Andrejs Chirjevskis, RSEBAA (Latvia)
CAN FOREST INDUSTRY CONSTITUTE THE LATVIAN NATIONAL COMPETITIVE ADVANTAGE ON THE EU LEVEL?

The essay presents a new method of determining the prospective and attractive industries in Latvia. The concept is based on the assumption that the sectors of the economy can be considered the business portfolio for the state. It looks at the sectors as strategic business units and evaluates the growth rate, profitability and contribution to the economy for each of them. The results are evaluated according to the concept of national competitive advantage described by M. Porter.

All sectors of the economy according to NACE classification have been analyzed in terms of their accumulated growth of net turnover and profitability (profit margin). The results are summarized in the GDP/LC matrix. The model shows that the sectors worth developing are Trade, Transport and Communications as well as Manufacturing (the most contributing sectors to the GDP), Financial Intermediation and Agriculture and Forestry (showing the fastest growth rates) and Commercial Services and Construction (presenting good results in both indicators). Accordingly, an industry that includes most of the development sectors should be given analyzed deeper for further development.

Forest industry has traditionally been among Latvian strengths and therefore it was analyzed in terms of its applicability to national competitive advantage in the EU level. The results show that with increased efforts to improve the weaknesses of the industry (elaboration of clear development strategy, promotion of investment and consolidation of the industry as well as support for research and education) the industry could remain Latvian national competitive advantage.

 Latvia should develop forestry and timber industries as they will encourage development of the sectors that are the most prospective according to the GDP/LC matrix (Agriculture, and Forestry, Manufacturing, Trade as well as Transport and Communications and Construction).

Forest industry can be developed as Latvian national competitive advantage on the EU level. By putting an emphasis on improvement of industry weaknesses (elaboration of clear development strategy, promotion of investment and consolidation of the industry as well as support for research and education) the industry could remain Latvian national competitive advantage.

As the concept is new, the author in the current work has tried to cover the topic as a whole. However, there are many details that still need to be included. One of the areas is determinants of industry life-cycle, where the author has taken into account only the industry growth rate and to some extent growth potential. Nevertheless, there are also other indicators that need to be researched before the GDP/LC model can be applied fully.

Similar models can be prepared for different countries and then compared to the Latvian statistics. Analyze other potentially prospective industries (e.g. financial services, logistics)
according to the elements of Porter’s Diamond on national competitive advantage can be carried out. It would give a broader perspective to the Europe as a whole.

Alhanagta O., BSU (Minsk)

SOME FEATURES OF USING PERT-MODEL IN PROJECT MANAGEMENT

The Project management (PM) discipline is acknowledged worldwide as one of the most dynamically developing science. PM is considered to be the main method of corporate management in constantly changing business environment. Complex projects require a series of activities, some of which must be performed sequentially and others that can be performed in parallel with other activities. This collection of series and parallel tasks can be modeled as a network.

The Program Evaluation and Review Technique (PERT) is a network model that allows for randomness in activity completion times. PERT model for project management was invented by United States Department of Defense’s US Navy Special Projects Office in 1958 as part of the Polaris mobile submarine launch project. PERT is basically a method for analyzing the tasks involved in completing a given project, especially the time needed to complete each task, and identifying the minimum time needed to complete the total project. This method has the potential to reduce both the time and cost required to complete a project.

In a project, an activity is a task that must be performed and an event is a milestone marking the completion of one or more activities. Before an activity can begin, all of its predecessor activities must be completed. Project network models represent activities and milestones by arcs and nodes. PERT originally was an activity on arc network, in which the activities are represented on the lines and milestones on the nodes. Over time, some people began to use PERT as an activity on node network. The PERT chart may have multiple pages with many sub-tasks.

The milestones generally are numbered so that the ending node of an activity has a higher number than the beginning node. Incrementing the numbers by 10 allows for new ones to be inserted without modifying the numbering of the entire diagram. The activities in the above diagram are labeled with letters along with the expected time required to complete the activity.

Steps in the PERT Planning Process
1. Identify Activities and Milestones. The activities are the tasks required to complete the project. The milestones are the events marking the beginning and end of one or more activities. It is helpful to list the tasks in a table that in later steps can be expanded to include information on sequence and duration.
2. Determine Activity Sequence. This step may be combined with the activity identification step since the activity sequence is evident for some tasks. Other tasks may require more analysis to determine the exact order in which they must be performed.
3. Construct the Network Diagram. Using the activity sequence information, a network diagram can be drawn showing the sequence of the serial and parallel activities. For the original activity-on-arc model, the activities are depicted by arrowed lines and milestones are depicted by circles or «bubbles». If done manually, several drafts may be required to correctly portray the relationships among activities. Software packages simplify this step by automatically converting tabular activity information into a network diagram.
4. Estimate Activity Times. Weeks are a commonly used unit of time for activity