

Summary

This Working Paper analyses the overall structure of the Slovenian economy in the period from 1900 to 2001. The research focuses on the manufacturing sector – Slovenia's most prominent economic activity. We present quantitative and qualitative methods used for measuring interindustry linkages and interindustry analysis of reproduction linkages based thereupon, that allows us to identify the key sectors in the Slovenian economy as a whole and specifically in manufacturing. Identifying these key sectors might prove useful for decision makers in the area of industrial policy in Slovenia in their current planning and optimisation of the proposed measures aimed at increasing their efficiency. In-depth knowledge of these sectors allows the policy makers to properly direct the current industrial policy (particularly in investment activity) in order to raise the production levels of these sectors as far as possible, thereby boosting the development of the economy as a whole.

Based on qualitative analysis, the manufacture of metals and metal products and the manufacture of pulp, paper and publishing were identified as the two key sectors in the Slovenian manufacturing in 1990-2001 in terms of their closely intertwined production flows and their high developmental and multiplicative effects on the economy as a whole. Over shorter time spans, the manufacture of chemicals and chemical products and the manufacture of rubber and plastic products also rank as significant. In 2000 and 2001, the transport and telecommunication services industry was identified as another key sector within the overall structure of the Slovenian economy.

The paper also provides a qualitative analysis of data from cross-sectoral tables using instruments based on graph theory. The qualitative interindustry analysis allows us to condense data from the matrix of reproduction flows into a simple and transparent graph. The linkages existing within the economic system can thus be graphically represented. The paper sets out the theoretical basis and presents two case studies for Slovenia based on data for 1993 and 2000. The results obtained indicate that it is not reasonable to apply the qualitative interindustry analysis as the exclusive criterion in shaping economic-political decisions. The main advantage of this method is that it can be used to obtain a comprehensive picture of the economic system's structure.

The principal goal of applying the presented methods is to raise the aggregate production levels in the Slovenian economy. However, there are some other criteria that should be taken into consideration in view of the new development paradigm as set out in the Strategy for the Economic Development of Slovenia (2001), and the concept of sustainable economic development. We find that the key sectors identified do not meet other social and, above all, environmental criteria entailed by the concept of sustainable development. These industries are characterised by a low level of the generated value added per employee, low to medium professional competence of workers, low technology level of production programmes, high energy intensity and harmful environmental impacts. Slovenia should therefore establish a new concept for the development of industrial policy in future, capable of promoting the new key sectors and making them the motors of modern sustainable development through a complex and comprehensive innovative and technological overhaul of the Slovenian manufacturing sector.

Key words: Slovenian economy, manufacturing, key sectors, structural changes, input-output tables, quantitative and qualitative interindustry analysis, graph theory, industrial policy, sustainable development.