



Commercialization of university research: appraisal and impact assessment

Milana, Evita

Publication date:
2016

Document Version
Peer reviewed version

[Link back to DTU Orbit](#)

Citation (APA):
Milana, E. (Author). (2016). Commercialization of university research: appraisal and impact assessment. Sound/Visual production (digital)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Commercialization of university research: appraisal and impact assessment



Evita Milana, Technical University of Denmark

WHY?

Successful commercialization of research has been an important source for wealth creation (Etzkowitz, 1998; Shane, 2004; Braunerhjelm et al. 2010; Mueller 2006), creation of new jobs (Audretsch and Lehmann 2005; Link and Welsh, 2013; Veugelers and Del Rey, 2014), and additional income of resources for funding further research (Guldbrandsen and Smeby, 2005; Bozeman and Gaughan, 2007; Link et al., 2007).

BUT...

Despite increasing patenting and licensing activities at universities, commercialization performance is still very weak, especially, in Europe. Within open innovation paradigm firms chose other sources rather than universities for their external patent in-licensing.

Additionally, previous literature doesn't explain how firms use in-licensed university patents for their strategic goals.

THEREFORE...

The overall aim of this PhD research project is to explore what value is created by university patents and what determinants maximize this value by centralizing the topics of technology transfer, value creation and entrepreneurial ecosystem.

WE ASK..

- ❖ What is the value of university patents for firms within the realm of open innovation?
- ❖ What motivates firms to in-license from universities?
- ❖ What factors maximize the value created by university patents?

HOW?

Exploring the database of university patents and contracts

Group data and map general patterns of commercialization through descriptive statistics

Run a survey of licensees

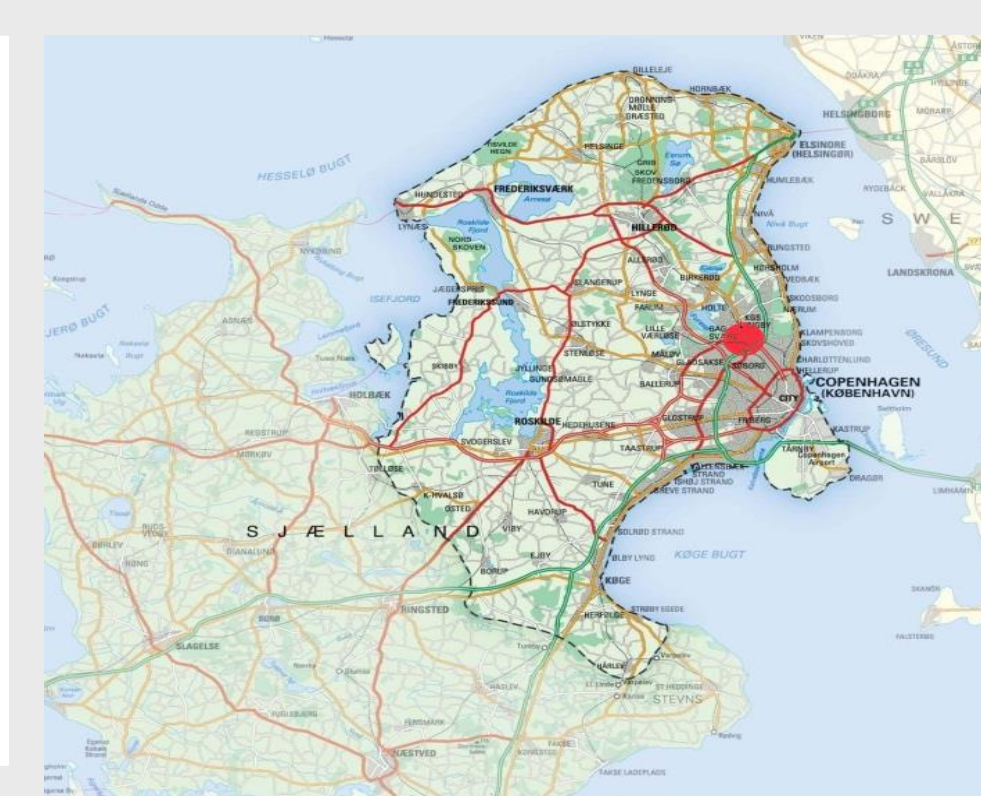
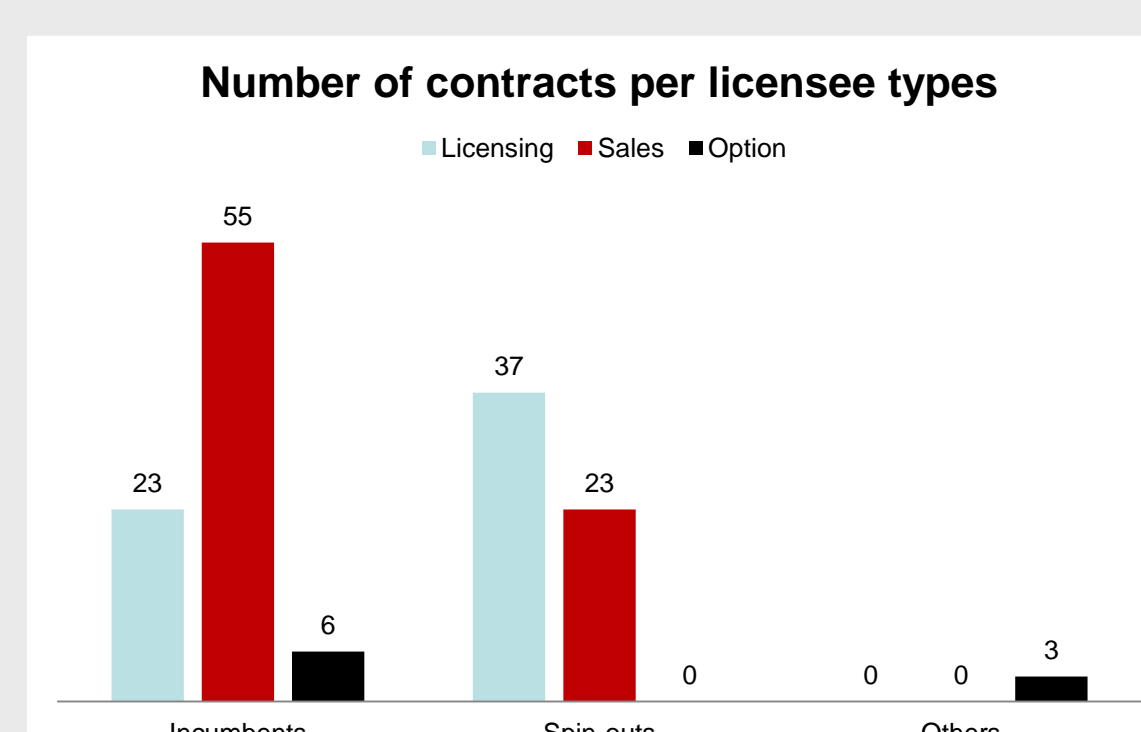
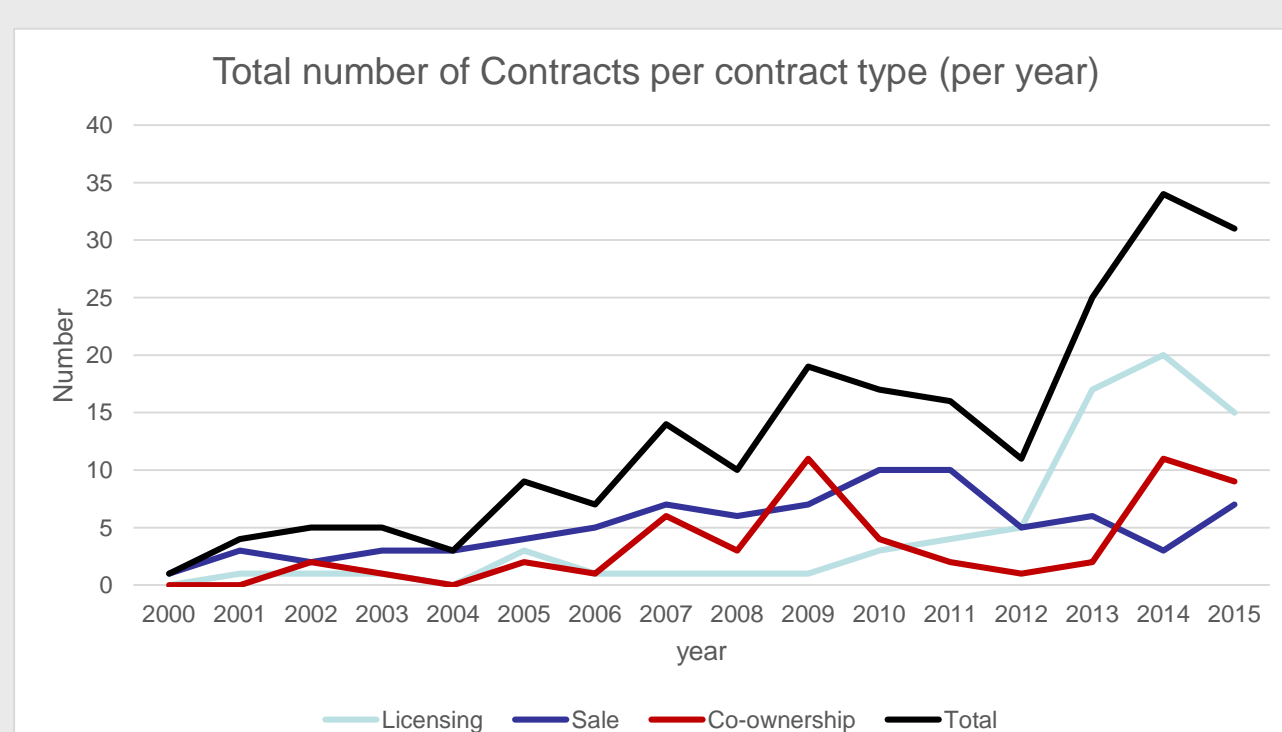
Assess university patent value and application in the market

Add secondary, firm level data and mix with survey and DTU database data

Draw and test a structural equation model to determine factors maximizing university patent value in the market

IN RESULT...

There is a stable increase in university's commercialization activities from 2000-2015



Most of university's patents are sold and not licensed; main licensees are incumbents of which half are large or very large firms while spinouts are micro or small firms. Two industries dominate: manufacturing and scientific activities. We find strong pattern of geographic localization around greater area of Copenhagen.

FURTHER...

We aim to develop a study based on licensee firm survey and to examine what value university patents have given to these firms and to the market and how this value can be maximized

Contact:

Evita Milana,
PhD student
Technical University of
Denmark
Diplomvej 372,
room 209
DK-2800 Kgs. Lyngby
+ 45 4525 4556
evimi@dtu.dk
www.man.dtu.dk

Supervisor/co-supervisor:

Jason Li-Ying (main
supervisor)

Karen Murdock (co-
supervisor)

Carina Lomberg (co-
supervisor)

Start and completion date:

1 December 2013 to
11 November 2017



Technology and
Innovation
Management