

Comparing impact of different funding modes

Peter Van Den Besselaar and Stefan de Jong

Research is funded in different ways, and these funding modalities differ in terms of types of research funded, agenda setting mechanisms, scale of research and organization of the decision making about applications. Often, specific funding modes are selected because it is expected that they each are useful for certain research goals. For example, large scale funding programs and large-scale research programs are deployed by the European commission, and in several countries for stimulating mission-oriented research. And small-scale investigator driven programs are often expected to generate new and innovative knowledge.

In the Netherlands, a series of large-scale research programs have been functioning over the last decade, focusing on new technological fields (nano, genomics) and on understanding of complex societal issues (adaptation to climate change, water management and engineering).

In this paper we will evaluate different funding modes in terms of their scientific and societal output and impact. We compare classes of researchers that use different (combinations of) funding sources. Does the research output of the different groups differ in terms of productivity, research topic choice and scientific impact (citations) and societal impact (measured with different indicators)? We focus on climate change research funding, but will use other fields as comparison. The paper ends with a discussion of optimal funding ecologies and their characteristics.

The paper uses a variety of information sources, such as administrative data of programs and bibliometric data.