From the Editors

A Note On The Evolution Of The French Management Scholarship, 1994-2014

Vincent Mangematin ● Mustapha Belkhouja

Abstract. This editorial note pictures the evolution of French management scholarship, 10 years after the takeoff of research at the international level. It analyses the decoupling between the consolidation of the industry with the French research in Management which is still emerging. It suggests that institutionalized patterns have been imported from international bodies. To explore this evolution, we analyze the international image of French scholarship as it is revealed on the Web of Science. We discuss the relative evolution of business schools and university departments in research and their relative performances in terms of scientific production (number of articles) and visibility (number of citations). Finally, we consider the effects of on-going strategies and the sustainability of imitation during the industry’s consolidation phase. We show how strategic convergence and imitation lead to Red Queen Effects and prevent organizations from achieving and sustaining strategic differentiation in the medium term.

The coexistence of private business schools (usually linked to Chambers of Commerce) and management departments (Business schools) within universities is a specific characteristic of the French context. Historically, research was performed in universities, while Business schools had a more professional and practice orientation. This has changed dramatically over the last 20 years, with the generalization of Business school research and the greater international openness of universities. Business Schools and Universities have been rapidly transforming to address international audiences and markets. Ten years ago, the French research in Management was dominated by Universities while few business schools were emerging (e.g., HEC, ESSEC and EM Lyon). What is the current situation in 2015 for the French context and what can we learn from ten years evolution?

This note analyses the simultaneous process of consolidation of the French Higher Education Management Organizations (Business schools and Universities) through merger and acquisition and the processes of research capability creation. The transformation of Business higher education organizations has been quicker than the transformation of management scholarship.

We first present the evolution of the French business higher education industry. When we are speaking about organizations (business schools or universities), we use the term ‘industry’ to refer to the sector as a whole. When we describe the evolution of research, we use the term ‘field’ to refer to one of the specific activities of business higher education organizations: the creation of new knowledge. We then explore the competition on markets for business higher
education in what is becoming a highly institutionalized industry, focusing on the evolution of business school rankings over the past couple of decades. We also reflect on the evolution of French business scholarship and on the on-going concentration of the sector’s strategies, and question their effects and the sustainability of imitation during the consolidation phase of the industry. We show how strategic convergence and imitation lead to ‘Red Queen’ effects. Strategic convergence prevents organizations from achieving strategic differentiation, a situation which is not sustainable in the medium run.

**TWO PROCESSES DECOUPLED**

The development paths of business education parallel the classic models of industry development. Industry Life Cycle theories display successive well-defined phases of industry development, each related to its specific development stage - initial, rapid growth or consolidation. The initial phase is characterized by a few organizations either entering an existing industry or constituting an entirely new industry which define the norms and set the product standards - here the creation of new business schools, with the norms being those of knowledge production. These new business schools are based on distinctive pedagogical or research skills, and are also linked with emerging markets in Europe and in developing countries. Norms emerged, both for business schools and the business and management scientific community at large. Journals were created and the community emerged with strong professionalization. After the Gordon report, case based teaching and research seem to have been the pillars of the new industry and emerged as its dominant design (Anderson & Tushman, 1990). Accreditation bodies such AACSB, EQUIS, AMBA were set up and participate in the diffusion of a standardized model, which took place by mimetism rather than by conformity to accreditation criteria. In the USA, this emerging period ended in the 2000s, when international competition became more intense (Mangematin & Baden-Fuller, 2007). During the same period in France, only HEC, ESSEC, EM Lyon and University of Toulouse (mostly the micro-economic and finance departments) had international publication track records.

As industries mature, dominant global standards start to be adapted locally: similar processes took place in both academic research and the organization of business schools. Accreditations led to the standardization of the process of producing qualified students and certified new knowledge while rankings order the business schools that compete nationally and internationally. The consolidation of the business higher education industry around a dominant design implies the growth of business schools, as well as the mergers or internationalization of some of them. Typically, industry consolidation phases are characterized by industry shake-outs (Klepper, 1997) and an increase in firms’ mean sizes (Afuah & Utterback, 1997; Agarwal & Tripsas, 2008), which also suggests that innovation in pedagogy or in research require more resources: firms internalize resources that are initially created externally, and concentrate on the most promising research avenues. At the industry level, we might speculate that the changing nature of competition leads to different development patterns. French business higher education entered a shake-out phase in late 2000, about ten years after the USA, UK and Northern Europe.

The industry has changed a lot over the last 10 years, with an international homogenization of training curriculum (LMD), mergers of business schools (NEOMA, KEDGE), failure of some of them (such as ESC Chambéry bought out by INSEEC) and the restructuring of universities (see table 1 and table 2 for further information).
Both Industry Life cycle and entrepreneurship theories predict the increasing specialization of firms during the consolidation stage. Boone et al (2013) argue that, up to a certain threshold of homogeneity, new entrants opting for differentiation strategies will enhance their life chances. Santos et al. (Santos & Eisenhardt, 2009) analyzes new entrants’ strategies to distinguish themselves from the crowd and to challenge existing performance criteria. In contrast, neo-institutionalist scholars have argued that highly institutionalized fields favor institutional entrepreneurship on the part of incumbents (Greenwood & Suddaby, 2006), as maintaining position or status requires long term investment.

How do business schools and universities react during the industry consolidation phase, under high isomorphic pressures? How do French higher education organizations combine emergence and consolidation simultaneously? Research is one component of the industry, and we focus on this field as it represents a major investment for all business higher education organizations,
which has been a limiting factor over recent decades. In 2004, French business research was dominated by the universities, but was very fragmented. Business schools research visibility was limited to ESSEC, HEC and EM LYON, each of which contributed more than 50 papers annually to international business journals. By 2014, the field still remained polarized, with the coexistence of business schools and universities. This paper analyses the evolution of French business scholarship between 2004 and 2013. It discusses the lower maturity of the business research field and the consolidation dynamics of the industry.

DATA AND METHODS

To explore the evolution of French business research, we focus both on publications and citations. The total number of papers published and the number of citations result from the long term strategies of actors in the business higher education field. While the number of articles published in different journals measures production, citations represent evidence of visibility, as authors draw from the extant stock of knowledge of the cited sub-discipline. Assessing research based on citations resembles a ‘democratic’ vote of the scientific community as evidenced by their propensity to recognize formally and openly the importance of other researchers’ work.

We adopted an organizational approach. Indeed, citations recognize scientists’ contributions, and so represent individual academic achievements. However, aggregated at the organizational level, they reveal scholars’ visibility within their individual organizations and academic networks, and the academic status of the organization.

Data were collected from the Web of Science database in Dec 2014 covering publications from 1994 to 2013. The database contains detailed information about articles published in peer-review academic journals, including author names, article title, year of publication, journal name, and - of particular interest to us - full reference lists. The database contains about 364 of the most prestigious business journals, covering all relevant research areas in management, business, and business and finance. The Web of Science does not include management journals published in French. The data covers the period 1994-2013, as the Web of Science only started collecting data on social science papers in 1990.

First, we counted the number of publications in each year, which represents the production output of each organization in that year. We obtain this number by counting all the articles published by authors from the same organization in a given year. Second, we identified the total number of citations that each article had received up to December 2014, which reflects its accumulated visibility up to that point. The total number of citations received by each organization is the sum of the citations received by each article that has an author from that organization. It is relevant to consider the total number of citations: as the citation half-life i.e. the median age of the articles that are cited in the Journal of Citation Reports (JCR) for the year in management (and more generally in social sciences) is high, papers need time to be cited and anteriority in the field counts. Finally, we mapped out the co-authorship profile of each organization to better understand the scientific knowledge production space.

We use the perimeter in 2014 to describe the landscape, and we use the 2014 names instead of the 2004 ones (see tables 1 & 2).
RESULTS

FRANCE REMAINS MARGINAL

The study of management has been US centric (Mangematin and Baden-Fuller, 2007) over the last four decades. Reasons have been advanced for US dominance, including supply conditions and the proximity to research sites (companies) where new ideas are being tested (Baden-Fuller & Hwee Ang, 2001). In recent years, this US centricity has been contested, first by European Business Schools and more recently from Asia; and these challenges have resulted in some subtle changes in the rules of the game and attempts by US players to hold on to their dominance.

However, France remains marginal. Europe is dominated by the UK, The Netherlands and Germany. The UK has been booming and outperforming continental Europe for the last 15 years. As a very open country with nine universities, the Netherlands was slightly ahead of the others until 2005, when German publication numbers rose to keep pace with Dutch, and then took off in 2010.

Figure 1. Evolution of European production numbers

The evolution of the number of citations by country follows the same path, with three leading countries, UK, the Netherlands and Germany and a group of followers including France, Italy and Spain, the last two of which have recently caught up.

MORE ARTICLES PUBLISHED BY UNIVERSITIES, BETTER VISIBILITY OF BUSINESS SCHOOLS

After homogenization of organization names and reprocessing, our dataset includes more than 370 different organizations, 160 of them are Public Sector Research Organizations (PSROs - 89 universities or Ecoles Normales Supérieures and other public sector research organizations, including engineering schools); 41 business schools and more than 170 other organizations such as companies, banks or international organizations (like the OECD) located in France. As Table 3 shows, the production multiplied almost by 10 between our two extreme periods of 1994-1998 and 2009-2013. However, due to fragmentation, the averaged numbers of publication per organization show that Business Schools are actually publishing more, per organization, leading to higher visibility.
Table 3. Evolution of the number of articles per organization type

| Organization Type | 1994-1998 | 1999-2003 | 2004-2008 | 2009-2013 | Total | Multiplied by ... between 1994-1998 and 2009-2013 |
|-------------------|-----------|-----------|-----------|-----------|-------|-----------------------------------------------|
| Business Schools (N=41) | 136       | 296       | 440       | 1249      | 2121  | 9.2                                           |
| Number of articles published | 6997      | 17549     | 11490     | 7397      | 43433 | 6.2                                           |
| Number of citations received | 6725      | 9948      | 9288      | 5599      | 31560 | 4.7                                           |
| Universities (N=160) | 164       | 327       | 645       | 1637      | 2773  | 16.9                                          |
| Number of articles published | 184       | 544       | 9288      | 5599      | 31560 | 4.7                                           |
| Number of citations received | 7997      | 17549     | 11490     | 7397      | 43433 | 6.2                                           |
| Other organizations (N=159) | 28        | 54        | 79        | 227       | 388   | 13.8                                          |
| Number of articles published | 470       | 2511      | 1055      | 603       | 4639  | 9.9                                           |
| Number of citations received | 14192     | 30008     | 21833     | 13599     | 79632 | 5.6                                           |
| Total organizations (N=360) | 328       | 677       | 1164      | 3113      | 5282  | 16.1                                          |
| Number of articles published | 14192     | 30008     | 21833     | 13599     | 79632 | 5.6                                           |

Regarding citations, Table 3 reveals that the scientific production of authors from business schools seems to be much more influential. Although universities have published more during the last twelve years, business schools were more cited when comparing both numbers and the average numbers of citations. This table shows that papers published by business schools receive on average more citations than papers published by universities (20.47 citation per paper on average vs. 13.88 respectively). In addition, it reveals that together, the 41 business schools have received a total of 43,433 citations (i.e., around 1059 citation per business school on average), whereas the 160 universities have received in total 31,560 citations (i.e., 197 citations on average per university). So, Table 3 suggests that business schools, which combine a higher average number of citations per organization and higher number of citations per article, are more visible internationally than universities and PSROs.

Table 3 also shows that number of citations per period tend to decrease over time as the more recent papers have less time to be cited. This is a mechanical effect. As the citation half-life is up to 7 years for 90% of the journals, and up to 10 for 1/3 of the journals, history counts. Citation patterns are highly persistent.

THE ZOOM ON INDIVIDUAL ORGANIZATIONS

Table 4 shows the significant presence of business schools and their take-off after 2004 in terms of production.

To describe the latest evolution, we rank organization by their number of articles published during the last period (2009-2013). Compared to a similar previous analysis (Mangematin, 2004), while INSEAD remains an outlier, the general landscape of management research in France changes dramatically.

First, if we exclude INSEAD which is highly specific, universities within the top 15 were producing the double than the business schools in the top 15 during the 1994-1998 period while they produce less in the 2009-2013 period. Business schools have been consistently investing in academic research: each of the schools in the top 15 has internationalized and implemented similar research policies.
Table 4. The top 15 producing organizations by number of articles published during the 2009-2013 period

| Type            | 1994-1998 | 1999-2003 | 2004-2008 | 2009-2013 | Total (rank) |
|-----------------|-----------|-----------|-----------|-----------|--------------|
| INSEAD BS       | 87        | 178       | 174       | 195       | 634 (1)      |
| PARISTECH (Incl. HEC and Polytech) Pole | 28        | 44        | 105       | 292       | 469 (2)      |
| HEC BS          | 14        | 23        | 59        | 171       | 267 (3)      |
| UNIV TOULOUSE (incl. IDEI) UNIV | 21        | 39        | 60        | 126       | 246 (4)      |
| EDHEC BS        | 0         | 5         | 21        | 97        | 123 (11)     |
| KEDGE BS        | 1         | 3         | 19        | 95        | 118 (13)     |
| EM LYON BS      | 8         | 25        | 39        | 92        | 164 (6)      |
| UNIV PARIS 09 UNIV | 13        | 16        | 39        | 90        | 158 (7)      |
| UNIV LILLE UNIV | 3         | 6         | 17        | 85        | 111 (14)     |
| ESSEC BS        | 16        | 33        | 40        | 81        | 170 (5)      |
| UNIV PARIS 01 UNIV | 13        | 17        | 32        | 80        | 142 (8)      |
| PARISTECH (excl. HEC and Polytech) UNIV | 12        | 16        | 31        | 74        | 133 (9)      |
| GRENOBLE EM BS | 4         | 7         | 21        | 73        | 105 (15)     |
| UNIV AIX MARSEILLE UNIV | 11        | 13        | 32        | 73        | 129 (10)     |
| NEOMA BS        | 1         | 3         | 3         | 72        | 79 (16)      |
| UNIV PARIS EST UNIV | 8         | 8         | 33        | 72        | 121 (12)     |

Second, HEC demonstrates an outstanding growth and has consolidated its leadership in knowledge production, which really took off after 2005. If we include HEC and Polytechnique within ParisTech, it becomes a booming organization. HEC, Univ Toulouse and INSEAD have been consistently in the first three since 2004, and have increased their lead over their direct followers in the most recent years.

INSEAD receives almost twice more citations than the 8 other business schools listed in table 3 during the last 20 years (26,140 and 15,348 citations in total respectively), even if there is a catch up during the last period. When we look at the total number of publications over the four periods, HEC comes second after INSEAD, with about 4,500 citations (and growth has been rapid). Then, there is a group of three challengers - EM LYON, ESSEC and Univ Toulouse – which each have around 3,000 citations. The next group is made mostly of universities (Univ Paris 9, Univ Paris 01, Polytechnique and Univ Lille); numbers have been high (more than 1,000 citations in total for each organization) but their evolution moderate. Finally there is a group of emerging business schools (Neoma, Kedge, Edhec and Grenoble EM), which have published less than 900 papers in total since 1994. Table 5 suggests that ParisTech as a pole may benefit from HEC visibility if the brands are clearly associated. For citations, anteriority plays an important role; organizations involved in scientific production earlier have had longer to gain high numbers of citations than more recent ones.

2. However, as HEC and Ecole Polytechnique are the two most famous brands in France for higher education, we choose to keep them separate.
Table 5. The first 15 organizations in citation (ranked by the last period)

| Number of citations | Type | 1994-1998 | 1999-2003 | 2004-2008 | 2009-2013 | Total (rank) |
|---------------------|------|-----------|-----------|-----------|-----------|-------------|
| INSEAD              | BS   | 5026      | 13150     | 6243      | 1721      | 26140 (1)   |
| PARISTECH (incl. HEC and Polytech) | Pole | 2026      | 1924      | 2108      | 1987      | 8045 (2)    |
| HEC                 | BS   | 803       | 1028      | 1434      | 1327      | 4592 (3)    |
| ESCP EUROPE         | BS   | 0         | 200       | 400       | 855       | 1455 (11)   |
| EM LYON             | BS   | 424       | 1037      | 906       | 662       | 3029 (6)    |
| UNIV TOULOUSE (incl. IDEI) | UNIV | 964       | 1219      | 993       | 516       | 3692 (4)    |
| PARISTECH (excl. HEC and Polytech) | UNIV | 402       | 323       | 523       | 498       | 1746 (9)    |
| ESSEC               | BS   | 584       | 1420      | 716       | 477       | 3197 (5)    |
| NEOMA               | BS   | 27        | 118       | 49        | 404       | 598 (16)    |
| EDHEC               | BS   | 0         | 119       | 309       | 374       | 802 (15)    |
| KEDGE               | BS   | 44        | 60        | 406       | 344       | 854 (14)    |
| GRENOBLE EM         | BS   | 59        | 105       | 429       | 278       | 871 (13)    |
| UNIV LILLE          | UNIV | 617       | 69        | 328       | 274       | 1288 (12)   |
| UNIV PARIS 09       | UNIV | 178       | 548       | 560       | 260       | 1546 (10)   |
| UNIV PARIS EST      | UNIV | 743       | 257       | 605       | 249       | 1854 (8)    |
| ECOLE POLYTECH      | UNIV | 848       | 573       | 311       | 236       | 1968 (7)    |

EMERGING RESEARCH FIELD

As our previous analysis suggests, universities are growing less rapidly than business schools both in terms of publications and citations. It seems that these two groups of organizations have been following different trajectories. Table 4 complements this analysis by presenting the ranking movements of French organizations in terms of production and citations. We have split the top 15 ranking into 3 classes, and counted for each the number of movements that could be inter-class changes, entries or exits. The organizations that increased their inter-class ranking are in green, and those that decreased are in red. This table yields two main findings.

1- The usual suspects continue to dominate the field, for the last 20 years: Univ. Toulouse, HEC, INSEAD have consistently been in the top 5.
2- There is high instability of the players. The French business higher education industry has seen maturing as revealed by entry/exit. For instance, the last period witnesses the entry of Kedge and Edhec - both of which resulted from mergers of business schools - into the top 5. Kedge’s achievements, as well as those of Neoma, result not only from the merger but also from endogenous growth based on its research investments. Their mergers seem to have been an opportunity to strengthen their international orientation. Edhec has an outstanding growth based on specialisation in Finance.
To conclude, our analysis shows that the industry of higher education is highly contestable and unstable, despite the isomorphic pressures involved. Rankings, accreditations, national evaluation systems have contributed to setting up the industry’s organization. However, research strategies have been implemented in different ways. French organizations produce a small numbers of papers, and the success of their research strategies makes major differences in terms of production and citations. Furthermore, if analyzed in terms of industry life cycle, the research field is maturing but not yet mature. It is mainly due to the expansion of the market, which allows entry to newcomers. For the industry of business higher education, the shake-out process started recently, with mergers and acquisitions as well as failures.

**WHAT DO WE LEARN? UNSUSTAINABLE RED QUEEN EFFECT**

The business higher education industry is still expanding and the number of players is growing. Research has been booming over the last 10 years, especially. The number of publications and the subsequent number of citations is expanding rapidly. Competitors are all running pretty fast – so every actor has to run faster and faster to stay in the race.

Van Valen, (1973) has used the term Red Queen effect (RQE) to describe the on-going adaptation of living organisms to a changing environment (see, Delacour & Liarte, 2012 for a review). He crafted this notion by analogy with...
Lewis Carroll’s novel (Through the Looking Glass) in which the Red Queen explains to Alice, “Here, you see, it takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!”. Lampel and Shamsie (2005) explain that “The red queen competition describes competitive rivalry in which firms must increase their investment in order to maintain their existing market position while at the same time failing to earn returns that are commensurate with higher investments”.

RQE perspective sheds new light on business schools’ differentiation and imitation strategies. French Business schools and University management departments have been following differentiation and imitation strategies simultaneously: differentiation as they partner with a large variety of other actors, or specialize in different sub-disciplines such as finance at Univ. Toulouse or EDHEC: imitation, as they all invest in the production of academic research, focusing on international journals so as to conform to accreditation criteria and rankings. As the target is constantly moving, and because the investment required to compete is constantly growing3, most resources are dedicated to imitate the leading organizations.

It seems that the Red Queen Effect is one of the consequences of the simultaneous co-existence of the entry into the maturation phase of the industry life cycle and of the emergence of the research field. However, RQE situations are not sustainable: speculative bubbles form and crises may speed up industry consolidation. To maintain the distance between themselves and their followers, leaders may push for alternative, more conservative indicators - such as citations - to assess research. Depending on how the criteria are implemented, the effects on competition may differ. The evolution of criteria of evaluation and ranking from publication to citation may deeply influence further strategies: citations are far less actionable indicators than publications. You can increase the level of publications by increasing investment, but it is more difficult to get to be a part of networks of scholars who know, appreciate and discuss your work.

A MOVE TOWARD IMPACT?

Research has represented a major investment for business schools and universities over the last two decades. Articles are produced, but the on-going questions concern the extent to which contributions and results impact the business world, education and future research.

The UK’s Research Impact Assessment opens avenues to document the extent to which research is impactful for businesses, and EQUIS and AACSB are amending their assessment apparatus to evaluate the impact of research on education more effectively.

The ranking based on citations is more stable than ones based on publication for leading American business schools which have been accumulating greater numbers of citations (more than 10,000) compared to less than 5,000 for HEC in France. The number of citations maintains the hierarchy of business schools and increases the gaps between them. With greater concern about impact, the move from production to impact is becoming clearer and clearer. Governments, public authorities and companies are more willing to invest in impactful research rather than research article production, even if the two may be highly connected (but not always).

Finally, with mergers and acquisitions in the industry, one of the open questions remains the brand. How can you keep your brand in the case of such changes? To what extent are brand names transferable? What happens about mergers or grouping if each organization is set on keeping its brand?
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