our approach should be integral and not dispersed between different competing projects and agencies. **Now, on the threshold of the European Union, it is the most appropriate and necessary time for that.** Several plans and projects in that direction that can serve as a foundation are about to be completed. Also Finland's SITRA has offered us help. Ideally, I would like to see **regional cooperation between the Baltic Rim countries** in that area similarly to the work that has been successfully launched in the financial sector. And perhaps we might find an opportunity to rely also on pan-European structures.
- ▪ Let me remind you that Knowledge-based Estonia, the research and development strategy for 2001-2006, was approved by Riigikogu as early as in 2001. How much of it has been implemented by today? One thing is sure: more could have been done - and perhaps in a more coordinated manner. Time does not wait.

Concluding remarks: The expansion of the European Union will have several direct and indirect effects on both the current and the new member states.

The European Union is currently facing several complicated economic policy problems. Many of these have originated from the developments in Europe's near past. New member states will bring new problems and new weaknesses to the Union, but certainly they will also intensify some positive developments within the European Union. Joint efforts should help to move future developments within the European Union towards the direction favourable to everybody.

What will be the role of the central bank of Estonia, a new European Union member state, in all this? To put it briefly - the same as today, only on an unparalleled scope and in enormous volumes since the central bank will be analysing the whole European Union instead of the small Estonia, and the bank has to participate in making decisions affecting the whole European Union.

The principal tasks of the present and also the future central bank are and will be the same as described by the then Governor of Eesti Pank, Jüri Jaakson, about 80 years ago. *The cornerstone of each and every economy is a firm monetary unit, which is a gauge of economic values. This monetary unit must not fluctuate, it must not be dependant on random external factors, or else it will lose its value as a stable gauge. Each industrialist, every merchant, any entrepreneur that creates economic values or obtains them for reselling must have the opportunity to make a definite pre-calculation as to the cost of these assets to him and the price at which he will have to pass them on in order to make both ends meet. /... / Therefore, maintaining the firm value of a monetary unit is an enormous, difficult, and very responsible task in every country.*

To sum it up, I would like to express my many thanks to all the Estonians: to every corporate manager, state official, banker, and politician who has supported the central bank in performing its difficult task by having faith in it. Without your trust in the past 12 years we would not have reached the point where we are standing now. Once again - thank you very much!