

Global University Entrepreneurial Spirit Students' Survey (GUESSS 2008)

National Report, France

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1. Introduction

1.1 Background of the study

GUESSS stands for "Global University Entrepreneurial Spirit Students' Survey". The project, which originated in 2003, was previously conducted under the name ISCE - International Survey on Collegiate Entrepreneurshipⁱ and was renamed in 2008. GUESSS is an international research project which investigates entrepreneurship attitudes and activities among students in tertiary education across the world. The overarching goal of the project is to examine the entrepreneurial behaviour and intentions of third level students i.e. to illustrate to what extent they are already self-employed or if they would like to become selfemployed in the future. The project also seeks to monitor and compare students' perceptions of the entrepreneurial environment and context in which they are embedded. The focus on university students arises from the assumption that it is third level students' entrepreneurial competences and potential for innovation which can later lead to successful start-ups. This interest in young people's self-employment or entrepreneurial aspirations is all the more important given the global economic climate pervading at this time. The youth unemployment rate rose sharply during the economic crisis – more sharply than ever before - from 11.9 to 13 per cent in 2009 (ILO, 2010). GUESSS surveys students at third level educational institutions and universities in applied sciences. Data is gathered using an online survey.

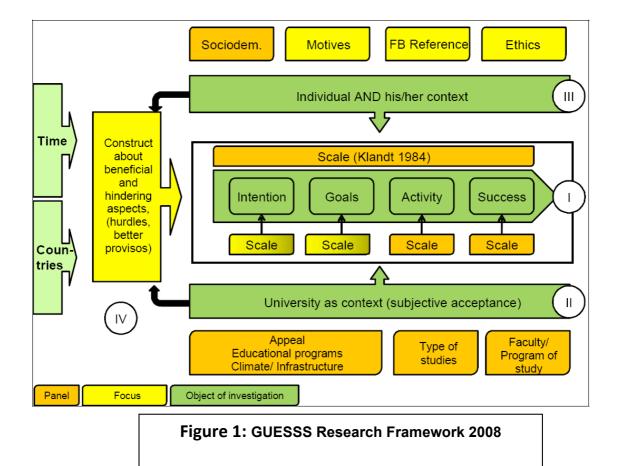
1.2 Research Goals and Theoretical Framework

The main goal of the study is to compare on an international level the entrepreneurial intention and activity of university students over time. The research framework for the project is outlined in figure 1 below. GUESSS focuses on three main dimensions relevant to students and entrepreneurship: I) the start up process, II) the university and III) the individual.

GUESSS helps to systematically record the founding intention and activity of students on a long-term basis, and therefore makes a temporal and geographical comparison of the *start-up process* (I) possible by way of panel study. The survey begins by questioning students about their career aspirations directly after their studies. Afterwards students' specific entrepreneurial intentions and activity are queried. Students are questioned about their intentions with specific time periods in mind (i.e. within the next five years or after five years employment) and survey items also address factors which may

foster or hinder students' entrepreneurial intentions and activities. Finally the start-ups that have already been founded by students are examined more closely. GUESSS observes the quality of the start-ups created by students (e.g. jobs, turnover, etc.) and helps generate research models as well as verifying existing ones. GUESSS also allows for a temporal and geographical comparison of *individual*-based characteristics (II) that may impact the founding intention and activity of students such as age, gender, family background and exposure to role-models. In addition to demographic characteristics the GUESSS survey seeks to examine students' business goals, their entrepreneurial motives and their personal evaluation of the innovativeness of the businesses they would like to establish, etc.

Finally, the *university* (III) offers a temporal and geographical comparison of the range of offers of the universities in the field of entrepreneurship (e.g. in the form of entrepreneurship courses, founding climate, infrastructure, etc.). The GUESSS project queries the importance, the existence and the quality of university services in the field of entrepreneurship. Students indicate clearly their different field of study and this make interdisciplinary analysis possible. The study also investigates *enabling and constricting factors* (IV) in the environment which may trigger or stall students' entrepreneurial endeavours and ambitions.



1.3 Project Coordination

The project is coordinated on an international level by the Swiss Research Institute of Small Business and Entrepreneurship at the University of St. Gallen (KMU-HSG) in Switzerland and by the Chair for Entrepreneurship at the European Business School (EBS) in Germany. The GUESSS project team is made up of representatives from both schools and it is this team that is responsible for the recruitment of national representatives who coordinate data collection in their own particular country. Country representatives are responsible for contacting universities and universities of applied sciences in their country and were asked to email the link to the questionnaire to as many students as possible, encouraging them to participate in the survey. A link to the questionnaire was sent from the country representatives to university and school representatives who were responsible for contacting students to ask them to participate in the survey. Data collection from all countries is centralised and coordinated by the GUESSS project team. The Web-based data collection for 2008 was supported and technically implemented by the company 'Information Factory GmbH' (www.information-factory.com).

Data collection is periodically conducted in order to ascertain the development of students' entrepreneurial potential. The GUESSS project began in 2003, and subsequent surveys were carried out in 2004 and 2006. Plans are already underway for the 2011 GUESSS project. The GUESSS international report presents the cumulative findings of all partner countries. This report aims to produce recommendations for action and to present the entrepreneurial situation at an international level. It is hoped that the results are indicative of participating countries' and universities' strengths and weaknesses. Individual national reports compiled by the participating countries lends further insight into the country context and student level aspirations. The project enables participating countries to reflect on their entrepreneurial spirit with regard to specific basic founding conditions that drive students to become entrepreneurs. It is thought that the periodic comparison and observation of students' entrepreneurial potential and change at an international and national level will positively influence the entrepreneurial climate in universities.

While France did engage in the survey in 2006, the number of respondents was quite poor and thus the 2006 findings will not be used for comparison purposes in this report. We do however hope to use the 2008 findings as a yardstick against which we can measure the 2010/2011 findings. In the following sections we begin by outlining the specificities of the French context for entrepreneurship and third level education before going on to present the results from the French survey. The statistics presented here are merely descriptive in

nature, we view them as a preliminary step to uncovering student entrepreneurial aspirations and intentions on a nationwide basis at a multi-disciplinary level. We also feel that this survey, being the first report (to our knowledge), which actually interrogates students' perception and usage of entrepreneurship support structures on a national level, can help yield interesting insights into the current state of development of entrepreneurship education in France. We hope to further interrogate these results in the future to yield more sophisticated findings.

2. The French Context¹

In this section of our national report, we document entrepreneurial activity in France and offer a brief overview of the higher education system and the current state of entrepreneurship education in the country. We believe that the background information provided here helps explain and contextualize some of the specific findings among French students.

2.1 Entrepreneurship in France

France consistently rates among Europe's poorest performers in entrepreneurial activity (Bosma et al, 2008). France has been found to lag behind Spain, the UK , Italy and the USA in enterprise creation (Hurel, 2002). The country has been referred to as Europe's entrepreneurial 'laggard' (Henriquiez et al, 2001), and has been said to lack an entrepreneurial culture (Arlotto et al, 2007; Torres and Eminet, 2005; Henriquiez et al, 2001; Carayannis, Evans and Hanson, 2003). While venture creation rates have improved in the last decade - in 1999, 193, 719 business start ups were recorded as opposed to 237,000 in 2008 (INSEE, 2009) - efforts are still needed to stimulate entrepreneurial activity and trigger SME growth and development. France rates particularly poorly with respect to high-growth expectation entrepreneurial activity (HEA)² and recent estimates show France exhibiting HEA of under 0.5% with less than 10% of all start-ups expecting high growth (Bosma et al, 2008). In 2008, 87% of new business creations employed no other individuals other than the founding entrepreneur (INSEE, 2009). Enterprise creation by higher education graduates remains a marginal phenomenon in France (Fayolle, 1999; Béchard 1994), especially when

¹ This section was adapted from Fayolle and Byrne (2010) 'EM Lyon Business School'), chapter 3 in 'The Development of University-based Entrepreneurship Ecosystems' by (Eds) Mike Fetters, Patti Greene and Mark Rice, Edward Elgar Publishing, with copyright permission.

² Percentage of 18-64 population who are either a nascent entrepreneur or owner-manager of a new business and expect to employ at least 20 employees five years from now (GEM Global Report 2008)

compared to countries such as the USA. French students have been said to have an 'aversion' to entrepreneurship (Arlotto et al, 2007).

Explanations for the country's low rates of entrepreneurial activity rates cite structural, geographic, religious, sociological and cultural factors (Torres and Eminet, 2005). Active government intervention - high taxes, red-tape and strict regulations are thought to play a considerable role in stifling entrepreneurial spirit (Henriquiez et al, 2001). The French business environment is characterised by large-scale technology operations and service industries – a feature which can both promote and stifle SME start ups. Numerous 'groupes d'entreprises' – activity or geographic based clusters – exist (Henriquiez et al, 2001). Most regional clusters account for more than 40 percent of the employment within their region. Innovative and research-intensive SME clusters abound and are often referred to as 'technopoles'. They unite publicly funded research labs, as well as universities and agencies that develop high technology products and employ highly skilled workers. New businesses and SMEs often gain from joining these clusters because of the opportunities they can derive from spin-off effects, technological dynamism and informational advantages. However the very stakeholders who support the 'technopoles' existence - large firms, government research centres and educational institutions - may also be said to inhibit SME's development opportunities. The French public research system traditionally avoids contact with the private sector and the university system (Henriquiez et al, 2001) and this lack of integration is thought to inhibit potential SME development.

Societal conceptions of being an entrepreneur do not yield the same respect and prestige afforded to the American entrepreneur (Carayannis, Evans and Hanson, 2003). The population's aversion to risk and the low tolerance for failure in society are also cited as contributory factors (Torres and Eminet, 2005). The education system has also been pinpointed as a strong contributory factor. Students envisage permanent positions in large and well-known companies or in the public sector as prestigious and sought after opportunities. The education system is said to stifle creativity and initiative, and is 'more about producing good employees rather than entrepreneurs' (Torres and Eminet, 2005). French youth have been said to believe it is the responsibility of the government and the 'system' to give them job security and employment (Bernager et al, 1998). The French educational system and other environmental factors have thus resulted in a "creativity wall" which restrains creative expression (Carayannis et al, 2003). Primary and secondary level education is also heavily criticised. Here, the professor–student relationship is one of "sage" and "apprentice" where students rarely question that which is proposed by the professor (Carayannis et al, 2003). The educational system tends to place students in subject

'streams' from a relatively young age and opportunities to switch at later stages are limited. It has been claimed that the education system is unsuited to the training and education of entrepreneurs (Beranger et al, 1998) and in the short-term necessitates 're-education' of students at tertiary level in order to create entrepreneurs (Carayannis et al, 2003). Tertiary level education in France, particularly in the social and applied sciences, operates differently to many of its European counterparts. In the following section, we attempt to explain its specificities in the hope that this may shed further light on our findings with respect to student entrepreneurial intentions and career aspirations.

2.2 Higher Education in France

The French education system is a long established, meritocratic hierarchy. At tertiary level (i.e. undergraduate education and above) France is said to operate a 'dual' system of education. Effectively this means that tertiary education may be obtained through either the traditional state universities or the revered *grandes école* system. Students who successfully complete their upper secondary diploma in France have an automatic right to a place in a state university. Tuition fees for these public universities are very low, and there is no selection at entry. Typically this leads to high drop-out rates in the second and third years of university education. The amount of resources devoted to tertiary education has not kept apace with the growth in applicants and thus the average resources available per student are low (OECD, 2007). Indeed the university option is the less prestigious route for the high-achieving student in France. The more ambitious high-school students (who have decided against a legal or life sciences qualification) often strive to enter one of the nation's *grandes écoles* (Barsoux and Lawrence, 1991). To gain entry, they often enrol for two years of intense 'coaching' at a preparatory schools to help them pass the notoriously tough entrance exams.

The clamour to join a *grande école* is a deep rooted sociological, political and economic phenomenon in France. Historically, the culture of the *Grandes Écoles* was built upon the social and scientific superiority of the elite group they created and reproduced (Henriquez et al, 2001). *Grande écoles* include both management and engineering schools. The overarching objective was to increase power and influence of these elites within the French economy and society. *Les Écoles de Commerce* (the business schools) in the *grande école* tradition were predominantly local institutions set up by the regional business community and financed by the local chamber of commerce. Both management and engineering schools in the *grandes écoles* tradition rank among the nation's most renowned and prestigious educational institutions. The *grande école* schibit a number of common

characteristics that distinguish them from the universities:(1) they are small in size and highly selective - only the top 10% of applicants are selected (Fayolle, 2006), (2) they nurture collaborative ties with the business community and (3) they are each autonomous units - no national body decides or even coordinates strategies, although to a certain extent the conferences des grandes écoles (a professional association dedicated to defending standards and the interests of the institutions) encourages cooperation and exchange and provides a system of accreditation. They have been described as 'carriers of history' in that they have often been involved in the transmittance of national and regional policy initiatives (David, 1994). Such schools enjoy considerable competitive advantage, based on the support they receive from both public and private companies as well as the rationally minded managers they produce who often recruit from the very school which they attended. Competition between these institutions can be quite acute, but the need to preserve prestige has generally led to certain homogeneity in the programme offering at these schools. While per capita resources available vary widely across the system, the more elite institutions spend several times more than the public universities (OECD, 2007) and competition for places among students is fierce.

In recent years the grandes ecoles have borne increasing criticisms. Such schools tend to produce rationally minded managers with a strong capacity for quantitative thought, analytical abilities, independence and intellectual rigour (Barsoux and Lawrence, 1991). The heavy emphasis on selection only at entrance level can have disastrous consequences on the behaviour of students during their studies and in their professional career. Among students, there is a belief that the added value in the end product of a grande école education does not come from the teaching imparted in the schools but rather from the 'rigor' of the schools' selection process (Barsoux and Lawrence, 1991). It is argued that such schooling leads to a form of social elitism - "the heads of the typical French company were moulded by a [educational] system that confirmed their intellectual superiority early in life" (Barsoux and Lawrence, 1991: 63). In more recent times, just as in the grand business schools of the United States, questions have been posed as to what part France's grandes écoles played in the economic crisis (Noiville, 2009). It thought that these schools breed arrogance - "senior executives in France believe they owe their high position to their intelligence and cunning" (Barsoux and Lawrence, 1991: 62). Another heavily lodged criticism is that these schools produce a cohort of graduates who are characterised by an aversion to risk-taking. The quest to be 'right' over-rides the creative imperative. In a critique of French grande ecole engineering schools Veltz (2007) argues that there is too much emphasis placed on only one criteria for excellence (mathematics) when innovation (and thus entrepreneurship) needs a diversity of talents and interpersonal managerial capacities to deal with them all. The French educational system is said to discourage the expression of creativity (Carayannis et al, 2003).

Despite these criticisms, the *grandes écoles* continue to carry a prestigious label and remain an attractive option for ambitious students. They are characterised by strong alumni networks, enjoy widely recognised status and reputation and generally have better resources and more plentiful capital at their disposition³. *Grande école* graduates will often use their previous school as a furtive recruitment ground. However, there are concerns that these privileges and certainties will not endure in a very highly competitive world. Changes in the French economy, i.e. the downsizing of larger companies and the outsourcing of labour to cheaper markets, coupled with the recognition of the power of entrepreneurship for triggering job creation and innovation have led to government emphasis on entrepreneurship and small business creation (Klapper, 2004). Large enterprises are not necessarily net employment creators. In many countries, small firms often outpace large ones in innovation and job creation (Acs, 1992; Thurik and Wennekers, 2004). Recent years have thus seen the emergence of many entrepreneurial programmes in the French higher education system (Degeorge and Fayolle, 2008), both in the *grandes écoles* and university system.

2.3 Entrepreneurship Education in France

The stimulation of entrepreneurship in France through education occurs mainly at the tertiary level of education (Henriquiez et al, 2001). Until quite recently France was thought to be lagging behind in terms of entrepreneurship education (Fayolle, 1998). It wasn't until the late '90s that entrepreneurship education was conceptualised as an important element in the school curriculum (Léger-Jarinou, 2001). In 1996 around 30 schools and universities in France offered courses in entrepreneurship or small business management (Fayolle, 1997). For the most part, programs offered were of short duration and more oriented toward enhancing student knowledge of enterprise and business functions as opposed to developing their entrepreneurial spirit (Léger-Jarniou, 2001). Approximately 46% of engineering schools, 71% of business schools and 37% of universities were found to have at least one course in entrepreneurship by the beginning of the millenium (Fayolle, 2000). In the last decade, both the universities and the *grandes écoles* have made considerable progress with respect to entrepreneurship education (Leger-Jarniou, 2005; European Commission, 2008) and France has been found to perform quite

³ The top French business schools (i.e. HEC, ESSEC, EM Lyon) dominate European rankings and their Master programs have a reputation of excellence in Europe based on the regular surveys and the records of the Financial Times.

favourably with respect to its implication in entrepreneurship education. However there is considerable heterogeneity among the *grandes écoles*, universities and institutions offering entrepreneurship education. Schools differ in terms of culture and practice and there is also a discernable difference between those *grandes écoles* who began investing in the field in the 1980s and others who shyly followed later (Fayolle, 1997).

Three major trends occurring on a globalised level are expected to induce change in the French educational system and more particularly at the grandes écoles level. These trends are 1) internationalisation, 2) the increased research focus (as mentioned, French business schools were not previously renowned in this field) and 3) a changing business environment which means that the career and job security that grandes écoles graduates usually enjoyed may longer apply (Fendt and Bureau, 2010). In response to these challenges, the French government has adopted initiatives to create more entrepreneurial graduates. The current government actively encourages the education sector to exploit their resources and expertise to stimulate entrepreneurship teaching and small business creation (Klapper, 2004). The development and growth of entrepreneurship education initiatives in France is thus occurring at a time of broader systematic change to the education system. But staunch resistance to change and the imposing legacy of tradition and privilege mean that change, good, bad or indifferent will not happen overnight. Indeed fighting this deeply engrained sense of what and how third level education is to be conducted in a grandes écoles today brings a whole array of problematic issues. The challenge for entrepreneurship educators – who often seek to challenge the status guo or instigate change - is heightened in such an environment.

Researchers in France increasingly seek to identify the impact of various entrepreneurship education initiatives on students (i.e.. Boissin et al, 2010; Degeorge and Fayolle, 2008; Fayolle, 2005; Klapper, 2004). Recently, it has been found that while French students desire for autonomy and power favourably influences their attitude to entrepreneurship, their preference for professional stability negatively negatively mitigates their entrepreneurial intentions (Boissin et al, 2009). Most *grande école* students want to work in large organizations and don't intend to create a new company or work in a family business (Klapper and Léger-Jarniou, 2006). As students progress in their studies they become more aware of the difficulties involved in starting a business and this negatively impacts their entrepreneurial intentions (Degeorge and Fayolle, 2008). However in some instances, students may be merely put off by (perhaps inaccurate) societal perceptions of the high administrative barriers associated with setting up a business in France (Boissin et al, 2009). Thus, it has been suggested that entrepreneurship education should not just be

about teaching students about the 'possibility' of starting their own business but also about inciting the 'desirability' of doing so (Boissin et al, 2009).

3. Methodology and Sample

3.1 Participating Schools

Our sample was drawn from students studying at 22 higher education institutions throughout mainland France. Of the 7,000 students invited to participate, a total of 1,150 completed the online survey, giving us a satisfactory response rate of 16.4%. This was one of the fifth highest response rates among GUESSS participant countries. The participating schools and percentage of student responses throughout France are shown below. As illustrated in the table, the majority of responses (67%) were from three schools: EM Lyon, Euromed Marseille and Ecole Centrale de Lille. Coincidently, these three schools are to be found in central France, the south and the north (see appendix 1 for graphical representation of French sample geographic distribution).

The strong response rate at EM Lyon was more than likely due to the high visibility of the study in the school (EM Lyon is the French partner school for the GUESSS project). Project organisers were able to make numerous in-class announcements in order to encourage student participation. Our contacts at Euromed Marseille and Ecole Centrale de Lille were also extremely perseverant and enthusiastic in their promotion of the GUESSS survey and sent email reminders to very large numbers of students. While we acknowledge that our sample is not fully representative of the entire French student population (the Parisian response rate was particularly disappointing), we feel that it does somehow reflect the diverse groups which exist. As explained previously, Frances operates a two tier system education system which often reflects two very different student profiles, that of the university candidate and the typical 'grande ecole' student. Our sample contained students from both universities and 'les grandes ecoles'. The breakdown of student responses from each of the 22 participating schools is shown in table 1 below.

Table 1: Participating Schools and their respective	response rates
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Name of Higher Education Institution	Per cent %
EM-Lyon	30.3
Euromed Marseille	20.2
Ecole centrale de Lille	16.5
ESC Troyes	7.3

Ecole de Mines des Nantes	4.9
ESC Saint Etienne	4.7
Université Jean Moulin Lyon III	3.3
IDRAC Lyon	3.1
Ecole Central de Lyon	2.1
ENTPE	1.9
Université Paris Dauphine	1.8
Others	3.9
Total	100%

3.2 Sample Profile

Almost all French respondents were engaged in bachelor (50.7%) or masters (48.5%) level studies at the time the survey was administered with only a very small number of respondents (0.8%) studying at post-graduate or PhD level. The international sample was composed of 68.4% undergraduate students, 27.4% graduate students enrolled in masters and 4.1% of students engaged in post-graduate or phd level studies. The average age was 21 years old (compared to 23 internationally) and students were generally in their fourth year of third level study (compared to the international average of 5 years). Slightly more than half of the respondents in the French sample were male (54.2%), in comparison with the overall international rate of 53% female.

Students were also asked to specify which broad subject area they belonged to – business, natural sciences, social sciences or 'other'. Below we tabulate (table 2) how each of these groupings were broadly defined. Just under 63% of students were studying business related subjects and 22% were studying natural sciences (the large majority of these studying engineering) with only 1.6% in the social sciences. Here, our sample differs significantly from the overall international student sample which was made up of 64% non-business related students.

Subject Area	Disciplines included	
Business and business-related fields	Business, management, political economics, administration, law, computer services, manufacturing and processing	
Natural Sciences	Mathematics, architecture, engineering, building, agriculture, forestry, fishing	
Social sciences	Humanities, health, social services, teacher training and education, behavioural science	
Other	Arts, security services, military, journalism, environmental protection	

Table 2 : Classification of student areas of study

3.3 Data Collection

GUESSS is administered through a common web-based questionnaire. The survey instrument is standardised to all participating countries and countries may choose to have their survey translated into their own native language. Thus, the French national survey was available online in French only – this meant that largely French (as opposed to international students in France) would have completed the online questionnaire. Representatives from EM Lyon Business were responsible for disseminating the link to the questionnaire to as many students in France as possible. Internally, we engaged in numerous in-class visits, group mails and presentations throughout the school from November 2008 right through to March 2009. We targeted the large group of bachelor students (approximately 350 students) with one in-class presentation of GUESSS and 4 follow up reminder emails. We also emailed class groups in the specialised masters, general masters and MBA courses. Students were encouraged to log on to the site (a follow up email was sent with the exact address) and we urged them to 'speak for France'. The poor response rate of France in the 2006 ISCE report (GUESSS's predecessor) was shown alongside impressive student responses in other countries. In 2006, only 67 respondents out of a total 2,500 targeted students in France responded to a similar survey. We tried to appeal to our 'grande ecole' students' competitive nature and urged them to 'speak out for France'!

We then relied on our broad network of contacts throughout France to help in the dissemination of the link to their other third level students. In-class presentations of GUESSS and the projects research objectives were performed in other schools in Lyon as well as in Lille and Dijon. Students were then sent reminder emails with the link to the questionnaire. The questionnaire took approximately 10 minutes to complete and students were advised of this in the email. Many participating schools sent emails to their entire student population

asking them to participate and were often followed up by reminders 1 week and 1 month later. Students were incentivised through the offer of winning an iPod music player. On completion of the survey, all data was processed by the core team in Switzerland and the individual country data sets were later disseminated to the national representatives in each country. A total of 63, 527 students in 19 countries participated in the 2008 study. In France, 1,150 students responded in 2008 compared with 67 in 2006. We attribute the seventeen fold increase in response rate to our perseverance with our own bachelor students as well as the widened network of other collaborators in France.

4. Results

4.1 Students future career aspirations

Students' future career aspirations were examined be asking them where they would like to work directly after their studies (< 5 years) and after a few years of work experience (>5 years). Students' career aspirations may be classified as either 'dependent employment' or 'independent employment'. Dependent employment options include working in an established company (be it small, medium or large) as well as working for the state (public sector) or gaining employment (research related) in a university. Independent employment options could include continuing the family business, taking over an existing business, starting up a franchise, investing in a new company, starting their own business or working as a self employed person.

We first turn to French students career aspirations for the five years directly following their studies. Directly after their studies, French students are largely comparable with their international counterparts. Over 78% of French students (compared with 76% internationally) clearly prefer a dependent employment and intend to spend their first five years after they graduate gaining work experience in an already established company. 13.9% of respondents indicated that they would prefer to engage in some form of independent activity following graduation (compared to the overall international average of 16%). Where France differs significantly from the international average is with respect to the type of established company students intend to work for. A large number of those French students (42.9 percent) who would prefer 'dependent employment' following graduation are interested in working for a large company (more than 250 employees). This is significantly above the international average which stands at 17.9 percent. The breakdown of French student preferences are shown in table 2 below.

Table 3 : French and Internationa	al Students future	career aspirations
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< 5 years after graduation (%)		
	France	International
Sample size =	1150	63580
Micro-enterprise	1,5	5,5
Small company	9,8	14,5
Medium sized company	19,8	17,6
Large company	42,9	17,9
University	2,1	9,3
Public sector	1,8	10
Family business	0,8	2,2
Take over	0,5	1,1
Franchise	0,3	0,6
Stake in a company	7,5	3,7
Continuing own company	0,2	1,1
Start up	4	3,8
Free-lance	0,5	3,1
No work	0,8	0,9
Don't know	6,3	6,9
Other	1,3	1,7

Just under 20% of those preferring 'dependent employment' would like to work for a medium sized company and under 10% would like to work for a small company. Surprisingly, only 1.8% of respondents would like to work in the public sector compared with 10% of international students. Only 4% of French students would consider undertaking their own start-up directly after leaving third level studies.

In general, the number of French students interested in 'independent employment' options increases when students are asked to specify their career aspirations five years after graduation (see breakdown in table 4 below). It seems that after some years of working experience, students expect their career aspirations to change. Internationally, the preference for independent employment becomes much more attractive and 43% of students prefer this option. The most popular preference being to 'start your own business'. In France, approximately 43% of students would prefer to engage in an independent activity more than five years after graduation and only 47% envisage themselves opting for dependent employment. Presumably students intend to gain some work experience first before engaging in their own activity.

Table 4: French and International Students	' future career aspirations
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> 5 years after graduation (%)		
	France	International
Sample size =	1150	63580
Micro-enterprise	0,7	1,9
Small company	3,2	5,7
Medium sized company	10,1	9,1
Large company	28	15,1
University	2,4	6,1
public sector	1,9	8,6
Family business	2,2	2,7
Take over	2	2,5
Franchise	2,4	1,8
Stake in a company	7	5,2
Continuing own company	0,5	2,5
Start up	22	19,8
Free-lance	6,6	7,7
No work	1,2	2,1
Don't know	8,1	7,8
Other	1,6	1,3

In line with international averages, of those French students who intend branching out on their own five years after graduation (whether it be a start-up, franchise, family business etc), the large majority hail from economic science/business related backgrounds. On a positive note for France, the number of French students interested in pursuing a start-up increases from 4% (directly after graduation) to an impressive 22% five years after graduation and there is a very small gender difference with respect to male and female career aspirations in the years directly following third level study. In line with international trends, a larger percentage of males than females hope to engage in independent activities five years after graduation. Presumably this points to the benefits which accrue to salaried female workers with respect to maternity leave. Staying in full-time employment perhaps remains the more attractive option for the young French mother.

Of course questions concerning students career preferences deal only with students 'aspirations' and not their actual behaviour. Furthermore students are invited to project themselves quite far into their future and their reflections are perhaps subject to change given that in most cases, their professional career has not yet started.

4.2 Entrepreneurial intentions

Students were asked whether they had ever seriously considered setting up their own business. Students could respond to the question by clicking one of alternatives ranging from 'no, never thought about it' to 'yes, i am (or was already) self-employed'. On average, 26% of international students participating in the GUESSS 2008 survey have never thought of becoming self-employed. Similarly in France, 23.1% of students have 'never' considered setting up their own business. However 40% claim to have 'briefly considered' becoming self-employed and, similar to other participating countries, this was the most frequently selected answer by respondents. The range of French students' responses are illustrated below (figure 2). Of the 1,150 French students surveyed ,16.1% claim to have thought about setting up a business 'quite specifically' (compared to 11.6% internationally) and 14.3% claimed to be 'determined to become self-employed in the future' (compared to 10.9% internationally).

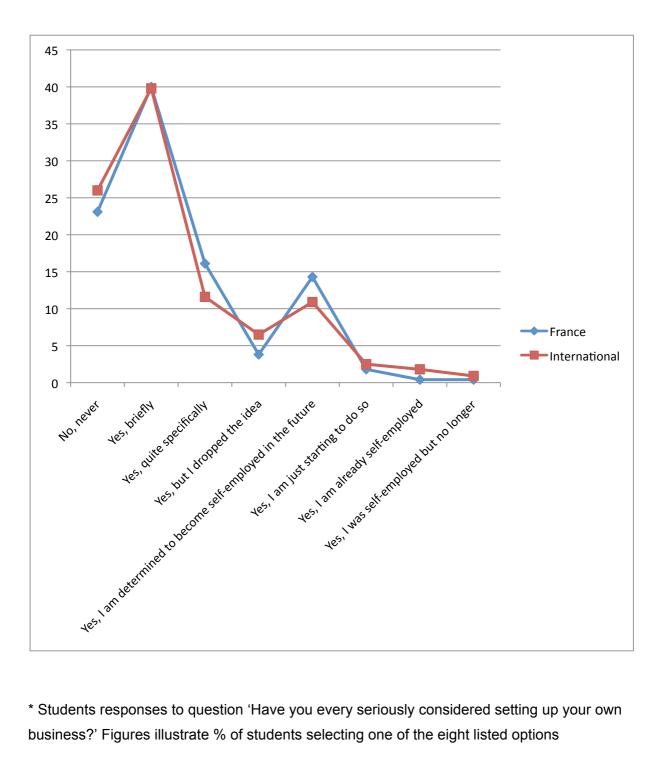


Figure 2: French and international students' entrepreneurial intentions*

* Students responses to question 'Have you every seriously considered setting up your own business?' Figures illustrate % of students selecting one of the eight listed options

4.3 Entrepreneurial Activities

Of those students that indicated an interest in becoming self-employed (i.e. all except those who answered 'no, never'), the GUESSS project classified these respondents as being potential founders or active business founders. The GUESSS survey tried to probe a little more deeply into the concrete entrepreneurial activities which such students had actually undertaken. Of the French respondents with an interest in becoming or being self-employed, 48.7% have taken no steps so far to found their start-up. A significant number of students (37.5%) state that they have already started thinking through initial business ideas. However it appears that these students are largely in the early stages of business foundation as other important steps such as developing a business plan, talking to potential sources of capital, fixing a start-up date or even creating a prototype of product/service have not yet been realized by the majority. Interestingly though, those French students who consider themselves as 'potential entrepreneurs' are more likely than all of their international counterparts to have visited start-up specific events (27.2% have done so compared to the international average of 8.2%). Equally, a higher number of them (27.2% compared to the international average of 18.1%) have begun gathering start-up specific information.

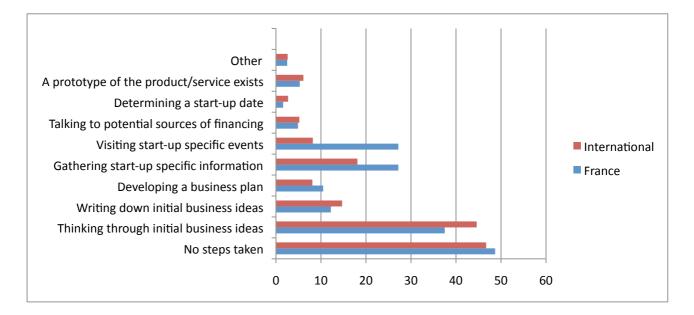


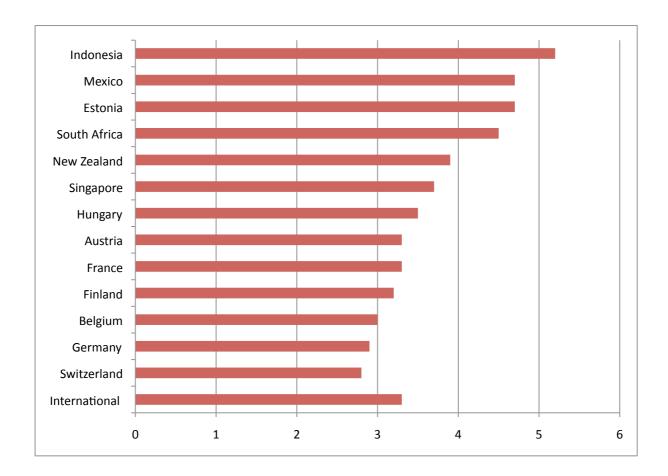
Figure 3: French and international students' entrepreneurial actions**

** Students' responding to question 'What steps have you already taken for your potential start-up?'. Figures illustrate the % of students who have engaged in the ten steps given.

4.4 Entrepreneurial Power

Students'entrepreneurial intentions and activities were used to create an index that shows their composite entrepreneurial power (see appendix 2 for further details of how this index was constructed). The maximum value of the entrepreneurial power is 10 and the minimum is 1. The international average of the index was 3.3 and French respondents recorded an

entrepreneurial power of exactly 3.3. Students in Indonesia, Mexico, South Africa and Estonia recorded the highest values of entrepreneurial power (5.2 points, 4.7 points, 4.5 points and 4.7 points respectively) while students in Switzerland and Germany showed the lowest values of entrepreneurial power (2.8 points and 2.9 points).





4.5 Student Start-Ups

One area where French students showed markedly different responses to their international counterparts was related to their involvement in a current start-up activity. A very small number of the French students surveyed were actually actively involved in a business start-up while studying. Internationally, 1.8% of students surveyed could be classified as active founders or already self-employed, whereas in France this figure is as low as 0.4% (i.e. five

⁴ Not all countries are included in this table i.e. Luxembourg, Greece, Ireland and Liechenstein but the international entrepreneurial power refers to the whole data set

companies were founded among the 1,150 students who responded to this survey). Countries with the more active student founders included Estonia, Indonesia and Hungary.

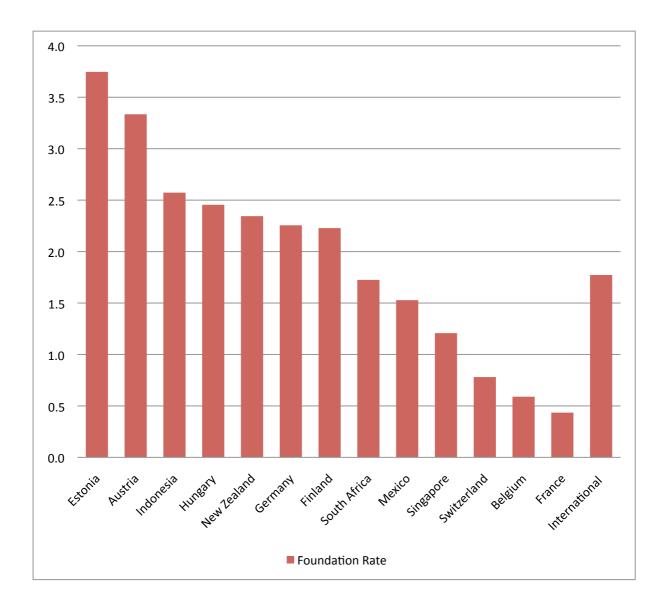


Figure 5: Start-ups founded by students (%) ⁵

4.6 University Services

As previously outlined, the GUESSS survey seeks to investigate the university environment in which students are embedded and to identify ways in which it can foster or hinder students' entrepreneurial capacity. In particular, the survey seeks to uncover students' perceived value of numerous different entrepreneurship services and facilities at third level

⁵ Australia, Portugal, Liechtenstein, Ireland, Greece and Luxembourg are excluded from the above graph but the international total refers to the whole data set

as well as assessing students perception of their existence and the extent to which they may or do avail of them.

4.6.1 The Importance of Entrepreneurship Support for Students

Students were asked to rate the importance of different university services in the field of entrepreneurship. Students rated their opinions on the importance of 8 potential university services/facilities along a scale of 1 to 6, where 1 was seen as 'not-important' and 6 was viewed as 'very important'. The French respondents' ratings are shown below alongside the international average.

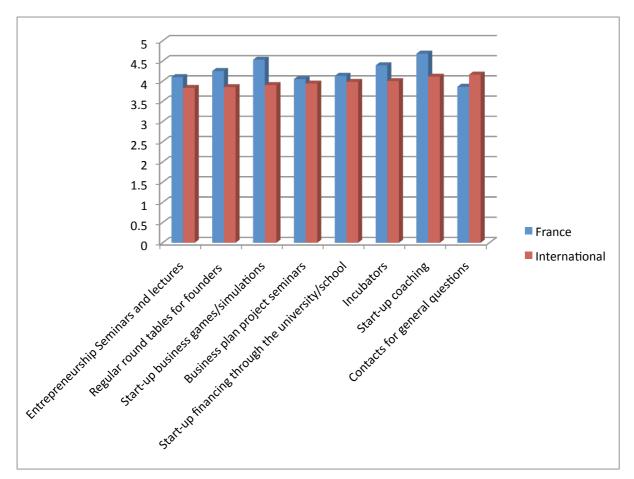


Figure 6: Students' Belief in the Value of Third Level Services for Entrepreneurship

Scale of 1 to 6 : 1 = not important, 6 = very important

The international average shows that points of contact for general questions are considered to be of high importance (rating 4.16), however while they appreciate such a service, French students do not rate this as highly as their international counterparts (French

rating 3.86 out of a potential 6). Interestingly, French students hold <u>all</u> other university or school led entrepreneurship service facilities in higher regard than their international peers. They rank start-up coaching and business games/ simulations in particularly high esteem, followed by incubators and round tables with 'contacts for general questions' being their least valued service provided. Similar to their international counterparts, French students regard entrepreneurship lectures and seminars as less important. This surely indicates that French students greatly appreciate and value university or school level interventions in entrepreneurship but perhaps may also imply that they feel more of a need for such facilities.

4.6.2 The Existence of Entrepreneurship Support Services

The students were then also asked about the existence of such services in their universities or schools. It is with respect to this issue that French respondents strikingly differ from their international counterparts. The left hand column indicates the % of students who agree that these services are provided by their current educational institution.

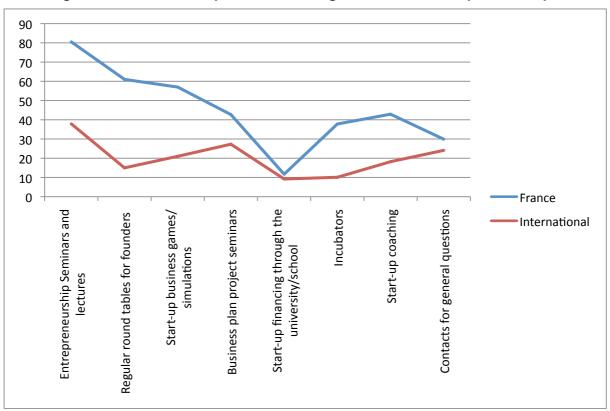


Figure 7: Student Perceptions of Existing Services for Entrepreneurship⁶

⁶ For a complete look at all student responses to the above questions, across the numerous different countries, please refer to appendix 3

For French students, entrepreneurship seminars and lectures are considered to be the most widespread (similar to most countries in the international sample) and regular round-table discussions for founders (allowing for exchange of experience etc) are considered the second most available facility, with business games and simulations ranking as the third most available facility. Unfortunately, though access to start-up finance was considered as relatively important to students, a large percentage of French students (67.8%) say that they do not know if this service exists in their school. This is perhaps not surprising though given the low levels of student start-ups in France. A further 20.4% say this access to finance service is not provided. One must bear in mind that these results do not verify the existence of such services but merely the students perception of whether they do or don't exist. In many instances (see appendix 3), large numbers of French students admit that they do not know if certain services exist (i.e. more than 40% of students queried admitted they did not know if services such as general question contacts, incubators, access to start-up financing, coaching and business plan seminars existed in their institution). This could be related to the fact that students' founding intention is not yet strong enough to trigger them to seek out such information. Equally, student ignorance to the existence of these services also indicates that education providers need to more actively communicate what they do and don't provide in line of entrepreneurship support.

4.6.3 The Use of Entrepreneurship Support Services

The table below shows the percentage of respondents who have availed of the selected services. In the middle column, we present the most services used by French respondents in ascending order (beginning with the most popularly used and finishing with the least used). The third column reveals the corresponding international average for the respective service usage.

Service	% of Students Indicating Usage (France)	% of Students Indicating Usage (International)
Entrepreneurship seminars and lectures	62.7	41.9
Start up business games and simulations	58.9	32.7
Business plan seminars	52.5	35.9
Regular round tables for founders	49.4	29.2
Contacts for general questions	16.3	25.7
Start up coaching	15.8	18.9
Start-up financing through the university	5.9	11.2
Incubators	3.7	10.3

Table 5 : Student Usage of Entrepreneurship Support Services

The above table reveals that French students are more likely to have been exposed to entrepreneurship seminars and lectures, business planning seminars and business games/simulations than their international counterparts. One begs the question if student usage of such facilities is optional or obligatory. It could very well be that many students are obliged to follow such programmes in order to fulfill their qualification requirements. However, French students are also are more likely to have engaged in a round table discussion or exchange forum for business founders, a facility which would often appear as an option rather than an obligation on a university or school campus. French respondents were on the whole less likely to have availed of start-up coaching or accessed university finance schemes and contacts for general questions. They are much less likely to have availed of incubation services, despite more than a third of them knowing that such services exist. Such facilities may be considered as being more concrete steps on the road to business foundation. Again perhaps an unsurprising finding given the low rate of active student entrepreneurs in France.

5. Discussion and Conclusions

Small business ownership in France remains low compared to other European countries (Thurik and Wennekers, 2004). As mentioned previously, France grapples with cultural barriers and societal conditioning which mean that entrepreneurship is still not widely viewed as a desirable career option (Caraynnis et al 2003; Boissin et al, 2009). Despite this, the overall entrepreneurial 'power' of French students in the GUESSS findings was in line with the international student average. In line with previous research (Klapper and Leger-Jarinou, 2006), French students remain largely enamoured with the idea of working for a large corporation upon graduation – more so than their international counterparts. The existence of a rigid education system coupled with the country's powerful elitist networks may explain graduates preference for large well known companies as opposed to business creation. Their fondness for stability and security in their professional lives (Boissin et al, 2009) perhaps helps explain this phenomenon. Hence some researchers calls for entrepreneurship educators to insist on the 'desirability' of being an entrepreneur as opposed to the mere 'possibility' (Boissin et al, 2009).

Encouragingly, the above statistics do show that French students greatly appreciate novel and fun approaches that are often associated with entrepreneurship education (business simulations and games) and are often more likely than their international counterparts to have been exposed to such interventions or know of their existence (see appendix 3). This is encouraging for those who have been behind the numerous policy initiatives in France to broaden the role of entrepreneurship in education. However, in terms of concrete activities, the French remain 'dreamers' rather than 'do-ers'. Their international student counterparts overshadow them when it comes to taking practical and real steps toward venture creation. The number of students actively engaged in entrepreneurial activity is disappointingly low. Indeed one can surmise that the interest is there but the follow up action isn't.

Youth unemployment rates have increased by 4.6 percentage points in the developed economies & the European Union between 2008 and 2009 (ILO, 2010). Thus one would expect that the European policy drive for stimulating entrepreneurship – particularly among young people – will continue. Cultural and societal barriers are perhaps one of the biggest obstacles for stimulating entrepreneurship among the student level population in France. Whether individual educators efforts are enough to overcome the French 'system' which enables the institutionalisation of many of the obstructing values and norms remains to be seen.

We find both encouraging and disappointing elements in the above statistics. More in-depth analysis is required to unearth the relationship between entrepreneurship, student attitudes, the university context and societal norms. The data presented here illustrative descriptive statistics and thus only paints a preliminary picture of pervading student views and attitudes. Additionally, our sample was largely dominated by *grande école* student responses which undoubtedly do not give a complete picture of French student aspirations. We hope to continue our research – both by furthering our analysis of the above statistics and by engaging in another round of GUESSS data collection in 2010/2011. In doing so we aim to further enlighten educators, researchers and policy makers on the prevailing dynamics of French students' attitudes toward entrepreneurship in these challenging economic times.

ⁱ The history of the project and previous reports can be found in the project's website: <u>www.guesssurvey.org</u>

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Appendix #1 – Location of schools polled in French 2008 GUESSS Survey



APPENDIX #2 – Construction of entrepreneurial power (GUESSS 2008)

The index was constructed on the basis of two questions. The first question is about students' entrepreneurial intentions and activities. Students' answers (only one selection permitted) to this question were weighted as follows:

Q. Have you every seriously considered setting up your own business?			
Possible Answer	Weight Given	Type of Business Founder	
No,never	1	No business founder	
Yes, sketchily	3	Potential business founder	
Yes, concretely	3	Potential business founder	
Yes, but I dropped the idea	3	Potential business founder	
Yes, I am determined to be self- employed	5	Advanced potential business founder	
Yes, I have already started	5	Advanced potential business founder	
Yes, I am already self-employed	10	Business founder	
Yes, I was self-employed but no longer am	10	Business founder	

For potential business founders, the GUESSS project considered whether respondents had already taken steps to realize their plans. These steps could be classified as more or less binding and as such different weights were accorded to the varying responses (see below).

Possible Answer	Weight Given
No Steps taken	0
Thinking through first business ideas	0.25
Writing down first business ideas	0.25
Developing a business plan	0.25
Gathering start-up specific information	0.25
Visiting start-up specific events	0.75
Talking to potential sources of Finance	0.75
Determining a date of foundation	0.75
A prototype of service/product exists	0.75

		siness F ect Sem		Start-up Coaching			Entrepreneurship seminars and			Start-up business games / start-up			Regular round tables for founders (e.g.			Contacts for general questions			Start-up financing through the university			Incubators (service centre for early		
							lectures			simulations			exchange of expe- riences)									stage start-ups)		
	yes	no	don't know	yes	no	don't know	yes	D	don't know	yes	no	don't know	yes	no	don't know	yes	no	don't know	yes	o	don't know	yes	no	don't know
SUI	26,3	9.3	64,3	17.3	12.3	70,4	33,4	8.2	58.4	18,5	11.4	70.1	13.7	12,5	73.7	13,9	12.2	73,9	9,9	12.2	77,9	8.2	12,0	79,8
LIE*)	63,7	4.3	32,0	40.6	6.8	52.5	83,5	2.2	14.4	46,4	8.3	45.3	28,4	10,8	60.8	39,9	8.3	51,8	11.2	17.6	71.2	19,1	15,5	65,5
GER	21,4	8,1	70,5	23,5	8,9	67,7	19,2	7,7	73,1	23,9	8,2	67,9	8,6	11,7	79,6	22,5	8,4	69,1	5,9	11,0	83,0	6,6	9,9	83,5
AUT	25,7	7,5	66,7	16,8	11,4	71,9	29,6	7,3	63,1	18,2	10,9	70,9	9,5	13,6	76,9	17,6	10,9	71,5	3,7	13,6	82,7	8,5	11,9	79,6
FRA	42,7	15,2	42,1	42,9	15,1	42,0	80,5	5,0	14,5	57,0	12,9	30,2	61,0	12,7	26,3	29,9	21,3	48,8	11,7	20,4	67,8	37,8	17,8	44,3
BEL	21,9	12,9	65,1	14,0	16,8	69,1	31,6	10,4	58,0	19,0	15,8	65,3	18,6	14,8	66,6	26,0	12,7	61,3	9,6	16,8	73,6	7,3	15,3	-77,A
IRL*)	30,7	10,0	59,3	13,6	15,0	71,4	46,4	8,6	45,0	16,4	19,3	64,3	10,0	15,7	74,3	37,1	11,4	51,4	5,7	20,7	73,6	9,3	15,7	75,0
FIN	51,4	5,3	43,2	40,6	9,1	50,4	60,4	5,8	33,8	34,5	12,5	53,0	12,8	13,9	73,3	32,8	7,9	59,3	4,9	14,0	81,1	29,2	- 9,1	61,7
HUN	25,4	19,3	55,2	8,8	25,7	65,5	43,0	13,2	43,8	17,2	23,4	59,3	14,8	23,8	61,3	20,2	20,2	59,6	4,6	28,8	66,6	3,0	27,8	69,3
NZL	18,7	6,8	74,5	13,6	- 7,4	79,0	30,6	5,8	63,6	14,7	7,5	77,8	8,9	8,2	82,9	31,0	5,6	63,4	8,2	9,7	82,2	11,1	-7,7	81,3
RSA	33,8	13,1	53,1	19,9	16,2	63,9	60,1	6,3	33,5	16,8	17,5	65,7	15,1	17,5	67,5	50,2	9,4	40,4	15,9	19,2	64,9	9,7	17,1	73,2
SIN	43,5	11,2	45,3	28,8	15,8	55,4	68,9	5,2	25,9	36,2	14,5	49,2	30,2	16,4	53,4	37,0	13,7	49,4	29,7	16,2	54,2	28,9	12,6	58,5
MEX	79,9	2,2	17,9	71,1	4,9	24,0	82,8	1,8	15,4	62,1	8,6	29,3	48,2	8,9	42,9	69,2	5,1	25,7	58,3	7,8	33,9	96,0	0,7	3,3
EST	37,1	9,6	53,4	26,8	11,0	62,1	51,0	6,8	42,2	10,7	17,4	71,8	6,2	18,5	75,3	29,0	10,8	60,2	5,4	17,2	77,3	8,8	14,3	76,9
LUX*)	10,6	17,0	72,4	5,4	17,5	77,1	15,1	13,2	71,7	9,2	14,6	76,2	8,5	16,0	75,5	9,7	15,8	74,5	5,9	16,0	78,1	3,1	15,8	81,1
GRE*)	29,9	25,4	44,7	15,5	35,2	49,3	57,7	16,2	26,1	13,7	38,4	47,9	13,0	38,7	48,2	40,1	21,5	38,4	5,3	30,6	64,1	4,6	28,5	66,9
IND	75,3	11,3	13,4	56,9	17,0	26,1	93,0	1,7	5,3	65,9	20,9	13,2	61,9	14,6	23,5	59,9	22,1	18,0	37,7	34,1	28,1	29,5	34,0	36,5
INT	27,3	11,4	61,3	18,2	14,8	66,9	37,9	8,7	53,4	21,0	14,2	64,8	15,4	15,2	69,4	24,1	12,7	63,2	9,2	16,7	74,1	10,1	15,2	74,6

APPENDIX #3 - Students Perceived Existence of University Services