

Uitval en vertraging bij promovendi, faal- en succesfactoren

Wageningen University & Research

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Nederlands Expertise Centrum voor de Promotie Opleiding



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- Work in research policy since 1986
- Now researcher and adviser on doctoral education
- And doing my own PhD
 - 'PhD 3.0 - From tradition to transition in the doctorate, 1920-2020'

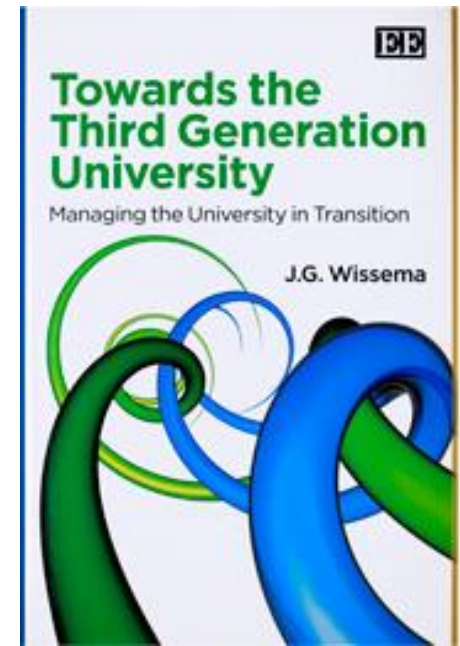


Three stages of the PhD and their purpose

- PhD 1.0 – the medieval PhD: license to teach in Europe
- PhD 2.0 – the Humboldtian PhD: career in academia
- PhD 3.0 – the present PhD: all knowledge-intensive jobs

Idea based on the book by J.G. (Hans) Wissema, 2009:

www.wissema.com



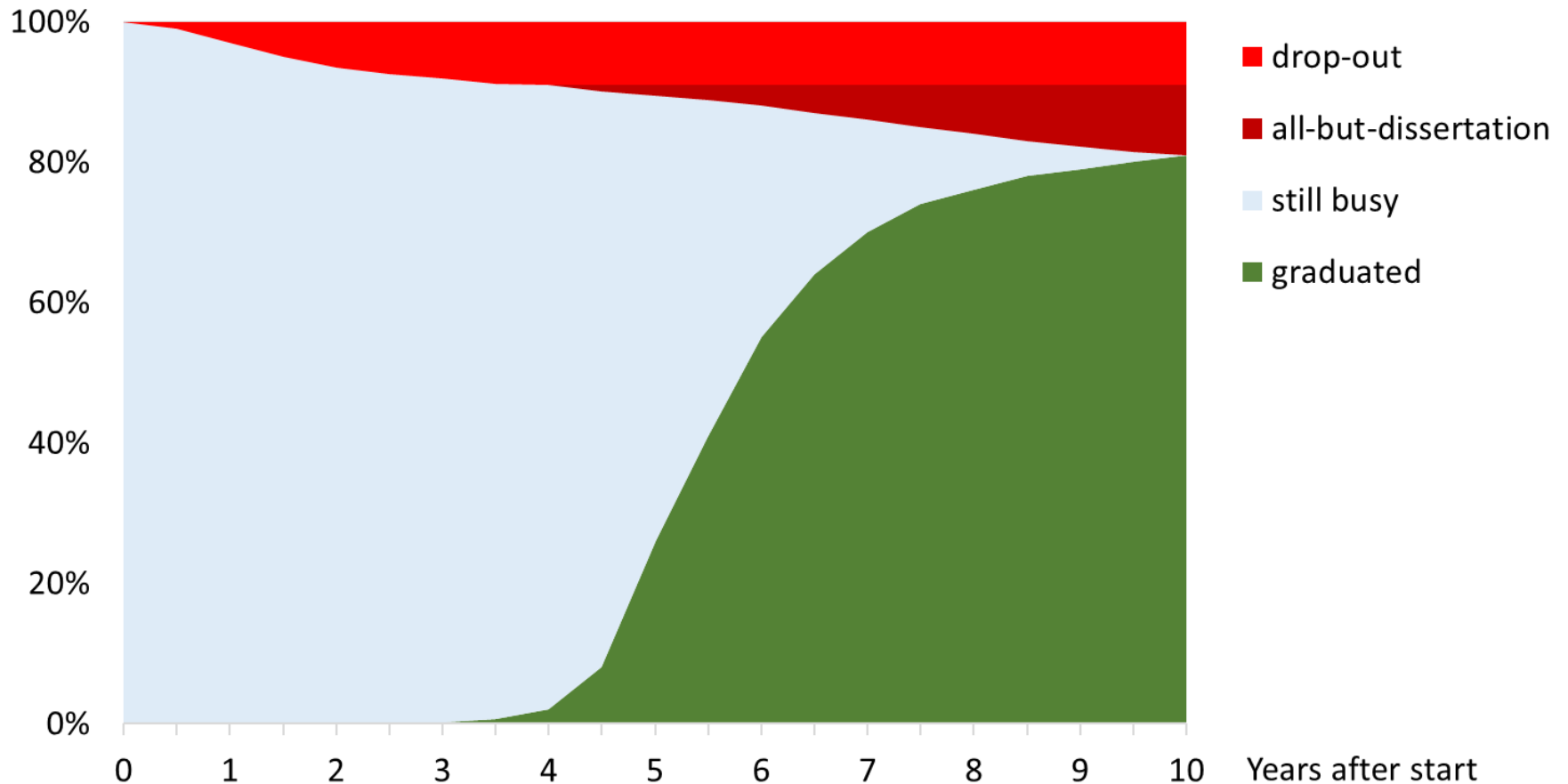
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- Data from VSNU
- What causes delay?
- Why do PhDs stop?



Methodology, data and metrics

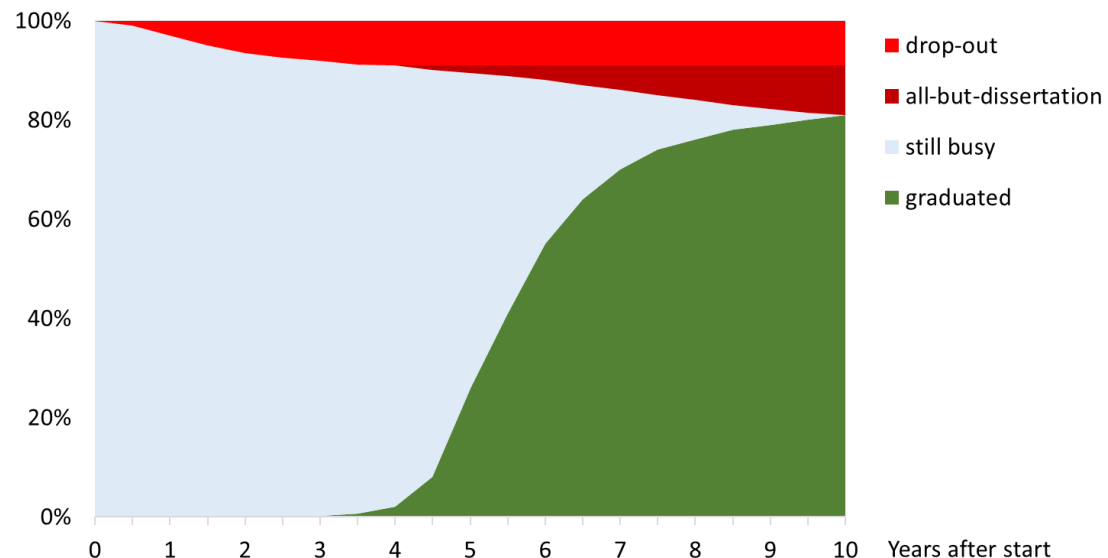
What happens in a PhD population?



Methodology, data and metrics

- Distinguish between drop-out and all-but-dissertation
- Final completion rate reached after ten (or more) years
- Each graduate school should be able to draw such graph!
(i.e. to have that data available...)

What happens in a PhD population?



Why differences in time-to-degree?

- Gender?
- Origin?
- Previous education?
- Selection?
- Supervision?
- Labour market?
- Scientific field!
- More...?



Methodology, data and metrics

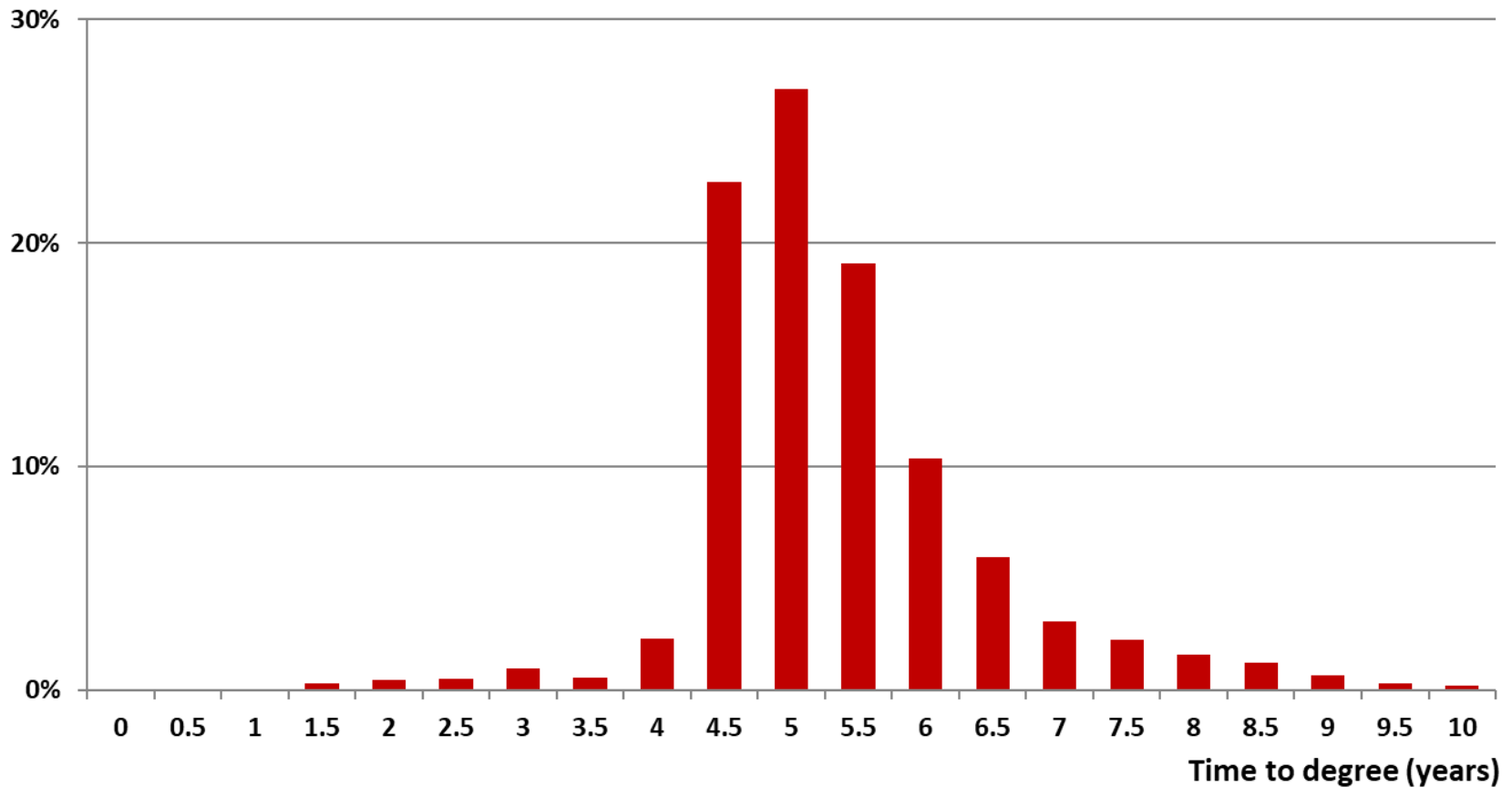
Option 1: full starting cohorts (preferred option)

- Final completion rate
- Percentage graduated after 4 – 5 – 6 etc years
- Other metric: median time-to-degree (**not** average!)



Skewed distribution, therefore use median!

Percentage graduated



Methodology, data and metrics

Option 1: full starting cohorts (preferred option)

- Final completion rate
- Percentage graduated after 4 – 5 – 6 etc years
- Other metric: median time-to-degree (not average!)

Option 2: graduation cohorts (if you have only those data)

- Percentage graduated after x years, median t-t-d
- Note that these metrics **differ** from option 1



Data from VSNU

- Only employed PhDs – AIOs, 50% of all PhDs
- Data quality – see remarks on VSNU website
- Large differences between universities
- Starting cohorts 2005-2010:

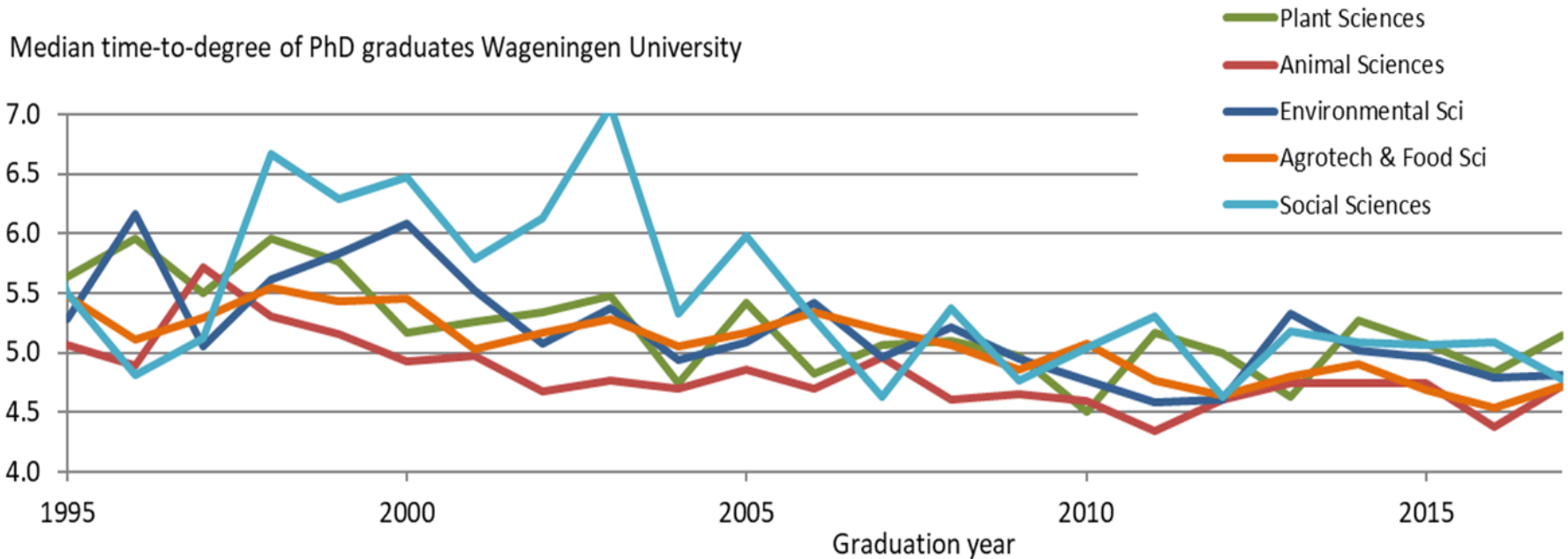
Scientific field	Graduated after 5 years	Final completion rate *
Humanities	29%	65%
Social Sciences	45%	75%
Natural Sciences	46%	77%

* underestimated by a few percent

more on: www.vsnu.nl/f_c_promovendi.html



Trend analysis employed PhDs Wageningen



* population base: graduated employed PhDs



Further reading on PhD completion

- <http://www.phdcentre.eu/nl/nieuws/documents/journal.pone.0068839.pdf>
- <http://www.phdcentre.eu/nl/publicaties/documents/VerslagprojectLangpromoveerders.pdf>
- http://www.phdcentre.eu/nl/publicaties/documents/RendementvanMAGW_NW_O-Subsidiesapril2011DePsycholoog.pdf



What causes delay?

Resultaten gepromoveerde alumni loopbaan-enquête Wageningen 2016

(N=456)

Oorzaken van vertraging (meerdere redenen mogelijk)

A Project-gerelateerde redenen

61%

A1 Op voorhand te ambitieus project

17%

A2 Extra experiment/analyse op eigen initiatief

20%

A3 Extra experiment/analyse verlangd door promotor of financier

12%

A4 Problemen met experimenten of dataverzameling

20%

A5 Problemen met data-analyse en interpretatie

5%

A6 Problemen met supervisie

15%

A7 Problemen met schrijven

10%

A8 Slecht tijdmanagement

12%

A9 Praktische, logistieke of financiële problemen

12%

B Door andere activiteiten

33%

B1 Extra cursussen bovenop het normale pakket

5%

B2 Extra onderwijs geven of studenten begeleiden

14%

B3 Klussen niet gerelateerd aan het promotieonderzoek

23%

C Persoonlijke redenen

58%

C1 Promotieonderzoek in deeltijd

19%

C2 Ziekte, psychische of sociale problemen

8%

C3 Zwangerschap, ouderschap

15%

C4 Nieuwe baan of studie

28%

D andere reden

21%



What causes delay?

- Delay has a large variety of causes
- The longer the delay, the more causes
- Short delay: mostly project-related
- Long delay: personal reasons, in particular the new job



Why did PhD candidates stop?

Resultaten alumni loopbaan-enquête Wageningen 2016	Drop-out (gestopt tijdens promotietraject, N=164)	All-but-dissertation (gestopt na promotietraject, N=56)
Oorzaken van stoppen (meerdere redenen mogelijk)		
A1 Problemen met niveau of inhoud van het onderzoek	27%	
A2 Resultaten onvoldoende voor een proefschrift		20%
B Problemen met supervisie	24%	32%
C Een 'no go' door de promotor	5%	
D Praktische, logistieke of financiële problemen	18%	
E Persoonlijke redenen of problemen	25%	30%
F1 Andere, meer aantrekkelijke baan	17%	
F2 Voorrang aan vervolgcarière		50%
G Andere reden	26%	18%
Totaal	141%	150%



Why did PhD candidates stop?

- Drop-out and all-but-dissertation have many causes
 - Supervision is one of them
 - Personal reasons are another
- The new job is the reason for all-but-dissertation
 - So, the thesis should be ready **before** the new job!



Further reading on stress in the PhD

- http://ga.berkeley.edu/wp-content/uploads/2015/04/wellbeingreport_2014.pdf
- <https://www.researchgate.net/publication/312267070> Why do students consider dropping out of doctoral degrees Institutional and personal factors
(ook full text bijgesloten bij de mail)
- <http://www.hildecrevits.be/nl/een-op-twee-doctorandi-voelt-zich-down>
- <https://www.universiteitleiden.nl/nieuws/2017/07/welzijn-promovendi>

