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### THE WORLD IN 2050: CHANGING DEMOGRAPHICS AND ITS IMPACT ON GLOBAL ECONOMY

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#### ABSTRACT

The people of the world are currently on the verge of a massive transition as the World population ratio is going to change drastically in the coming few decades, principally because of migration. According to a research study published by the PEW Research Centre, Indonesia will be a Christian populated country while France, UK and USA will be Muslim populated countries by the year 2050. Changing demographics could be observed in almost all the developing and industrial countries of the World, if the current trends continue, according to the reports. This paper examines the future of World population, its changing patterns and its impact, specifically on Global Economy. This paper is an attempt to study future World Economy, changing demographics of some developed and developing countries through an analysis of the data and statistics provided by the Pew research centre, and finally to make people aware of the upcoming changes.

**KEYWORDS:** World Economy, Changing Demographics, Population, migration

#### **INTRODUCTION**

Demographic change has profound effect on all sectors of economy. Today demographics are raising some unexpected concerns. According to a research report published by the PEW Research centre, the world demographics are going to change drastically in the coming few decades. This change will affect Global economy in a number of ways. Although, the impact of population growth on economy has always been a subject of much debate, Thomas Malthus, in his well-known book, "Essay on the Principles of Population"(1798) made the remark that "the rate of population growth was held in equilibrium by the pace of economic growth". Population projections are one of the tools of demography, and thus, a change in population ratio will affect the economy as well.

Demographic change suggests changes in various sectors of population. This paper is concerned with changes in immigration ratio, birth rate percentage, and the overall population growth ratio. While some of these have a positive impact on a country's economic growth, some have harmful effects on economy, like aging of population.

This paper is divided into five sections. The first section is concerned with the projections made by the PEW Research Centre, while the other four sections analyse the impact of the changes in demographic trends on Global Economy.

#### **OBJECTIVES AND RESEARCH METHODOLOGY**

The basic objective of this paper is to examine the impact of demographic transition on Global Economy. For this purpose, I am going to analyse the reports published by the PEW research Centre, and on the basis of their projections, I will try to make a projection of the World economy of 2050. The objectives of this paper are:

- 1. To find out whether population explosion is good or bad for a country's economic growth
- 2. To find out whether immigration is good or bad for a country's economic growth
- 3. To find out what effect does the ageing of population have on economic growth
- 4. To examine the impact of demographic transition on World Economy

This paper is descriptive in nature, it is a kind of review paper. I am here just analysing the reports and projections made by a research centre, PEW, and on the basis of those reports, I have tried to analyse here the impact of these projections on Global Economy.

#### **PEW RESEARCH CENTRE REPORT**

Some shocking statistics have recently been released by the PEW Research Centre, about the future of World's religions. The report explored "the projected changes in the size and geographic distributions and percentage share of eight major religious groups - Christians, Muslims, Hindus, Buddhists, Jews, the unaffiliated, folk religions as an umbrella category and all other religions as a final umbrella category". According to their report, by the year 2050, Christianity will be surpassed by Islam as the world's largest religious group. By 2050, India will become world's largest Muslim population, surpassing Indonesia, according to this new study. On the other hand, the Christian population in Indonesia, which is the World's largest Muslim populated country, will surpass its Muslim population. As par the reports published by Pew research centre, "over the next four decades, Christians will remain the largest religious group, but Islam will grow faster than any of the major religions". According to their reports, "Because Muslims in Indonesia are having fewer children, India is expected to pass Indonesia and become the country with the world's largest Muslim population." These are all predictions, but if these predictions come true, then the world is going to change significantly in a number of different ways, as this change in ratio will definitely affect a change in the World order. If the current trend continues, then the people of the world are soon going to witness something that has never happened in History, Indonesia, which is the World's largest Muslim populated country, will be turning to Christianity, while, India, which is the home to the largest population of Hindus, will, by 2050, be the home to World's largest Muslim population. The population statistics of all the countries are going to change drastically in the coming few decades, which definitely have a large number of reasons, but at the same time, this change will result in a number of consequences, which will also affect the World order, for good or for bad, that we don't know.

For the time being, let us just put aside the futuristic predictions, and concentrate on the current scenario. At present, according to the 2011 Census reports of India, 17.22 crore people are Muslim among its 121 crore population. The Muslim population growth rate in India is 24.6%, which is the highest growth rate among the other religious groups in India. This is due to the fact that Muslims have the highest fertility rate, an average of 3.8 children per couple, which is 2.4 in the case of the Hindus. On the other hand, in Indonesia, Christianity, which constitutes the second largest population, will soon surpass Islam as the largest religious group in that country. This is due to mass conversion that is taking place in the country at present. Every year approximately 2 million people are converting to Christianity in Indonesia. According to the statistics, if the growth of Christianity continues at its current rate, by 2035, Indonesia will cease to be a Muslim populated country. This is an alarming situation, as the people of the world's largest Muslim populated country, are abandoning Islam and embracing Christianity. There are people in India who have very limited access to Islamic knowledge, the main exposure to Islam is specified by its sermons, which on many occasions they do not understand and are not able to relate the teachings to their daily life. The Christian missionaries across Indonesia are taking advantage of the situation. The case of India or other South-East Asian Countries is different from Indonesia, but this ratio change has affected the world order, in a number of different ways. . According to the reports of the PEW Research Centre, if the current trends continue, then "many events such as scientific discoveries, armed conflicts, social movements, political upheavals, natural disasters and changing economic conditions can shift demographic trends in unforeseen ways".

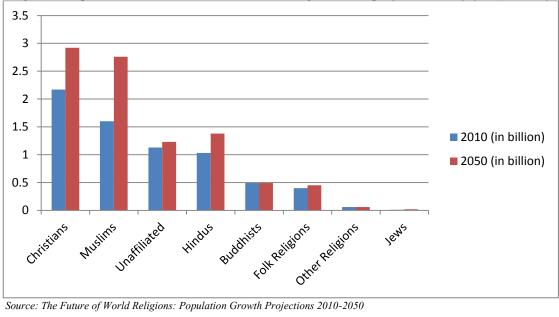


Figure:1 Population Growth rate in terms of Religious Groups (2010-2050) (Projections)

Source: The Future of World Religions: Population Growth Projections 2010-2050

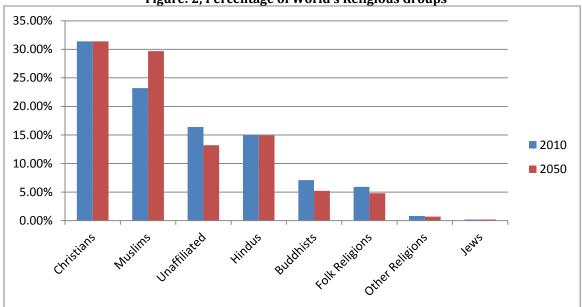
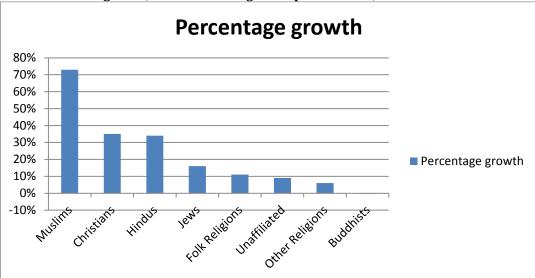
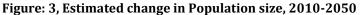


Figure: 2, Percentage of World's Religious Groups

Source: The Future of World Religions: Population Growth Projections 2010-2050

It is clear from the two graphs that the population growth rate is the highest among Christians and Muslims, while other religious groups grow in a slower pace. If the current trends continue, by the year 2050, Christians and Muslims will make up nearly equal shares of the World's population. And by the year 2070, Islam will be the World's religious group, according to the projections of the PEW Research Centre.





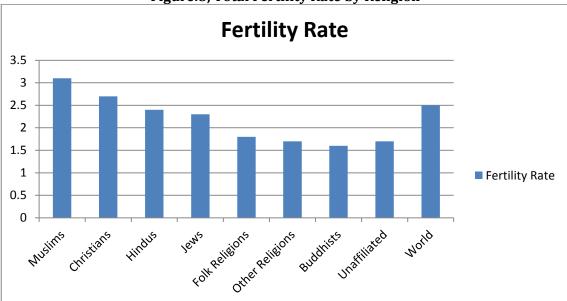
Source: The Future of World Religions: Population Growth Projections 2010-2050The above mentioned data clearly shows thatworld, as their fertility rate is the highest amongIslam is the fastest growing religious group in theother religious groups.

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Religious Group	2010 Population	Percentage of World Population in 2010	Projected 2050 Population	Percentage of World Population in 2050	Population Growth 2010- 2050
Christians	2,168,330,000	31.4%	2,918,070,000	31.4%	749,740,000
Muslims	1,599,700,000	23.2%	2,761,480,000	29.7%	1,161,780,000
Unaffiliated	1,131,150,000	16.4%	1,230,340,000	13.2%	99,190,000
Hindus	1,032,210,000	15.0%	1,384,360,000	14.9%	352,140,000
Buddhists	487,760,000	7.1%	486,270,000	5.2%	-1,490,000
Folk Religions	404,690,000	5.9%	449,140,000	4.8%	44,450,000
Other Religions	58,150,000	0.8%	61,450,000	0.7%	3,300,000
Jews	13,860,000	0.2%	16,090,000	0.2%	2,230,000
Total	6,895,850,000	100%	9,307,190,000	100%	2,411,340,000

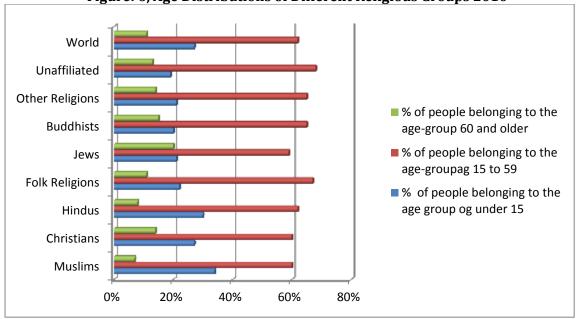
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Source: The Future of World Religions: Population Growth Projections 2010-2050



#### Figure:5, Total Fertility Rate by Religion

Source: The Future of World Religions: Population Growth Projections 2010-2050



#### Figure: 6, Age Distributions of Different Religious Groups 2010

Source: The Future of World Religions: Population Growth Projections 2010-2050

There are a number of projections made of the future population, but this report is the first formal demographic projections based on data collected on the basis of age, fertility rate, death rate, migration and religious conversions of the people of all over the world.

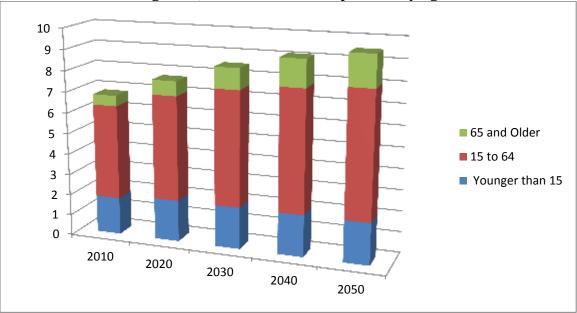


Figure: 7, Estimated Global Population by Age

Source: The Future of World Religions: Population Growth Projections 2010-2050

On the basis of the reports published by the PEW Research Centre and these graphs, the following projection could be formed:

- 1. By 2050, the Global Population will increase, approximately by 38%.
- 2. By the year 2050, the majority of the people in most of the Developed countries will be older than 50. "The number of people 65 and older is projected to triple by mid-century, from 531 million in 2010 to 1.5 billion in 2050."
- 3. Due to migration, US population will grow by 89 million. Not only in US, but immigration rate is increasing in most of the Developed Countries.
- 4. Due to high fertility rate, population will grow rapidly in the Developing and poor countries. By 2050, US will be the third most populated country in the world, and India will surpass China as the most populated country in the world.

Now, I am going to discuss the effect of these projections on economy.

#### POPULATION EXPLOSION AND ITS IMPACT ON GLOBAL ECONOMY

For at least a few decades the economists of the world believed that population growth is neither intrinsically good nor intrinsically bad for economic growth. One important point that should be mentioned here is that one society becomes fairly wealthy; it undergoes what is called demographic transition. So when a country is rich or growing in wealth, then population growth seems to be a problem that takes care of itself. Thus population growth is not a problem for economic growth of a country, rather population growth contributes or adds to its economy. The actual problems of population explosion are –

- 1. Crowding
- 2. Increasing cost for food production
- 3. Pollution

Despite these above mentioned facts, it is also true that there are significant benefits of having a higher population, such as:

- 1. More Innovators
- 2. Larger Market to support more innovators
- 3. Economies of scale
- 4. Easier to fund and support infrastructure
- 5. While thinking about the benefits of higher population, we should not forget Price theory and property rights, that is the excellent way in which higher population put pressure on natural resources, but in turn the prices of those resources go up that encourages conservation but also encourages people to look for more supply or other substitutes.

Besides these facts, it should also be mentioned here, that population growth does not have a positive impact on the economic growth of the developing countries. For example, India, which is a developing country and where the population is growing rapidly since 1951, does not have a booming economy and the standard of living of most of the people is not high. In case of other developing countries, like Pakistan, Bangladesh, population explosion is an issue that obstructs and hinders their economic growth. But it is also a fact that population explosion obstructing economic growth is an Asian problem, in other developing countries, like the countries of Africa and Latin America, population explosion is not a serious issue, neither has it obstructed the economic growth of those countries.

## AGEING OF POPULATION AND ITS IMPACT ON ECONOMY

Because of magnificent revolution of Science and Technology, the average age of people has increased and people are living longer than ever before. Life expectancy is steadily rising for nearly a 100 years, today it's 76 for men and 81 for women. This is happening in each and every country of this World. In addition, the birth rate is falling in most of the countries, except for the Muslim populated countries, as their fertility rate is the highest among all religious groups. As a result, in the coming few decades, the proportion of retired and elderly people will increase, and at the same time, the proportion of people of working age will fall. By 2060, there will only be two workers for every person of 65 or over, half as many as today. These changes will have profound consequences for our society, particularly, it will affect pensions and health care. Public expenditure on health and long term care is expected to rise 2% by 2050. At the same time, there will be fewer workers paying taxes, an increasing demand on public expenditures.

According to the reports of World Health Organization (WHO) and Pan American Health Organization, the principle challenges that the Developed and Developing Countries face because of the fast aging of population are:

- 1. "strains on pension and social security systems;
- 2. increasing demand for health care;
- 3. bigger need for trained-health workforce in gerontology;
- 4. increasing demand for long-term care, particularly in dealing with dementia; and
- 5. the raising of pervasive ageism that denies older people the rights and opportunities available for other adults."

Some other consequences of an aging population are:

1. "Increase in the dependency ratio. If the retirement age remains fixed, and the life expectancy increases, there will be

relatively more people claiming pension benefits and less people working and paying income taxes. The fear is that it will require high tax rates on the current, shrinking workforce."

- 2. "Increased government spending on health care and pensions. Also, those in retirement tend to pay lower income taxes because they are not working. This combination of higher spending commitments and lower tax revenue is a source of concern for Western governments - especially those with existing debt issues and unfunded pension schemes."
- 3. 3. "Those in work may have to pay higher taxes. This could create disincentives to work and disincentives for firms to invest, therefore there could be a fall in productivity and
- 4. growth."
- 5. "Shortage of workers. An ageing population could lead to a shortage of workers and hence push up wages causing wage inflation. Alternatively, firms may have to respond by encouraging more people to enter the workforce, through offering flexible working practices."
- 6. "Changing sectors within the economy. An increase in the numbers of retired people will create a bigger market for goods and services linked to older people (e.g. retirement homes)"
- 7. "Higher savings for pensions may reduce capital investment. If society is putting a higher % of income into pension funds, it could reduce the amount of savings available for more productive investment, leading to lower rates of economic growth."

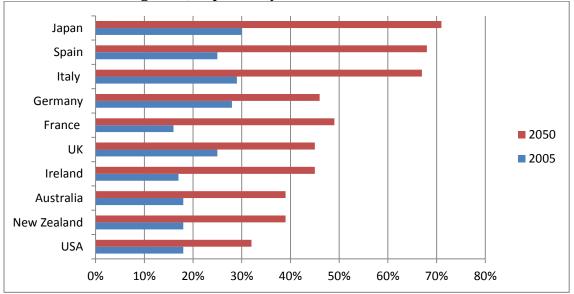


Figure: 8, Dependency ratio of different countries:

The above table shows that the dependency rate is increasing in an alarming rate in these developed countries.

### MIGRATION AND ITS IMPACT ON ECONOMY

The rate of immigration is increasing in US, UK, Europe and other developed countries of the World. Migration has profound social and economic impacts. It's true that migration causes a number of problems for Developed countries, but it's also a fact that migration is good for economic growth; it has a positive impact on economy. Actually without immigrants, economies cannot survive. According to statistics, if only 5% of the population in poor countries immigrate to richer countries, Global incomes will rise by four to nine trillion dollars. This is possible because when the workers will be allowed to move to countries with more economic opportunities, they are able to produce more wealth with the same skills by orders of magnitude.

If we analyse the impact of immigration on Global economy country wise, we will see that Ireland, which is at present the fastest growing European union economy, has liberal laws for immigration. Ireland has immigrants coming from Africa, South Asia, South-East Europe, Eastern Europe, and the country grants political rights to immigrants, like voting, joining the police force etc. Spain, where immigrants mainly come from North America and Latin America, has a booming economy. They have huge construction industries, large amount of minimum wage agricultural and service jobs, and thus have one of the leading EU Economies as of 2015. It has become possible because Spain has lean immigration laws. Israel, which also has an open door immigration policy, has healthy economies and a growing GDP. The example of these countries illustrates or proves the

point that immigration is beneficial for Economic growth.

We should also take a look at what effect does immigration has on the American Economy. US is home to World's 20% immigrants. Immigrants create jobs for Americans; they hold businesses in this state. According to census reports published by the US Government, in this country, immigrants represent 33% of the engineers, 27% of Mathematicians, Statisticians and Computer Scientists and 24% of Physical Scientists. Thus immigration is beneficial for Economic growth.

#### CONCLUSION

This paper is basically concerned with the effect of Demographic change on Global Economy. This paper's prime objective is to analyse the impact of demographic transition or population change on World Economy, to examine whether population explosion, ageing of population and migration add to a country's economic growth or slower it. For this purpose, I have analysed the reports published by the PEW Research Centre, and its projections of the world in 2050. These issues are topics and subjects of much debate. This paper empirically claims that whereas population explosion and migration adds to a country's economic growth, ageing of population has negative impact on economic growth of a country. The population of this world is changing rapidly. In the coming decades the demography of this world is going to change drastically, and as a result, it will profoundly affect the Global economy. Through this paper, I have tried to make a projection of the World Economy of 2050. The projections of PEW Research Centre have posed some challenges for World Economy, and this is the high time to take major decisions. An analysis of these issues will help countries to make possible changes to its

economic policies. This is what I have tried to do in this paper.

#### REFERENCES

- "The Future of World Religions: Population Growth Projections, 2010-2050", PEW Research Centre Report
- "Impacts of population growth, economic development, and technical change on global food production and consumption", Uwe A. Schneidera, , , Petr Havlíkb, Erwin Schmidc, Hugo Valinb, Aline Mosnierb, c, Michael Obersteinerb, Hannes Böttcherb, Rastislav Skalskýd, Juraj BalkoviČd, Timm Sauera, Steffen Fritzb

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d Soil Science and Conservation Research Institute, Bratislava, Slovakia

- 3. "Population Growth and Economic Development of a Country", By Supriya Guru
- 4. "Effects of Population Growth on the Economic Development of Developing Countries", a research article published by Richard A. Easterlin, Department of Economics, and Research Associate, Population Studies Center, University of Pennsylvania
- "The Impact of Population Growth on Economic Development in Pakistan", a research paper published in the Middle-East Journal of Scientific Research 18 (4): 483-491, 2013, by Sher Ali, Amjad Ali and Amjad Amin
- 6. "Impact of India's Population Growth on Economic Development", a research article published by Shubhi Agarwal.
- "The Effects of Population Growth on Economic Performances in China and India", a research paper published by Brandon Lozeau, in Brussels Journal of International Studies
- 8. "The Impact of an Ageing Population on the Economy", written by Tejvan Pettinger
- "The challenges of population ageing worldwide", a report published by WHO and Pan American Health Organization.
- "The Economic Consequences of Ageing Population: A Comparison of The EU, US and JAPAN", by K. M C Morrow & W. Roeger
- "Economic Growth and the Demographic Transition", by David E. Bloom, David Canning, Jaypee Sevilla, NBER Working Paper No. 8685, Issued in December 2001
- 12. "The Demographic Transition And The Emergence of Sustained Economic Growth", by Oded Galor, Journal of the European Economic Association
- 13. "The Demographic Transition: Stages, Patterns, and Economic Implications", by Jean-Claude Chesnais
- 14. "The Demographic Dividend: A New Perspective on the Economic Consequences of Population Change", a

book by David Bloom, David Canning, Jaypee Sevilla

- 15. "The demographic transition: causes and consequences", by Oded Galor
- 16. "Demographic Transition and Demographic Dividends in Developed and Developing Countries", by Andrew Mason, Department of Economics, University of Hawaii at Manoa and Population and Health Studies, East-West Center
- "Economic and Demographic Change: A Synthesis of Models, Findings, and Perspectives", by Allen C. Kelley, Duke University - Department of Economics, Robert M. Schmidt, University of Richmond, Duke Economics Working Paper No. 99-01
- "Introduction: The Landscape of Demographic Transition and Its Aftermath", by Ronald D. Leel andDavid S. Reher, Population and Development Review, Volume 37, Issue Supplement s1, pages 1– 7, January 2011
- "Demographic Transition, Income Distribution, and Economic Growth", by Momi Dahan, Daniel Tsiddon, Article, Journal of Economic Growth, March 1998, Volume 3, Issue 1.
- "Demographic Change and Economic Growth in Asia", by David E. Bloom, David Canning, and Pia N. Malaney, CID Working Paper No. 15 May 1999.