

Demographic Shifts and Higher Education: Responses and Strategies

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ABSTRACT

Demographic shifts in a vast majority of EU countries affect universities in a rather negative way. The aim of the paper is to identify universities' responses to these demographic challenges. Desk-top analysis of available literature combined with the analysis of responses of fourteen top European and American universities to demographic changes is presented here. The paper starts from a review of the literature on the university's strategies in the context of demographic shifts (based on ScienceDirect and EBSCO databases). Then strategies of the fourteen universities at hand are presented. It is shown here that these strategies have not acknowledged demographic changes as strategic factors. Universities at hand as global players (with the exception of Charles University and Eötvös Loránd University) do not consider ageing as a phenomenon which could jeopardize their future. They consider further international expansion and lifelong education as adequate responses to demographic shifts. It is suggested in this paper that ageing populations can be perceived by universities as an opportunity in respect both to research and teaching.

Keywords: Demographic Changes, Universities, Strategies

INTRODUCTION

We live in an increasingly changing world. Rapid changes and developments in the world of higher education involve increased cross border education, enlargement in higher education, an increase in the number of international students, a more diversified body of students, multiculturalism, marketization, decreasing state funding, increased expectations for quality and higher competition for better students and researchers, among others (Gül et al. 2010, p.1879).

In the twenty-first century universities are subject to the pressures of society more than ever, largely because of their importance to knowledge-based economies¹, and because more and more of the college-age population attends postsecondary institutions in the USA (Altbach, 2011) and in the European Union², including in Poland (Białynicki-Birula, 2011). Influences from external forces come from two basic directions. The first constitutes broad societal factors, such as economic trends and demographic factors, which affect the directions and realities of higher education, and the second comes from the specific requirements of funding sources, government agencies, and others to account for, and sometimes control, the expenditure of funds, the nature and scope of research, and other university activities (Altbach, 2011).

¹ An assumption being that the concept of knowledge-based economy is the leading one, addressing vast majority of the societal needs of the XXI century.

² According to Eurostat data, the number of tertiary education graduates in the EU 27 countries rose from 130,8 thousand in 2000 to 145,2 thousand in 2011, available from <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do?sessionId=9ea7d07d30d97e1cd11902c344c78196b1267b10872f.e34MbxeSaxaSc40LbNiMbxeNb38Ke0>

Having acknowledged the significance of economic, organizational and other societal determinants, this paper focuses on demographic changes and their influence on university education³.

Demographic changes themselves possess several dimensions, however, it aging which attracts the attention of many professionals and researchers partly because the aging population has a profound impact on all generations and on most economic, social and political activities: employment, social protection, education, culture, and politics. Demographic changes challenge these institutions and political strategies, which were put into operation at a time when demographic trends were different. These trends influence the daily lives of citizens and the strategies adopted by governments, which are confronted with a number of problems including but not limited to the cost of pensions, changing strategies related to education and training, housing, transportation, healthcare, public infrastructure, tax reforms, structural reforms, public expenditure, etc. (Rogojanu and Badea, 2012).

Aging is an ... increasing problem in EU countries. The age structure of population in the EU-27 is becoming older, due to increasing life expectancy and low levels of fertility sustained for decades. The share of the population aged 65 or over is projected to increase from 17.4 % in 2010 to 30.0 % in 2060 (European Commission, 2011, p.65). Over the next 50 years, the age grouping of 65 and over will increase in the EU-27 from 17.4 % to 30.0 %. Most of this increase is projected to occur between 2020 and 2040.

Aging population is the result of at least two processes: diminishing fertility rates in a vast majority of developed countries⁴ and increasing longevity. Aging influences the higher education sector in a negative way, leading to a diminishing number of graduates. To illustrate this, one may point to the U.S.A. where the number of high-school graduates peaked in the 2010-2011 academic year with about 3.4 million graduates. The number is predicted to decline until 2013-2014, before stabilizing between 3.2 and 3.3 million until 2020-2021. Each state in the northeast US (except New York) is predicted to have fewer high-school graduates by 2028 than they have today (Lane, 2013). A similar trend is predicted in the UK (Wolff, 2013).

In respect to universities demographic changes can be grouped as affecting students, teachers and society as a whole (OECD, 2008). The key areas of demographic shift's impact on higher education are on student enrollment, the budget for higher education, student-teacher ratios, teacher recruitment requirements, and the percentage of higher education graduates in the population (Vincent-Lancrin, 2008). There are new lifestyles and new patterns of migration and all of this affects higher education systems all over Europe (Rogojanu and Badea, 2012).

The goal of this paper is to identify top American and European universities' responses to demographic changes and challenges. The paper is organized as follows: in the first part there is a brief review of the literature available in ScienceDirect and EBSCO and then methods are introduced, followed by the results and a brief discussion. Conclusions complete the paper.

REVIEW OF THE LITERATURE

Despite the fact that demographic shifts are considered as having serious consequences for higher education sector (Keller 2001; Wolff, 2013), the number of publications analyzing these processes remains moderate. This can be perceived as strange since, for example, population aging in Europe has occupied the attention of policy makers and demographers for over a decade (Ceobanu and Koropecjy-Cox, 2013). It is significant that in a book published by a respected publishing house and aimed at the analysis of the higher education system in the U.S., virtually no attention is paid to demography as an important factor influencing the future of the system (Waldavsky et al, 2011). Indirectly such an inclination to underestimate the influence of demographic changes on the American higher education sector is acknowledged by Patricia McGuire⁵ (2013). There are also other anecdotal evidences that top

³ For editorial reasons in this paper terms: universities, tertiary education, and higher education are used interchangeably while acknowledging all the differences in meanings.

⁴Which is combined with such trends as: the reduction in the number of marriages; the increase in the average age at which people marry; and an increase in the number of divorces (Rogojanu and Badea, 2012, p. 4556).

⁵ President, Trinity Washington University.

American universities⁶ are inclined to underestimate the potential threat of demographic shifts on student enrollment (Hoover, 2013). Due to space limitations only a few selected issues are presented below⁷. Publications dealing with demographic changes influencing the higher education sector can be grouped into two broad categories: those focusing on expected (and unexpected) consequences of demographic changes, and those aimed at recommended/suggested responses/answers to these consequences.

An OECD report from 2008 fits in with the first category of publications since it identifies demographic trends affecting the higher education system, and classifies them as related to students, teachers and society.

As regards to students one could expect the following:

- student participation will continue to expand and will in most cases be evident from the growth in the size of higher education systems. Contraction will affect only a small number of countries;
- women will be the majority in the student population;
- the mix of the student population will be more varied, with greater numbers of international students, older students and those studying part-time, etc.
- the social base in higher education will probably continue to broaden, along with an uncertainty about how this will affect inequalities of educational opportunity between social groups;
- novel attitudes and assumptions regarding access to higher education will emerge and be more concerned with real student attainment, reflecting trends in access policies for students with disabilities;
- changes will occur in issues and policies relating to access and the fight to reduce inequality, as well as some broadening and changes among the groups concerned, depending on the particular country

As regards to teachers:

- the academic profession will be more internationally oriented and mobile, but still structured in accordance with national circumstances;
- the activities of the profession will be more diversified and specialised, and subject to varied employment contracts;
- the profession will move gradually away from the traditional concept of a self-regulated community of professionals, and towards a model and consensus to be based on fresh principles.

As regards society:

- the population will contain a greater proportion of graduates with positive implications for social well-being and economic growth;
- women graduates will be the majority, while the inequalities they experience in remunerative terms will be reduced but still present;
- half or almost half of all people in the youngest age cohorts in many countries will be graduates;
- the gap between the absolute number of graduates (but not the relative number) in the OECD area and in the major emerging countries, in particular China and India, will become smaller;
- demographic trends seem likely to have little effect on higher education expenditure as a percentage of national wealth;
- challenges will arise linked to the possible social exclusion of groups not involved in higher education (OECD, 2008, p.13-14).

Another example of publications belonging to the first group is Morrison's paper (2003) identifying four demographic changes affecting higher education in the U.S.:

⁶ An interview with Mr. Fitzsimmons, dean of admissions and financial aid at Harvard University, cited after Hoover (2013).

⁷ The literature review is limited to sources published over the last decade. ScienceDirect (Elsevier) and EBSCO were searched using the following key words: *demography*, *demographic shifts*, *demographic trends* and *tertiary education*, *universities*, and *higher education* (in various combinations). The search was limited to: abstract, title and keywords field (in ScienceDirect) and abstract (in EBSCO). The selection process had three stages. At the first stage all of 245 in ScienceDirect and 341 in EBSCO (the latter after few consecutive attempts to narrow the scope of search) articles were looked through and those not fitting with the research topic were rejected. At the next step each summary of all which left (119) was read. Then based on the summary content at 58 papers were identified for *in extenso* reading. In *References* only the most relevant sources are indicated.

- the ethnic identification mix of the general population is changing both in the US and in the world, although the changes vary by geographical area. This change is reflected worldwide, in that the proportion of the population that is white is decreasing and is projected to continue to decrease. To be effective in this environment, colleges and universities must ensure that their curriculums provide opportunities for students to learn how to function effectively in an increasingly diverse, multi-cultural global environment.
- the demand for access to some form of postsecondary education is increasing dramatically. The demand for education is exacerbated by a general shortage of postsecondary faculty members.
- the age demographic within the US and other industrialized countries is changing.
- within the first decade of twenty first century, more than 20 percent of college and university faculty members will retire.

In the U.S. the tertiary education demographic shifts are considered by private universities as one of the top ten trends for 2013⁸. The most recent report by The Lawlor Group (2013) indicates that changing demographics results in the U.S. higher education market in:

- producing more first-generation students and students from socioeconomic backgrounds that not only make paying for college a challenge, but also leave them underprepared for college-level study,
- more people age 25 and older have returned to college, but that bump reached its peak in 2010. Non-traditional students are also more likely to drop out in their first year, so they seek convenient course scheduling, assistance in the financial aid process, tutoring and counseling services, and centers for veterans services,
- from 2012 to 2019, the number of white college students is expected to increase 5%, while the number of Hispanic students will increase 27%. (College Board cited after The Lawlor Group 2013)
- compared to a decade ago, 31% more international students were studying at U.S. colleges and universities in 2011-12.

According to some forecasts all higher education institutions, including the market-leading elites, are going to be facing significant fiscal pressures in the coming decade due to the fact that demographic changes are lowering student demand for higher education, while at the same time a weak economy has exacerbated parents' and students' concerns about the cost versus value of a college degree (Lane, 2013).

The second category of publications is built on papers and books offering suggestions and recommendations on how to countervail the negative consequences of demographic shifts. This group is heterogeneous and can be further divided according to different criteria. For example, they can be classified as dealing with macro level issues, thus appropriate recommendations are addressed to governments and politicians and those dealing with micro level offering recommendations for universities. Due to the topic and the goal of this paper, attention is paid only to the micro level⁹.

Another possible criterion is the level of generalization of recommendations given. One may find here publications offering very general recommendations such as focus on quality education, restructuring in order to become more competitive, internationalize and globalize campuses and curriculum, emphasize technology, produce knowledge, develop and retain intellectual assets, and assert the importance of moral leadership (Mauch, 1998) which can be applied to virtually any business entity.

There are also publications offering more practical, university-focused recommendations. A good example here are various measures aimed at solving (or softening) the problem of diminishing enrollment caused by demographic shifts identified by Vincent-Lancrin (2008):

- diversification of student enrollment and provision since "new" kinds of students can be identified,
- closures and mergers of higher education institutions,
- diversifying the higher education sector,
- public funding and cost-sharing,
- the attainment, quality and number of graduates,

⁸ This may in turn lead to the question about differences in attitude between public and private universities.

⁹ One may quote Marcus (2011) who maintains, that the higher education system in the USA lacks the capacity for reshaping itself and creating an environment of innovation and creativity.

- quality assurance and the recognition of qualifications,
- e-learning,
- numerical impact, geographical distribution and variations over time.

In respect to the diversification of student enrollment acknowledgement of the existence of “new” kinds of students:

- part-time students in countries where this kind of participation remains uncommon,
- international students - their numbers have grown rapidly in the last ten years and institutions (and countries) are increasingly attempting to develop strategies for boosting their recruitment,
- older less “traditional” students - in many countries, higher education institutions are offering easier access to courses for students with some professional experience or a family, seeking to retrain or obtain qualifications enabling them to change career or further their professional development. This process may or may not involve degree courses, or may lead to certificates awarded for evening or weekend classes.
- company employees - the provision of continuing education and training for people employed in firms, in such a way that the their employees are the “client”, is also expanding in some countries, even though it is not widespread in all OECD countries.
- retired people - the ageing of the population, with people living longer in good health, arguably creates a fresh demand for students from among the ranks of the retired whose desire to study is unrelated to their career development and envisaged more for its own sake. This would appear all the more likely if they already have a sound basic education (Vincent-Lancrin, 2008, p. 76-77).

Since it is often hard to close higher education institutions, and especially those in the public sector, mergers and acquisitions are perceived as less controversial and more acceptable thus politically feasible. The first ones to face difficulty are often small private institutions or small public institutions with only a modest reputation located in rural or remote regions. Above all, the closure of public establishments in particular poses a political problem. The elected representatives of these regions or towns (and possibly other regions in similar circumstances) will tend to join forces to prevent these closures. While this may partly occur for reasons of form or prestige, local economic concerns are also an important issue. The fact that higher education institutions can make a major contribution to the economic vitality of their region is no less true if the latter is in economic decline.

The diversification of higher education may also be viewed in relation to demography, even though it constitutes a response to many other issues also, such as the appropriate matching of particular types of graduate to demand on the labour market, or research excellence. The division of labour between institutions or sub-sectors of higher education, or even courses within a single institution, has contributed to the expansion of higher education, and the management of that expansion. To simplify matters, the various forms of diversification (or diversity) are of two kinds, corresponding to the division between public and private institutions, or between general and professional (or long and short) higher education (Vincent-Lancrin, 2008, p. 78). Diversity may also help to satisfy more varied student demand, thereby attracting new groups of people into higher education and improving student achievement rates as long as institutions and students within the system are well matched, which also presupposes the existence of sound admissions and guidance systems. The main risk inherent in this diversity is that it can result in a hierarchy and real or perceived stratification, which may pose problems of equity (with inequality of opportunities).

From the standpoint of governments, the coexistence of private sector education has the merit of being far less costly than an entirely public system, even when private institutions are partly government dependent, and also of satisfying a social demand that governments cannot or do not wish to meet.

Transnational education, which is defined as an arrangement in which courses or programs offered by an educational institution based in one country are delivered to students located in another country (Ziguras, 2003, p. 89), is increasingly becoming popular as it provides internationally recognised education at the doorstep of students.

The reduction of government subsidies to western universities has created conditions for looking for alternative ways to generate income to offset a financial short fall. As a result, the western higher education institutions have become heavily dependent on onshore fee paying international students. However, the income from onshore fee paying international students is falling. Therefore, universities are starting to offer their education to international students in their home countries (Alam et al., 2013) . There are five popular modes widely used in transnational

Technology, Higher Education and Society (2020)

education. They are branch campus, franchising or partnership, articulation or twinning, distance or virtual education, and study abroad (Alam et al., 2013, p.871).

In the next section we would like to explore what particular measures were undertaken in fourteen top universities to address challenges arising from demographic changes.

MATERIAL AND METHODS

The sample

Desk top analysis is supplemented by a pilot study covering 14 universities. It is a purposeful sample composed of top universities (according to Academic Ranking of World Universities 2013¹⁰) from the U.S., United Kingdom, France, and Germany and of two universities from new European Union member states: Czech Republic and Hungary¹¹. The U.S., the United Kingdom, France and Germany were selected due to their leading position in the global higher education market (Alam et al. 2013), and Czech Republic and Hungary as a kind of point of reference. The list of the universities is shown in Tab. 1.

The goal of the search

The aim of this pilot study was to answer the following questions:

1. do the universities mentioned possess formal¹² strategic plans?
2. are there any specialized organizational units responsible for strategy formulation?
3. are demographic shifts acknowledged in strategic plans among factors influencing the present and future of universities at hand?
4. what are universities' responses to demographic changes?

Method

Strategic plans of the respective universities were analyzed in detail. In addition relevant university policies including admission policies, research policies, teaching policies, etc. were also assessed from the point of view of their responsiveness to demographic changes.

Data

The main source of information were web pages of the universities.

Results

As shown in Tab. 1, in seven universities (50% of the sample) formal strategic plans are available. It can be explained partly by the organizational structure of British and American universities with considerable scopes of decentralization.

¹⁰ Available from < <http://www.shanghairanking.com/World-University-Rankings-2013>> (3 February 2014)

¹¹ Charles University, Prague and Eötvös Loránd University, Budapest were the highest ranked (301-400) among universities from Central and Eastern European countries.

¹² It means: separate documents specifying nothing less than university's mission, vision, and strategic goals.

As far as the problem of institutional settings for strategic formulation at the level of an entire university is concerned, special organizational units aimed at strategic development exist in five universities (36%). It is worth noting that at Harvard University, Stanford University, and Eötvös Loránd University, strategic development rests in the hands of the CEOs dedicated to strategy, e.g. Vice President for Strategy and Programs, Vice President for Development, and Vice-Rector for Strategic Affairs.

It is striking that in virtually none of the universities, demographic changes were acknowledged as strategic factors influencing the universities' future. Here the University of California, Berkeley's case is interesting due to the fact that – unlike in other cases - California's population is expected to increase over the next four decades. Consequently, UC, Berkeley is not facing possible drops in enrollment. What is interesting, however, is the fact that despite big projected changes in the racial structure of students enrolled at UC, Berkeley, there is no action plan aimed at addressing this problem which is considered in the literature as important (Prescott, 2012; Swail, 2002).

Despite the fact that there is no formal recognition of demographic changes as a strategic factor, one may identify in these universities actions which are classified in the literature as ways to respond to the ageing issue, namely lifelong education (Chiřba, 2012). This refers to all of the fourteen universities but three – the University of Paris Sud - Paris 11, [École normale supérieure](#) - (ENS) Paris, and Eötvös Loránd University. The most commonly used initiative is the development of various lifelong (continuous) education programs (named as such) declared by seven universities (50%). In eight universities (57%) namely Harvard University, CU, Berkeley, Oxford University, University College London, University Pierre et Marie Curie, Technische Universität München, Universität Heidelberg, and Ludwig-Maximilians-Universität München ageing is a subject of intensive research. There are dedicated departments (Department of Psychological Ageing Research), institutes (Institute of Longevity, Institute of Population Ageing, Institute of Healthy Ageing) and research centers (Resource Center on Aging, Centre for Policy Challenges of Population Ageing, or Network Aging Research) as well as research programmes (Program on the Global Demography of Aging) aimed at the study of ageing. This shows that universities, as research institutions, want to treat demographic changes also as an opportunity. The ageing population can be combined with another function of a university, which is teaching. One may find interesting university initiatives in this respect, for example, the Institute for Learning in Retirement or various projects aimed at new special-needs teaching methods taught in Ludwig-Maximilians-Universität München.

Charles University and Eötvös Loránd University, when compared to the other twelve universities, show considerable weaknesses in respect to the ways they have responded to demographic changes. Keeping in mind that demographic projections in these two countries are negative one may conclude that the only option for these two universities is to neutralize negative demographic trends when attracting foreign students. The Eötvös Loránd University case is doubly interesting here since it leverages university strategy at the highest possible institutional and organizational level (special position has been established - Vice-Rector for Strategic Affairs), and at the same time it lacks development of a formal strategy and ignores such simple (and commonly used) action to develop and promote lifelong learning.

Discussion

Apparently due to the size of the sample one cannot generalize the findings. The fact that demographic changes (first of all ageing) are not at all perceived as strategic factors by these fourteen universities may be partly explained by the fact that these fourteen universities represent (in vast majority of cases) higher education institutions which operate internationally (if not globally)¹³. Since the share of international students at these universities remains high, aging population issues in a home country of a given university does not create a visible threat for this university in respect to enrollment. Here, however, one interesting issue should be noticed.

Students from Asian countries, mainly China and India, constitute an important component of foreign students around the world¹⁴ and in the universities mentioned here. In this context it is worth noticing that China intends not

¹³ Australia, Canada, France, Germany, the United Kingdom and the United States together receive more than 50% of all foreign students worldwide (OECD, 2013, p. 305).

¹⁴ Asian students represent 53% of foreign students enrolled worldwide. The largest numbers of foreign students are from China, India and Korea (OECD, 2013, p. 304).

only to reverse the stream of its own students currently travelling to the west for education but to attract more foreign students to Chinese universities as well. With the strong intention to identify and develop a few Chinese universities into 'world-class' universities, the Chinese government has implemented various reform measures such as the '211 project' and the '985 project' to concentrate state resources on a few selected top-tier national universities to boost them to become leading universities in the world (Mok, 2005; Chou, 2008).

Maybe demographic shifts constitute real threats but mainly (if not exclusively) for middling universities (Wolff, 2013) thus addressing this issue to top universities can be seen as missing the point. Such an assessment is right only in respect to enrollment of secondary school graduates. There is enough ground to expect that senior citizens may become a university's top clients (i.e. students) too (Elmore, 1999).

Ageing population issues constitute both a threat and an opportunity for universities. As the few examples in Table 1 show there is growing opportunity for universities to perform research on ageing as a multidimensional problem (engaging various specialists thus implying high value analyses by academic study which needs to be addressed without unnecessary delay).

CONCLUSIONS

Even if demographic changes/shifts are identified in the literature as factors influencing the present and the future of tertiary education institutions, there is a lack of in-depth analysis on their possible consequences. Since there is limited reflection/analysis on the consequences of demographic shifts on higher education institutions, there is an acute shortage of adequate/appropriate university responses to demographic changes. Identified university strategies are aimed at exploiting the existing market through balanced or increased enrollment including attracting students from abroad. There is enough ground to maintain that the target group for the vast majority of universities are secondary schools/college graduates, i.e. people aged 16 to 25.

Table 1. Universities’ strategic plans and responses to demographic changes

University	Strategic plan available	Person/institution responsible for strategic planning	Demography as a strategic factor acknowledged	Initiatives/actions which are connected with demographic changes	Comments
Harvard University	There is no formal strategic plan as a separate document for Harvard University as such since the strategic planning process is decentralized. Components of the Harvard University strategy are present in Drew Gilpin Faust’s (President of Harvard) opening speech <i>To Seize an Impatient Future</i> on September 21, 2013. Available from < http://www.harvard.edu/president/the-harvard-campaign > and in “The Harvard Campaign” .Available from < http://campaign.harvard.edu/aspiration/advancing-new-approaches-learning-and-teaching >. In “The Harvard Campaign”, under the label “Aspirations” one may find the following: - Advancing the Power of Integrated Knowledge, -Advancing New Approaches to Learning and Teaching, -Advancing Global Harvard, -Advancing Meaning, Values, and Creativity, -Advancing Innovations and Hands-On Discovery, -Attracting and Supporting Talent, -Creating a Campus for Harvard’s Next Century. Harvard must be at the forefront of creating knowledge, of integrating knowledge across disciplines and fields, and of deploying knowledge in service to the world.	Vice President for Strategy and Programs (Leah Rosovsky)	There is no formal recognition of demographic changes as important factors influencing Harvard’s position in the future.	There is a special unit responsible for continuing education: the Harvard Division of Continuing Education (HDCE) . It offers open-enrollment courses, professional development seminars, and degrees and certificates. There is also Institute for Learning in Retirement (HILR) founded in 1977 as a branch of Harvard’s Division of Continuing Education. HILR hosts lectures and events throughout the year, including a distinguished lecture series that is open to the public. Members have belonged to the Institute for as few as one year and as many as 30 years. Their ages range from 55 to 95. The two cornerstones of HILR are peer learning and active participation in study groups. Members create the curriculum, leading courses on a variety of subjects. Almost all courses are offered in seminar format, with an emphasis on preparation and discussion by class members. In addition, courses at Harvard Extension School and Harvard Summer School are available to members at a reduced cost (Members of the public can take classes there too) In “Advancing New Approaches to Learning and Teaching” section it is stated that Harvard must pioneer new approaches to learning and teaching that build on the transformative potential of a digital age, as well as emerging insights into human behavior and the human brain. Special research programs, for example the Program on the Global Demography of Aging (PGDA) , led by David E. Bloom, Harvard Center for Population and Development Studies or Harvard Initiative for Learning and Teaching (HILT)	Harvard University’s offers can be characterized as flexible: flexible class times, part-time pace, blended online and on-campus degree programs and professional certificates offering a combination of online courses and courses taken on campus at Harvard.
Stanford University	There is no formal strategic plan as a separate document for Stanford University . Individual departments and schools possess their own strategic plans.	Vice President for Development (Martin Shell) Office for Development (which is focused nearly exclusively on donations)	There is no formal recognition of demographic changes as important factors influencing SU’s position in the future in the departmental strategic plans available.	Stanford Continuing Studies: offers courses in Liberal Arts & Sciences, Creative Writing, and Professional & Personal Development.	
University of California, Berkeley (UC, Berkeley)	“Pathway to Excellence 2009–2020” . Available from < http://diversity.berkeley.edu/pathway-excellence-2009%E2%80%932020 > “ International Office Strategic Plan 2011-2014”. Available from < http://internationaloffice_berkeley.edu/strategic_plan >	University of California, Berkeley (UC Berkeley) is part of the University of California system and is governed by The Regents. Strategic Planning Committee and Special Faculty Assistant to the Chancellor for International Relations.	Only general task identified in International Office Strategic Plan: Identify growth trends and understand the distinct needs of each population. It is interesting that in strategic plan revealed in 2002 among strategic goals <i>Placing a Limit on Growth</i> was indicated “ <i>Limit enrollment at Berkeley to no more than 33,000 students</i> ”	UC Berkeley opened the Resource Center on Aging in October 1985, as part of its new Academic Geriatric Resource Program. UC Berkeley Extension offers variety of courses, for example: <i>Transformative Learning for the Lifelong Learner</i>	Over the next four decades, California’s population is expected to increase by 25 million people, with varying rates for different racial and ethnic groups. The white population is expected to decline from 16 million to 12 million by 2050, while the number of Hispanics is projected to grow from 11 million to 29 million and the Asian American population from 3 million to 4 million. Issues related to these projected changes are not adequately addressed in strategies.
University of Cambridge	Individual colleges and schools of the University of Cambridge possess their own strategic plans. Cambridge defines only its mission, core values and general tasks (within certain areas). The mission of the University of Cambridge is to contribute to society through the pursuit of education, learning, and research at the highest international levels of excellence. The University’s core values are as follows: -freedom of thought and expression -freedom from discrimination In education Cambridge is focused on: -the encouragement of a questioning spirit -an extensive range of academic subjects in all major subject groups.	Planning and Resource Allocation Office and the Planning and Resources Committee (PRC), and the Resource Management Committee (RMC).	There is no formal recognition of demographic changes in the colleges’ and schools’ strategic plans available.	Institute of Continuing Education	

	<p>-quality and depth of provision across all subjects, the close inter-relationship between teaching, scholarship, and research, strong support for individual researchers as well as research groups, -residence in Cambridge as central to most courses, -education which enhances the ability of students to learn throughout life.</p> <p>In respect to UC's relationship with society UC opts for –among others - the widest possible student access to the University.</p>				
University of Oxford	<p>“Strategic Plan 2013-18. Vision, Priorities, Core strategies, Enabling strategies”. Available from <http://www.ox.ac.uk/about_the_university/introducing_oxford/strategic_plan_201318/index.html></p> <p>It sets a high-level agenda for the University of Oxford . The first aspiration to meet is: “To develop our capacity to generate and share knowledge in the UK, Europe, and globally, ensuring significant contributions to public policy-making and economic growth” (Strategic Plan 2013-18, p.2).“Global reach” is the first of two overarching priorities for Oxford development over 2013-2018 (Strategic Plan 2013-18, p.3).</p>	<p>The International Strategy office (Director: Loren Griffith) is responsible for developing a coherent strategy to promote UO’s international relations, global profile and international competitiveness. The work of the office is broad.</p>	<p>There is no formal recognition of demographic changes in “Strategic Plan 2013-18. Vision, Priorities, Core strategies, Enabling strategies”.</p>	<p>Department for Continuing Education enrolls more than 15,000 students annually on over 600 short and part-time courses. Students can study in Oxford, in the region or online, for general interest and/or for an Oxford qualification. Other University departments are also actively involved with online learning materials, including the Learning Technologies Group, Oxford Digital Library, the Oxford Internet Institute, and Continuing Education’s Technology-Assisted Lifelong Learning Unit.</p> <p>Harris Manchester College offers Oxford degree courses solely to mature students. It offers full-time study opportunities to people who may have missed out on a university education the first time around and to those who, having finished one career, wish to retrain for a new one.</p> <p>Institute of Population Ageing (established in 1998) with the Centre for Policy Challenges of Population Ageing.</p>	<p>Despite the fact that colleges and halls select and admit undergraduate students, and select graduate students after they are admitted by Oxford University, there is a strategy for the whole university.</p>
University College London (UCL)	<p>“UCL Council White Paper 2011-2021”. Available from <http://www.ucl.ac.uk/white-paper></p> <p>Mission: UCL is London’s global university</p> <p>Vision (only two first issues):</p> <ul style="list-style-type: none"> -An outstanding institution, recognised as one of the world’s most advanced universities and valued highly by its community of staff, students, alumni, donors and partners and by the wider community; -Providing an outstanding education to students from across the globe that imparts the knowledge, wisdom and skills needed by them to thrive as global citizens 	<p>UCL President and Provost (Malcolm Grant)</p>	<p>There is no formal recognition of demographic changes in “UCL Council White Paper 2011-2021”.</p>	<p>Postgraduate research degrees and the UCL Graduate School</p> <p>UCL proceed with intensive research on ageing mainly through Institute of Healthy Ageing, a part of UCL School of Pharmacy.</p>	<p>Financing is perceived as the main strategic issue at UCL due to diminished government grants. The Government teaching grant has been withdrawn also from taught postgraduate (PGT) programmes cross-disciplinary research UCL opened a campus in Adelaide in 2010, South Australia, dedicated to energy and resources</p>
University Pierre et Marie Curie (UPMC) – Paris 6	<p>There is no strategic plan for UPMC available. The leading document titled “Priorities 2009-2012” was prepared in International office. Available from: <http://www.upmc.fr/en/international/international_strategy/priorities2009_2012.html></p> <p>UPMC follows a dynamic policy of cooperative projects with regard to developing countries and, more particularly, with French-speaking countries. It is committed to reinforcing its ties with Vietnam, Lebanon, Palestine, Syria and North Africa.</p> <p>In order to maintain and intensify the international relations UPMC intends to undertake the following:</p> <p>in education:</p> <ul style="list-style-type: none"> - Significantly increase the international movement of its students with the aim of quadrupling the figures achieved at the end of the last contract. - Ensure a geographical diversity, particularly in relation to other European countries, among the foreign students that it admits by developing institutionalised exchange programmes and ensuring that a high standard of support services (information, social benefits, assistance with accommodation, French lessons). - Increase the international aspect of studying at UPMC by reinforcing the administrative support necessary to facilitate assistance with the organisation and monitoring of projects. <p>in research:</p> <ul style="list-style-type: none"> - Position UPMC within Europe in terms of research and knowledge through the signing of choice partnership agreements with European universities. - Ensure better coordination of international cooperation agreements with research organisations by encouraging and supporting the different types of partnerships possible such as the GDRI (international research network), LIA (international associated laboratory) and UMI (mixed 	<p>The Board of Directors and Vice President, International Relations (Danielle Seilhean)</p>	<p>There is no formal recognition of demographic changes in “Priorities 2009-2012”</p>	<p>Life-long Learning Department (with 37 years of experience), one of the leading in France</p> <p>Institute of Longevity (established in 2009)</p> <p>Education: Biology of Ageing and Longevity specialization (Integrative Biology and Physiology)</p>	

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	international research unit). - Ensure that international cooperation agreements in relation to research are kept up to date.				
University of Paris Sud - Paris 11	No formal strategic plan available. Paris-Sud University's President Jacques Bittoun: Paris-Sud University's is home to research of the highest level, geared towards the understanding of the world, student success, and society's needs. The large number of major distinctions it received and its place in international rankings are proof of the exceptional quality of its research. Paris-Sud University also takes pride in its top position among French Universities for the integration of its students into the workforce. Available from <http://www.u-psud.fr/en/university.html>	No special office for university strategy and development.	N/A	N/A	Paris-Sud is especially recognized for the high level of its basic research, most notably in mathematics and physics.
École normale supérieure - (ENS) Paris	No formal strategic plan. Under: <i>ENS: Current Transformations</i> , one may find only new mission and very general goals. New ENS missions: The École normale supérieure wishes to define its missions on a new basis. Its first and fundamental mission is to provide a training grounded on research and creativity. By the success of its students in various fields - research and high education, as well as high administration and business - the ENS proves the importance of doctoral studies to management, innovation and creativity. Available from < http://www.ens.fr/a-propos/l-ecole/article/ens-current-transformations?lang=en>	No special office for university's strategy and development. The only strategic component in ENS is very general <i>International Strategy</i> available from <http://www.ens.fr/international-102/l-ouverture-internationale/article/strategie-internationale-944>	N/A	N/A	Search for <i>continuous education, lifelong education, lifelong learning</i> turned up nothing. ENS opened a Master's-PhD campus in Shanghai. The establishment, at the ENS, a campus of New York University, the Remarque Institute, a research centre for European and transatlantic history. ENS participates in a network of special partnerships with more than a hundred institutions throughout the world: MIT; RIKEN in Tokyo; the University of Beijing; Oxford and Cambridge; Harvard; New Zealand and South Africa; the EPFL in Lausanne; the National University in Seoul.
Technische Universität München (TUM)	"Internationalization at Technische Universität München A progress report (2006 – 2011)". Available from <http://www.international.tum.de/fileadmin/w00bhr/www/Startseite/TUM_Internationalisierungsbericht_2006-2011.pdf> TUM strategic goal is to be amongst the top 20 universities worldwide in the most important international research rankings by the year 2020 (Internationalization at Technische Universität München..... p.52)	Directory Board Senior Vice President for International Alliances (Liqiu Meng) International Office	There is no formal recognition of demographic changes in "Internationalization at Technische Universität München A progress report (2006 – 2011)"	Continuing Education and Lifelong Learning Economics & Policy Department, Economics of Aging (Prof. Dr. Axel Börsch-Supan)	TUM's most important international research cooperations and partnerships are in Europe (EuroTech University Alliance), the Middle East (King Abdullah University of Science and Technology, KAUST, Saudi Arabia) and in South-East Asia (Singapore: GIST-TUM Asia, TUM CREATE).
Universität Heidelberg (UoH)	"Institutional Strategy " available from <https://www.uni-heidelberg.de/excellenceinitiative/institutionalstrategy> Heidelberg University promotes dialogue beyond the traditional boundaries and cultures of specific subject areas. In so doing it pursues its traditional course of cultivating Heidelberg's "intellectual ethos". Cross-sectoral cooperation was initiated years ago and is flourishing, as witnessed by the founding of interdisciplinary research centres at the UoH. The concept of a comprehensive university is the central element of Heidelberg's institutional strategy. Building on its own strengths and in close cooperation with capable partners throughout the region, UoH is intent on meeting future tasks and challenges. Heidelberg University will: -Strengthen the disciplines that make up the comprehensive university -Develop new forms of interdisciplinary cooperation -Open up clear career prospects to young academics -Further improve its position in national and international networks -Continue with decentralised responsibility for resources	Project Office of the Excellence Initiative	There is no formal recognition of demographic changes in "Institutional Strategy"	Network Aging Research (NAR) and Department of Psychological Ageing Research , Institute of Psychology, The research foci of the Faculty of Behavioural and Cultural Studies covers – among others - lifelong learning and development processes across the life span (cooperation between education science, psychology, sport science, and gerontology),	Branch Offices of the South Asia Institute in: New Delhi and Kathmandu
Ludwig-Maximilians-Universität München (LMU)	"The Institutional Strategy" available from <https://www.en.uni-muenchen.de/about_lmu_alt/excellence_initiative/institutional_strategy/index.html#top> LMU will continue to focus support on cutting-edge research and actively encourage formation of priority areas, thus further enhancing its research profile. Programs for the promotion of early-career researchers will be restructured to increase their effectiveness. Recruitment policies	University Governing Board	There is no formal recognition of demographic changes in "The Institutional Strategy"	Faculty of Psychology and Educational Sciences Munich Center of the Learning Sciences Assigned to the Department of Education and Rehabilitation are the Sonderpädagogische Förderwerkstatt (research on special-needs teaching methods), the Lernwerkstatt (workshop on principles of teaching and learning), and the organization Unterrichtsmitschau und didaktische Forschung (observation and analysis of classroom activities and research on teaching methods and didactics).	

	designed to facilitate the appointment of outstanding scholars and scientists will be further developed. LMU's governance structures will continue to be professionalized. Finally, an innovative concept for research-oriented teaching will be devised. Equality and diversity as well as internationality shape all measures implemented in the context of LMUexcellent.				
Charles University (CU)	„Charles University Long-term Plan 2011-2015“. Available from < http://www.cuni.cz/UKEN-118.html > Mission: Charles University wishes to be an epicentre of education, independent knowledge and creative activities that are key in the scientific, cultural, social and economic development of society, and simultaneously be a place where lasting values, knowledge and skills are cultivated and transmitted to the following generations (Charles University Long-term Plan 2011-2015, p. 2). Selected strategic goals: - to strengthen the position of CU as a leading, internationally recognised research University - to be the first choice for quality candidates, especially in Doctoral and Master's study programmes -To be an internationally renowned university in postgraduate studies and a university with attractive academic career prospects -to accelerate the university's implementation of the highest international standards - Develop the infrastructure of Charles University in order to meet the growing needs of scientific/scholarly research and educational activities - actively co-operate with the non-academic sector and via good communication strengthen the university's position as one of the leading institutions in the public sector	Analyses and Strategic Department of the Rectorate and Rector of Charles University (Václav Hamp)	There is no formal recognition of demographic changes in „Charles University Long-term Plan 2011-2015“	Lifelong Learning programmes include short-term and long-term courses plus a range of other events – excursions, seminars, film screenings, discussions and more. The programmes are divided into two basic types: professional programmes (focusing on participants' profession or career) and general-interest programmes. The category of lifelong learning also includes post-Master's examinations (examen rigorosum).	
Eötvös Loránd University (ELU)	No formal strategic plan is available. Mission: ELU aims : -to offer, through the joint efforts of its members, valuable, up-to-date knowledge, modern thinking and competitive degrees to its students; -to give high priority to programs at Master's and PhD levels and above; and to widen the range of inter- and multidisciplinary programs and of courses offered in foreign languages, as well as programs conducted in partnership with top-ranking foreign universities, -to pursue research, development and innovation activities that are globally acclaimed and capable of responding to complex social challenges, and which focus on social and technological issues still to be tackled, and thus to perform its role as a competitive research university in Europe; -to foster the development of talented individuals and to increase the numbers of highly qualified and productive instructors and researchers by providing them with an attractive teaching and research environment; -to maintain a value-based and efficient relationship with its immediate and broader context, thus acting as one of the leading university centers of the Central European region. Available from < http://www.elte.hu/en/missionstatement >	Vice-Rector for Strategic Affairs (András Karácsony)	N/A	N/A	Search for continuous education, lifelong education, lifelong learning went to nothing.

Source: own compilation based on WebPages indicated in the table

Despite the fact that - due to demographic changes – there are more and more adult students (i.e. older than 25) enrolled at universities, this does not influence a university's policy and practice strongly enough to make appropriate changes in curricula, teaching methods, ways classes are organized, etc. Senior citizens, i.e. people over 64 years of age, who are growing in numbers everywhere (but especially in developed countries) are still out of sight (and probably out of interest) of a vast majority of universities and other tertiary education institutions. It is significant, that people aged 64 and over are excluded from official statistics as students¹⁵.

Some of the universities analyzed in the paper showed growing interest in performing research on ageing issues. This can strengthen their position as research centers and – in the long run – may result in better tools and techniques aimed at addressing various economic, social and medical challenges connected to and arising from issues of ageing.

But ageing can be approached by universities from a teaching perspective too. As Harvard University's experience shows, teaching senior citizens can be treated not exclusively as a kind of social experiment but could be an opportunity to expand teaching offerings also which in turn (but this must take time) may lead to an increase of revenues.

Consequently, ageing can be interpreted by universities as an opportunity from the point of view of two basic university functions - research and teaching.

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¹⁵ The most recent OECD report (OECD, 2013) does not possess data on students older than 65.

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