

FRANCE – HONG KONG

**Scientific impact of the programme PROCORE
(2005-2020)**

MESRI-DAEI / MEAE

2020

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

GENERAL PRESENTATION OF THE PROGRAMME

Creation : 2003

The purpose of this programme is to develop excellence scientific and technological exchanges between French and Hong Kong laboratories, by promoting new scientific collaborations and integrating in the projects young researchers and PhD students.

Total budget (France + Hong Kong) : around 220 000 € / year

>> including budget from the French part : around 110 000 € / year

>> including budget from the Hong Kong part : around 110 000 € / year

Average budget per project (France + Hong Kong) : around 10 000 € / year

Number of new funded projects per year : around 12

From 2005 to 2020 :

560 applications submitted

190 projects funded

DATA SOURCES

Campus France (2005-2020)

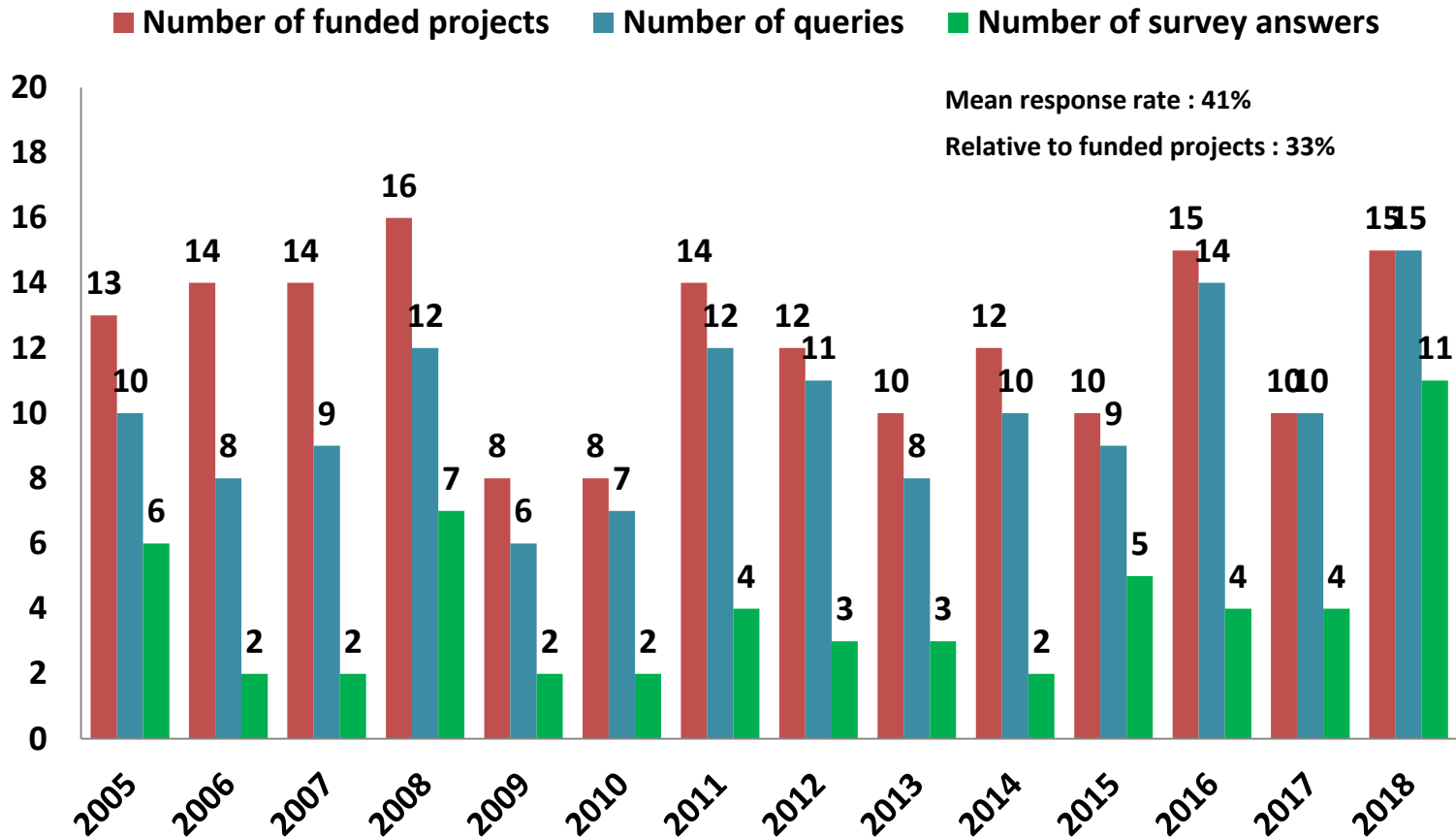
- Information about the PHC Procore applications
- List of mobilities (from France to Hong Kong for projects and from Hong Kong to France for workshops held in France)

Survey (2005-2018)

- Target : French Principal Investigators of selected projects between 2005 and 2018
- Survey duration : 11 weeks between June and Septembre 2020
- **41%** response ratio (58 respondents for 140 queries)

ANSWERS TO THE SURVEY

Average response rate to the survey : **41 % (58 answers)**

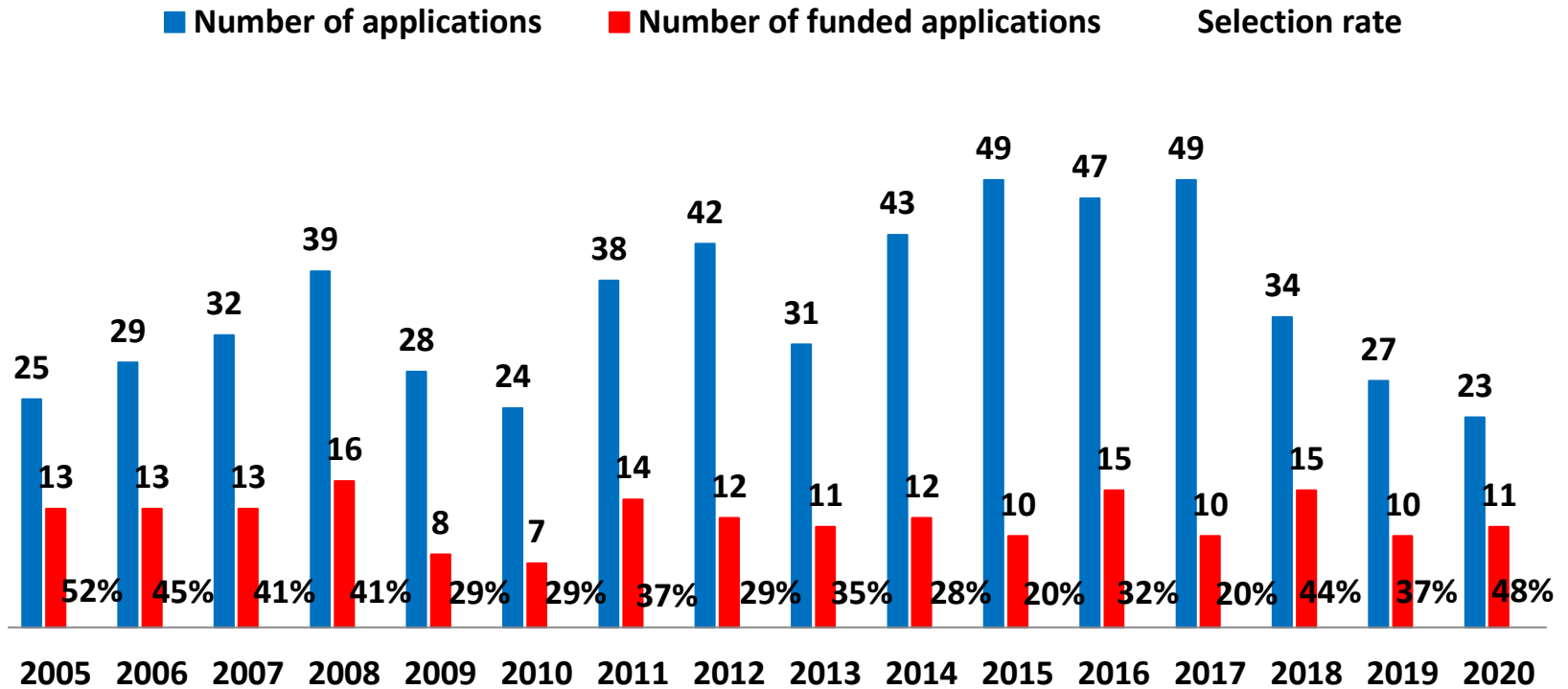


169 funded projects between 2005 and 2018, 140 valid email addresses

2005-2020 Key Points

NUMBER OF APPLICATIONS AND SELECTION RATE

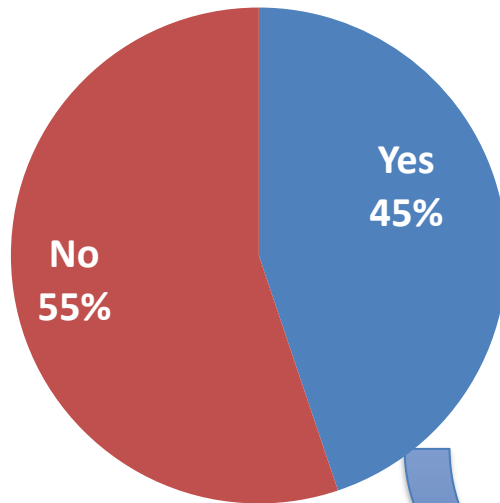
Average selection rate from 2005-2020: **34%**



Continuous decrease in the number of applications since 2017

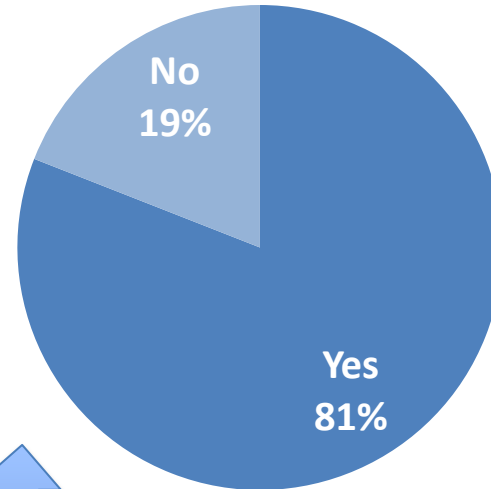
BEFORE THE PROCORE PROJECT (1/2)

Did you already cooperate with Hong Kong in the past ?



Data from 58 responses

If yes, was it with the same partner?



Data from 21 responses

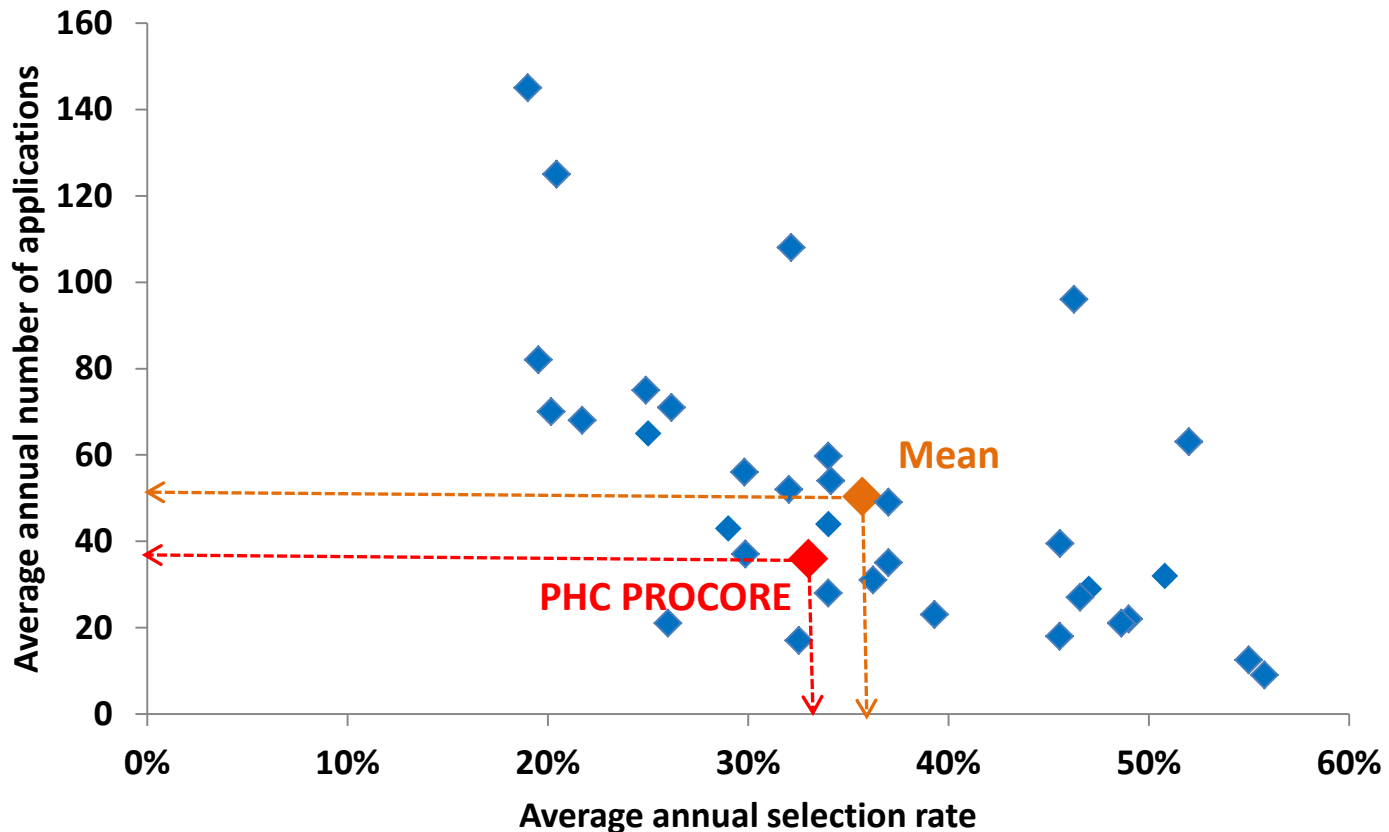
BEFORE THE PROCORE PROJECT (2/2)

With which scientific collaboration programme ?	
PHC Procore	64%
Co-funding with Hong Kong institutions	9%
ANR (French National Research Agency)	6%
Others	21%

Plus 31 previous cooperations based on other exchanges (co-publication, meetings, joint PhD...)

Data from 33 responses

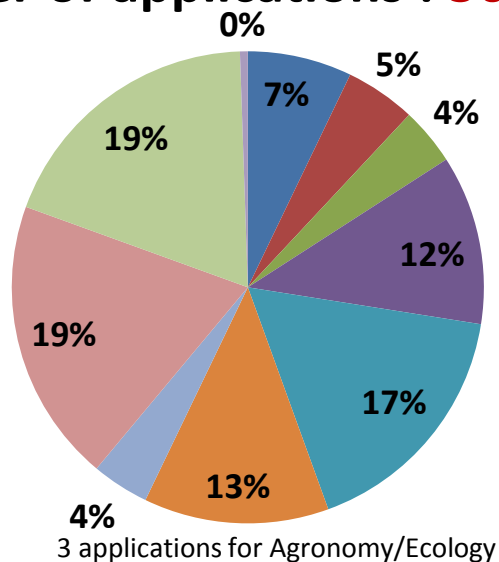
NUMBER OF APPLICATIONS VS SELECTION RATE (COMPARISON BETWEEN 35 DIFFERENT BILATERAL PROGRAMMES)



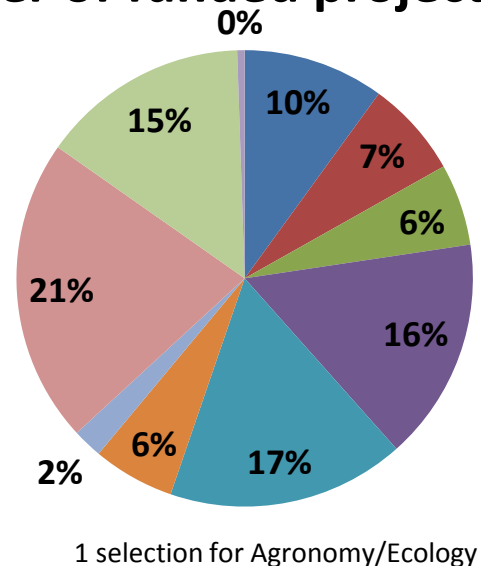
Average selection rate for 2005-2020 : 33% vs 36% mean
Average number of applications 2005-2020 : 36 vs 50 mean

SCIENTIFIC DOMAINS OF PROJECTS 2005-2020

Number of applications : **560**



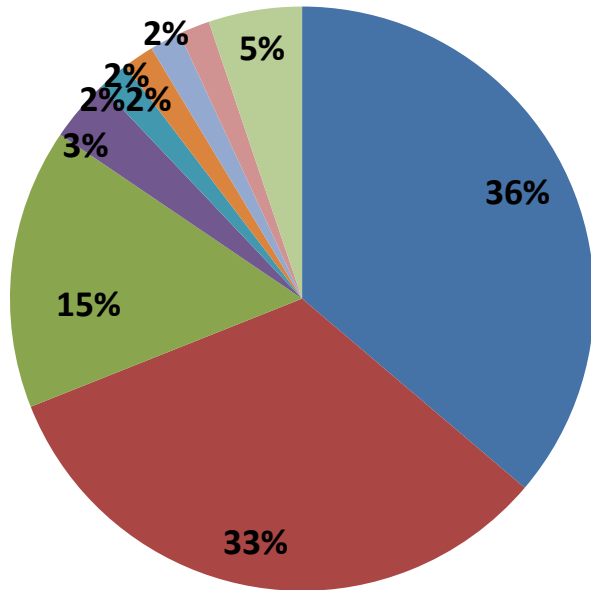
Number of funded projects : **190**



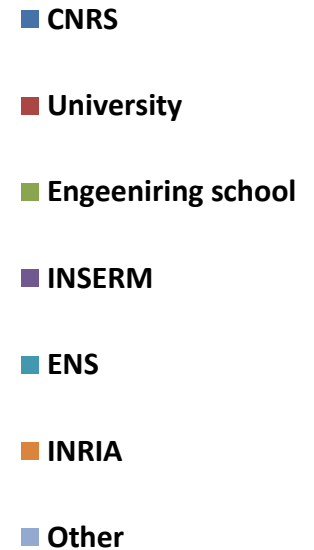
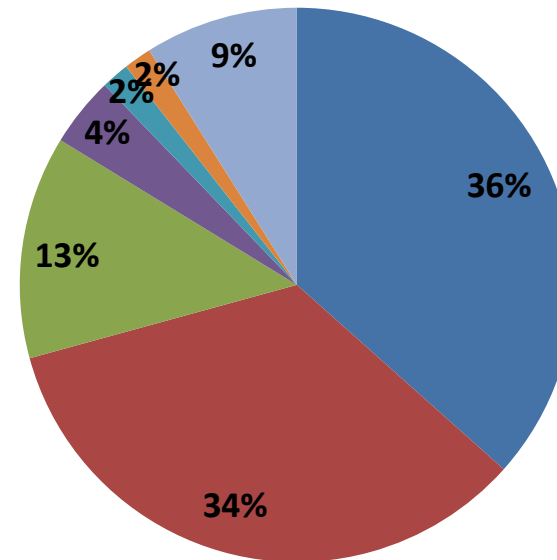
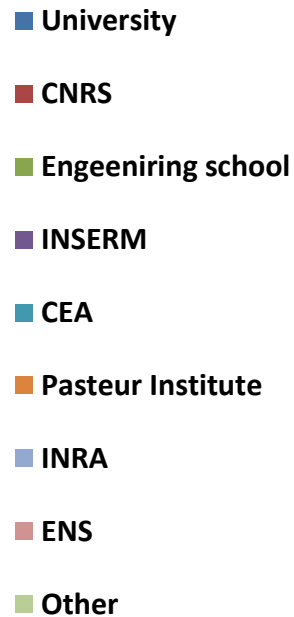
- Mathematics
- Physics
- Marine/Earth/Planet Sciences
- Chemistry
- Biology and Health
- Humanities
- Social Sciences
- Engineering Sciences
- Information Technology
- Agronomy/Ecology

FRENCH PARTICIPATING INSTITUTIONS 2005-2018

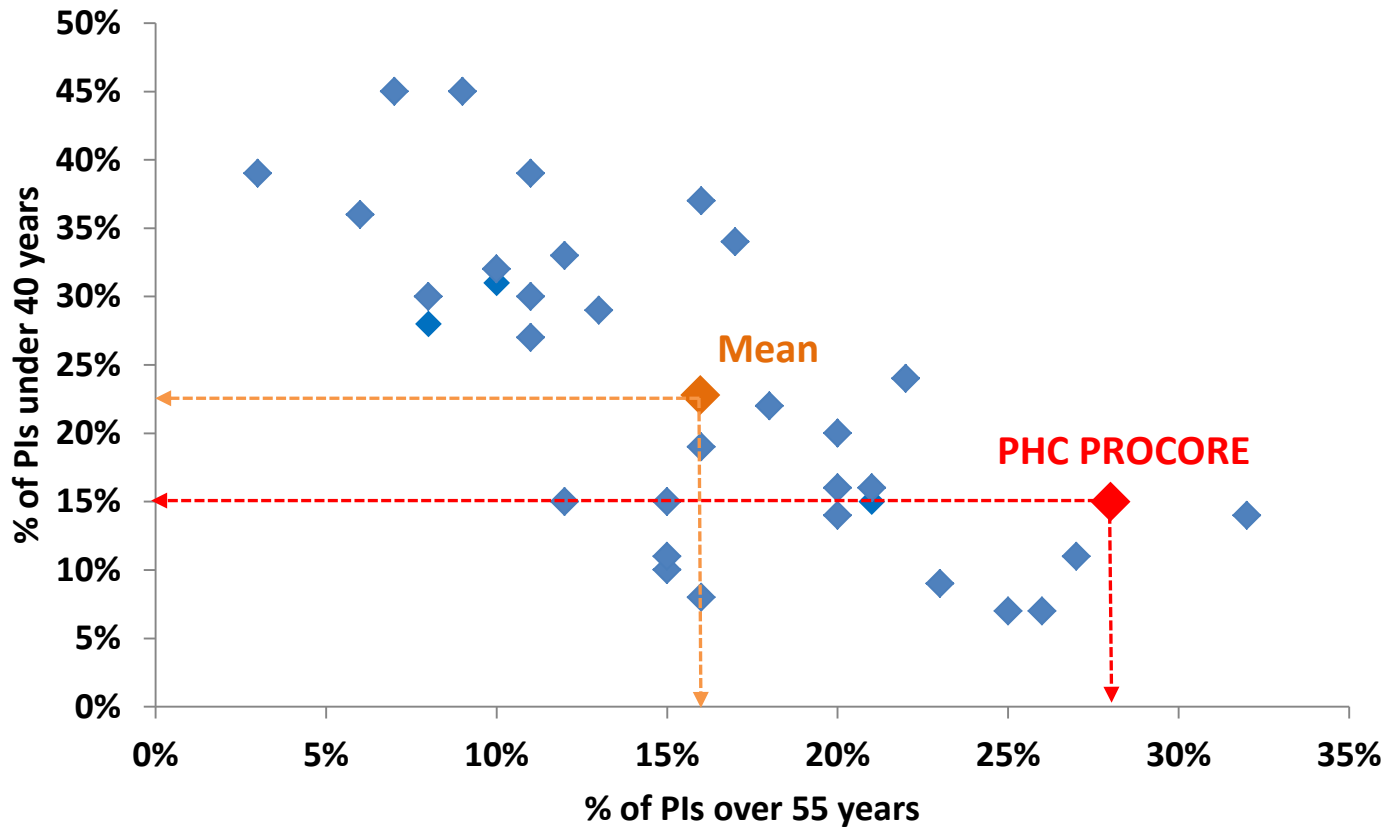
PI's employers



Laboratories authorities



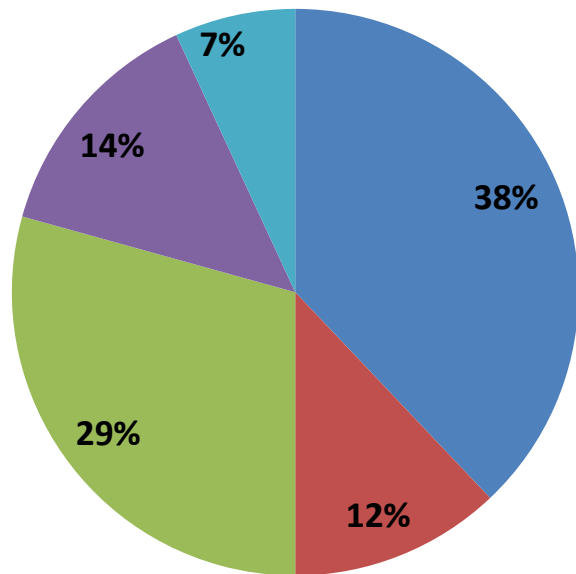
AGE OF PRINCIPAL INVESTIGATORS (PI) (COMPARISON BETWEEN 35 DIFFERENT BILATERAL PROGRAMMES)



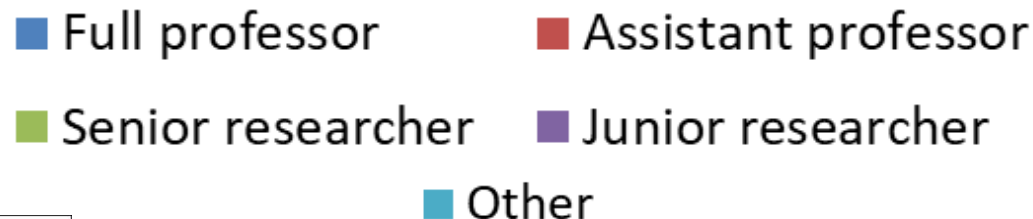
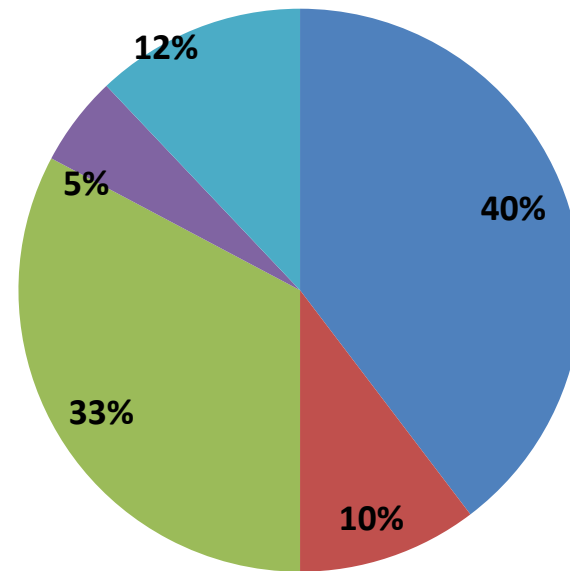
PIs under 40 years : **15% vs 23% mean**
 PIs over 55 years : **28% vs 16% mean**
57% of the PIs are between 40 and 55 years

FRENCH PIS (PRINCIPAL INVESTIGATORS) : STATUS

Previous professional status (at the beginning of the project)

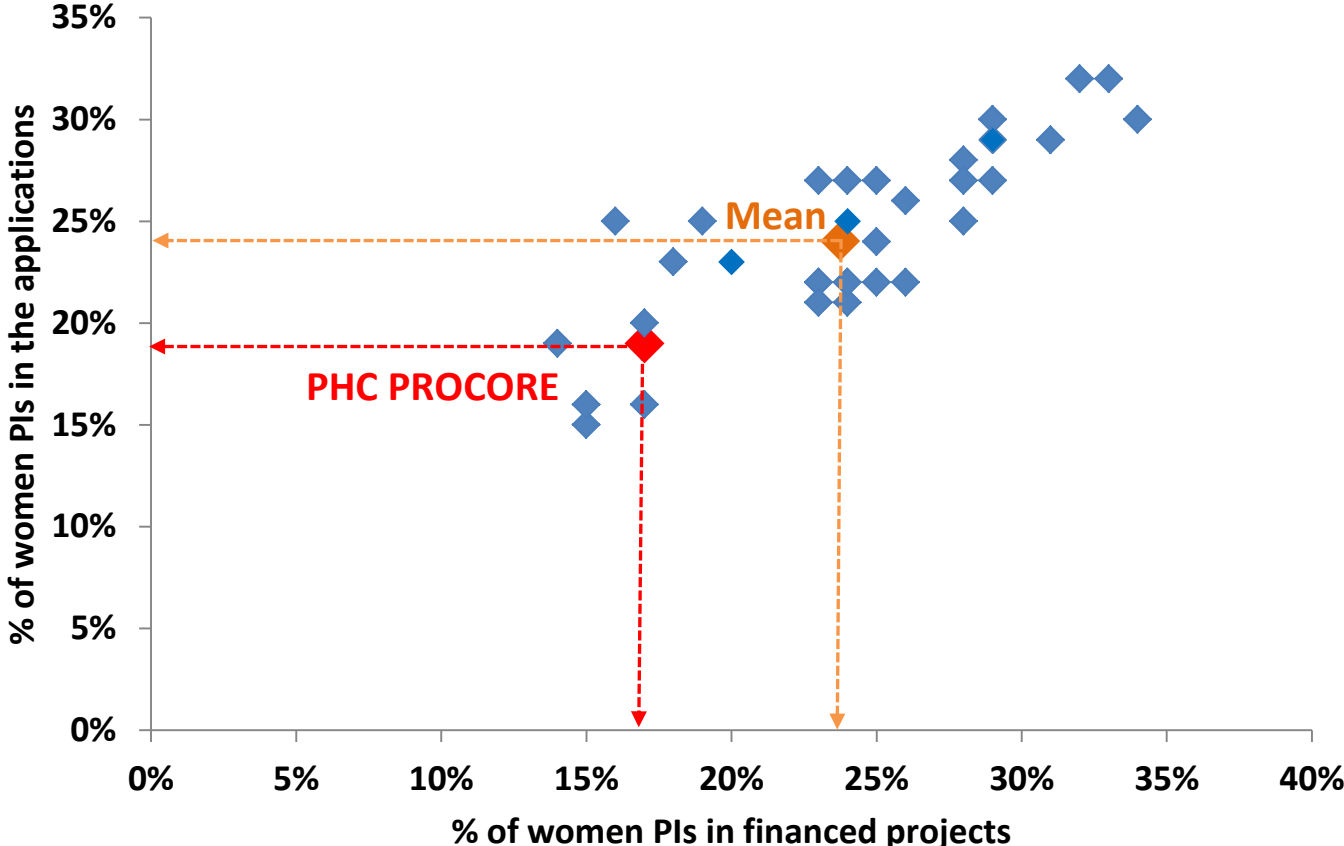


Current professional status



IMPLICATION OF WOMEN (FRANCE)

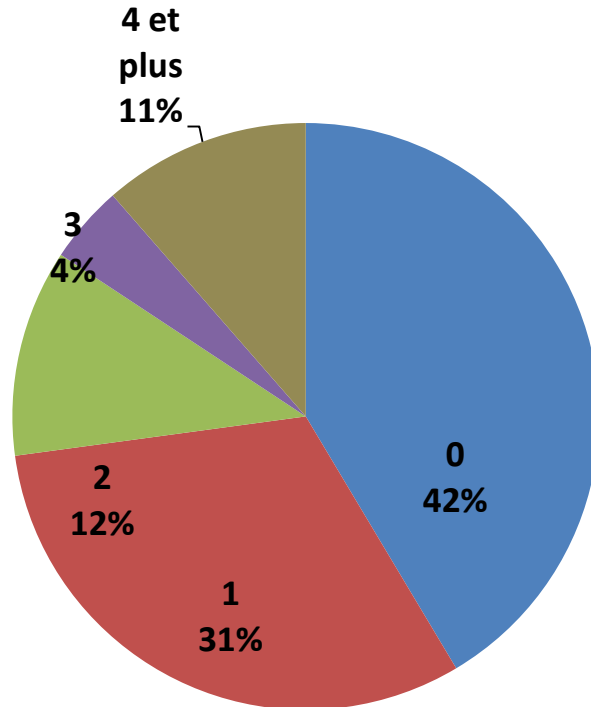
(COMPARISON BETWEEN 35 DIFFERENT BILATERAL PROGRAMMES)



% of women PIs in the applications : 19% vs 24% mean
% of women PIs in the selected projects : 17% vs 24% mean

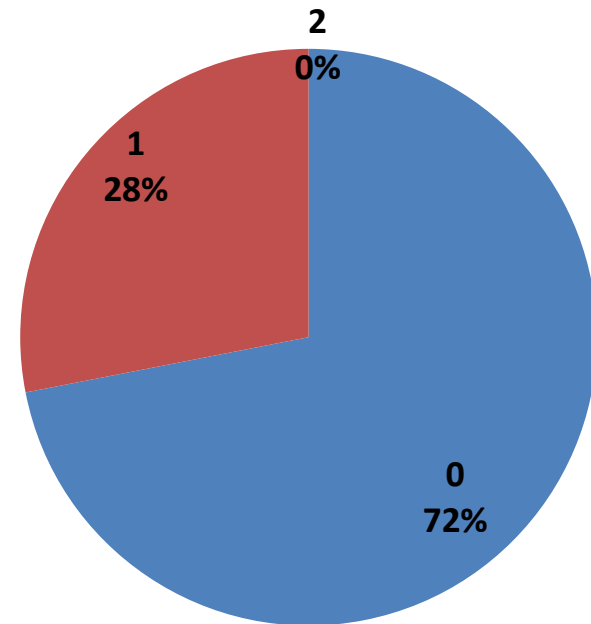
PARTICIPATION OF FRENCH YOUNG RESEARCHERS

Number of PhD students



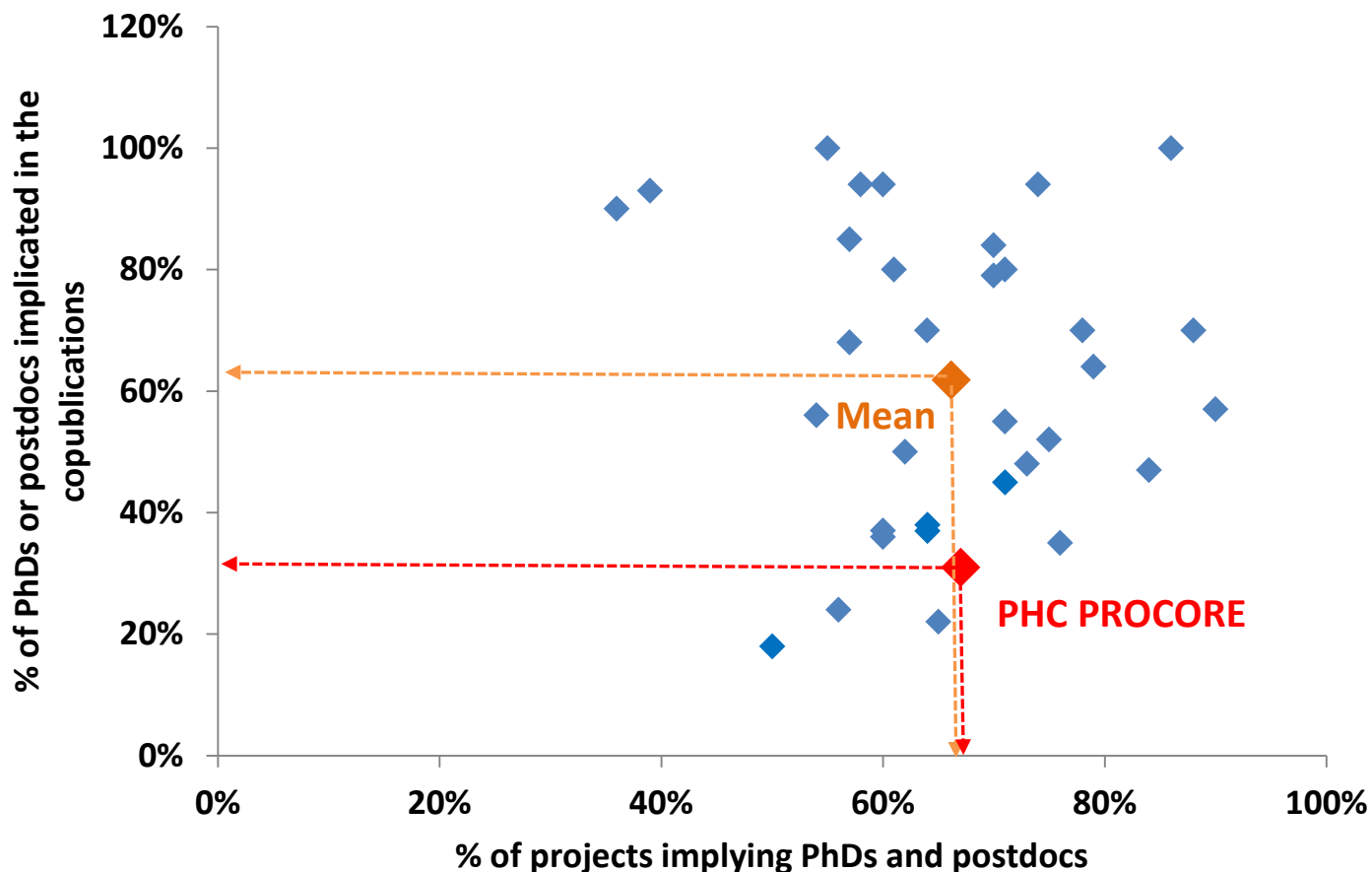
50% of projects involve at least one PhD student

Number of post-doctoral researchers



29% of projects involve at least one post-doctoral researcher

IMPLICATION OF YOUNG RESEARCHERS (COMPARISON BETWEEN 35 DIFFERENT BILATERAL PROGRAMMES)



% of projects implying young researchers : 67% vs 66% mean

% of PhD or postdoc implicated in the copublications : 31% vs 62% mean

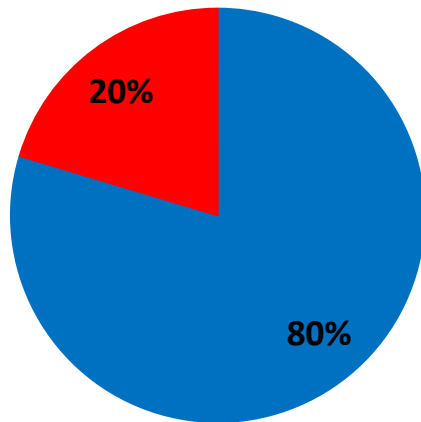


MOBILITY 2005-2019

MOBILITY : GENDER DISTRIBUTION

France → Hong Kong

Hong Kong → France



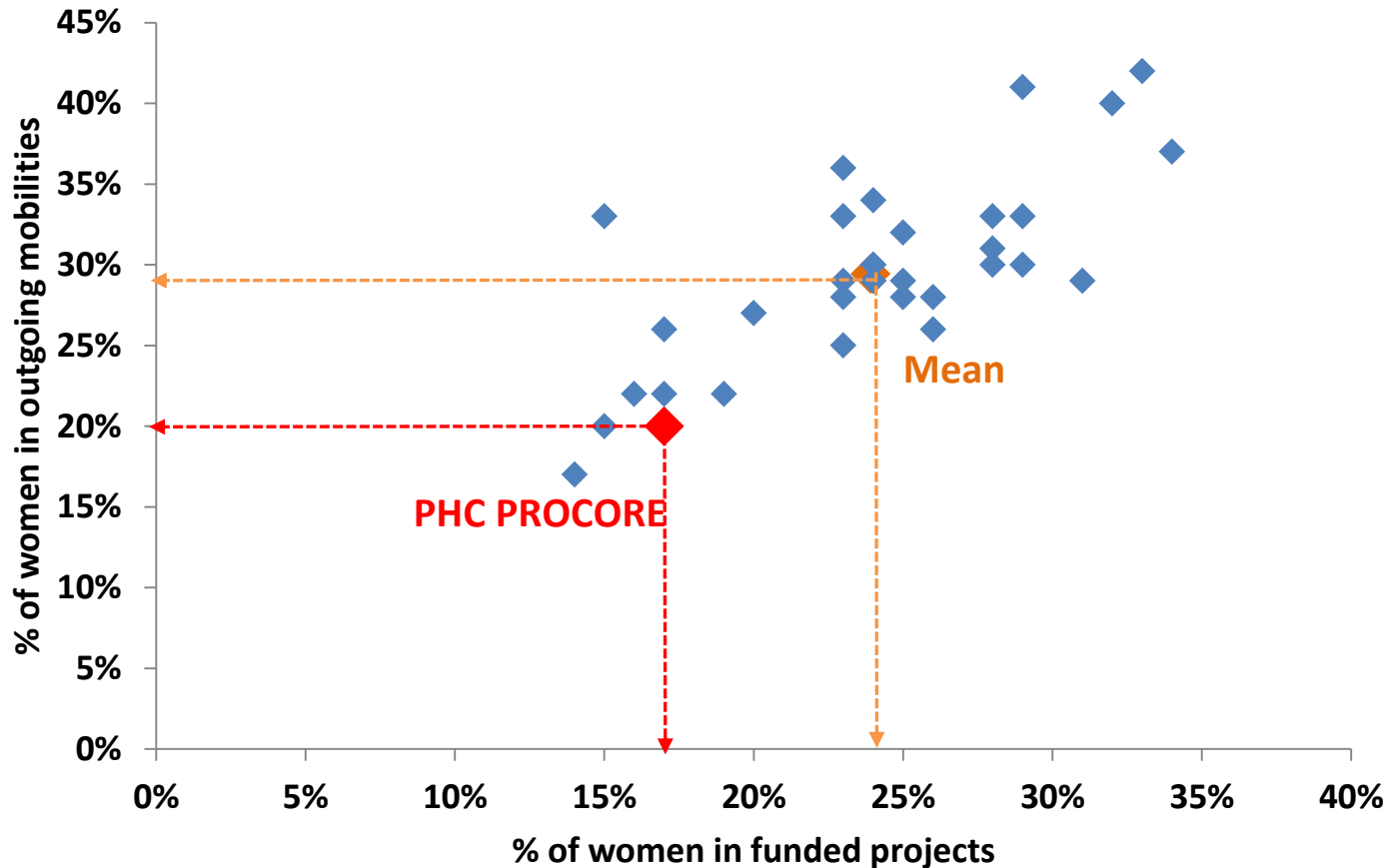
Not available

■ Men ■ Women

Data from 170 funded projects including outgoing mobilities

WOMEN MOBILITY FRANCE – HONG KONG

(COMPARISON BETWEEN 35 DIFFERENT BILATERAL PROGRAMMES)



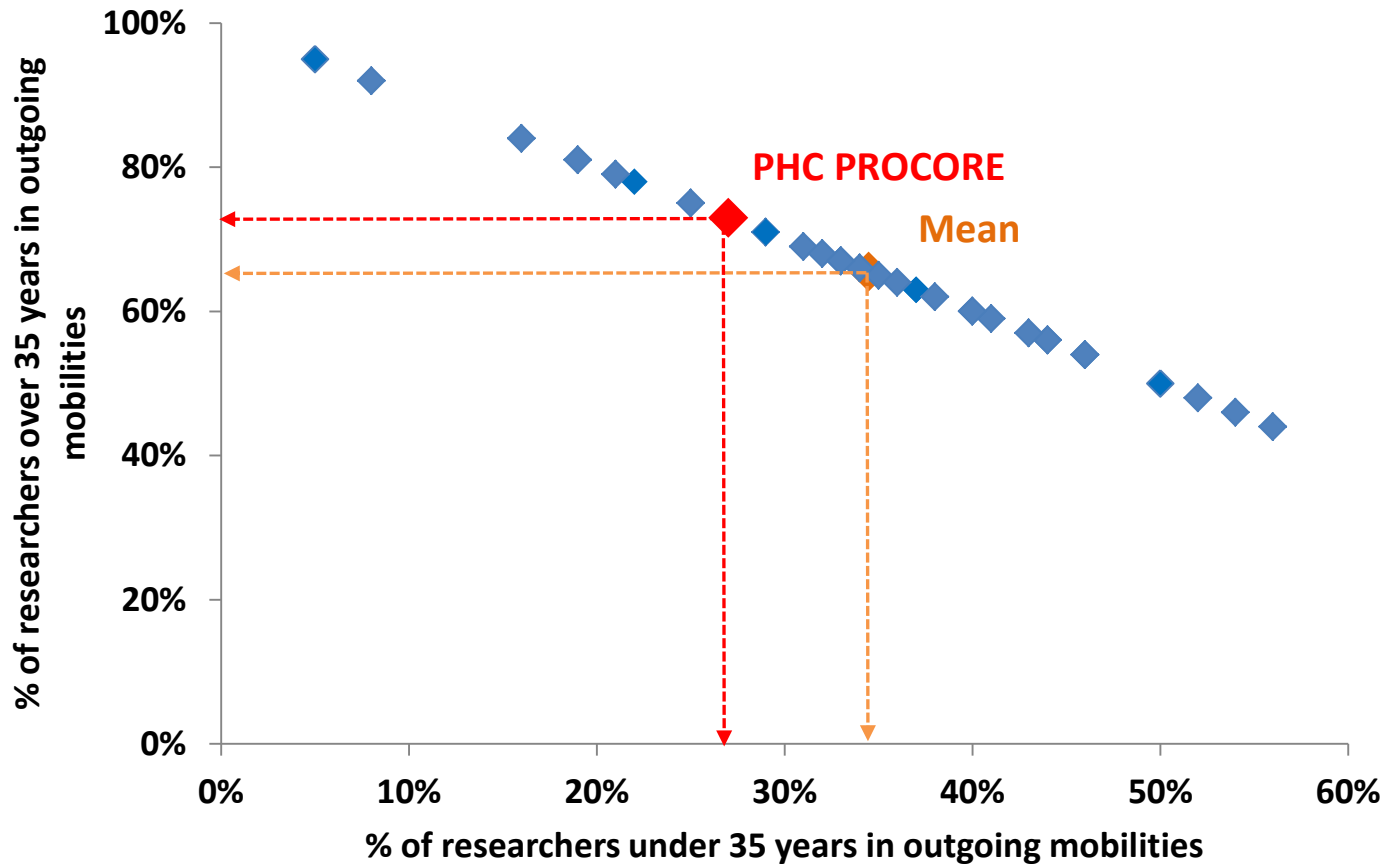
% of women researchers in the selected projects : 17% vs 24% mean

% of women researchers in outgoing mobilities : 20% vs 29% mean

YOUNG RESEARCHERS MOBILITY

FRANCE – HONG KONG

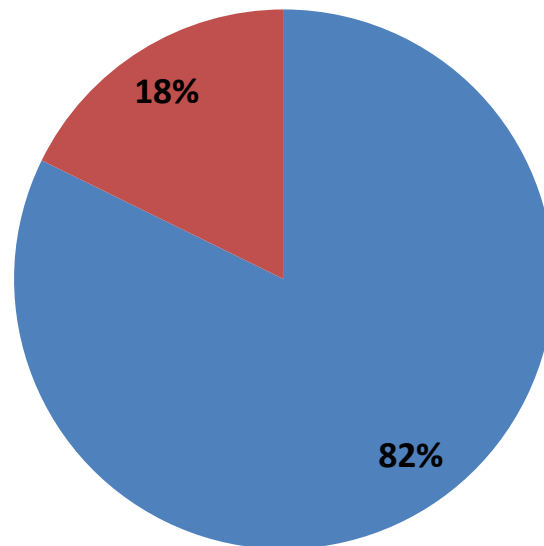
(COMPARISON BETWEEN 35 DIFFERENT BILATERAL PROGRAMMES)



% of french young researchers in outgoing mobilities : 27% vs 34% mean

MOBILITY : DURATION

France → Hong Kong



■ < 15 days

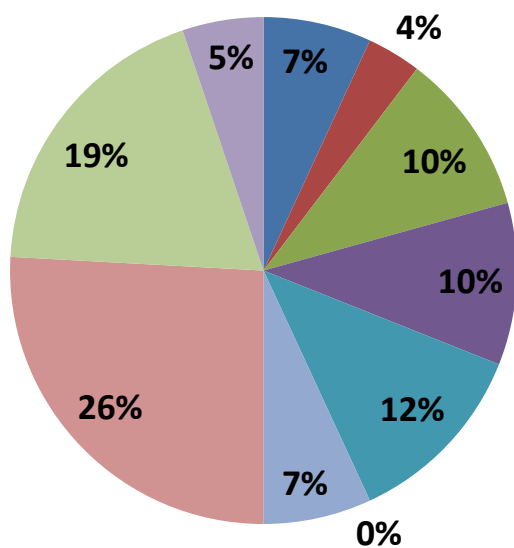
■ between 15 days and 3 months

SCIENTIFIC PRODUCTION 2005-2017

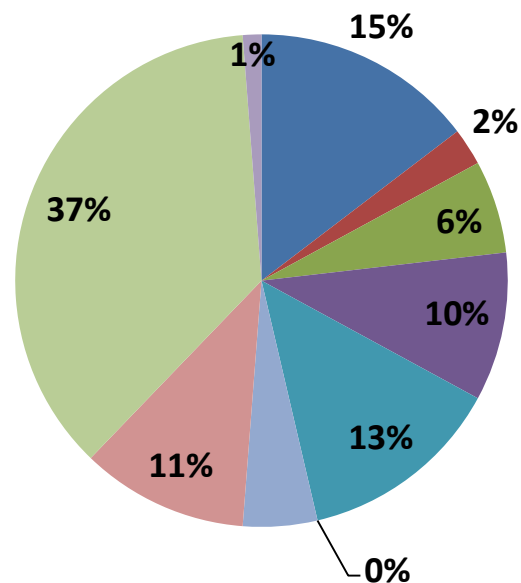


SCIENTIFIC OUTPUT (1/2)

Funded projects with responses to the survey (58)



Percentage of copublications



- Mathematics
- Physics
- Marine/Earth/Planet Sciences
- Chemistry
- Biology and Health
- Humanities
- Social Sciences
- Engineering Sciences
- Information Technology
- Agronomy/Ecology

SCIENTIFIC OUTPUT (2/2)

Data from 58 funded projects

	Number of financed projects in the survey	Average number of co-publications per project
Mathematics	4	3,00
Physics	2	1,00
Marine/Earth/Planet Sciences	6	0,83
Chemistry	6	1,33
Biology and Health	7	1,57
Humanities	0	0
Social Sciences	4	1,00
Engineering Sciences	15	0,60
Information Technology	11	2,73
Agronomy / Ecology	3	0,33
TOTAL	58	1,41

Overall average **annual** number of copublications per project : **0,71 vs 0,93 mean**

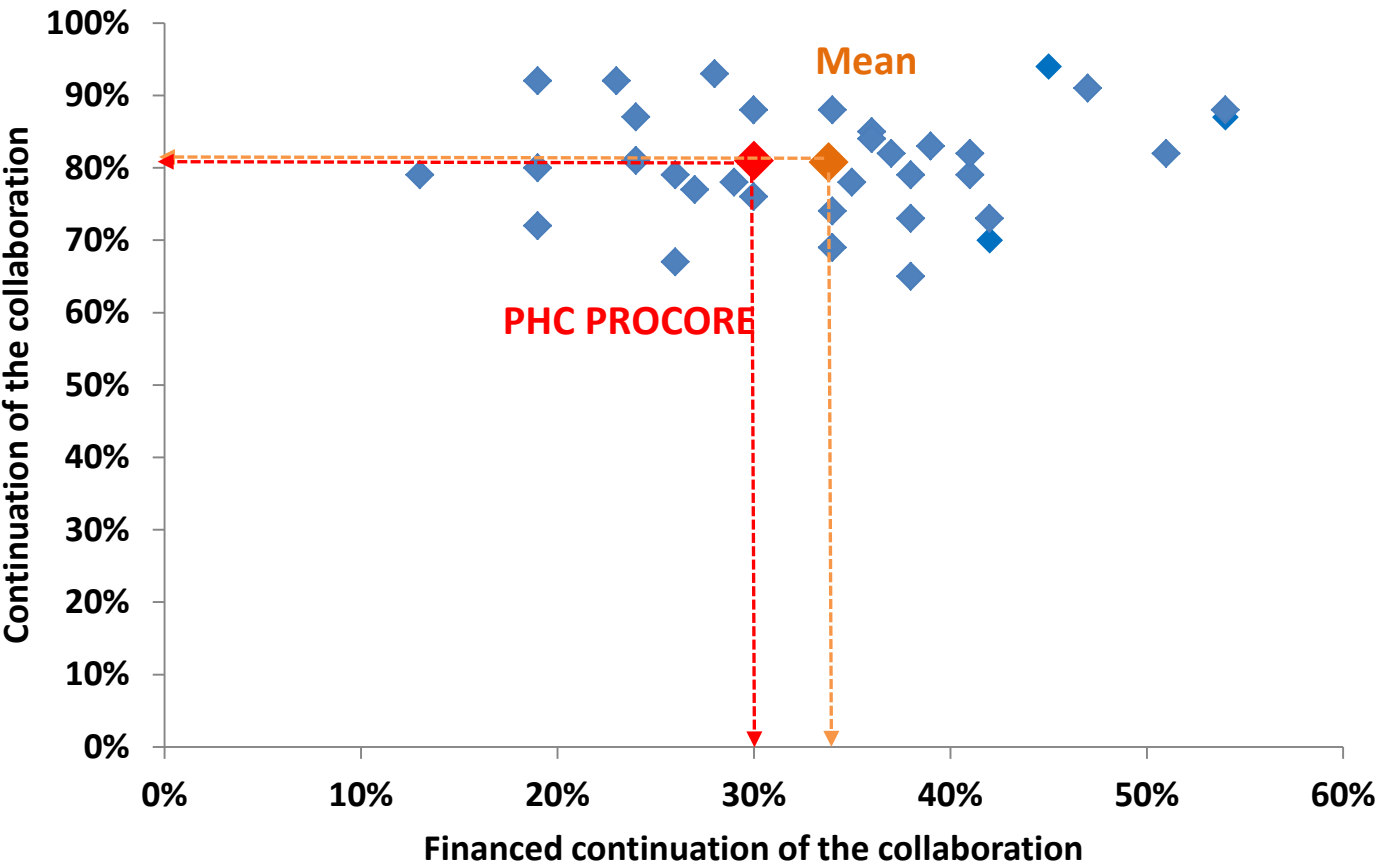
53% of funded projects led to one co-publication at least

40% of copublications include at least 1 PhD or PostDoc

The average annual rate of publication for young researchers involved in the projects is **0,27**

WHAT HAPPENS AFTER A PROCORE PROJECT ?

CONTINUATION OF THE COLLABORATION (1/5) (COMPARISON BETWEEN 35 DIFFERENT BILATERAL PROGRAMMES)



Continuation of the collaboration : 81% vs 81% mean

Continuation of the collaboration with other sources of subvention : 30% vs 34% mean



Data from 57 responses (continuation) and 40 responses (financing)

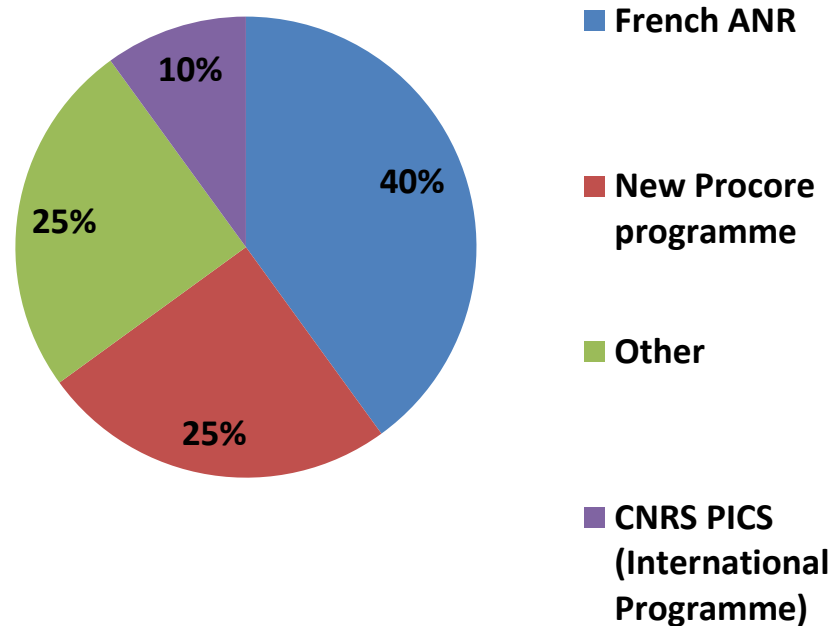
CONTINUATION OF THE COLLABORATION (2/5)

81% of the collaborations continued after the Procore project

Which activities?	
Collaborative research	67%
Co-publications	43%
Researchers mobility	43%
Joint participation to conferences	30%
Co-organisation of scientific events	24%
PhD mobility	13%
Others	13%
Joint participation to PhD thesis	7%

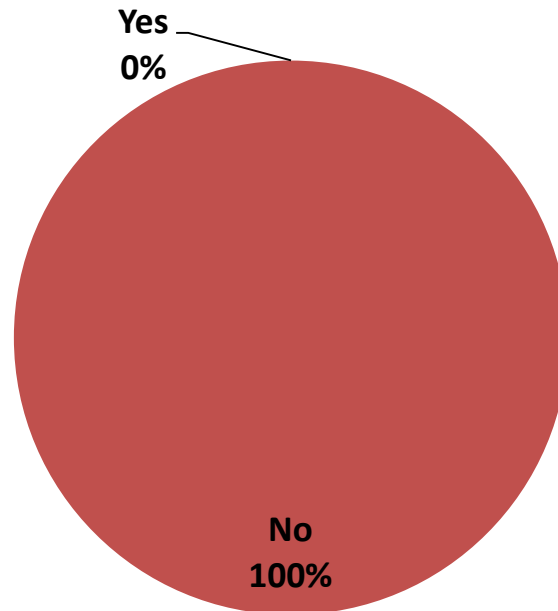
CONTINUATION OF THE COLLABORATION (3/5)

What kind of funded collaborations after the Procore project ?



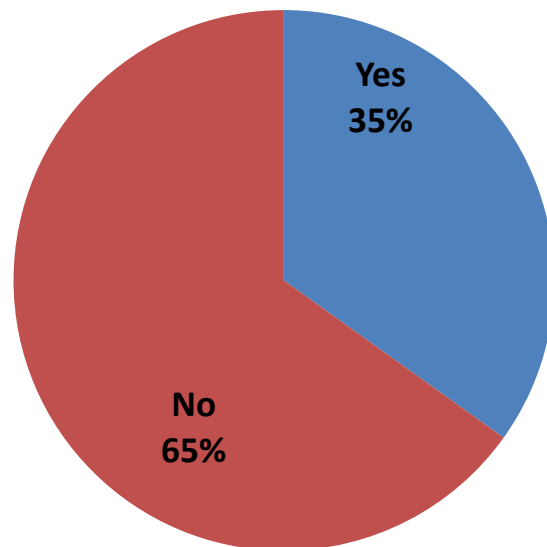
CONTINUATION OF THE COLLABORATION (4/5)

Has the Procore project led to the set-up of joint structures?



CONTINUATION OF THE COLLABORATION (5/5)

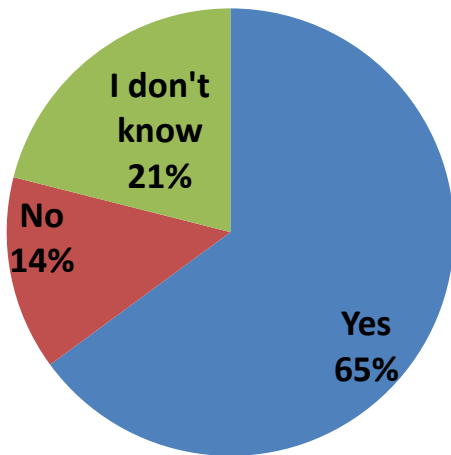
Has the France-Hong Kong collaboration involved new partners?



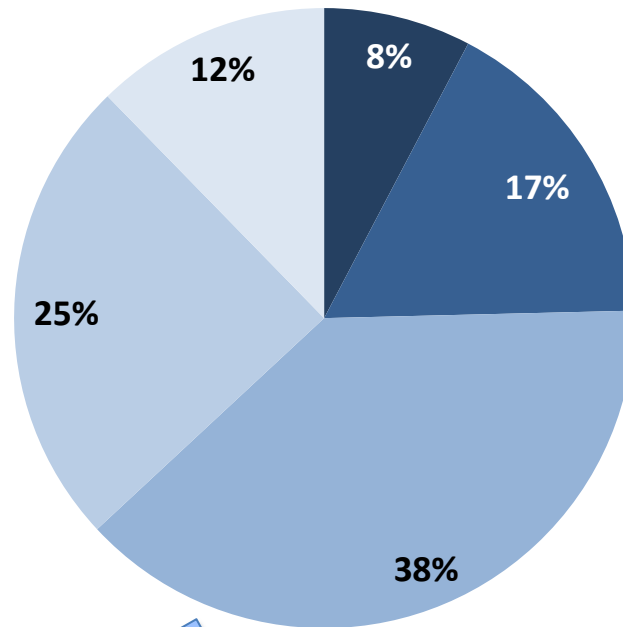
For a total of 28 new partners from 20 different countries

IMPACT ON YOUNG RESEARCHERS' CAREER (1/2)

Was young researchers' career impacted by the Procore programme ?



Type of impacts



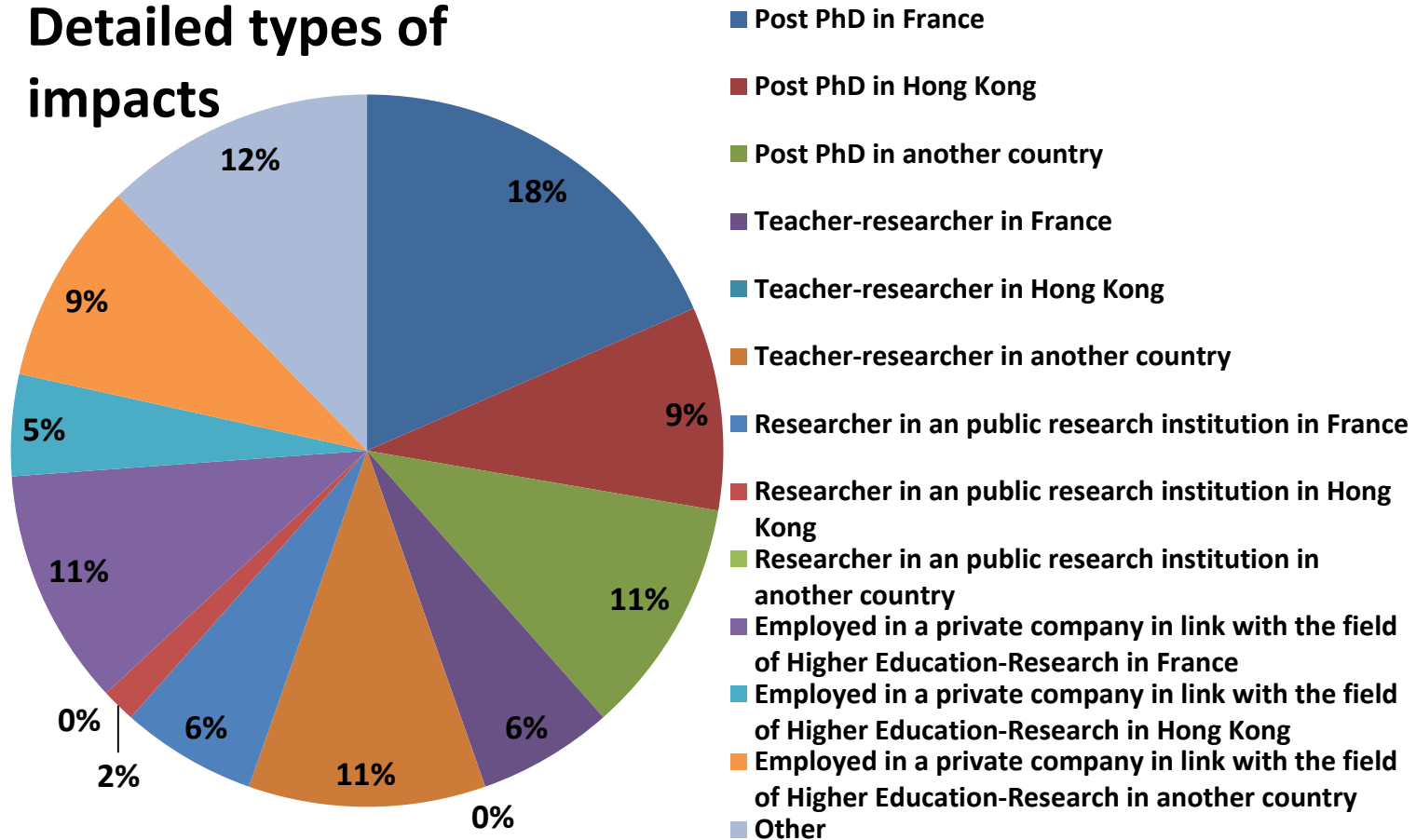
- Researcher in a public research institution (permanent position)
- Teacher/Researcher (permanent position)
- Postdoc/Teacher/Researcher (temporary position)
- Employed in a private company in link with the field of Higher Education - Research
- Other

Data from 53 responses

Data from 29 positive responses for a total of 65 young researchers

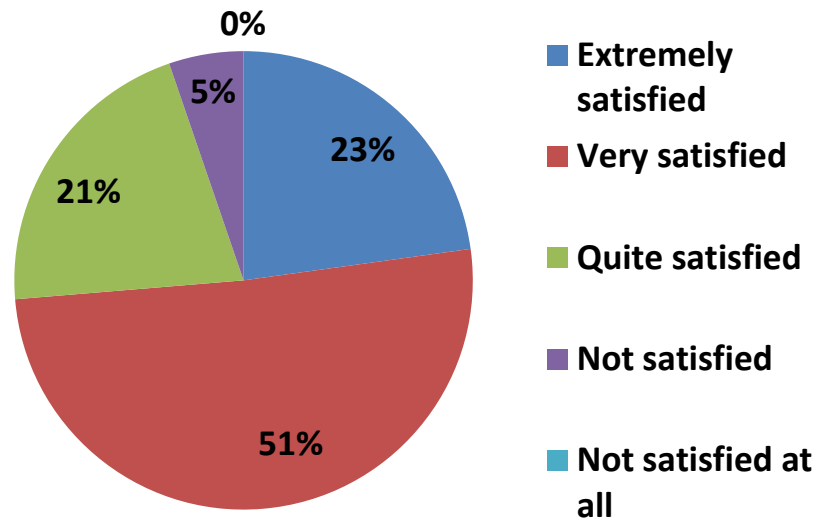
IMPACT ON YOUNG RESEARCHERS' CAREER (2/2)

Detailed types of impacts



GENERAL OPINION OF FRENCH PIS ON THE PROGRAMME

95% of French principal investigators are satisfied



Data from 57 responses

GENERAL OPINION OF FRENCH PIS ON THE PROGRAMME (2/3) POSITIVE COMMENTS

SURVEY OF 57 FUNDED PROJECTS



Strengths of this program	Number of occurrences (out of 338)	% (out of 57)
Allows the mobility of the researchers	43	74%
Allows an international scientific collaboration	43	74%
Simplicity of the application process	38	66%
Allows exchanges which allow a scientific production	31	53%
Allows a knowledge of the country partner	28	48%
Allows the training of the young researchers	26	45%
Easy implementation (administrative flexibility)	25	43%
Financial means sufficient for the expenditure of mobility	20	34%
Financial autonomy towards your institution	18	31%
Good scientific appreciation compared to the financial investment	16	28%
Is used as starting for raising other funds	15	26%
Sufficiently long duration of the projects	11	19%
Duration of mobilities adapted to the needs	11	19%
Timetable for implementation	7	12%
Transparency of the methods for selecting the projects	4	7%
Others	1	2%
No strenght point	1	2%
<i>Total number of occurrences</i>	338	

GENERAL OPINION OF FRENCH PIS ON THE PROGRAMME (3/3) NEGATIVE COMMENTS

SURVEY OF 57 FUNDED PROJECTS



Weaknesses of this program	Number of occurrences (out of 141)	% (out of 57)
No funding of the operation and capital expenditures	18	31%
Too short duration of the projects	18	31%
Too short duration of mobilities	15	26%
Lack of transparency on the methods of projects selection	14	24%
Difficult perpetuation of collaboration	13	22%
Financial means insufficient for the expenditure of mobility (transport)	11	19%
Financial means insufficient for the expenditure of mobility (per diem)	9	16%
Other	9	16%
No weakness	8	14%
Too low number of mobilities	8	14%
Administrative heaviness of the missions management	5	9%
Timetable for implementation	5	9%
Heaviness of the process of applications	4	7%
Insufficient communication on the evaluation's results	3	5%
Financial autonomy towards your institution	1	2%
Too long duration of mobilities	0	0%
Flexibility of the programme for actions co-financed with the partner	0	0%
Number of occurrences	141	

PRELIMINARY CONCLUSIONS

Preliminary conclusions suggest that the funding scheme has efficiently contributed to create (or to maintain) fruitful and long-term cooperation, despite the relatively low financial support, which is to be considered as “seed money”.

67% of the projects involve at least one young researcher

The implication of postdoctoral researchers (29%) is better than the mean (21%)

Percentage of young researchers involved in the co-publications (40%) close to the mean (41%)

High percentage of continuation of the collaboration (81%)

High percentage of new fundings through the ANR programme

Beware of the decrease in the number of applications

Procore programme initiates only 55% of new collaborations

Too weak implication of young PIs (15%) and women PIs (19%) in the applications (and the mobilities)

Insufficient implication of french young researchers in the scientific production (31% vs general mean 62%) with a low rate of publication (0,27)

Scientific production (0,71) below the mean (0,93)

PRELIMINARY RECOMMENDATIONS

- Beware of the continuous decrease of candidates : necessity to think of renewing the call to make it more attractive
- Promote more new cooperations
- Encourage women researchers to apply
- Encourage young researchers to apply
- Encourage PIs to increase the implication of young researchers in the publications
- Improve scientific coproduction
- Consider a “PROCORE +” programme to help PIs at the end of their financing to apply to international programmes ?

French national ministries (MESRI / MEAE) will provide a complete analysis of the survey. It will be sent to the recipients of the funding and participants in this symposium.

CONTACTS

robert.gardette@recherche.gouv.fr

thanh-truc.vu@recherche.gouv.fr

camille.brugier@recherche.gouv.fr

christophe.delacourt@recherche.gouv.fr

Thank you for your attention