

# Exploring quotas in academia

Robert Bosch **Stiftung**



# Exploring quotas in academia

Sandra Bendiscioli  
Michele Garfinkel  
Gerlind Wallon

Ingrid Wüning-Tschol

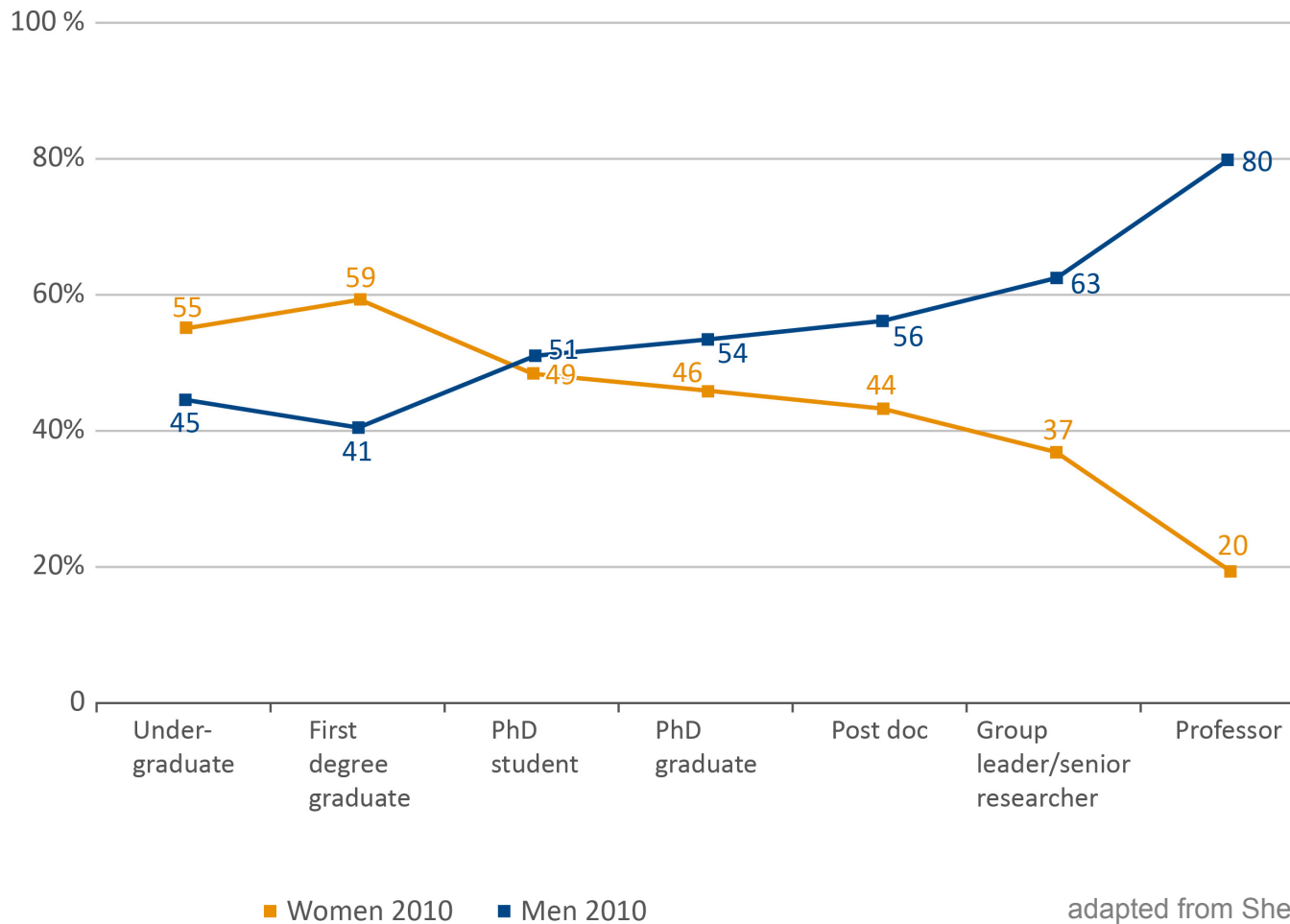


Robert Bosch **Stiftung**

# EMBO is

- a European academy for the life sciences
  - >1700 elected members in Europe and world-wide
- a funder
  - funds via 27 member state intergovernmental organization (EMBC)
- a publisher of scientific journals

# Why quotas in academia?



# Reasons for concern in academia

quotas vs merit

# Where have quotas been tried?

- Politics
- Business

# Aim of the report

- Analyze possible **harms** and **benefits** of gender quotas to increase the number of women at the **highest career levels**.
- Provide **options** to decision makers:
  - Politicians
  - Science administrators/heads of institutes
  - Funders
  - Scientists

# Project methodology

- Literature review
- Interviews with stakeholders
- Closed workshop with stakeholder group



# Working group

Researchers  
on gender  
issues

Scientists in  
academia

Government  
officials

Decision  
makers in  
academia

Funders

Decision  
makers in  
industry

# Project methodology

- Literature review
- Interviews with stakeholders
- Closed workshop with stakeholder group
- Report

# Gender quotas analysed in 3 areas

1. for hiring at the highest career levels
2. for the composition of evaluation committees
3. for research funding

# 1. Quotas for hiring at the highest academic career levels

## The cascade model

# 1. Quotas for hiring at the highest academic career levels

## The cascade model

### Benefits

- Would effect long-term change in academic units.
- Realistic, based on composition of individual departmental/ institutional workforce.
- Require active participation of the institute.

### Harms or concerns

- Quota calculation may become complicated and can be manipulated.
- Perpetuation of small numbers due to small entry numbers.
- May lead to promotion/hiring of less qualified individuals.
- Stigma for those hired under a quota system.
- Stigma for institutions hiring under a quota system.

### Open questions

- Should there be a time window in which the quota is reached?

## 2. Quotas for the composition of evaluation committees

# Critical mass

- 30%?

## Effect of more women on committees?

- Data are unclear:
  - ERC: no correlation (Vernos, 2013)
  - Italy: inverse relation (Bagues et al, 2014)
  - Spain: correlation only for full professor positions (Zinovyeva and Bagues, 2011)

# Existing quotas for review committees and oversight bodies

- Finland, Gender Equality Act: 40%
- Norway, Gender Equality Act: 40%
- Spain, Law on Science, Technology and Innovation: 50%
- European Commission, Horizon 2020: 40% on advisory structures
- EMBO: 30%
- The Swedish Research Council: 30%



## 2. Quotas for the composition of evaluation committees

### Benefits

- Reduce isolation and tokenism.
- Broaden the points of view in discussions.

### Harms or concerns

- Cause work overload for the few women who qualify for committee work, thereby limiting their scientific output.

### Unknowns

- What is the “critical mass” that represents women effectively?
- What is the effect of the presence of women in a committee?

### 3. Equal success rate for research funding

# Is there a lower success rate for women when applying for research funding?

## YES:

- BBSRC: women 3-5% less successful, 2009-2012
- EMBO: women had 20% lower success rate, 1998-2008
- ERC: women have 16% lower success rate, 2007 - 2013

## NO:

- Wellcome Trust, 2007
- Wellcome Trust and UK Research Councils, 2000
- DFG, 2008
- EC (27 members states), 2009

### 3. Equal success rate for research funding

#### Benefits

- Systemic biases would be excluded.
- The applicant pool would be fairly reflected, full inclusion is ensured.
- Equal success rate might encourage a higher rate of applications by the underrepresented group.

#### Harms or concerns

- Possibly less qualified applicants may get funded.
- Other minorities may demand quotas as well.
- May be viewed as an unfounded measure, since systemic biases have not been demonstrated in all funding schemes.

#### Open questions

- Should there be a time window in which the quota is reached?

# Who can implement quotas?

Governments

Universities or institutes

Funders

Professional societies

# Who can implement quotas?

Governments

Universities or institutes

Funders

Professional societies

# Who can implement quotas?

Governments

Universities or institutes

Funders

Professional societies

# Who can implement quotas?

Governments

Universities or institutes

Funders

Professional societies



# Conclusions

## Benefits:

- Quotas can make change happen (fast)

## Harms and drawbacks :

- Stigma for individuals hired or selected through a quota process
- Concern expressed by the academic community
- Quotas will not be sufficient to address all issues effecting gender balance

# Issues not addressed by quota

- Precipitous drop of women after post doc:  
    women do not apply for professorial positions.
- Women do not choose the more technical subjects.



Exploring  
*quotas*  
in academia

Gerlind Wallon, Sandra Bendiscioli,  
and Michele S. Garfinkel, EMBO



Robert Bosch Stiftung

[www.embo.org/science-policy](http://www.embo.org/science-policy)

Thank you for your attention!

Thank you for your attention!

# Working group members and interviewees

## Scientists

- Johanna Ivaska, FI
- Cornelia Ulrich, DE
- Detlef Weigel, DE
- Curt Rice, NO
- Monica Gotta, CH

## Decisions makers in academia

- Ricarda Opitz, DE
- Ulrike Beisiegel, DE
- Eleanor Campbell, UK
- Iain Mattaj, DE
- Maria Leptin, DE

## Government

- Petra Schott, EC
- Sarah Dickinson, UK
- Ines Sanchez de Madariaga, ES

## Researchers on gender issues

- Sarah Childs, UK
- Sara de la Rica, ES
- Nina Steinweg, DE
- Mari Teigen, NO
- Linda Senden, NL
- Marc Gärtner, DE

## Funders

- Ulrike Eickhoff, DFG, DE
- Jackie Hunter, BBSRC, UK
- Carl Jacobsson, SRC, SE
- Anna Lönnroth, ERC, SE
- Indra Wilms-Hoff, VW Stiftung, DE

## Decision makers in industry

- Thomas Sattelberger, DE

# 1. Quotas for hiring at the highest academic career levels

## The cascade model

Benefits	Harms or Concerns	Unknowns
<ul style="list-style-type: none"><li>• Would effect long-term change in academic units.</li><li>• Realistic, based on composition of individual departmental/ institutional workforce.</li><li>• Require active participation of the institute.</li></ul>	<ul style="list-style-type: none"><li>• Quota calculation may become complicated and can be manipulated.</li><li>• Perpetuation of small numbers due to small entry numbers.</li><li>• May lead to promotion/ hiring of less qualified individuals.</li><li>• Stigma for those hired under a quota system.</li><li>• Stigma for institutions hiring under a quota system.</li></ul>	<ul style="list-style-type: none"><li>• Should there be a time window in which the quota is reached?</li></ul>

## 2. Quotas for the composition of evaluation committees:

### Benefits

- Reduce isolation and tokenism.
- Broaden the points of view in discussions.

### Harms or Concerns

- Cause work overload for the few women who qualify for committee work, thereby limiting their scientific output.

### Unknowns

- What is the “critical mass” that represents women effectively?
- What is the effect of the presence of women in a committee?



### 3. Equal success rate for research funding

Benefits	Harms or Concerns	Unknowns
<ul style="list-style-type: none"><li>• Systemic biases would be excluded.</li><li>• The applicant pool would be fairly reflected, full inclusion is ensured.</li><li>• Equal success rate might encourage a higher rate of applications by the underrepresented group.</li></ul>	<ul style="list-style-type: none"><li>• Possibly less qualified applicants may get funded.</li><li>• Other minorities may demand quotas as well.</li><li>• May be viewed as an unfounded measure, since systemic biases have not been demonstrated in all funding schemes.</li></ul>	<ul style="list-style-type: none"><li>• Should there be a time window in which the quota is reached?</li></ul>