

FRANCE – MEXICO ECOS NORD MEXIQUE 24 YEARS ANNIVERSARY

Scientific impact of the program (2007-2017)

MESRI-MEIRIES / MEAE

2018

<http://www.enseignementsup-recherche.gouv.fr>

GENERAL PRESENTATION OF THE PROGRAMME

Creation : 1994

Total budget (France + Mexico) : around 580 000 € / year

>> including budget from France : 290 000 € / year *

>> including budget from Mexico : same € / year

Number of new projects per year : ~ 10

From 2007-2014:

281 applications submitted

87 projects funded

DATA SOURCES

ECOS North Mexico committee

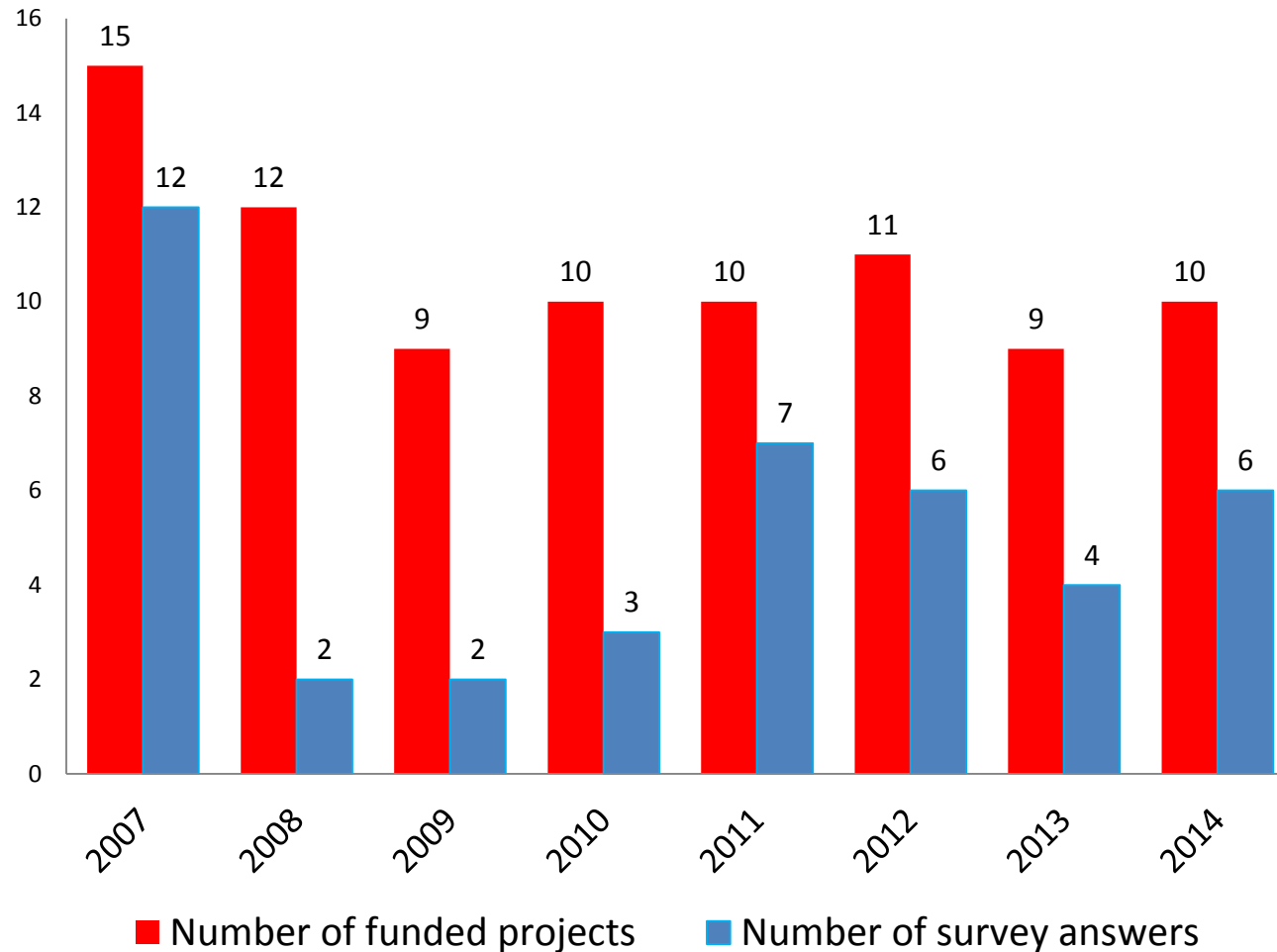
- Informations about applications to the ECOS Nord Mexique program
- List of mobilities (France to Mexico)

Survey *(conducted by the French Ministry of Higher Education, Research and Innovation)*

- Target : Principal Investigators of selected projects between 2007 and 2014
- Survey duration : 1 month between **February and March 2018**, focusing on the projects funded between 2007 and 2014
- **49%** response ratio *(42 respondents for 86 funded projects)*

ANSWERS TO THE SURVEY

Average response rate to the survey : **49 % (42 answers)**



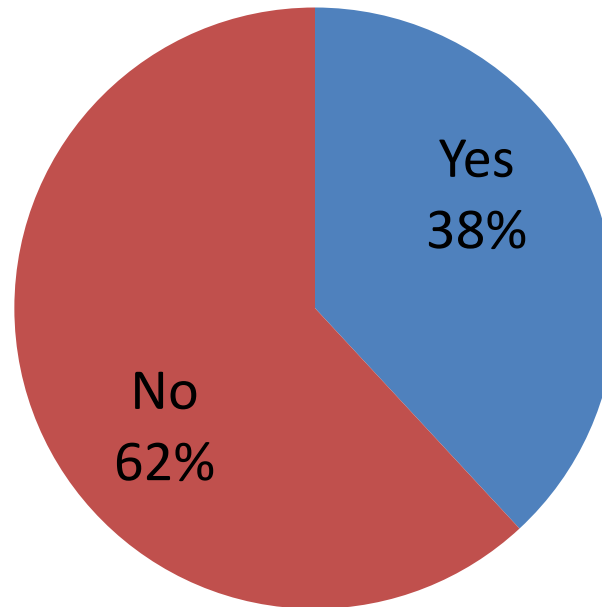
**42
answers
(49 %)**

2007-2017

Key Points

BEFORE THIS ECOS NORD MEXIQUE PROGRAMME (1/2)

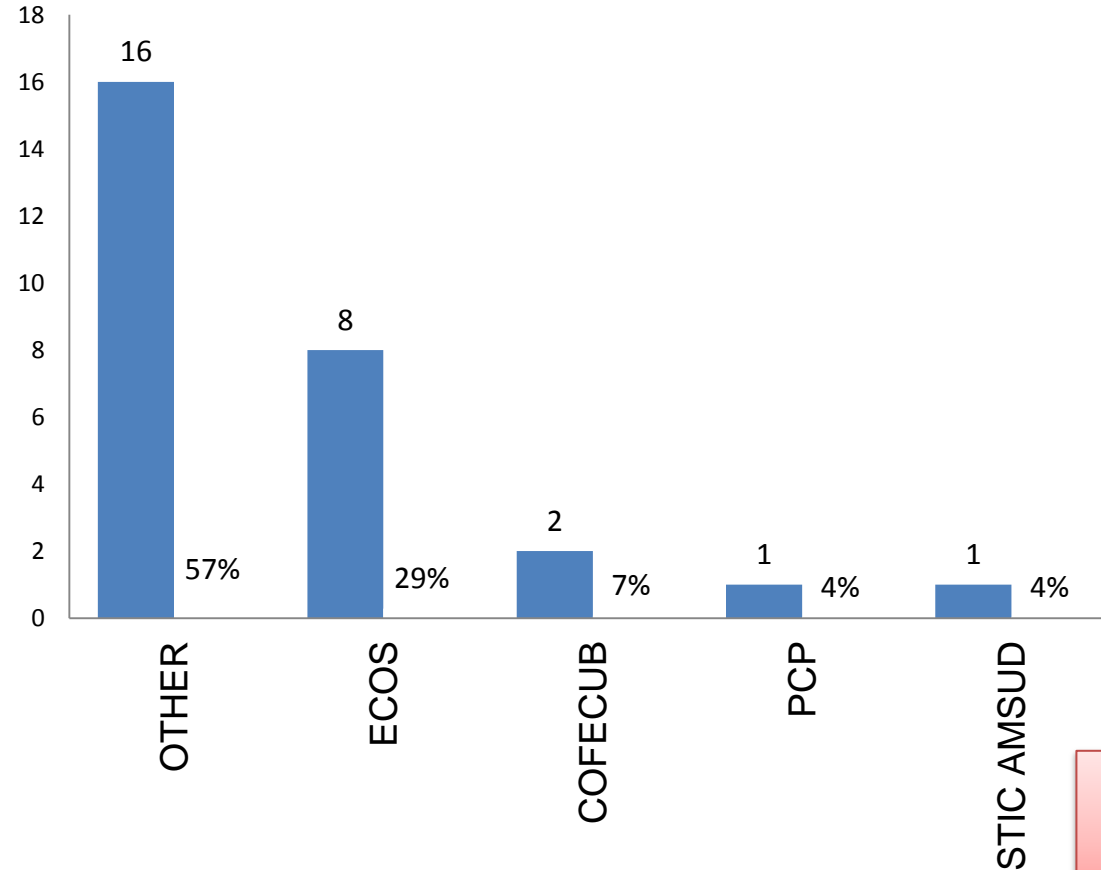
Participation to another cooperation program supported by France in Latin America before this ECOS North Mexico program



**Survey
data**

BEFORE THIS ECOS NORD MEXIQUE PROGRAMME (2/2)

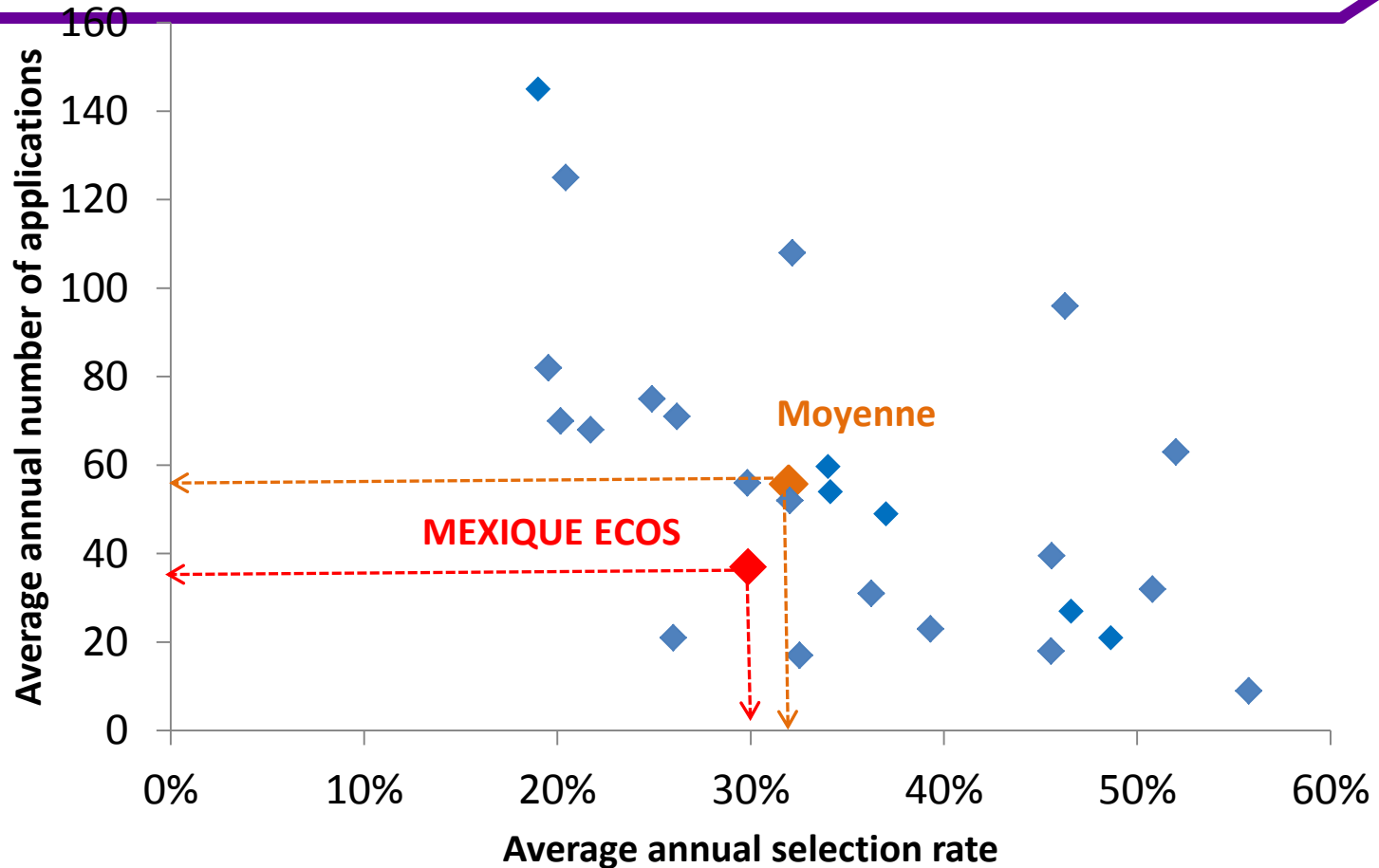
**Participation to
another
cooperation
program
supported by
France in Latin
America before
this ECOS North
Mexico program**



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NUMBER OF APPLICATIONS VS SELECTION RATE

(COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)

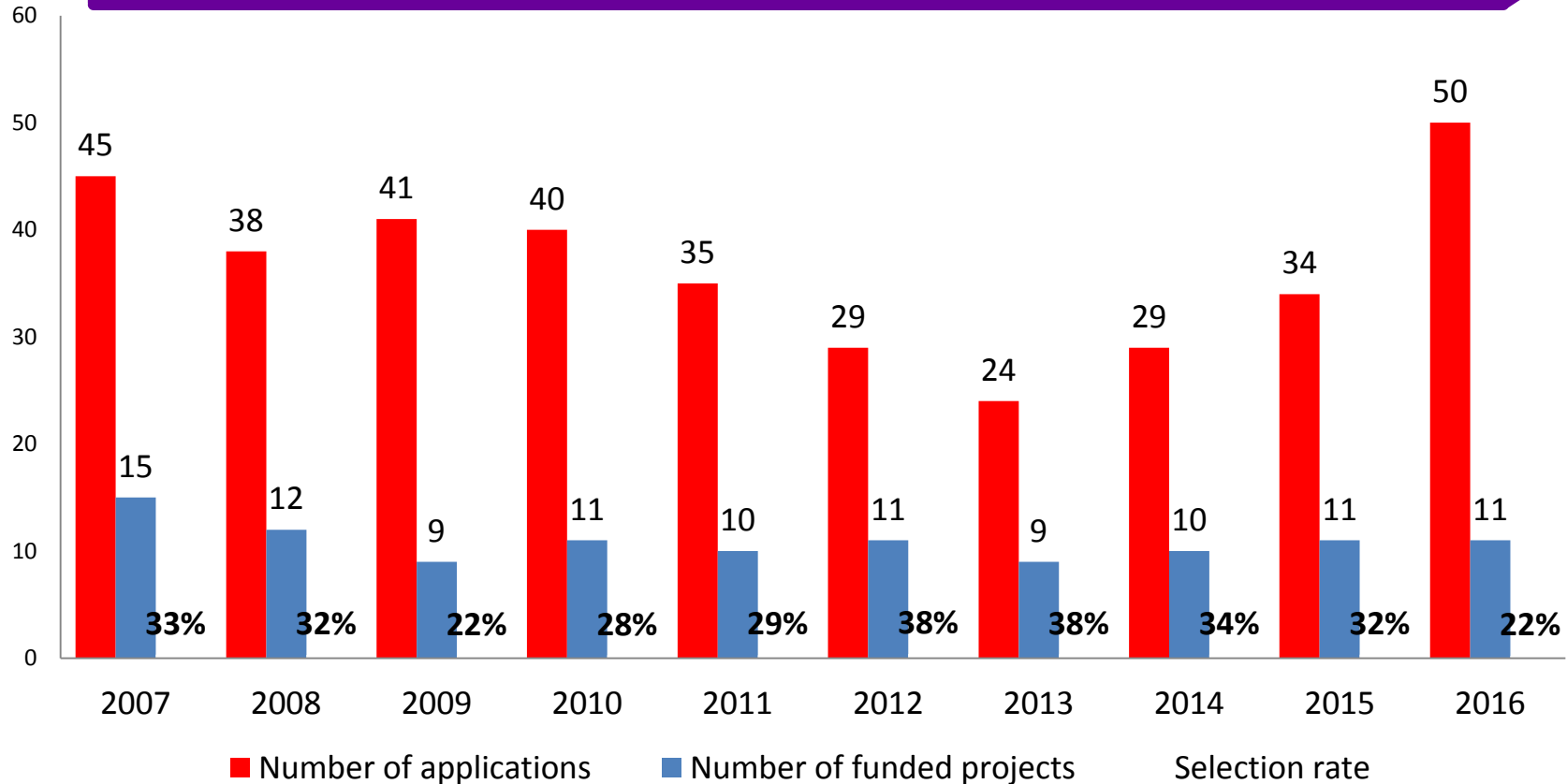


Average selection rate for 2007-2017 : **30% vs 32% mean**

Average number of applications 2007-2017 : **37 vs 56 mean**

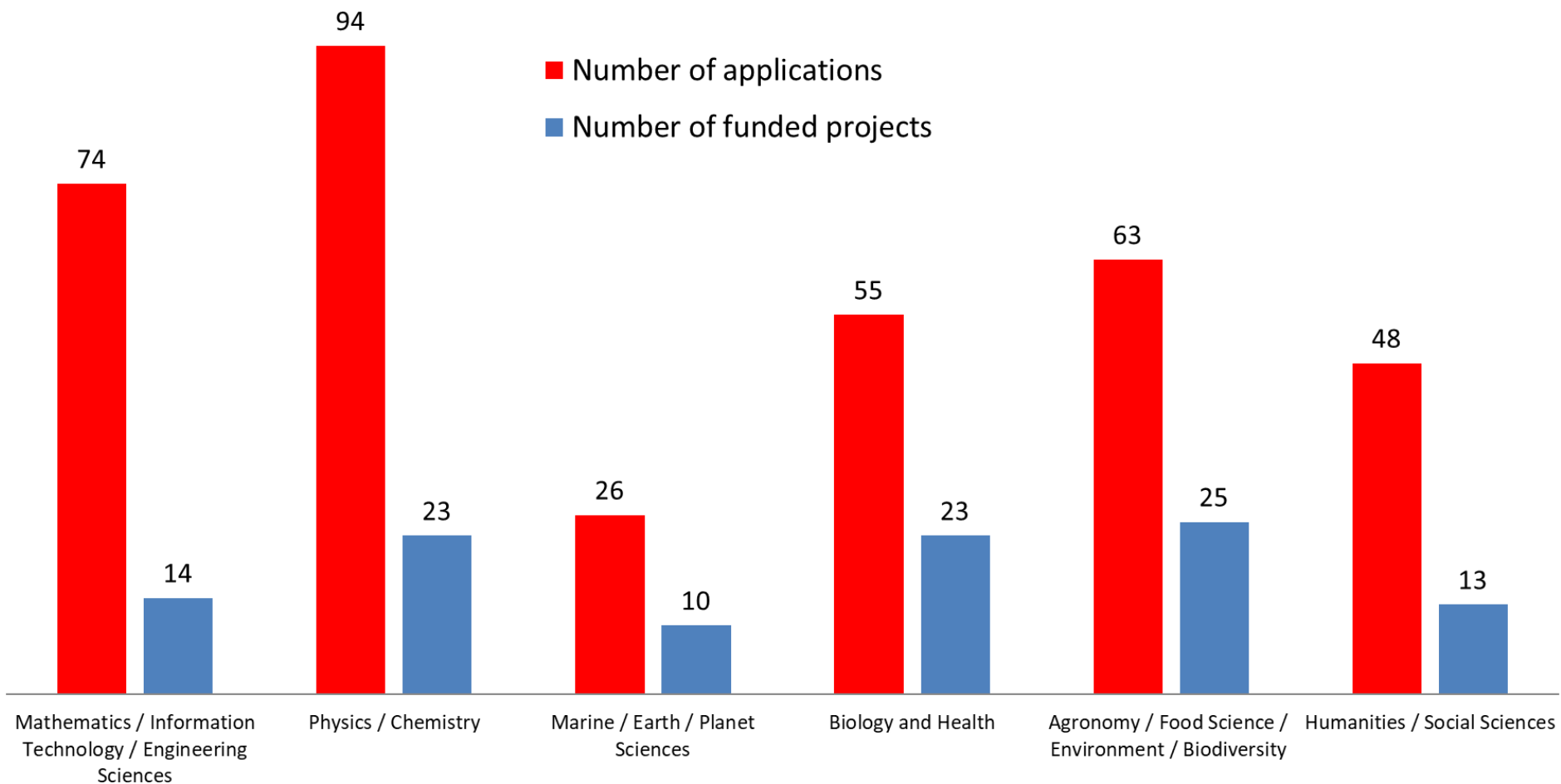
SUCCESS RATE

Average selection rate from 2007-2016: **30 %**



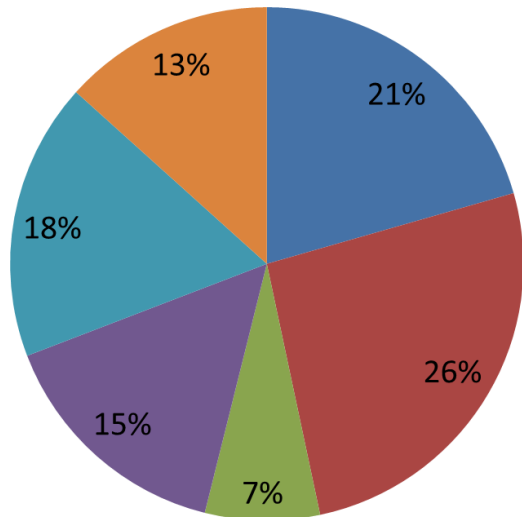
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data**

SCIENTIFIC DOMAINS



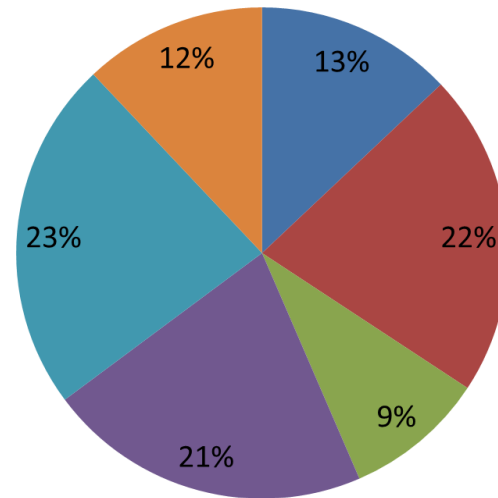
SCIENTIFIC DOMAINS OF PROJECTS

Number of applications : **360**



- Mathematics / Information Technology / Engineering Sciences
- Physics / Chemistry
- Marine / Earth / Planet Sciences

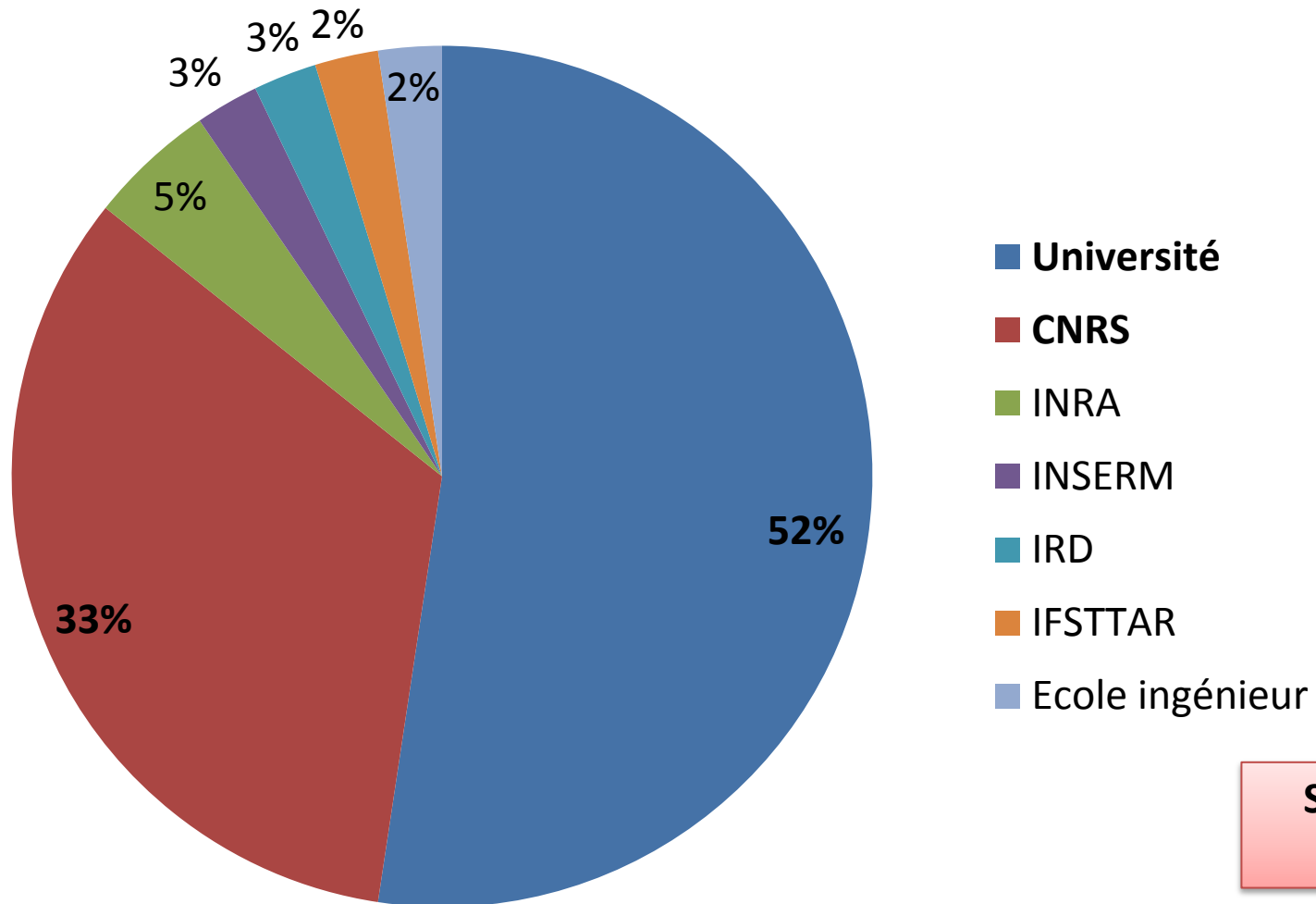
Number of funded projects : **108**



- Biology and Health
- Agronomy / Food Science / Environment / Biodiversity
- Humanities / Social Sciences

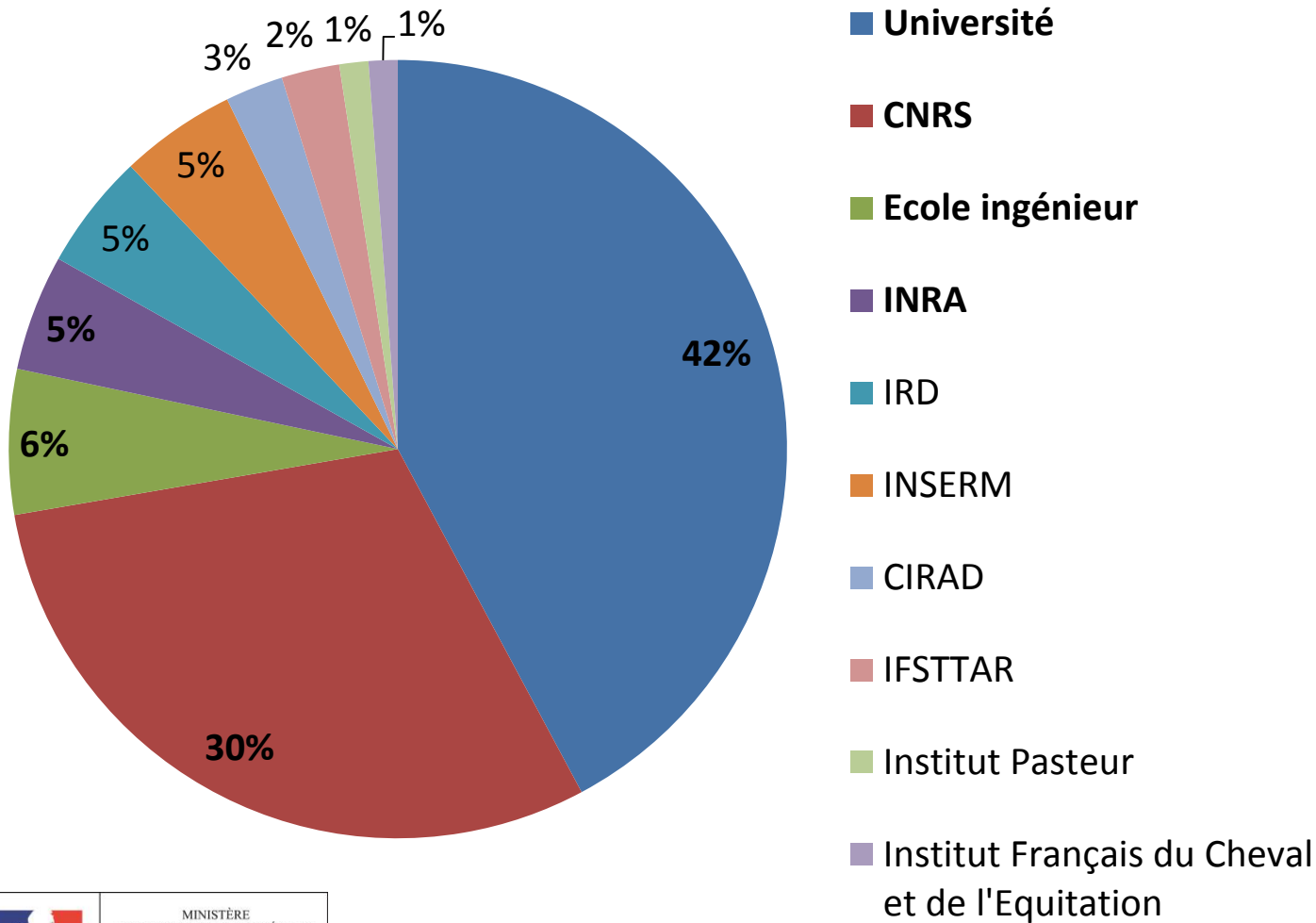
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MAIN FRENCH PARTICIPATING INSTITUTIONS (PIS EMPLOYERS)



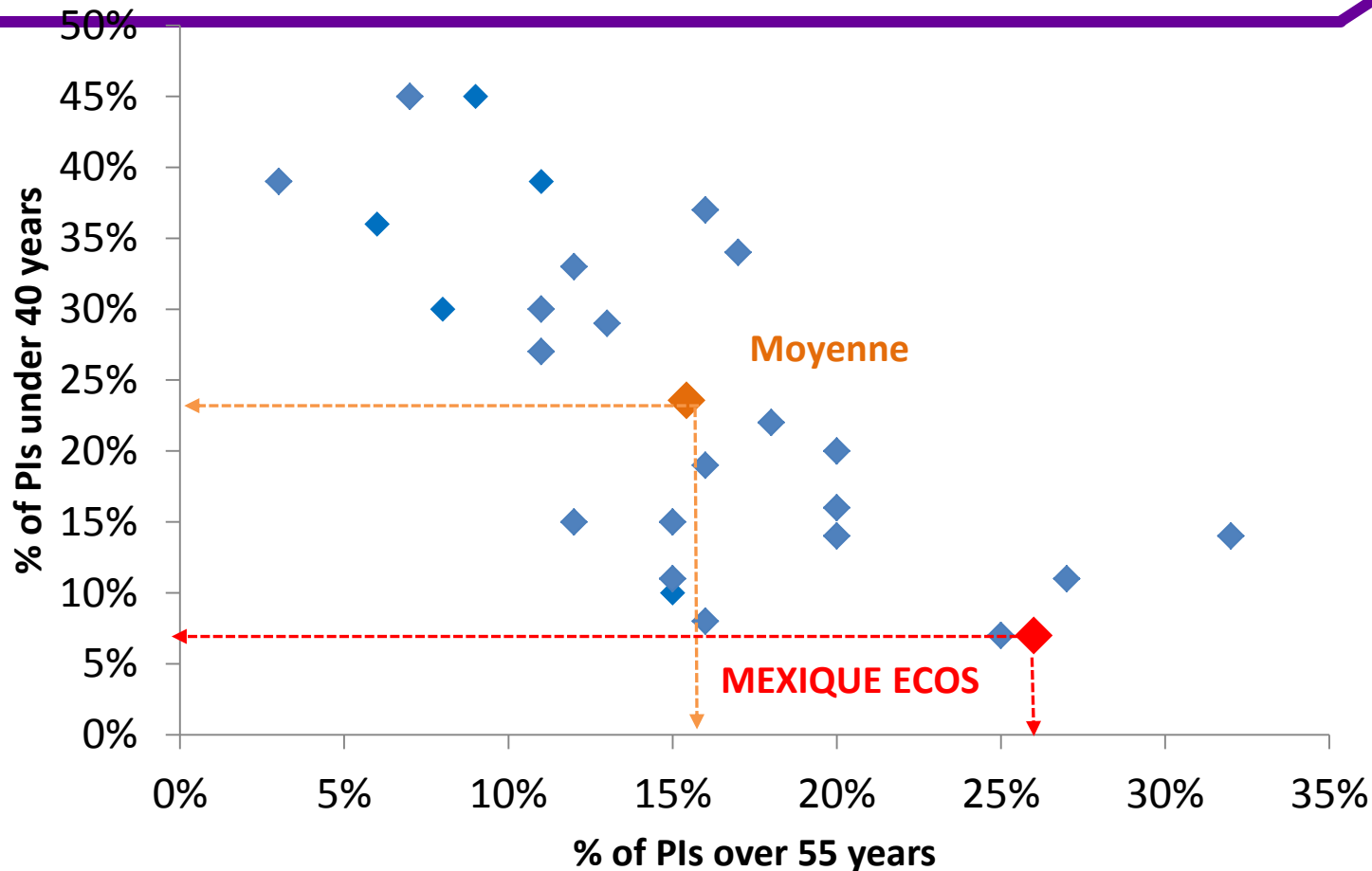
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MAIN FRENCH PARTICIPATING INSTITUTIONS (LABORATORIES)



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AGE OF PRINCIPAL INVESTIGATORS (PI) (COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)



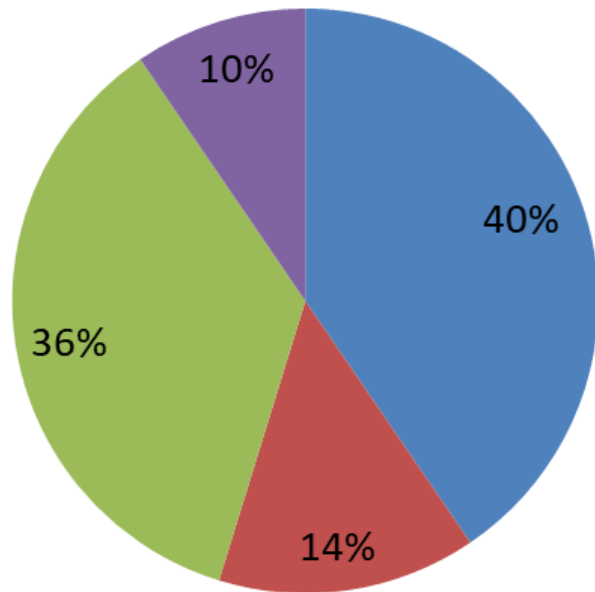
PIs under 40 years : **7% vs 24% mean**

PIs over 55 years : **26% vs 15% mean**

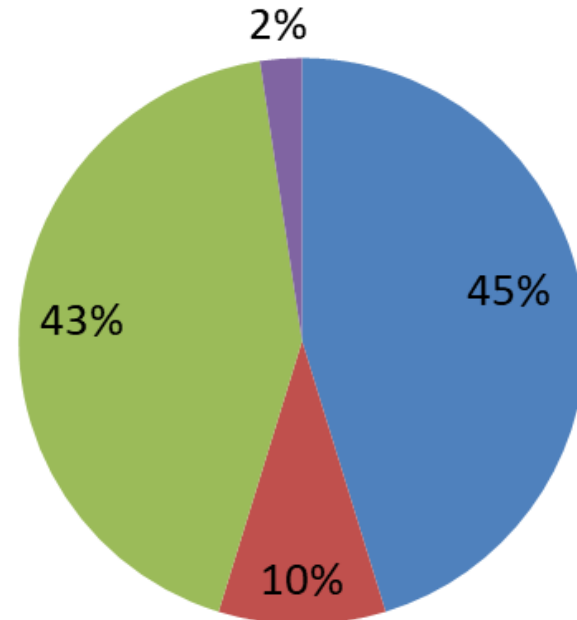
67% of the PIs are between 40 and 55 years

FRENCH PIS (PRINCIPAL INVESTIGATORS) : STATUS

Starting professional status



Present professional status



■ Full professor

■ Assistant professor

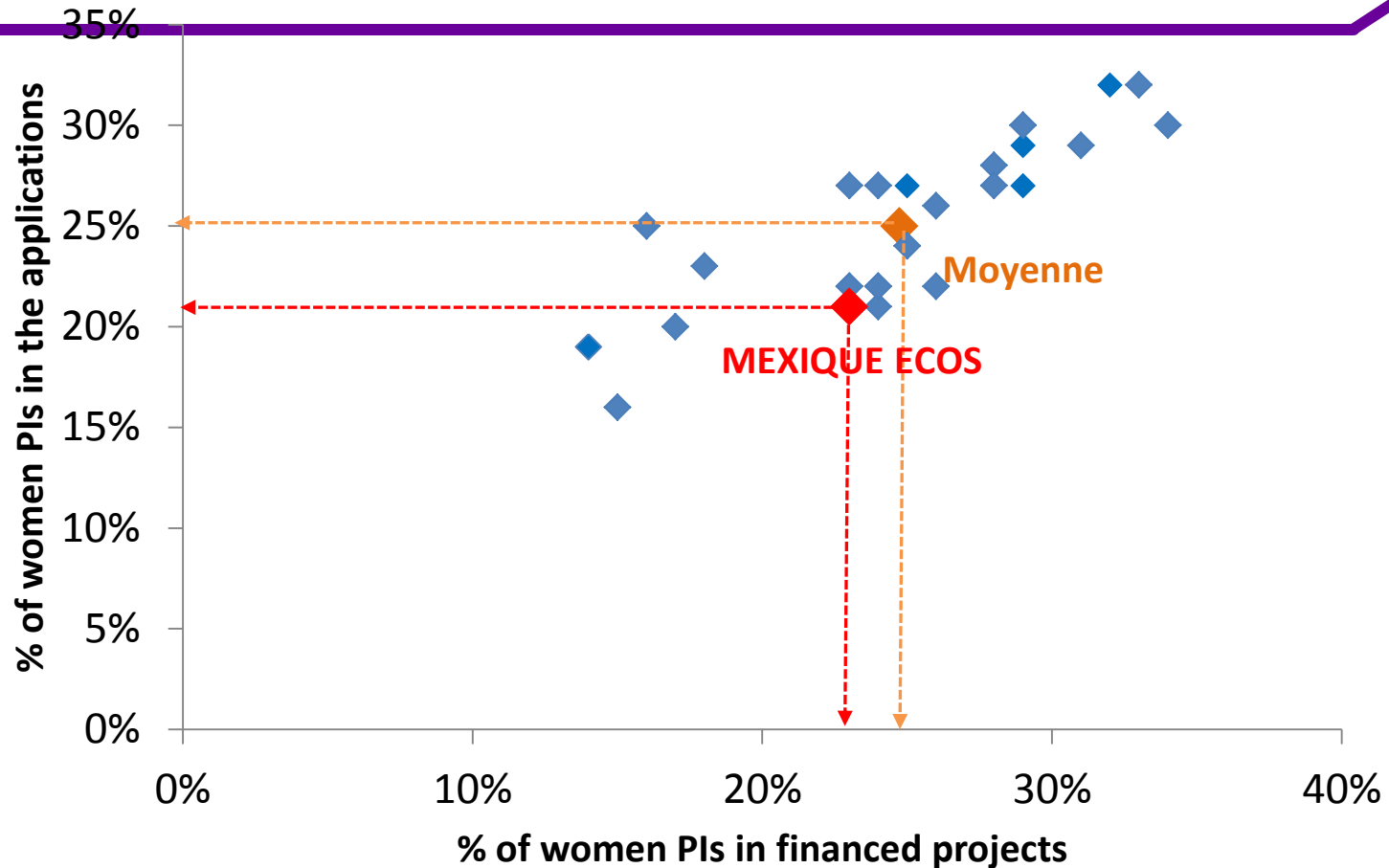
■ Senior researcher

■ Junior researcher

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IMPLICATION OF WOMEN (FRANCE)

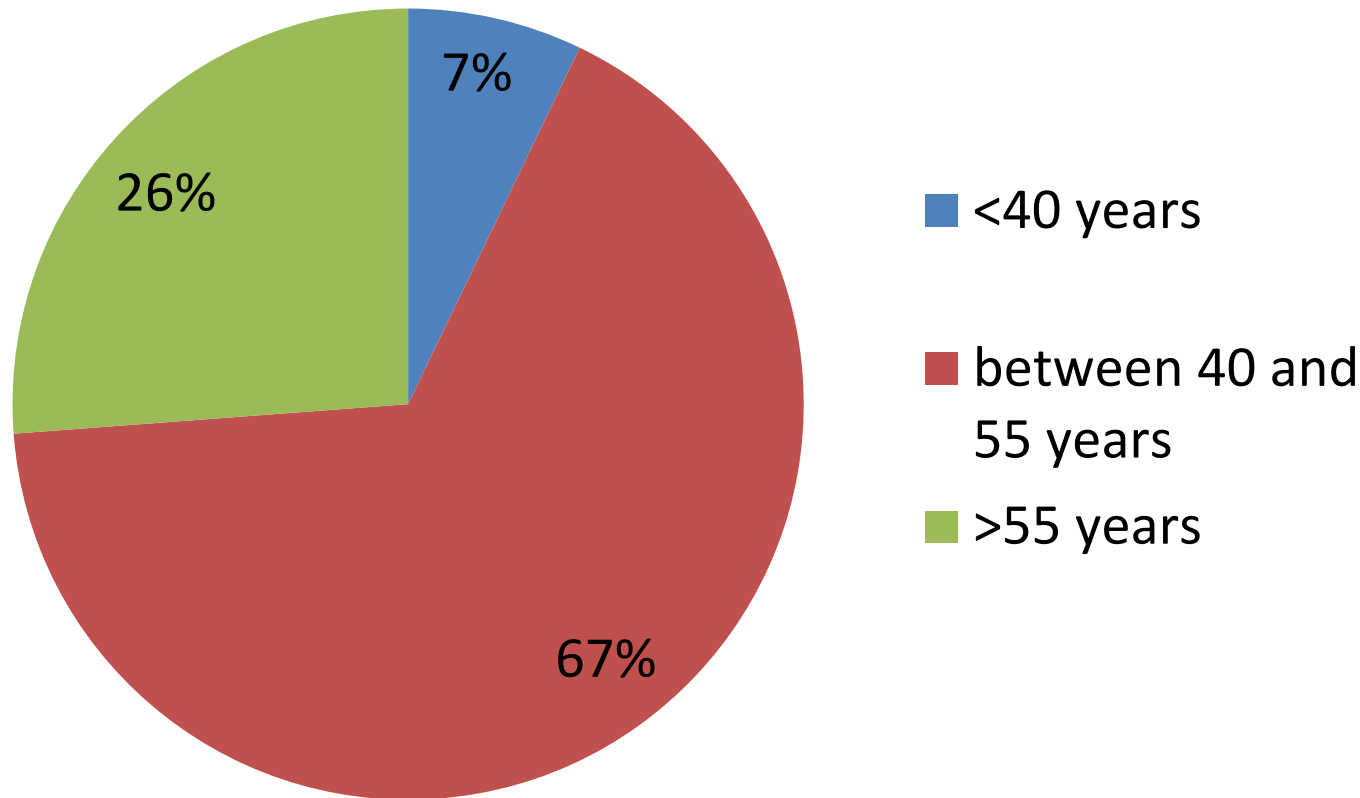
(COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)



% of women PIs in the applications : **21% vs 25% mean**
% of women PIs in the selected projects : **23% vs 25% mean**

PARTICIPATION OF YOUNG RESEARCHERS (1/4)

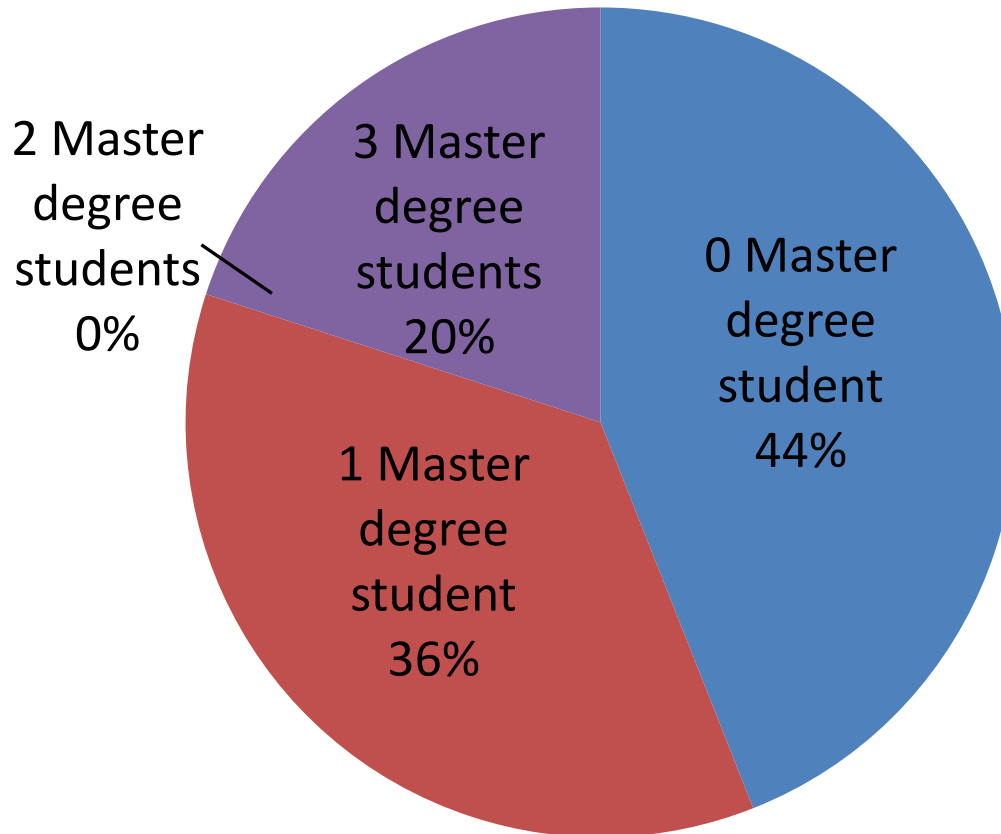
7 % of French PIs are young researchers



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PARTICIPATION OF YOUNG RESEARCHERS (2/4)

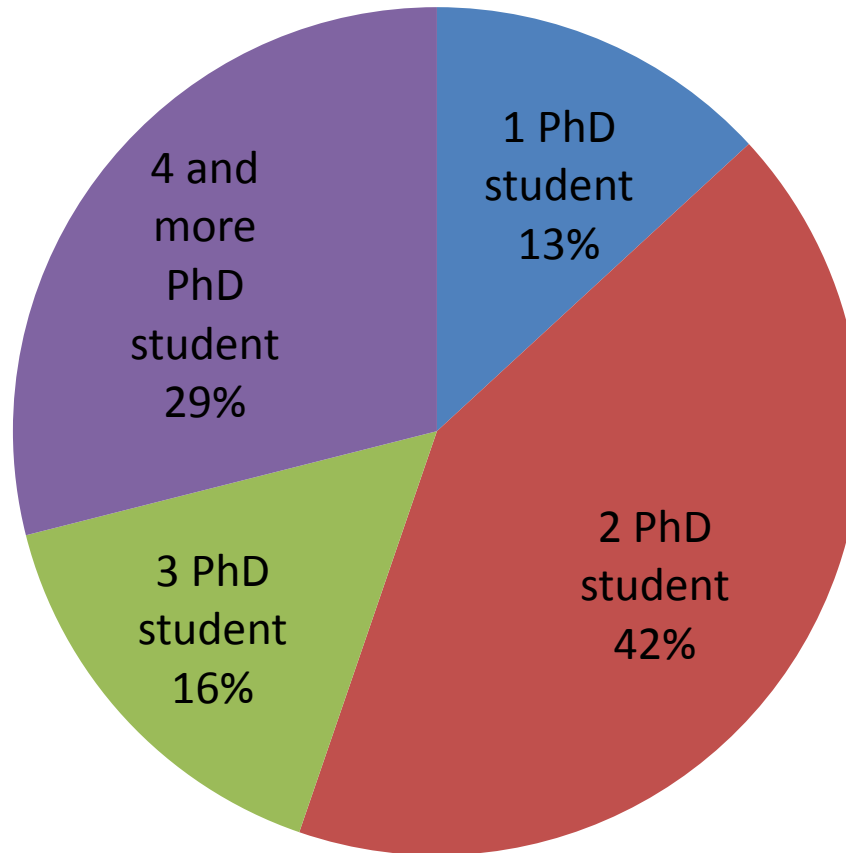
56 % of projects integrate Master degree students



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PARTICIPATION OF YOUNG RESEARCHERS (3/4)

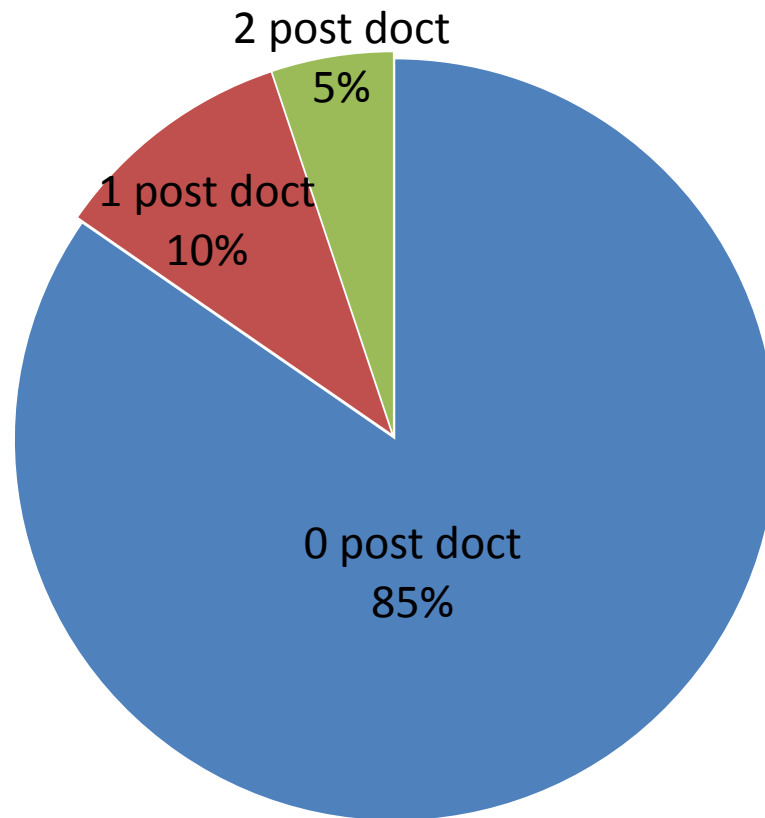
100 % of projects integrate PhD students



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PARTICIPATION OF YOUNG RESEARCHERS (4/4)

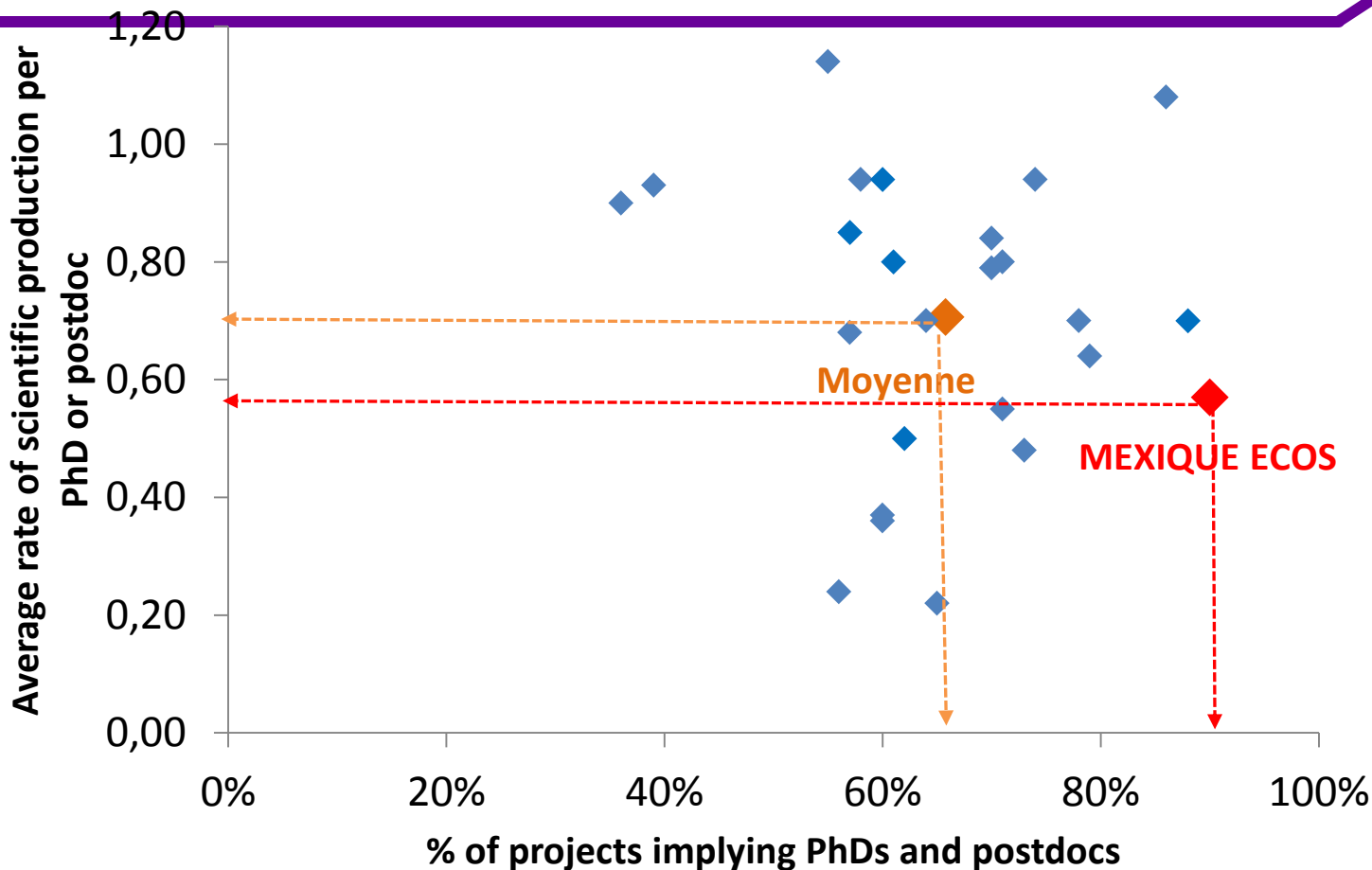
15 % of projects integrate post-doctoral researchers



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IMPLICATION OF PhDs

(COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)

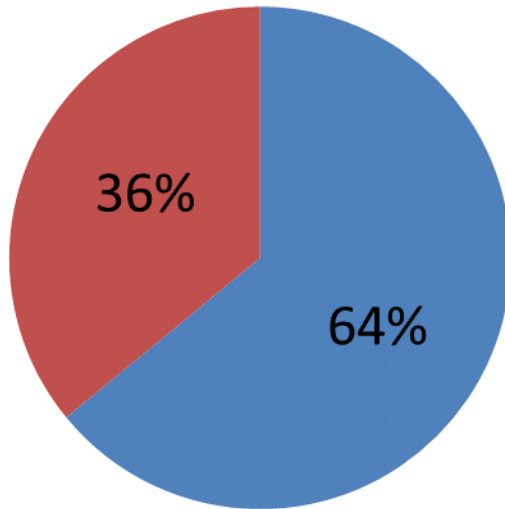


% of projects implying PhDs : 90% vs 66% mean
Average rate of scientific production per PhD : 0,57 vs 0,70 mean

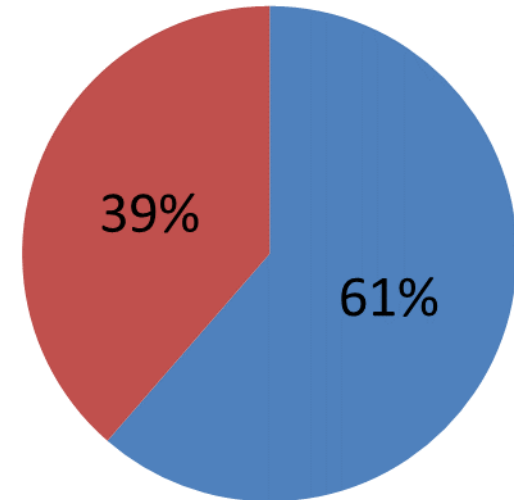
Mobility

MOBILITY : GENDER

France → Mexico



Mexico → France

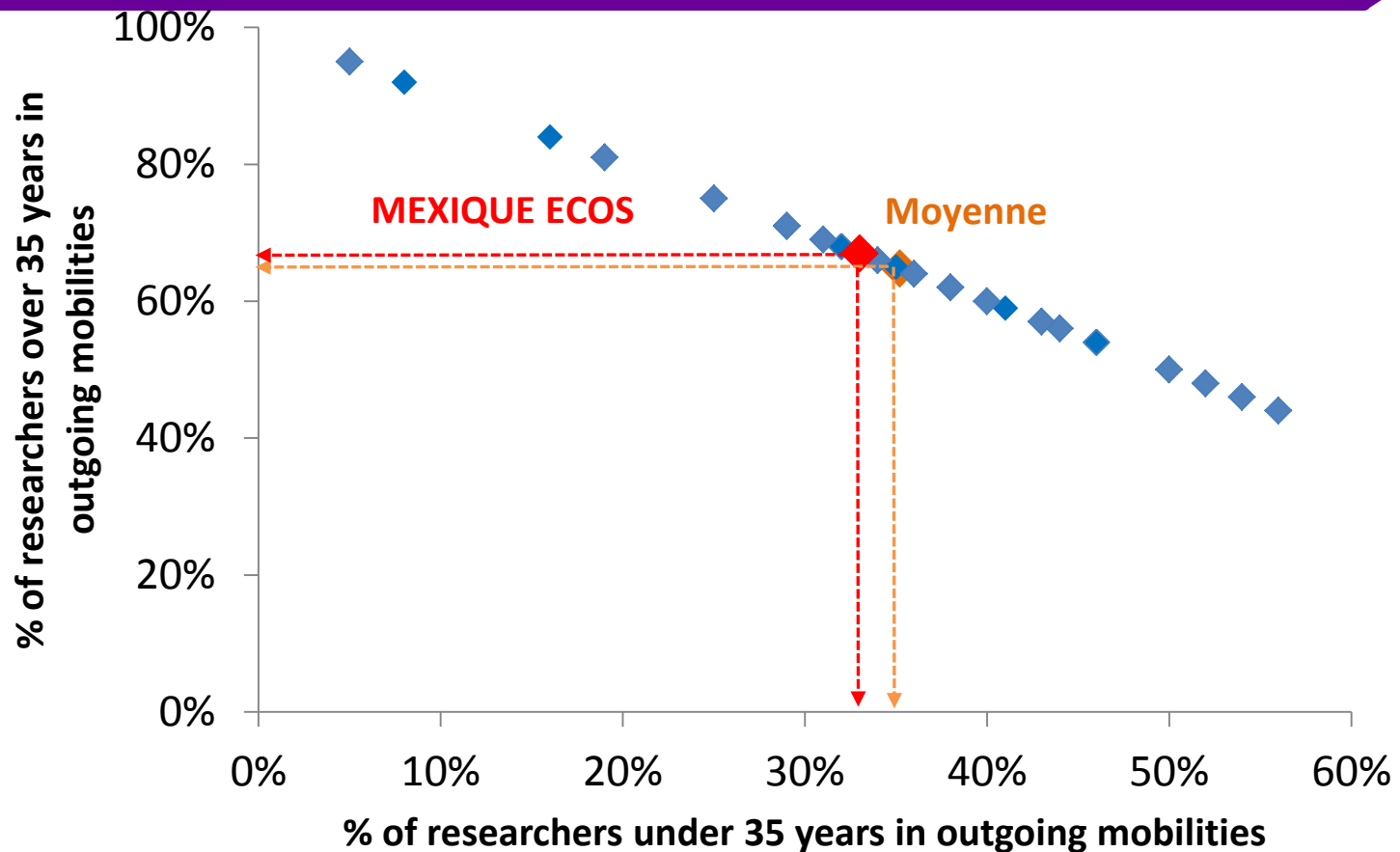


■ Men ■ Women

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MOBILITY FRANCE – MEXICO

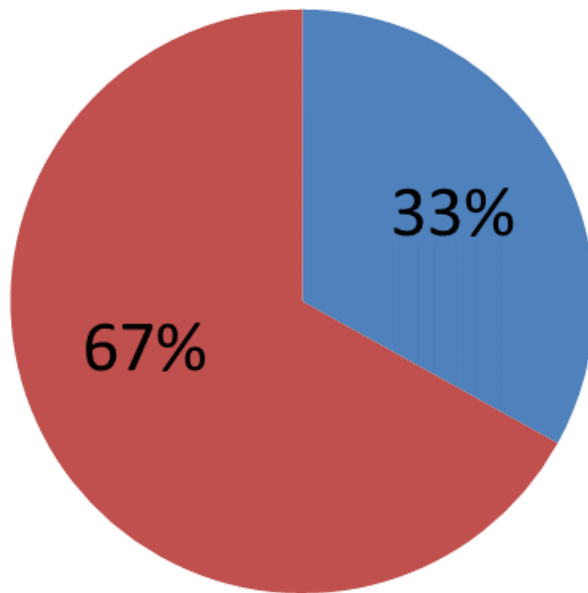
(COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)



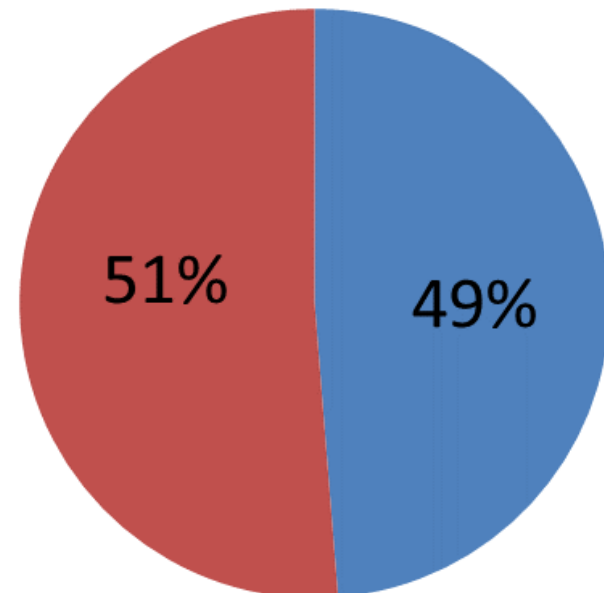
% of french young researchers in outgoing mobilities : **33% vs 35% mean**

MOBILITY : STATUS

France → Mexico



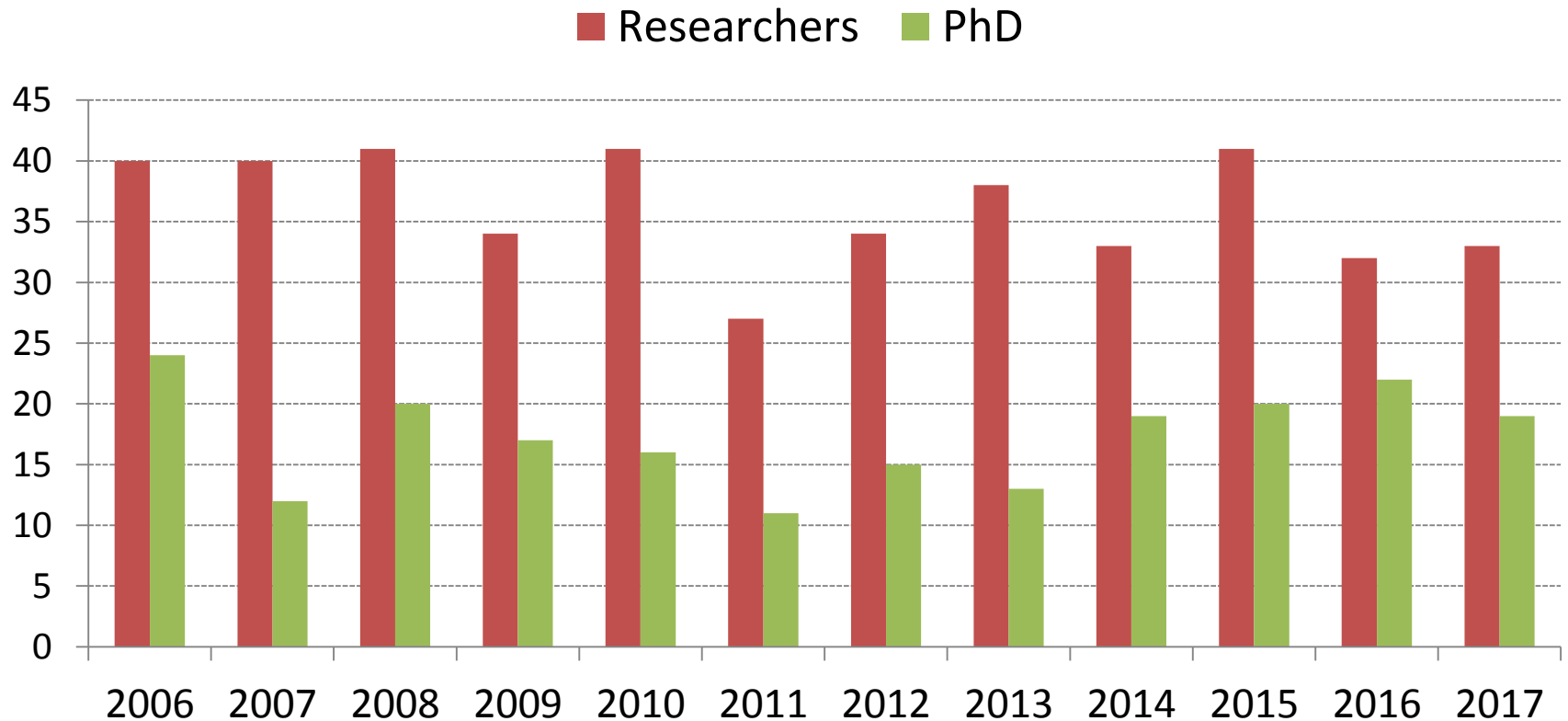
Mexico → France



- Junior researchers
- Senior researchers

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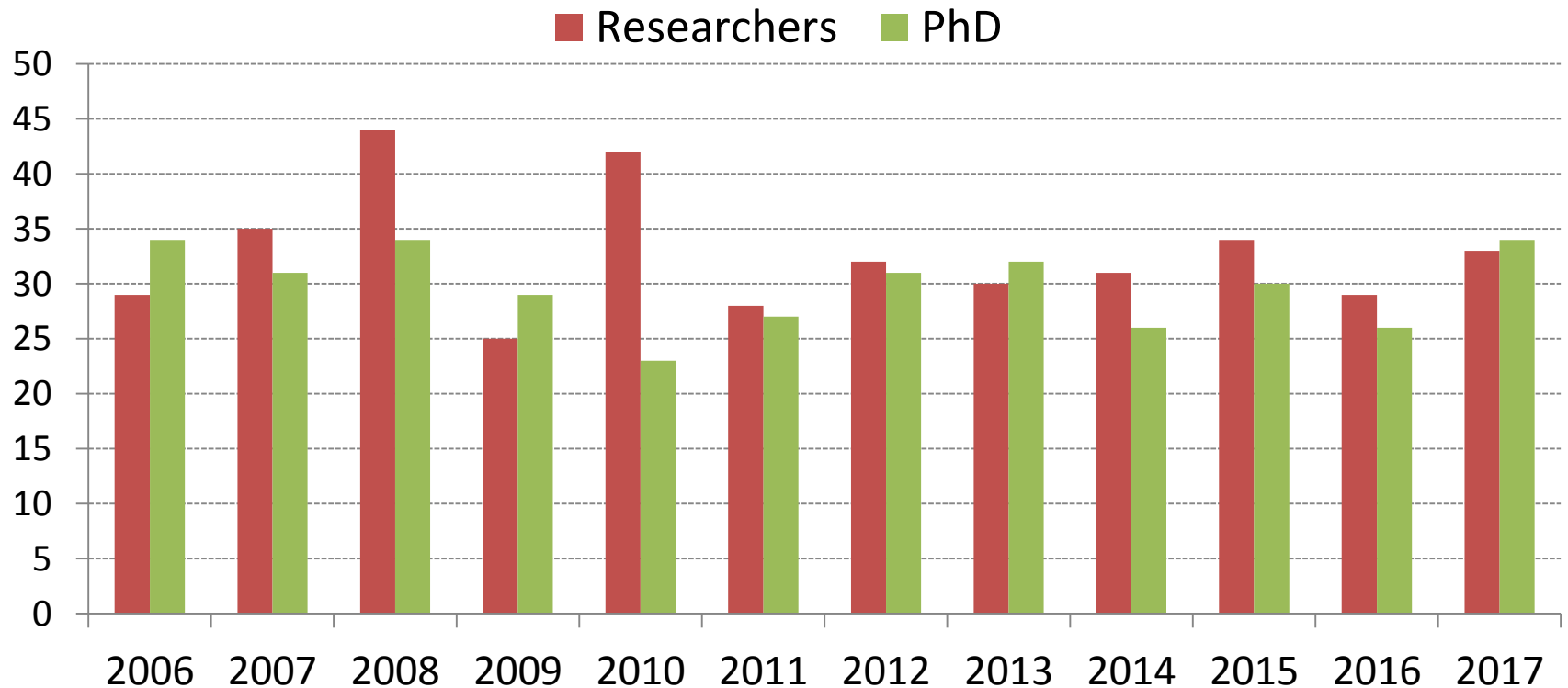
MOBILITY FRANCE → MEXICO : STATUS



(number of mobilities according to the status)

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MOBILITY MEXICO → FRANCE : STATUS

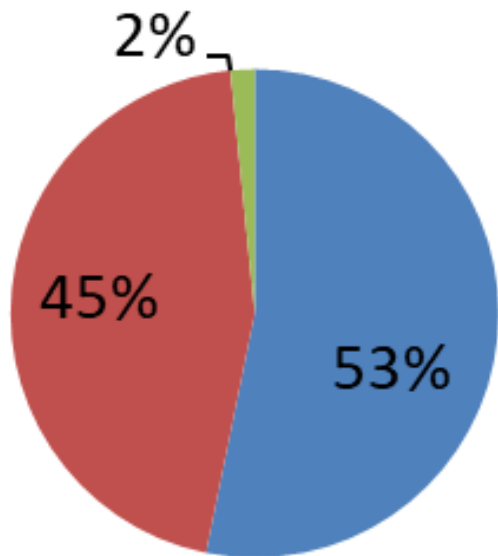


(number of mobilities according to the status)

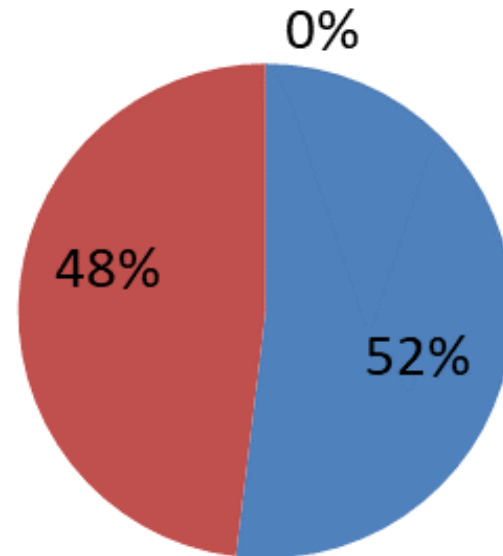
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MOBILITY : DURATION

France → Mexico



Mexico → France



■ < 15 days

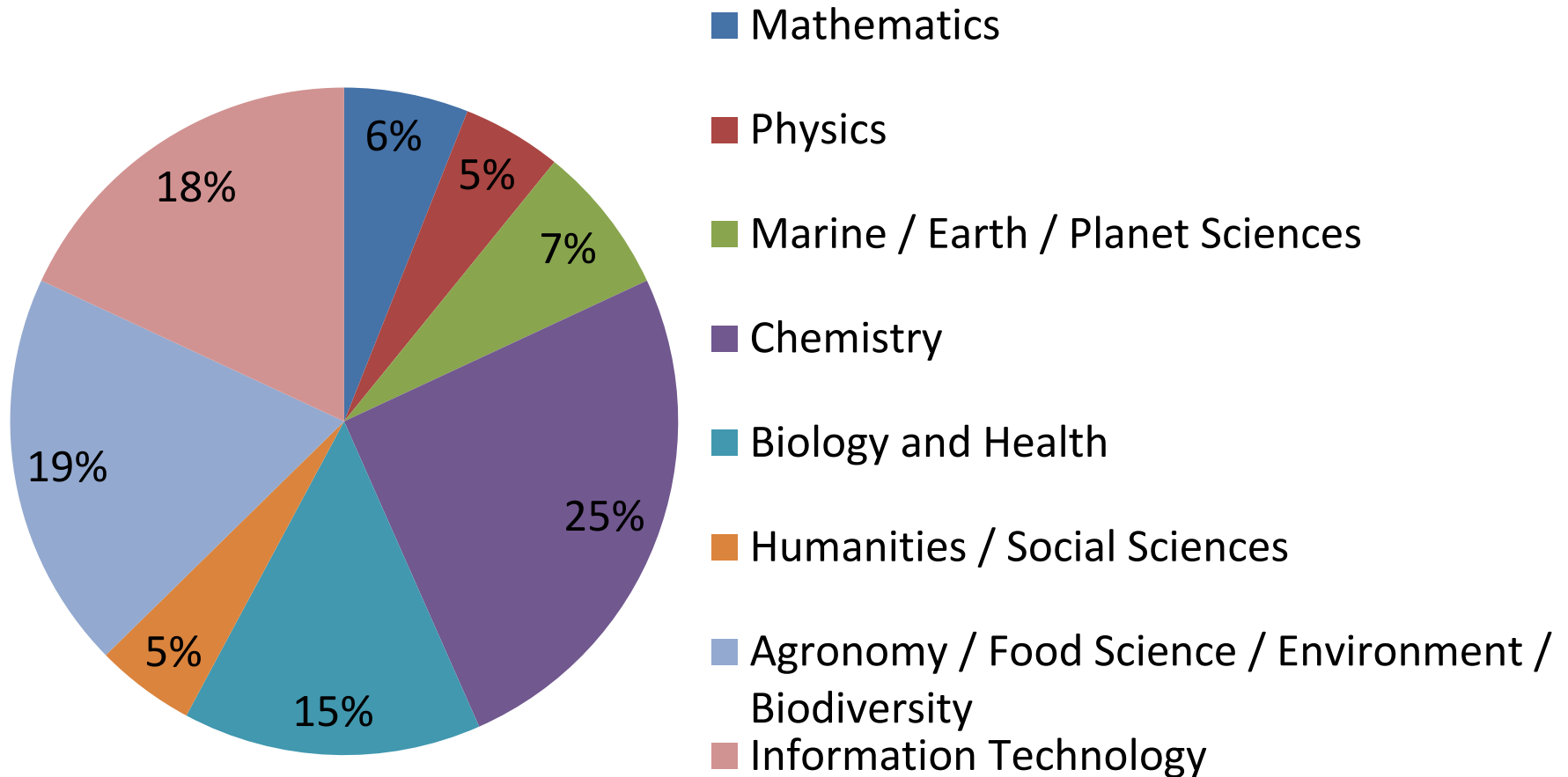
■ between 15 days and 3 months

■ > 3 months

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Scientific production

SCIENTIFIC OUTPUT (1/2)



SCIENTIFIC OUTPUT (2/2)

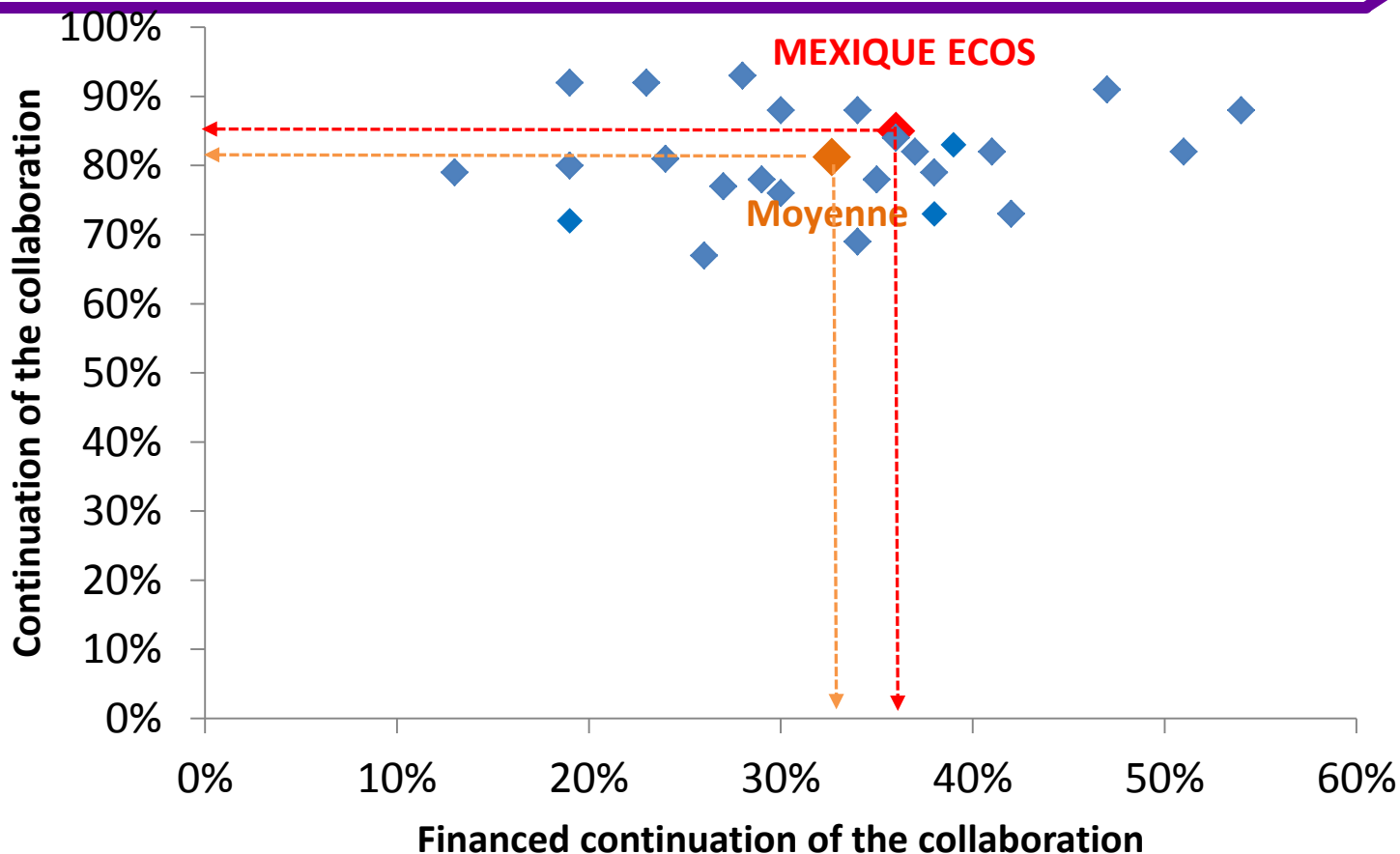
48% of funded projects led to one copublication at least

65% of copublications include at least 1 PHD or PostDoc

	Number of funded projects by thematic area	Ratio of funded projects by thematic area	Number of copublications	Ratio of copublications by thematic area	Ratio of funded projects by thematic area that led to one copublication at least	Ratio of copublication by project
Mathematics	6	14%	5	6%	17%	0,8
Physics	3	7%	4	5%	67%	1,3
Marine / Earth / Planet Sciences	3	7%	6	7%	67%	2,0
Chemistry	7	17%	21	25%	71%	3,0
Biology and Health	7	17%	12	14%	43%	1,7
Humanities / Social Sciences	8	19%	4	5%	25%	0,5
Agronomy / Food Science / Environment / Biodiversity	5	12%	16	19%	80%	3,2
Information Technology	3	7%	15	18%	33%	5,0
TOTAL	42	100%	83	100%	48%	2,0

What happens after a ECOS Nord Mexique Project ?

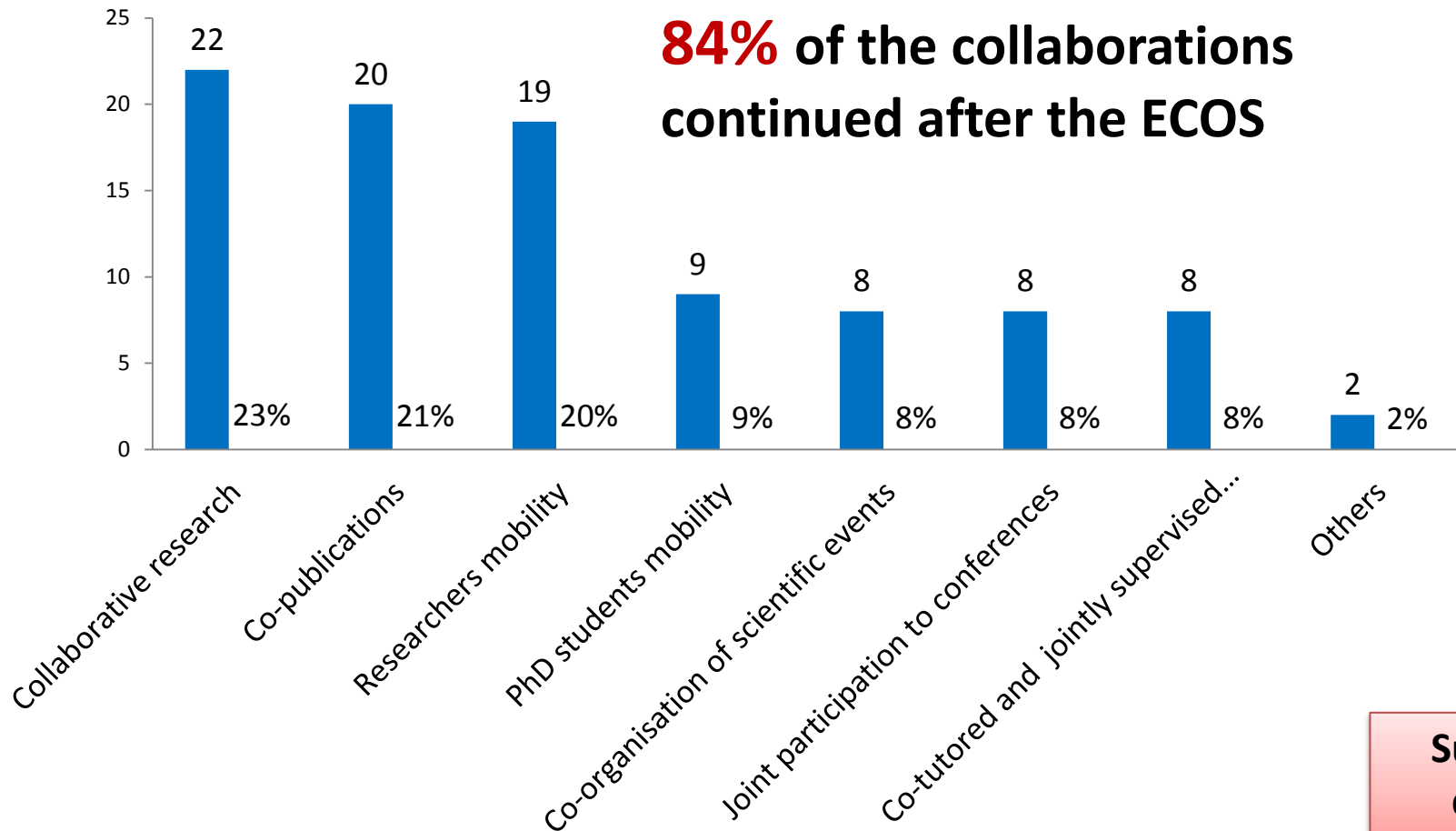
CONTINUATION OF THE COLLABORATION (1/4) (COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)



Continuation of the collaboration : **84% vs 81% mean**

Continuation of the collaboration with other sources of subvention : **36% vs 33% mean**

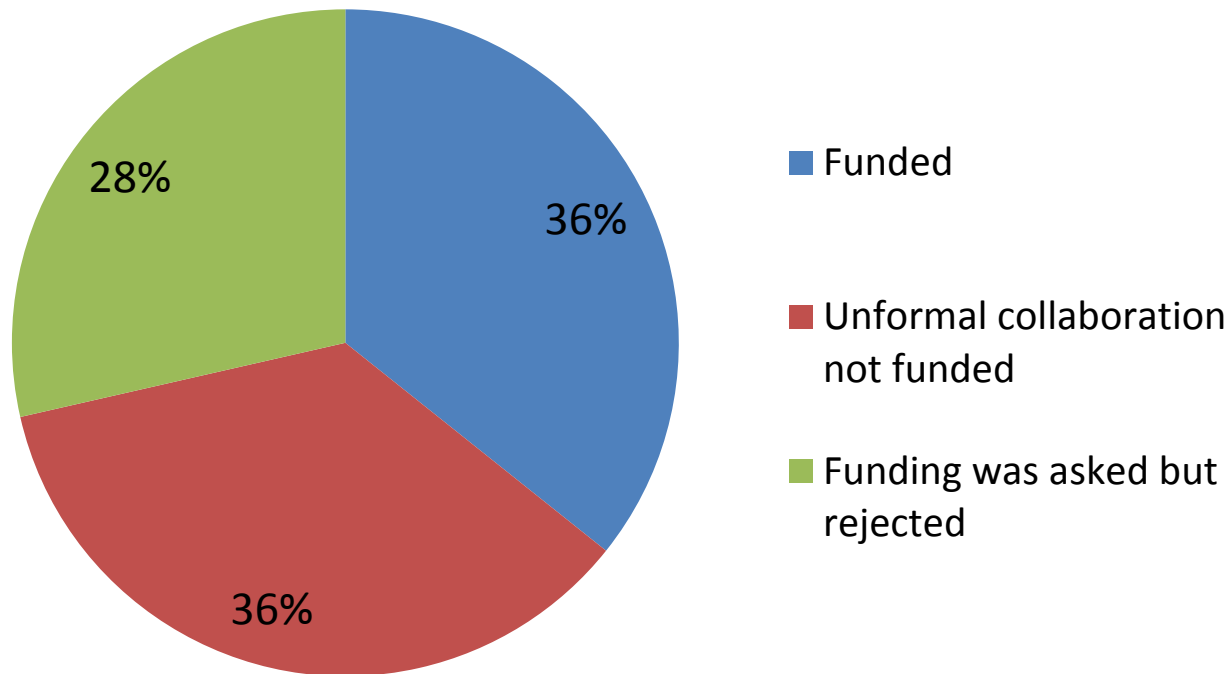
CONTINUATION OF THE COLLABORATION (1/4)



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CONTINUATION OF THE COLLABORATION (2/4)

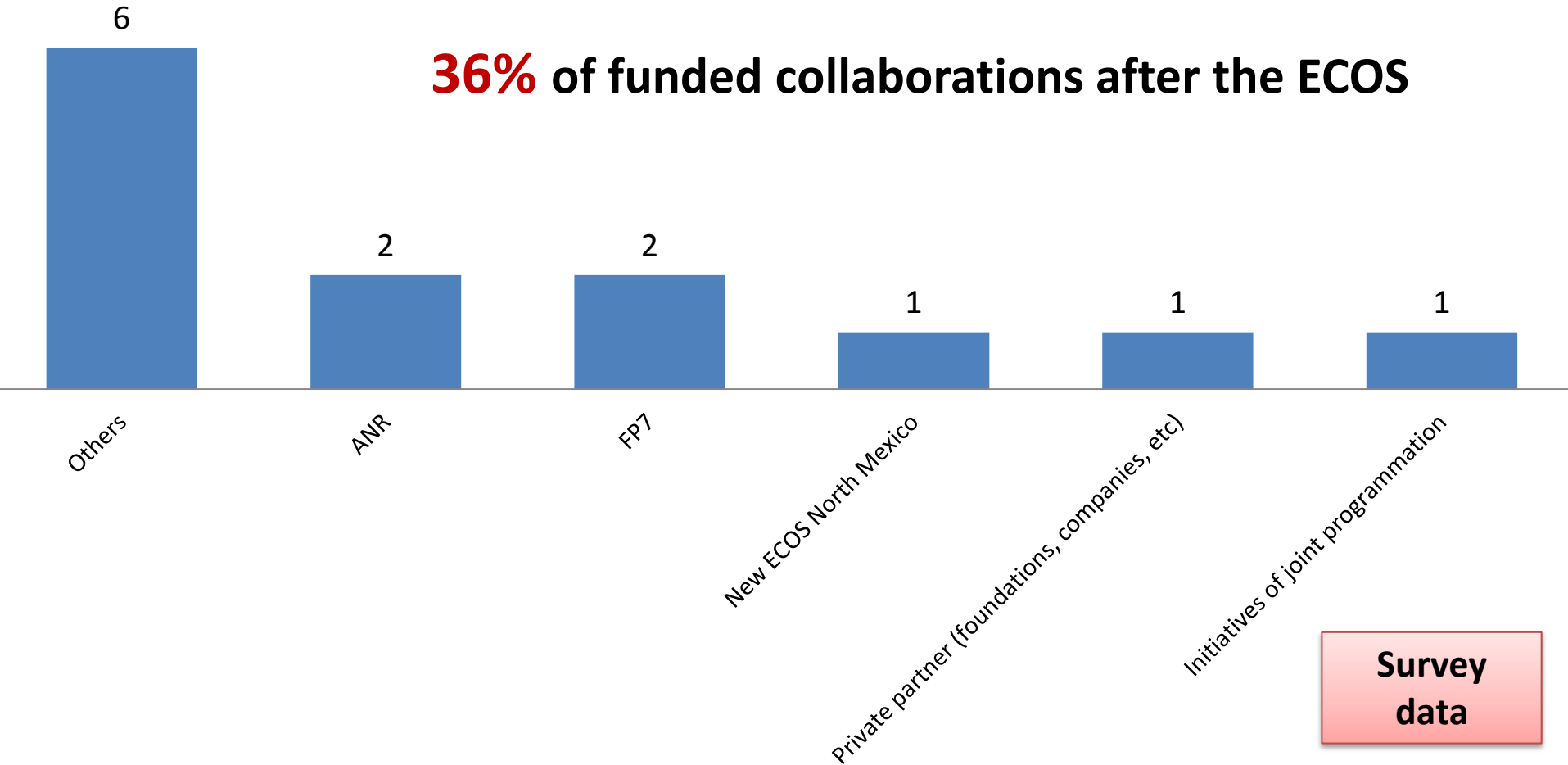
36% of funded collaborations after the ECOS



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CONTINUATION OF THE COLLABORATION (3/4)

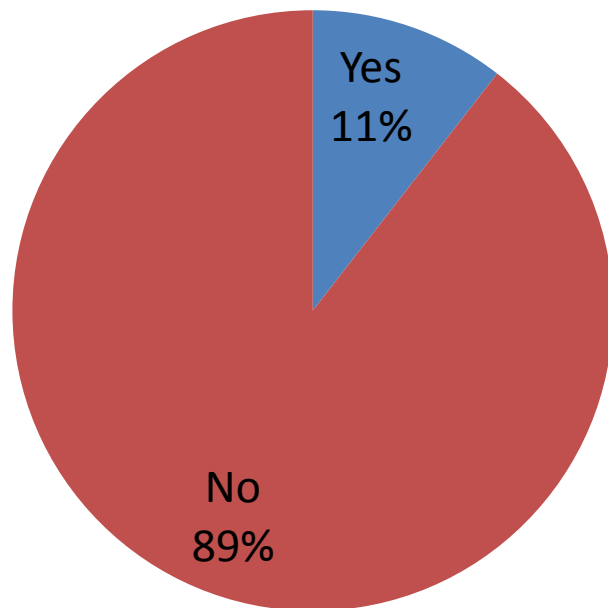
36% of funded collaborations after the ECOS



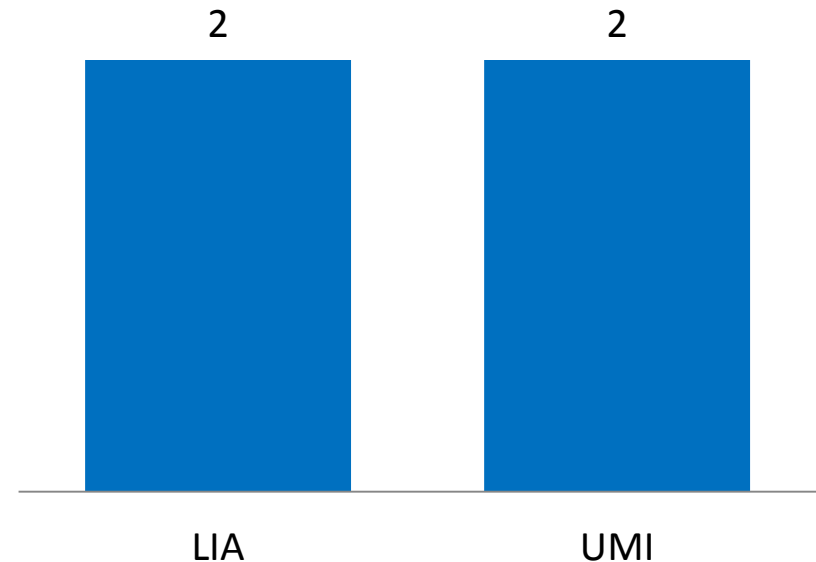
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CONTINUATION OF THE COLLABORATION (4/4)

Did the project ECOS lead to the establishment of joint structures?



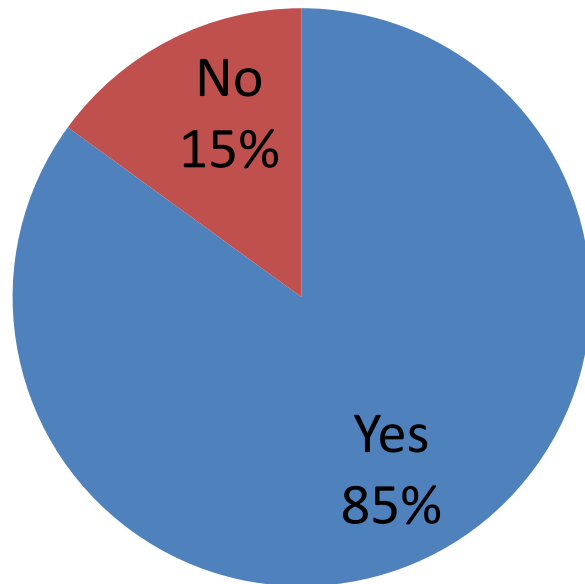
Type of structures



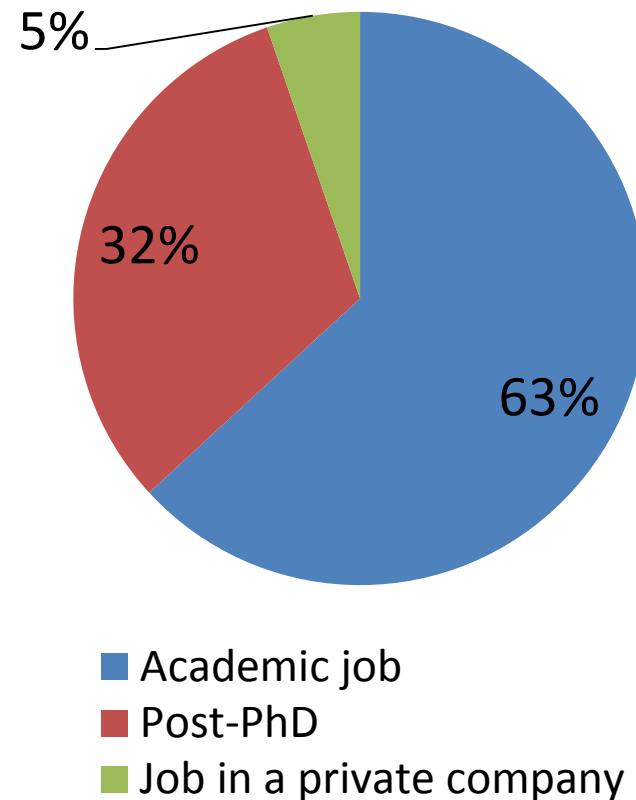
Survey data

IMPACT ON YOUNG RESEARCHERS' CAREER

% of young researchers whose career was impacted by the ECOS program



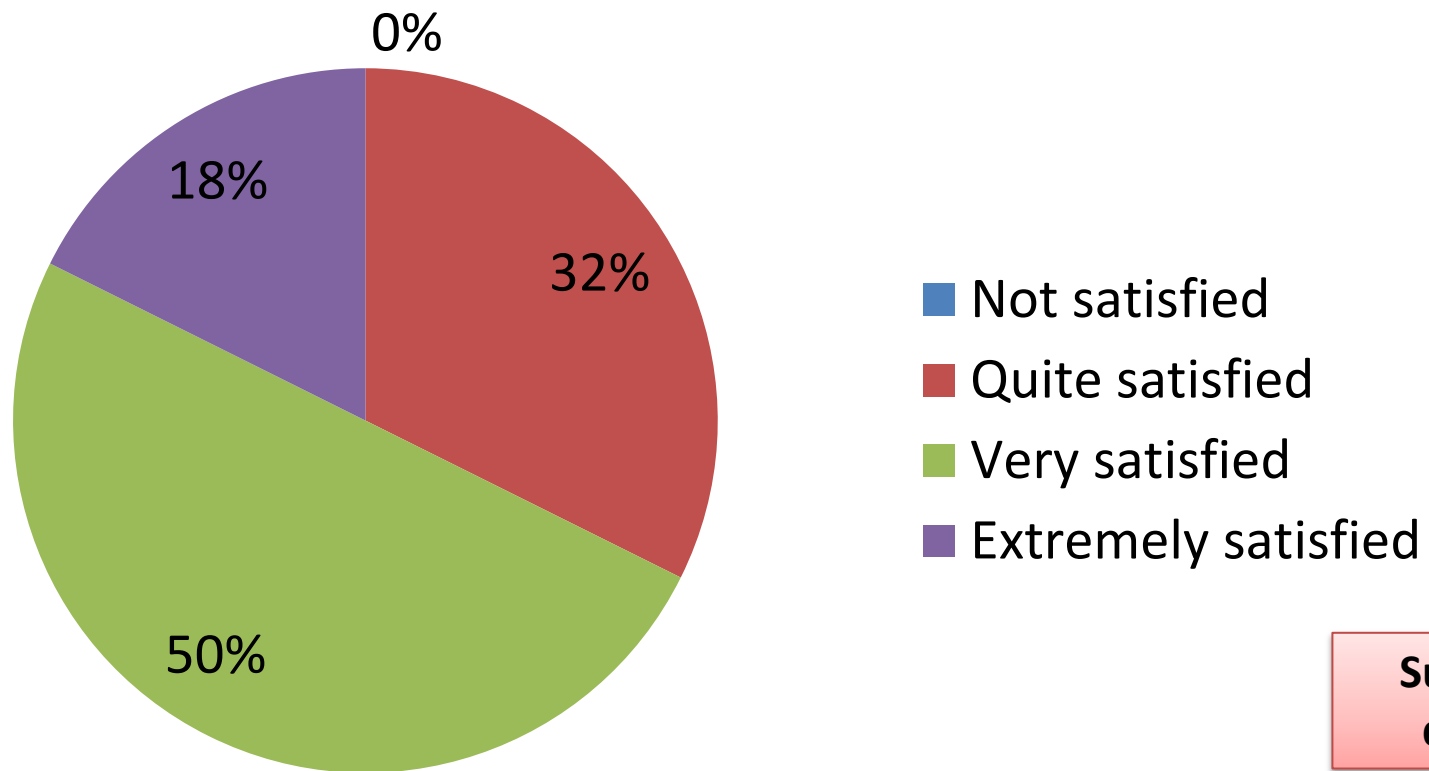
Type of impacts



Survey data

GENERAL OPINION OF FRENCH PIS ON THE PROGRAMME

100% of french principal investigators are satisfied



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PRELIMINARY CONCLUSIONS / RECOMMENDATIONS

CONCLUSIONS

- Top PHD students involvement (100 %)
- Mainly senior Principal Investigators (93 %)
- Good further scientific collaborations (84 %)
- Difficulties for obtaining financial support for further scientific collaborations (36 %)
- Good level of scientific outputs including at least 1 PHD students or post-doc (65%)
- Pretty good average rate of young researchers copublications(57%)

RECOMMENDATIONS

- Promote young researchers applications
- Promote women applications (only 21% of applicants are women)
- Improve success rate (22% in 2016)

CONCLUSIONS

French national authorities (MESRI / MEAE) will provide a complete analysis of the survey (incl. on the scientific impact) and provide this to recipients of the funding and participants in this symposium.

Preliminary conclusions suggest that the funding scheme is efficiently contributing to creating (maintaining) fruitful and long term cooperation, despite the relatively low financial support, which is to be considered as “seed money”.

Thank you for your attention

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