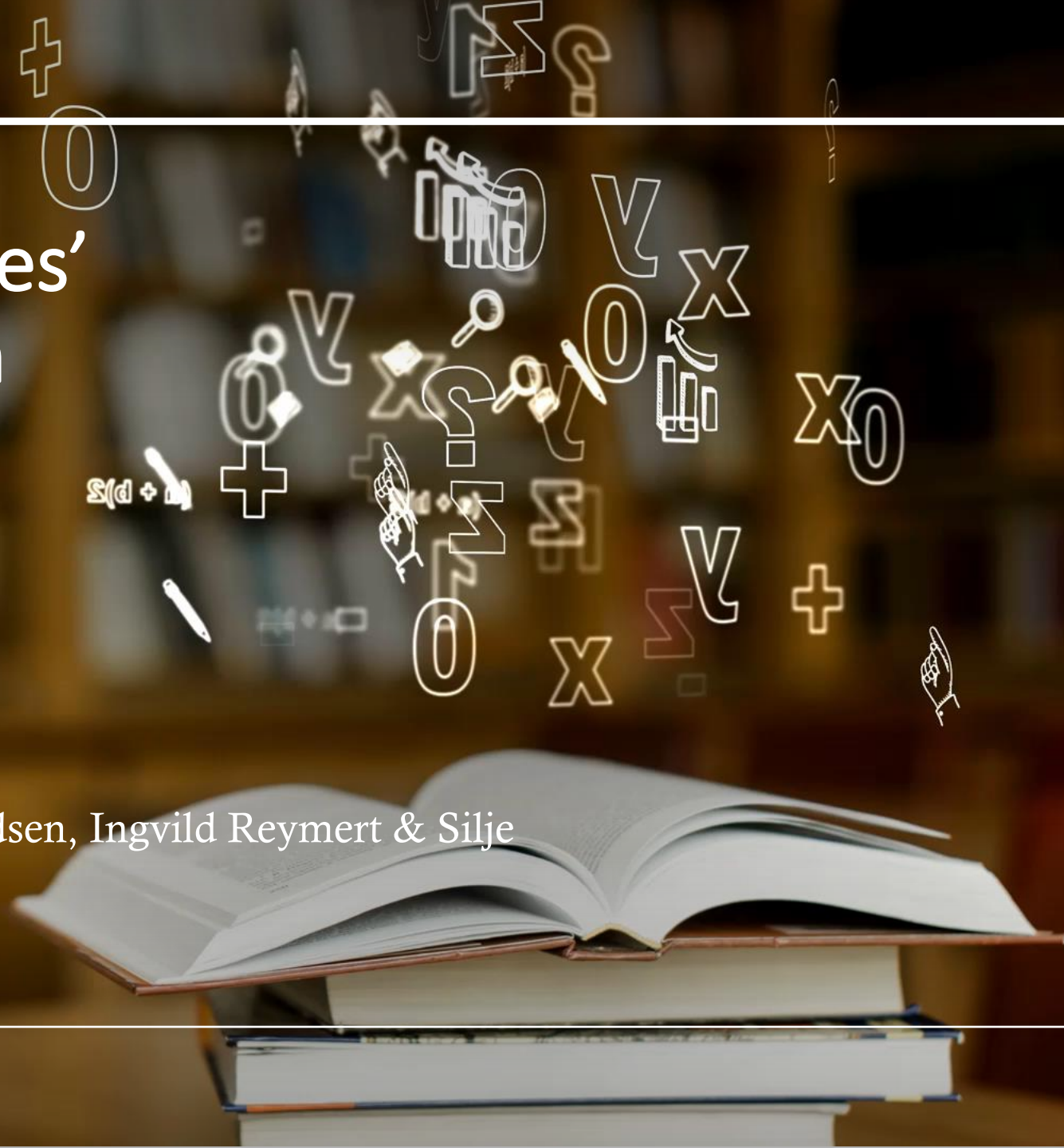

Exploring ministries' use of research in policymaking - knowledge stock, circulation, or routines?

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BACKGROUND

- High expectations for government bodies to make decisions based on updated and scientific (or research-based) knowledge and evidence
 - Policy contexts and government bodies are very different although subject to similar “expectations” – yet little is known about this from a “use of research” perspective
 - Different set-ups of the “knowledge infrastructure”, legal demands and normative expectations, characteristics of employees, policy issues and responsibilities
 - Research, science and evidence – unclear categories from a user perspective
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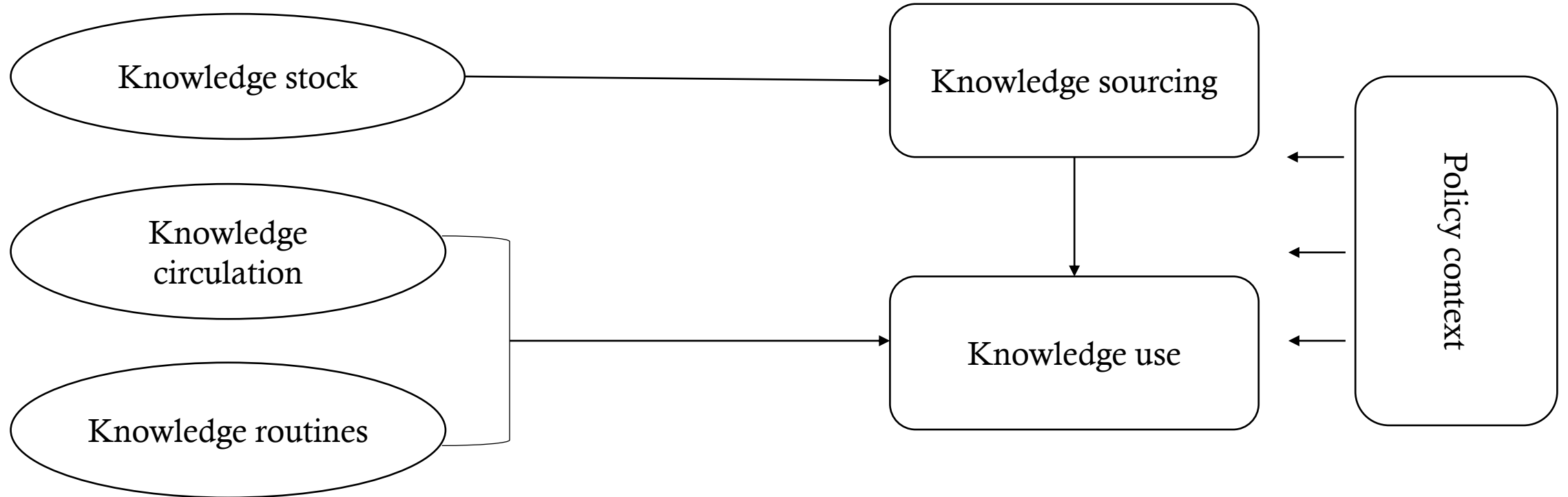
PERSPECTIVES

- Studies of research and evaluation
 - Studies of expertise
 - Public administration
 - Health services, health policy and evidence
 - Knowledge management, organisational perspectives and similar
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RESEARCH QUESTION

- *Which organisational characteristics are related to how government bodies use research in policymaking, and are they important for all aspects of research use?*
 - Capacity and capabilities in public organisations likely influence how government bodies use research as part of policy making, but these are also related to specific contextual conditions
 - Three dimensions of capabilities: knowledge stock (passive capacity) and knowledge-handling actions and routines (realised capabilities)
 - These can be assumed to be related
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ARGUMENTS – EXPECTED CONFIGURATIONS



EMPIRICAL STUDY & CASES

- 14 Norwegian ministries (all but one)
- Data sources:
 - Registry data (personnel files)
 - Funding data (from national budget analysis) (2017)
 - Survey data (2019+)
 - Contextual information (documents, interviews)

Ministry	Employees (2018)
Ministry of labour and social affairs	195
Ministry of children and families	153
Ministry of finance	290
Ministry of defence	426
Ministry of health and care	225
Ministry of climate and environmental affairs	236
Ministry of local government and regional development	380
Ministry of culture	153
Ministry of education and research	327
Ministry of agriculture and food	139
Ministry of trade, industry and fisheries	346
Ministry of oil and energy	157
Ministry of transport	170
Ministry of foreign affairs	838

METHODS

- Main data source: Survey of government employees (Thune, Simensen & Gulbrandsen, 2020)
 - Additional data: Registry data, state administration survey (Christensen et al.), analysis of state budget (Kallerud et al.), documents and interviews
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THE GOVERNMENT EMPLOYEE SURVEY

- The use of scientific (or «research-based») knowledge as part of government work (policymaking)
 - 1600 responses (two rounds); 28% response rate; 14 ministries & 8 state-level government organisations («directorates»).
 - Individual level and «perceptions» of organisation in which they work (two separate parts of the survey).
 - In this paper: three main questions (several response items): sourcing knowledge (consulting scientific knowledge as part of work, participation in knowledge diffusion activities and routines in organisation), use of scientific knowledge in own work, positions (work tasks) and education level (employees), R&D budget
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KNOWLEDGE STOCK

(CAPACITY/PASSIV)

Educational level	Percent
PhD (or similar)	6
Master (or similar; at least 5 years HE)	70,4
Bachelor (or similar; at least 3 years HE)	11,5
Secondary	3,4
Other	2,1
Non-response	6,5
Total	100
Positions in «analytical» and «research-related work»	17,2

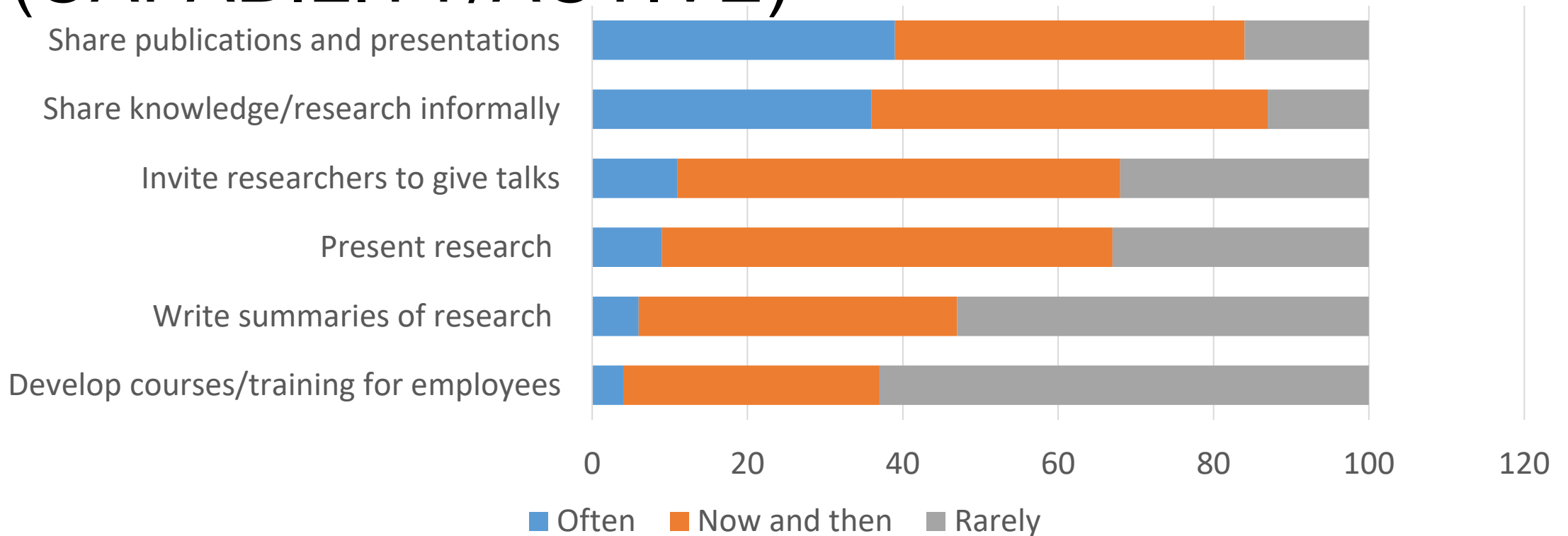
Tabell 3.1 FoU-bevilgninger i saldert budsjett for 2016 og bevilgninger til Forskningsrådet per departement. Mill. kroner.

Departement	FoU	FoU/budsjett	NFR	NFR/FoU
Kunnskapsdepartementet [#]	16 240	29,1 %	3 894	24 %
Helse- og omsorgsdepartementet	4 560	2,9 %	361	8 %
Nærings- og fiskeridepartementet	3 812	38,5 %	2 317	61 %
Utenriksdepartementet	1 568	3,9 %	338	22 %
Forsvarsdepartementet	1 140	2,3 %	5	0 %
Kommunal- og moderniseringsdepartementet	1 086	0,6 %	141	13 %
Olje- og energidepartementet	1 046	15,4 %	1 004	96 %
Klima- og miljødepartementet	856	9,6 %	390	46 %
Landbruks- og matdepartementet	661	3,8 %	483	73 %
Samferdselsdepartementet	332	0,6 %	140	42 %
Arbeids- og sosialdepartementet	282	0,8 %	137	48 %
Kulturdepartementet	199	1,5 %	25	13 %
Barne- og likestillingsdepartementet	163	0,4 %	16	10 %
Finansdepartementet	128	0,3 %	22	18 %
Justis- og beredskapsdepartementet	84	0,2 %	32	38 %
Sum departementene	32 157	2,0 %	9 304	29 %
Diverse	534		192	
Total sum	32 691		9 495	

[#] Inkluderer administrasjonsbevilgning på 280 mill. kroner.

Kilde: NIFU og Forskningsrådet.

KNOWLEDGE CIRCULATION (CAPABILITY/ACTIVE)



KNOWLEDGE ROUTINES (INTERNAL INFRASTRUCTURES)

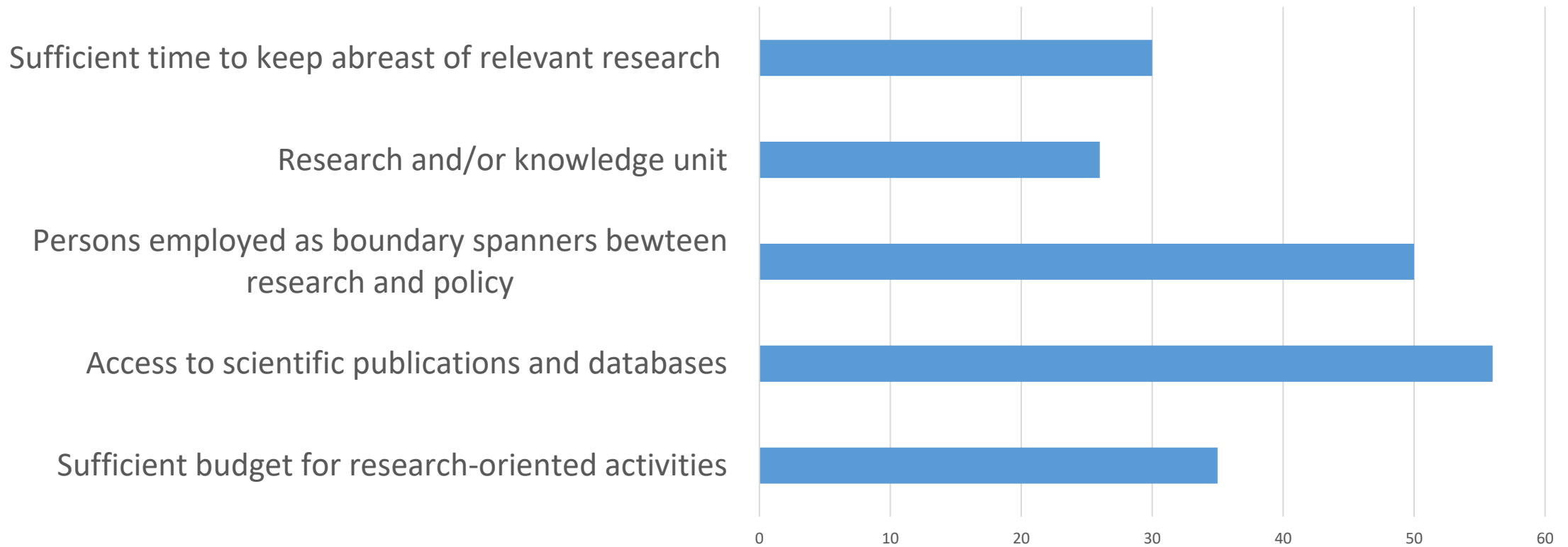


Figure 4: Distribution of responses to whether organisations have routines in place to support the use of knowledge in policymaking (survey to policymakers; in percent; respondents who agree).

SOURCING RESEARCH AS PART OF JOB

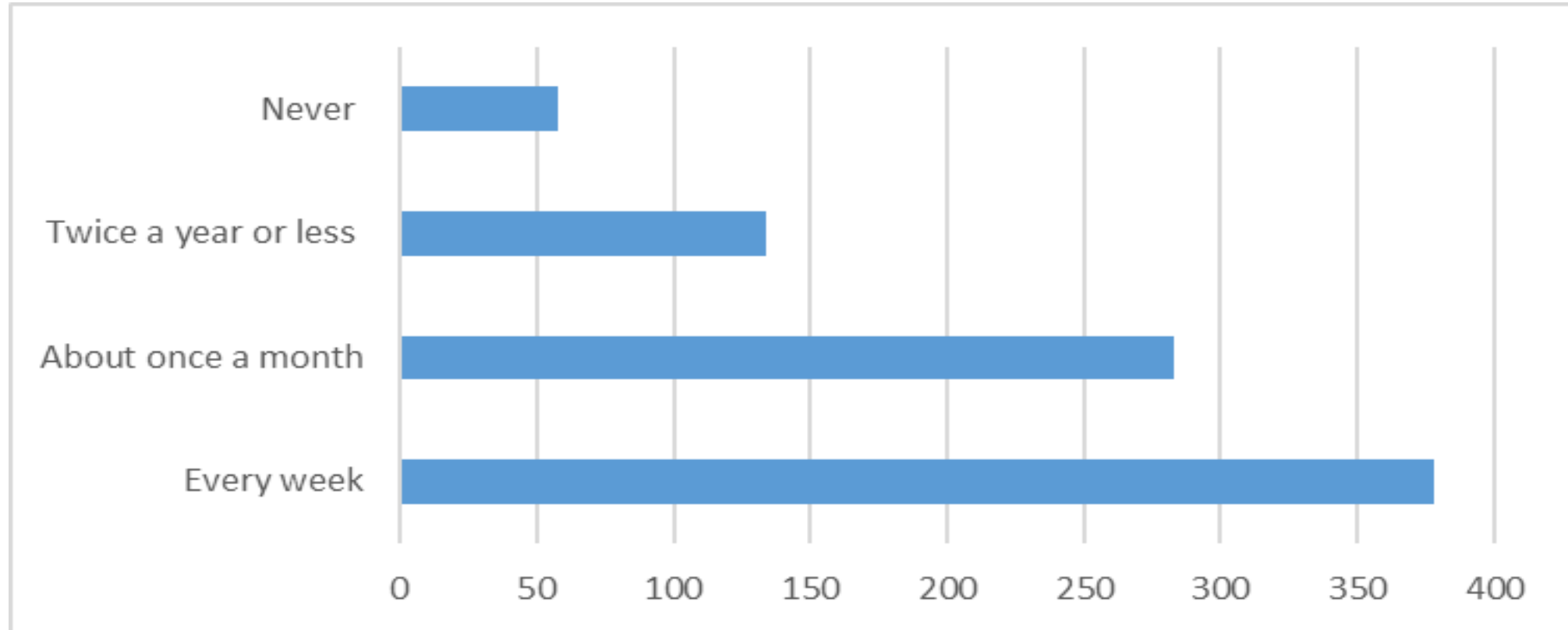


Figure 1: Frequency of consulting research as part of policy work. Data source: survey to government employees. Here shown only the responses from Ministry employees (853)

USE OF RESEARCH IN OWN WORK

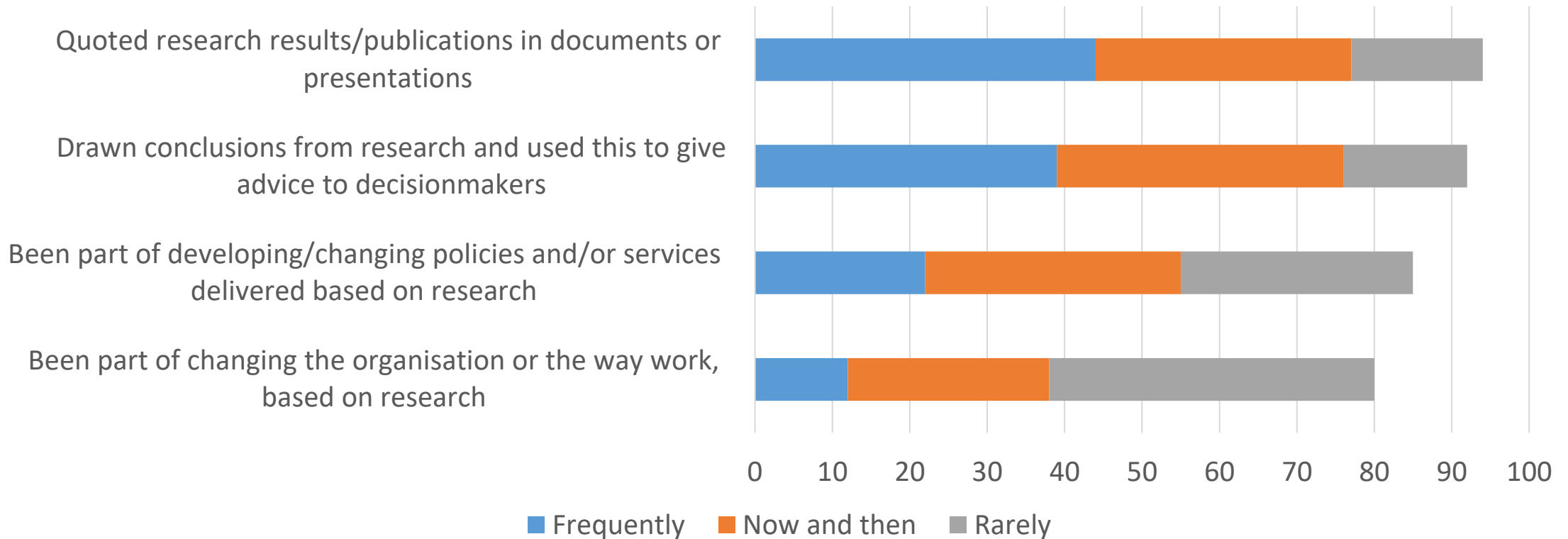


Figure 2: Use of research in policy work (survey to government employees). Responses in percent.

NEXT STEPS

- Qualitative Comparative Analysis (QCA) (Ragin, 1987; Rihoux and Ragin, 2012) to examine how the knowledge conditions are related to different outcomes
 - Configurational analysis – comparing patterns (“configurations”) of variables (“conditions”) across cases
 - Qualitative/interpretative analysis guided by simple descriptive statistics (yes/no – Boolean reasoning) and qualitative data
-

CONDITIONS (CODING SCHEME)

- Passive/capacity in organisations – “knowledge stock”
 - Human resources: More than average PhD holders (or more than 3%) 1; all other 0; More than 10% responses in analysis/research functions=1; all other 0
 - R&D resources: More than average investment in R&D (more than 10%)=1; all other=0
 - Active capabilities
 - Knowledge circulation: Proportion of responses above average; summarised responses on 6 items =1; all other 0
 - Knowledge routines: Proportion of responses above average; summarised responses on 4 items =1; all other 0
 - Knowledge sourcing: Proportion of frequent «sourcers» per organisation
 - Knowledge use: Proportion of “advisors to decision-makers”
-

CONFIGURATIONS (EXAMPLE OF THE ANALYSIS)

Case	Stock 1	Stock 2	Circulation	Routines	Sourcing	Use
Ministry 1	1	0	1	1	1	1
Ministry 2						
Ministry N	0	0	0	1	1	0

Example in sample:
Ministry of health and welfare: Ministry who has a high level of highly educated employees, but limited own investment in R&D. Often source research externally and have well developed internal routines and structures. These patterns «predict» that they are high knowledge users

Interpreting patterns: Guided by documents and interviews

DISCUSSION

- Comparing ministries – «apple and pears»-problem
 - Reductionist approach – but enable to see some broader patterns
 - High level of sourcing and use – response-bias issues
 - Individual variation – organisational similarity? (remove some variables – the most «individualistic ones»)
 - Some «routine» variables vary significantly – most promising for comparative analysis?
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THANK YOU FOR LISTENING!

Comments and questions are welcome

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