

As the world turns: Opportunities and challenges for Florida higher education

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ABSTRACT

With the rapid change in demographics, technology, environmental resources, and globalization expected over the next several decades, Florida colleges and universities must rise to the challenge of effectively preparing business students for the next economy. Aging populations, increasing gender gaps, shifts in global economies, the transfer of wealth to the Millennials, and the increased need for knowledge management and interdisciplinary studies all present challenges for today's business schools. This paper previews these anticipated changes and asks the hard questions. Are professors and administrators in Florida's higher education institutions willing to address the challenges and take the risks necessary to meet the needs of students preparing for careers in the new economy? Will business schools take advantage of the opportunities to invigorate their programs of study with new courses, new focus, and new activities to meet the needs of future business leaders? In order for business schools to provide an education that remains relevant and effective, radical changes must be made to traditional educational approaches, while still maintaining leadership and values education. It is suggested that these efforts can be successful with the financial support of private industry and non-profit foundations, the creativity of faculty willing to think outside the box, and the unencumbered leadership of private universities and colleges.

Keywords: Next economy, career extinction, aging population, wealth transfer, global economies, knowledge management

INTRODUCTION

The next economy has begun. As Thomas Friedman notes, the change “is happening at warp speed and directly or indirectly touching a lot more people on the planet at once.” (Friedman 44). In a recent white paper written by SAS founder Jim Goodnight, he claims that “Most of our schools in Europe and the US are using an industrial factory model on an agrarian calendar trying to meet the needs of an information age. We are trapped in old models designed for a very different time.” (*Educating for Global 2*). If business education is to be relevant and effective today, educators must recognize that we have long since moved from the industrial age and are rapidly passing through the information age to the next economy.

Change from past practice is being induced from many dimensions, including demographic and economic shifts, knowledge and technology shifts, and shifts in resources and the physical environment. In addition to making adjustments in order to adapt to each of these areas, educators must also recognize the need for broadly based leadership and behavioral skills if the next generation of leaders and managers can successfully maneuver through the extreme adjustments and changes.

AGING POPULATIONS

Economists tell us that demographics are fate. As indicated in Tables 1, 2 and 3 (Appendix) the U.S. Census Bureau Statistics provide a snapshot of the U.S. Population in the year 2000 and forecasts for the years 2025 and 2050. In the United States, the next ten years will demonstrate slow demographic growth in the age groups from 35 to 5; but as baby boomers move into retirement age, the percentage of the population that is over 65 will leap substantially. The most striking increase is in the forecasted number of people (male and female) over the age of 55. With advances in healthcare, coupled with the “pig in the python” movement of the baby boomer “bulge,” the profile of the American population will be significantly older. At the same time, “Y” generation (ages 30 – 44 in 2025) will hold a dominant position in society.

A March, 2010 *Global Workforce Study* reveals that, among over 1000 U.S. employees surveyed, the recession had prompted workers to lower career and retirement expectations severely. (Gurchiek) An April 2011 report published by the Insurance Retirement Institute indicates that more than one-third of the pre-retired boomers are now unable to predict their retirement date. (*Boomer Expectations 4*) Therefore, many boomers will be extending retirement. Yet the economy has changed, and boomers need to learn skills and concepts that will allow them to adapt to the new economy.

However, educational institutions have been slow to adapt to this market. Most colleges and universities continue to teach traditional production-oriented business courses to traditionally aged students. Where are the educational products that have been designed to meet the needs of middle-aged adults needing to understand changes in technology, innovation, globalization and perspectives on economic sustainability? How can traditional academic institutions become nimble enough to meet the needs of a powerful demographic segment with a newly felt need? How can finances and courses in skills and competencies be packaged to meet the needs of aging adults?

There are a number of implications and opportunities for the educational systems of Florida and the US in general. The health care sector will obviously be an area of employment strength over the next fifteen years – but how can the educational system adapt and train baby boomers in advancing health care industries and technologies? What innovative applications for educational goods and services will pander to the boomer’s desire to “keep young?” What innovative part time work/life situations can educational institutions help initiate to take advantage of the boomers desires to remain active and to lend value to their environments? Will educational institutions supply the research that can help businesses develop products and services that are age compliant for an aging population?

WEALTH TRANSFER

One additional consideration with respect to the aging population is the impending transfer of wealth. The wealth management industry reminds us that over the next fifteen years, we will experience the largest wealth transfer in the history of the world, as members of the elderly generations pass trillions of dollars (variously estimated from 33 to 60 trillion) to heirs. (*Baby Boomer, Herriage*). Who will benefit from this wealth transfer and how will the wealth translate into the “next economy?” According to Kenneth Gronbach, in his book, *The Age Curve* the “millennials” who will inherit much of this wealth, have established a culture for consumption, and have a bent toward entrepreneurship. They are almost as large a group as the boomers who precede them and will likely be in command of creating the new economy. Their lives have been integrated with technology since infancy. The rapidly changing work environment will result in the “millennials” starting a host of new businesses. (*The Age Curve*) Florida will experience more than its share of wealth transfer, given the number of retirees in the state, and given that it was the fourth most populous state in the United States in 2010. Much of the wealth transfer will come from passage of assets in private businesses. Has the millennial generation received adequate financial training and education to handle the transfer? How will academic institutions in Florida succeed in producing innovative educational programs that will train “millennials” to use their entrepreneurial strengths in the development of advanced new technologies and applications?

GENDER GAP

A second problem area concerns the educational gender gap. Richard Widmore highlights a growing problem with the educational gap between boys and girls in our educational system in his book, *Why Boys Fail*. As indicated in Table 4 (Appendix) the gender gap in U.S. University enrollment continues to grow. What implications does this gap have for the “next economy?” According to a recent article in *Inside Higher Ed* the gap is much more pronounced among blacks and Latino’s than it is in whites. (*Gender Gap*) Will this mean that minority males will continue to fall behind in socio-economic standing in the United States? If “new economy” jobs and careers are dominated by educated whites and minority women, sociological issues are sure to become more pronounced. Colleges and Universities must be pro-active in understanding the underlying issues causing the gender gap, and develop strategies to recruit and retain male students.

GLOBAL TRENDS

The global demographic and economic trends will also provided challenges and opportunities for Florida's economy and institutions in the "next economy." As indicated in Tables 5, 6 and 7 (Appendix) there will be radical changes in the way the world will grow—population wise and economically—over the next few decades.

Many of the nations which have been at the core of study for U.S. educational institutions and the foundation of trade for U.S. businesses are likely to experience population shrinkage and relative slow growth, according to reports from Price Waterhouse Coopers and the Population Reference Bureau of the UN (Cookson, Haub, Population Reference Bureau).

India will become the most populous country in the world over the next few decades. The economies of China and India will continue to grow more powerful. The GDP's of Brazil, Mexico, Russia and Indonesia should pass those of the United Kingdom, Germany and France by 2050. The economies of China, India, Brazil, Russia, Indonesia, Mexico and Turkey will likely surpass the combined GDP's of the US, Japan, Germany, United Kingdom, France, Italy and Canada in that time. Where are our plans to teach Chinese in our schools? Brazil is Florida's major trading partner, even today. Why is Portuguese not a language of interest in Florida schools and universities? What learning objectives in our colleges are related to Indonesia? Russia? India? We are in need of educators who can see the trends and design curriculum and programs to meet the evident trends.

KNOWLEDGE AND TECHNOLOGY MANAGMENT

Issues of advances in knowledge and technology will affect economics and education in Florida and beyond in ways that we never could have anticipated even twenty years ago. "An analysis of the history of technology shows that technological change is exponential, contrary to the common-sense 'intuitive linear' view. So we won't experience 100 years of progress in the 21st century — it will be more like 20,000 years of progress (at today's rate)." (Kurzweil) "As of the 1940's the product cycle (idea, invention, innovation, imitation) stretched to 30 or 40 years. Today it seldom lasts 30 to 40 weeks." (Cetron and Davies). According to Jay Jamrog, Executive Director of the Human Resource Institute, all the technical knowledge we work with today will represent only 1% of the knowledge that will be available in 2050.

Yet, what are we doing in K-12 or in colleges and universities to help train and educate students to understand knowledge management? China and India evidently pay much more attention to engineering studies than we do in the US. (Engardio). Robotics, artificial intelligence, nano technology, and the merging of video/internet and teletech communications, linked with personal portals – digital intelligence in cars, homes, offices, wrist mounted devices and even internally – are only a few of the technologies advancing at breathtaking speed. Health care and biotech information, predictive health, synthetic tissues, implantable microchips and genetic engineering breakthroughs – are only beginning to usher the dawn of longer life and better health – of great interest to the aging population. Those who control the technology in the

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future, control destiny. Where are the advanced programs in data mining and analysis, bio-information systems and micro-biological research? Where is the research in global intelligence for anywhere, anytime producers/consumers, rfid utilization, e-finance, accounting and security and real-time business collaboration? If Florida is to have a place in the “next economy” its educational system must invest in information and medical technologies which will flow through and dominate our lives in the future. Integration of disciplines must take place in order to bring appropriate applications and solutions from computer and information science, medicine and biology, to the commercial marketplace. Past silos of computer information systems, pre-med and production economics and business will not suffice. Educational leaders must take initiative to blend and combine disciplines and formulate new degrees and curricula in order to match resources to opportunities. Students must be cross trained or formed in interdisciplinary teams blending science, engineering, creative arts and business in order to achieve the success needed for innovation in the next economy.

Issues of the environment produce equal opportunities and challenges. Issues in this area are complex and sophisticated. Extreme competition for resources – including energy and water – will have far reaching impact on local, state, national and global politics. Offshore drilling? Nuclear generators? Disposable plastic water bottles? Desalinization plants? Hydrogen supply infrastructure? Local vs regional, national and international food sources? Where is the knowledge and talent to clearly analyze and frame the issues and decisions to be made? Are we exposing students to analytic models, tools, metrics and program management skills to help organizations assess and respond by way of transformative change? Who will transform Ford and GM and Kellogg and ATT? Who in Florida will help transform Florida Progress and Winn Dixie and CSX?

How will our educational institutions respond to the rapid growth of knowledge – both the volume and velocity? How will we deal with rapid career extinction? According to futurist Jim Carroll, “65% of children now in pre-school will be employed in roles that don’t exist today.” (Carroll). Most business schools in Florida and the US still teach the same boilerplate business, accounting and economics curriculum that was in place 50 years ago! Where are the flexible, nimble reactive educational structures that will produce managers and leaders for the “next economy”?

CONCLUSION

Florida’s economy and its educational system are facing powerful forces driven by demographics, technology and resource issues. How can we respond to the growing needs and opportunities? How can we deal with the aging population, the shifts in global influence, the pace of career extinction, the emergence of sensitive social and cultural issues, and the blinding speed of technological change? The answer to some of these questions may have to come from “outside the box.” Who is to say that 120 credit hours of college courses constitutes the “gold standard” required for success? (Hooker) Who is to say that two years of liberal arts and two years of concentrations lead to a better education than would four years of apprenticeship? Why is 8.5 months a year of college education the magic number? Can students not learn during the summer? Why can’t knowledge in sciences and graphic arts and medicine be integrated with knowledge in business and economics to provide innovative but practical paradigms of learning? Perhaps we should listen closely to the themes of Harvard professor Clayton Christensen. In his

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books, Christensen points out that disruptive technologies, driven by market forces, often undermine mainstream paradigms and create new movements and enterprises. (*Disrupting Class, The Innovators Dilemma*) Is the meteoric growth of online educational delivery institutions and the success of technology driven schools of graphic and computer art and design evidence of the accuracy of Christensen's thesis?

It is time for us to experiment, take entrepreneurial risks, jump outside our comfort zones and offer new delivery methods, new curricular designs, and new educational approaches in order to effectively address the issues and take advantage of the opportunities. Where will these entrepreneurial efforts come from? The following sources are suggested:

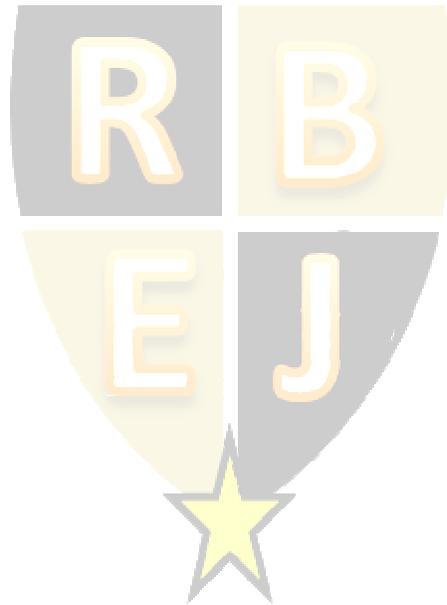
- 1) From private universities and colleges that are not encumbered by bureaucratic state systems and from progressive, innovative, risk taking university leaders.
- 2) From young faculty members who are willing to create and teach interdisciplinary content in innovative new formats and designs.
- 3) Foundation initiatives from institutions like the Gates Foundation, the Annenberg Foundation, the Kaufman Foundation, the NSF or one of many others with an interest in preparing future generations for the "next economy."
- 4) Financial support from private industry, willing to invest dollars into the destructive educational technologies that will provide educational foundations for the future.

Regardless of the radical changes that must take place in educational approaches, an equal challenge will be to reinforce and encourage those changes while maintaining and building traditional values which have made the United States, and Florida as its subset, successful over generations. These qualities will remain essential for educational and economic success and include conscientiousness, work ethic, a sense of humor, discernment, humility, respect and emotional intelligence, the ability to encourage and motivate others, and the ability to work well with others in spite of differences. Educational institutions must embrace the breadth of their responsibilities. Outcomes must be measured, not only by what students know, but also by who they are and what they can accomplish in an ever-changing world.

REFERENCES

- "Baby Boomer Wealth Transfer." *Insurance Journal*. Wells Publishing, 23 Feb. 2004. Web. 02 June 2011. <<http://www.insurancejournal.com/magazines/mag-features/2004/02/23/37126.htm>>.
- "Boomer Expectations for Retirement, How Attitudes About Retirement Savings and Income Impact Overall Retirement Strategies." *Insured Retirement Institute*. Apr. 2011. Web. 02 June 2011. <<https://www.myirionline.org/eweb/uploads/RetirementExpectations.pdf>>.
- Carroll, Jim. "What's the future of education and what should we do about it?." *Jimcarroll*. Web. 2 June 2011. <<http://www.jimcarroll.com/2008/12/whats-the-future-of-education-and-what-should-we-do-about-it/>>.
- Cetron, Marvin J, and Owen Davies. "50 Trends Now Changing the World." *The World Future Society, Futurist* Mar. - Apr. 2001: 27-42. Print.
- Christensen, Clayton. *The Innovator's Dilemma*. Cambridge: Harvard Business School Press, 1997. Print.
- Clayton, Christensen, Curtis Johnson, and Michael Horn. *Disrupting Class*. New York: McGraw Hill, 2008. Print.
- Cookson, Gordon, and John Hawksworth. "The World in 2050." *Economics*. Price, Waterhouse, Coopers, 2008. Web. 02 June 2011. <http://www.pwc.com/gx/en/world-2050/pdf/world_2050_brics.pdf>.
- Engardio, Pete. "Engineering: Is the U.S. Really Falling?." *Business Week* 27 Dec. 2005: *Bloomberg Businessweek*. Web. 2 June 2011.
- Friedman, Thomas L. *The World is Flat: A Brief History of the Twenty-First Century*. New York: Farrar, Straus and Giroux, 2005. Print.
- "Gender Gap Stops Growing." *Inside Higher Ed*. 26 Jan. 2010. Web. 06 May 2011. <<http://www.insidehighered.com/news/2010/01/26/gender>>.
- Goodnight, Jim. "Educating For Global Competitiveness." *A White Paper on Education in the 21st Century*. SAS, Web. 2 June 2011. <www.sas.com/resources/whitepaper/wp_3486.pdf>.
- Gronbach, Kenneth W. *The Age Curve: How to Profit from the Coming Demographic Storm*. New York: American Management Association, 2008. Print.
- Gurchiek, Kathy. "Recession Alters Relationship Between Employers, Workers." *Society for Human Resource Management*. 17 Mar. 2010. Web. 2 June 2011. <<http://www.shrm.org/Publications/HRNews/Pages/RecessionAlters.aspx>>.
- Haub, Carl, and Mary M. Kent. "2008 World Population Data Sheet." *Population Reference Bureau*. 2008. Web. 02 June 2011. <<http://www.prb.org/Publications/Datasheets/2008/2008wpds.aspx>>.
- Herriage, Kip. "The Greatest Wealth Transfer in History." *Wealthjournals.com*. Wealth Journals. Web. 02 June 2011. <<http://wealthjournals.com/wealth-management/greatest-wealth-transfer.html>>.
- Hooker, Michael. "The Transformation of Higher Education." *The Learning Revolution*. Ed. Diane Oblinger and Sean C. Rush. Bolton, MA: Anker, 1997. Print.
- Jamrog, Jay. "The Perfect Storm." Human Resource Institute. Lecture.

- Kurzweil, Ray. "The Law of Accelerating Returns." *Kurzweil Accelerating Intelligence*. KurzweilAINetwork, 7 Mar. 2001. Web. 02 June 2011. <<http://www.kurzweilai.net/the-law-of-accelerating-returns>>.
- "The Speed of Information." *The Technium*. 20 Feb. 2006. Web. 02 June 2011. <http://www.kk.org/thetechnium/archives/2006/02/the_speed_of_in.php>.
- "2009 World Population Data Sheet." *Population Reference Bureau*. 2009. Web. 02 June 2011. <<http://www.prb.org/Publications/Datasheets/2009/2009wpds.aspx>>.
- United States. Department of Commerce. Census Bureau. *Resident Population Data*. 2010. Web. 02 June 2011. <<http://2010.census.gov/2010census/data/apportionment-pop-text.php>>.
- Whitmire, Richard. *Why Boys Fail Saving Our Sons from an Educational System That's Leaving Them behind*. New York: American Management Association, 2010. Print.



APPENDIX

Table 1
Snapshot of the U.S. population in the year 2000.

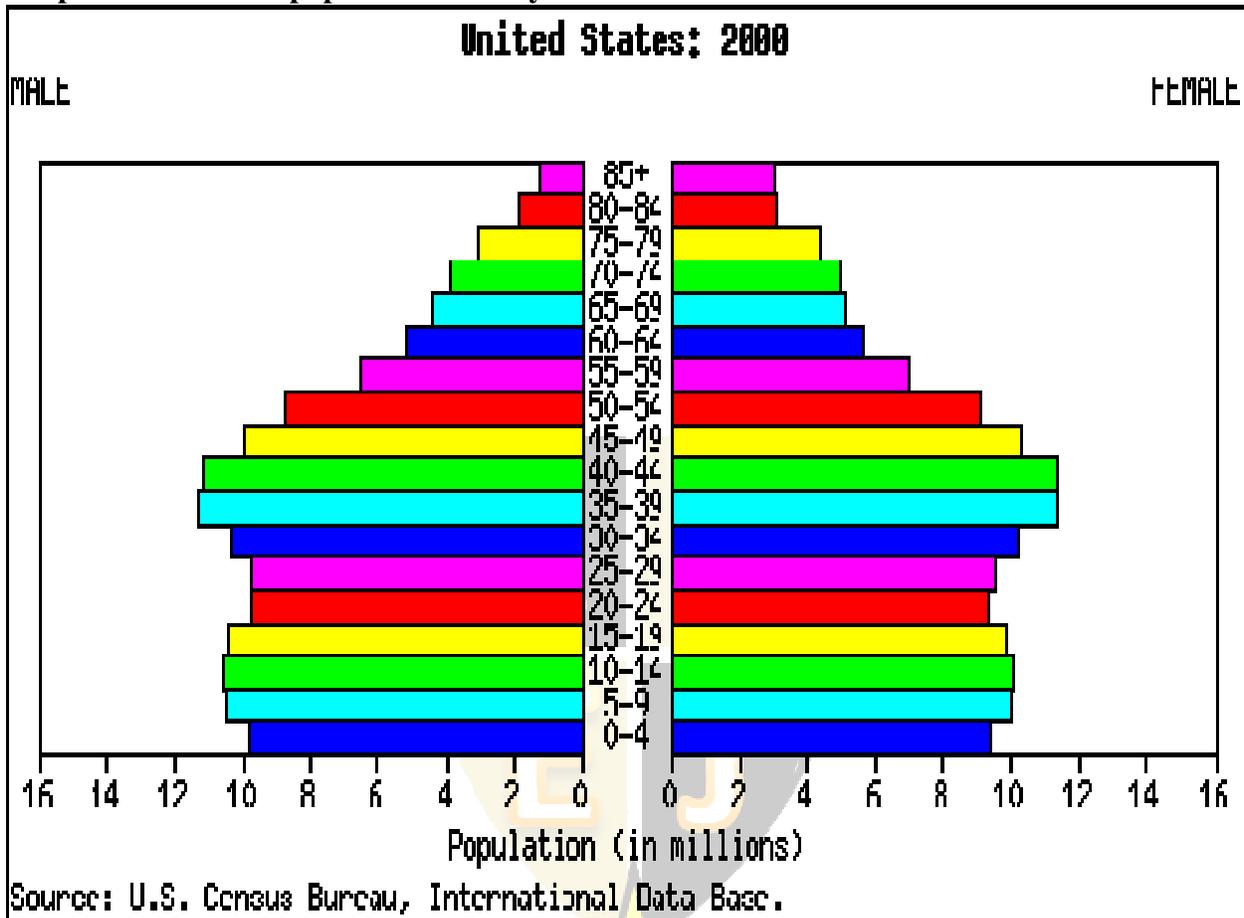


Table 2
Forecast of the U.S. Population in the Year 2025

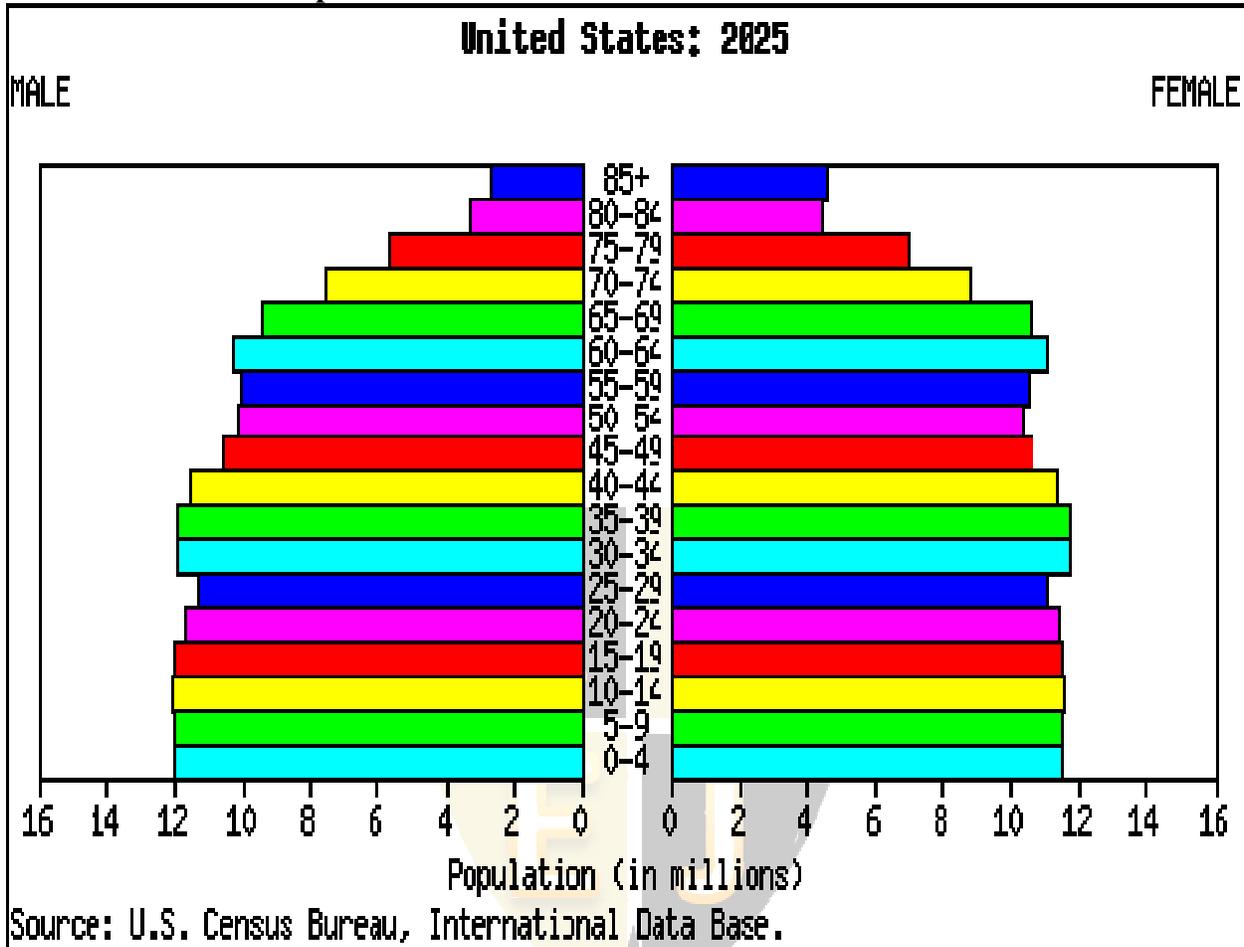
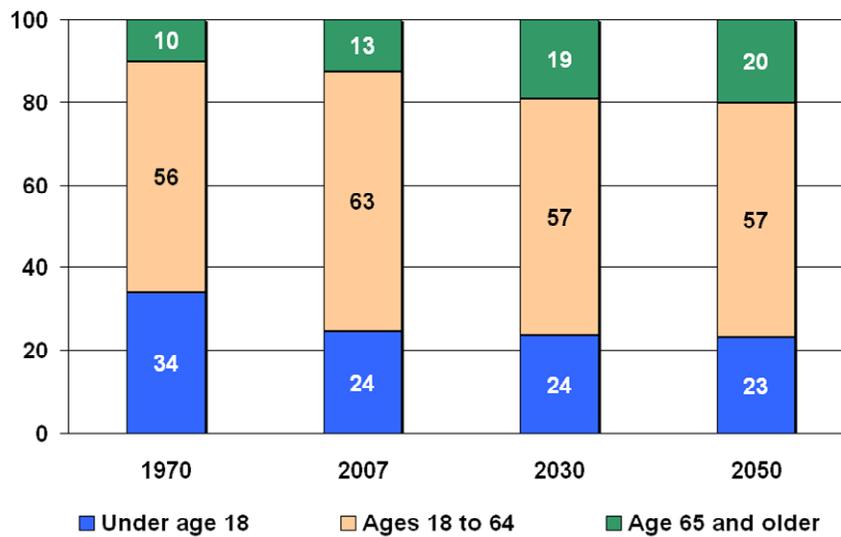


Table 3
Forecast of the U.S. population in the year 2050

By 2050, One in Every Five Americans Will Be Age 65 or Older

Percent of U.S. Population in Selected Age Groups: 1970-2050



Source: Population Reference Bureau, analysis of data from U.S. Census Bureau.

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Table 4
Growth in gender gap through 2016

Gender Gap, US University Enrollment
(in 000's National Center for Education Statistics, 2006)

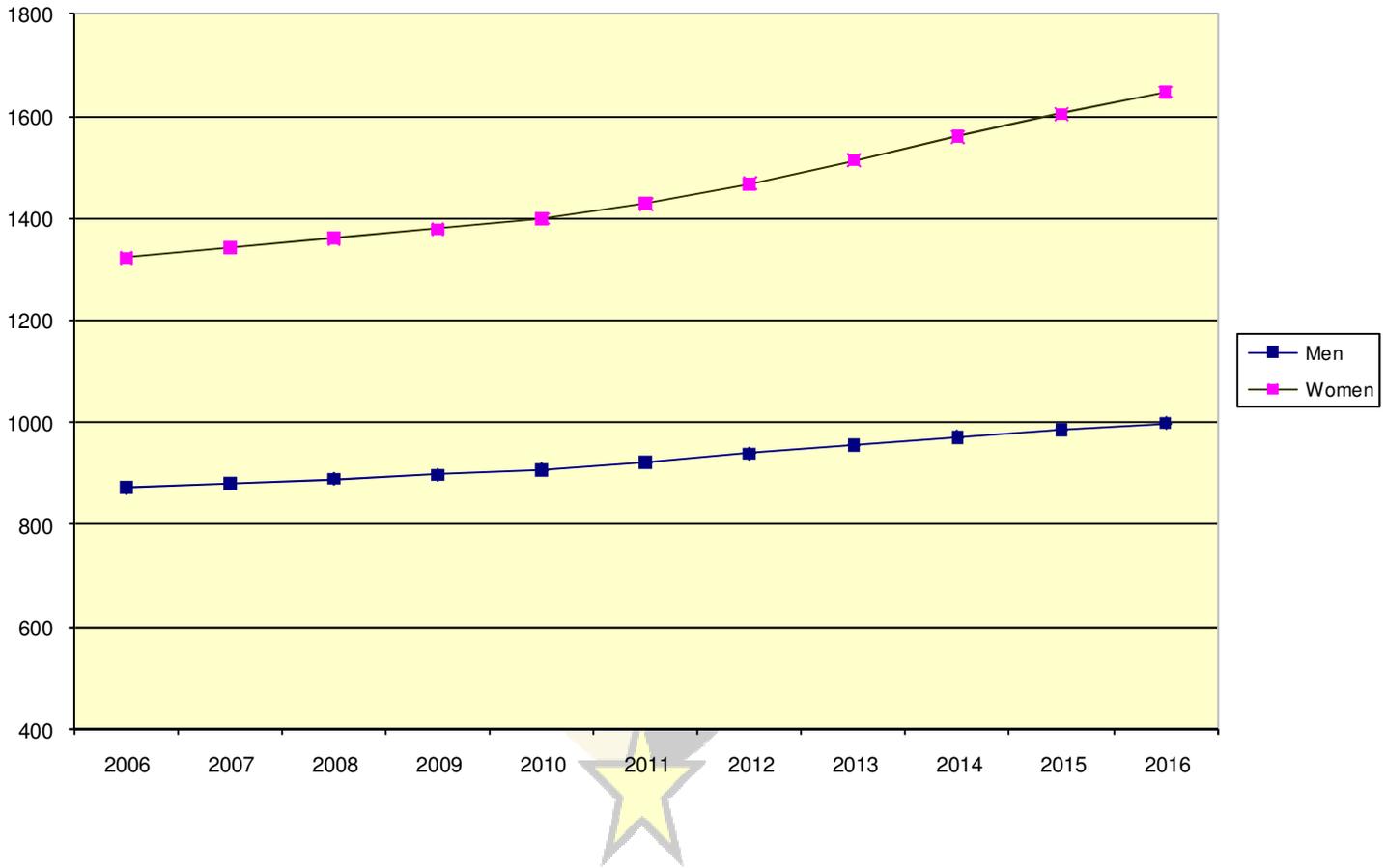
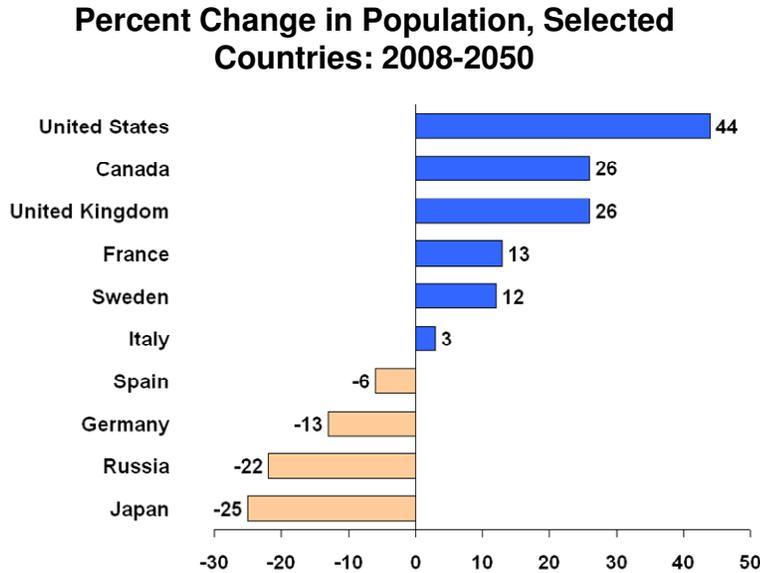


Table 5
Forecast of population by country in the year 2050

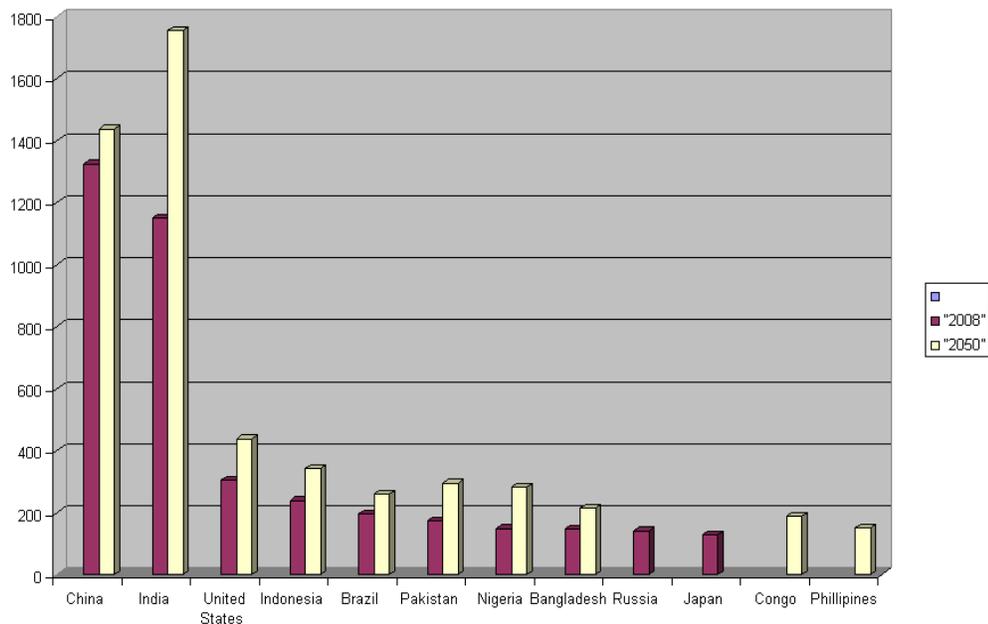


Source: Carl Haub and Mary Medeiros Kent, *2008 World Population Data Sheet*.

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Tables 6
Forecast of most populous countries in 2050

Most Populous Countries (millions)



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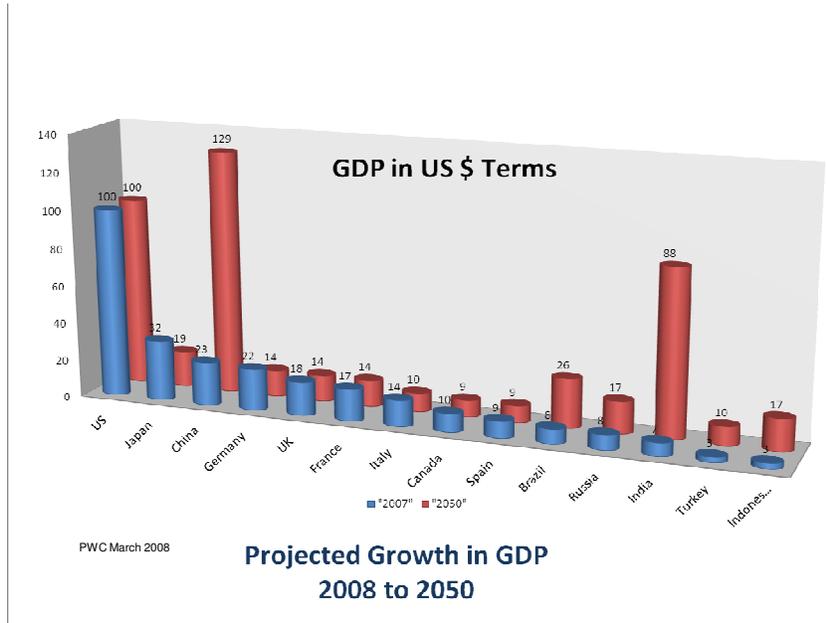


Table 7
GDP Forecast for the year 2050

