



Research and innovative projects financing, key to universities competitiveness

Laurent GROSCLAUDE – Madrid – May 16th 2010



2,8 millions inh.
Research
Industry
Higher Education



Midi-Pyrénées region European *think-tank*

TOULOUSE
4th largest city
1 000 000 inh.
120 000 students





**Toulouse
City of
innovation**

Research clusters

Aerospace valley (Airbus A 380)

Pharmaceutical indus & biotechnologies

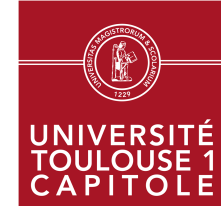
Cancer Bio-Health

Electronics / embedded systems





Université
de Toulouse



UNIVERSITY of TOULOUSE

*Higher education association, groups
together 16 HE institutions :*

- Major universities (UT1/UTM/UPS)
- Business schools
- Elite engineer institutes

- Covering all disciplines
(arts/humanities/law/econ/manag/
IT / medicine / sc & tec / aeronautics)

- Various competencies: research devpt /
international / students life



- 120 000 students
- 6 000 professors / researcher
- 15 Phd schools
- 12 000 foreign students



UNIVERSITY TOULOUSE 1 – CAPITOLE

- ✓ In the heart of the city since 1229
- ✓ 18 000 students
- ✓ 600 professors/researchers
- ✓ 450 adm. Staff
- ✓ Consolidated budget : 95 M€



UT1 Capitole – Training & Research fields



Law

Economics

Management

Administration

ICTs

- 20 Bachelors
- 70 Masters
- 4 Phd schools



UT1 – Capitole : *a global University*



- 3 500 foreign students
- 180 frame agreement with 60 countries
- 80 foreign researchers
- 10 offshored programmes (500 stud.)
- 10 programmes taught in english

Universities changes 2000 / 2010



- French system has experienced massive changes / reforms (BMD process, PRES, autonomy...) – more changes in one decade than in one century
- French system has to face the new challenge of competition in education & research
- Improvements are undeniable but the French HE system still comes up against two major issues / taboos: selection / financing (sp. tuition fees issues)

Universities research policy



- Free discussion & setting-up within the establishment (univ. autonomy)
- Negotiated with French Ministry of HE & Research within the frame of a four-year contract setting up objectives / financing / implementation indicators
- Highly depending on financing constraints

UT1 Capitole research policy



- Link education / research – research starts at the Master level
- Defining a research policy implies to define a broader education project within the establishment
- Our education & research policy may be summarized in very simple words: attracting the best



Attracting the best: meanings & implementation

- Meanings: attracting good students / in excellent programmes / involving the best professors-researchers

- Not original: shared goal by a stakeholders in a competitive market (university is not a firm / goal is not profitable / goal is the creation of scientific knowledge / but competition is real)

- Real challenge is to create competitive advantage:
 - what attracts students ? Reputation of a good programmes / PhD school
 - what makes the reputation ? Above all professors & researchers
 - how to attract the best professors-researchers in a field ?

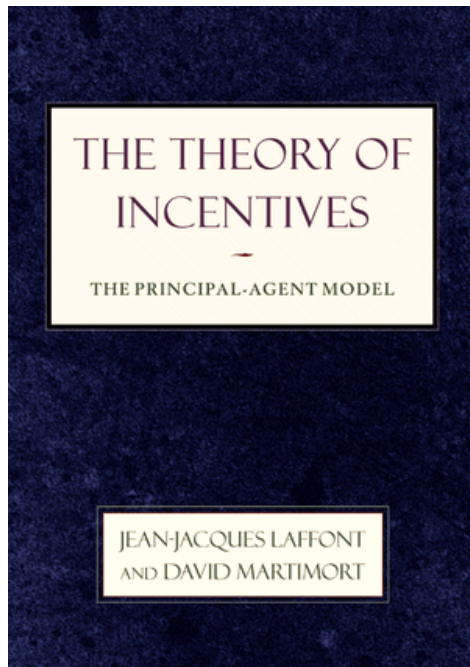


Attracting the best Faculty

- Create good working conditions / research environment (breeding ground / substratum)
- Invite world leading researchers
- Hire excellent researchers
- After several years, system will work and grow on itself: excellence will attract excellence / competitive advantage exists.
- Sharing the interesting success story of TSE

TOULOUSE SCHOOL of ECONOMICS

www.tse-fr.eu



- TSE is UT1 economics excellence dept
- TSE is an academic and reserach dept
 - 4 Master programs taught in English
 - 1 Phd school
 - a strict selective admission policy
 - 70 researchers
 - 85 % foreign students

T.S.E. / Main research fields



- Industrial economics
- Public economics
- Information economics
- Environment & natural resources economics

T.S.E. / Heads



- J.J. LAFFONT (1947-2004 - founder)
- PhD Harvard



- J. TIROLE (Dir. TSE)
- PhD MIT
- Visiting Pr Harvard



- J. CREMER
- PhD MIT
- Pr Polytechnics (X)



- P. REY (researcher)
- Polytechnics (X)
- Vis. Pr MIT

T.S.E. / rankings & awards

- 1st EU economic doctoral school (equal London sch. econ.)
- A.R.W.U. (Shangai ranking) 2009 : rank 76

- 18/321 (Econphd world bibliometric ranking / *all economics disciplines*)
- 5/180 (Econphd world ranking bibliometric / *industrial economics*)
- J. Tirole CNRS Gold medal 2007



TSE: how does it start ?

- 1980 - one outstanding researcher (Jean Jacques LAFFONT) with the firm belief / ambition that excellence may exist beyond US / London / Paris (initiates Reverse Brain Drain / RBD)
- 1990 - started to set up long-term partnerships (via IDEI = non profit association) with corporations and to develop innovative research topics that contributed to establishing the reputation of economists from Toulouse
- 2000 - now gathers about 100 senior and junior researchers affiliated with various research institutions (University of Toulouse, EHESS, CNRS, INRA) and about 100 doctoral students (70% international).



TSE: how does it work ?

- TSE is developing both fundamental & applied research
- TSE applies to firms call for tender / sign research contracts with multinational corporations → significant contribution to PhD and research financing. TSE offers higher wages & better research conditions to amplify the RBD process
- TSE is currently supported by a private Foundation (JJ Laffont foundation) which capital endowment averages 70 M€ (half from corporations / half from State) – this capital is not consumable but invested
– Yield = 4 % → 2,8 M€ / year



TSE: how will it develop ?

- To increase and speed up the return brain drain process, UT1 Capitole is setting up a new strategy consisting of the creation of 15 “RBD Chairs”
- RBD Chairs will provide to world leading researchers a package including wages up to international standards + 2 post doc + important research budget + 1 PhD financing/year
- Financing of RBD Chairs (250 000 € each):
 - Foundation capital interests
 - Firms contributions
 - “Great Loan” funds



Great Loan

- French gvt is currently issuing a State loan of 35 Billions €, of which 15 billions will be devoted to HE & Research
- A specific call for tender concerns “Excellence campuses”: aims at endowing innovative research projects with a non consumable capital.
- There will be 5 to 10 excellence campuses endowed by the end of 2010 with a capital of 1 billion € each.
Yield = 4 % → 40 M€ / year

Competition is in process !!!



Conclusion: does higher education pay ?

- Financing is the key to the HE and research competition
- Financial capital shall be used to develop human capital
- RBD process implies important financing
- Driving corporate funds & public savings to education & research implies to change the way people think.
- Economists demonstrate that “education pays”: comparison between investment in education/research and social & financial gains shows one of the highest and most sustainable return rate (12/20 %)



Thank you for your attention

