

Chapter 4

**Scenarios for the Global Economy
and Implications for Migration**

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Introduction

The objective of this chapter is to use scenario planning techniques to:

- Explore how the global economic, political, technological, environmental and social outlook might develop out to 2030
- Assess the implications for migration from poorer to richer nations, and
- Examine the particular policy challenges raised for OECD countries.

Five scenarios are presented. These were created for and then elaborated at a focus group discussion with migration experts organised by the OECD/IFP secretariat in July 2008. The scenarios were subsequently developed further based on the focus group input. They were then reviewed and discussed at an OECD/IFP expert workshop in December 2008 and refined as a result of those discussions. A fuller description of the scenario development process is set out in Annex 4.A1.

The chapter is structured into five main sections and five key annexes:

This section, “Introduction”, presents the rationale for use of a scenario planning approach and outlines the methodology adopted.

The second section, “The underlying patterns of change”, sets out nine critical underlying patterns of global change which we believe could have the greatest influence on how the scenarios develop.

The third section, “The Five Scenarios”, introduces the five scenarios and provides a summary of their key features.

The fourth section, “Scenario narratives and implications”, provides a more detailed discussion of each scenario and the implications for migration and migration policy.

The fifth and last section, “Conclusion : Core impacts on migration flows”, draws conclusions – examining the migration implications of the scenarios for the main sending regions, assesses the overall strength of the “Pull Factors” and suggests possible net migration impacts for the OECD countries under each scenario.

Annex 4.A1 provides a more detailed description of the methodology for scenario construction.

Annex 4.A2 sets out a detailed description of the impact of key trends and forces each scenario.

Annex 4.A3 explores the possible impact of the critical Pull Factors under each scenario.

Annex 4.A4 describes the possible impact of key Push Factors for each scenario.

Annex 4.A5 examines possible wild cards (low probability, high impact events) and their implications for migration and migration policy.

Annex 4.A6 shows the range of underlying factors that have been considered under each of the Pull and Push factor headings.

Why use a scenario planning approach?

Why adopt a scenarios-based approach? The current economic downturn has highlighted how rapidly our expectations about the likely or “preferred” future can be disrupted. Indeed it is now recognised as positively dangerous for governments and businesses to rely on a single plan and underlying set of assumptions about how even the short term future may play out. We need to prepare for a range of possible futures. The further out we try to look, the greater the uncertainty becomes. Scenarios are a tool for helping us order our perceptions and address uncertainty.

There are a number of economic, geo-political, social, technological and environmental factors which will have a bearing on the outlook for 2030. With inherent uncertainties in each of these areas, it is impossible and inappropriate to envision or predict a single view of what the world in 2030 might look like. For policy makers, it is far more useful to think about the underlying uncertainties and key drivers of change and to explore how they might combine to create a range of different possible “scenarios” of what the world could look like in 2030. These insights can then be used to test and challenge current thinking and to develop a robust range of policy options to address the different possible scenarios that may unfold.

Scenario planning methodology

Scenarios are a tool that enable you to create a series of plausible and feasible “stories” about alternative possible futures that could play out – they are not forecasts, projections or predictions. Assessments of plausibility may vary between observers – the key is to consider a range of possible futures even if some don’t seem as likely from where we stand today. In order to build scenarios, we identify a range of driving forces and parameters which form part of each scenario. In the approach adopted for this study, known as the driving force model, the start point for scenario building is to identify two key forces which are expected to have the greatest bearing on how the scenarios will play out.

Hence, in terms of global economic development and international migration, the two forces that are expected to have the most significant bearing on the scenarios are the level of growth in the OECD economies and the level of

social development in non-OECD states. A breakdown of the key steps in the scenario development process adopted is presented in Annex 4.A1.

For the OECD/IFP Future of International Migration to OECD Countries Project we have looked at how the driving forces could combine to create five different scenarios. These scenarios and their potential impacts are summarised in section three and described in detail in section four. Also summarised below in section two are key patterns of change evident in the world today which will have a bearing on how the global economy could develop in the period to 2030.

To elaborate on the scenarios, we have identified four sets of parameters:

- A set of descriptors of the baseline scenarios – these are summarised below and presented in full in Annex 4.A2
- The leading “Pull Factors” that would encourage people to go to a particular country – (Annex 4.A3).
- The leading “Push Factors” that might drive people to leave their home country (Annex 4.A4).
- Wildcards – low probability, high impact events (Annex 4.A5).

The following key parameters were considered for the baseline scenarios:

- Geopolitical Outlook
- Global Economy and Trade – GDP Growth and GDP Per Capita
- Socio-Economic Development
- Resources / Commodities
- Environmental Concerns
- Technology
- Infrastructure
- Regional Co-operation and International Aid

The underlying patterns of change

There are nine key patterns of change which we believe will have a strong bearing on how the scenarios will play out:

- Demographic shifts
- Changing economic landscape
- Political complexity
- Expanding business agenda
- Science led innovation and growth

- An ageing society
- Talent shortages
- Global internet expansion
- Rising environmental risks

These are described below.

Demographic shifts

The United Nations “World Population Prospects 2008 Revision” (2009) forecasts that we will see dramatic growth of population globally from around 6.8 billion in 2009 to 9.2 billion by 2050. We are also experiencing a rapidly changing ethnic mix of the population – particularly in Europe and the U.S. – for example, *The Brussels Journal*, citing the *Daily Telegraph* (2007), reports that there is an expectation that an average of up to 2.2 million people could migrate from poor to rich countries every year through to 2050. In the U.S., the World Future Society forecast that Hispanics could be one-fourth of the population within ten years (Cetron and Davies, 2008).

Changing economic landscape

The credit crisis and resulting global economic downturn which started in 2008 highlight how integrated the global economy is and highlight how quickly shockwaves can spread across the system. Indeed many commentators suggest that it is the more developed economies such as the US, UK and Germany that could feel the greatest impact and take the longest to recover. Despite the downturn, there is still a strong expectation that increasing economic power will be exerted by the BRIC economies (Brazil, Russia, India and China). Current forecasts from the OECD suggest that China’s GDP could overtake that of the U.S. as early as 2015 (Maddison, 2008).

A number of other emerging nations have been developing stronger economies – creating new opportunities and potential threats for OECD based enterprises. How they fare during the downturn could determine the extent to which their promise is fulfilled in the period to 2030. Particular attention has been focused on what Goldman Sachs described in 2005 as the “Next-11” high potential economies (O’Neil *et al.*, 2005). These are countries which could follow the BRICs to become top 20 economies as early as 2025. The list includes Bangladesh, Egypt, Indonesia, Iran, Mexico, Nigeria, Pakistan, the Philippines, South Korea, Turkey and Vietnam. The key selection criteria were macroeconomic stability, political maturity, openness of trade and investment policies, and the quality of education. These economies have the potential to be both a source and destination for migrants over the period to 2030.

For many of the Less Developed Countries (LDCs), economic advancement could actually lead to higher migrant outflows initially as rising incomes and higher educational achievement could help citizens seek out better opportunities elsewhere. For most nations though, assuming some degree of political and social stability, there comes a point when wage differentials begin to erode between recipient and sending countries and the rate of economic migration begins to slow. Discussions at the July 2008 focus group put this figure at between 30% to 50%.

Rising political complexity

The global political agenda is becoming more inter-connected and complex. At the same time, there are more actors on the global stage wanting to have a political say. Hence the voices of Europe and the U.S. are no longer as loud and as distinct in the international arena. China and India are increasingly becoming “spokesnations” for the developing world and fault lines are beginning to appear in institutions like the United Nations as the old and new worlds collide on a range of topics from trade rules to security issues and environmental policy. There is a growing dialogue on the need for changes in the institutional framework to better represent the developing world.

At the same time, there is clearly potential for strengthening and expansion of the role of existing political groupings such as ASEAN (Association of Southeast Asian Nations), the African Union, USAN (Union of South American Nations), the OAS (Organization of American States), the GCC (Gulf Co-operation Council), the SCO (Shanghai Cooperation Organization) and the CIS (Commonwealth of Independent States). In addition, new entities could emerge which better reflect the needs and aspirations of developing countries and LDCs who feel under-represented in the current set-up of international institutions. Hence, the global institutional landscape could have changed quite significantly by 2030.

In the U.S. the expectation is that the political agenda will become increasingly crowded and complex with a range of existing and new challenges. These include tough choices around the level of engagement and funding for the campaigns in Iraq and Afghanistan and how to address rising tensions in and with Iran and Pakistan. Domestic economic choices will also require tough political trade-offs in deciding how to fund them – for example, the American Society for Civil Engineers “2005 Report Card for America’s Infrastructure” estimates that USD 1.6 trillion is required for infrastructure improvement over the next five years. At the same time, healthcare costs are projected by the American Congressional Budget Office to reach 25% of GDP by 2025 and 49% of GDP by 2082. At the time of writing, the potential scale of the economic crisis also continues to rise – with the International Monetary Fund April 2009 Global Financial Stability Report now estimating total losses

on loans and securities of up to USD 2.7 trillion for the USA and around USD 4.1 trillion globally.

Expanding business agenda

Businesses in many parts of the OECD are facing tougher domestic conditions as the global downturn spreads. European and U.S. businesses can no longer assume leadership in every sector. For many businesses in the OECD, domestic slowdowns could become an increasing incentive to focus on emerging markets and LDCs and take a longer term focus. At the same time the pressure is on business to put an increasing focus on work-life balance and pay much closer attention to a broader responsibility to their employees around the globe – the triple bottom line of profit, people and the planet. This could help improve the economic prospects, employment opportunities and social conditions in developing markets and reduce migratory pressures.

Science led innovation and growth

Science and technology are “going mainstream” and becoming increasingly critical to innovation in business products and processes. Fields like nanotechnology, green technology and biotechnology all hold the promise of becoming trillion dollar sectors. The rate at which research and development globalizes and the pace of technological diffusion will be critical to changing the prospects for growth and development in non-OECD nations.

An ageing society

The world’s aging population will be a key demographic story of the 21st century. The United Nations “World Population Ageing Report 2007”, highlights that since 1945 the life expectancy of citizens living in the wealthier countries around the world has increased by one year in every five. Expanded access to basic healthcare, nutrition, and safe water supplies has resulted in an increase in global life expectancy. The American Academy of Anti-Aging Medicine (2005) believes that average life expectancy in the US will reach 100 by 2029.

Ageing has wide-ranging implications related to wealth distribution, pensions, social services, healthcare, financial services, consumer spending, industry sector make up, labor markets and political policies. A UN report, *World Population Ageing* (2002/2007 update), indicates those aged over 60 represented 8% of the global population in 1950, rising to 11% in 2007 and are forecast to reach 22% by 2050 (O’Brien, 2007). The report highlights that by 2050, those aged 60 and over will comprise one-third of the population in developed regions.

Ageing of the developed world will have major implications for the shrinkage of the working population and the resulting demand for migrant labour. The UN study suggests the global ratio of workers aged between 15 and 64 to older persons could decrease from 12 to 1 in 1950 to 4 to 1 by 2050. Asia and Europe are expected to age faster than other regions. By 2015 the EU is projected to have 26% more people in the 50 to 74 age bracket and one-third more aged over 65 than in 2007. This will be accompanied by a 16% decline in the 15 to 44 cohort. In the United States, the proportion of the population aged over 65 years is projected to increase from 12.4% in 2000 to 19.6% by 2030. Over the same time period, life expectancy in China is expected to reach 75, the Russian Federation 72 and India 71.

Talent shortages

With up to 70% of the valuation of public companies being based on their talent pool and intellectual property (Fleming, 2007), there is growing concern amongst employers in the developed world over the talent gap between demand and supply in almost every sector. Again the problems are most pronounced in the U.S. where the US Bureau of Labor Statistics *Employment outlook: 2006-16* reports that retirement of the baby boomer generation is taking around 77 million people out of the U.S. workforce. While 'Generation X has bought around 40 million into the workforce, Generation Y (born 1978-1995) that follows them is estimated at 77 million (Deloitte, 2005). At the same time, a 2005 US National Association of Manufacturers study found that 84% in U.S. manufacturing industry say they are not happy with the quality of school and high school education.

Global internet expansion

The rise of the global internet is accelerating the pace of technological diffusion and making it easier for would be migrants to understand the opportunities and challenges in potential recipient countries. Internet World Statistics estimates suggest there were around 1.6 billion total users as at 31 March 2009. Additionally, rapid growth in popularity led to estimates of 691 million unique social network visitors in November 2008 (Schonfeld, 2008). The web increasingly allows people to service global opportunities while staying in their home countries and research global migration opportunities. The online channel and mobile devices will also become critical tools in distributing educational content in an affordable manner.

Rising environmental risks

The challenge of managing natural resources and reducing our environmental footprint will be key to reducing the number of environmental refugees. We know that current consumption rates are already exceeding the planet's capacity – if the developing world wanted to consume at the same rate as Europe, we would need three planets. Energy demand is far exceeding our ability to supply it and global requirements are projected by the US Energy Information Administration to increase by 50% from 2005 to 2030.

The five scenarios

The analysis of the key change drivers identified in section 2 above suggested five plausible scenarios for the global economy for the period to 2030. These are shown in Figure 4.1 and are summarised below.

Clearly the global economic downturn taking place at the time of writing will have a significant bearing on the near term economic outlook. These shorter term scenarios will in turn influence the possible economic development pathways to 2030. However, to posit a range of scenarios for the near term and then define a set of scenarios from each of those possible starting points would have led to an unmanageable number of scenarios to work with for the 2030 analysis. Hence, in constructing the scenarios, we have adopted an assumption that the global economy has fully recovered from the economic downturn by 2013 and is back to the levels of growth witnessed in 2007-08. The five scenarios are summarised as follows:

Scenario 1 – Progress for All – growth and development have delivered advancement in social welfare across the planet. There is strong demand and intense competition for skilled and unskilled labour across both the OECD and many developing economies and a high circular flow of migrants results – particularly amongst skilled labour.

Scenario 2 – OECD Long Boom – high levels of innovation-fuelled growth in OECD countries are not matched by the BRIC economies – who are beset by internal challenges. However, many other developing nations achieve advancement. There is strong demand for skilled and unskilled migrants from the OECD but there is less competition for talent from non-OECD nations.

Scenario 3 – Uneven Progress – While OECD and BRIC countries continue to develop, the gap with other emerging nations and LDCs grows. There is intense competition between OECD nations and the BRIC economies – particularly for skilled migrants.

Scenario 4 – Globalisation Falters – A series of global economic slow-downs dramatically reduce demand for all but the most specialist of skilled labour.

Scenario 5 – Decoupled Destinies – There is an economic decoupling as OECD nations struggle with the increasing cost of recovery from a series of punishing downturns. The developing nations however are propelled by an influx of long term investment capital. While there is low demand even for specialist skills in the OECD, opportunity improves both domestically and in other developing nations across the non-OECD universe.

A short overview of the key features of each scenario is presented in Table 4.1 below. A more detailed description is presented in Annex 4.A2. In the interest of clarity and brevity, the analysis is presented at a summarised level rather than looking at a country by country picture. The scenarios can be viewed as variations on scenario one – “Progress for All” – as this could be considered the “preferred future” for developed and developing economies alike.

As can be seen, under scenario one, the broad outlook is of continued economic progress and improving political and social stability – particularly in LDCs. Widespread investment in infrastructure is enabling higher levels of diffusion of technological innovations that can help improve the quality of life. Initially, improving stability, domestic growth and rising education levels in emerging economies and LDCs are expected to actually drive higher levels of out-migration. In these circumstances, more citizens have the financial capacity to leave in search of higher levels of opportunity. In the longer term, migration levels could fall and returnees increase as the levels of income disparity reduce between sending and recipient countries to within 30-50%.

Figure 4.1. The five scenarios

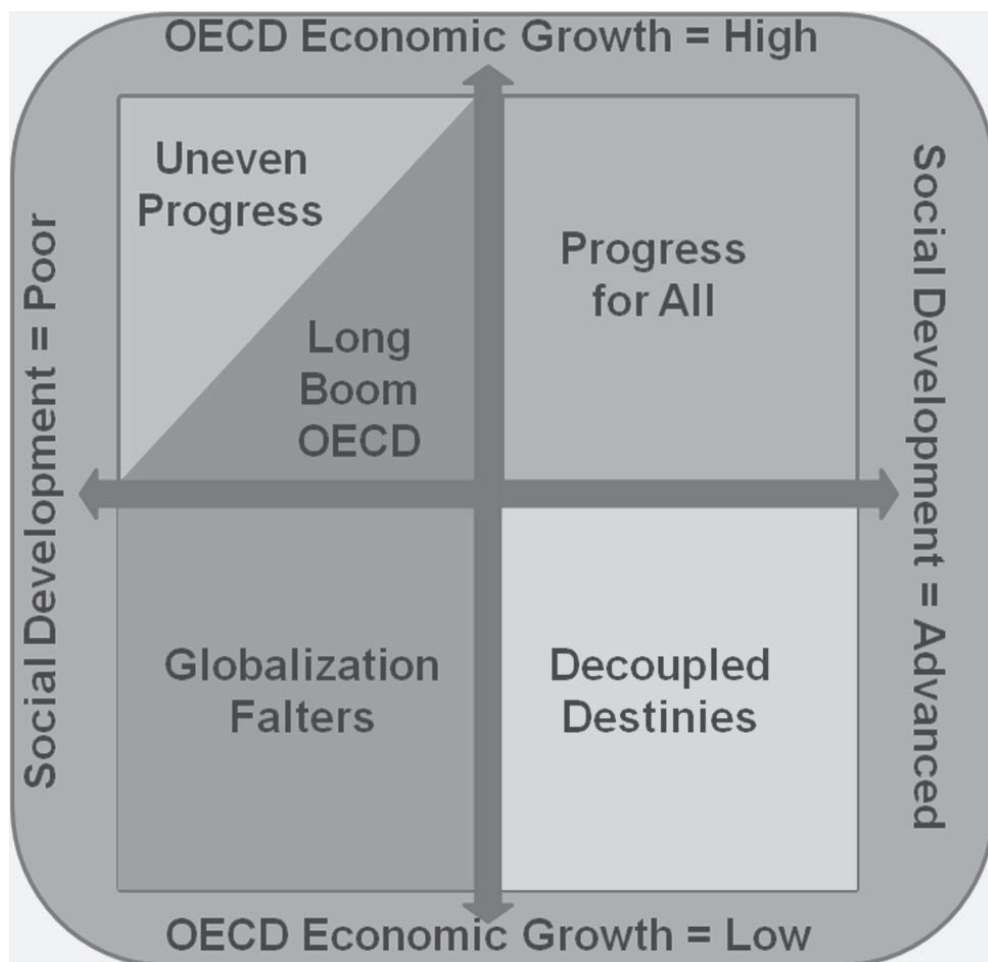


Table 4.1. The five baseline scenarios

Scenario Overview	Scenario 1 "Progress for All"	Scenario 2 "OECD Long Boom"	Scenario 3 "Uneven Progress"	Scenario 4 "Globalisation Falterers"	Scenario 5 "Decoupled Destinies"
Geopolitical Outlook	<ul style="list-style-type: none"> Stable geo-political outlook – driven by priority of global economic growth Reducing internal conflict in most LDCs enables greater economic progress 	<ul style="list-style-type: none"> Relatively benign context for international co-operation although tensions rising between OECD and BRIC nations Targeted assistance from OECD countries to help selected emerging economies and LDCs 	<ul style="list-style-type: none"> BRICs and some Middle Eastern states play out their dominance against more vulnerable states Developed nations more interventionist to secure natural resources and prevent domestic and regional conflicts 	<ul style="list-style-type: none"> Deterioration of international cooperation between developed and developing nations Increasing tensions and conflicts between poorer nations over resources such as water 	<ul style="list-style-type: none"> New political institutions evolve to focus on the needs of developing nations and LDC's – potentially marginalising UN, World Bank, IMF and OECD Greater cooperation between emerging nations and LDCs
Global Economy and Trade	<ul style="list-style-type: none"> Average annual growth rates (2000 PPP USD): <ul style="list-style-type: none"> World: 4-4.5% OECD: 2.5% Non-OECD: 5-6% China: 7.5% India: 6% Africa/ME/LA: 3.5-4.5% Average annual per capita income growth: OECD – 2%; non-OECD – 5%. Rapid integration of world trade 	<ul style="list-style-type: none"> Average annual growth rates (2000 PPP USD): <ul style="list-style-type: none"> World: 3.5-4.0% OECD: 2.5%+ Non-OECD: 4-5% China: 3-5% India: 2-4% Africa/ME/LA: 3.5-4.5% Average annual per capita income growth: over 2% for OECD countries; non-OECD – 3-4%. Increasing integration of non-BRICs into world trade, BRICs internally focused 	<ul style="list-style-type: none"> Average annual growth rates (2000 PPP USD): <ul style="list-style-type: none"> World: 4-4.5% OECD: 2-2.5% Non-OECD: 5-6% China: 8%+ India: 6%+ Africa/ME/LA: 2.5-3.5% Average annual per capita income growth: OECD – 2%; non-OECD – 5% Strong integration of OECD with key developing nation partners 	<ul style="list-style-type: none"> Average annual growth rates (2000 PPP USD): <ul style="list-style-type: none"> World: 1.5-2.0% OECD: 0.5-1.5% Non-OECD: 2-4% China: 4-6% India: 3-5% Africa/ME/LA: 1.5-2.5% Average annual per capita income growth: OECD – 0.5-1.0%; non-OECD – 1-3% Trade, investment and aid flows slow significantly 	<ul style="list-style-type: none"> Average annual growth rates (2000 PPP USD): <ul style="list-style-type: none"> World: 3-4% OECD: 0.5-1.5% Non-OECD: 6-7% China: 8%+ India: 7%+ Africa/ME/LA: 3.5-5.0%. Average annual per capita income growth: OECD – 1%; non-OECD – 5-6% Increasingly strong integration of emerging economies and LDCs

Table 4.1. The five baseline scenarios (continued)

Scenario Overview	Scenario 1 "Progress for All"	Scenario 2 "OECD Long Boom"	Scenario 3 "Uneven Progress"	Scenario 4 "Globalisation Falterers"	Scenario 5 "Decoupled Destinities"
Socio-Economic Development	<ul style="list-style-type: none"> Broad-based social progress across non-OECD regions Advancement of many LDCs actually accelerates migration push in the shorter term but helps erode wage inequalities in the longer term 	<ul style="list-style-type: none"> While the BRICs stall, LDCs continue to develop through strengthened ties with OECD 	<ul style="list-style-type: none"> Uneven progress towards higher living standards across non-OECD regions 	<ul style="list-style-type: none"> Increasingly sharp divisions between winners and losers 	<ul style="list-style-type: none"> Steady progress by BRICs, other emerging economies and many LDCs
Resources / Commodities	<ul style="list-style-type: none"> Innovations in alternative energy and food production keep price inflation under control 	<ul style="list-style-type: none"> Slowing BRIC growth reduces food and energy demand, innovation drives up supply 	<ul style="list-style-type: none"> Slowing demand growth and supply-side innovation keep price growth in check 	<ul style="list-style-type: none"> While demand growth decreases, pace of innovation slows and resource prices remain high 	<ul style="list-style-type: none"> Energy prices rise while agricultural innovation helps control food prices
Environmental concerns	<ul style="list-style-type: none"> Increasingly co-ordinated global progress on environmental protection and climate change reducing the environmental drivers of migration in many countries by 2030 	<ul style="list-style-type: none"> Most OECD states makes strong environmental progress, emerging economies and LDCs struggle to hit targets 	<ul style="list-style-type: none"> Many OECD countries progress according to plans – developing nations and LDCs increasingly fall behind global targets 	<ul style="list-style-type: none"> Increasing environmental degradation and adverse climatic effects as countries struggle to fund improvement 	<ul style="list-style-type: none"> Environmental degradation increases as rising food demand places increasing pressure on agricultural supply chain
Technology	<ul style="list-style-type: none"> Increased technological diffusion and take-up helps developing world advance 	<ul style="list-style-type: none"> Technological innovation accelerates development across many OECD countries – slower, uneven take-up for developing world. 	<ul style="list-style-type: none"> Most OECD states maintain pace of progress, emerging economies increase take up, LDCs continue to struggle 	<ul style="list-style-type: none"> Slowing growth and negative geo-politics reduce technological diffusion. 	<ul style="list-style-type: none"> Improvements in power distribution help accelerate technological diffusion across the developing world

Table 4.1. The five baseline scenarios (continued)

Scenario Overview	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falters”	Scenario 5 “Decoupled Destinies”
Infrastructure	<ul style="list-style-type: none"> Economic growth and aid drive spending on physical, educational and health infrastructures in emerging economies and LDC’s 	<ul style="list-style-type: none"> Emerging economies and LDC’s struggle to fund their burgeoning infrastructure requirements 	<ul style="list-style-type: none"> While the BRICs and many emerging economies increase infrastructure spending, LDCs make limited progress 	<ul style="list-style-type: none"> Significant slowdown in global infrastructure investment 	<ul style="list-style-type: none"> While infrastructure spend accelerates across non-OECD nations, OECD investment slows – further hampering recover and growth
Regional co-operation and international aid	<ul style="list-style-type: none"> Existing and new regional and pan-regional institutions flourish – encouraging political goodwill, global trade, aid flow and reduced corruption. 	<ul style="list-style-type: none"> Strong relations and alignment between OECD countries increases exertion of influence on non-OECD states in return for aid. Slowing BRIC / LDC collaboration. 	<ul style="list-style-type: none"> Greater integration among emerging nations: increased assertiveness towards the OECD and higher “targeted” aid flows. 	<ul style="list-style-type: none"> Global and regional institutions blunted, aid flows reduced and corruption goes unchecked in many LDCs. 	<ul style="list-style-type: none"> Increasing tensions between “old” and new world institutions. Less aid from OECD, higher flows from BRICs.

Scenario narratives and implications

In this section we look at the dynamics of each scenario in greater detail and examine the critical implications for migration and migration policy.

Scenario 1 – “Progress for all”

Overview

By 2030, the benefits of increased global economic integration and growth are benefitting most nations – even the Less Developed Countries (LDCs). There is strong integration of the global economy, a relatively benign political context and worldwide progress on tackling environmental risks. The EU has enlarged and strengthened as an institution. Strong regional institutions have also emerged in Asia, Africa, the Gulf States and Latin America. Institutional strength has helped to strengthen regional economies, enhance international trade and establish global agreements on the mobility of workers. The ageing of OECD populations, high economic growth and skill shortages across most sectors are key drivers of demand for inward migration. The emergence of regional growth poles encourages increased intra regional migration.

The continued globalization of corporations from both the developed and developing world has helped increased the competition for both skilled and unskilled labour in OECD and non-OECD countries. There is a strong circular flow – particularly of professionals and skilled labour between the OECD, BRICs and other developing nations. The attractions of migration are being countered by the increasing range of opportunities in people’s home countries – although the wealth and income gap with the OECD and BRICs remains high.

A key feature of the scenario is international co-operation which helps drive globalization, accelerates global trade for most regions and increases the flow of aid from OECD and BRIC countries to other emerging nations and LDCs. Although, the outlook for emerging nations and LDCs improves over the period to 2030, we are unlikely to see a change of “push” factors over the first 10 years.

4.1.2. Implications for migration and migration policy

The key features of this scenario for OECD countries are constant growth, high domestic employment rates, low fertility rates, an ageing population, increasing ratios of retirees to workers and increasing global competition for top talent. While the majority of migrants are expected to move to traditional powerhouses in the OECD or the BRICs, a significant minority, will migrate

to less traditional locales in the developing world – helping intellectual and technological diffusion along the way.

The highest levels of foreign born populations are expected in the richest counties *e.g.* the USA. Higher levels of domestic growth and rising incomes in regions such as Eastern Europe, the BRICs and North and Sub-Saharan Africa may reduce the inclination to migrate among higher skilled workers while also increasing the range of opportunities available to them globally. In regions such as Africa, intra-regional migration is expected to increase.

To help increase the overall talent supply, an increasing number of OECD educational institutions are expected to establish educational programmes and campuses in developing world locations. Environmental factors such as water shortages, soil degradation and flooding could drive up migration – particularly to neighbouring states. Technological diffusion such as increased penetration of mobile phones may increase circular migration as individuals can stay in contact with their national diaspora and move in line with emerging opportunities.

The key implications for OECD countries could include:

- High locally unmet demand for skilled and unskilled workers
- Pressure from employers to develop more immigrant friendly policies
- High migrant flows likely to countries with strong existing foreign born networks
- Reduced transaction costs where a large foreign born population exists already
- Growing concerns over “brain drain” of top talent from developing nations and LDC’s
- Increasingly intense competition for talent with developing nations
- Possible rise in resistance to immigration when it reaches a high threshold
- Countries with low foreign born population levels could become more popular with migrants if there is a backlash in countries with a high/higher rate.

From a policy perspective, the key challenge will be ensuring a strong flow of appropriate talent to maintain economic development whilst avoiding high levels of domestic resistance to in-migration. Measures to increase domestic fertility will need to be in place by 2010 to have any real impact on the working population by 2030 – hence the demand for inward migration is likely to grow. The European Union already has open borders for European workers and under this scenario, similar schemes could be adopted across

the bulk of the OECD as long-term growth and social and political reforms remove many barriers to integration. Critical challenges for policy makers will include:

- Demonstrating to their citizens the need for high in-migration and proving that appropriate monitoring policies and controls on migration are in place
- Determining the right balance between permanent and temporary migration requirements to address skills shortages
- Balancing migration with extension of retirement age to grow the working population
- investment to ensure the education, capability and productivity of migrants – possibly even in their own countries
- Addressing language and cultural integration difficulties to avoid social tensions
- Thinking through the second and third order effects of mass migration – such as how employment markets will be affected and the impact on local communities.

Scenario 2 – OECD “Long boom”

Overview

This scenario presents a view of perpetuation of a 20th century development model where richer countries continue to prosper while developing countries struggle to fulfil their potential. While the OECD countries have been fuelled to new levels of economic prosperity on the back of high investment in technological innovation, the BRIC countries have failed to maintain their stellar growth rates of the late 1990s and early 2000s. Internal barriers such as under-investment have held back BRIC progress, while other developing nations have been pulled along in the slipstream of OECD growth. Institutions such as the EU and OECD have grown and strengthened whilst across the developing world other regional groupings have failed to act as a coherent driver for growth and progress. The demand for in-migration remains high in the OECD, but there is less intense competition from the BRICs.

Implications for migration and migration policy

Given rising OECD growth, skills shortages and an ageing population, in-migration will be a key tool to ensure a steady flow of labour to fuel

continued progress. The key ramifications of uneven development across the OECD and BRIC economies could include:

- BRICs expected to be net exporters of migrants over the period to 2030
- A rising flow of students from the BRICs to OECD states
- Limited competition for top talent globally as sluggish emerging economies will struggle to retain / attract the very best
- An increasing growth gap between developed and developing nations
- Rising poverty levels in less developed nations
- Increasing informal / clandestine migration.

From a policy perspective, low OECD inflation rates relative to those in the developing world may also prove particularly attractive for nationals who have gone back to their emerging countries but are now struggling to achieve economic advancement. If skilled worker opportunities are limited in non-OECD states, higher levels of tertiary education and the presence of foreign educational institutions could act to accelerate and increase the “brain drain” to OECD states. This could further widen the gap between have and have-not nations. This also creates the possibility of “brain waste” in OECD countries if skilled migrants are underutilized.

The negative effects of low growth – *e.g.* political instability, poor governance, slow development and corruption could increase the desire of skilled and non-skilled alike to migrate to richer nations. In the longer term an increase in unregulated migration could create increased economic costs which reduce growth potential. Lower environmental protection funding from BRIC countries will increase risks and drive up both internal and external migration. This could be partially countered by the potential for greater aid funding from OECD states. Such aid could help to reduce environmental risks and improve clean water provision, sanitation and coastal protection in poorer at-risk nations and help reduce migratory pressures.

High levels of in-migration could drive up domestic tension in OECD states. There may be increasing restrictions on entry of non skilled workers as and when the OECD has topped up its workforces. What could follow is a tightening of border control and a surge in illegal migration. This could lead to tensions between OECD and non-OECD countries.

Increased growth should provide more resources to enable OECD countries to integrate, develop, and enhance foreign born populations. Conversely, failure to integrate effectively could lead to problems of political stability and social cohesion in the OECD.

Key policy challenges will include:

- Effective integration of foreign born populations to address the social cohesion issues in trying to achieve a harmonious “melting pot” society
- Striking the right balance between raising the domestic retirement age, increasing the level of permanent in-migration and temporary work permits to address peaks and troughs in domestic skills supply
- Addressing potentially greater health issues given the rise in the number of poor people globally who want to migrate to the richer nations
- Education and capability development of migrants to ensure a high economic contribution and low or zero net overall cost to the receiving country
- Tensions between countries may require the strengthening of border controls in OECD states which will act to raise tension. Increasing the numbers of refugees allowed in by OECD countries may also raise tensions.

Scenario 3 – Uneven progress

Overview

The OECD countries and BRICs make strong progress and achieve close economic and trade integration. The gap increases with many other developing countries and LDCs who cannot afford to invest as much in technological innovation, infrastructure, education and health. While there is strong competition for talent between OECD and BRIC nations, there is also a growing supply of skilled and unskilled would-be migrants.

The EU has proved an effective driver of growth and in Asia, the ASEAN and Gulf Cooperation Council regional groupings are becoming a coherent economic force. However, the progress of similar groupings in Africa and Latin America continue to falter. There are expected to be increased tensions between cores and peripheries and urban rural areas in developing nations that struggle to achieve advancement. Many of these states show a decreased ability to cope with environmental degradation, water shortages and food stress. All of these factors help drive outward migration.

The tension inherent in the wildcard situations is heightened in this scenario such as the potential for more pandemics in countries with limited funding available to implement effective controls. However, this might be mitigated by technological advancements such as health sector discoveries that produce low cost multiple disease vaccinations and low cost solutions that help the energy sector to moderate demand for oil. This scenario could see a rise in reverse migration trends to BRIC economies and migration may even decrease for some OECD countries.

4.3.1. Implications for migration and migration policy

High growth, skills shortages and an ageing population will mean OECD countries will need to target key skill groups for in-migration. Key implications for migration include:

- The BRICs will become power centres, intensifying global competition for top talent
- Skilled migrants may increasingly circulate between OECD and developing nations
- Growth in the BRICs and “dominant” Latin America countries will curb migration and increase domestic opportunities
- Uneven growth within the BRIC group could lead to outflows of rural/unskilled workers who are not successful in their home countries (rural to urban migration)
- Internal tensions in LDCs will increase refugees and illegal migration – many will seek to migrate to places with large numbers of co-ethnics
- Richer countries may feel more onus to accept refugees
- Skilled migrants may become more selective in picking their destination country (politics permitting)
- High volume migration may create language blocks in host countries.

From a policy perspective, declining fertility rates in OECD nations could increasingly be mimicked by the BRICs and emerging economies – leading to more intense competition for skilled workers. LDCs will maintain high fertility rates and see strong out-migration throughout the timeframe. Competition for top level candidates will increase between universities in OECD states and those in their host countries.

Tensions in larger OECD states with significant immigrant populations could lead to a diversification of migration flows toward smaller “dominant” countries – raising the issue of desire versus ability to migrate. Challenges will include recognition of foreign documents, the potential for inter-ethnic tensions and shocks in destination countries, health issues raised by diverse ethnic immigration groups and rising outflows of remittances to in the sending countries. Increasing migration to previously “closed” nations could also have positive effects – increasing diversity, innovation and entrepreneurship.

The BRICs may be able to cope better with environmental challenges and water stress but rural populations may suffer and seek to emigrate. We may see initiatives from cash strapped nations to “push” out those populations under water stress, creating tension and some outflow. Under such

circumstances OECD countries are unlikely to allow in large numbers of unskilled environmental migrants.

Given citizen concerns over an influx of poor migrants, acceptance of the need for in-migration may be limited until there is a realization that there is a high age dependency ratio and growing skills gap. The success or otherwise of host countries to establish an effective welfare system will have an impact on the flows of migrants. The key policy challenges thrown up by this scenario will be centred on the management of instabilities and uncertainties and will include:

- Recognising that some OECD countries may seek to maintain their relative power through a high rate of immigration to maintain or increase productivity
- Determining the level of service provision for asylum seekers and refugees and how to integrate them effectively
- Providing language training and integration support to help absorb successive “ethnic waves” of migration
- Adapting social security systems in order to speed the integration of low skilled immigrants
- Responding to pressure from highly educated populations in OECD countries for their governments to support poorer immigrants
- Accommodating increased diversity of ethnic backgrounds, skills and approaches – which will be both a benefit and pose integration challenges
- Achieving social cohesion if migration is concentrated on diasporas and family tie areas leading to ethnic enclaves
- Coping with the potential health issues resulting from the emergence of close knit migrant enclaves.

Scenario 4 – Globalisation falters

Overview

Regular global economic downturns act to depress globalisation, growth, infrastructure investment and social development across the world. The EU has either disbanded or become far less effective as an entity. Across the world regional groupings have been considered a lower priority than individual nations’ domestic interests. Whilst the demographic drivers in the OECD mean there is still demand for in-migration in key sectors such as elderly care, the potential supply far exceeds demand. OECD nations

in particular use a range of policy instruments to prevent unmanageable in-migration. A growth in illegal migrants would be expected.

Pressure for migration increases in a global environment stymied by lower growth, scarcity of critical resources, declining living standards and lower productivity. These pressures would exist in a policy environment hostile to international co-operation, leading to tighter border policies to control migratory pressures. Legal and clandestine migration may also be checked by an increase in the cost of migration.

Implications for migration

Persistent wealth and income differences between OECD and non-OECD countries result in continuing migration flows but with significantly lower overall demand across the OECD. The key implications are:

- Increasing selectivity in admissions
- Growing importance of the diaspora effect in inducing migration as an increasing number of diaspora related / run businesses will draw fellow migrants
- Continuing demand for migrant labour in key sectors such as long term care, health and construction industries
- Rising clandestine migration
- Increasing host country antagonism to legal and illegal migration – leading to rising integration challenges
- Skilled worker migration will represent a larger share of total migration
- Poor domestic conditions will create increasing emigration pressure especially from poor to middle income countries
- Migration costs will increasingly result in migrants showing greater selectivity
- Concerns over cherry picking the best talent and “brain drain” could create tensions between developed and developing nations.

From a policy perspective, there is unlikely to be a significant diversification of destinations under this scenario. As all economies struggle or underperform, OECD states will be the primary destination for skilled and unskilled migrants alike. The BRICs could see a small increase their number of resident foreign born nationals. Possible longer term improvements in Latin America and South Eastern Europe could reduce migratory pressure.

Given the poor prevailing economic conditions – particularly in the developing world, there will be limited local funding or aid to address environmental challenges such as coastal flooding. This could result in increased numbers of internally displaced persons and increased internal migration. OECD states are unlikely to open their doors to environmental migrants – leading to far greater internal and intra-regional migration among developing nations and LDCs.

Retarded growth will slow development – particularly in LDCs – and will result in static or increased fertility rates. Poorer countries will be faced with the burden of overpopulation as more developed countries have less need for migrant workers in the adverse economic climate. The charged geo-political atmosphere will limit co-operation between states and lead to increased isolationism and border control, plugging an escape route for those states with burgeoning populations.

Migrationary pressures will increase for non-OECD states, but political and economic realities increase the cost of migration and the selectivity of OECD states in accepting migrants. The BRICs and other emerging economies will experience weaker than expected economic growth, which combined with a deceleration of structural reforms will slow the inward flow of migrants. Slow growth in private wealth generation in the BRICs will encourage migration at a time when the OECD is ill equipped to accommodate high in-flows. The OECD will still recruit the cream of skilled workers

The effect of the wildcards would be to accelerate migration trends, especially through events such as a rise in socialist regimes in South America and wars in Africa. A major health disaster would obviously be a push factor but the migration pressure may be checked by the strict border controls of host and sender countries. Similarly a major implosion or “dismemberment” of China could lead to mass outward migration.

Under this scenario, key policy challenges will include:

- Managing the mis-match in the supply of and demand for migration. Increasing selectivity and tighter migration/border policy will reduce demand at a time of increased supply
- Identifying critical skill gap areas where domestic populations cannot meet demand
- Addressing negative public opinion – which will greatly affect integration and could be a major check on migration
- Balancing permanent and temporary migration to allay public concerns of over-population

- Addressing brain waste – the number of graduates will be increasing worldwide which may drive a change in demand for low skilled migrants
- Even in this pessimistic scenario the OECD countries will still be very attractive destinations for migrants even if the situation in non-OECD countries has not deteriorated.

Scenario 5 – Decoupled destinies

Overview

The much heralded “decoupling” of developed and developing economies is starting to take place. The OECD countries are beset by a series of increasingly severe and ever more expensive downturns, from which it becomes harder and harder to recover. The credit crisis and resulting downturn of 2008-2012 led to a massive flight of global capital to developing economies and LDCs. These inflows enable developing economies to focus on longer term investment in critical infrastructure, education, healthcare and technological diffusion and have helped provide a massive growth stimulus to many nations.

Tensions in the EU mean that it has either weakened or broken up into smaller more local groupings – such as the Scandinavian bloc. In contrast, regional groupings for Asia, Africa, the Gulf States and Latin America have all made considerable progress and have become effective co-ordinators of policy and drivers of growth. Collaboration between these groupings is increasing and frequently by-passes the EU, UN and other “old world” institutions.

Economic and social development, coupled with increasing trade amongst developing nations and LDCs have provided new cause for optimism and stimulated reforms in governance and key institutions. Whilst there are limited opportunities for skilled migrants in the OECD, there is now an array of choice for skilled and unskilled labour in both their own countries and across the developing world and LDCs.

A virtuous circle develops with greater co-operation, aid and technology transfer flowing between the developing and poorest nations, helping to pull even the weakest states to higher levels of growth and progress. Investment in education, greater female participation in the workplace, higher investment in research and development and increased innovation all spur job creation and create the conditions in which fertility rates can come down.

At the same time, in many countries, increased growth provides the funding for investment in clean water, sanitation, pollution control and coastal

protection – all of which serve to reduce migratory pressure. Overall these factors help to reduce the demand for out-migration and encourage in-migration to developing economies and LDCs. At the same time, firms from the developed world will be increasing their investment in developing markets – further driving the demand for skills and accelerating the inflow of foreign expertise that could help drive technology diffusion, innovation, job creation and wealth generation.

Implications for migration and migration policy

Migrants themselves may be less enthusiastic about a move to an OECD state as conditions improve at home, wage differentials decline and increasingly attractive conditions prevail throughout the developing world. Key implications include:

- Rising OECD unemployment reduces demand for all types of migrant skills
- Decreasing legal and illegal migration
- Declining or stagnant foreign born population rates in the majority of OECD states
- Reducing competition from the OECD for all but the most highly skilled labour
- Rising flow to non-OECD states with significant diasporas – e.g. Asians to African and Gulf States
- Increasing global competition for top talent
- Potential for professional imbalance – migration may continue to the OECD at a steady rate to compensate for ageing populations but unskilled labour may comprise an increased proportion of the total
- Net migration may be flat or negative for most OECD states as increasing numbers of OECD nationals seek opportunities outside the OECD
- Enrolments may fall in OECD tertiary institutions as domestic demand declines and international competition for foreign students increases in both cost and quality terms.

From a policy perspective, OECD graduates will contribute to a strong trend of circular migration between OECD and BRICs and other emerging economies. Increasing numbers of students from OECD countries may seek to do their undergraduate and post-graduate studies abroad to gain firsthand experience of emerging markets. There will be an accelerated pace of OECD educational institutions establishing educational programmes and campuses in the developing world to offset the downturn in domestic markets.

Sluggish growth could act to depress fertility rates in the developed world. This could increase the need for inward migration but only in the long term. The developed world may be better positioned to drive through active policies to control fertility rates and address environmental risks – both would help reduce migratory pressures.

Should inflation become a real problem it would significantly increase the cost of migration to the OECD. It will also badly affect the balance of trade with emerging economies – further aggravating economic problems. Were OECD states to suffer a significant rise in inflation we can expect to see a decline in migration as people are drawn toward more “local” and economically upbeat hosts. Skilled foreign nationals will increasingly look to the BRICs and other emerging nations for opportunities. A “reverse brain drain” could develop – particularly to China, India and the Middle East – as increasingly well funded new and existing academic institutions seek out the best talent globally.

The highest pressure for out-migration is likely to come from the very poorest countries that see only marginal gains from the overall boom in the developing world. Here we will see a combination of economic, political and environmental refugees. Differential development policies in developing nations could lead to families migrating to states with more female-friendly employment laws. If developing nations progress as expected and rewards increase, inward migration of skilled labour from developed countries will increase – accelerating innovation and technological diffusion. Increased interconnectedness will work to create a more globally connected society, freeing people from the national or regional confines and increasing the rate of circular migration around the developing world.

Under this scenario, key policy challenges will include:

- A growing need to focus on policies to retain top talent in the face of growing global competition
- Ensuring business retention as firms in OECD countries may accelerate the transfer of core operations and investment overseas – taking investment funds and some of their best talent with them
- Maintaining academic excellence in the face of a prolonged period of developing world investment in education – particularly by states in the Middle East, China and India – which will see some of the best educational talent being tempted to work overseas – creating a reverse brain drain
- Developing stronger temporary migration policies to enable short-term inflows to address particular skill shortages.

Conclusion: Core impacts on migration flows

The five scenarios described above set out a broad range of possible economic outlooks and associated migration and policy implications. The broad expectation is that demand for migration into the OECD is likely to rise or at least stay constant under the five scenarios. However, we appreciate that policy makers require a more detailed assessment of the drivers, scale and possible sources of migrant flows. Hence, for national and regional policy makers, the challenge is to review each scenario and assess the local implications for the strength of Push and Pull factors, determine the critical areas of likely demand for each skill level and consider the range of policy responses required. To help in assessing these likely impacts, we conclude by analysing three critical dimensions of migration flows for each scenario which have been requested by policy makers:

- Implications for Source Regions
- Migrationary Impact of Key Pull Factors
- Net Migrationary Impact of Inflows and Outflows for OECD Countries.

Each of these perspectives is discussed in more detail below. In each case we focus on the critical impacts under the highest OECD growth scenarios as these are the circumstances under which the largest migrant flows are expected.

Implications for source regions under each scenario

Table 4.2 explores the likely net impacts of the key Push and Pull factors on migration flows from the following regions:

- South Asia
- China and South East Asia
- Africa
- The Middle East
- Latin America and the Caribbean, and
- The Russian Federation and Central, Eastern and South-East Europe.

In South Asia the expectation is for continued development in India and halting progress in Bangladesh and Pakistan. While India is expected to continue exporting all skills for some time, return flows should increase over the period as should the local demand for high skilled foreign workers.

For China and South-Asia there is expectation of strong global outflows, high levels of migration within the region and a growing level of opportunity in China in particular for skilled foreigners. China, Malaysia and Singapore could become strong educational magnets for students within and outside the region, while the growth of economies such as Indonesia, Vietnam and possibly Thailand could reduce outflows significantly and increase in-migration of top talent. For Africa, the expectation is that outflows could rise initially with economic progress while environmental factors could also increase demand push. A rise of short term contracts in the OECD is expected to increase circular migrant flows and return flows are expected to rise as income disparities reduce.

The Middle East is expected to see a rising outflow of students and business professionals coupled with strong return flows. The Gulf States are expected to maintain a strong reliance on guest workers except under scenario four – Globalisation Falter. For Latin America and the Caribbean, economic advancement is expected to increase outflows – especially to the US. Economic migrants are expected to increase under the low growth scenarios while return migration is anticipated longer term under the more positive outlooks. For the Russian Federation and Central, Eastern and South East Europe the key is political stability, without it demand push could increase dramatically. Under the positive scenarios, outflows for the region are expected to increase but domestic opportunity is also projected to rise in most countries. Circular flows are expected to increase later in the period as is the level of migration within the region.

Table 4.2. Possible implications for source regions under each scenario

Source Region	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falterers”	Scenario 5 “Decoupled Destinies”
South Asia	<ul style="list-style-type: none"> Domestic labour demand – rising in India – limited growth in Bangladesh / Pakistan due to political, social and security tensions Temporary decline to 2012 followed by strong outflows of skilled labour to OECD importing countries through to 2020 Gradual reduction in annual outflows 2021-2030 as OECD retirement ages rise Strong return flow to India of graduates and experienced workers Steady flow to Gulf of professional (especially healthcare), semi and low-skilled workers Professionals in demand in stronger developing economies High student outflow to OECD / other states A more fundamentalist Pakistan could see strong outflows 	<ul style="list-style-type: none"> Domestic demand – rising in India – flat or declining in Bangladesh / Pakistan Temporary decline to 2012 followed by strong outflows of skilled labour to OECD importing countries through to 2020 Gradual reduction in outflows 2021-2030 Small return flow to India of graduates and professionals Steady flow to Gulf of professional (especially healthcare), semi and low-skilled workers Professionals in demand in stronger developing economies High student outflow to OECD A more fundamentalist Pakistan could see strong outflows Environmental refugees rise if climatic risks go un-managed 	<ul style="list-style-type: none"> Marked decline in Indian domestic demand – Pakistan and Bangladesh face regular recessions Limited opportunities for specialist skills from India Social / political tensions and concerns restrict opportunities for skilled Pakistanis and Bangladeshis Restricted educational opportunities in OECD Strong return flow to India of graduates and professionals Continued demand for professionals, semi-skilled and unskilled staff from Gulf States Professionals in demand in stronger developing economies A more fundamentalist Pakistan could see strong outflows 	<ul style="list-style-type: none"> Intense competition in domestic markets for limited opportunities Very selective opportunities for top talent in OECD Intense competition in global markets for opportunities amongst professionals from developed and developing nations Steady demand for lower skilled staff in Gulf states Limited educational opportunities in OECD Any shift to a more fundamentalist state could see strong legal and illegal outflows from Pakistan Environmental refugees rise if climatic risks go un-managed 	<ul style="list-style-type: none"> Very limited opportunities for top talent in OECD Rising demand for skilled professionals in India – steady rise in OECD workers Slow progress and gradual rise in opportunity in Bangladesh and Pakistan Rising demand for all skill levels in Gulf States Growing demand for professionals in stronger developing economies Steady return flow of all classes of labour from OECD

Table 4.2. Possible implications for source regions under each scenario (continued)

Source Region	Scenario 1 "Progress for All"	Scenario 2 "OECD Long Boom"	Scenario 3 "Uneven Progress"	Scenario 4 "Globalisation Falters"	Scenario 5 "Decoupled Destinies"
China and South East Asia	<ul style="list-style-type: none"> Strong flow of students and professionals to OECD and fast developing economies Growing return flows of students / professionals High Gulf State demand for all skill levels Growing levels of intra-regional migration Strong demand through to 2020 for semi-skilled and unskilled workers from net importing OECD nations – demand tails thereafter Increasing outflow of business people in line with global expansion of Chinese businesses 	<ul style="list-style-type: none"> Strong flow of students and professionals to OECD and non-BRIC fast developing economies Moderate return flows of students / professionals High Gulf State demand for all skill levels Growing levels of intra-regional migration Strong demand through to 2020 for semi-skilled and unskilled workers from net importing OECD nations – demand tails thereafter 	<ul style="list-style-type: none"> Strong flow of students and professionals to OECD and fast developing economies Moderate return flows of students / professionals High Gulf State demand for all skill levels Growing levels of intra-regional migration Strong demand through to 2020 for semi-skilled and unskilled workers from net importing OECD nations – demand tails thereafter 	<ul style="list-style-type: none"> Limited opportunities for highest skilled in OECD Rising domestic unemployment creates migratory pressures Increasing return flow of all skill levels from OECD and other economies Limited demand and intense competition for semi- and unskilled roles in Gulf States 	<ul style="list-style-type: none"> Rising flow of professionals to China – especially from OECD states Growing demand for all skill levels in the Gulf States Rising export of Chinese professionals to other developing economies with expansion of Chinese businesses Rapid increase of educational flows into China, Singapore and Malaysia

Table 4.2. Possible implications for source regions under each scenario (continued)

Source Region	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falterers”	Scenario 5 “Decoupled Destinies”
Africa	<ul style="list-style-type: none"> Rise in skilled migrants as educational standards improve in most countries 2015-2030 – Some growing East and West African economies see increasing inflows of professionals and business people Rising numbers of student outflows Slow increase in return migration as domestic opportunities rise Increased flow of all skill levels within the region and to Gulf States Increasing flow of semi-skilled and unskilled workers on temporary contracts to net importing OECD states and other developing economies Increasing demand from environmental refugees 	<ul style="list-style-type: none"> Rise in skilled migrants as educational standards improve in some countries Rising regional migration as economic migrants to escape weak and failing states Rising numbers of student outflows Slow increase in return migration to stronger economies as domestic opportunities rise Increased flow of all skill levels within the region and to Gulf States Increasing flow of semi-skilled and unskilled workers on temporary contracts to net importing OECD states and other developing economies Increasing demand from environmental refugees 	<ul style="list-style-type: none"> Growing gap between Africa’s developing economies and LDCs Opportunities for highest skilled in OECD and BRIC economies Increased flow of all skill levels within the region and to Gulf States Rising regional migration as economic migrants to escape weak and failing states Moderate student outflows from stronger regional economies Limited return migration to stronger economies Increasing flow of semi-skilled workers on temporary contracts to net importing OECD states and other developing economies Increasing demand from environmental refugees 	<ul style="list-style-type: none"> Many nations seen to be falling behind with limited global assistance to recover Very limited global opportunities for highest skilled Rising regional migration as economic migrants to escape weak and failing states Limited educational outflows Growing influx of professionals from OECD seeking to work on development projects 	<ul style="list-style-type: none"> Rise in skilled migrants as educational standards improve in most countries Some East and West African economies could see increasing inflows of professionals and business people in the period 2015-2030 if growth continues unabated Rising numbers of student outflows to other developing economies Strong increase in return migration as domestic opportunities and wages rise relative to OECD Increased flow of all skill levels within the region and to Gulf States Growing influx of OECD professionals seeking to work on development projects

Table 4.2. Possible implications for source regions under each scenario (continued)

Source Region	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Faltering”	Scenario 5 “Decoupled Destinies”
Middle East	<ul style="list-style-type: none"> Rising student outflows as economic development increases wealth across several states Regular outflow of professionals to OECD and other developing economies Steady return flow of students and professionals to Gulf States Strong circular flow of all skill levels within the region Gradual rise in domestic competition for talent and incentives to stay in Gulf States as pressure to meet “nationalisation” targets increases Rising outflow of professionals as ME businesses expand 	<ul style="list-style-type: none"> Rising student outflows as economic development increases wealth in Gulf states Regular outflow of professionals to OECD and non-BRIC developing economies Steady return flow of students and professionals to Gulf States Strong circular flow of all skill levels within the region Gradual rise in domestic competition for talent and incentives to stay in Gulf States as pressure to meet “nationalisation” targets increases Rising outflow of professionals as ME businesses expand 	<ul style="list-style-type: none"> Rising student outflows as economic development increases wealth in Gulf states Regular outflow of professionals to OECD and BRIC economies Steady return flow to Gulf of students / professionals Strong circular flow of all skill levels within the region – increase in economic migrants from poorer nations Gradual rise in domestic competition and incentives to stay in Gulf States as pressure to meet “nationalisation” targets increases Rising outflow of professionals as ME businesses expand 	<ul style="list-style-type: none"> Moderate student demand from Gulf States Increasing circular regional flow of economic migrants at all skill levels Locals increasingly displace guest workers in the Gulf States as international opportunities dry up 	<ul style="list-style-type: none"> Rising student outflows to OECD and other economies Regular outflow of professionals to BRIC economies Rising return flow to Gulf of students / professionals Significant increase in opportunities across the region Strong circular flow of all skill levels within the region Rising outflow of professionals as ME businesses expand internationally – particularly to non-OECD states

Table 4.2. Possible implications for source regions under each scenario (continued)

Source Region	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Faltering”	Scenario 5 “Decoupled Destinies”
Latin America and the Caribbean	<ul style="list-style-type: none"> High flows of all skill levels to net recipient OECD countries – especially Mexico to USA – and to other developing economies Economic advancement brings growing student outflows to OECD and other developing economies Rising circular flows within the region 	<ul style="list-style-type: none"> High flows of all skill levels to net recipient OECD countries – especially Mexico to USA – and to other developing economies Economic advancement in many nations brings growing student outflows to OECD and other non-BRIC developing economies Rising circular flows within the region – increasing numbers of economic migrants 	<ul style="list-style-type: none"> High flows of all skill levels to net recipient OECD countries – especially Mexico to USA – and to other developing economies Economic advancement in many nations brings growing student outflows to OECD and other developing economies Rising circular flows within the region – increasing numbers of economic migrants 	<ul style="list-style-type: none"> Increasing restrictions on migration to the USA and other OECD economies – limited opportunities for professionals Limited student outflows to OECD and other developing economies Growing numbers of economic and political migrants within the region 	<ul style="list-style-type: none"> High flows of all skill levels to other developing economies and some net recipient OECD countries – especially Mexico to USA Economic advancement brings growing student outflows to OECD and other developing economies Increasing opportunity within the region Rising circular flows within the region at all skill levels

Table 4.2. Possible implications for source regions under each scenario (continued)

Source Region	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Faltering”	Scenario 5 “Decoupled Destinies”
<p>Russian Federation and Central, Eastern and South East Europe</p>	<ul style="list-style-type: none"> Economic growth brings rising student outflows Strong demand for skilled professionals across OECD, developing economies and some Eastern European states 2010-2020 High demand for semi-skilled and unskilled workers – particularly from OECD states in Europe and other EU members Strong return flows of students / professionals Rising domestic opportunities increases competition at all skill levels Growing circular migration of all skill levels within Eastern Europe and South East Europe 	<ul style="list-style-type: none"> Growth in some countries brings rising student outflows Strong demand for skilled professionals across OECD and non-BRIC developing economies and some Eastern European states 2010-2020 High demand for semi- and unskilled workers – particularly from OECD states in Europe / other EU Moderate return flows of students / professionals Rising domestic opportunities in stronger economies increases competition at all skill levels Some circular migration of all skill levels within Eastern Europe and South East Europe 	<ul style="list-style-type: none"> Growth in some countries brings rising student outflows Strong demand for skilled professionals across OECD and developing economies and some Eastern European states 2010-2020 High demand for semi- and unskilled workers – from OECD states in Europe / other EU Moderate return flows of students / professionals Rising domestic opportunities in stronger economies increases competition at all skill levels Some circular migration of all skill levels within Eastern Europe and South East Europe Increase in economic and political migrants 	<ul style="list-style-type: none"> Limited demand at all skill levels, domestically, within the region, across the OECD and other developing economies Very limited student outflows Increasing numbers of political, economic and environmental refugees High return flow at all skill levels 	<ul style="list-style-type: none"> For most countries – rising opportunities at all skill levels domestically, across the region and in other developing nations Strong student outflows within the region and to other developing economies High return flow at all skill levels

Migrationary impact of key pull factors under each scenario

Table 4.3 below draws on the Immigration Scenarios developed by B.L. Lowell and presented earlier in this report. The analysis assesses the potential strength of the Pull factors under each scenario. As can be seen, the net level of in-migration to the OECD is expected to stay positive under the first four scenarios and to be moderately positive or flat under scenario five – Decoupled Destinies. Our expectation is that social receptivity could increase under the positive scenarios as OECD country populations become increasingly aware of the challenges of population decline and an ageing society. However, such receptivity could disappear and be replaced by more hostile attitudes under the more negative outlooks for OECD states presented in scenarios four and five.

Net migrationary impact of inflows and outflows for OECD countries

Table 4.4 below uses the framework and rankings for the Immigration Pull Factor Analysis (Table 4.16) by B.L. Lowell presented earlier in this report to assess the likely net Migrationary impact of inflows and outflows for each scenario. The analysis for Table 4.4 combines the Pull and Push Factor analysis conducted for this OECD/IFP study with our broader economic analysis for each scenario to develop an assessment of the likely balance for each OECD country.

Under scenario one – Progress for All, the highest levels of net inward migration are expected for seven countries – Australia, Luxembourg, the United States, Belgium, Korea, New Zealand and the United Kingdom. The lowest levels of net inward migration are expected for four countries – Austria, Ireland, Denmark and Norway.

Table 4.3 highlights that in-migration is expected to stay positive or neutral under all scenarios. However, for Table 4.4, when out-migration effects are taken into account, by 2030, the expectation is that under scenarios four and five, for many OECD nations, net migration could be flat or negative. This is based on a combination of factors – rising working age, declining economic performance, a rising outflow of skilled and semi-skilled workers in search of opportunities, a decline in foreign students, increasing return flows to sender countries as income inequalities reduce and a major contraction in opportunities for foreign workers in the OECD. Indeed, under scenario five – Decoupled Destinies – the expectation for 29 of the 30 OECD countries is that net inward migration will be flat or negative – only Luxembourg is expected to maintain a positive or neutral level.

Applying the scenarios

A natural temptation is to define a single set of assumptions and policy options to handle future migration challenges. However, the analysis presented here highlights that there is and will continue to be a high level of uncertainty over the key factors shaping the short, medium and longer term economic outlook for OECD countries, developing economies and LDCs. To handle those uncertainties we need to consider a range of possible scenarios and “rehearse the future” to determine what our national priorities and policy responses might be under each scenario.

It is extremely unlikely that the future will unfold exactly as described in any of the scenarios set out above, although many of the features may come to pass. The power of the scenario approach is that it enables us to think about a range of possibilities and define coherent and consistent responses. These in turn enable us to develop flexible policy tools that can work under a broad range of possible futures. The scenarios also provide a “wind tunnel” against which to test existing migration policies and procedures to see how effectively they deliver on our national priorities objectives in each case.

Table 4.3. Migrationary impact of key pull factors under each scenario

Pull Factors	Scenario 1 "Progress for All"	Scenario 2 "OECD Long Boom"	Scenario 3 "Uneven Progress"	Scenario 4 "Globalisation Falters"	Scenario 5 "Decoupled Destinies"
Economic	++++	+++++	+++++	++	+0
Demographic	+++++	+++++	+++++	+++	+
Social Networks	+++++	+++++	+++++	+++	+0
OECD Domestic Skill Supply	+++++	+++++	+++++	++	0, -
Social Receptivity	+++	+++	+++	--	-----
Educational Opportunity	+++++	+++++	+++++	+	0, -
Competition from BRIC Economies	+++++	0, -	+++++	0	+++++
Level of Migration to OECD	+++++	+++++	+++++	++	+0
Primary Composition of Migrant Flow	Skilled Semi-Skilled Unskilled Permanent and Temporary	Skilled Semi-Skilled Unskilled Permanent and Temporary	Skilled Semi-Skilled Unskilled Permanent and Temporary	Skilled Primarily Temporary	Highly Selective Skilled Sectors Primarily Temporary

Table 4.4. Anticipated net migration by OECD country under each scenario
 High, Medium, Low = Net, level of in-migration, 0 = no net in-migration, - = net out-migration

Country (Ranked by Economic Pull Factor Analysis)	Scenario 1 "Progress for All"	Scenario 2 "OECD Long Boom"	Scenario 3 "Uneven Progress"	Scenario 4 "Globalisation Falters"	Scenario 5 "Decoupled Destinies"
Australia	H	H	H	L, 0	0, -
Finland	M	M	L	L, 0	0, -
Netherlands	M	M	M	L, 0	0, -
Austria	L	L	L	0	0, -
Japan	M	M	M	0, -	0, -
Luxembourg	H	H	M	L	L, 0
Ireland	L	L	L	0, -	0, -
Denmark	L	L	L, 0	0	0, -
United States	H	H	H	L, 0	0, -
Belgium	H	H	M	L, 0	0, -
Italy	M	M	L	0, -	0, -
Korea	H	H	M	L, 0	0, -
Iceland	M	M	M	L, 0	0, -
Switzerland	M	M	L	L, 0	0, -
Spain	M	M	L	L, 0	0, -
Germany	M	M	L	L, 0	0, -
Canada	M	M	L	L, 0	0, -
New Zealand	H	H	H	L	0, -

Table 4.4. Anticipated Net Migration by OECD Country under Each Scenario (continued)
 High, Medium, Low = Net, level of in-migration, 0 = no net in-migration, - = net out-migration

France	M	M	L	L, 0	L, 0	0, -
Sweden	M	M	L	L, 0	L, 0	0, -
Portugal	M	M	L	L, 0	L, 0	0, -
United Kingdom	H	H	M	L, 0	L, 0	0, -
Norway	L	L	L, 0	0, -	0, -	
Czech Republic	M	L	L, 0	0, -	0, -	
Poland	M	L	L, 0	0, -	0, -	
Slovakia	M	L	L, 0	0, -	0, -	
Hungary	M	L	L, 0	0, -	0, -	
Mexico	M	M	L, 0	0, -	0, -	
Turkey	M	M	L, 0	0, -	0, -	
Greece	M	L	L, 0	0, -	0, -	

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Annex 4.A1

Scenario Planning Methodology

The key steps in developing these scenarios were as follows:

- The team from the OECD/IFP and Fast Future developed four “baseline” scenarios for discussion at the July 2008 preparatory experts’ workshop Paris.
- At the July 2008 preparatory experts’ workshop:
 - The participants were introduced to the approach to scenario building that would be adopted for this project
 - The participants then reviewed the material collated by the OECD team on “Pull” (OECD related data) and “Push” factors (Non-OECD country data) that could have an influence on migration to OECD countries
 - A brief discussion was held on possible additional factors to consider
 - The four baseline scenarios were then presented for participants to review and discuss
 - Participants were then asked to vote for the top push and pull factors that would have the greatest bearing on the scenarios and a prioritised list was developed of those factors to be considered during the meeting
 - Four groups were then formed and each group was asked to explore the implications of the prioritized lists of Push and Pull factors on one of the scenarios
 - The groups were also asked to consider possible wildcards in their scenario and the implications and challenges for policy makers
 - Finally each group presented back a summary of the key features, insights, policy implications and challenges for their scenario
 - A key recommendation was on the need for a fifth scenario – Decoupled Destinies

- The outputs and recommendations from the focus Group were then factored in to develop a more detailed description and analysis of the five scenarios. This document was circulated to a range of experts for review in November 2008
- The scenarios were then presented and discussed at the OECD/IFP Future of International Migration to OECD Countries Experts' Workshop in December 2008.
- The feedback from the expert workshop was factored in to create the final version of the document.

Annex 4.A2

The Five Baseline Scenarios: Breakdown by Key Parameters

The five baseline scenarios – breakdown by key parameters					
Scenario Parameter	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falters”	Scenario 5 “Decoupled Destinies”
Geopolitical Outlook	<ul style="list-style-type: none"> Overall good collaboration between key regions and countries such as China, Russia, India, the European Union, Japan, and the United States – and perhaps also the Middle East – leads to successful international cooperation. 	<ul style="list-style-type: none"> Relatively benign context for international co-operation on most fronts – economic, environmental, military – despite potential for BRICs to run into strong headwinds at different points out to 2030 OECD countries take the lead on driving the development agenda for the non-BRIC developing economies and LDCs 	<ul style="list-style-type: none"> Key emerging economies such as China, Russia, India, and perhaps also some Middle Eastern countries play out their dominance against other, more vulnerable states Developed nations may also pursue a more aggressive stance on global intervention – particularly to secure natural resource supplies and prevent domestic and regional conflicts Globalisation continues but at somewhat slower rates than in Scenario 1 Lower economic growth for certain developing nations may lead to aid flows slightly higher than in scenario 1 	<ul style="list-style-type: none"> Deterioration of international cooperation among key regions and countries such as China, Russia, India, the European Union, Japan and the United States and perhaps also some Middle Eastern countries. Reduced economic development leads to greater tensions in and between poorer nations – particularly over critical resources such as water 	<ul style="list-style-type: none"> Potential for new political institutions to evolve to focus on the needs of developing nations and LDC’s – reduced interest from the developing world in the institutions such as the UN, World Bank, IMF and OECD Growth economies challenge the established order, leading to frosty relations, especially between the BRICs and the OECD nations. Emerging economies and LDC’s show increasing levels of collaboration. Aids flows are dramatically reduced from OECD

The five baseline scenarios – breakdown by key parameters <i>(continued)</i>					
Scenario Parameter	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falterers”	Scenario 5 “Decoupled Destinies”
Socio-Economic Development	<ul style="list-style-type: none"> Continued globalisation. Broad-based progress (albeit at different speeds) towards improved living standards across non-OECD economies Steady improvement in internal distribution of incomes within non-OECD countries – leading to overall reduction in poverty 	<ul style="list-style-type: none"> Growth and global integration stall for the BRICs as they increasingly run into home-made problems (e.g. inflation, underinvestment in critical infrastructure, disruptive regional inequalities, poor governance, etc.) and labour markets slacken significantly; OECD countries succeed in sustaining good levels of growth led by a renaissance US and more innovative Europe; Emerging economies other than the BRICs succeed in strengthening trade and investment ties to OECD countries thereby compensating for shrinking markets in the BRICs. 	<ul style="list-style-type: none"> Progress towards higher living standards across non-OECD countries Strongest performance comes from the emerging economies (BRICs, some Central European and SE Asian economies, some LA countries, oil rich ME states, South Africa) Many less developed countries left behind in the race for growth Internal distribution of income improved but not significantly in both developed and developing nations 	<ul style="list-style-type: none"> Slowing pace of Globalisation generates sharp divisions between winners and losers Social and political concerns about income distributions, labour market outcomes and environmental impacts act to significantly restrain the pace of integration. Slow progress on further removal of impediments to trade and investment due to declining growth and increasing inherent complexity of multilateral negotiations. 	<ul style="list-style-type: none"> The pace of OECD-driven Globalisation slows, but increases for developing-economy based firms Steady socio-economic progress made by the emerging economies especially BRICs and also by many of the LDCs FDI flows continue apace but their sources diversify. Investment from OECD governments declines but emerging economies pick up the slack in their rush to expand. OECD based firms continue to diversify and invest globally in search of new opportunities Distribution of income is improved in the emerging economies with encouraging signs of progress in LDCs, but the majority OECD nations stall

The five baseline scenarios – breakdown by key parameters (continued)					
Scenario Parameter	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falterers”	Scenario 5 “Decoupled Destinies”
Global Economy and Trade	<ul style="list-style-type: none"> Average annual growth rates (2000 PPP USD): <ul style="list-style-type: none"> World: 4-4.5% OECD: 2.5% Non-OECD: 5-6% China: 7.5% India: 6% Africa/ME/LA: 3.5-4.5%. Average annual per capita income growth: OECD – 2%; non-OECD – 5%. World trade integration continues at a rapid pace thanks to successful future WTO rounds, increased FDI flows, increased aid flows and further debt cancellation. 	<ul style="list-style-type: none"> Average annual growth rates (2000 PPP USD): <ul style="list-style-type: none"> World: 3.5-4.0 OECD countries grow at 2.5% or more Non-OECD: 4-5% China: 3-5% India: 2-4% Africa/ME/LA: 3.5-4.5%. Average annual per capita income growth: over 2% for OECD countries; non-OECD – 3-4%. World trade and investment flows continue apace, but driven largely by the growing integration of emerging economies (other than the BRICs); Stalling growth in the BRICs has lower than expected impact on overall trade and investment levels since approximately 70% of trade and around 90% of FDI holdings remain concentrated within the OECD area. 	<ul style="list-style-type: none"> Average annual growth rates (2000 PPP USD): <ul style="list-style-type: none"> World: 4-4.5% OECD: 2-2.5% Non-OECD: 5-6% China: 8%+ India: 6%+ Africa/ME/LA: 2.5-3.5%. Average annual per capita income growth: OECD – 2%; non-OECD – 5% (but widening gap between emerging and less developed countries as the former press ahead with structural reforms). World trade and investment flows continue apace, but driven largely by the growing integration of emerging economies compared to slower integration of LDCs; Aid flows slightly higher than in scenario 1. 	<ul style="list-style-type: none"> Average annual growth rates (2000 PPP USD): <ul style="list-style-type: none"> World: 1.5-2.0% OECD: 0.5-1.5% Non-OECD: 2-4% China: 4-6% India: 3-5% Africa/ME/LA: 1.5-2.5%. Average annual per capita income growth: OECD – 0.5-1.0%; non-OECD – 1-3% Entrenched gap between emerging economies and LDCs as the appetite for structural reforms decreases, especially in LDCs Trade, investment and aid flows slow significantly 	<ul style="list-style-type: none"> Average annual growth rates (2000 PPP USD): <ul style="list-style-type: none"> World: 3-4% OECD: 0.5-1.5% Non-OECD – 6-7% China: 8%+ India 7%+ Africa/ME/LA: 3.5-5.0%. Average annual per capita income growth: OECD – 1%; non-OECD – 5-6% Increasingly strong integration of emerging economies and LDCs The beleaguered OECD states withdraw from many of their positions in the developing world as they move from one shock to the next that serves to depress growth on a regular basis in the period to 2030 Strong growth from emerging producer economies spurs larger volumes of trade between emerging and less developed economies

The five baseline scenarios – breakdown by key parameters <i>(continued)</i>					
Scenario Parameter	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Faltering”	Scenario 5 “Decoupled Destinies”
Resources / Commodities	<ul style="list-style-type: none"> Oil prices fall back from high levels of 2008 as oil production increases, new fields come on stream, use of alternative energy sources increase and fuel efficiencies kick in triggered by initially high prices. Food prices peak around 2014-2015 and fall back to more modest levels as additional land comes on stream and agricultural innovation and trade accelerates. 	<ul style="list-style-type: none"> Commodity prices gradually fall from high levels of 2008 as demand from BRICs declines and oil and food supplies increase in reaction to high prices early in the scenario period. 	<ul style="list-style-type: none"> Oil prices fall back from high levels of 2008 as oil production increases, new fields come on stream, use of alternative energy sources increase and fuel efficiencies kick in triggered by initially high prices. Food prices peak around 2014-2015 and fall back to more modest levels as additional land comes on stream and agricultural innovation and trade accelerates. 	<ul style="list-style-type: none"> Commodity prices remain uncomfortably high although lower world demand contributes to restrain oil prices. Oil supply difficulties persist and the more tense international atmosphere is not conducive to new multinational ventures to open up and operate new fields Pace of development of alternative energy sources slows due to lack of investment Population pressures continue to keep food prices at high levels with little prospect of agricultural innovation and trade relieving serious food bottlenecks in many developing countries. 	<ul style="list-style-type: none"> Oil Prices remain high as a result of high demand but food prices stabilise as bread basket countries produce higher yields on the back of growth and development. Transfer of innovation and best practice helps drive up agricultural yields in many developing nations and LDCs. Investment in alternative energy in developing economies helps alleviate pressure on fuel prices

The five baseline scenarios – breakdown by key parameters (continued)					
Scenario Parameter	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Faltering”	Scenario 5 “Decoupled Destinies”
<ul style="list-style-type: none"> • Environmental concerns • Food security – food demand growth rates, food prices • Environmental degradation – environmental refugees, pressure on arable land 	<ul style="list-style-type: none"> • Advancement in agricultural techniques reduces global pressure on food supply and manages to keep in line with the growth in population rates born of longer life spans. • Environmental degradation remains a pressing issue. • International efforts to reduce the effects of climate change and cut GHG emissions help slow pressure on arable land and on the agriculture of much of the third world. • Particularly dry areas still suffer but the benign geo-political atmosphere encourages migration and the international community accommodates those displaced peoples. 	<ul style="list-style-type: none"> • This scenario will see the OECD cope well with the problem of food supply while the non-OECD states struggle. • The OECD acts to reduce GHG's but their efforts are not replicated in the less well funded emerging and LDC economies, mitigating their efforts. • Environmental degradation continues relatively unchecked in the developing world and poorer countries experience many of the worst impacts • A booming OECD increases environmental aid flow, the effects of which are seen in the mid to late stages of the scenario. 	<ul style="list-style-type: none"> • Agricultural investment and innovation help ensure security of food supply in the OECD and many emerging economies. • Conversely, for LDCs, growth in crop yields remains static and agricultural advancements are slow to diffuse from the developed world – possibly leading to increased LDC migration to the developing world and OECD. • Forced migration from those areas affected by environmental degradation increases. • The developing world experiences a number of ugly conflicts over access to arable land. • The OECD may act to reduce environmental impacts but the emerging economies, desperate to maintain growth, resist efforts at regulation. 	<ul style="list-style-type: none"> • As food prices remain stubbornly high, efforts to increase production to reduce prices and alleviate hunger are stymied. • The OECD's poor economic performance acts to deflate aid flows. • Negative economic and geo-political conditions block international efforts to end food and environmental crises. • Environmental degradation creates high levels of forced migration, whether from drought, flood or resulting conflicts. • International co-operation on the reduction of GHGs is almost non-existent. • Multiple factors combine to create havoc in the developing world. High food and commodities prices force ever greater numbers of people into poverty and migratory pressures spike. • Developed countries are loath to accept large waves of environmental migrants. • High occurrence of illegal migration into the OECD. 	<ul style="list-style-type: none"> • Although the strong performance of the developing world helps to allay many food supply problems, the rapidly expanding ranks of the middle classes increase demand for meat products straining agricultural supply. Such demand increases prices and lowers development. • The poor performance of the OECD means that environmental reform is put on the back burner • Without the pressure the OECD would usually exert on the developing world to cut emissions, fast industrialising economies may contribute to a net increase in GHG emissions in the period to 2020 • Some improvements on GHG emissions occur from 2020 to 2030. This trend intensifies environmental degradation and acts increase migratory pressure. • A return to international environmental activism is not seen until the later stages of the scenario time line.

The five baseline scenarios – breakdown by key parameters <i>(continued)</i>					
Scenario Parameter	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Faltering”	Scenario 5 “Decoupled Destinies”
Technology – Technological advancement, connectivity and diffusion	<ul style="list-style-type: none"> Increased mobile phone, pc and broadband take-up across the developing world increase interconnectedness, helping to bring LDC’s into the 21st century. Technology diffusion continues apace as emerging and developing economies are better able to implement enabling structural reforms, aided by strong economic growth. The resulting job growth helps reduce migratory pressures The growth of technology markets strengthens demand for skilled migrants in the developed and emerging economies, increasing the already fierce competition for top talent. 	<ul style="list-style-type: none"> Prolonged growth enables technological advancement in OECD states to progress at a faster pace than expected Limited availability of investment funding in the BRICs and other non-OECD states limits the potential for R&D and adoption of innovations that would drive growth, structural reforms and social improvement thus increasing migratory pressures. Strong and prolonged growth by OECD states drives demand for technologically skilled migrant labour and accelerates the international brain drain – exacerbating the problems of the emerging economies and the LDC’s in particular. 	<ul style="list-style-type: none"> For LDC’s poor economic growth and limited inward investment from the technology sector lead to a slow pace of technological advancement – making it harder to retain more highly skilled workers. The emerging economies use technology and innovation to propel them into a position where they increasingly retain their best domestic talent and attract inflows from developed, developing and poorer nations alike. The OECD countries maintain a lead in technological innovation, aided by the steady stream of skilled migrants as a result of the brain drain they enjoy from the developing world – although competition for top talent intensifies. 	<ul style="list-style-type: none"> The negative geopolitical environment dramatically reduces technological diffusion. The LDC’s are especially hard hit, inward technology investment declines and growth in mobile, pc and broadband take up slow amidst dire economic projections. The absence of strong foreign markets for OECD technology firms and poor growth projection slows demand for skilled migrants. Sluggish competition for skilled migrants as emerging economies are unable to compete with the OECD. Declining formal opportunities could see a commensurate rise in illegal migration. 	<ul style="list-style-type: none"> Rapid improvements in the power infrastructure of developing countries aids the diffusion of technology, while increased spending power increases its utilisation, both on a national and personal level. Technological diffusion is especially strong between the emerging and less developed economies as they forge close ties through trade, and multi-lateral treaties and bi-lateral agreements. OECD states are still the world leaders in technology but the rapid pace of advancement in the developing world begins to level the playing field as more OECD firms look to developing markets for expansion and transfer in their technologies As technology spreads so will the level of circular high skill migration between OECD states, emerging economies and eventually, the LDCs. This scenario will not see a brain drain so much as a brain conveyor as skilled workers interchange or even migrate multiple times, accelerating diffusion and fostering innovation.

The five baseline scenarios – breakdown by key parameters (continued)					
Scenario Parameter	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Faltering”	Scenario 5 “Decoupled Destinies”
Infrastructure <ul style="list-style-type: none"> • Capability of/ presence on physical infrastructure 	<ul style="list-style-type: none"> • Excellent economic performance drives increased spending on infrastructure in the emerging economies and LDCs to provide a backbone for future growth and social development • A healthy proportion of spending goes on education and health. 	<ul style="list-style-type: none"> • Emerging economies and LDCs struggle to fund their burgeoning infrastructure requirements and the terms asked by international investors make this an infeasible option for many projects • However, the OECD countries are more willing to underwrite the cost of vital development efforts through aid packages. Progress is slow however, and many states are loath to be saddled with more debt or place themselves under the control of developed nations, the World Bank or IMF. 	<ul style="list-style-type: none"> • The BRICs and other emerging economies are able to push ahead with infrastructure development, health and education reforms • These investments enable countries to retain a growing percentage of their human capital, compete with the OECD nations for skilled migrants and eventually coax their own nationals from positions abroad. • The LDCs on the other hand are unable to push through similar developments which limits opportunity and increases migratory pressures 	<ul style="list-style-type: none"> • Progress is stalled as poor economic performance and a competitive, isolationist geo-political environment take their toll. • Though emerging economies are not as badly affected as the LDCs, their ability to implement health and educational reform are badly compromised, harming their development. • The developed world has limited ability or inclination to aid the non-OECD states as their own economies slow or stagnate. • Migratory pressures increase across the board, inundating an OECD generally unwilling to accept great numbers of migrants. 	<ul style="list-style-type: none"> • As the non-OECD states grow, investment in infrastructure becomes a critical priority to expand economic prospects and retain the best talent. • Although OECD countries will continue to have leadership on infrastructure, the poor economic conditions that prevail could deter a number of migrants who may go to emerging economies instead. In this scenario the OECD will be but one stop in a circular conveyor of skilled migrants.
<ul style="list-style-type: none"> • Education infrastructure • Health Infrastructure 	<ul style="list-style-type: none"> • As improved health care and education are rolled out, migratory pressure decreases. Higher levels of education in the developing world have the added benefit of improving many other social indicators, further mitigating migratory pressure. • The LDCs begin to tackle endemic health crises in earnest, creating an environment conducive to development and welcoming to FDI. • As conditions improve the pool of skilled migrants will shrink driving a ferocious level of competition, particularly between OECD countries and the BRICs 	<ul style="list-style-type: none"> • Increased aid and the resultant increase in development help to slow migration – but levels are still high as the OECD countries continue to lure away the cream of non-OECD states’ human capital. 	<ul style="list-style-type: none"> • The LDCs’ on the other hand are unable to push through similar developments which limits opportunity and increases migratory pressures 	<ul style="list-style-type: none"> • Migration pressures increase across the board, inundating an OECD generally unwilling to accept great numbers of migrants. 	<ul style="list-style-type: none"> • The developed world has limited ability or inclination to aid the non-OECD states as their own economies slow or stagnate. • Migratory pressures increase across the board, inundating an OECD generally unwilling to accept great numbers of migrants.

The five baseline scenarios – breakdown by key parameters <i>(continued)</i>					
Scenario Parameter	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falters”	Scenario 5 “Decoupled Destinies”
<p>Regional co-operation and international aid</p> <ul style="list-style-type: none"> • Regional and pan-regional institutions flourish as the spread of globalization and political goodwill encourage trade and political collaboration. • Close political and economic linkages help diversify the flow of migrants, breaking the traditional non-OECD to OECD dynamic as people become increasingly “global” in their outlook. • As emerging states and LDCs develop they make great strides in eradicating corruption and fostering transparency in political and business governance. • Progress in governance begets massive increases in aid and FDI inflows as the developing world gains the confidence of the OECD countries. • Migration increases but people travel to a far wider range of destinations, helping the spread of technology and aiding innovation in developing economies. • Competition for skilled labour is unrelenting as migrants enjoy an abundance of choices. 	<ul style="list-style-type: none"> • The excellent performance of OECD countries helps strengthen ties between member states. The corollary is an increased desire to exert influence on non-OECD states in return for aid. • Lower than expected economic growth hinders the development and integration of the BRICs and LDCs. • The reliance of LDCs on aid flows begets a rush to reduce corruption and increase transparency in governance and business, with the aim of establishing a base for future development. • During the scenario time-frame, actual progress in reducing corruption in LDCs and emerging economies is slow and migratory pressure increase accordingly. • The lack of regional cooperation for LDCs, and in some cases, emerging economies means that migrant flows are still largely focused on richer countries with the OECD taking the largest share. 	<ul style="list-style-type: none"> • This scenario sees greater integration among the emerging economies and increased assertiveness towards the OECD states. • Unless supported by the emerging economies, the LDCs may suffer as a result and become marginalized. • Aid flows are slightly increased on 2008 levels but without the support of regional institutions, and under pressure from the OECD and emerging economies, development is slow. • LDCs still labour under the twin blights of corruption and inefficiency and are thus unable to benefit fully from international aid flows. • Structural reforms and social progress are hampered and migratory pressure increases. 	<ul style="list-style-type: none"> • Aid flows are reduced as a result of poor global economic conditions. • Corruption and poor governance combine to squander a proportion of the aid the developing world still receives. • An unstable environment prevails in the emerging economies as struggling governments fail to quell corruption and structural reforms fail to bed in. • The OECD’s economic travails force countries to disengage somewhat from the non-OECD states. • The miasma of mistrust that pervades geo-politics acts against the creation of regional or pan regional co-operatives and even established institutions to engender development efforts. • Migratory pressures are increased but economic conditions act to halt actual migration leading to a spike in illegal migration, especially of unskilled workers. 	<ul style="list-style-type: none"> • Intense competition for resources, trade competition and geo-political issues drive a wedge between the OECD and emerging economies. • With contrasting economic priorities and prognoses, the OECD states are somewhat sidelined from the collaboration of the emerging economies and the LDCs. • Developing countries create strong trading and political alliances – accelerating and diversifying migration flows. • Aid flows are reduced because of poor economic conditions in the OECD. What is left is used more efficiently as the combination of increased growth, regional collaboration and a growing middle class act to improve the quality of government and reduce corruption. • Improvements in governance are also responsible for increasingly efficient structural reforms and social progress. • Migration increases within the non-OECD world as co-operation and collaboration spread. • Migration to the OECD decreases. • High volume of circular movement of high skilled workers between increasingly stable states. 	
<p>Managing aid and donations</p> <p>Effects of corruption – improving governance and reducing corruption</p>					

The five baseline scenarios – breakdown by key parameters (continued)					
Scenario Parameter	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falters”	Scenario 5 “Decoupled Destinies”
<p>Competition for resources</p> <ul style="list-style-type: none"> • As benign economic conditions prevail, funds are widely available for investment in sustainable and supplementary energy supplies. As these sources come on stream and are able to contribute significantly to supply, competition for resources declines. • The benevolent geo-political environment reduces disruptions caused by unrest (political or security based) in supply states, helping to lower prices and increase investor confidence. Energy FDI increases. • Energy source diversification helps to spread technology and human capital throughout the world, aiding development and reducing migratory pressures. • The OECD will still seek out the world's best and brightest but will face increased competition from emerging economies and new players resulting from energy diversification. 	<ul style="list-style-type: none"> • OECD states are far better positioned to compete with emerging countries for resources and to secure better prices from resource suppliers • Increased competition for resources drives up prices, fuels inflation and further limits growth in many emerging economies and LDCs – adding to migratory pressures 	<ul style="list-style-type: none"> • The two speed nature of this scenario works to further inequality. As the OECD and emerging economies seek to maximize their access to energy suppliers, LDCs will be further sidelined. • There will still be heavy spending on renewables in this scenario but the issue will receive less attention than under scenario 1 as the OECD and emerging economies compete for access to supply. • As LDC's are sidelined they are more likely to experience political or violent upheaval creating migratory pressure and hindering development. 	<ul style="list-style-type: none"> • As economic conditions worsen and all countries experience lower than expected growth, attention will be diverted from research and investment into renewables as states seek to consolidate current supply sources. • As LDCs grow they become hungrier for raw materials creating ever more demand and thus driving up prices. • Intense competition will increase the urgency of efforts to introduce renewable energy, but there is less funding available within the OECD states during the economic downturn • The emerging economies will see significant uplift in investment in alternative sources in the period from 2015 onwards • The winners in the competition for resources will see a spike in production and growth and an increased demand for skilled migrants. 	<ul style="list-style-type: none"> • Intense competition for resources as developing countries (especially the emerging economies) consume record amounts of raw materials, while OECD states are already large consumers of these products and seek to maintain their positions. • As LDCs grow they become hungrier for raw materials creating ever more demand and thus driving up prices. • Intense competition will increase the urgency of efforts to introduce renewable energy, but there is less funding available within the OECD states during the economic downturn • The emerging economies will see significant uplift in investment in alternative sources in the period from 2015 onwards • The winners in the competition for resources will see a spike in production and growth and an increased demand for skilled migrants. 	

The five baseline scenarios – breakdown by key parameters (continued)					
Scenario Parameter	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Faltering”	Scenario 5 “Decoupled Destinies”
<p>Security concerns</p> <ul style="list-style-type: none"> • Conflict • Internal instability 	<ul style="list-style-type: none"> • As all states enjoy economic growth, development efforts accelerate, structural reforms are enacted and social conditions improve. • Genial relations between states and the establishment of international institutions further decrease the likelihood of violent conflict, whether internal or inter-state. • A reduction in security concerns drastically reduces the number of political asylum seekers, internally displaced persons and illegal immigration. • The lack of security concerns reduces migratory pressure and helps emerging and developing economies to lure migrants from the developed world, fostering innovation and technological advancements. 	<ul style="list-style-type: none"> • A dominant OECD is able, though not always willing, to act as global policeman to the developing world. • A deceleration in the pace of development in many emerging economies creates tension among populations who have come to expect improvements in their standard of living and the opportunities available to them. This could speed migration in itself and spark protest and disharmony (perhaps violent) which could further increase migratory pressure. • LDCs experience both internal and inter-state conflicts over political issues, territorial disputes, resources and access to water – thus increasing migratory outflows. 	<ul style="list-style-type: none"> • As the LDCs struggle to compete with stronger states and experience poor economic performance and limited social development, the possibility of internal conflict increases. • The populations of developing states are more likely to protest against a lack of social development and foreign interference / domination. • Increased unrest is a strong migratory force, enabling the OECD and emerging economies to cherry pick skilled workers. • Migration proceeds along traditional lines, while toward the end of our timeframe the BRICs will begin to compete for skilled labour. • A possibility is that the OECD steps in to aid states that have been thrown into internal disarray. This might lead to a normalization of conditions and a move towards more sustained development. 	<ul style="list-style-type: none"> • The toxic geo-political conditions prevalent in this scenario act to increase destabilizing factors in poorer countries and between states. • Developed nations will be generally unwilling or unable to intervene in regional or internal conflicts, creating an environment conducive to internal instability and violence. • The numbers of asylum seekers and internally displaced persons increase. • Rising asylum applications place pressure on OECD states and neighbouring countries who are burdened with refugees they are unable to support and whose presence hinders their own development efforts and internal stability. • “Traditional migration” rises as professionals flee conflict zones and seek a higher standard of living. 	<ul style="list-style-type: none"> • Internal stability in the developing world increases on the back of strong economic growth and high social development. • LDCs are far less likely to dissolve into political or violent strife, reducing migratory pressure.

Annex 4.A3

Pull Factors: Potential Impact Under Each Scenario

Pull factors – potential impact under each scenario					
“Pull” Factor	Scenario 1 “Progress for All”	Scenario 2 “Long Boom OECD”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falterers”	Scenario 5 “Decoupled Destinies”
GDP per capita	<ul style="list-style-type: none"> OECD GDP per capita increases in line with inflation. Median reaches around USD 34,000. The wage gap between OECD and non-OECD states narrows but remains at over 50% 	<ul style="list-style-type: none"> OECD GDP per capita increases above level of inflation. Median reaches around USD 36,000 The gap between OECD and non-OECD states widens to over 50%. 	<ul style="list-style-type: none"> Median OECD GDP per capita reaches approximately USD 34,000. The gap between OECD and BRIC states varies between 30-50%. The gap with some developing economies increases to over 60% 	<ul style="list-style-type: none"> OECD GDP per capita increases below the rate of inflation, making people poorer in real terms. Median falls below USD 30,000 The wage gap between OECD and non-OECD states narrows but remains at over 50% 	<ul style="list-style-type: none"> GDP per capita will stagnate and will be outpaced by inflation within the OECD. Median reaches just USD 26,000 The wage gap between OECD and non-OECD states varies between 30-50%
Foreign born population rate	<ul style="list-style-type: none"> Median rate is 10% for OECD states. Korea is lowest with a rate of 0.3 and Luxembourg the highest with a rate of 32.6 	<ul style="list-style-type: none"> Median rate increases to around 12% as the OECD booms and overshadows the emerging world. 	<ul style="list-style-type: none"> Foreign born population rates increases but OECD faces competition as more migrants are drawn to emerging economies. Median rate rises to 11% 	<ul style="list-style-type: none"> Rates increase, but Median rises only marginally to around 9%. 	<ul style="list-style-type: none"> Rates decrease to 6.0% as the BRICs and emerging economies take a bigger share of migrant flows and LDCs enter the marketplace.

Pull factors – potential impact under each scenario (continued)					
“Pull” Factor	Scenario 1 “Progress for All”	Scenario 2 “Long Boom OECD”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falters”	Scenario 5 “Decoupled Destinies”
Age dependency ratio	<ul style="list-style-type: none"> • Median OECD ratio is 0.5, Mexico is the only state experiencing a higher rate with 0.6 • Continued growth drives the need to increase the percentage of economically active people in the population and those in employment • Drives the need to increase the productivity of workers through education and other factors 	<ul style="list-style-type: none"> • Median OECD ratio stable at 0.5 with a long term downward trend. 	<ul style="list-style-type: none"> • Median OECD ratio stable at 0.5 with a long term downward trend. 	<ul style="list-style-type: none"> • Median OECD ratio stable at 0.5 with a long term upward trend as more people continue to work beyond retirement 	<ul style="list-style-type: none"> • Median OECD ratio stable at 0.5 with a long term, and very slight, upward trend as reduced opportunity limits the potential for people to work post-retirement.
Key employment sectors	<ul style="list-style-type: none"> • OECD primarily engaged in services sector – increased service sector employment • Only Germany and the US have substantial manufacturing bases with 28 million and 125 million employed respectively. Italy, Korea and Spain have substantial but smaller manufacturing bases. 	<ul style="list-style-type: none"> • Employment increases further in the services sector while manufacturing continues to decline. The USA sheds 10% of manufacturing jobs by 2030 • Need for training and education in order to increase numbers in employment 	<ul style="list-style-type: none"> • Services sector expands while manufacturing continues to decline. The US sheds 6-8% of its manufacturing jobs by 2030 	<ul style="list-style-type: none"> • Resurgence of local manufacturing as OECD firms bring plants back on shore 	<ul style="list-style-type: none"> • Decline in both service and manufacturing sectors in most OECD countries

Pull factors – potential impact under each scenario <i>(continued)</i>					
“Pull” Factor	Scenario 1 “Progress for All”	Scenario 2 “Long Boom OECD”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Failers”	Scenario 5 “Decoupled Destinies”
Number in tertiary education	<ul style="list-style-type: none"> Sharp rises in Tertiary enrolments. Western European Union (WEU) enrolments rise 73% to 130 million while Non-Aligned movement (NAM) enrolments rise 32% to 145 million by 2025 	<ul style="list-style-type: none"> OECD admissions increase across the board. WEU and NAM experience slight fall in admissions due to a reduced intake from the developing world. They enjoy percentage increases of 65-70% and 25-30% respectively. 	<ul style="list-style-type: none"> OECD admissions increase across the board. WEU and NAM’s enrolments increase by 65-75% and 25-35%. Heavy competition for enrolments from emerging economies. 	<ul style="list-style-type: none"> Poor showing of non-OECD states: increases interest in OECD institutions and enrolments soar. WEU and NAM increase enrolments by 75% and 35% respectively. 	<ul style="list-style-type: none"> Growth in OECD enrolment slows under pressure from poor economic performance and competition from non-OECD states. WEU and NAM institutions increase enrolment by 60% and 25% respectively.
Economically active population (2020)	<ul style="list-style-type: none"> In 2020 the world will have an economically active percentage of 64.4%. The OECD median will be 57.45% 	<ul style="list-style-type: none"> Economically active populations: World: 62% OECD: 60% 	<ul style="list-style-type: none"> Economically active populations: World: 61% OECD: 55-60% 	<ul style="list-style-type: none"> Economically active populations: World: 65% OECD: 55% 	<ul style="list-style-type: none"> Economically active populations: World: 65-70% OECD: 50-55%

Pull factors – potential impact under each scenario <i>(continued)</i>					
“Pull” Factor	Scenario 1 “Progress for All”	Scenario 2 “Long Boom OECD”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falters”	Scenario 5 “Decoupled Destinies”
Total fertility ratio 2030 – 35	<ul style="list-style-type: none"> World fertility rate is 2.14. The OECD median rate is 1.78 	<ul style="list-style-type: none"> World fertility rate is 2.3. The OECD median rate is 1.90 	<ul style="list-style-type: none"> World fertility rate is 2.0. The OECD median rate is 1.65 	<ul style="list-style-type: none"> World fertility rate is 2.0. The OECD median rate is 1.70 Sluggish economic growth could reduce fertility rates. A combination of economic and political shocks would likely worsen this effect and further reduce fertility rates. More of a long term effect. Unlikely to have any impact in the short to medium term of our scenario time frame. 	<ul style="list-style-type: none"> World fertility rate is 2.14. The OECD median rate is 1.65

Pull factors – potential impact under each scenario <i>(continued)</i>					
“Pull” Factor	Scenario 1 “Progress for All”	Scenario 2 “Long Boom OECD”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falters”	Scenario 5 “Decoupled Destinies”
<p>Working population determinants/pre-dictors</p> <ul style="list-style-type: none"> Working age population (15-64), gender disaggregated, in absolute numbers, in 2005 and 2030 Median age of population in 2005 and 2030 	<ul style="list-style-type: none"> The median for OECD citizens in 2030 will be 44 years old. Luxembourg will age the slowest and Korea will age the fastest to an average of 48. Working age populations will shrink as median ages increase. 	<ul style="list-style-type: none"> The median age for OECD states in 2030 will be 44 years old. As the OECD grows in isolation, often at the expense of non-OECD states, median ages will continue to rise steadily and the working population will decrease. 	<ul style="list-style-type: none"> The median age for OECD states in 2030 will be 44 years old. 	<ul style="list-style-type: none"> The median age for OECD states in 2030 will be between 39-41. This is on account of scenario 5 drawing the bleakest economic picture for the OECD The working age population of OECD countries is set to fall while the median age will continue to rise. These changes will be minor in themselves but their ramifications will be widely felt 	<ul style="list-style-type: none"> The median age for OECD states in 2030 will be between 39-41. This is on account of scenario 5 drawing the bleakest economic picture for the OECD The working age population of OECD countries is set to fall while the median age will continue to rise. These changes will be minor in themselves but their ramifications will be widely felt

Pull factors – potential impact under each scenario <i>(continued)</i>					
“Pull” Factor	Scenario 1 “Progress for All”	Scenario 2 “Long Boom OECD”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falters”	Scenario 5 “Decoupled Destinies”
Inflation <ul style="list-style-type: none"> Inflation, average consumer prices (annual percentage change) in 2006 and 2013 	<ul style="list-style-type: none"> Broad down trend among OECD states. Approximate median rate of inflation stands between 2% and 2.5% in 2013. Relatively few states buck trend and exhibit a rise in inflation. Favourable economic conditions and strong performance enable the OECD to maintain low interest rates throughout the time-frame after the rocky ride experienced during the credit crunch. 	<ul style="list-style-type: none"> OECD median interest rates stand between 2-2.5% 	<ul style="list-style-type: none"> OECD median interest rates stand between 2-2.5% Low inflation may not be replicated across all OECD states and increased resource competition from emerging economies and resource hungry BRICs could drive global inflation 	<ul style="list-style-type: none"> Depending on economic policy OECD median interest rates fluctuate between 1.5 and 5% As globalization stalls and growth economic OECD stagnates, interest rates may be cut as governments and central banks seek to stimulate sluggish economies – which could in turn fuel inflationary pressures 	<ul style="list-style-type: none"> OECD interest rates rise across the board to a median of 4-5% As OECD economies struggle and the price of oil remains above the USD 100 a barrel mark, inflation will remain a real worry.

Pull factors – potential impact under each scenario <i>(continued)</i>					
“Pull” Factor	Scenario 1 “Progress for All”	Scenario 2 “Long Boom OECD”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falters”	Scenario 5 “Decoupled Destinies”
Dual Citizenship <ul style="list-style-type: none"> • Countries / Territories Allowing Dual Citizenship in Some Form 	<ul style="list-style-type: none"> • In such a benevolent political and economic environment, the notion of dual citizenship becomes somewhat outdated as many states relax border controls to further integrate themselves into a global economy. 	<ul style="list-style-type: none"> • As the OECD booms, these developed countries will do everything possible to accommodate the influx of skilled workers they require. • Border restrictions between OECD states, already minimal, will be slackened further while those for skilled migrants from non-OECD states will be softened. 	<ul style="list-style-type: none"> • With growth shared between the OECD and emerging economies, relations between these groups are cordial and border restrictions are light. • Dual citizenship is encouraged as is professional migration. • Barriers to migration are more intense for non skilled workers from LDCs. 	<ul style="list-style-type: none"> • Amidst the political tension rife in this scenario an increasing number of countries strengthen the barriers to migration. • Dual citizenships rights are curbed, curtailing the movements of many habitual migrants and travellers, especially those from LDCs. 	<ul style="list-style-type: none"> • Relations are strained between the OECD and the non-OECD world, as increasing competition, in both trade and geo-politics sour relations. • Co-operation on dual citizenship or border control / restrictions is limited, increasing the difficulty and cost of migration. • Relations between the emerging economies and LDCs are generally robust. • The BRICs are able to source natural resources from LDCs at low cost to feed their voracious economies while the LDCs themselves benefit from trading agreements and increased levels of FDI and political backing.

Pull factors – potential impact under each scenario <i>(continued)</i>					
“Pull” Factor	Scenario 1 “Progress for All”	Scenario 2 “Long Boom OECD”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falters”	Scenario 5 “Decoupled Destinies”
Foreign born population <ul style="list-style-type: none"> • Foreign-born population by country of residence 	<ul style="list-style-type: none"> • The US has a total of 32 million foreign born citizens, almost 17 million of whom come from non-OECD states. Foreign born population could rise to around 40 million by 2030 • Germany has the second largest foreign born population with figures of 8 million and 4.5 million. 	<ul style="list-style-type: none"> • As migration to the OECD increases, foreign born populations will increase as will the percentage of that population originating from non-OECD states. • This scenario will see a continuation of base trends for the OECD while the BRICs will see limited growth in their numbers of foreign born residents. 	<ul style="list-style-type: none"> • Foreign born population rate and percentage from non-OECD states will both increase. • This scenario will witness less diversification than scenario 1 as a result of the asymmetric growth performance between the OECD, emerging economies and the LDCs. 	<ul style="list-style-type: none"> • Tough economic conditions will reduce both the foreign born populations of OECD states as well as the proportion of those populations that come from non-OECD states. 	<ul style="list-style-type: none"> • Foreign born populations fall, as do the proportions originating from non-OECD states. The decline is steeper than under Scenario 4

Data sources are listed in Annex 4.A6.

Annex 4.A4

Push Factors: Potential Impact Under Each Scenario

Push factors – potential impact under each scenario					
Push Factors	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falterers”	Scenario 5 “Decoupled Destinies”
Economically active population	<ul style="list-style-type: none"> • Economically active population rate changes to 2020: <li style="padding-left: 20px;">World: -2.0% • More Developed Regions (MDR): -2.5% • Less Developed Regions (LDR): +2 	<ul style="list-style-type: none"> • Economically active population rate changes to 2020: World: -1.5% MDR: -3.0% LDR: +2.5-3.0% 	<ul style="list-style-type: none"> • Economically active population rate changes to 2020: World: -2.0% MDR: -2.5-3.0% LDR: +2.5% 	<ul style="list-style-type: none"> • Economically active population rate changes to 2020: World: -1.5% MDR: -2.0% LDR: +3.0% 	<ul style="list-style-type: none"> • Economically active population rate changes to 2020: World: -1.5% MDR: -2.0% LDR: +1.5% • As this is a generational trend we will see little change in the early stages of the scenario.

Push factors – potential impact under each scenario (continued)					
Push Factors	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falters”	Scenario 5 “Decoupled Destinies”
<p>Political stability, absence of violence (Current)</p> <ul style="list-style-type: none"> • Vast majority of non-OECD states under 50th percentile in governance rankings. Only four rank higher. • Median percentile of the 30 selected countries is 33.45% • High growth supports and strengthens political stability, subdues many domestic tensions and reduces the migratory push factors particularly for previously unstable countries • Periodic incidences of domestic strife break out in some LDCs and within a handful of developing countries • Remittance levels should increase and help to reduce tensions in sending countries 	<ul style="list-style-type: none"> • Likelihood of a slight decline in the median ranking as a result of increased tensions (See below). • Expected median of between 31%-33% • Increased religious and ethnic tensions possible within BRIC countries • Increasing potential for conflict between Russia and her neighbours and between India and Pakistan 	<ul style="list-style-type: none"> • We can expect the median to experience a slight decline. Possible median of 32%-33.5% • Instability increases under this scenario in non-BRIC countries due to internal tensions. 	<ul style="list-style-type: none"> • The instabilities de-tailed below promise to cause a trough in governance ratings. • In this scenario we can expect a governance median of between 27%-29% • Low growth could lead to domestic unrest and faster turnover of governments in some developing nations and LDCs 	<ul style="list-style-type: none"> • If developing states can avoid the corruption that often comes with rapid development we may see a governance median rate of between 35% – 38%. Improvement will be less pronounced should development lead to despotism • Buoyant emerging economies and LDCs are able to deliver more rapid social development to their increasingly affluent, productive populations. • General prosperity and a strong emerging middle class mean that internal violence is infrequent • “Power corrupts” – strong growth and the commensurate spike in development may mask political misbehaviour, however, as sitting leaders use the good times to solidify themselves in power, things may come to a head if and when this boom cycle turns. 	

Push factors – potential impact under each scenario (continued)					
Push Factors	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falters”	Scenario 5 “Decoupled Destinies”
Enrolment in tertiary education	<ul style="list-style-type: none"> All developing regions show growth in tertiary enrolments. China, India, South East Asia and Sub Saharan Africa (SSA) perform best, each exhibiting over 200% growth by 2030. More money is available for education both in OECD states and for aid funded education programmes in non-OECD states 	<ul style="list-style-type: none"> China and India improve less than Scenario 1, posting an 85-95% improvement, while SSA falls further, exhibiting only 110-120% increases by 2030. 	<ul style="list-style-type: none"> China leads the BRICs with a 100-110% increase in enrolments while the LDCs fall away embodied by a mean 90-100% increase by 2030 for SSA. 	<ul style="list-style-type: none"> Economic issues dampen enrolment rates, even among the BRICs. China oversees a 70% increase while LDCs see a mean increase of just 55-65% by 2030 Tertiary education may be held back if economic development falters A global slowdown could lead to less opportunity for grant and scholarship funded places in OECD countries 	<ul style="list-style-type: none"> On the back of strong growth, and the advances achieved in social development and structural reforms, governments and their populations are increasingly aspirational. Significant growth in tertiary enrolments as developing countries invest in human capital and seek to expand their skilled workforce. China leads surging BRIC and emerging economies with enrolment growth of 110-120% by 2030. LDCs also show better than expected increases. SSA has over 200% growth by 2030

Push factors – potential impact under each scenario <i>(continued)</i>					
Push Factors	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falters”	Scenario 5 “Decoupled Destinies”
Population living in areas under water stress	<ul style="list-style-type: none"> The percentage of South Asians living under severe water stress tops 80% by 2030, while all other regions apart from the MENA region show a decrease in those under water stress. More money available to better manage scarce water resources in developed and developing world Sporadic tensions emerge within and between nations where water scarcity is still an issue 	<ul style="list-style-type: none"> South Asians living under water stress reaches 82% by 2030. Improvement elsewhere is slowed by an average of 1-2%. Greater use of OECD aid-funding to finance innovative irrigation and water access projects in the developing world Greater domestic funding for water projects in better performing nations Slowdown in BRIC countries leads to reduced funding for water projects and results in greater tension between agricultural areas and urban dwellers 	<ul style="list-style-type: none"> South Asians living under water stress declines slightly to 77-78% on the back of strong Indian performance. Elsewhere LDCs figures increase slightly by 0.5-1% 	<ul style="list-style-type: none"> Measures to alleviate water stress fail to cope and the numbers of those affected rise. South Asian percentage rise to 83%, emerging economies by 0.5% and LDCs by 0.5-1.5% Water stress increases migration from Asia, Africa and the Middle East Increasing water stress prompts higher tension between states and acts to lower living standards. 	<ul style="list-style-type: none"> Emerging economies improve quickly under this scenario – by 2-4% over base figures. The percentage of South Asians living under water stress drops to 76%. Although development efforts proceed with limited aid input from the OECD, progress is still made. After strong growth there is money available in the developing world to tackle water shortage issues. The aura of co-operation in the developing world means that populations suffering from water shortages are more readily assisted by neighbouring states.

Push factors – potential impact under each scenario (continued)					
Push Factors	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falters”	Scenario 5 “Decoupled Destinies”
Projected coastal flooding	<ul style="list-style-type: none"> By 2070 147 million people will be under threat from coastal flooding, representing 5% of the world population. Worst hit will be China with almost 30 million, while the Asian subcontinent will also be greatly affected. More money available to help populations move out of threatened areas 	<ul style="list-style-type: none"> Greater than 5% of the world's population at risk by 2070 under this scenario. Increase of perhaps 0.15 – 0.2% 	<ul style="list-style-type: none"> Population at risk increases by .025-0% <ul style="list-style-type: none"> BRICs and aid funded emerging economies and LDCs may make conscious choices to allow certain areas to flood and focus their resources on protecting only critical locations – could lead to high levels of migration 	<ul style="list-style-type: none"> Population at risk increases by up to 1% 	<ul style="list-style-type: none"> Decline on figure of 5% under threat. Fall of perhaps 0.25-0.5% Developing countries may provide increasing aid funding and skills transfer to help LDCs with coastal protection – and reduce the risk of higher levels of migration to wealthier nations such as the BRICs and Middle East states Nations will be selective in where they focus protection efforts – leading to internal displacement

Push factors – potential impact under each scenario (continued)					
Push Factors	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Failers”	Scenario 5 “Decoupled Destinies”
<p>Working population determinants/ predictors</p> <ul style="list-style-type: none"> • Age dependency rate • Total fertility rate 2030-2035 	<ul style="list-style-type: none"> • 2030 World Fertility rate: 2.14 • Current OECD Age Dependency Ratio: 0.5. By 2030 A majority of states have similar or higher rates than the OECD • As non-OECD states enjoy robust economic growth, fertility rates are expected to decline in line with increased income and employment rates. • In the long term, as fertility rates fall, the age dependency ratio for developing countries will more closely mirror the situation in the OECD countries. • In the poorest countries high fertility and low dependency rates will continue through to 2030 	<ul style="list-style-type: none"> • 2030 world fertility rate may increase slightly to around 2.17. • Median age dependency ratio will remain at 0.5 though long term trend is upward. • As the fertility rates of countries like India and many LDC's remain high, their age dependency rate will be kept low. 	<ul style="list-style-type: none"> • 2030 world fertility rate increases to 2.19 on the back of poor LDC performance. • Median dependency ratio remains at 0.5 though long term trend is upward. • Strong growth from the BRICs, regional powers and oil rich states reduce fertility rates, while age dependency rates trend within a 0.5 variance on mean OECD rates. • Weaker economies are left behind – without strong economic growth and the commensurate rise in social development, fertility rates and age dependency rates show little or no improvement 	<ul style="list-style-type: none"> • 2030 world fertility rate increases to 2.22 as a result of overall sluggish performance. • Median dependency ratio remains at 0.5 though long term trend is upward. 	<ul style="list-style-type: none"> • 2030 world fertility rate decline to 2.11 as a result of strong performances from emerging economies and LDCs. • Dependency ratio static at 0.5 but overall trend is downward. • The benefits of improved growth and social development take some time to impact fertility rates and dependency ratios – with real improvement only starting to show through from 2020 onwards • Improvements in education and sustained gains in incomes and living standards are largely responsible for the reduction in fertility in both developing nations and LDCs.

Push factors – potential impact under each scenario (continued)					
Push Factors	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falters”	Scenario 5 “Decoupled Destinies”
<p>Population Gender distribution determinants</p> <ul style="list-style-type: none"> • Females (15-64 years), by age cohorts 2005 and 2030 • Males (15-64 years), by age cohorts 2005 and 2030 	<ul style="list-style-type: none"> • Women currently comprise 44.1% of the workforce in OECD states. The percentage is far lower in non-OECD states but the gap begins to close by 2030 • As LDC political and structural reforms take effect more women are drawn into the workforce. This may have the effect of decreasing fertility rates and stemming any potential population crisis affecting the poorest countries. • Significant fertility rate declines are only likely to become apparent from 2020 onwards 	<ul style="list-style-type: none"> • Economic uncertainty in BRIC nations could lead to legislation to control birth rates – which could in turn reduce the workforce towards the end of the period • The bulk of those seeking to migrate by 2030 will have been born by 2012 – hence the supply is fairly well specified – fertility rates from 2012 onwards will influence longer term economic forecasts 	<ul style="list-style-type: none"> • Developing states are unable to improve economic or social performance significantly. • In the absence of legislation or other disincentives, economic necessity may continue to drive those in poorer countries to seek larger families 	<ul style="list-style-type: none"> • As globalization falters, the growth in female workers participating in developing states and emerging economies could slow. • Fertility rates remain relatively high and there is a commensurate oversupply of workers. Thus, migratory pressure is increased at a time of increased selectivity from the OECD nations 	<ul style="list-style-type: none"> • Economic and social development should bring higher female participation in the workforce and help drive down fertility rates • Women will form a larger portion of the workforce until in some countries the split reaches the levels we see today in the developed world (roughly 50%).

Push factors – potential impact under each scenario (continued)					
Push Factors	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falters”	Scenario 5 “Decoupled Destinies”
<p>Population Age Determinants</p> <ul style="list-style-type: none"> • Working age population (15-64), gender disaggregated, in absolute numbers, in 2005 and 2030 • Median age of population in 2030 	<ul style="list-style-type: none"> • Sub Saharan states, Mali and Niger median age's in 2030 will be only 17-18, a rise of only 1-2 years. • The BRICs and developing Eastern European (EE) states age quicker –6-7 years by 2030. • If fertility rates decline with economic and social development, towards the end of the scenario period the mean age will rise as the working age population shrinks proportionally. • Better performing LDCs will exhibit similar behaviours, but the effects will not be felt in the short or medium term. 	<ul style="list-style-type: none"> • SSA's Mali and Niger's median ages increase even slower under scenario 2, by 0.5-1 years by 2030. The BRICs and EE's ageing also slows slightly, increasing by 5-6 years by 2030. • Although the LDCs post relatively strong growth figures of around 6%, they are starting from such a low base that development is relatively slow. 	<ul style="list-style-type: none"> • SSA's Mali and Niger's median ages show similar movement as under scenario 2, aging by 0.5 years to 2030. • BRICs and emerging economies rate of aging increases by 7-9 years by 2030. 	<ul style="list-style-type: none"> • Aging rate slows across non-OECD states. Even the BRICs see a minimal median rise of 4-5 years by 2030. • The working age population in non OECD states grows or remains static and the mean age remains stubbornly low on the back of the sluggish implementation of political and structural reform. 	<ul style="list-style-type: none"> • Aging rates accelerate throughout the non-OECD world. SSA's Mali and Niger age by 3-4 years by 2030, while the BRICs and emerging economies age by 8-9 years on the back of excellent economic performance. • As developing countries accelerate the pace of improvement in education health and structural reform we will see significant reductions in growth rates of working age populations and median age will gradually rise.

Push factors – potential impact under each scenario (continued)					
Push Factors	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falters”	Scenario 5 “Decoupled Destinies”
<p>Income and wealth determinants</p> <ul style="list-style-type: none"> • Comparison of GNI per capita, 2005 • Inflation, average consumer prices (annual percentage change) in 2006 and 2013 	<ul style="list-style-type: none"> • Inflation trends downwards. EE is particularly successful. Russia more than halves inflation to 5% while Serbia experiences a two-thirds cut to 6%. • S. America is far less successful. Inflation soars in Venezuela to 40% while Brazil and Argentina experience 2% and 1% falls respectively • This scenario shows high levels of income growth for most countries alongside a general drop in inflation • Growth should improve the funding for research and development globally and facilitate knowledge transfer leading to innovation in resource usage and help offset the inflationary pressures of rising global living standards 	<ul style="list-style-type: none"> • Inflation will trend down in the OECD but will remain static or experience upward pressure elsewhere. Serbia, for instance only experience a 50% fall to 9% 	<ul style="list-style-type: none"> • Inflation trends downward for the OECD and BRICs and upward for the LDCs. Russia's inflation decreases to 4.5%. 	<ul style="list-style-type: none"> • Weak economic performance increases inflation. Serbia's climbs to 8% while Russia sees a climb to 7.5% 	<ul style="list-style-type: none"> • Strong performance from the developing world and emerging economies sees inflation fall. However, overheating in the Russian economy sees inflation rocket to 15%. • Rapid wage growth in non-OECD economies could lead to economic overheating and inflation. • Less heavily regulated economies lack the policy instruments to control growth. • Well managed emerging economies are able to maintain steady growth allied to relatively low inflation rates whilst continuing to deliver steady increases in incomes and living standards.

Push factors – potential impact under each scenario (continued)					
Push Factors	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Failters”	Scenario 5 “Decoupled Destinies”
<p>Technology and innovation</p> <ul style="list-style-type: none"> • The current median number of phone subscriptions in non-OECD states is 74 per 100 inhabitants. • Market set to expand by 382.5 million subscriptions in 2008. • By 2012, yearly growth in subscriptions is expected to be 163 million per year. • Innovation, based on patent filings, is dominated by OECD states. No non-OECD state currently ranks among the top 10 innovators. • By 2030 the adoption of technology and the pace of innovation quicken as economic advancement and structural reforms encourage entrepreneurialism and facilitate technological uptake. • Rapid adoption of mobile phones in both emerging and LDCs accelerates domestic development and increases integration with the developed world. • Technological advancement also creates domestic opportunities that benefit the LDCs and decelerates the brain drain. 	<ul style="list-style-type: none"> • Mobile penetration rates slow – with growth of 100-120 million subscribers per year by 2012 • A key driver of OECD growth is investment in R&D and the innovations that follow. • The BRICs and other emerging economies failed to capitalize on their growth spurt to 2008 and under-invest in the underpinning infrastructure to support future technological growth and innovation. • The pace of national re-turning to home countries is slowed as opportunities reduce • The LDC’s struggle to keep pace with the costs of technological advancement and although educational output increases for many, the result is a brain drain to more developed nations. • Despite uneven growth, technological diffusion still increases as firms from OECD states seek to expand into new markets. 	<ul style="list-style-type: none"> • Environment conducive to technological advancement and innovation sees mobile subscriptions only fractionally below Scenario 1 levels at 140-150 million per year by 2012 • Continuing globalisation encourages the spread of technology and accelerates innovation. These forces help to further integration with the developed world. • Rapid take up of mobile phones – even amongst the poorest helps the creation of new micro-businesses • Emerging economies exhibit strong economic growth and are able to push ahead with structural reform programs, opening up new technology and innovation centred sectors – thus creating new jobs and relaxing migratory pressures. 	<ul style="list-style-type: none"> • Innovation stagnates in the developing world and growth in mobile subscriptions drops to under 100 million by 2012. • The negative geopolitical atmosphere plays against technological diffusion, lessening the ability of non-OECD states (especially the LDC’s) to increase the use of those technologies beneficial to development. 	<ul style="list-style-type: none"> • Non-OECD states see strong growth in Patent filings and begin to approach the levels of mid-ranking OECD states. • Mobile phone subscriptions soar as the Chinese and Indian markets flex their muscles. We can expect growth of 180 – 200 million per year in 2012. • Innovation and technological uptake in non-OECD states accelerate at a rapid pace particularly in the period from 2015-2030 as a result of significant investments made in the period to 2015 both to bolster R&D and attract knowledge and technology intensive industries. • Increasing mobile penetration draws people together, helping the furtherance of technological diffusion and spurring innovation. • Increased numbers in tertiary education will also help to increase innovation. Increased innovation will in turn aid growth. 	
<ul style="list-style-type: none"> • Patent Filings by Country of Origin (top 20 origins and share of countries in total patent filings), 2000 and 2006 					

Push factors – potential impact under each scenario (continued)					
Push Factors	Scenario 1 “Progress for All”	Scenario 2 “OECD Long Boom”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falters”	Scenario 5 “Decoupled Destinies”
<p>Clean water and Sanitation</p> <ul style="list-style-type: none"> • Access to improved drinking-water sources and to improved sanitation (percentage) • Millennium Development Goals set target of halving fraction of those living without clean water and sanitation. Current figures are 93% and 84% respectively 	<ul style="list-style-type: none"> • Millennium Development Goals (MDGs) are surpassed. The share of population with access to clean water and sanitation hit 97% and 95% respectively. • As a result of solid economic growth and reforms, many non-OECD countries are able to provide an increasingly large percentage of their population with access to clean water and with significantly improved levels of sanitation. • Reductions in child mortality and the incidence of avoidable waterborne diseases as safe drinking water become widely available in developing states. 	<ul style="list-style-type: none"> • MDG targets of 96.5% and 94% with access to clean water and sanitation respectively by 2015 are not achieved. Expected results for this scenario are 94% and 86% respectively by 2015 with targets met by 2030 • With worse than expected economic performance the emerging economies and LDCs may have to rely on the altruism of the OECD states in order to implement effective clean water and sanitation programs. • With the OECD experiencing a “long boom” there will be significant internal pressure to increase aid to the poorer nations. 	<ul style="list-style-type: none"> • BRICs and emerging economies reach their MDGs, halving those without access to clean water or sanitation. The LDCs are less able to improve and fall badly short of MDG targets. Overall global progress falls short, with figures of 94.5% and 87.5% respectively. Targets still not met by 2030 • BRICs and emerging economies • Strong growth and structural reforms provide the funding and mechanisms for large scale engineering projects to deliver access to clean water and the provision of adequate sanitation to large sections of the population in LDCs. • Low economic growth will hamper the speedy implementation of clean water and sanitation programs. 	<ul style="list-style-type: none"> • Worse than expected global performance halts efforts to reach MDGs. Figures stagnate. Access to clean water and sanitation remain at 93% and 84% respectively • Limited technological diffusion works against significant improvements in the provision of clean water and sanitation. • Non-OECD states will be unable to implement programs as quickly as they would like. • The BRICs enjoy the most significant sector growth but it is below expected levels. • LDCs lack the funding and management infrastructure to implement effective wide ranging programs. 	<ul style="list-style-type: none"> • The emerging and developing world thrive and are able to roll out clean water and sanitation. MDGs are achieved with figures hitting 96.5% and 94% respectively by 2015 • Strong economic performance enables developing countries to invest heavily in these vital projects. • A steadily increasing number of people have access to clean water and sanitation, a vital step for social development – serious health issues are brought under control

Annex 4.A5

Wild Cards and Their Implications for Migration and Migration Policy

Wild cards and their implications for migration and migration policy Wild Cards = Low Probability, High Impact Events					
Wild Card	Scenario 1 “Progress for All”	Scenario 2 “Long Boom OECD”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falters”	Scenario 5 “Decoupled Destinies”
Environmental	<ul style="list-style-type: none"> • Environmental constraints confine migration flows to intra regional movements • A natural / climatic disaster creates high volumes of economic migrants from developing world • A natural / climatic disaster has high death toll in key OECD economies (e.g. the US) – generating a short term peak in demand for migrants at all skill levels 	<ul style="list-style-type: none"> • As per scenario 1 • Environmental disasters and high levels of internal migration could be a contributing factor in the sluggish performance of the BRIC countries 	<ul style="list-style-type: none"> • As per scenario 1 • Poor pace of development for LDCs could decrease their ability to address major environmental catastrophes and increase environmental migration 	<ul style="list-style-type: none"> • As per scenario 1 • Limited protection funding could lead to increased frequency of disasters • A global turnaround would limit the assistance available to deal with disasters – leading to higher outflows but limited willing recipients 	<ul style="list-style-type: none"> • As per scenario 1 • Enhanced economic and political co-operation could increase the co-ordination of developing economies in addressing environmental crises and limit the outflow of poor environmental migrants

Wild cards and their implications for migration and migration policy (continued)					
Wild Cards = Low Probability, High Impact Events					
Wild Card	Scenario 1 “Progress for All”	Scenario 2 “Long Boom OECD”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falters”	Scenario 5 “Decoupled Destinies”
Health	<ul style="list-style-type: none"> Health epidemic dramatically increases migrant outflows from source nations Health epidemic with high fatality rate dramatically increases demand for all skill levels in key OECD economies A widespread infectious disease leads to collapse in the insurance and travel industries. Barriers to the movement of migrants (border controls) increase and compete with increased incentives to leave affected areas. Reductions in border controls to encourage migration could lead to the easier flow of disease and pandemics between countries 	<ul style="list-style-type: none"> As per scenario 1 Developed economies may feel compelled to invest in monitoring and prevention systems in the less well funded emerging economies to prevent the spread of disease 	<ul style="list-style-type: none"> As per scenario 1 The type of epidemic is very important. The impact point may vary E.g. A SARS outbreak would affect both the core and the periphery whereas an acceleration in the spread of HIV will mostly affect the periphery 	<ul style="list-style-type: none"> As per scenario 1 Barriers to the movement of migrants (border controls) increase and compete with increased incentives to leave affected areas 	<ul style="list-style-type: none"> As per scenario 1 Greater political and economic collaboration between emerging nations and LDCs could lead to enhanced and co-ordinated health monitoring systems and greater knowledge transfer

Wild cards and their implications for migration and migration policy <i>(continued)</i> Wild Cards = Low Probability, High Impact Events					
Wild Card	Scenario 1 “Progress for All”	Scenario 2 “Long Boom OECD”	Scenario 3 “Uneven Progress”	Scenario 4 “Globalisation Falters”	Scenario 5 “Decoupled Destinies”
Governance Challenges	<ul style="list-style-type: none"> Major political or economic scandal hinders cohesion Major corruption scandal in a global institution reduces global trust Collapse of a key global institution such as the UN or World Bank Pakistan becomes a Taliban State Russia forms a 21st century equivalent of the Soviet Union 	<ul style="list-style-type: none"> As per scenario 1 One or more OECD states abuse their power and destabilise weaker nations leading to country collapse 	<ul style="list-style-type: none"> As per scenario 1 The growth of multinationals emanating from developing nations could create systemic shocks if they seek to use corruption as a means of influence 	<ul style="list-style-type: none"> As per scenario 1 Limited monitoring and resources could lead to financial, political and human rights abuses 	<ul style="list-style-type: none"> As per scenario 1 Some developing countries and LDCs may seek merger as the most economically viable long term strategy

Wild cards and their implications for migration and migration policy (continued)					
Wild Cards = Low Probability, High Impact Events					
Wild Card	Scenario 1 "Progress for All"	Scenario 2 "Long Boom OECD"	Scenario 3 "Uneven Progress"	Scenario 4 "Globalisation Falters"	Scenario 5 "Decoupled Destinies"
Social Cohesion Issues	<ul style="list-style-type: none"> Domestic tensions rise in OECD countries as the gap between haves and have-nots increases – leading to forced expulsion of migrants 	<ul style="list-style-type: none"> OECD populations may turn against national governments if they perceive domestic growth is being achieved to the detriment of other nations 	<ul style="list-style-type: none"> Major global flows of workers could create integration issues for recipient countries 	<ul style="list-style-type: none"> "The implosion of China" because of the unequal economic distribution and various political problems – leads to huge migrant outflows to Australia, New Zealand and Japan as well as a commensurate replacement influx. Socialist revolutions in Latin America lead to refugees and migratory flows, especially to countries with ethnic, social or language similarities e.g. Spain, Italy, USA. 	<ul style="list-style-type: none"> The gap between developed and developing nations could be played out at the individual level if developing nations perceive they are still being ignored in the global institutions
Wars and Internal Violence	<ul style="list-style-type: none"> An increasingly assertive Russia could engage in local conflicts – driving out-migration and putting stress on NATO 	<ul style="list-style-type: none"> Serious conflicts could emerge in LDCs over resources and access to water 	<ul style="list-style-type: none"> An increasingly bullish India may feel that war is the only way to resolve tensions with Pakistan – particularly if it becomes more fundamentalist 	<ul style="list-style-type: none"> Regular internal and inter-state conflicts in Africa drive high levels of social and political migrants 	<ul style="list-style-type: none"> Tensions between developed and developing nations could lead to armed conflict over resources

Wild cards and their implications for migration and migration policy (continued)					
Wild Cards = Low Probability, High Impact Events					
Wild Card	Scenario 1 "Progress for All"	Scenario 2 "Long Boom OECD"	Scenario 3 "Uneven Progress"	Scenario 4 "Globalisation Falts"	Scenario 5 "Decoupled Destinies"
Economic Upheaval	<ul style="list-style-type: none"> • A series of severe price hikes or increase in commodity prices: <ul style="list-style-type: none"> – Uneven spread of growth benefiting oil producers and states with a strong agricultural industry – Generates instability – Produces very different migration models 	<ul style="list-style-type: none"> • Potential collapse of a BRIC economy could lead to global economic turmoil 	<ul style="list-style-type: none"> • Regular collapses amongst LDCs may strain global capacity to intervene and prop up weak and failing states 	<ul style="list-style-type: none"> • A global turnaround could lead to a rash of conflicts over resources at key flashpoints around the globe • A corporation formally bids to take over a weak economy 	<ul style="list-style-type: none"> • Accelerating pace of development in the developing world and the transfer of big business to those markets could lead to protests and riots in the "victim" OECD countries

Annex 4.A6

Sources for Pull and Push Factor Core Data

Pull factors – OECD countries

Demographics

Population Gender Distribution Determinants

Females (15-64 years), by age cohorts (in percentages), in 2005 and 2030

Males (15-64 years), by age cohorts (in percentages), in 2005 and 2030

UN World Population Prospects: The 2006 Revision and World Urbanization Prospects: The 2005 Revision (median variant).

Working Population Determinants/Predictors

A) Working age population (15-64), gender disaggregated, in absolute numbers, in 2005 and 2030

UN World Population Prospects: The 2006 Revision and World Urbanization Prospects: The 2005 Revision (median variant).

A) Median age of population in 2005 and 2030

UN World Population Prospects: The 2006 Revision and World Urbanization Prospects: The 2005 Revision (median variant).

Economics

B) Inflation, average consumer prices (annual percentage change) in 2006 and 2013

IMF World Economic Outlook Database, April 2008

Quality of life

H) Countries/Territories Allowing Dual Citizenship in Some Form

Renshon, Stanley A. (2000), *Dual Citizens in America: An Issue of Vast Proportions and Broad Significance*, Centre for Immigration Studies Center

International Migration History

J) Foreign-born population by country of residence

OECD (2008), *A Profile of Immigrant Populations in the 21st Century*

Push factors – non-OECD countries

Demographics

Working Population Determinants/Predictors

A) Age dependency rate (dependants to working-age population)

World Bank World Development Indicators; 2006

A) Total fertility rate 2030-2035

UN World Population Prospects: The 2006 Revision and World Urbanization Prospects: The 2006 Revision. (Median variant) (The average number of children a hypothetical cohort of women would have at the end of their reproductive period if they were subject during their whole lives to the fertility rates of a given period and if they were not subject to mortality. It is expressed as children per woman.)

Population gender distribution determinants

A) Females (15-64 years), by age cohorts (in percentages), in 2005 and 2030

UN World Population Prospects: The 2006 Revision and World Urbanization Prospects: The 2005 Revision (median variant)

A) Males (15-64 years), by age cohorts (in percentages), in 2005 and 2030

UN World Population Prospects: The 2006 Revision and World Urbanization Prospects: The 2005 Revision (median variant)

Population age determinants

A) Working age population (15-64), gender disaggregated, in absolute numbers, in 2005 and 2030

UN World Population Prospects: The 2006 Revision and World Urbanization Prospects: The 2005 Revision (median variant)

A) Median age of population in 2030

UN World Population Prospects: The 2006 Revision and World Urbanization Prospects: The 2005 Revision (median variant)

*Economics**Income and wealth determinants*

B) Comparison of GNI per capita, 2005

B) Inflation, average consumer prices (annual percentage change) in 2006 and 2013

IMF World Economic Outlook Database, April 2008

Technology and innovation

G) Mobile cellular subscribers per 100 inhabitants

ITU Statistics Database “ICT-Eye”; 2007 dataset

G) Patent Filings by Country of Origin (top 20 origins and share of countries in total patent filings), 2000 and 2006

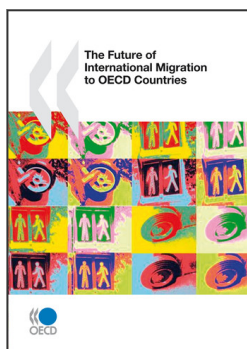
WIPO Statistics database, 2008

*Quality of life**Clean water and sanitation*

G) Access to improved drinking-water sources and to improved sanitation (percentage)

WHO Statistical Information System (WHOSIS), 2006. Access to improved water source refers to the percentage of population with access to an improved drinking water source in a given year. Access to improved sanitation is the percentage of population with access to improved sanitation in a given year. Improved water sources include household

connections, public standpipes, boreholes, protected dug wells, protected springs, and rainwater collections. Reasonable access is broadly defined as the availability of at least 20 litres per person per day from a source within one kilometre of the user's dwelling. Improved sanitation facilities are defined in terms of the types of technology and levels of services that are more likely to be sanitary than unimproved technologies. Improved sanitation includes connection to a public sewers, connection to septic systems, pour-flush latrines, simple pit latrines and ventilated improved pit latrines.



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