

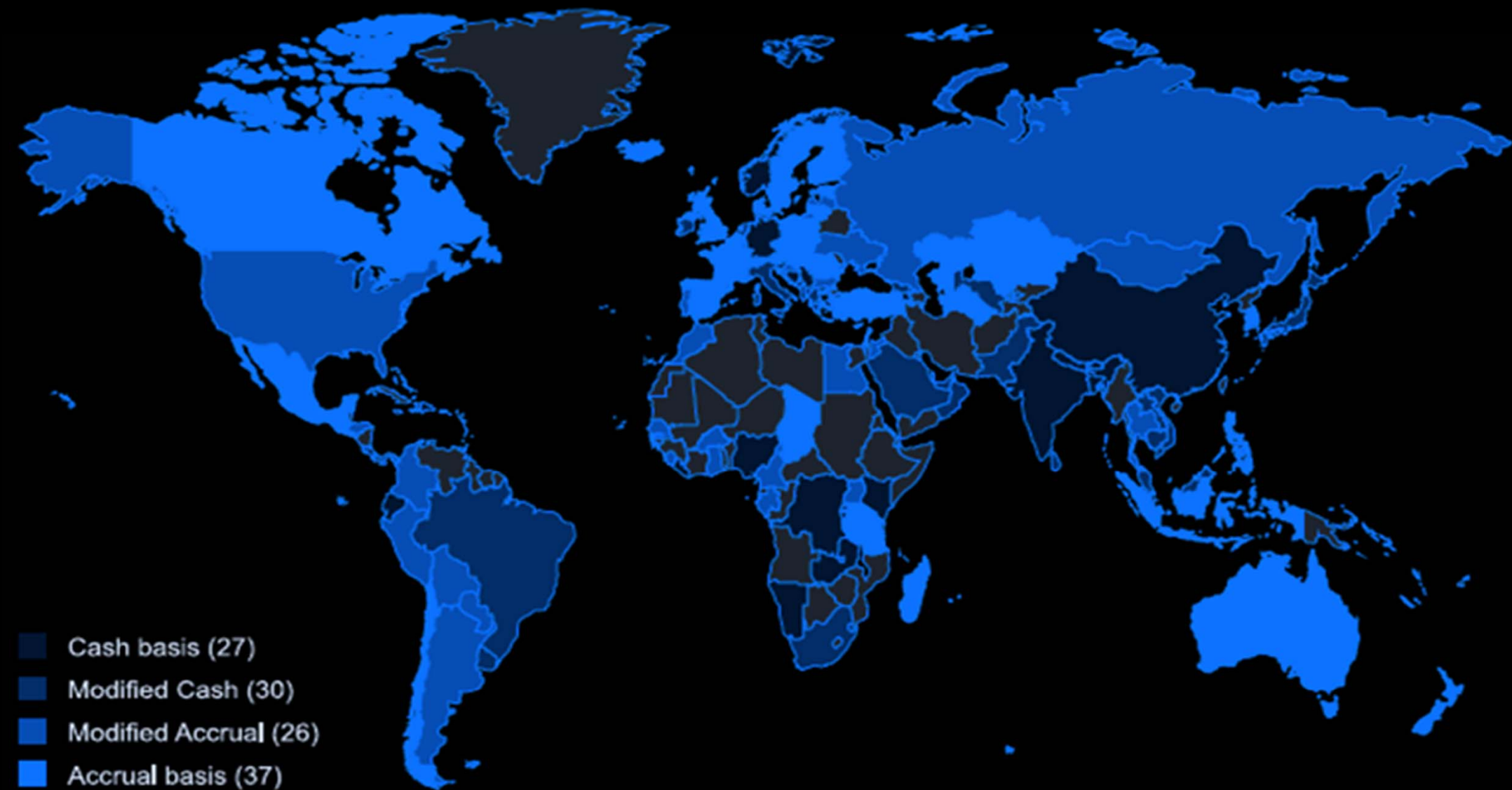
EGPA PSG XII Spring workshop 2018

Cui Bono Accrual Accounting? A German Perspective

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International perspective on accounting in the public sector

Path towards Accruals?



International Perspective on Accounting in the Public Sector Europe (Central Level)



	Accounting		Budget	Status of Reform (OECD 2017)			
	Mode	Based on IPSAS?	Mode	Finished	In Progress	planned	Not planned
Belgium	Accrual		Cash		Yes		
Bulgaria	Accrual		Cash	Yes			
Denmark	Accrual	Yes	Accrual	Yes			
Germany	Cash		Cash				Yes
Estonia	Accrual	Yes	Mixed	Yes			
Finland	Accrual	Yes	Mixed	Yes			
France	Accrual		Cash	Yes			
Greece	Mixed		Cash			Yes	
Ireland	Cash		Cash			Yes	
Italia	Cash		Cash		Yes		
Croatian	Accrual		Cash	Yes			
Latvia	Accrual	Yes	Cash		Yes		
Lithuania	Accrual	Yes	Cash		Yes		
Luxemburg	Cash		Cash			Yes	
Malta	Accrual	Yes	Cash		Yes		
Nederland	Cash		Cash				Yes
Austria	Accrual	Yes	Accrual	Yes			
Poland	Accrual		Cash	Yes			
Portugal	Accrual	Yes	Cash		Yes		
Rumanian	Accrual		Cash		Yes		
Sweden	Accrual	Yes	Mixed	Yes			
Slovakia	Accrual		Cash	Yes			
Slovenian	Mixed		Cash			Yes	
Spain	Accrual	Yes	Cash	Yes			
Czechia	Accrual		Cash		Yes		
Hungary	Accrual		Cash	Yes			
UK	Accrual	Yes	Accrual	Yes			
Cyprus	Accrual	Yes	Cash		Yes		

Accrual

Cash

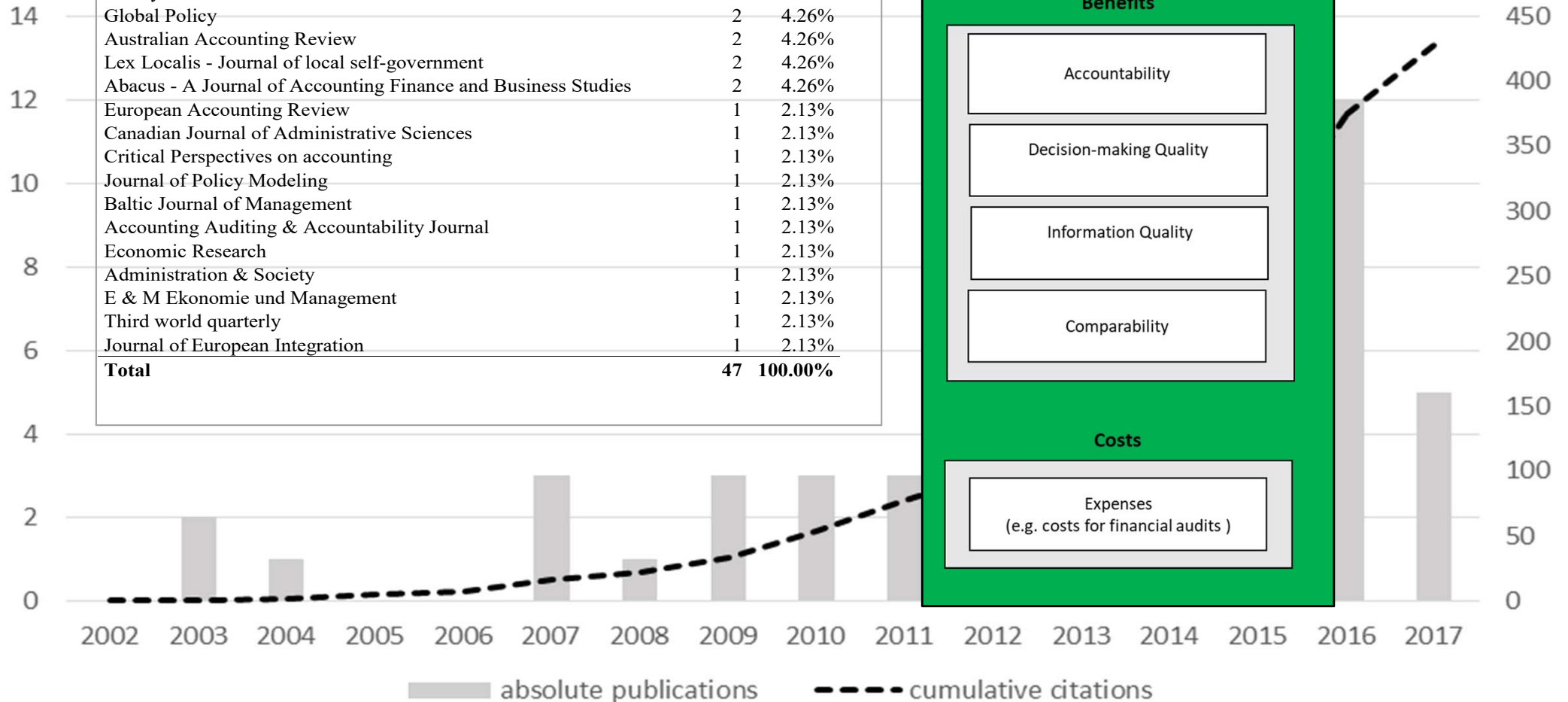
Mixed

Yes

Number of Publications and Citations on IPSAS by Year

Note: **N= 47**; based on Data drawn from *Web of Science* (01/2018)

Journal	Freq.	%
Public Money & Management	12	25.53%
International Review of Administrative Sciences	10	21.28%
Public Administration and Development	3	6.38%
Transylvanian Review of Administrative Sciences	3	6.38%
Global Policy	2	4.26%
Australian Accounting Review	2	4.26%
Lex Localis - Journal of local self-government	2	4.26%
Abacus - A Journal of Accounting Finance and Business Studies	2	4.26%
European Accounting Review	1	2.13%
Canadian Journal of Administrative Sciences	1	2.13%
Critical Perspectives on accounting	1	2.13%
Journal of Policy Modeling	1	2.13%
Baltic Journal of Management	1	2.13%
Accounting Auditing & Accountability Journal	1	2.13%
Economic Research	1	2.13%
Administration & Society	1	2.13%
E & M Ekonomie und Management	1	2.13%
Third world quarterly	1	2.13%
Journal of European Integration	1	2.13%
Total	47	100.00%



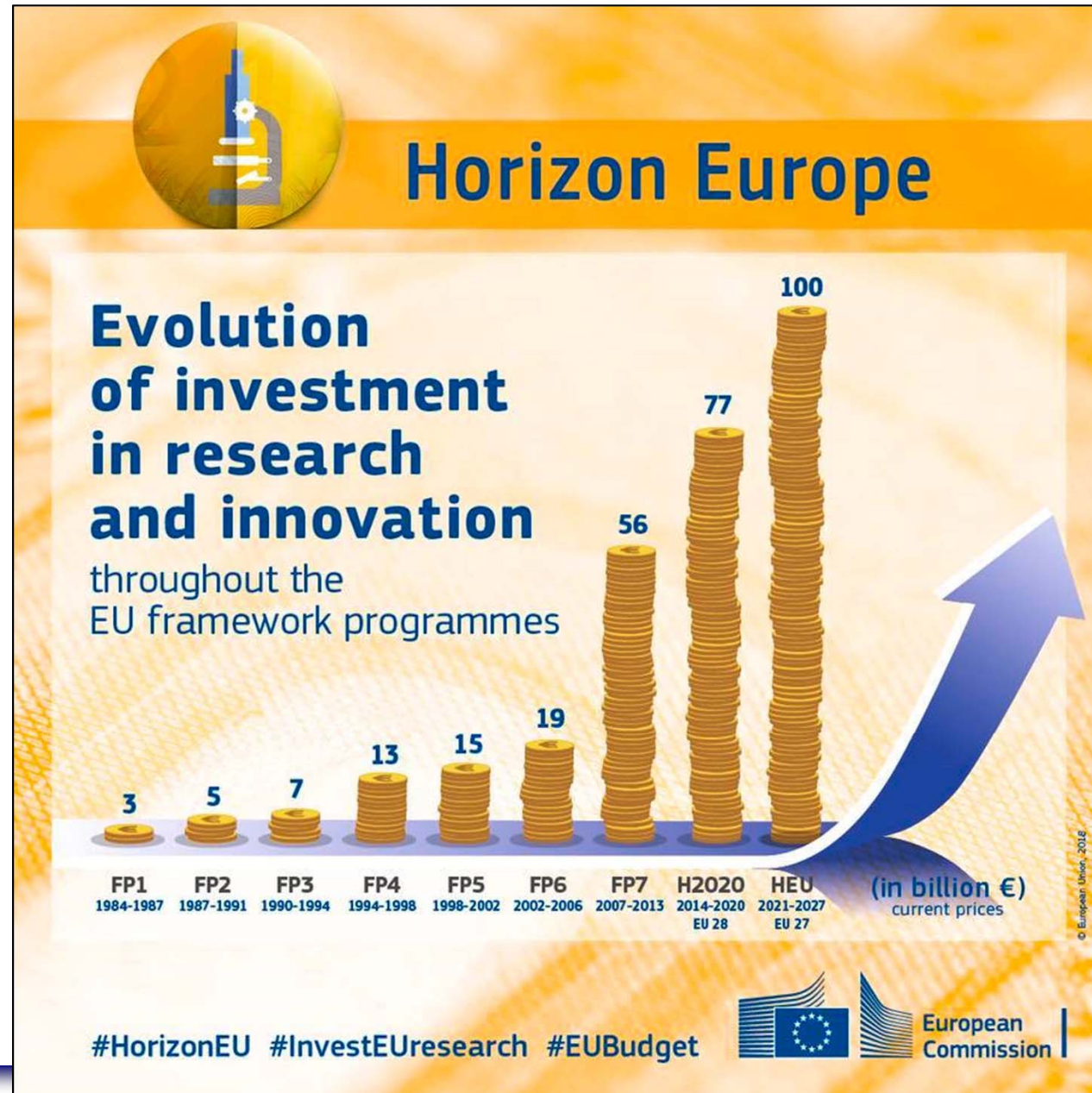
Number of Research Projects from EU?

Horizon Europe announced at 2nd May 2018

Calls on:

- **Accountability**
- **Transparency**
- **Digital Finance**

Consequences for
Research on
Public Financial
Management and
Accrual Accounting?





Cities and Counties: Local Level in Germany (82 mil. Inhabitants)

State	Deadline of Change to Accruals	Number of Cities + Counties
Baden-Württemberg	1.1.2020	All(1.136)
Bavaria	Option Model: 1.1.2007	95 of 2.127
Berlin	Cash Accounting	0
Brandenburg	1.1.2011	All (432)
Bremen	1.1.2008	1 of 2
Hamburg	1.1.2013	All (1)
Hesse	1.1.2015	All (447)
Mecklenburg Western Pomerania	1.1.2012	All (763)
Lower Saxony	1.1.2012	All (1.031)
North Rhine-Westphalia	1.1.2009	All (427)
Rheinland-Pfalz	1.1.2009	All (2.329)
Saarland	1.1.2010	All (58)
Saxony	1.1.2013	All (441)
Saxony-Anhalt	1.1.2013	All (233)
Schleswig-Holstein	Option Model: 1.1.2007	502 of 1.121
Thuringia	Option Model: 1.1.2007	42 of 866
Total (2015)		7.938 of 11.415

→ 61,9 Mil. Inhabitants in Germany: Access to Local Government Balance Sheets (Accruals)

Accrual Accounting on the Local Level: The Situation of **German Municipalities**

- Prominent reformelement under the umbrella of **New Public Management (NPM)**
- Revenues and expenditures allocated to the **period** in which there are earned and used
- Enhance the information about the **value of assets** held by a municipality, the claims on these resources by others, and show more clearly the exposure of debts (presentation of **balance sheets** / financial reports)
- The aim is to provide managers with better information for **decision making** and being more **accountable** for taxpayer/capital 'donors'

- **Proclaimed benefits:** Promising more transparency, accountability, and therefore also more effectivity and efficiency in contrast to the **traditional cash accounting regime** (cameralistics)

No Clear Advantages for Municipalities in Using Accrual Accounting

- Although this promised benefits of the **implementation** of accrual accounting **are not self-evident**
- Instead of advantages municipalities often experiencing **multiple problems** with implementing and using accrual accounting
- Some researchers' emphasis that the cameralistic accounting regime provides sufficient information and **accrual accounting is too complex** for the use in a public administration context

Paying More Attention to Prerequisite of Implementing Accrual Accounting

- One approach to resolve this contradiction is to pay more attention to internal and external requirements for the **acceptance** of new systems
- Understanding the **prerequisite for the acceptance** of new systems is important to improve the functionality of systems

- **Laws can only be the enabler of a change but are not sufficient for a “lived reform”**: What makes change happen?
(an **Accounting Innovation** dilemma)

- Municipals can have implemented accrual accounting but their **sophistication** in using accrual accounting can vary

Degree of **Sophistication** of Accrual Accounting in Municipalities

Ceremonial Institutionalisation

Accrual accounting is implemented formally whereas the information from the old cameralistic system is still used for monitoring compliance with legality and for decision-making



Instrumental Institutionalisation

Accrual accounting is not only correctly implemented and delivers accurate values, but also information is used and is seen as useful for decision-making

Accounting practices are usually slow to change and it is the question which factors support or hinder such process of change from ceremonial to instrumental institutionalisation and how this in turn influence the performance.

Nitzl, Hilgers, Hirsch (2018)

So far in the Literature...

- The literature of using accrual accounting in public sector has developed from **pure anecdotes** to more profound systematic studies, mainly **case studies**
- There is still a great gap to illustrate factors that determine the **use of accrual accounting** in a public sector context. (*change*)
- There is still a great gap to illustrate the consequences of the **use of accrual accounting** in a public sector context. (*performance*)

Research Questions

Nitzl, Hilgers, Hirsch (2018)

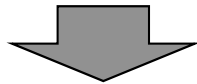
RQ1: What are the relevant factors that drive the sophistication of accrual accounting in municipalities (**factors**)?

RQ2: Is a higher sophisticated use of accrual accounting followed by a higher performance of municipalities (**results**)?

Influencing Factors on the Degree of Sophistication of Accrual Accounting

Organization

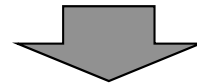
Routines can be very flexible however these include such elements as informal ways as well as team working, in contrast to formalized, hierarchical procedures for decision-making. As more are organisational activities are routinized as more the process of change is slow. And as more as routines are formalised as more difficult it will be to change such formalization.



- *Formalization*
- *Vertical Differentiation*
- *Centralisation*

Context

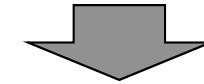
According to the institutional theory, the adoption of accrual accounting can be viewed as a process of formal compliance with the wishes and expectations of the external environment and stakeholders. It assumes that organizations react to demands from their institutional environments and endorse structures and practices that have high social value as answers to external changes in expectations and formal rules.



- *Fiscal Stress*
- *Political Competition*
- *Political Culture*
- *Legal System*

Resources

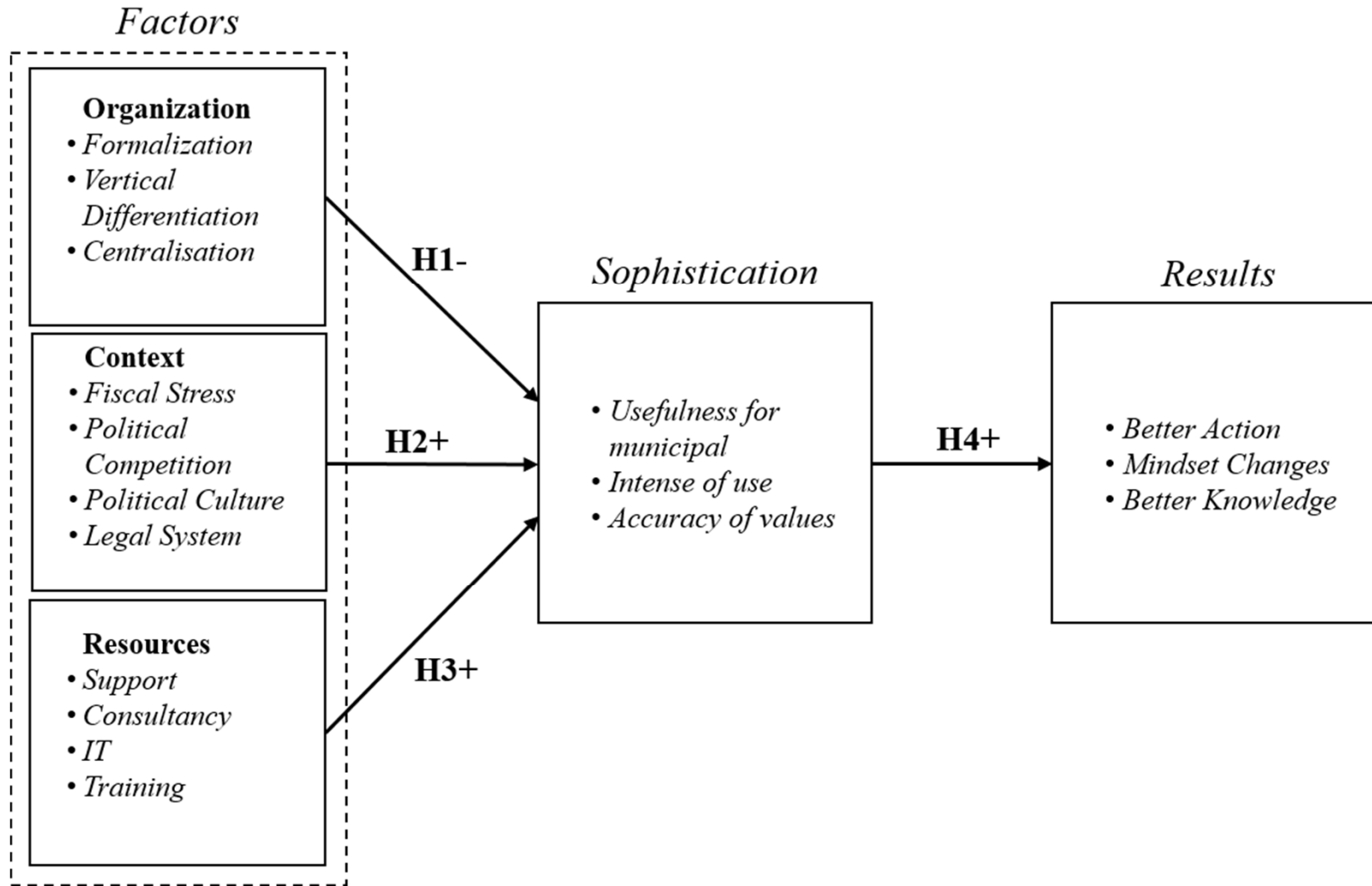
Resources involves all intangible or tangible assets, such as human resources, financial resources, political resources, and administrative resources that enable an organization to conceive of elements that improve performance. An organizational change requires the redistribution of scarce resources to the change project. For example, training to improve individual skills play an important part in routinization of behaviour.



- *Support*
- *Consultancy*
- *IT*
- *Training*

Operationalization

Research Model



Hypothesis

*H1: A more **bureaucratic (mechanistic) organization** has a negative influence on the level of sophistication of accrual accounting in a municipality.*

(Kuhlmann et al., 2008; Pina et al., 2009; Pugh, Hickson, Hinings, & Turner, 1968).

*H2: A higher **contextual pressure** has a positive influence on the level of sophistication of accrual accounting in municipalities.*

(Chenhall, 2003, 2007; Lüder, 1992).

*H3: A higher **resource foundation** of accrual accounting has a positive influence on the level of sophistication of accrual accounting in municipal administrations.*

(Barney, 1991; Bryson, Ackermann, & Eden, 2007).

*H4: A higher sophisticated **use of accrual accounting** has a positive impact on the municipal **administration performance (results)**.*

(Hilgers, 2011; Hirsch et al., 2015; Ouda, 2004)



Data Basis

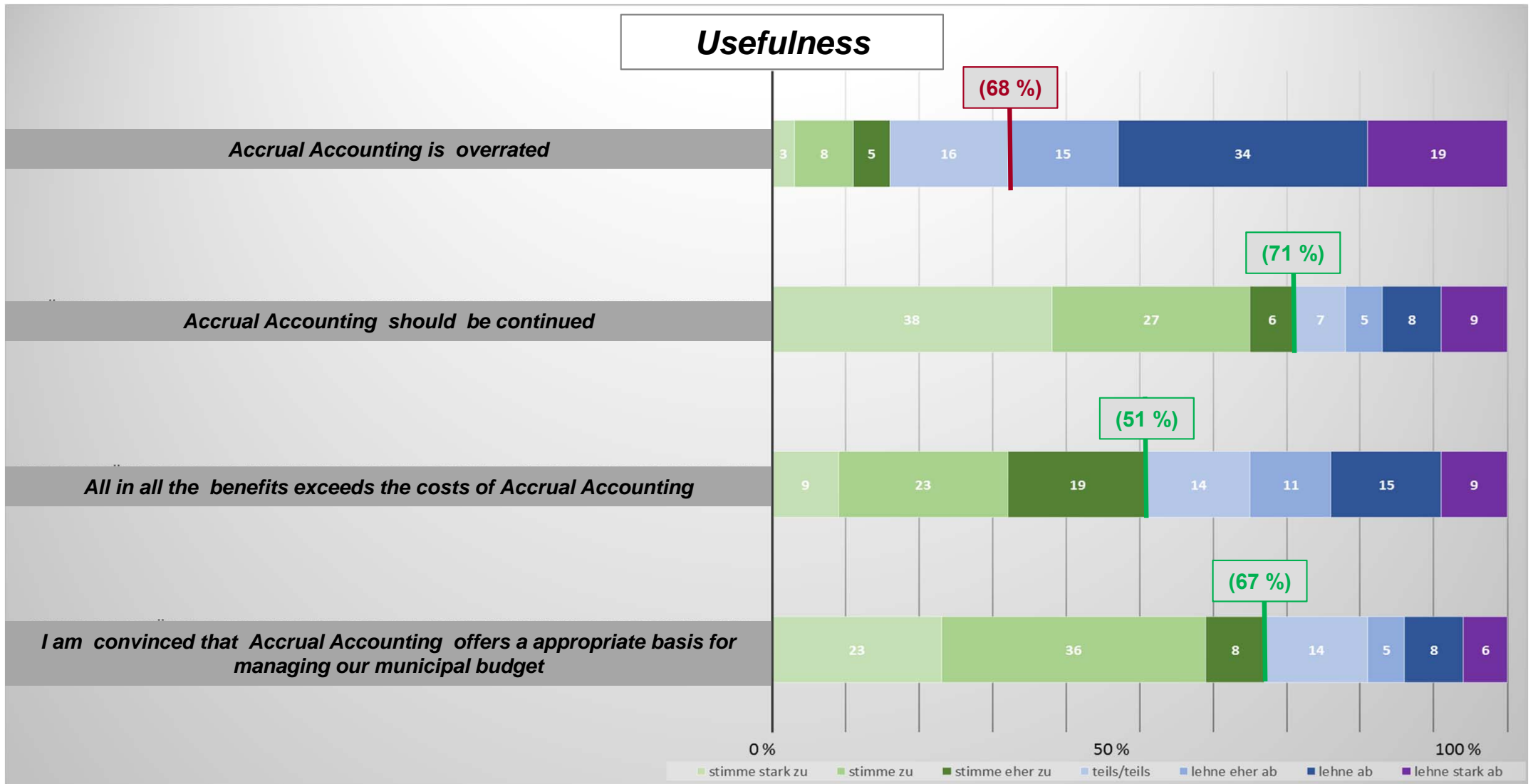
- The implementation of accrual accounting in municipalities is one of the prevalent reform projects in recent years in **Germany**
- Germany is **still in the process** of rearranging, implementing and testing new accrual accounting systems
- The **data collection method was based on a postal survey**. The survey was sent to **public financial managers** (Kämmerer) of all German cities with more than 20,000 inhabitants (**N=1006**)
- Financial managers are the **key informants/players** for the implementation of accrual accounting in a municipality

Responses and Data Analysis

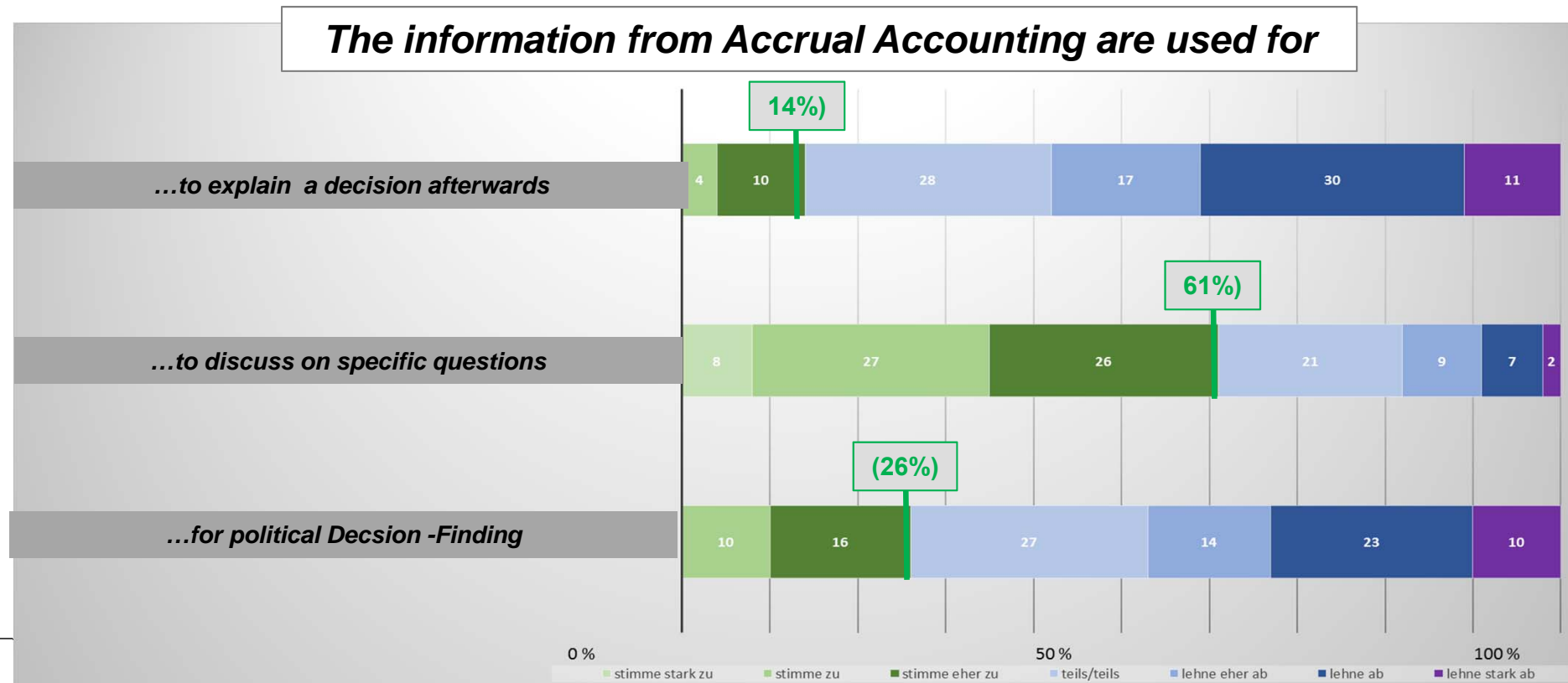
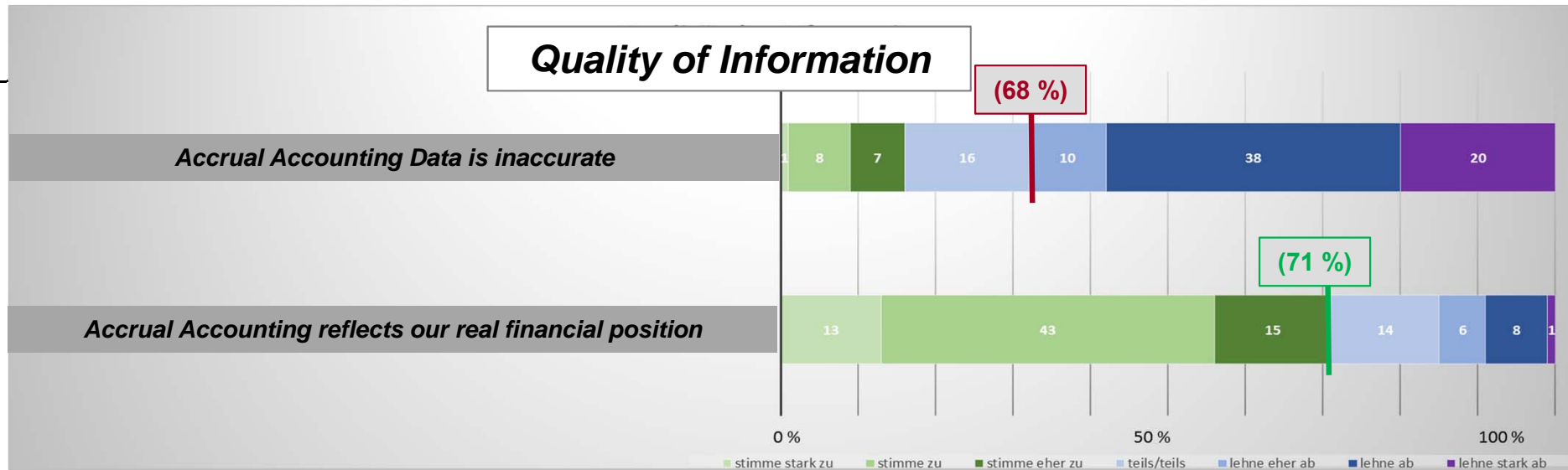
- We received **255** filled in questionnaires which reflects a response rate of **25,6%**
- 43 of the responding financial managers were women, and 208 were men. The **average work experience** of the financial managers was **27.2 years**
- At 1.1%, the amount of **missing values** in the survey is quite low. We therefore used the mean replacement procedure for missing values
- We control for the effect of common measure variances by a marker variable
- For the calculations, we used a **partial least squares structural equation model**

Number of Inhabitants		Age of the Participants	
20,000 to 50,000	140	18 to 29 years	7
50,001 to 100,000	38	30 to 39 years	42
100,001 to 200,000	38	40 to 49 years	62
200,001 to 300,000	20	50 to 59 years	104
300,001 to 400,000	9	more than 60 years	36
more than 400,000	8	missing values	4
missing values	2	Sum	255
Sum	255		

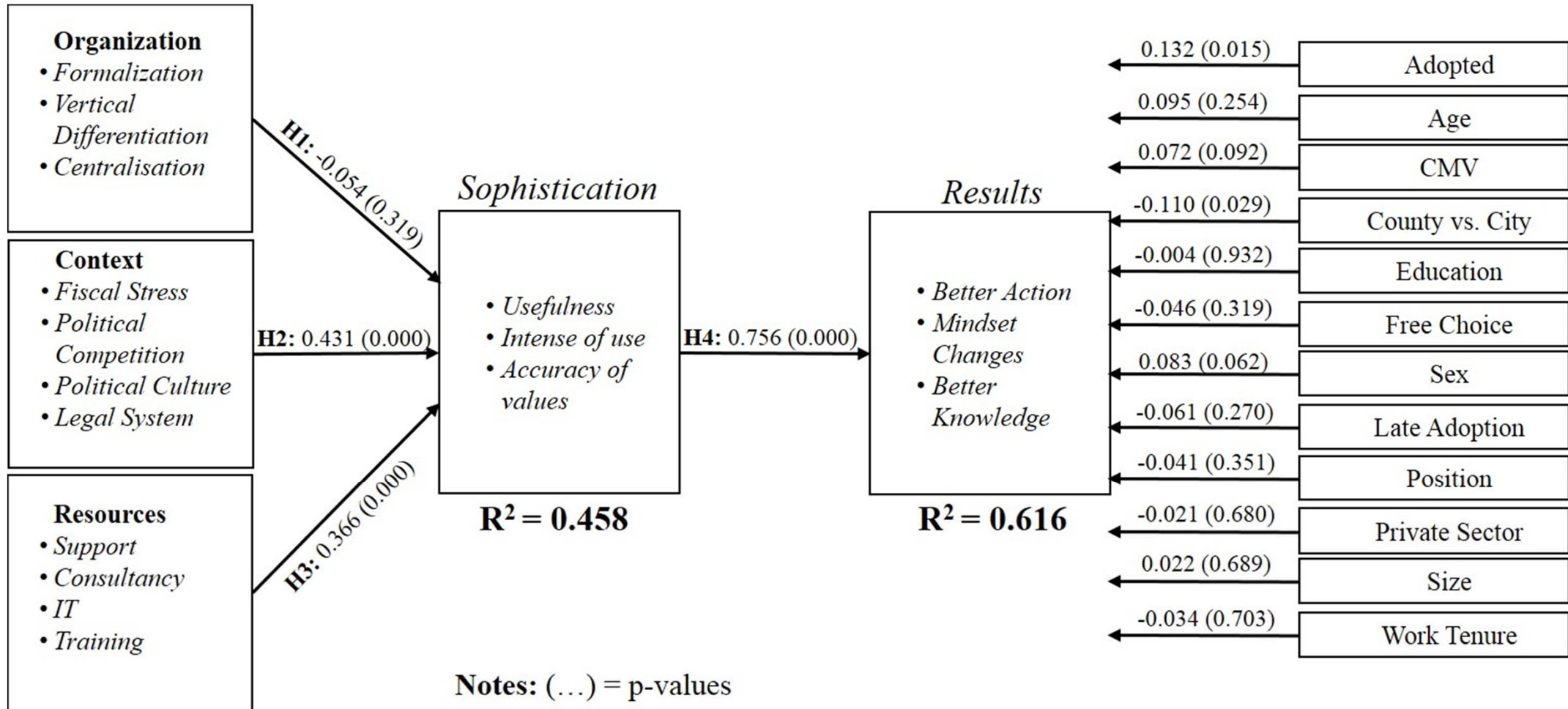
Accrual Accounting in German Municipalities: **Benefit**



Accrual Accounting in German Municipalities: Information



The Results of Factors and Consequences of a More: **Sophisticated Accrual Accounting Use**

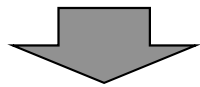


Findings of Influencing Factors on the Degree of Sophistication of Accrual Accounting

Organization \square

H1: Organizational structure has no significant impact

Indicate that the implementation of new accounting rules are only done in ceremonial way which makes a deep organizational change not necessary. The old cash accounting system is still in use for monitoring compliance with legality and for administrative decision making and therefore still routines in municipal organizations.

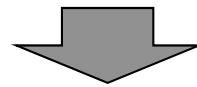


- Drivers**
- Formalization
 - Vertical Differentiation
 - Centralisation

Context $+$

H2: The most important factor is the context

The legal system is the most important factor. An accounting change which challenges more those routines and institutions of the existing routines and institutions are more difficult to achieve the change than that who more in line with them. As more as participants active as more political decision makers use comprehensive information.

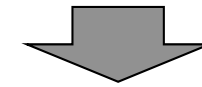


- Fiscal Stress $+$
- Political Competition \square
- Political Culture $+$
- Legal System $+$

Resources $+$

H3: The provision of resources shows a high relevance

Mayoral support is relevant to the degree of implementation of accrual accounting. Technically sophisticated and user-friendly IT systems are required to supply meaningful reports and to enable decision makers in public administrations to acquire a managerial view. Training play an important part in routinization of behavior.



- Support $+$
- Consultancy $+$
- IT $+$
- Training $+$

Not filled in symbols indicates a non significant effect

Legal System Drives the Use of Accrual Accounting

- Organizational structure, which consists of formalization, vertical differentiation, and centralization, **has no significant impact** on how a sophisticated accrual accounting is used in German municipal administrations
- The most important factor is the context in which the local administration is embedded
- The **legal system** has an extremely important influence on the degree to which accrual accounting is used in municipal administrations. Hence, the public accounting literature and actual practice should focus more on the question of how accounting laws are formulated. **A blind transformation of accounting laws from the private sector to the public administration context is not advisable.**

Political Culture Drive the Use of Accrual Accounting

- We found also that accrual accounting is used more intensively when **participants in the political system** are *more active*. Hence, **political decision makers** use the more comprehensive information provided by accrual accounting

- Whereas in theory, accrual accounting can provide greater transparency about the administration's debtness and potential mismanagement, our data show that it is **not** influenced by **municipality's fiscal situation**.
(*At present Banks do not really analyze balance sheet and accrual information*)

Support by the Leader as the Most Important Resource Factor

- The **provision of resources** shows a high relevance for the use of accrual accounting
- **Mayoral support** was strongly relevant to the degree of implementation of accrual accounting in a local administration. This finding reflects the central role of a leader in the success of implementing
- Also the **provision of an IT system** is important. Technically sophisticated and user-friendly IT systems are required to supply meaningful reports and to enable decision makers in public administrations to acquire a managerial view
- Having **trained staff** influences the degree of sophistication of accrual accounting in municipalities, which implies that municipalities must invest financial and time resources for training initiatives on accrual accounting
- **We were not able to show that external consultants** have an impact on the degree of implementation of accrual accounting

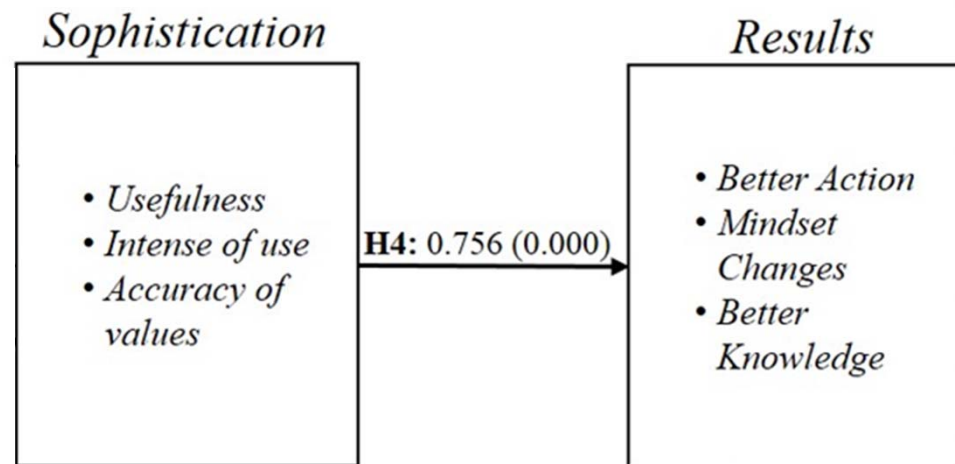
A Higher Sophisticated Use of Accrual Accounting drives the Performance

Our measurement of '**sophistication**' consists of **three dimensions**:

- A **technical** aspect covering the **accuracy of values**,
- the **application aspect** covering the **information use**,
- and an **impact aspect** covering **usefulness**.

A Higher Sophisticated Use of Accrual Accounting Drives the Results

- We found that a more sophisticated implementation of accrual accounting strongly influences the results of the reform



Question: Can ceremonially implementation facilitated an instrumental change? Overtime it could come to a new way of thinking with the right supporting factors which we tried to uncover.

→ **Reforms take time and onward Resources!**



Thank you for your attention!

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