



# ICGEE 2018 : 20th International Conference on Gender Equality in Education

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## Persisting Gender Gap in the Field of Academic Entrepreneurship. The Case of Switzerland

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# Academic Entrepreneurship

## The Entrepreneurial University

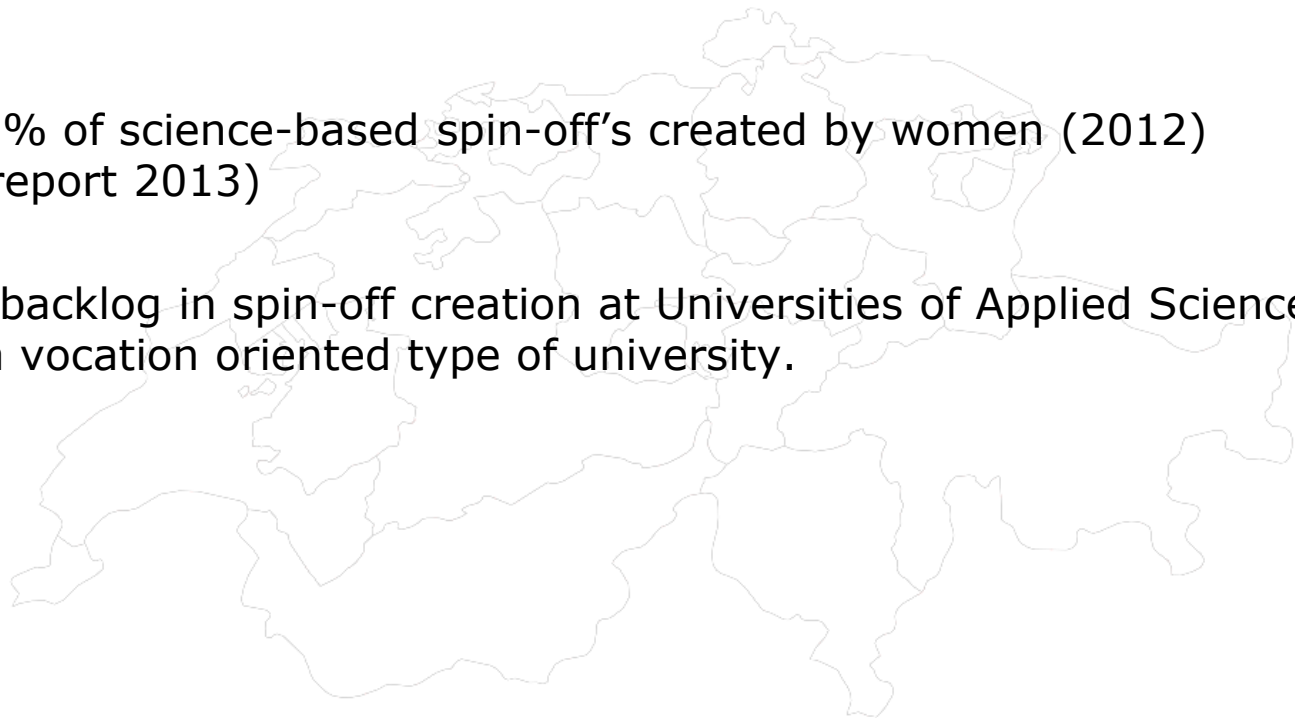
Universities are increasingly important for technical and social innovation; increased exploitation and market-oriented action of knowledge production

## Women in Academic Entrepreneurship?

- The proportion of women in science-based start-ups is very low (Rosser 2012; Micozzi et al. 2015; Lawton Smith et al. 2015).
- Only 9% of the patents, licences and spin-offs at universities were filed by women (2010-13) (European Commission 2016:6).
- Women entrepreneurs dominate in the sector groups human health and social work activities (60%), other service activities (59%), and education (55%) (European Commission, 2014). On the other hand, only 13% of high tech start-ups are led by women (German Startup Monitor, 2015).

# The Case of Switzerland

- Women in Switzerland are almost half as likely to be engaged in entrepreneurial activities as men (f: 5.8% vs. m: 11.1%) (GEM, 2017).
- Only 6.9% of science-based spin-off's created by women (2012) (SwiTT-report 2013)
- Specific backlog in spin-off creation at Universities of Applied Science (UAS), a vocation oriented type of university.



# Theoretical perspectives

Universities can be seen as **institutional actors**, which produce/reproduce gender inequalities also in the **context of spin-off formation** (Roski 2011)

Spin-off formation influenced by

- **Formal rules** (i.e. support strategies, spin-off and gender equality policies, incentives)
- **Informal expectations and practices** (i.e. implicit conceptions of entrepreneurship and routines) (North 1990, 2005; Kirby et al. 2011)

Different **disciplinary cultures and traditions** impact on formal/informal conditions (market orientation, commercialization)

# Research Questions

- How do Swiss Universities of Applied Science (UAS) foster spin-off intentions and activities of women researchers?
- Which informal conditions, implicit rules and expectations can be identified with respect to entrepreneurship and how are they related to gender constructions and practices?
- Which relations can be identified between disciplinary fields and formal/informal conditions for spin-off formation?

# Methods

**Survey** conducted in 2017 and 2018 at six (out of 7) public Universities of Applied Sciences in Switzerland (UAS)

Support measures to foster spin-off intentions and activities of women researchers

N= 6 Universities of Applied Sciences  
N=14 Departments

**Expert interviews** conducted with heads of start-up centers

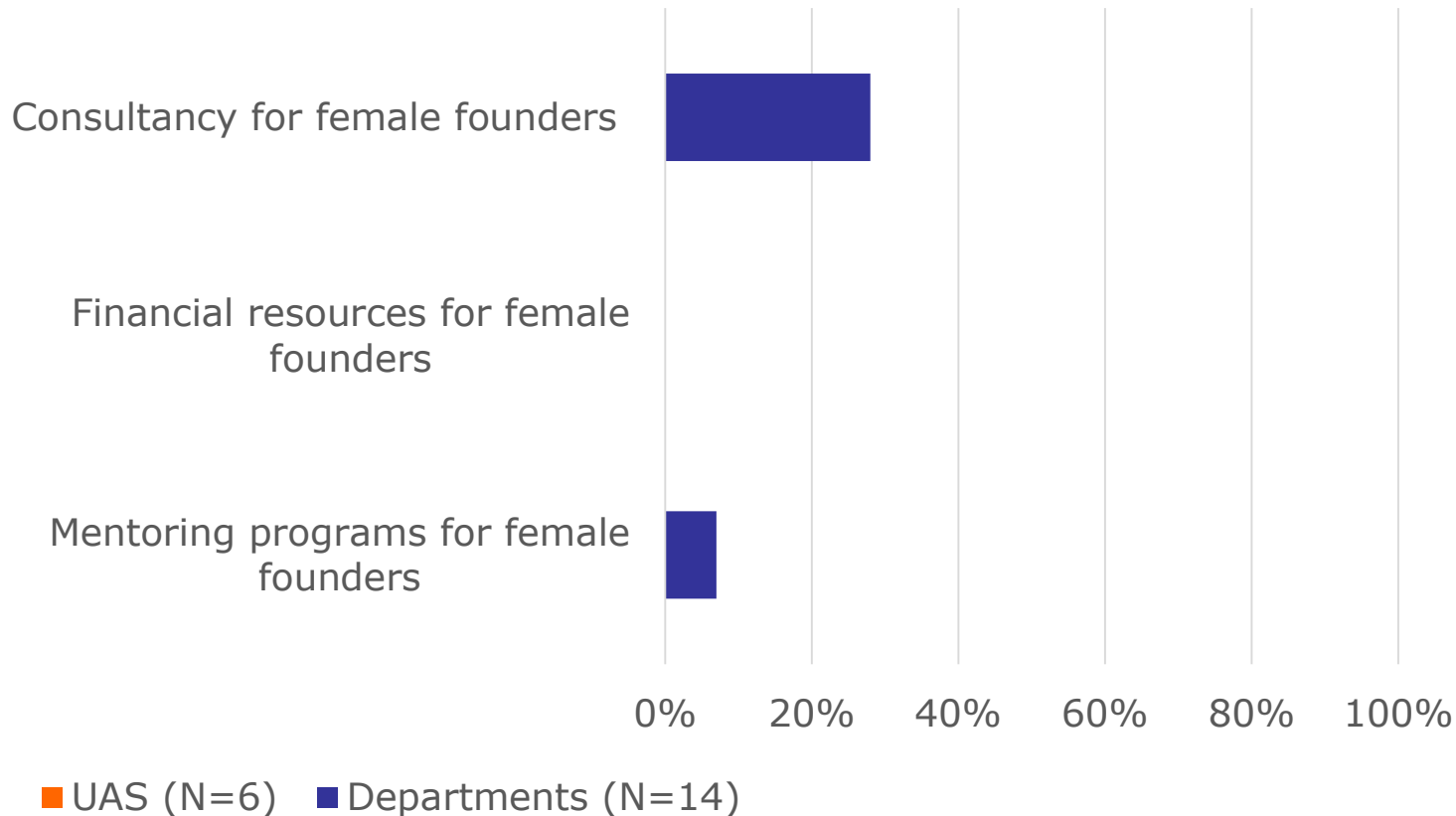
Specific conditions for spin-off activities of women in terms of

- Formal factors (structural barriers etc.)
- Informal factors (mindset )

N=6 heads of start-up centers

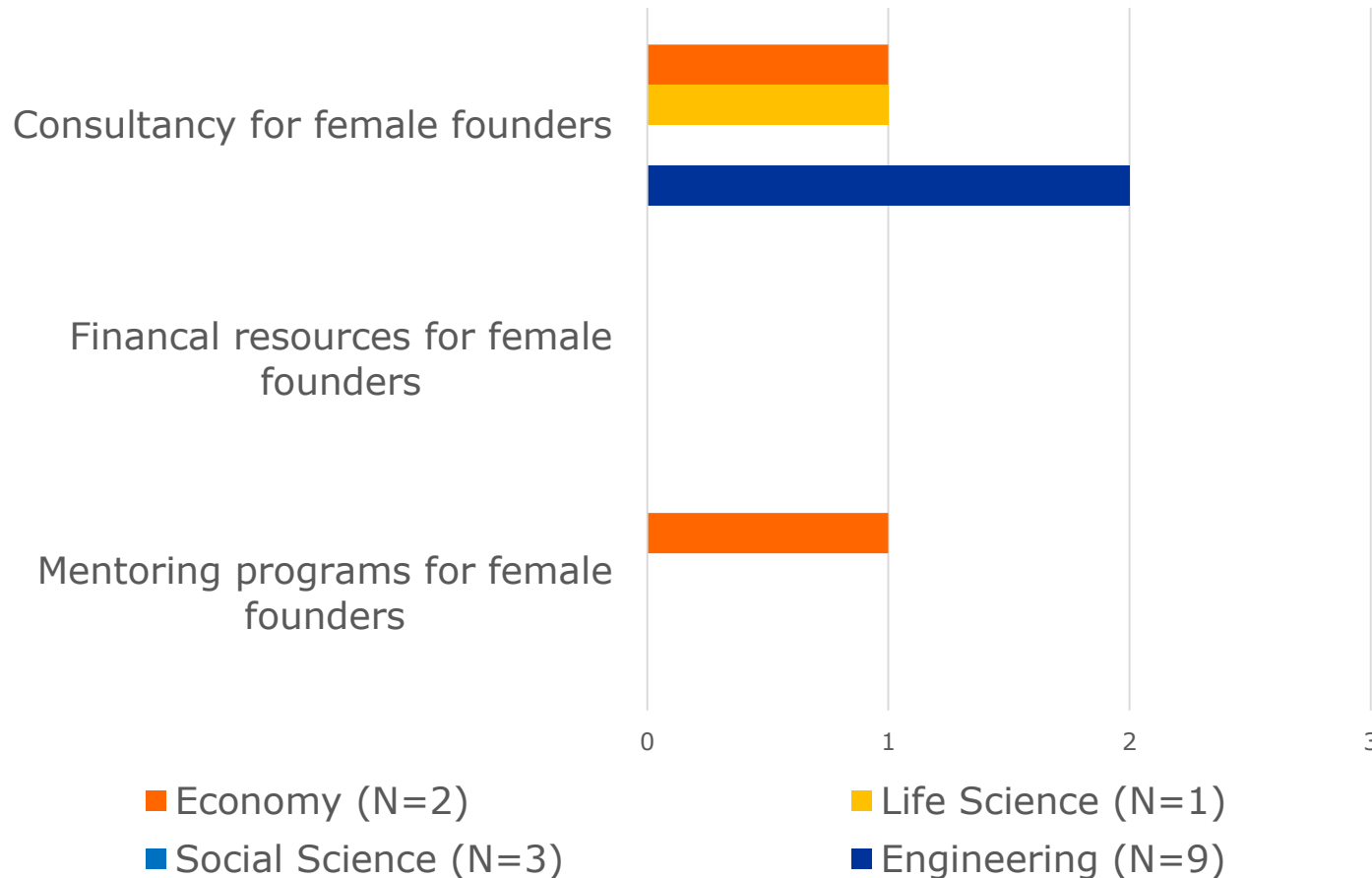
# Results I

What kind of support is offered specifically for female founders at Swiss Universities of Applied Sciences?



## Results II

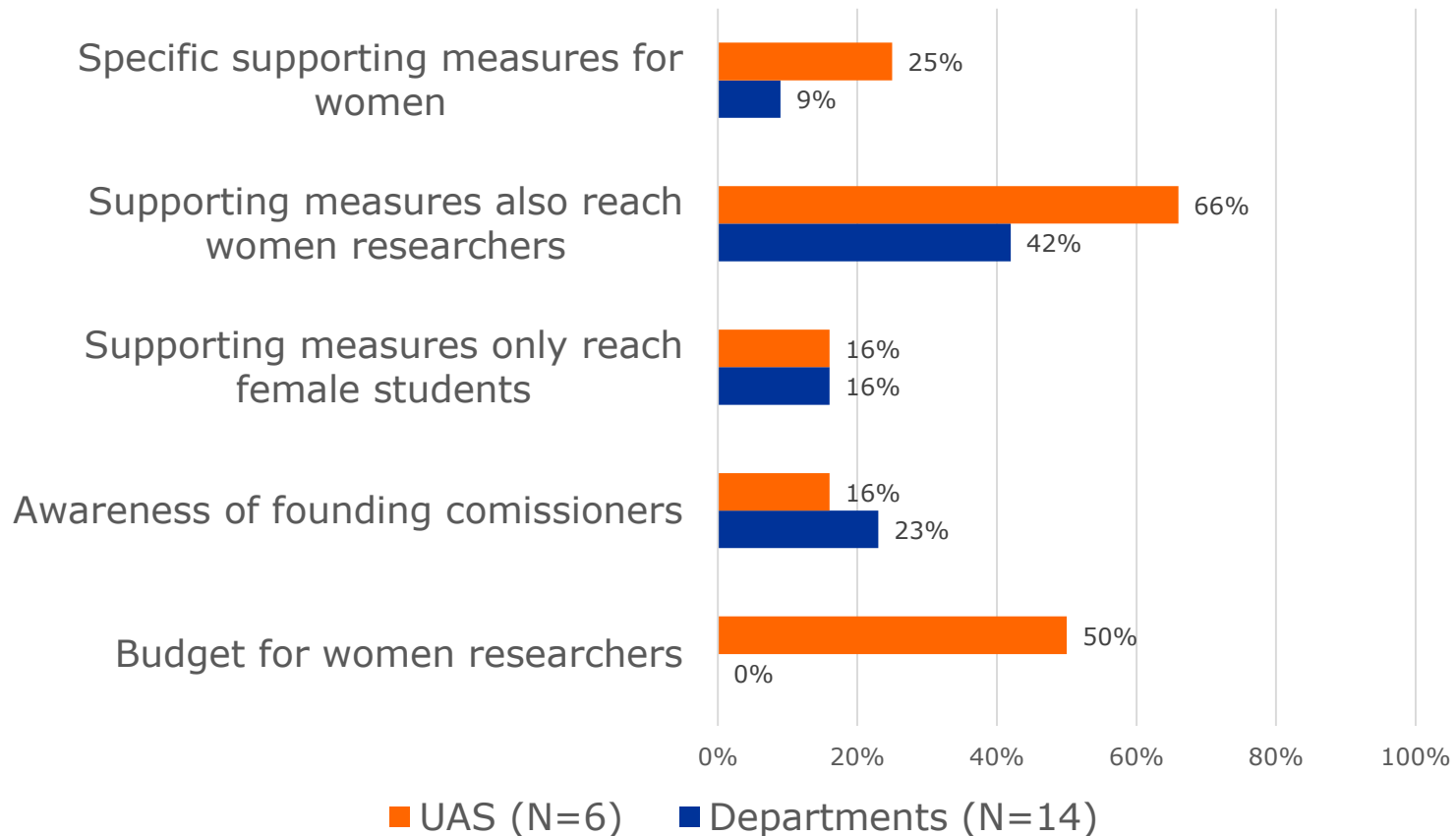
What kind of support is offered for female founders in the different disciplinary fields?





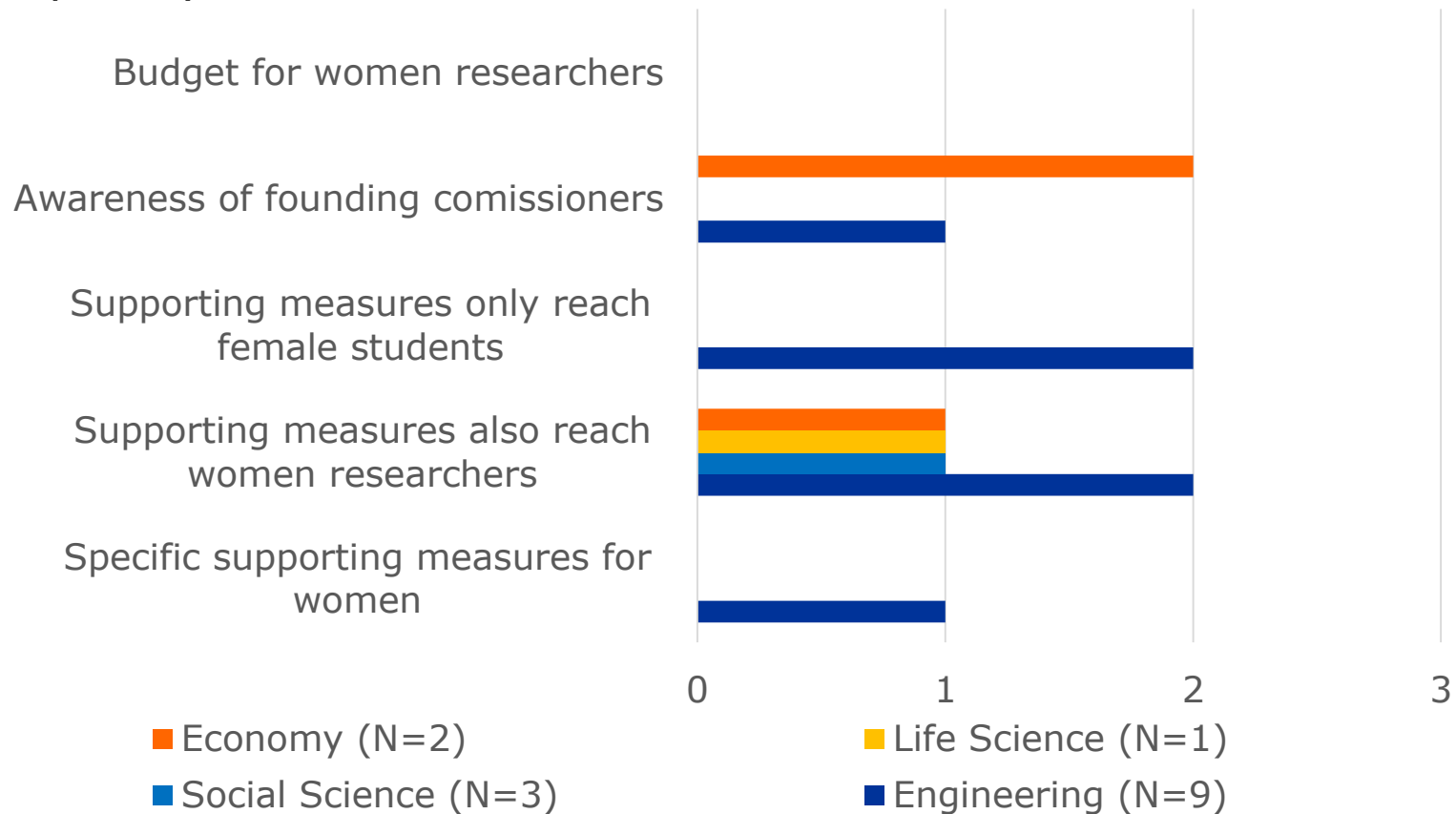
## Results III

How far do strategic objectives include an explicit reference to the spin-off promotion for **women researchers**?



## Results IV

How far do strategic objectives include an explicit reference to the spin-off promotion for **women researchers** in the different disciplinary fields?



# Results V

Formal and informal conditions at Swiss UAS which potentially obstruct the participation of women in the field of academic entrepreneurship.

<b>Formal-structural barriers</b>	<b>Informal-cultural barriers</b>
<ul style="list-style-type: none"> <li>• Missing objective and financial resources to foster women</li> <li>• Lack of specific support measures for women</li> <li>• Women researchers are not a specific target group in Entrepreneurship Education</li> </ul>	<ul style="list-style-type: none"> <li>• Low awareness of head of start-up centers concerning gender gap</li> <li>• Dominance of masculine attributes in academic entrepreneurship (STEM)</li> <li>• Difficult access to research fields that are already entrepreneurial</li> <li>• Exclusion processes in the formation of founding teams</li> </ul>

# Conclusion

- Swiss Universities of Applied Sciences have done little to foster women founders so far
- Instead, specific formal and informal barriers generate a gender gap in academic entrepreneurship
- Support measures for women researchers in academic entrepreneurship only exist in disciplines which are already entrepreneurial
- A consistent transfer strategy might be key for bringing in line the formal and informal preconditions for providing an effective incentive structure to promote women founders

# Discussion

