

FRANCE – SLOVAKIA

**Scientific impact of the programme STEFANIK
(2006-2020)**

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 the French and Slovak laboratories, by promoting new scientific collaborations and integrating in the projects young researchers and PhD students.

Total budget (France + Slovakia) : around 70 000 € / year

>> including budget from the French part : around 35 000 € / year

>> including budget from the Slovak part : around 35 000 € / year

Average budget per project (France + Slovakia) : around 2300 € / year

Number of new funded projects per year : around 13

From 2006-2020 :

219 applications submitted

106 projects funded

DATA SOURCES

Campus France (2006-2020)

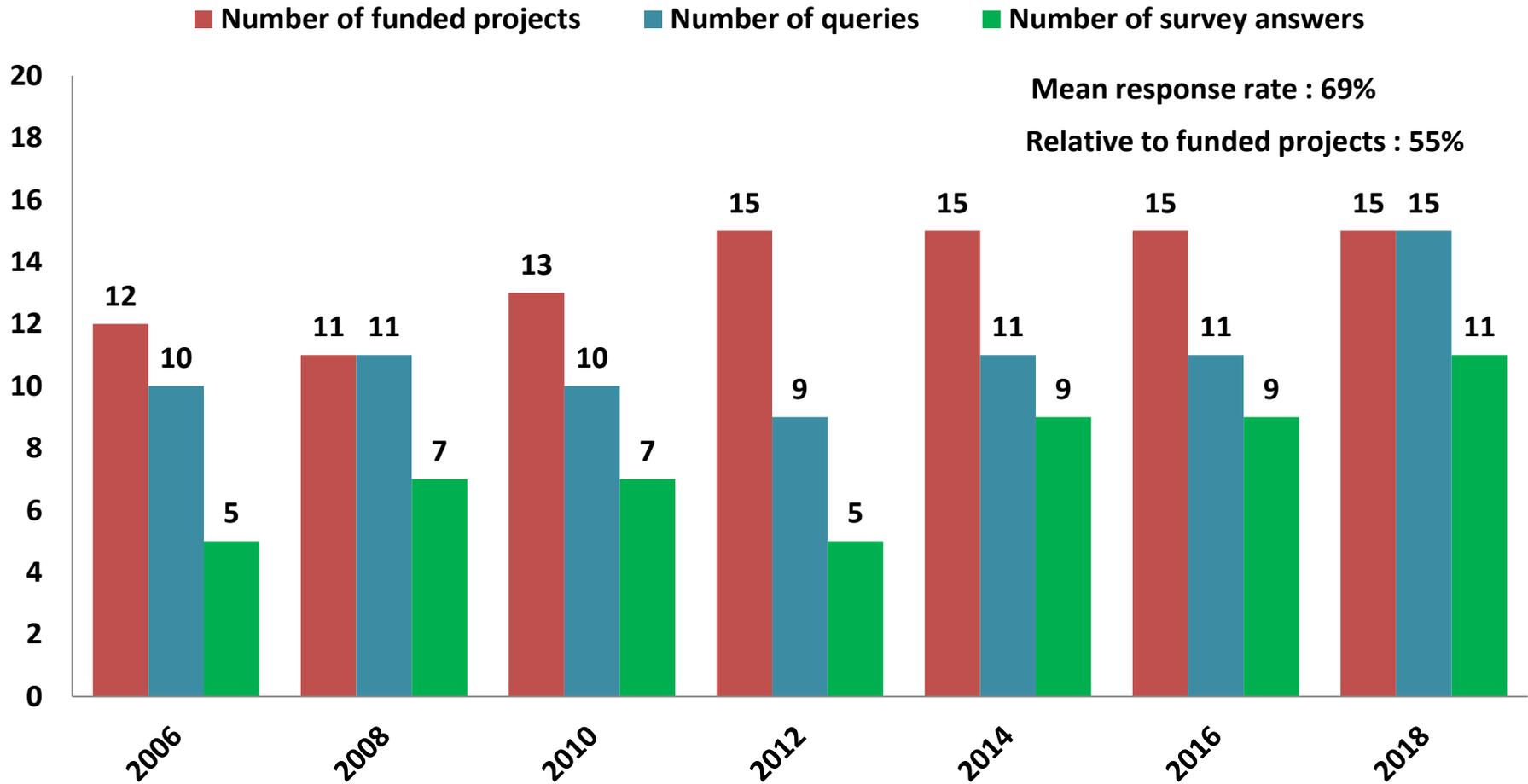
- Information about the PHC Stefanik applications
- List of mobilities (from France to Slovakia and from Slovakia to France)

Survey (2006-2018)

- Target : French Principal Investigators of selected projects between 2006 and 2018
- Survey duration : 6 weeks between May and June 2020
- **69%** response ratio (53 respondents for 77 queries)

ANSWERS TO THE SURVEY

Average response rate to the survey : **69 % (53 answers)**



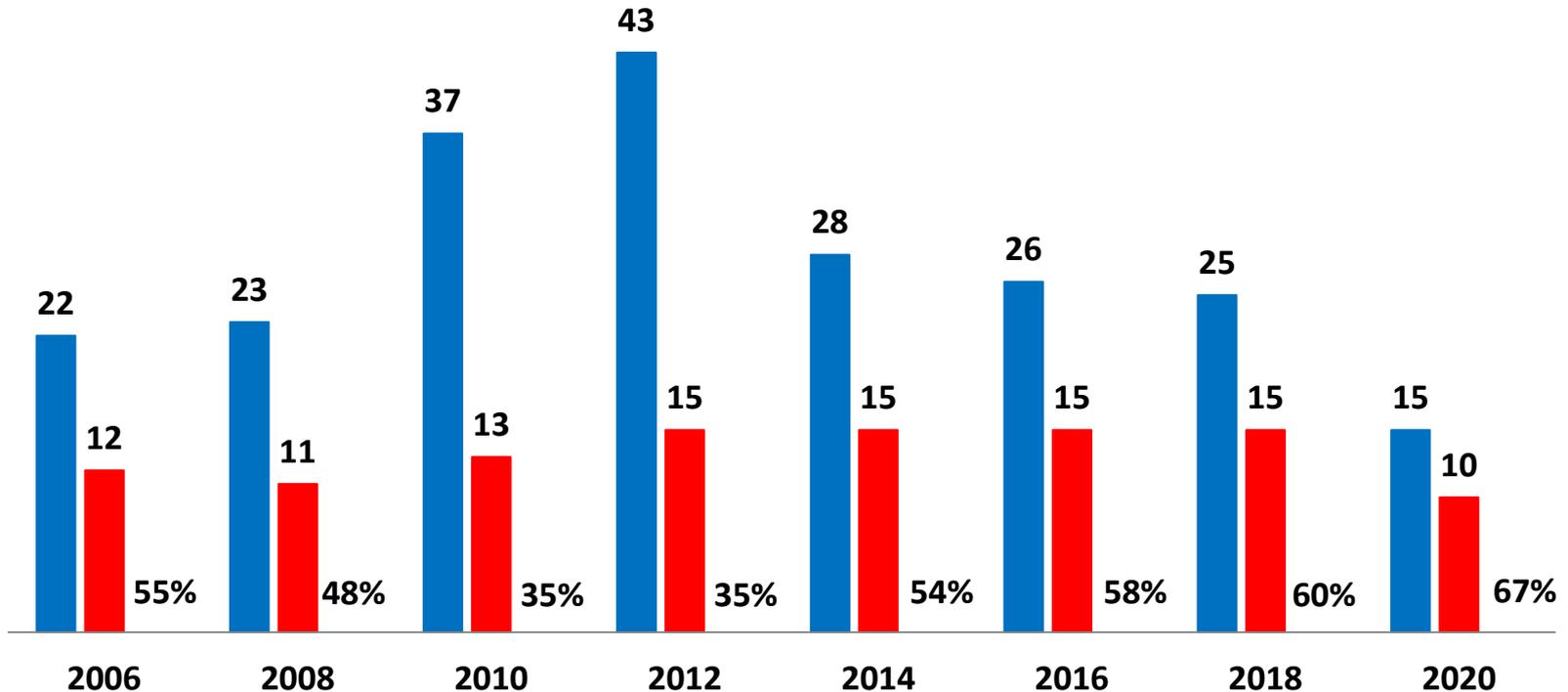
96 funded projects between 2006 and 2018, 77 valid email addresses

2006-2020 Key Points

NUMBER OF APPLICATIONS AND SELECTION RATE

Average selection rate from 2006-2020: **48%**

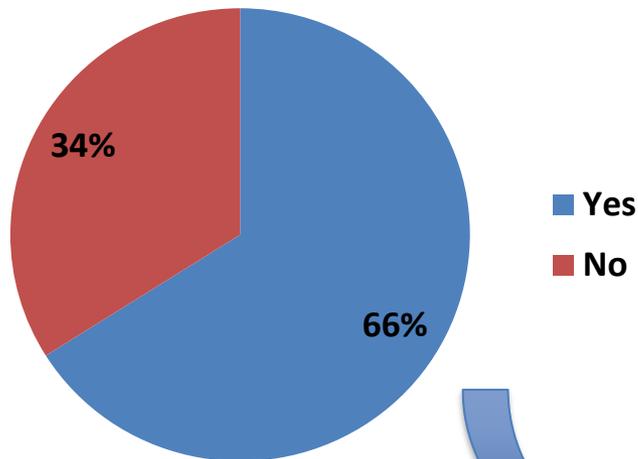
■ number of applications ■ number of selected projects Selection rate



Persistent decrease in the number of applications since 2012

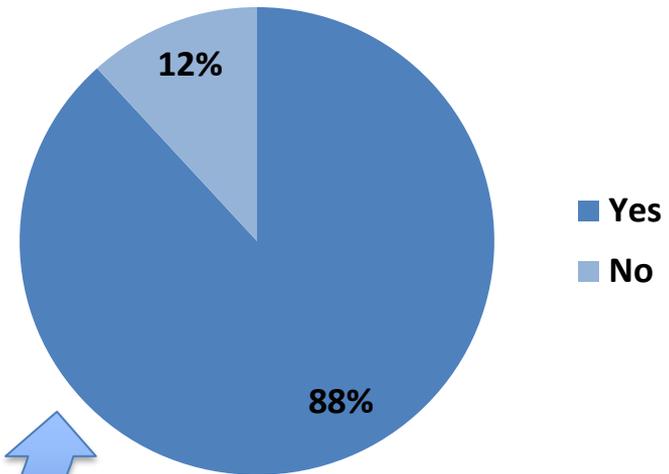
BEFORE THE STEFANIK PROJECT (1/2)

Did you already cooperate with Slovakia in the past ?



Data from 53 responses

If yes, was it with the same partner?



Data from 34 responses

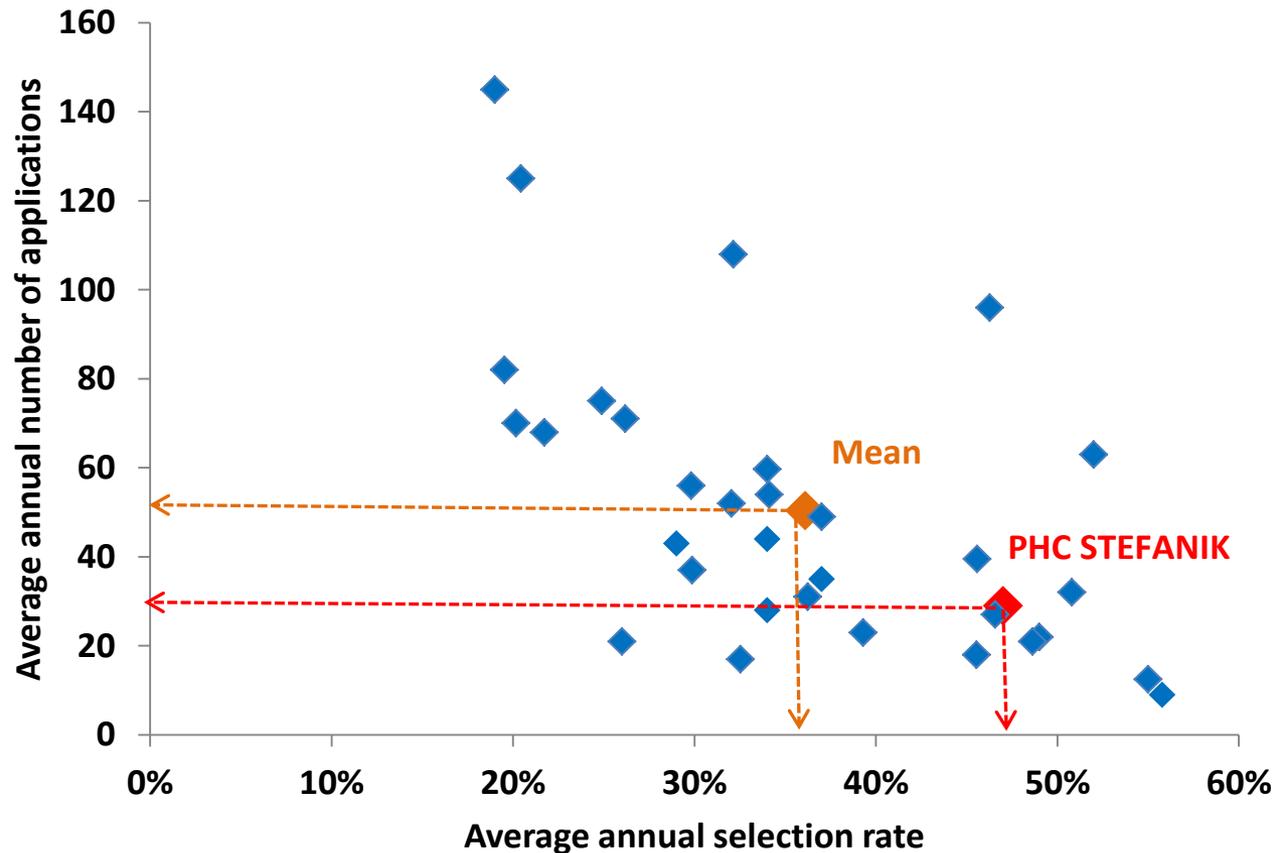
BEFORE THE STEFANIK PROJECT (2/2)

With which scientific collaboration programme ?	
PHC Stefanik	33%
European fundings (FP7, H2020, Marie-Curie, Erasmus...)	26%
BGF (French government grants)	10%
CNRS fundings	8%
Co-funding with slovak institutions	8%
Private sector	3%
ANR (French National Research Agency)	3%
Others	10%

Plus 48 previous cooperations based on other exchanges (co-publication, meetings, joint PhD...)

Data from 39 responses

NUMBER OF APPLICATIONS VS SELECTION RATE (COMPARISON BETWEEN 33 DIFFERENT BILATERAL PROGRAMMES)

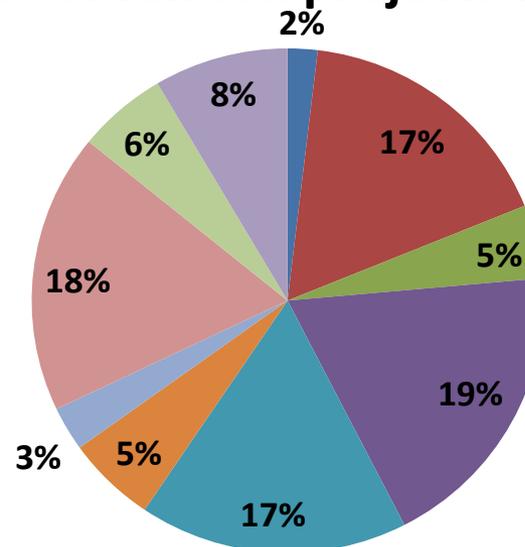
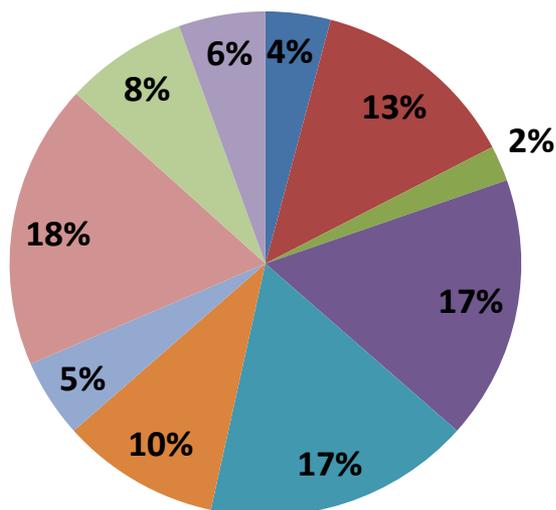


Average selection rate for 2006-2018 : 47% vs 36% mean
Average number of applications 2007-2018 : 29 vs 50 mean

SCIENTIFIC DOMAINS OF PROJECTS

Number of applications : **219**

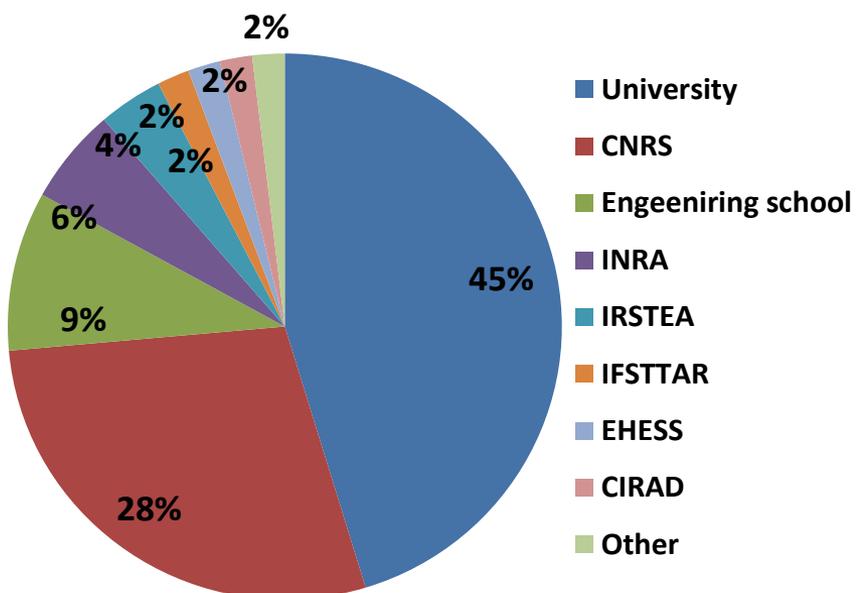
Number of funded projects : **106**



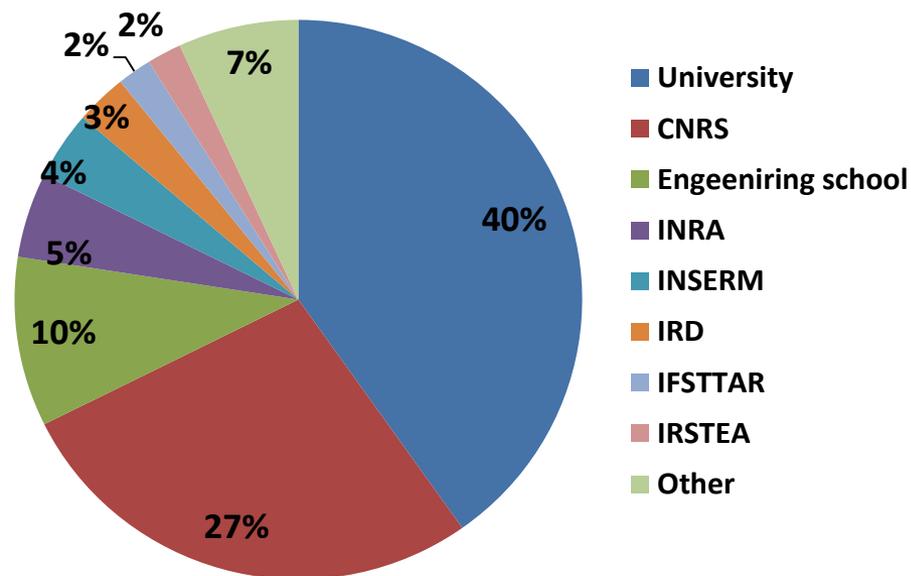
- | | |
|--------------------------------|------------------------|
| ■ Mathematics | ■ Physics |
| ■ Marine/Earth/Planet Sciences | ■ Chemistry |
| ■ Biology and Health | ■ Humanities |
| ■ Social Sciences | ■ Engineering Sciences |
| ■ Information Technology | ■ Agronomy/Ecology |

FRENCH PARTICIPATING INSTITUTIONS

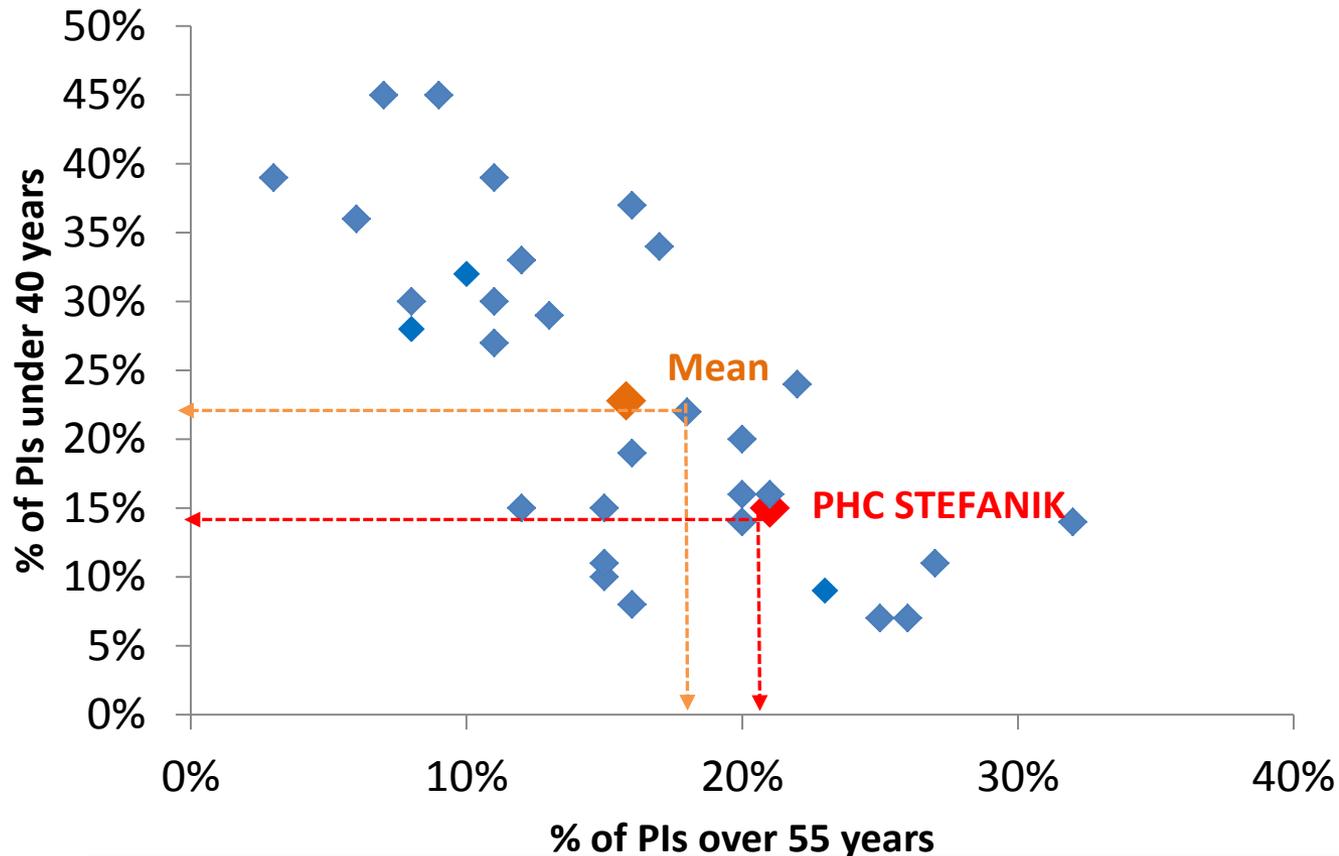
PI's employers



Laboratories authorities



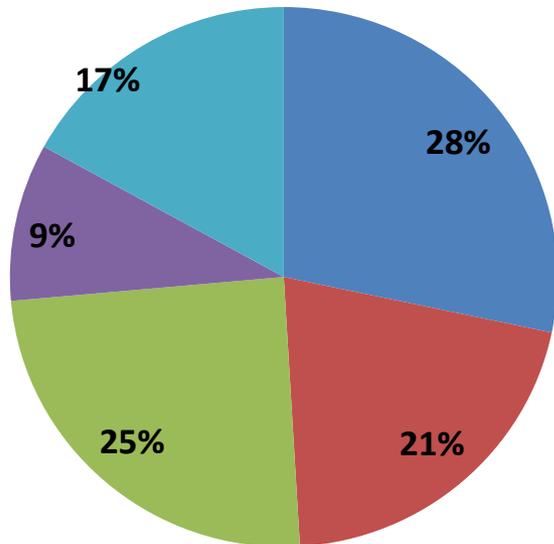
AGE OF PRINCIPAL INVESTIGATORS (PI) (COMPARISON BETWEEN 33 DIFFERENT BILATERAL PROGRAMMES)



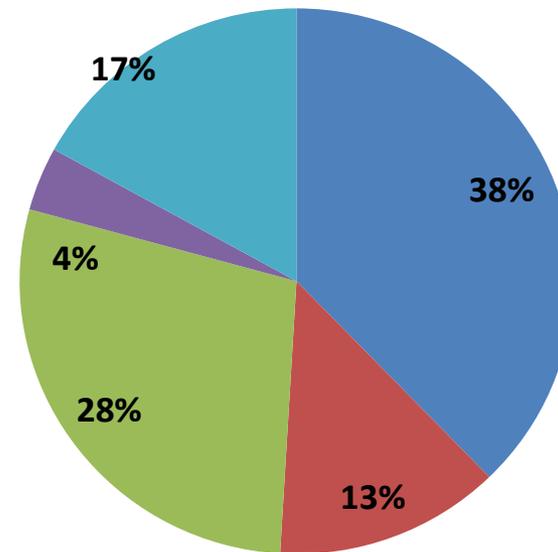
PIs under 40 years : **15% vs 23% mean**
 PIs over 55 years : **21% vs 16% mean**
64% of the PIs are between 40 and 55 years

FRENCH PIS (PRINCIPAL INVESTIGATORS) : STATUS

**Previous professional status
(at the beginning of the project)**

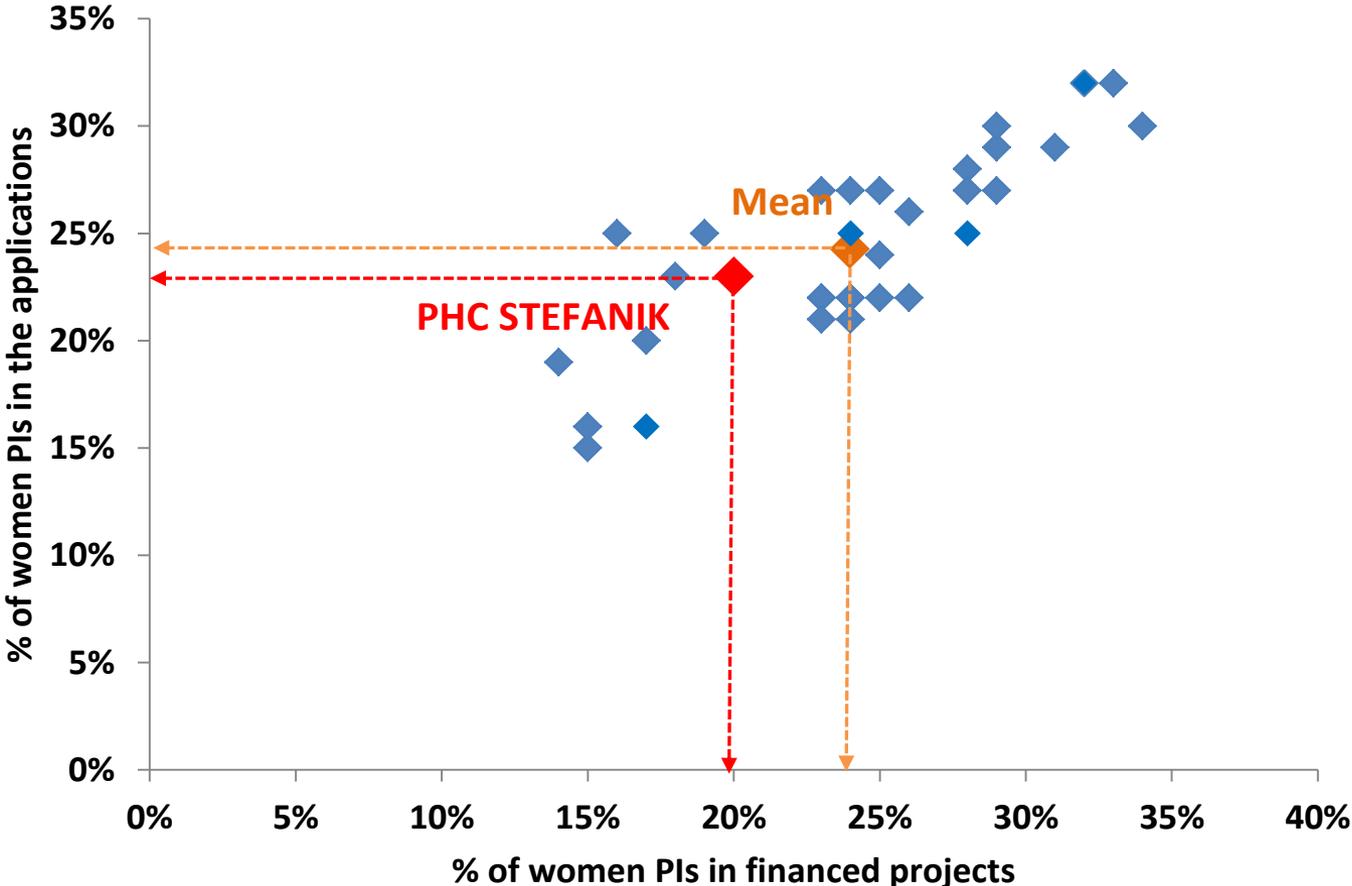


Current professional status



IMPLICATION OF WOMEN (FRANCE)

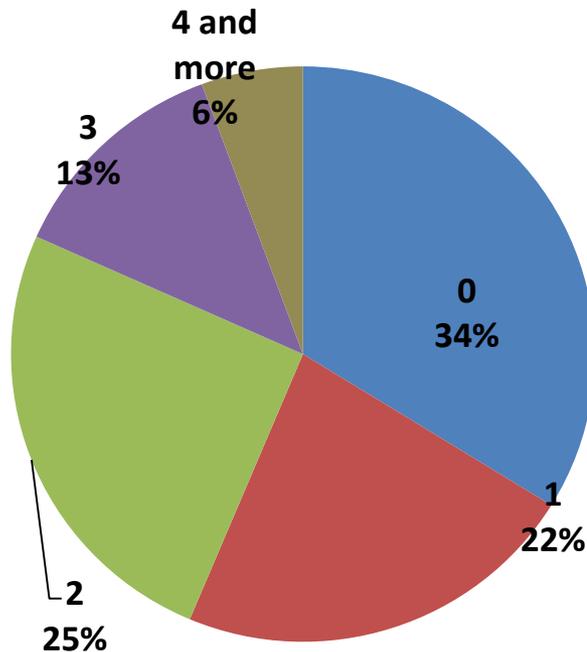
(COMPARISON BETWEEN 33 DIFFERENT BILATERAL PROGRAMMES)



% of women PIs in the applications : 23% vs 24% mean
% of women PIs in the selected projects : 20% vs 24% mean

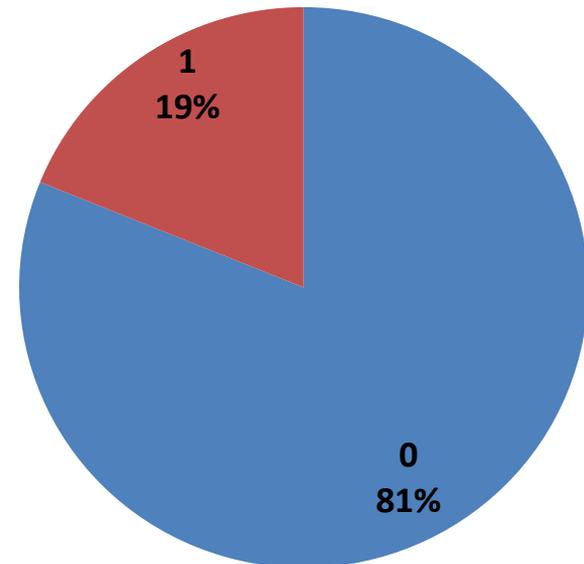
PARTICIPATION OF FRENCH YOUNG RESEARCHERS

Number of PhD students



55% of projects involve at least one PhD student

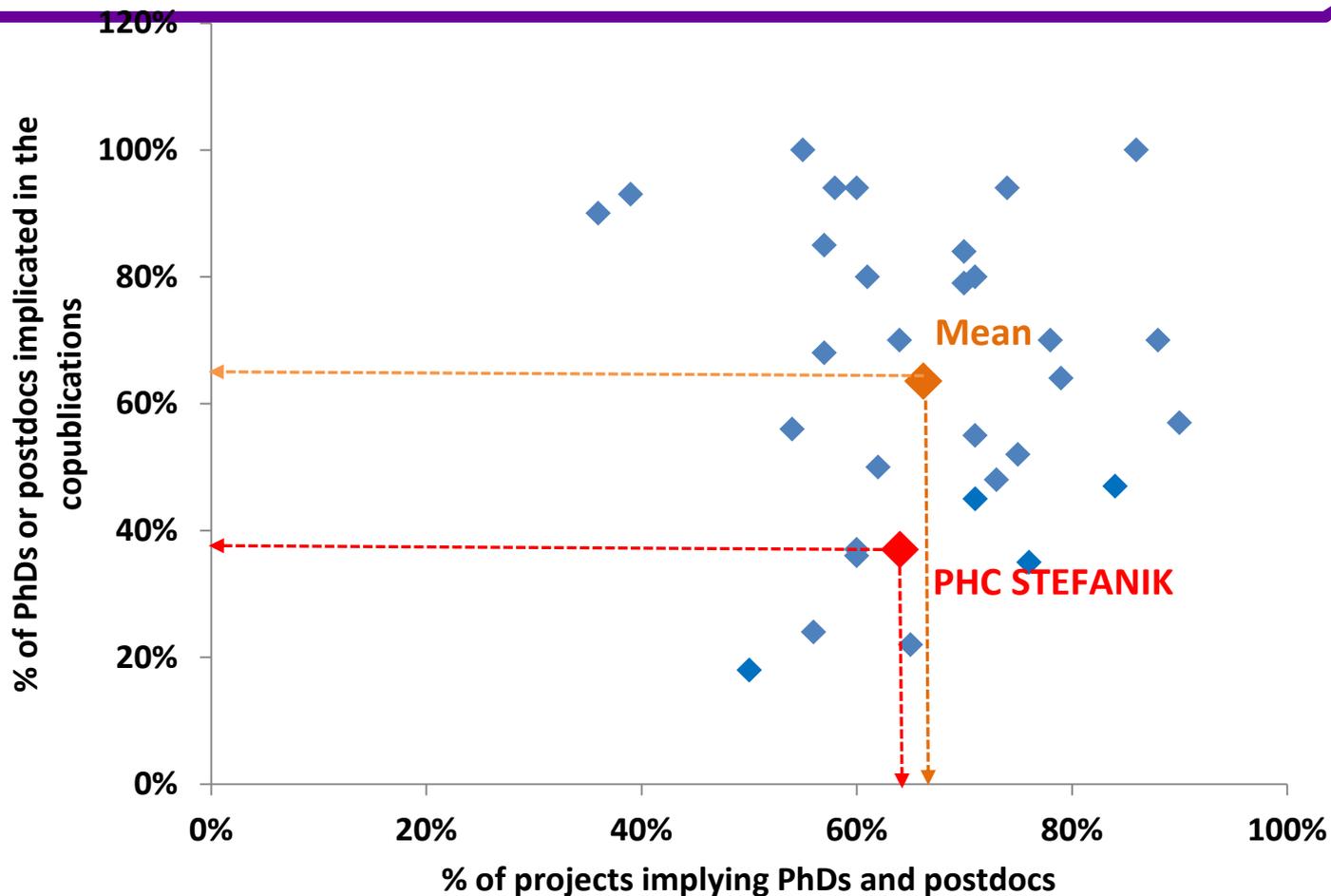
Number of post-doctoral researchers



19% of projects involve at least one post-doctoral researcher

Data from 53 responses

IMPLICATION OF YOUNG RESEARCHERS (COMPARISON BETWEEN 33 DIFFERENT BILATERAL PROGRAMMES)



% of projects involving young researchers : 64% vs 66% mean

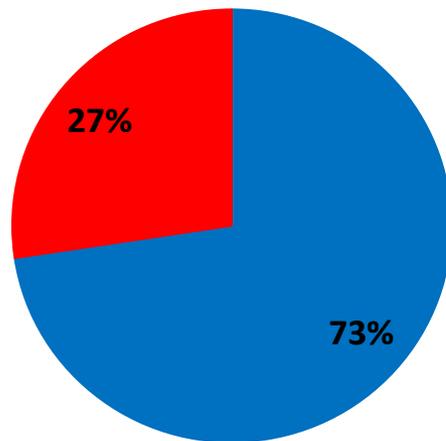
% of PhD or postdoc implicated in the copublications : 37% vs 64% mean



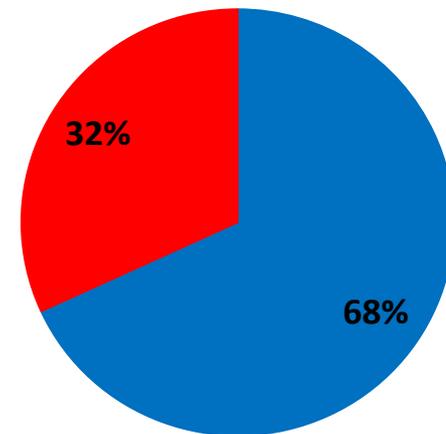
MOBILITY

MOBILITY : GENDER DISTRIBUTION

France → Slovakia



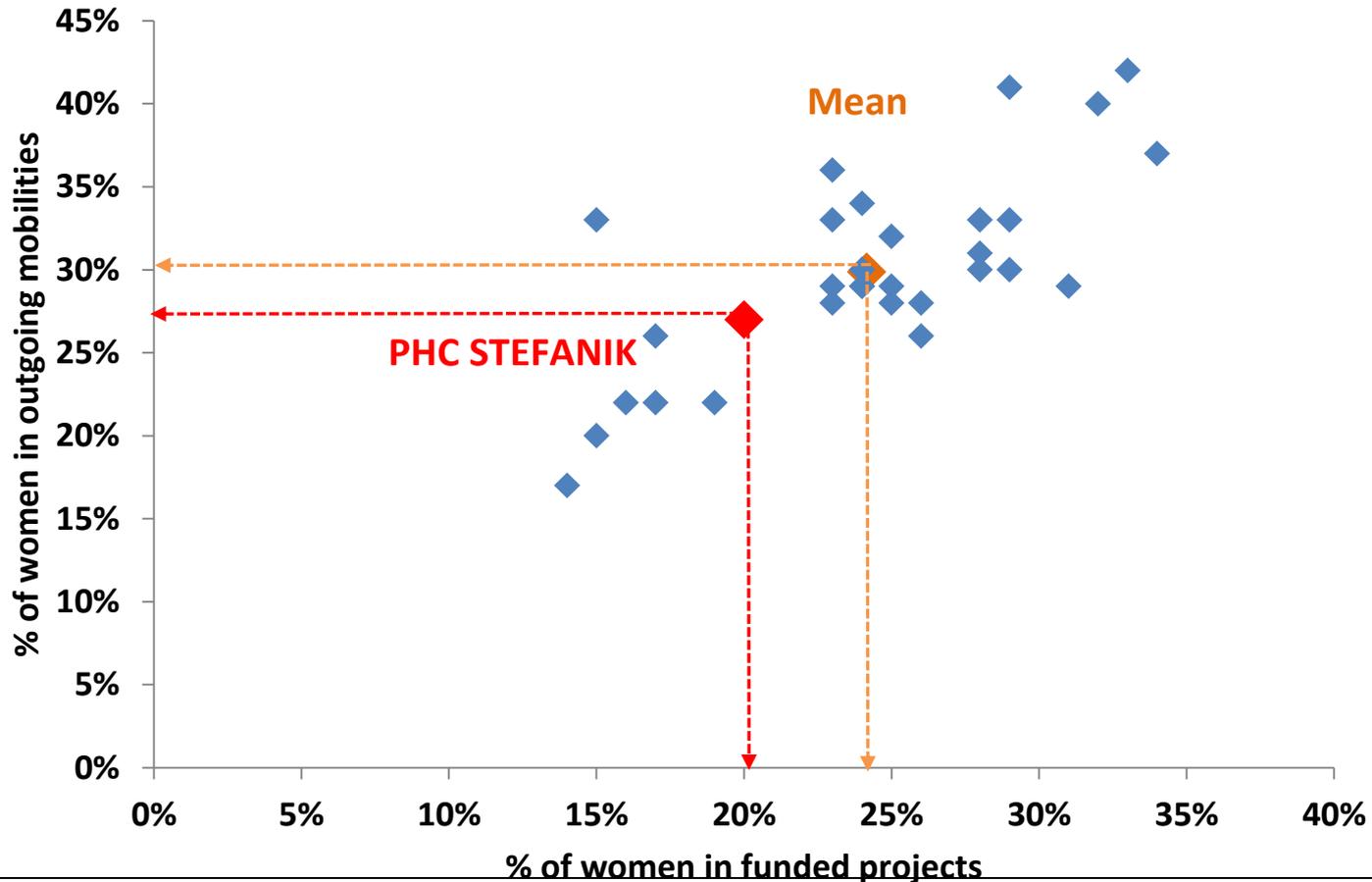
Slovakia → France



■ Men ■ Women

WOMEN MOBILITY FRANCE – SLOVAKIA

(COMPARISON BETWEEN 33 DIFFERENT BILATERAL PROGRAMMES)



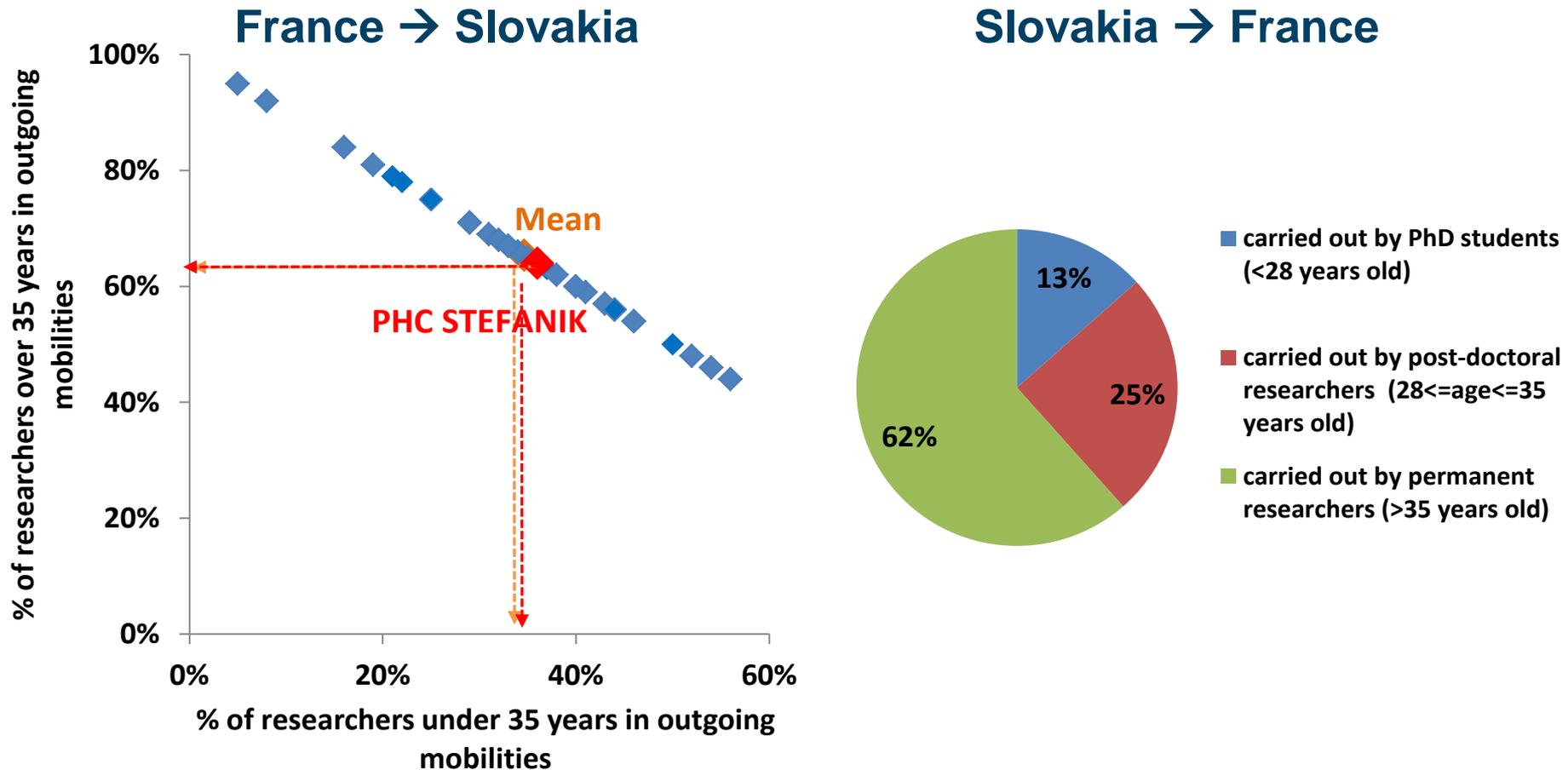
% of women researchers in the selected projects : 20% vs 24% mean

% of women researchers in outgoing mobilities : 27% vs 30% mean

YOUNG RESEARCHERS MOBILITY

FRANCE – SLOVAKIA

(COMPARISON BETWEEN 33 DIFFERENT BILATERAL PROGRAMMES)

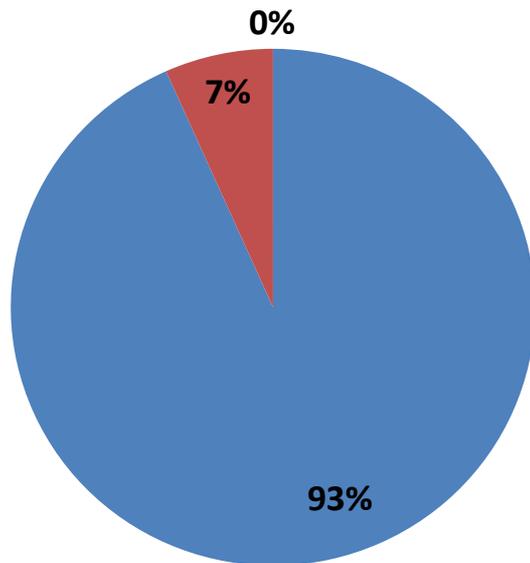


% of french young researchers in outgoing mobilities : **36% vs 35% mean**

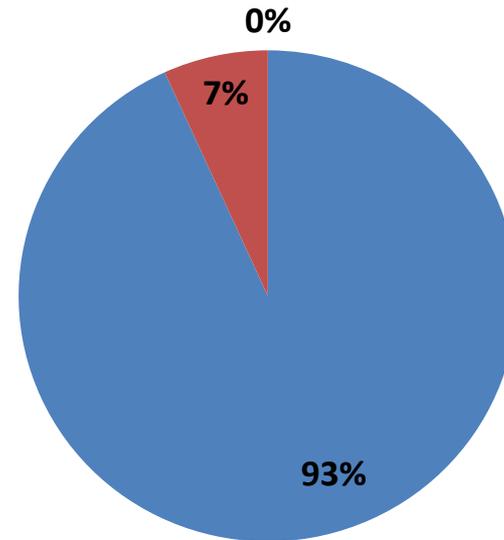
% of slovak young researchers in incoming mobilities : **38%**

MOBILITY : DURATION

France → Slovakia



Slovakia → France



■ < 15 days

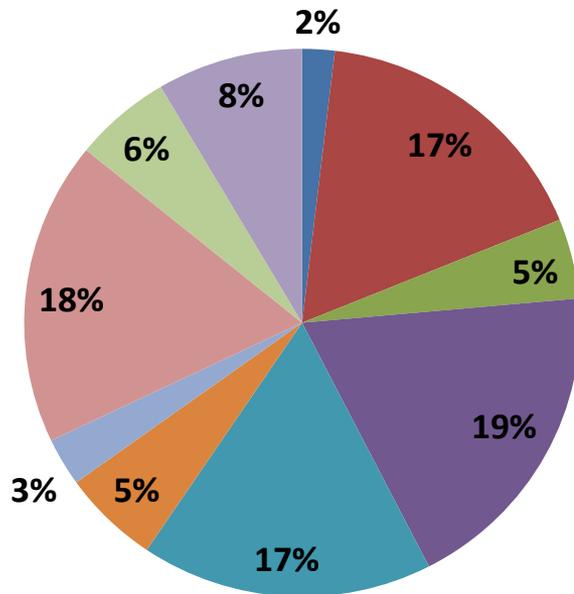
■ between 15 days and 3 months

SCIENTIFIC PRODUCTION

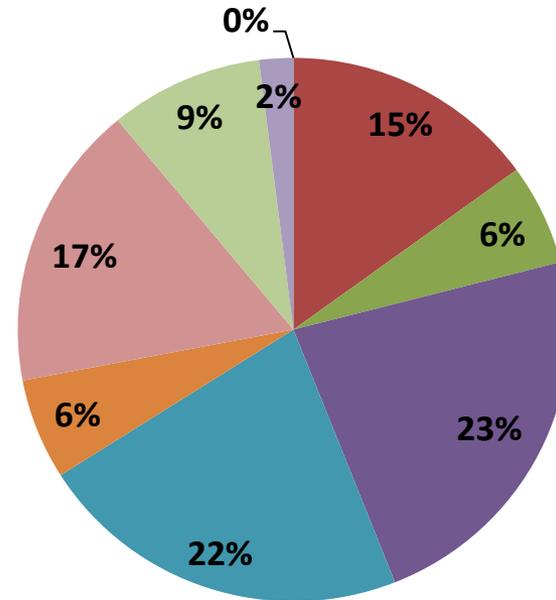


SCIENTIFIC OUTPUT (1/2)

Number of funded projects : **106**



Percentage of copublications (53 responses)



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

SCIENTIFIC OUTPUT (2/2)

Data from 53 funded projects

	Number of financed projects in the survey	Average number of co-publications per project
Mathematics	2	0
Physics	10	15
Marine/Earth/Planet Sciences	4	6
Chemistry	9	23
Biology and Health	10	22
Humanities	4	6
Social Sciences	1	0
Engineering Sciences	7	17
Information Technology	5	9
Agronomy / Ecology	1	2
TOTAL		

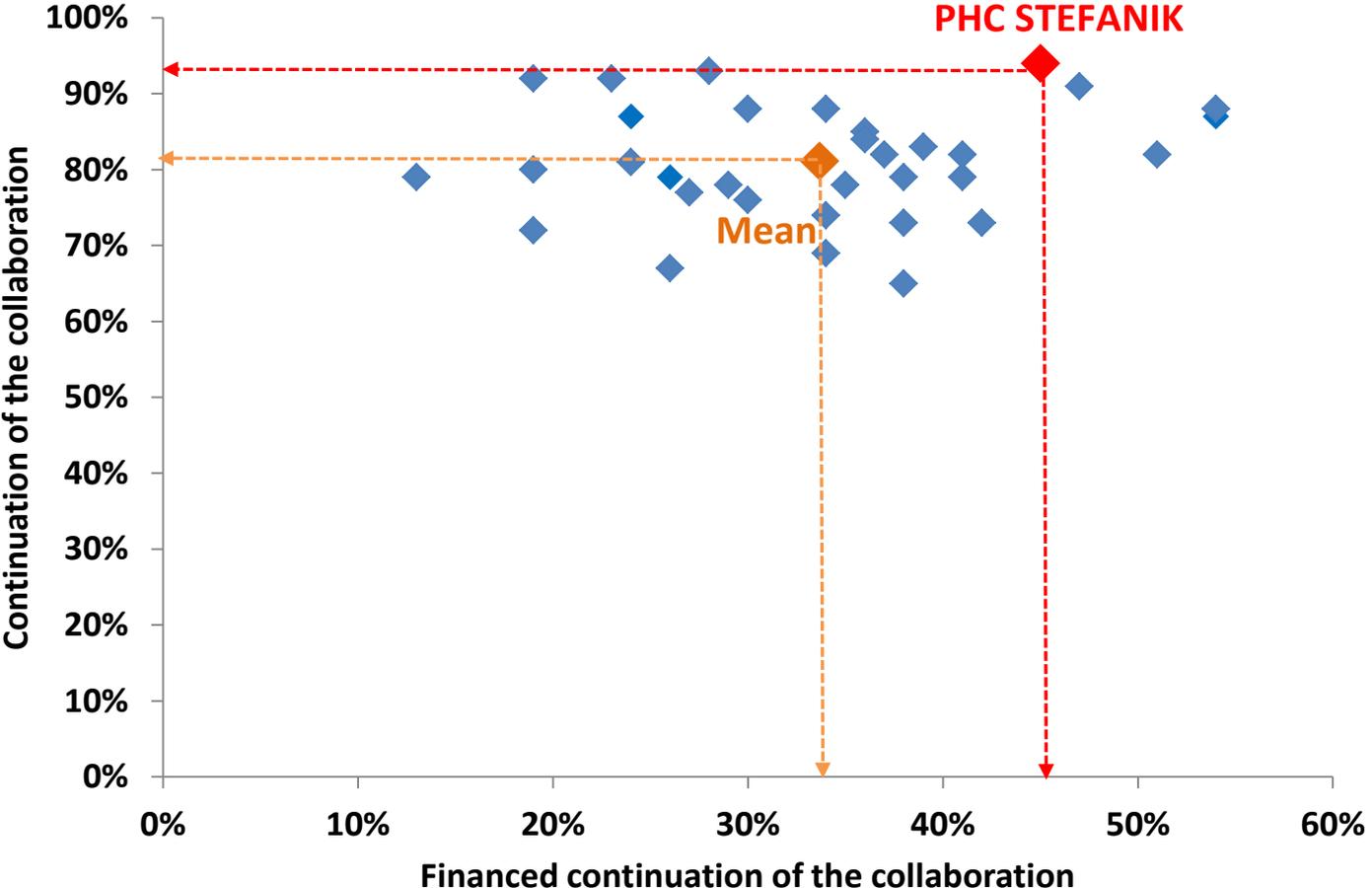
Overall average **annual** number of copublications per project : **0,94 vs 0,93 mean**

66% of funded projects led to one co-publication at least

35% of copublications include at least 1 PhD or PostDoc

WHAT HAPPENS AFTER A STEFANIK PROJECT ?

CONTINUATION OF THE COLLABORATION (1/5) (COMPARISON BETWEEN 33 DIFFERENT BILATERAL PROGRAMMES)



Continuation of the collaboration : 94% vs 81% mean

Continuation of the collaboration with other sources of subvention : 45% vs 34% mean



Data from 53 responses (continuation) and 42 responses (financing)

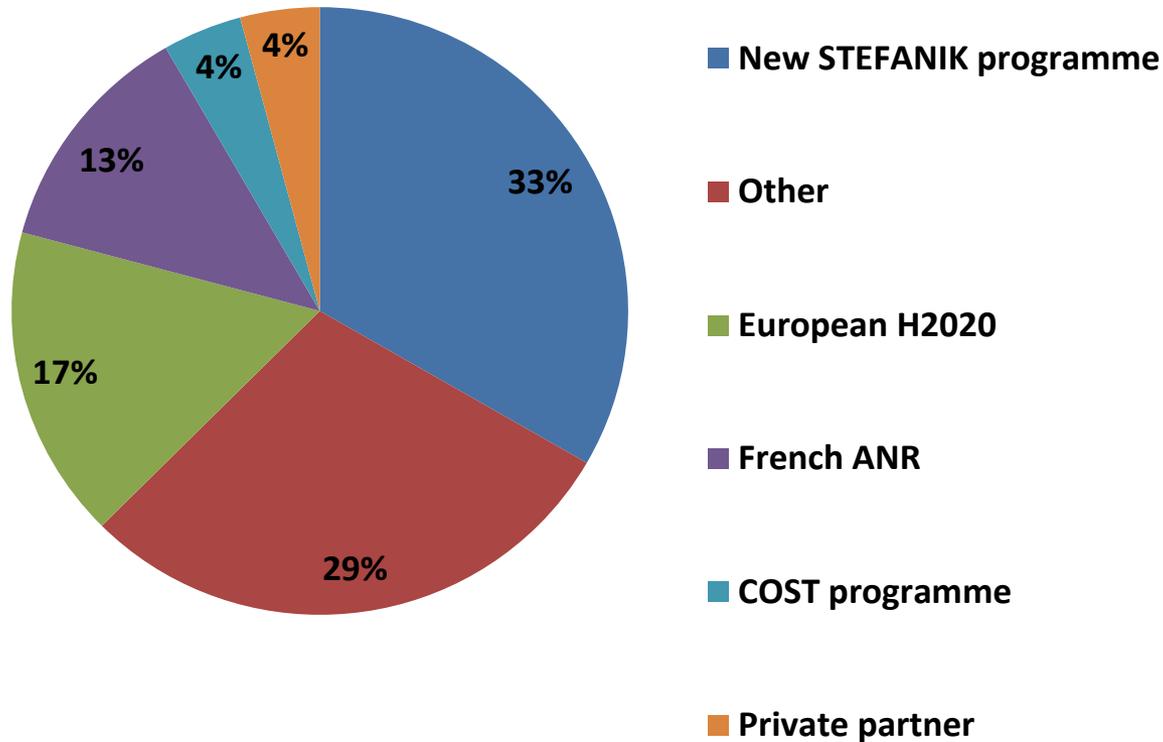
CONTINUATION OF THE COLLABORATION (2/5)

94% of the collaborations continued after the Stefanik project

Which activities?	
Co-publications	58%
Collaborative research	48%
Joint participation to conferences	44%
Researchers mobility	38%
PhD mobility	24%
Joint participation to PhD thesis	12%
Others	12%
Co-organisation of scientific events	6%
Joint diplomas (Master, PhD...)	4%

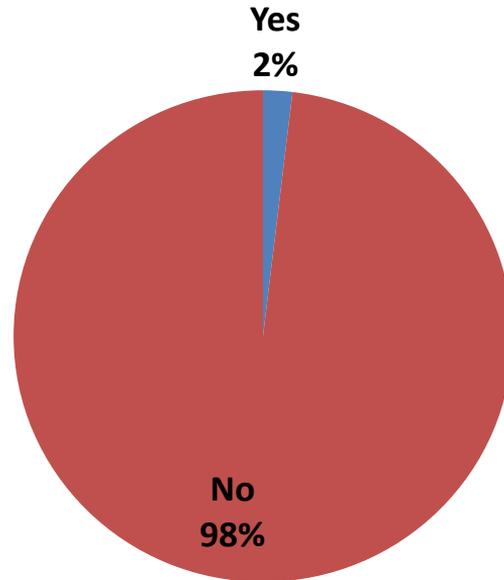
CONTINUATION OF THE COLLABORATION (3/5)

What kind of funded collaborations after the Stefanik project ?



CONTINUATION OF THE COLLABORATION (4/5)

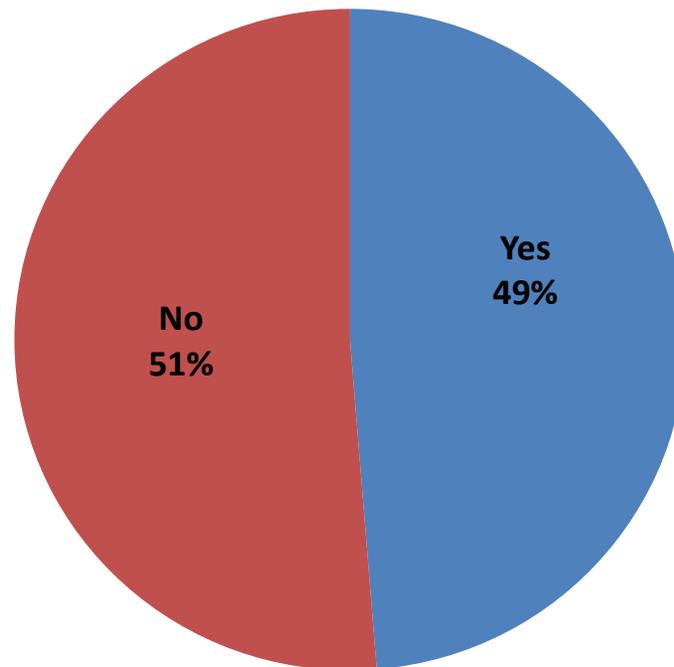
Has the Stefanik project led to the set-up of joint structures?



1 University International Associated Laboratories (LAI)

CONTINUATION OF THE COLLABORATION (5/5)

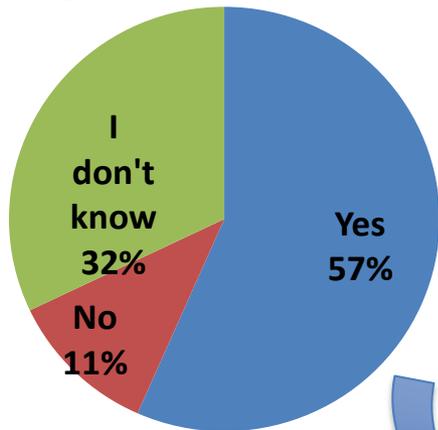
Has the French-Slovak collaboration involved new partners?



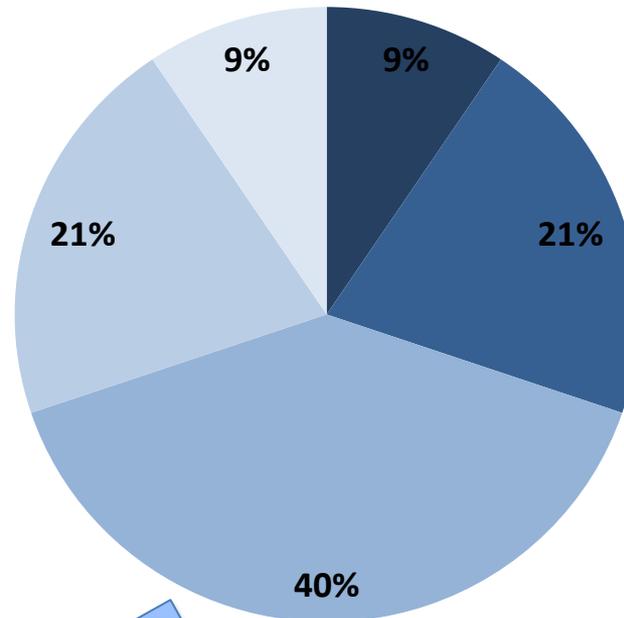
For a total of 28 new partners from 20 different countries

IMPACT ON YOUNG RESEARCHERS' CAREER (1/2)

Was young researchers' career impacted by the Stefanik programme ?



Type of impacts



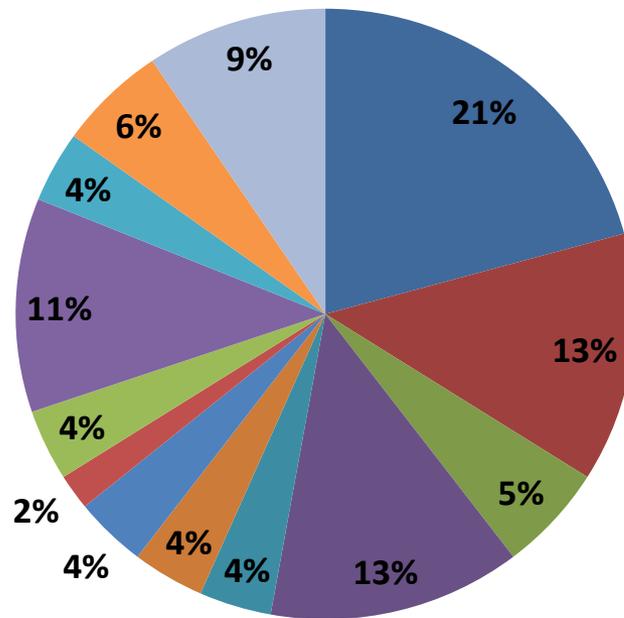
- Researcher in a public research institution (permanent position)
- Teacher/Researcher (permanent position)
- Postdoc/Teacher/Researcher (temporary position)
- Employed in a private company in link with the field of Higher Education - Research
- Other

Data from 53 responses

Data from 30 positive responses for a total of 53 young researchers

IMPACT ON YOUNG RESEARCHERS' CAREER (2/2)

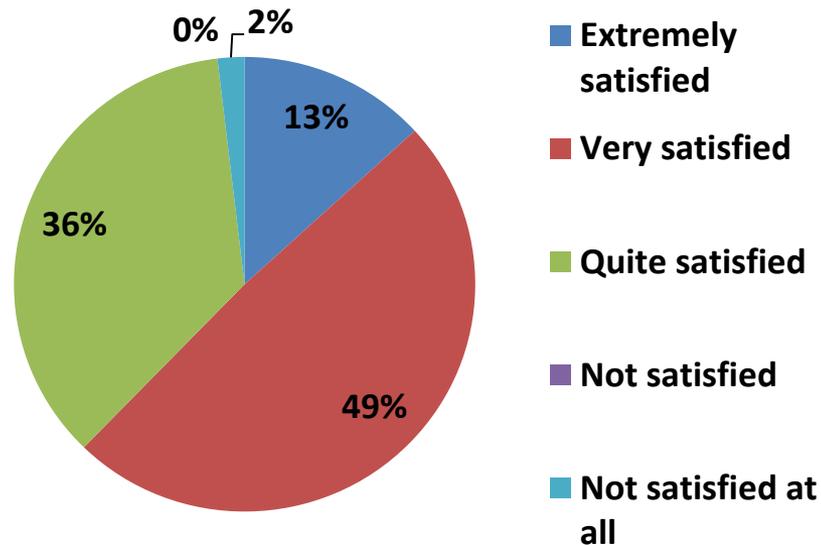
Detailed types of impacts



- Post PhD in France
- Post PhD in Slovakia
- Post PhD in another country
- Teacher-researcher in France
- Teacher-researcher in Slovakia
- Teacher-researcher in another country
- Researcher in a public research institution in France
- Researcher in a public research institution in Slovakia
- Researcher in a public research institution in another country
- Employed in a private company in link with the field of Higher Education-Research in France
- Employed in a private company in link with the field of Higher Education-Research in Slovakia
- Employed in a private company in link with the field of Higher Education-Research in another country
- Other

GENERAL OPINION OF FRENCH PIS ON THE PROGRAMME

98% of French principal investigators are satisfied



Data from 53 responses

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

SURVEY OF 53 FUNDED PROJECTS



Strengths of this program	Number of occurrences (out of 332)	% (out of 53)
Allows the mobility of the researchers	42	79%
Allows exchanges which allow a scientific production	39	74%
Simplicity of the application process	37	70%
Allows an international scientific collaboration	35	66%
Allows the training of the young researchers	31	58%
Allows a knowledge of the country partner	31	58%
Easy implementation (administrative flexibility)	25	47%
Financial autonomy towards your institution	18	34%
Financial means sufficient for the expenditure of mobility	17	32%
Good scientific appreciation compared to the financial investment	16	30%
Is used as starting for raising other funds	12	23%
Duration of mobilities adapted to the needs	9	17%
Sufficiently long duration of the projects	8	15%
Transparency of the methods for selecting the projects	5	9%
Timetable for implementation	4	8%
Others	3	6%
<i>Total number of occurrences</i>	332	

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

SURVEY OF 53 FUNDED PROJECTS



Weaknesses of this program	Number of occurrences (out of 153)	% (out of 53)
No funding of the operation and capital expenditures	30	57%
Too short duration of the projects	22	42%
Too short duration of mobilities	15	28%
Difficult perpetuation of collaboration	14	26%
Lack of transparency on the methods of projects selection	13	25%
Insufficient communication on the evaluation's results	11	21%
Financial means insufficient for the expenditure of mobility (per diem)	10	19%
Heaviness of the process of applications	8	15%
Too low number of mobilities	7	13%
Other	7	13%
Financial means insufficient for the expenditure of mobility (transport)	6	11%
Administrative heaviness of the missions management	6	11%
Timetable for implementation	3	6%
Too long duration of mobilities	1	2%
Flexibility of the programme for actions co-financed with the partner	0	0%
Financial autonomy towards your institution	0	0%
Number of occurrences	153	

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”.

Participation of women PIs close to the the mean but could be encouraged
Correct participation of young researchers to the projects (64% vs 66% mean) and to the outgoing mobilities (36% vs 35% mean)

Only 34% of funded projects with no co-publications

Scientific production close to the mean (0,94 vs 0,93)

High percentage of new fundings after a Stefanik Project (45% vs 34% mean)

Stefanik programme initiates only 34% of new collaborations

Insufficient implication of french young researchers in the scientific production (37% vs general mean 64%)

Only 35% of co-publications include at least one young researcher

Tow low implication of both PhDs (55% vs general mean : 65%) and postdocs (19% vs general mean : 23%)

Quite low percentage of young PIs (16%) as compared to the mean of 23%



PRELIMINARY RECOMMENDATIONS

RECOMMENDATIONS

- Beware of the persistent decrease of candidates : necessity to think of renewing the call to make it more attractive
- Promote more new cooperations
- Increase the participation of young researchers in the projects
- Encourage PIs to increase the implication of young researchers in the publications
- Encourage women researchers to apply
- Encourage young researchers to apply
- Consider a “STEFANIK +” programme to help PIs at the end of their financing to develop a European application ?

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

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Thank you for your attention