



# The Actuarial Science Programme An Egyptian Model of Industry-Academia Partnership

By

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*For over 150 years, the actuarial profession has contributed to the growth of financial markets especially in the areas of **insurance and investment.***

Although the number of actuaries is considerably low compared to other professions, the need for their expertise is increasing significantly worldwide.



A study ranking the best and worst jobs in the U.S. (2010) evaluates 200 professions according to five criteria inherent to every job:

*environment, income, employment outlook, physical demands and stress.*

*Of 200 Jobs studied, these came out on top –*

**1- Actuary**

**2- Software Engineer**

**3- Computer system analyst**

Source: CareerCast.com is published by Adicio Inc., in which Wall Street Journal owner News Corp. holds a minority stake.)





The aim is  
to enhance the international  
collaboration in Actuarial Science in the fields of  
education and research



Different aspects of Actuarial Science Programme at Cairo University (ASP-CU) will be explained, through :

- Actuarial Profession bodies
- Foundation of Actuarial Science Programme
- ASP-CU model of Industry-Academia partnership
- Facts about ASP-CU
- The way forward...



# Actuarial profession bodies

- The actuarial profession bodies have been developing their *education system* to provide the students with the strong ground and high skills required to continue in their career.
- Well-reputed universities are keen to include the actuarial science as a major academic programme using mainly the modules set by the professional bodies.



# Actuarial profession bodies (*cont.*)

- The International Actuarial Association (IAA)
  - founded in 1895 - includes 62 professional institutions as full members in different countries and regions.

At the top of the list are: the main professional actuarial bodies, such as:

*Institute and Faculty of Actuaries – UK*

**Society of Actuaries – USA**

*Institute of Actuaries of Australia*



# Actuarial profession bodies (*cont.*)

IAA also includes four professional bodies in Africa and the Arab World, they are:

- **Egyptian Society of Actuaries (Egypt)**
  - Founded in 1998 and currently has 13 qualified actuaries.
- **Lebanese Association of Actuaries (Lebanon)**
- **Association Marocaine des Actuares**  
**(Morocco)**
- **Actuarial Society of South Africa (South Africa)**



# Actuarial profession bodies (*cont.*)

A *qualified Actuary* in *Egypt* is the one who is qualified as an *Associate* or a *Fellow* either from **IoA** or **SoA**



# Actuarial Science Programme (ASP)-CU

- The programme was first introduced at Faculty of Commerce, Cairo University in September 1995.





The programme was the first of its kind in Egypt and the Arab countries.





# Actuarial Science Programme (*cont.*)

A protocol was initially signed for running the programme  
between

Institute of Actuaries and City University

*(London, UK)*

and Faculty of Commerce and Egyptian Insurance Federation

*(Cairo, Egypt)*

University of Kent currently acts as

*Independent Examiner*

The **IoA** supervises and grants the exemption of  
CT subjects



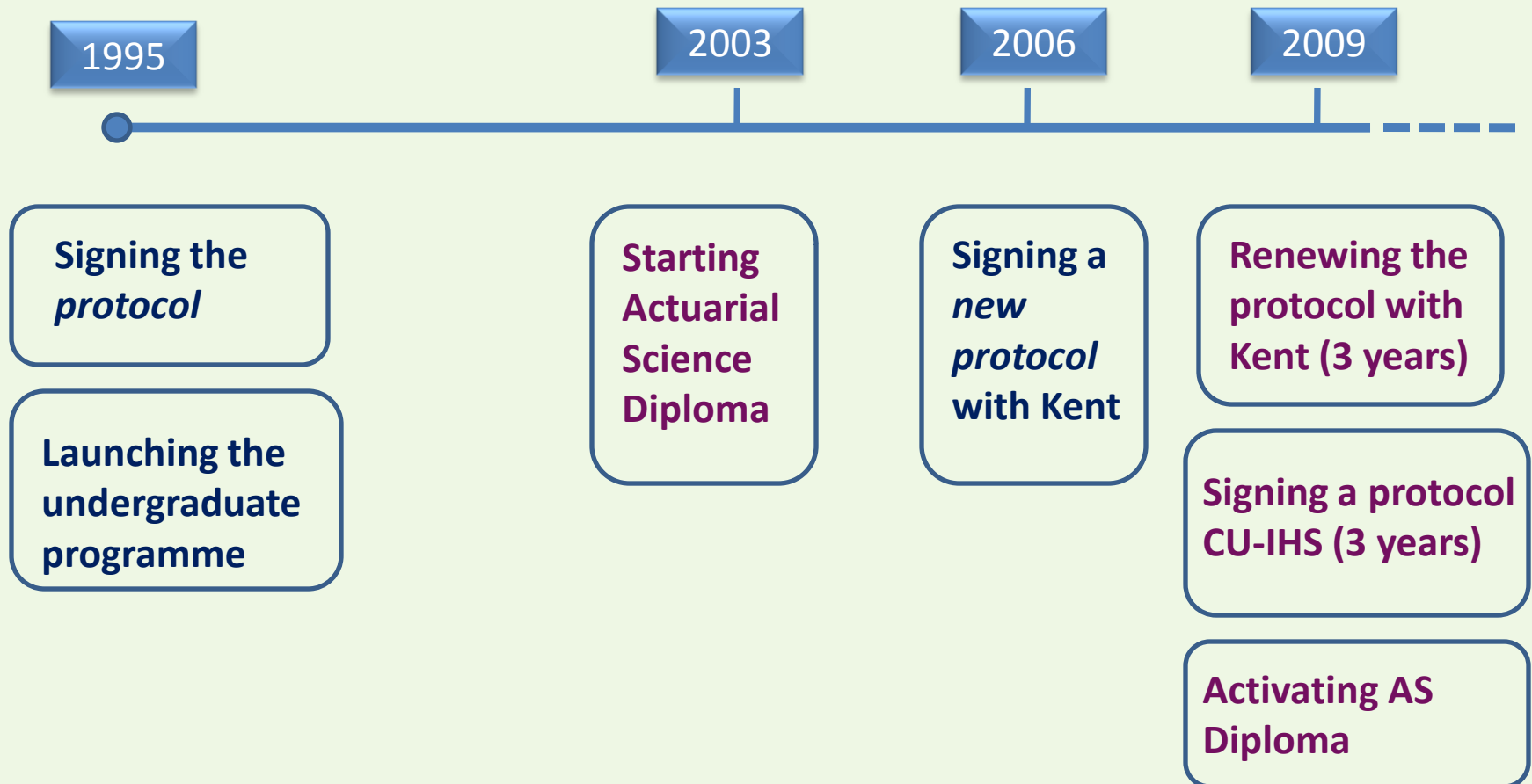
# Actuarial Science Programme (cont.)

*The protocol* is financially supported by  
**the Insurance Holding Company-Egypt (IHC).**

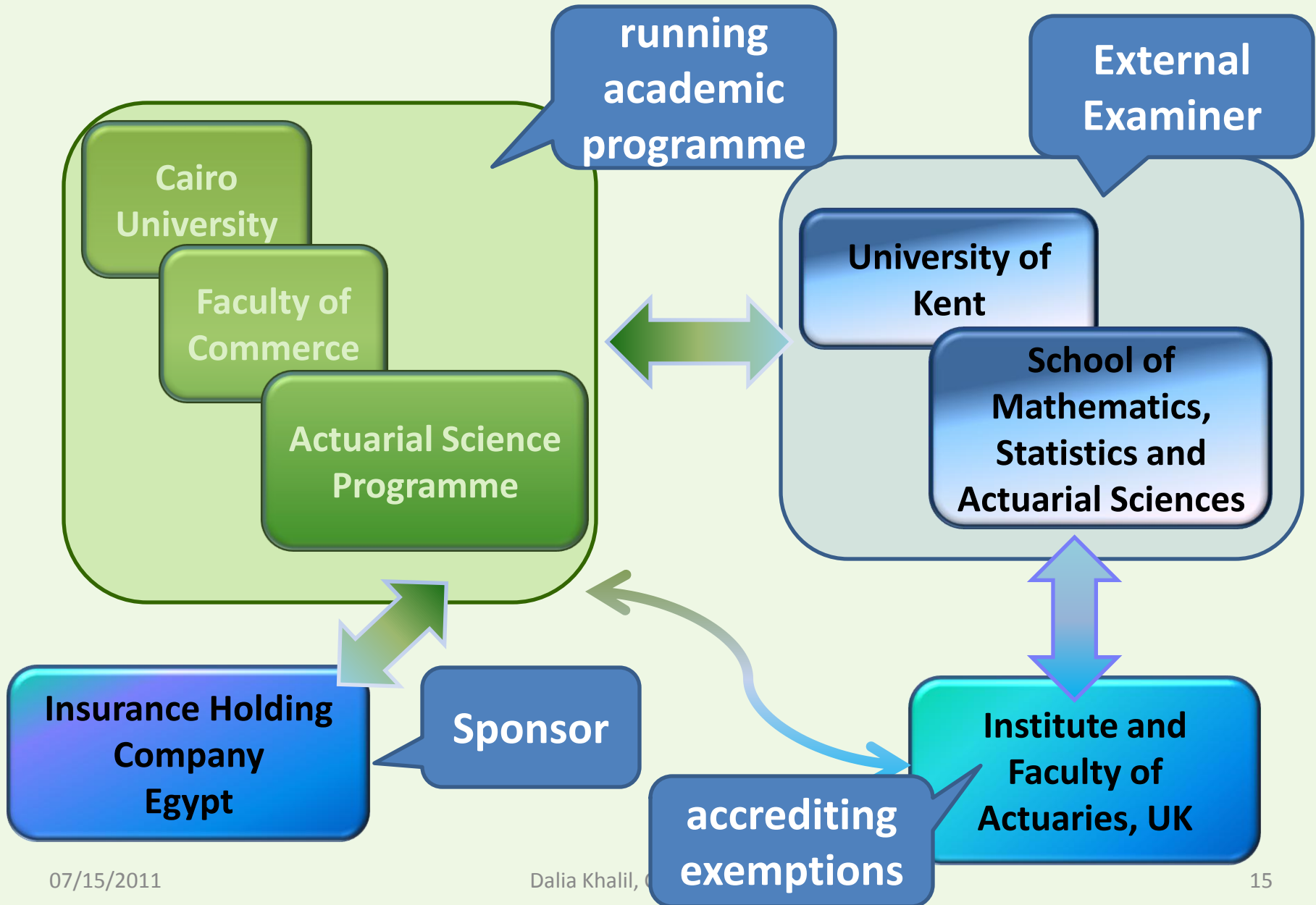
*Scholarships* are also granted by **(IHC)**  
to the distinguished students to encourage  
them to join the programme



# ASP- History



# ASP Model of Industry-Academia Partnership





# Facts about ASP

- The Faculty of Commerce grants a degree of

**BSc in Actuarial Science**

**and**

**Diploma in Actuarial Science.**

Both are taught in *English Language*



# Facts about ASP (cont.)

- The duration of BSc programme is **3 years** (starting from the second year at CU).
- The Core Technical subjects (CT1- CT8) are taught over 6 terms as follows:

<b>Year 2</b>	CT1 (Part I and II), CT2 (Part I and II), and CT7
<b>Year 3</b>	CT3 (Part I and II) and CT4 (Part I and II);
<b>Year 4</b>	CT5, CT6 and CT8 each has (Part I and II)



# Facts about ASP (cont.)

- The Diploma is a **two-year** course offered to graduates from other fields – mainly Statistics, Mathematics, Business and Engineering - who are interested in the actuarial profession.

The CT subjects are divided as follows:

**Year 1**      CT1, CT2, CT3 and CT7

**Year 2**      CT4, CT5, CT6 and CT8



## Facts about ASP (cont.)

- The programme has been running for 15 years and the total number of graduates from 1998 to 2010 reaches 165

Only **4** of them are able to be qualified.

The courses at ASP are taught by academic staff (ard 12) and qualified actuaries (ard 6)

There are 12 tutors appointed by the University who are graduated from the programme.



# Facts about ASP (cont.)

There is an average of 20 students enrolled in the programme each year.

Over the last four years, there has been one international student joining the programme.

We can say that  
50%-60% of graduates work in insurance sector  
50%-40% of graduates work in  
Ministry of Finance  
Banks  
Others



# Strength and weakness of ASP

- **Strength**

- *Sustainability*
- *International qualification*
- *Knowledge transfer*
- *Availability of job opportunities*

- **Weakness**

- *Funding*
- *limited number of staff*  ***Delay***
- *Absence of MSc and PhD programmes*
- *Lack of awareness*



# The way forward...

- Development of Actuarial Science Programme can be considered through the three main sectors at the Faculty and University level, they are:
  - *Students Affairs*
  - *Postgraduate Studies and Research*
  - *Community Service*



# *For Students Affairs*

Promote current programs in Africa and the Arab World.

Apply new methodologies in teaching by using practical problems and case studies

Arrange annual meetings among students worldwide



# *For Postgraduate Studies and Research*

Set a comprehensive postgraduate programme with cooperation of international institutions on the base of Industry- Academia Partnership.

Encourage research in the area with applications on the Middle-East financial markets.

Open new channels for collaboration in research projects and staff-student exchange programmes.



# *For Community Service*

Set a strategy to promote for Actuarial Science through the international institutions

Organize workshops to raise the awareness among other professions of Actuarial Science.



# Conclusions

***ASP-CU** is expected to play a leading role in the region*

***Research** is the way for development*

*There are challenges but we believe that we are capable to go forward.*