INTRODUCTION

Science policy is the terrain of “hybrid careers”: important positions in the governance of science are held by researchers who have accumulated experience and recognition in a scientific specialty.

This paper addresses the policy implications of hybrid careers. The main goals are to identify the side effects on:

• Organizational arrangements in science policy
• Ideas implemented in the governance of science

METHODOLOGY

75 professional life stories: hybrid careers in the Spanish R&D system (1975-2004)

Type of positions. Scientists in:
• Administration (universities, public labs)
• Policy making (planning, funding, evaluation)
• Politics (ministries, regional governments)

How to study professional life stories:
• Follow the professional path (CV)
• Focus on key positions along the path
• Get a narrative about decision making experiences - Check it with policy documents

WHY SCIENTISTS GET INVOLVED IN THE GOVERNANCE OF SCIENCE?

• Technical reasons: management experience is better acquired working as a researcher.
• Institutional reasons: acknowledged researchers are more legitimated for decision making in science policy.

Consequences on the profile of science policy positions:
• Few science policy professionals
• High rotation
• Prevalence of tacit knowledge

WHAT HAPPEN TO SCIENTISTS IN SCIENCE POLICY POSITIONS?

Scientists out of research work may lose key resources.

3 social mechanisms:
• Organizational: loss of human and financial resources
• Cognitive: loss of scientific competence
• Institutional: loss of recognition by peers

Reactions of researchers in hybrid careers:
• The try to keep in touch with the lab.
• They do not spend much time far from the research work

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KEY FINDINGS

Side effect 1: The policy implications of high rotation

Most scientists in hybrid careers go back to their labs • They carry the tacit knowledge with them: few codified experiences

Consequences of high rotation:
• Lack of organizational learning
• Lack of organizational innovation
• Path dependency

Empirical evidence: Spanish National R&D funding scheme: little change since the 80s:
• Small projects
• Individual orientation
• Bottom up procedures
• Little strategic planning

Side effect 2: The policy implications of appointment bias

Fresh appointments come from prestigious “disciplinary” research labs (mostly biologists, chemists, physicists)

Senior researchers have management experience only in their own specialties and research sites • They usually bring “S&T policy ideas back in”

Consequences of appointment bias:
• Implementation of policy tools from specific specialties
• Institutional diffusion of policy practices
• Isomorphism

Empirical evidence: evaluation agencies in the Spanish R&D system
• Diffusion of evaluation tools from bio-sciences and physics.
• Rise of standardized indicators at individual and team level.

CONCLUSIONS

Hybrid careers can have important consequences for the governance of science. Unintended effects should be taken into account.

Crucial dilemma:
• How many science policy professionals are needed?
• Should scientists get involved in science policy on a regular basis?
• What is the optimal balance?