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CAPITAL APPROACH OF SUSTAINABILITY: EXPERIENCE OF ESTONIA

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ABSTRACT

World Bank National Wealth methodology to measure sustainability was first time applied in Estonia in 2001. The study was carried out by the research team of Policy Research Center PRAXIS in co-operation with Statistical Office of Estonia. This paper aims at highlighting some of the challenges, lessons learnt and opportunities to apply capital approach.

BACKGROUND

1. The study on “Alternative Assessment of Estonia’s Development – The Indicators of Sustainability” was carried out by the Center for Policy Studies - PRAXIS during 2000-2001. PRAXIS is an independent not-for-profit think tank based in Tallinn, Estonia. PRAXIS was founded in 2000 with the support of Mr. George Soros and the Open Society Institute. The mission of PRAXIS is to improve and contribute to the policy-making process in Estonia by conducting independent research, providing strategic counseling to policy makers and fostering public debate.[1]

2. The goal of the study on Sustainable Development Indicators for Estonia was to support the application of sustainable development principles in the planning and implementation of public policies in Estonia. The broader aim was to contribute to the process of preparing the National Sustainable Development Strategy by developing a framework and indicators to measure sustainable development. The purpose of the published book (PRAXIS 2002a) and a brief policy analyses (PRAXIS 2002b) was to introduce more operational approach of sustainable development to different stakeholders and encourage public debate.

THE METHODOLOGY

3. Our study reviewed various international indicator initiatives up to the year 2000. With the help of Bellagio and OECD criteria for a good indicator we decided to test the World Bank

[1] Center for Policy Studies PRAXIS: http://www.praxis.ee/

capital approach methodology. This methodology helps to expand the use of conventional indicators of economic growth such as Gross Domestic Product (GDP) or Gross National Product (GNP) to measure development.

4. According to the capital approach concept, generation of national wealth relies on the use of three forms of capital available to a society: produced assets; natural resources; and human resources (this term has been now broadened to ‘intangible capital’). The essence is using these capital forms in a way that creates a non-declining stream of wealth for society.

5. The major difference *vis-à-vis* conventional indicators of growth is viewing public sector spending on education as investments into human capital in the long-term, rather than pure consumption as these are reflected in the System of National Accounts (SNA). Another important difference from the conventional approach is viewing the depletion of non-renewable natural resources as depreciation of natural capital base, which reduces overall welfare in the society.

6. Only a flow indicator Genuine Saving was calculated during the pilot study and not a stock indicator of extended wealth. A positive, or rising, Genuine Saving rate indicates that the country’s economic growth is sustainable – allocation and use of its limited resources will allow for a sustainable growth of national wealth. A negative Genuine Saving rate indicates that a society is burning its capital base to fuel its economic growth, which may lead to a slowdown in its economic growth in the long run.

7. The World Bank measured extended wealth in several countries on the basis of 1994 data. Unfortunately data for Estonia was not reliable by that time. It would have been also very problematic to estimate Estonian produced capital in 2000 as national fixed assets had been assessed in 1993 and government fixed assets had been re-assessed in 1995. The World Bank estimations of Estonian Genuine Saving were based on more reliable 1997 data. This provided unique opportunity for the comparison of the results with those of the World Bank. Due to data caps and inconsistencies the time period for the calculation of the Genuine Saving was 1995-2000.

8. The proposed methodology would help policymakers better understand and identify the factors that fuel economic growth and the way a nation’s development process is financed (e.g. foreign loans, fixed assets depreciation, and depletion of natural resources). Moreover, the new approach would help to understand and evaluate the tradeoffs and costs of using various forms of capital (e.g. environmental degradation and pollution, increasing scarcity or abundance of natural resources, and changes in human resources).

9. Adoption of the methodology of Genuine Saving in case of Estonia led to a few differences from the World Bank methodology:

(a) Using actual rather than derived estimates of non-renewable resource depletion (oil-shale);

(b) Net forest harvest is computed using natural timber re-growth only from productive forests where felling are legal. (I.e. protected forests and forests which are subject to privatization were excluded); and

(c) Only expenditures, which would directly improve human capital were considered rather than general public expenditures into education (e.g. expenditures to health promotion, direct government programs to education programs, R&D spending).

Hence the difference compared to the World Bank estimates.

RESULTS

10. The results show that during 1995–1999, the genuine saving rate amounted to the average of 3.5% of GDP per annum (Estonian National Report on Sustainable Development 2002). The average indicator for Estonia, calculated according to the World Bank methodology, was 7.8% per year (Praxis 2002). According to the World Bank methodology, investments into human capital are calculated on the basis of total expenditure on education. The PRAXIS methodology tested the narrower interpretation and considered selected expenditures on education, preventive healthcare and R&D, all of which contribute to the increase in human capital in the long term.

11. Consumption accounts for a considerable share of GDP, but has decreased from 85% of DGP in 1995 to about 80% in 2000. Gross saving rate has been fluctuating between 3.5% (1996 and 1999) and peaking around 6% in 1997. In 2000 it had increased from 3.5% in 1999 to around 5%.

12. Increase of the depreciation of fixed assets was curbed in 2000, amounting to 14.5% of the GDP and having a positive impact on the genuine saving rate.

13. The total depreciation of natural resources has been rather big when we compare to the beginning of 1990s. Though, the down-ward trend was interrupted in 2000 with natural resource depletion increase from 2% (1999) to 3% of GDP. The depreciation rate of natural resources varied between different resources. For instance, CO2 damage and the consumption rate of oil shale (main energy source for Estonia) have decreased, while cutting of forest in commercial forest areas exceeded the consumption rate of oil shale in 2000.

14. The total expenditures on education (average for 1995-2000 7.5%) and selected human capital expenditures (average for 1995-2000 1%) have a positive impact on the genuine saving rate.

15. The genuine saving rate has increased over the five year period according to PRAXIS study. The sustainability of Estonia’s development, assessed according to the World Bank’s methodology, is in the same order of magnitude as the respective indicator of the countries with higher average income.

16. The main results were published in 2002 (PRAXIS 2002a, b in Estonian). Several articles in newspapers and popular magazines introduced the results of the study to the wider public.

APPLICATION OF THE CAPITAL APPROACH IN ESTONIA

17. **Sustainable Development Strategy -** In 2001 the Ministry of Environment (MoE) as an implementing agency for Estonian Commission on Sustainable Development began a preparatory work towards National Sustainable Development Strategy. A limited public tender was organized by MoE to choose a consortium to co-ordinate Sustainable Development Strategy preparation. During the selection process the proposal to adopt a capital approach as a conceptual framework for Estonian Sustainable Development Strategy was not supported. Most likely the reason was the fact that by that time there were no other European countries that would have developed their Strategies based on that framework.

Politicians were unfamiliar with the capital approach. Also there were no environmental accounts registered by State Statistical office at that time.

18. The first official overview of Sustainable Development indicators in Estonia was published in the Estonian National Report on Sustainable Development in 2002 by the Estonian Ministry of the Environment. The publication reported among other indicators also the results of the Genuine Saving measurements by PRAXIS study.

19. Statistical Office of Estonia has issued two publications (2004 and 2006) on Sustainable Development Indicators in Estonia. These publications describe around 60 main sustainability indicators based on the UN CSD and EUROSTAT indicators' lists. Statistical Office of Estonian also presented the Sustainable Development Indicators in Sustainability Dashboard in 2004, where Estonian data is compared with other European countries. However, Genuine Saving was not among the selected sustainability indicators.

20. Estonian National Strategy on Sustainable Development **– "**Sustainable Estonia 21" (SE21) was adopted by the Parliament in September 2005. SE 21 is an integral and clearly on the sustainability focused conception for the long-term development of the Estonian state and society until year 2030. General development principle of the country is "to integrate the requirement to be successful in global competition with a sustainable development model and preservation of the traditional values of Estonia".[2]

21. The strategy defines Estonian long-term development goals:
1) Viability of the Estonian Cultural Space;
2) Growth of welfare;
3) Coherent Society; and
4) Ecological balance.

22. The persistence of the cultural space as a separate goal is a relatively specific aspect in SE21 as other goals on welfare, coherent society and ecological balance can be found as main goals also in strategies of other countries. Statistical Office of Estonia has worked out also the first list of indicators arising directly from the Estonian SD Strategy.
It remains to be seen how SE21 nationally selected indicators will be combined and can be combined with UNCSD and EUROSTAT sustainability indicators as well as with national wealth indicators in case the latter will become more common and required.

23. **Estonian Development Plan for European Commission Structural Funds 2004-2006 -** During 2002 there was another important process that affected the development of Estonia in a longer term - the preparation of Estonian Development Plan for European Commission Structural Funds 2004-2006.

24. In 2002 the Ministry of Finance, based on stakeholders and economists comments, called in an expertise to develop stronger strategic framework for the Estonian Development Plan. Initially there was a strong interest to apply capital approach based on the recommendations by leading economists of the country. Several panels of discussion with participants from different ministries and other organizations took place. The innovative approach received many inspired and positive comments also from international advisers. Though finally, the Ministry of Finance declined to use the capital approach as the bases for

[2] http://www.envir.ee//166310

Estonian National Development Plan for the implementation of the EU structural funds SPD 2004-2006.

25. There were many explanations for this decision. Government official would have liked to see a formal political decision on the use of the concept of extended National Wealth and capital approach. There were no other existing cases of application of this approach for sustainability or a National Development Plans for European Structural and Cohesion Funds in EU member countries. There were no ready solutions or guidelines on how to apply this concept for monitoring the use of Structural Funds (SF) or other measures on micro and project level. Hesitation towards broader (and at the same time very innovative) indicator for measuring success in implementing SF measures could be seen, because there would have been a possibility that this new evaluation measure questions the sustainability of some areas of intervention. There were also methodological questions on monetary valuation of natural and intangible resources as well as the availability of statistics. Finally, limited expertise of this field in Estonian universities and research institutions seemed to be a case as well.

26. It was obvious that new operational concept on sustainability and application of capital approach needs awareness raising, lobbying, co-operation and collaboration among different government agencies, the statistical office and academic institutions to improve the applicability and integration in sectoral strategies and policies as well as in daily work and data collection in those governmental agencies. The main goal of Estonian government during those years was the accession to European Union in 2004. Thus, it can be understandable that all efforts were focused on accession and fulfilling required formal criteria and following the guidelines of the European Commission. Thus, the level of readiness as well as the administrative capacity to take the risk of a policy innovation by the government officials was rather low at this period of time. One could have expected that the government agencies responsible for designing national development strategies would carry on the work initiated. However, more work has remained to be done before Genuine Saving or other indicators of sustainable development can be effectively used in public policy making. Thus, commonly accepted framework is needed to efficiently guide coordinated activities in different countries.

CONCLUSIONS

27. **Challenges in applying capital approach in Estonia** could be summarized as follows:

- Different political priorities - accession to the European Union (and NATO) and meeting all the criteria and requirements.
- Political debate and acceptance of the capital approach is desired as this would give government institutions a mandate to further develop the methodology and its applications in collaboration with academic institutions. Political debate and acceptance in turn would depend on factual knowledge (statistics), applicable solutions, availability of experts and skills.
- Courage and openness for public policy innovations by government institutions is desired. The 1990s has witnessed a huge transformation of Estonian economy and as well as the public sector. Continuous changes, reforms, new requirements and new ideas (national or international) challenge the administrative capacity of government institutions and affect the readiness for innovations.
- Resources of the Statistical Office to carry out in-house research & development of new concepts & relevant statistics are very limited. The main activity is to full-fill

statistics inquiries from international and national institutions. There is no R&D department in the Statistical Office of Estonia.

- The expertise of this field in Estonian Universities and research institutions is also rather limited.

28. **The lessons learned from the Estonian experience in introducing the capital approach:**

- The capital approach is a useful concept in operationalising sustainable development for experts from different fields, though there is still some hesitation in using monetary valuation for natural and intangible assets.
- The capital approach seems to appeal to politicians. At least the vocabulary of wealth of the state or the nation and the attention to different capitals (human capital, social capital, intellectual capital, natural capital, cultural capital, etc) is quite widely used.
- The publication of the PRAXIS study on “Alternative Assessment of Estonia’s Development – The Indicators of Sustainability” introducing the capital approach on sustainable development and Estonian sustainability according to this indicator has become a required literature for many different courses in Estonian universities spreading the knowledge and awareness.
- It is very important to decompose the aggregated indicator to better deliver the information and message as well as to show links to various policies.
- Linking capital approach to national budgeting process is important as for example it would help to strengthen/clarify the need for longer term investments or expenditures (natural capital, intangible capital).
- The national accounting framework needs to be extended with environmental and social accounts to enable integrated data and cross-sectoral analyses. This would require re-evaluating the existing data collection practices and institutional roles.
- Improved capacity and advanced skills for monetary valuation and modeling are needed to better utilize the expanding statistics and prepare better analysis for policy-making.
- International collaboration and networking between institutions and experts is very vital for small countries not having all the expertise and capacity
- Practical examples, guidelines and standards are of great value.

29. **Opportunities to introduce capital approach for sustainable development in the ongoing policy initiatives:**

- Ecological Tax Reform (managing natural capital) - defining key indicators and development of monitoring system should answer the following questions:
  - What are critical environmental accounts needed & what are the inter-linkages in developing these?
  - How to optimize the data collection for these accounts?
  - What institution would apply monetary valuation?
  - How to build up needed advanced skills?
  - What international expertise is available?
- Regional Policy - Introducing and applying capital approach at regional and local government authority level:
  - Many top-down activities in the EU promote urban sustainable development (Sustainable Communities and Thematic Strategy on Urban Environment)
  - Numerous bottom-up activities of European Cities to implement and monitor local sustainability - Aalborg Commitments. Nordic-Baltic Local Authorities

Network for Aalborg Commitments was just established to co-ordinate the activities in local authorities around the Baltic Sea and North Sea.

- National Development Plan for the European Commission Structural Funds for the next budget period of 2007-2013:
    - How to evaluate the long-term impact of planned interventions?

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