

Academic mobility: are abroad postdocs needed?

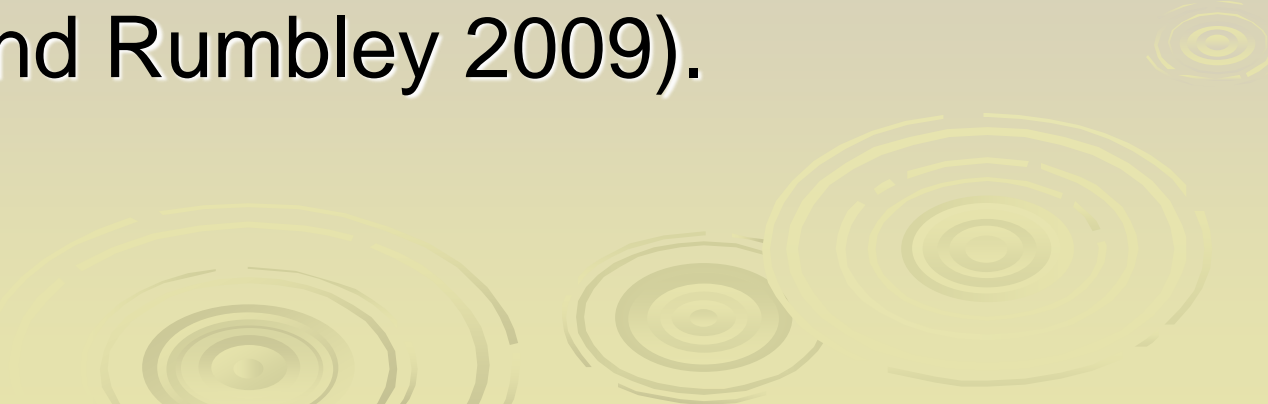
Alejandro Canales
(UNAM –IISUE/RIMAC)

4S 40Th Annual Meeting

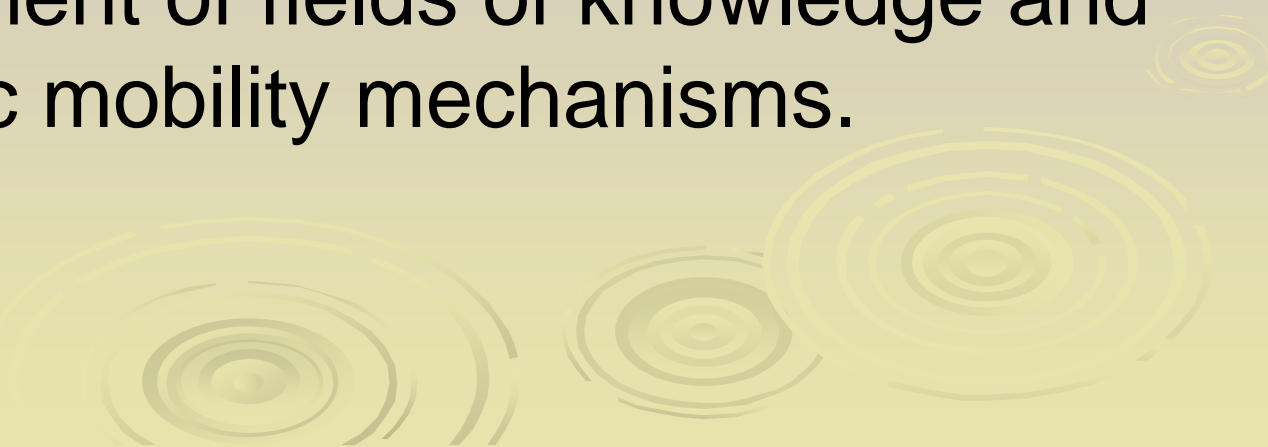
Denver, Co. November 14, 2015

I. Background:

The literature highlights the remarkable upsurge in doctorate program enrollment in most countries as part of the expansion of higher education systems (Altbach, Reisberg and Rumbley 2009).

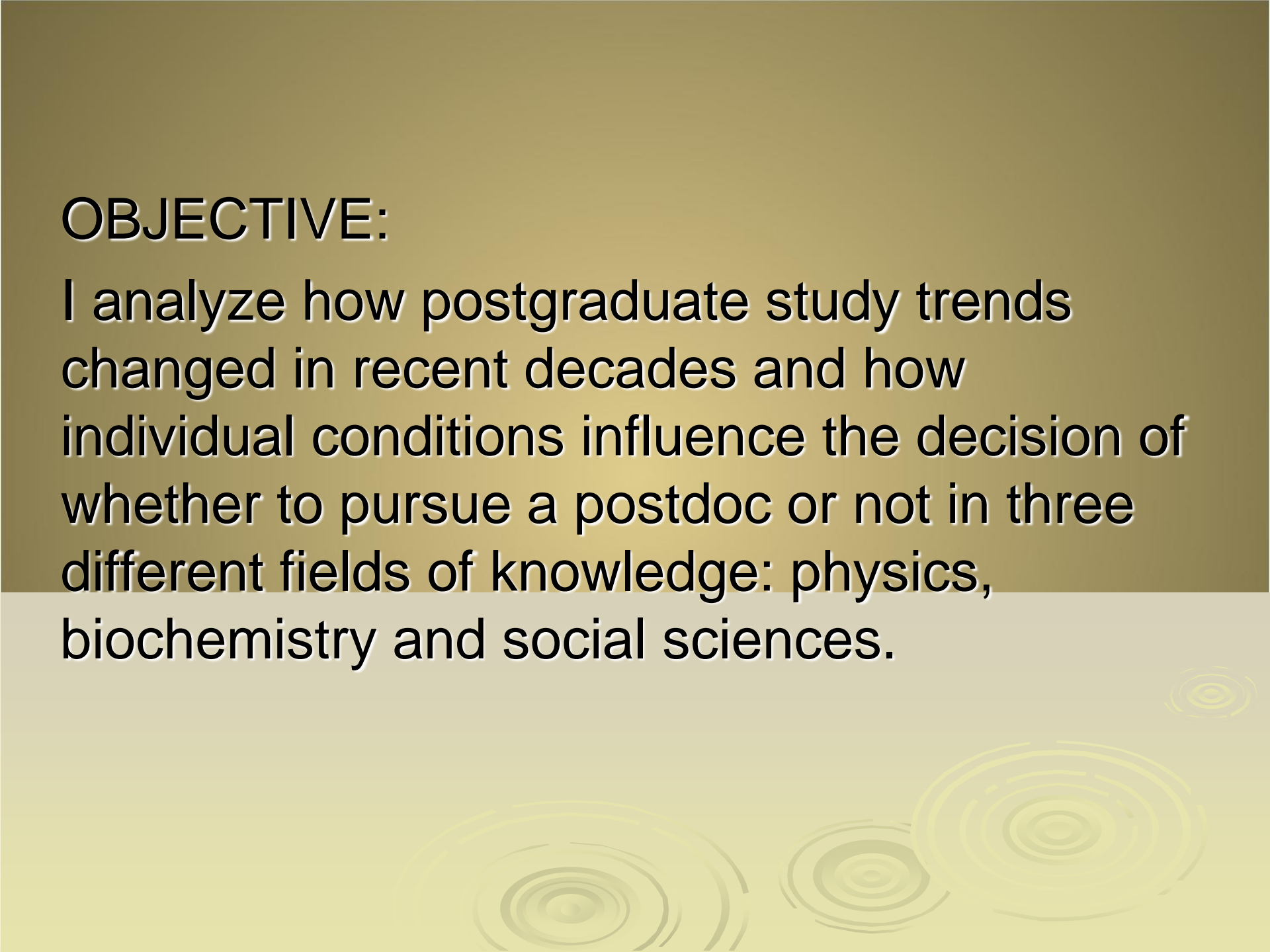


The point is that the upsurge in doctoral studies and post-doctoral fellowships not only affects the structure of educational systems, job searching and reorganization of the academic market but has implications in the preparation process of young scientists, development of fields of knowledge and academic mobility mechanisms.



OBJECTIVE:

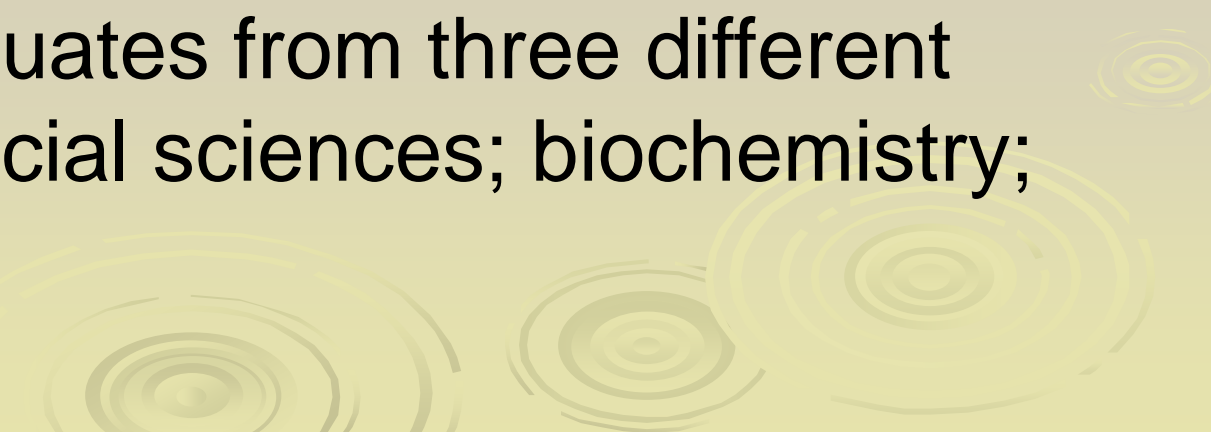
I analyze how postgraduate study trends changed in recent decades and how individual conditions influence the decision of whether to pursue a postdoc or not in three different fields of knowledge: physics, biochemistry and social sciences.



Methodology

Firstly, I will show some numbers about PhDs in the world; after I will concentrate on national policies.

Next, we have used, in part, information from semi-structured interviews with new doctoral graduates from three different programs: social sciences; biochemistry; and physics.



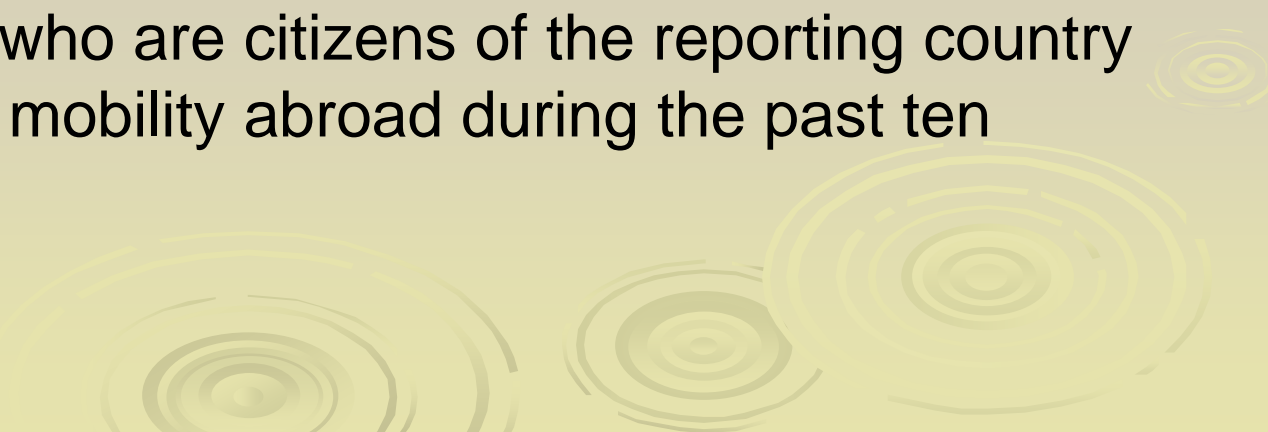
Discussion

1. The data.

In the world, between 1998 and 2006 Portugal, Mexico, the Slovak Republic, Italy and the Czech Republic, Ireland and Denmark grew between 22% and 10%. Another group, Korea, Belgium, Japan, Australia, Poland, New Zealand and United Kingdom grew 10 to 5%; Germany, France and Hungary just 5%. So, the most important enrollment will be on the first Group.

-Unemployment rates in 1990-2006 on doctoral graduates did not exceed 2% or 3%. The transition to full employment may, however some time, rise up to four or five years.

-Finally, Doctorate holders are indeed a highly mobile population. “In the European countries for which data are available, the information shows that 15% to 30% of doctorate holders who are citizens of the reporting country have experienced mobility abroad during the past ten years”.



- On the other hand, in Mexico, between the early seventies and 1990, enrollment in postgraduate programs multiplied by a factor of eight: the first rose from 5,011 students to 43,965 and the programs from 195 to more than 1,600 (CONACYT, 1990).
- It is estimated that by 2013, 5.400 doctors graduated, 300 more than the previous year; compared to the two hundred in 1990, they multiplied by a factor of 27 (CONACYT, 2014). The increased number of graduates is relevant; however, it must be pointed out that the starting base was extremely small, ergo it seems more. Brazil has five times more doctoral graduates than Mexico.

II. *The initiatives.*

- From the mid-nineties, the federal government launched various programs aimed to encourage internationalization. For example, the Mobility Program in Higher Education (PROMESAN) surged as an initiative of the governments of Canada, United States and Mexico. Another was Mexico - European Union association (including Alban, ALFA and *Erasmus Mundus* programs). More recently, the Bilateral (Mex –USA) Forum on Higher Education, Research and Innovation

- However, the more relevant initiative is the Scholarship Program of the National Council for Science and Technology (CONAYCT) that recognizes best graduate programs (Graduate Quality Programs).

-Unfortunately, national statistics on training, graduation and labor positions for doctors are fragmented or unavailable.

-Most of the 30,000 graduates in 2000-2013 were from social and administrative sciences (25%); followed by natural sciences (23.7%); engineering and technology (18.9%); education and humanities (13.9%); and health sciences (11.5%).

- The proportions differ from the European countries in which the natural sciences represented between 20 and 30%. (CONACYT, 2013: 54).

III. *Testimonials*

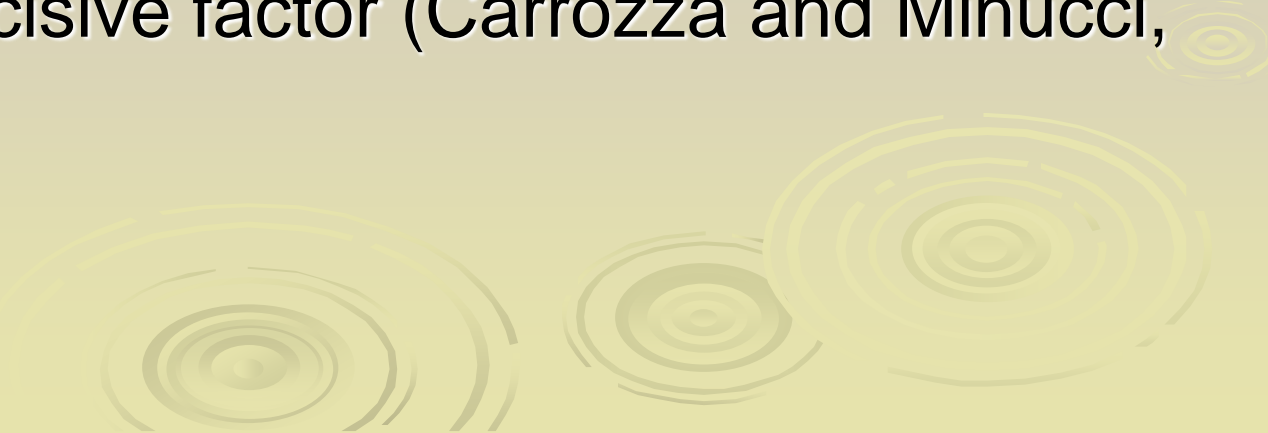
In relation to the circumstances of new doctorate graduates for pursuing a post-doctorate, it is important to note the personal limitations in the testimonials that inform the decision whether to do a postdoc or not because they are life altering. For example, a young doctor in biochemistry facing the dilemma of a postdoc abroad says:

I think my age was the main consideration when I decided to pursue a postdoc. I was young, so I directed all of my energy toward my education. At the time, I had a girlfriend and from the moment we started going out, I told her “I am a researcher; this is my life. Very soon, I will have to move away and make a life in a different country. Tell me whether you are in or not”.

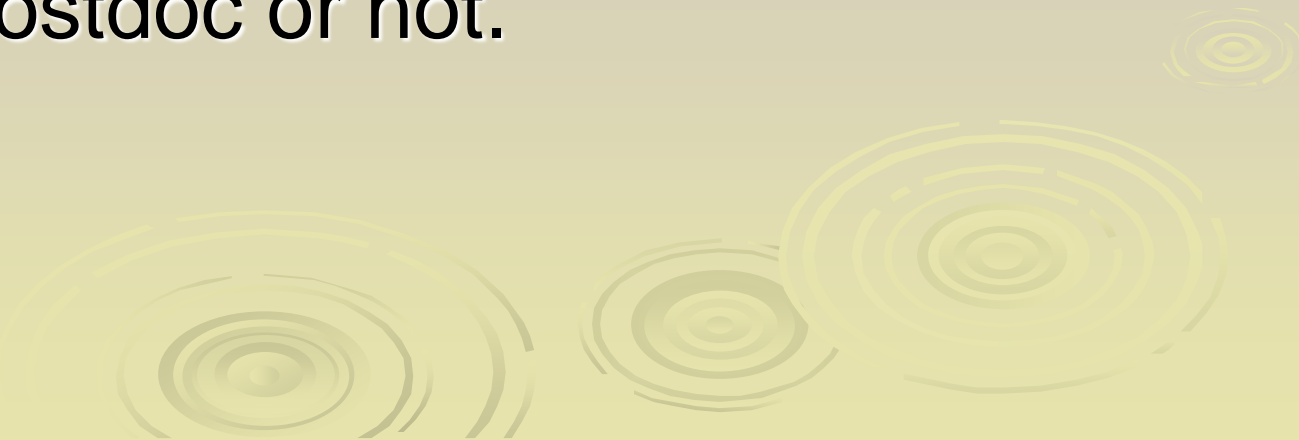
The family status, however, can also be a deciding factor when making the decision not to pursue a postdoc. Another biochemistry graduate says:

In my case, it is the family; it's not just one child but my wife, who is also a graduate of this university, UNAM. She is a doctor in political sciences. She has a very good job now; she works at the TRIFE. So, if I consider moving away, it would mean going alone; leaving her and my child and with her job, which is extremely demanding and exhausting. That's the part that stops me until...

Conclusions

- The results show, as they have in other countries, a relevant growth in doctoral studies, especially in the last two decades.
 - As for individual circumstances for pursuing postdocs abroad, it is possible to see that this may be a decisive factor (Carrozza and Minucci, 2014).
- 

- Finally: somewhat, independently of the difficulties in finding an academic position, disciplinary or gender differences, are notwithstanding, it would seem that personal circumstances constitute one of the most relevant factors when deciding whether to pursue a postdoc or not.



Thanks!

This work was done within the framework of the International Relations and Scientific-Academic Mobility Network (RIMAC), Project No. 260402 Thematic Networks Program, CONACYT.