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Divergent patterns in the ethnic transformation of societies
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Developed-country populations that began their fertility transitions relatively early are becoming increasingly diverse with respect to the ancestry, ethnic origins and religions of their inhabitants. This is primarily a result of high levels of immigration, particularly migration from the less developed countries. To a lesser extent, higher birth-rates of some of the immigrant populations further amplify diversity. This paper considers the possible consequences of these trends in the developed world, and whether diversity of that kind may eventually become a universal phenomenon affecting most countries.

The assumption of demographic globalisation

Many characteristics of the developed world: low death and birth rates, and possibly the new attitudes to marriage and living arrangements embodied in the ‘second demographic transition’, are becoming universal. That may be regarded as a demographic facet of globalisation. Some long-term future scenarios envisage a world where economic prosperity is more universally shared, where demographic transition is complete, where population growth is over and the socio-economic and demographic composition of populations are convergent.

This paper considers whether the growing heterogeneity of Western countries today is inevitable, and what its social, economic and political consequences might be, and whether heterogeneity of populations arising from immigration might remain confined for the most part to countries currently classed as ‘developed’. Globalisation of population may be much less marked in many of those countries which began their fertility transition later and are now progressing towards full economic development. If so, the later that countries develop, the less heterogeneous they will become through migration.

Demographic transition and international migration

Large-scale migration from poor countries to the developed world is powered, in part, by the century-long gap between the onset of their respective fertility transitions. In the developed world, societies have moderated birth and death rates for about a century and are relatively old. Many have ceased to grow through their own natural increase; some are declining in number. With the exception of some former communist countries, they have become rich. They send relatively few emigrants. Poor countries, mostly with incomplete or even absent regulation of fertility, still grow rapidly, have more youthful populations, often send many emigrants and endure varying, although generally diminishing, levels of poverty.

Many migrants from those poorer countries move to the developed world. With a few exceptions such as France, their immigration comprises the greater part of population growth (Eurostat 2008a) and most future projected growth to mid-century. Nine Western European countries are projected to grow by 15 per cent or more by 2060, primarily from immigration. Seventeen former communist countries, plus Germany,

are projected to decline by up to 28 per cent by the same year (Eurostat 2008b). Many countries in Central Europe also receive immigrants from low and middle-income countries, although they do not at present compensate numerically for population loss from chronic low fertility (OECD 2007).

Transformation of population composition

Aside from its strictly demographic effects in driving population growth or mitigating decline, this migration has begun to make substantial, and presumably permanent, changes to the ethnic and religious make-up of the Western receiving countries. Populations of recent immigrants and their descendants increase, progressively diminishing the share of the native or indigenous population over time. The best-known example is the official projections by race and Hispanic origin of the population of the United States (US Census Bureau 2008). According to that, the minority populations together will together comprise a majority of the US population by 2042, accompanied by substantial growth in the total population by 129 million by 2050 (42 per cent), mostly through the direct and indirect effects of immigration. The Black, American Indian and other indigenous populations are, however, mostly not of recent immigrant origin. Setting aside those populations (in all 66.8 million by 2050) the population of recent immigrant origin is projected to comprise 36 per cent of the 2050 total.

For at least twelve other developed countries, mostly in NW Europe and the English-speaking world (listed in Table 1), projections document similar trends and project similar outcomes to mid-century and beyond, although on somewhat different

Table 1 A list of the projections of 'foreign-origin' populations from various sources.

	up to	criteria	source
Austria	2050	citizenship only	Lebhart and Münz 2003
Denmark	2050	'foreign origin'	official statistics
Germany	2050	'foreign origin'	Ulrich 2001
Germany	2100	Citizenship & descendants.	Birg 2002
Greece	2025	citizenship	Tsimbos 2008
Netherlands	2050	'foreign origin'	official statistics
New Zealand	2021	ethnic origin	official statistics
Norway	2060	'foreign origin'	official statistics
Sweden	2020	'foreign origin'	official statistics
Switzerland	2050	citizenship only	official statistics
UK	2051	ethnic origin	Coleman 2007
USA	2100	race and Hispanic origin	official statistics
Australia	2009	aboriginal populations only	official statistics
Canada	2017	aboriginal populations only	official statistics

Note: 'foreign origin' or 'foreign background' usually taken to include foreign immigrants plus those with one or both parents foreign immigrant
 Projections of 'foreign origin' usually include 'citizenship' and immigrants.
 (i.e. two generations). The third generation is assumed to be national. Fertility is assumed to converge to close to, or same as, the national average.
 Migration is usually held constant. The mortality of all groups is mostly assumed to follow

the national projected trend.

Individual groups are often clustered into 'Western background' and 'non-Western background' or similar broad classification.

definitions. Most do not use 'ethnic' or 'racial' criteria and include only the first and second generations (see Coleman 2006). These projections incorporate migration and fertility rates separately according to various national origins. In that way their impact on the composition of the population, given the continuation of specified, usually current migration levels, and convergent assumptions of fertility rates, can be estimated. In most of the projections the 'foreign-origin' or 'foreign background' population is defined to include both the first immigrant generation and the second generation born in the host country.. The third generation is generally assumed to be assimilated to the national population and to become Dutch, Swedish etc, thus disappearing from statistical view. However, potentially permanent 'ethnic' categories are employed in the projections for the English-speaking countries. 'Ethnic' identity can also fade over generations, of course, be changed or rejected by individuals, or become merely symbolic (Gans, 1979).

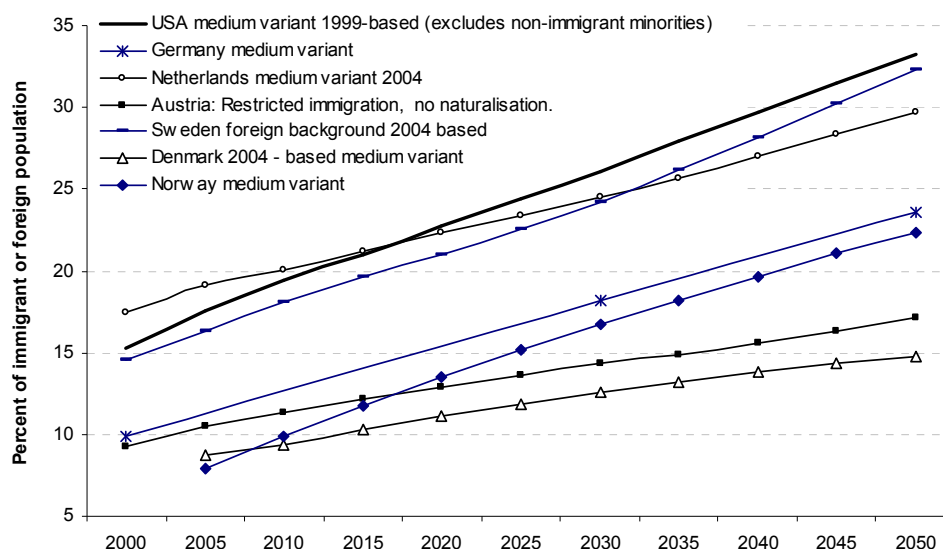
On these projections, between 15 per cent and 30 per cent of the total population is expected to be of first or second generation origin by mid-century, in some cases not far short of the equivalent projected proportion in the United States. In many of the European projections, however, up to one third of the projected foreign-origin totals are from other European or from other developed countries. In all cases the projected proportion of foreign origin population increases in nearly linear fashion up to the end of the projection period (mostly 2050 or 2060).

On those conservative assumptions, the foreign-origin proportions of those populations are projected to rise to between about 15 per cent and 30 per cent by mid-century with almost linear rates of change (Figure 2). The proportion of the foreign-origin populations with non-European backgrounds is expected to increase from about one half today to about two thirds by mid-century, up to 20 per cent of the total population. The composition of the population by origin does not necessarily determine the degree of social or economic salience of these differences. That would depend upon the degree of integration and social assimilation, including inter-ethnic union, and changes in ethnic self-identification.

Relative importance of migration and of differential fertility

Migration assumptions are more important than fertility assumptions in determining this outcome. Taking all minority groups together, ethnic minority or 'foreign origin' total fertility in most European countries is not great: for example in France in 1991-8, 2.5 compared with 1.65 for women born in France. Corrected for distortions in childbearing due to the migration process, these figures become 2.16 and 1.70 respectively (Toulemon 2004, t 2, t. 3) A similar differential can be seen in the UK in respect of birthplace of mother, and of ethnic origin in 2001 (ONS 2008 FM1 table 9.5, Coleman and Scherbov 2005). Youthful age-structure, of course, ensures a disproportionate contribution to births for the time being. Some groups, mostly Muslim or of African origin, have notably higher fertility but in common with other groups, these are declining. Most projections assume eventual convergence or at least stabilisation at a total fertility around 2.0 at most. The fertility of the Hispanic population in the US is, proportionately, the largest minority in these

Figure 2:
Projected growth of population of immigrant or foreign origin as per cent of total population in selected countries of Europe, 2000-2050



projections with a high birth rate, and its fertility is projected to decline only relatively slowly. Migration flows, by contrast, are very high in some countries compared with the annual total of births (Table 3). In Spain, Switzerland and Italy, net foreign immigration either exceeds the annual number of births or is close to it.

Table 3 Selected Western countries
 Comparisons of live births, net immigration and natural increase

	Population 1st Jan 08	Live births	Natural increase	Net immigration	Immigration as percent of births percent
	data in thousands				
Spain	44475	488	107	702	144
Switzerland	7509	74	13	69	93
Italy	59131	563	-7	494	88
Norway	4681	58	17	40	68
Belgium	10585	121	20	62	52
Austria	8299	76	2	31	41
Greece	11172	110	2	41	37
Denmark	5447	64	8	20	32
UK	60817	771	195	175	23
France mét	61538	784	268	70	9
Germany	82315	683	-141	48	7
Euro total	355968	3792	483	1752	46
Australia	21015	285	145	213	75
Canada	33311	357	127	204	57
New Zealand	4263	64	35	4	11
United States	298363	4217	1840	844	20

Sources: Eurostat, Australian Bureau of Statistics, Statistics Canada, Statistics New Zealand, US Census Bureau, National Center for Health Statistics, US Dept of Homeland Security.

Note: US data refer to 2006, Australia, Canada and New Zealand to 2007. Net immigration data not available for US. Admission for permanent settlement in 2006 was 1,266,264. Figure reduced by 1/3 to allow for return migration.

Projections of foreign populations are not available in respect of many of these countries; for example Spain, Italy, Belgium. But the data above indicate that transitions in population composition must be proceeding similar to those depicted in Figure 2.

The relative power of migration is easily shown by comparing the projected outcome in terms of population composition with, and without migration. Without migration, minority proportionate growth is relatively slow and eventually stops – or even declines in those European projections which assume that all persons with foreign background become ‘native’ after two generations. With the assumption of current migration, the growth in foreign-origin proportions is continually upwards (Figure 2).

Demography as destiny?

Migration trends are the most volatile of the three components of demographic change; driven by often unconnected economic, demographic and political developments in the numerous sending countries and in the receiving country itself. Migration is much more subject to government policy than are birth or death rates, all the more because the direction of migration policy – restrictive or promotional – can change radically between successive governments (Hollifield 2000).

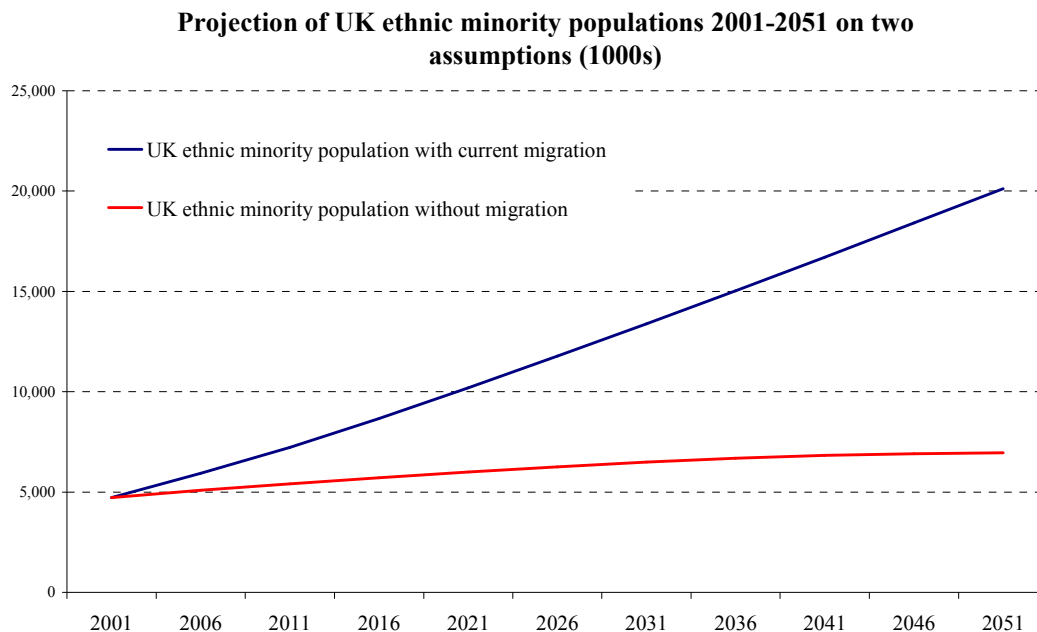
The projected ethnic changes—based on unchanged migration flows—are therefore by no means inevitable but depend on migration policy as well as on many unpredictable developments (including, of course, the recent economic collapse). Especially in liberal democracies, migration is much easier to encourage than to control (Freeman 1994); governments have limited their freedom of action by subscribing to international conventions on human rights and asylum, facilitating the migration of spouses, other relations and dependants that has dominated legal migration streams to the developed world in recent decades. But migration can go down as well as up, as the recent experience of Germany and the Netherlands has shown. Variant projections show that the assumed level of migration is the most powerful factor in these outcomes; alternative assumptions about differential fertility make little difference. As migration is by far the most uncertain of the components of projection, such projections can only show the consequences of specified assumptions. Reality may change radically. However immigration to Western Europe and similar overseas countries has been high and rising for some years and has been encouraged by government policy in the US, Canada, Australia and the UK, although recently the UK government has somewhat reined in its previous enthusiasm.

Projection of migration levels is exceptionally difficult; most projections assume the continuation of current levels of migration, for want of any demonstrably preferable alternative. At least that shows the consequences of things continuing as they are. Until 2008 it seemed reasonable to assume that high levels of migration, and a positive approach to immigration was set fair to continue among the governments of the English speaking world, although in Europe, policy has been more volatile and

more likely to be reversed by political change. Despite opposition from electorates, upward pressures are strong, from the growing population of immigrant voters and their pressure groups; from the demands of employers for easy access to labour, from hopes that migration might avert demographic deficiencies, from the difficulty of stopping illegal immigration; all supported by pro-immigration sympathies of liberal elites. Despite low levels of immigrant workforce participation throughout Western Europe, demand for overseas labour continued to be underwritten by the European social model of welfare, retirement policies and labour laws which accommodate relatively high levels of native unemployment and low levels of workforce participation.

Since the economic downturn of 2008/9 the picture looks somewhat different. Economic trends may not affect spouse and dependant migration and may enhance asylum claiming. But strictly economic migration is likely to fall, especially as rising unemployment sharpens native resentment of immigrant workers. Published migration data are often a year late and have hardly begun to reflect the new economic environment. But some early figures already show a downturn in flows. For example, registrations of new workers in the UK from the Eastern European A8 countries fell to 26, 815 in Q4 2008, almost halved from the 50,820 in Q4 2007 (Home Office / UK Border Agency, 20 table 1). The Australian government is reported to be revising downwards its annual immigration target.

Figure 2



Inter-ethnic unions

In reality, the growth of the number of children from mixed unions, and of children with mothers or fathers themselves of mixed origin, complicates and blurs these ethnic or 'foreign origin' distinctions. In statistics, however, persons of more than one origin do not - indeed cannot - feature in most of the projections by origin made in European countries. Those define 'foreign origin' or 'foreign background' on the basis of the birthplaces or citizenships of the subjects and of their parents, as recorded in the population registers. Registers are the basis of most Continental population and

migration statistics. Nonetheless children of mixed parentage comprise an increasing proportion of all 'minority' populations where it is possible to record them, and their diversity is beginning to erode the usefulness of conventional classifications of origin. For example, following the incorporation of multi-ancestry population categories into the questions on race in the US census, the US projections now require for their full presentation a table with 26 rows (Bureau of the Census 2008, see also Goldstein and Morning 2002). In the US the parents of children of multiple origin are themselves mostly described as having multiple origins (Hollmann and Kingcade 2005). In the British census of 2001, 661,200 people voluntarily identified themselves as 'mixed' (1.1 per cent of the UK population), or were so identified by their parents, and 7.27 million in the US census of 2000 (2.6 per cent; (Jones 2005)). In the 2001 census of England and Wales, 8 per cent of children born 1990-2001 were recorded as having a different ethnic group from their mothers, and 22 per cent of children of non-white mothers (ONS Commissioned table CO431) although by no means all those children were classified as 'mixed'.

Taking mixed unions into account, the mixed populations in the UK have been projected to increase from 661,200 in 2001 (1.1 per cent) to 3.5 million by mid-century (5 per cent of the projected total), by that time becoming the joint largest ethnic group (the other being African) (Coleman, 2007) A different, experimental probabilistic projection of the growth of the mixed population in the UK gave a median value of 8 per cent of the total population 'mixed' by 2050, and 26 per cent of infants, and 29 per cent 'mixed' by the end of the century. By that time, the median size of the white population was projected to be 41 per cent of the total, and the 'mixed' populations would be roughly twice as numerous as each of the Asian populations taken together, and the Black populations taken together. (Coleman and Scherbov 2005). A high prevalence of inter-ethnic unions would moderate the growth of immigrant-origin populations strictly defined, while introducing a new diversity from rapidly growing heterogeneous populations of mixed origin. These may eventually defy categorisation and become a very numerous, if diffuse, population.

A universal globalised trend?

Data from a wider range of countries in table 3 suggests that diversification is a near-universal phenomenon in Western Europe and is beginning to make itself felt in Eastern Europe as well. It is further advanced in the English-speaking world outside Europe but less in the larger developed countries in the Far East, for example Korea and especially Japan. Marked, divergent divisions have emerged across the world in the proportion of immigrants comprising total populations. On a broad-brush basis, the proportions of immigrants in the developed realms of Oceania (mostly Australia and New Zealand), North America and Europe have shown consistent increases in their proportions born overseas; in the less developed regions the proportions of immigrants are only a fraction of those elsewhere and, overall, have been diminishing (Table 4). The number of migrants in the less developed realm has of course increased, but not in step with overall population growth. Altogether, in 1960, according to the United Nations (United Nations 2005), 43 per cent of the world's international migrants were in the more developed counties, 57 per cent in the less developed. By 2005 those proportions had almost reversed; to 61 per cent and 39 percent respectively. Furthermore, a substantial

Table 4 Percent of populations that are migrants, major world regions 1960 - 2005

	World	More developed	Less developed	Oceania	North America	Europe	Africa	Asia	Latin America
1960	2.5	3.4	2.1	13.4	6.1	3.4	3.2	1.7	2.8
1965	2.4	3.5	1.8	14.3	5.8	3.8	3.0	1.5	2.3
1970	2.2	3.6	1.6	15.4	5.6	4.1	2.7	1.3	2.0
1975	2.1	3.9	1.5	15.8	6.3	4.3	2.7	1.2	1.8
1980	2.2	4.2	1.6	16.4	7.1	4.5	2.9	1.3	1.7
1985	2.3	4.6	1.6	17.0	8.2	4.8	2.6	1.3	1.6
1990	2.9	7.2	1.8	17.8	9.7	6.9	2.6	1.6	1.6
1995	2.9	8.1	1.6	17.5	11.2	7.6	2.5	1.4	1.3
2000	2.9	8.8	1.5	16.3	12.8	8.0	2.0	1.4	1.2
2005	3.0	9.5	1.4	15.2	13.5	8.8	1.9	1.4	1.2

Source: United Nations Population Division: Trends in Total Migrant Stock: The 2005 Revision

Note: These are official figures which will under-estimate the true level of migration, especially in the less-developed regions.

proportion of immigration to the three major regions of the more developed realm has been from outside the region, while most of the migration in the less developed world is within the region and often between neighbouring countries.

Foreign immigrant populations in the third world

This discussion is concerned with the prospect of large-scale migration flows arising from substantial demographic and economic imbalances within and between world regions. Such migration is over and above the normal migratory exchanges that always arise between (especially) neighbouring countries, in the less developed world as elsewhere. A few comments about that migration would be appropriate. In 1960 about 60 per cent of the world's international migrants had moved from one less-developed country to another, although by 2005 that had fallen to 40%. Many less-developed countries have quite large numbers of foreign residents from neighbouring states, even when all are relatively, though not equally poor and where there are few regional 'champions'. Numbers can fluctuate according to economic boom and bust, policy change and political crisis, and are not well recorded.

In Africa, many are refugees in the broad sense. 2 per cent of the population overall are known to be international migrants, and the proportion has not increased in a decade. In sub-Saharan Africa, 69 per cent of migrants stayed with the region in 2005, while 80 per cent of migration from North Africa was to Europe. A few large counties have immigrant proportions approaching European levels, mostly from neighbouring African countries: Ivory Coast 13 per cent in 2005, Ghana 7.5 per cent. Except for small counties most of the rest have 2 per cent or less of migrant population. In Latin America the larger countries have large numbers, but relatively small proportions, of immigrants: Argentina 3.9%, Venezuela 3.6%, Chile 1.4%, Brazil 0.3%. Smaller countries, as is often the case, can have higher proportions e.g. Costa Rica 9.8% (data for 2005, from IOM 2008). Migration within Asia is now a significant influence on its economic, social and demographic development which, according to Hugo (2005) is likely to continue regardless of political and economic development and the interventions of government. The smaller developed counties now have significant numbers of immigrants; the large populations of Asian sending countries still have small proportions of immigrants (although large absolute numbers): India

0.5%, Bangladesh 0.7 per cent, Pakistan 2.1 per cent including many Afghan refugees.

Trends tending to diminish global ethnic diversity

The process of population and ethnic change has not been symmetrical. While the composition of the population of the developed world, especially of its cities, come more to resemble that of the third world through migration, settled populations of European and other origins are diminishing, some to the point of extinction, in many areas outside Europe. The developed world becomes more heterogeneous, the third world less so. In earlier centuries, European emigration had radical and sometimes catastrophic consequences for the indigenous populations of the lands that they settled; almost eliminating them in Australia and the United States, creating new *mestizo* populations of various shades in South America; introducing new variety by their own migration and by those of their African slaves and Asian indentured labourers throughout the world, from Trinidad to Fiji to Central Asia. Empires tend to facilitate, and often encourage migration. Now, with the end of empire, the situations are reversed.

In the first half of the calamitous 20th century, ethnic diversity diminished in many of the countries of Europe. Re-drawing the map at Versailles dismembered multi-ethnic empires, although some of the treaty creations were themselves multi-ethnic nation states (Czechoslovakia, Yugoslavia) that proved to be fragile. The reduction of Hungary diminished Romanian and other minorities in Hungarian territory by creating new Hungarian minorities in Romania, Czechoslovakia and elsewhere. But overall the effect was of ethnic simplification, albeit within more constricted national boundaries. The elimination of most of Europe's Jews in the 1940s, and the severe diminution of its gypsy and other minorities, was altogether of a much more savage kind.. At the end of the war and after it, forced migration removed most of the German populations from *Mittleuropa*, a process now more or less completed in peacetime by the opportunities of return given to ethnic Germans from Eastern Europe and Russia under the German Basic Law. The whole of Poland and Polish populations was moved 200 miles further West; Poland's diminished population, formerly diverse, was 95% Polish by the late 1940s (Kosinski 1970). After the break-up of the Soviet Union in 1991, about 25 million people of Russian 'nationality' living in the non-Russian constituent republics found themselves defined as 'foreigners'. At least a third has emigrated to Russia, some (especially from the Central Asian republics) under duress.

Looking further afield, at various times in the last century European populations, both ancient and those of more recent immigrant origin, have almost completely disappeared from many regions outside Europe, leaving behind a more homogeneous population. Today the 70 million people of Turkey include substantial numbers of Kurds, Circassians and Georgians. But, following the Armenian genocide of 1915 and the population exchange with Greece from 1923 and later measures, the country has lost most of its (aboriginal) Greeks and Armenians. Numbers are uncertain but there may remain between 15 -20,000 Greeks and 40 - 60,000 Armenians, compared with perhaps 3 million of each at the beginning of that century. They were numerically dominant in the early middle ages. Following the creation of the State of Israel, the Jews of most Middle Eastern countries have departed. Christians in the Middle East, mostly of ancient - but not European - origin, are diminishing fast (Dalrymple 1997).

Permanently resident European-origin populations, mostly of colonial origin dating from the 19th and early 20th centuries, have almost completely disappeared from North Africa and Egypt, and from most of sub-Saharan Africa except for Southern Africa. Altogether these once numbered several million. Thus in the French former territories in about 1935 there were 1.48 million Europeans, in the British (not including the Dominions such as India and South Africa) about 735,000; in all about 4.16 million of European origin (Kuczynski, 1937 Chapter 2}. By 1950 that total had increased to over 5 million people. Thirty years later those numbers had diminished to perhaps a tenth. In Algeria there remained only about 75,000 Europeans, just 45,000 French, mostly expatriates. Between 800,000 and 1 million people of Portuguese origin left Angola and Mozambique after the Portuguese Revolution ended colonial wars in 1974. Southern Africa still has a numerous but diminishing white native-born population, mostly of British and Dutch origin, the latter dating from the early 17th century. In Zimbabwe, that has fallen to a fraction of its peak number of about 250,000. According to the South African Institute of Race Relations, the white population of South Africa fell by 840,000 from 1995 (5.2 million) to 2005 (4.3 million) – mostly due to the emigration of young adults and their children. Most other former colonies worldwide have lost their (often native-born) white minorities, perhaps the most numerous of which were the Dutch population who fled what is now Indonesia in 1950. Except for Southern Africa, those that remain are mostly expatriates, not long-term residents or native-born.

This process is not limited to European-origin populations. In a number of less-developed countries, non-European ‘market-dominant’ ethnic minorities have found themselves expelled by newly-independent governments, such as the Asian populations of Kenya and Uganda in (1973), or massacred as were many Chinese in Indonesia in 1965/66 and 1998, and the Ibos of Nigeria in the 1960s. The massacres of Tutsis in Rwanda, particularly in 1994, are also claimed to be of this kind. It is suggested that the advent of notions of representative government in newly independent countries, often with nationalist governments, have sharpened such trends, by focusing attention upon relative numbers (Chua, Ch. 7).

Various formerly cosmopolitan cities such as Alexandria and Constantinople, have accordingly become much more culturally and racially homogeneous with the departure of Greeks, Jews and others (Courbage and Fargues 1997)), while a reverse process of diversification through new immigration transforms London, Paris, New York, Auckland, Singapore and elsewhere.

The future

Contrary to the expectations of globalisation theory, ethnic diversification of world population is therefore far from uniform and in some cases proceeds in opposite directions. Those rich countries that began the demographic transition first were accordingly the first to be able to increase at hitherto unprecedented rates. Aided by earlier developments in navigation, military technique, trade and political organisation, by about 1900 those countries managed to colonise the greater part of the Earth’s surface and its populations. Only China, Japan, Thailand and Ethiopia among larger countries avoided foreign rule. Where indigenous populations were sparse or technically backward, colonisation was permanent and a more (North America, Australia) or less (South America, New Zealand) complete population replacement followed. Elsewhere, the situation of minority settler or governing

populations became more demographically precarious as death rates began to fall among the indigenous peoples and their numbers increased in turn, and as the latter acquired the technical means – especially military – of the ruling minority. Relative population growth and the globalisation of techniques, and of concepts of liberty and democracy, originating from some of the colonisers themselves contributed to their demographic and political eclipse and withdrawal.

Now almost all the less-developed world is at some stage of demographic transition, with considerable if diminishing rates of population growth arising from high net reproduction and prolonged by the momentum of still youthful age-structures. The obvious destinations for the excess populations of those countries still in transition are the richer post-transitional countries, whose natural increase is over and whose populations are ageing and in a few cases declining. That migration, together with the natural increase of the migrant populations, generates the ethnic diversity described above.

How far will diversification through migration continue?

Can the countries that currently send the migrants expect to experience migration in their turn, and the diversity resulting from it, as they themselves complete the demographic transition, run out of population momentum and begin to age, decline, and become economically attractive to migrants? To some extent, the experience of Western Europe and the US is already being reproduced in countries outside Europe as their economies have developed and their surplus population is absorbed by their growing demand for labour. They too have attracted asymmetrical immigration streams from poorer neighbouring countries. In a few cases wealth has preceded demographic transition, particularly the oil-revenue *rentier* economies of the gulf, where 8.7 million workers from other Asian countries have migrated. There, oil money flowed in independently of indigenous economic transition, permitting a high standard of living in parallel with only a slow and late decline in fertility and high levels of population growth. Manual and white collar work is done predominantly by expatriates who in some cases outnumber the local population. Although the presence of so many Indians, Pakistanis, Bangladeshis, Philipinos, Europeans, Americans and others makes the populations currently very diverse, that is not intended to be permanent. Citizens and foreigners really comprise quite separate populations: expatriates neither wish to or are able to integrate, naturalise, enjoy permanent residence or family re-union.

More interesting and more typical are those formerly ‘third world’ populations that have been through more ‘conventional’ demographic and economic transition and social modernisation: first and foremost, Japan, followed by Korea, Taiwan, Singapore, Hong Kong. China, Malaysia, Thailand and others are less advanced examples. All sent numerous emigrants to richer countries before and during their economic and demographic transitions and the latter three still do. Now with demographic transition complete or well under way and rapid economic growth, immigration is increasing with concomitant increases in the number of immigrant workers per 1000 persons in the labour force.

As well as a strong Asian diaspora, much of this migration is intra-regional, some of it from culturally and linguistically similar countries. In small rich city states such as Hong Kong (43 per cent in 2005) Macau (56 per cent) and Singapore (43 per cent)

about half the population is immigrant. Larger countries have much smaller proportions; Japan 1.6 per cent, Korea 1.2 per cent. Japan in particular remains exceptional in its low immigration to a rich country. There is unusual tension between employers' demands for labour and a popular and political desire to protect Japanese society from the kind of diversity that characterises older rich countries. In attempting to resolve this dilemma, Japanese policy attracted back to Japan descendants of the Japanese who emigrated to Brazil at the beginning of the 20th century. They now number about 1.4 million. The 302,000 Brazilians in Japan by 2005 were the third largest immigrant group. But they were welcomed for a Japanese origin which they had mostly lost: they had adopted Brazilian culture, and speak Portuguese (Higuchi 2006). Looking Japanese is one thing; behaving Japanese is quite another. Thailand, with 1.6 per cent of its population immigrant, is shifting from a migrant-sending to a migrant-receiving country. Malaysia, where immigrants (65 per cent of whom are from Indonesia) comprise 6.5 per cent of the population, has already done so (all data from International Organisation for Migration, 2008).

Divergent destinies

This uneven timing of the demographic transition in different countries and regions of the world seems likely to create significant divergence in the level of national ethnic and religious homogeneity. Globalisation and the migration that goes with it will affect the composition of all populations. But the growing diversity, mostly from immigration, currently transforming most of the Western countries may not be repeated among those countries which join the rich countries' low fertility club much later than others. Countries in the developing world have traditionally comprised many ancient minority groups, and formerly dominant ones from invasions. But the larger countries at least seem unlikely to acquire much additional diversity from new large-scale migration. The later their transition, the more they are likely to retain the basic pattern of their original population composition. However their internal diversity may shift as indigenous minorities, or culturally distinct regions; e.g. North versus South India, follow the fertility transition at different speeds (or stall on it).

Four obstacles to the globalisation of diversity.

There are four possible obstacles in the way of a globalisation of diversity at the level currently developing in Europe and the US. First is the sequential nature of demographic transition and economic development across the world. The second is relative population size. The third is past and current politics; the lack of imperial connections transcending major regions of the countries concerned with even poorer areas, and greater capacity of countries which are not democratic to resist unwanted forms of migration. The fourth is climate change.

The first set of economically developed post-transitional societies, with less than a billion people, comprise about a 15% minority of the world's total. By comparison, potential migrant-supplying populations are very large. The total population of the migrant-sending regions is over four times that of western Europe; in the case of the Indian sub-continent *vis a vis* the UK, about 20 to 1. While those countries remain poor, the potential supply of immigrants is effectively inexhaustible. In the long run, though, the pool of potential migrants may become relatively small in relation to that of destination countries, and geographically remote and historically unconnected. The combined population of the next group to develop, led by Japan and then the 'four dragons', is less than 200 million, or about 300 million if Thailand and Malaysia are

included. That is still relatively small in relation to even regional, never mind world populations of less developed status. But as other, larger countries move only slightly later from population growth to stability, from demographic bonus to population ageing, from labour surplus to labour shortage, the position may look begin to look rather different. The future size of many less developed countries, in conjunction with the development in potential sending countries, may make it demographically more difficult for European-type minority proportions to arise. It is not easy to imagine immigration streams large enough to transform the populations of India (peaking at about 2 billion) or of China (peaking at about 1.4 billion), nor of Bangladesh, Brazil Egypt, Mexico, Nigeria, Pakistan, Vietnam or Yemen (peak population 144 m in 2100). They may people other countries, but they are less likely to be transformed by immigration themselves.

Table 5 presents a selection of larger countries currently at different stages of economic and demographic development. The data show the projected population in 2050, the years at which population will reach its maximum before declining, reach replacement level fertility, zero natural increase and an aged potential support ratio of 4 (that is, the number of persons aged 15-64 for every person aged 65 and over). These variables, together with projected GDP per head in 2030, could indicate the approximate period at which those countries become attractive to immigrants from poorer countries, and when domestic employers will begin demanding them.

Table 5 Some basic data for estimating future potential migration for larger countries at different stages of economic and demographic transition

	estimated population in 2008 (millions)	projected population in 2050 (millions)	year of maximum population	year of projected TF = 2.1	year of projected RNI = 0 (or per 1000)	year of projected PSR = 4	GDP pc projected in 2030 (1000s)
Japan	126.9	99.4	2005	1969	2005	1997	30.072
Taiwan	23.0	20.2	2020	1984	2024	2022	33.666
Korea	48.2	44.1	2023	1989	2027	2022	30.643
Thailand	67.3	73.1	2050	1992	2030	2032	14.014
China	1336.9	1416.3	2032	1997	2037	2027	15.763
Iran	73.3	97.0	2050	2002	<i>2.8</i>	2047	10.789
Brazil	192.0	218.5	2045	2007	<i>2.1</i>	2032	8.316
Turkey	73.9	97.4	2050	2007	<i>1.7</i>	2042	13.111
Indonesia	227.2	287.6	2050	2012	<i>1.6</i>	2042	6.924
Mexico	108.6	129.0	2043	2012	<i>1.6</i>	2037	10.668
Vietnam	87.8	118.0	<i>2050</i>	2012	<i>2.4</i>	2042	<i>8.292</i>
Bangladesh	160.1	222.5	<i>2050</i>	2017	<i>5.9</i>	<i>4.5</i>	<i>8.292</i>
India	1181.5	1613.7	<i>2050</i>	2022	<i>3.3</i>	<i>4.5</i>	7.089
Malaysia	27.0	39.5	<i>2050</i>	2022	<i>3.8</i>	2047	<i>8.292</i>
Phillipines	90.3	146.2	<i>2050</i>	2027	<i>6.3</i>	<i>4.6</i>	<i>8.292</i>
Egypt	80.1	129.5	<i>2050</i>	2037	<i>6.2</i>	<i>4.5</i>	
Congo	64.3	147.5	<i>2050</i>	<i>2050</i>	<i>11.0</i>	<i>7.8</i>	
Nigeria	151.2	289.1	<i>2050</i>	<i>2050</i>	<i>10.3</i>	<i>9.3</i>	<i>2.027</i>
Pakistan	176.9	335.5	<i>2050</i>	<i>2050</i>	<i>8.2</i>	<i>5.9</i>	<i>8.292</i>
Uganda	31.7	91.3	<i>2050</i>	<i>2050</i>	<i>17.0</i>	<i>15.6</i>	<i>2.027</i>

GDP data Maddison, 2007 table 7.9

Values in italics are from Maddison's regional values in table 7.3; they are not specific to those countries.

Population size, RNI, PSR, TFR data from UN World Population Prospects Medium Variant (2009)
Taiwan data from US Census Bureau and Council for Economic Planning and Development, Taiwan.
<http://www.cepd.gov.tw/encontent/dn.aspx?uid=5829>
Numbers in italic red are the values reached by stated variables in 2050,
in cases where the target has not been reached.
'2050' in italic red in the 'year of maximum population' column indicates that

Together with China, seven other large countries totalling 900 million people, 2.3 billion in all, have already reached replacement fertility or will do so within a few years. Demographic momentum will maintain population growth for longer; most except China are still projected to show modest natural increase by 2050. At least before recent crises, all were projected to become richer. Their aged potential support ratio is projected to fall to about four within about 30 years, in China much sooner. That is the current level in most European and other developed countries today, at which population ageing has become a serious concern and the bulges in domestic workforce are about to retire into elderly dependence. GDP per head is expected to be around \$10,000 per year or more, still only a half to a third of that of the current rich world but four times or more that of many remaining counties that are less developed.

Poorer countries such as the Philippines and Indonesia, Egypt and the less developed Latin American countries will no doubt continue to export people. Closer to mid-century, their population surpluses may also be running out. Beyond that, the remaining sources of potential large-scale migration would have to come primarily from sub-Saharan Africa and from a few large Asian countries with delayed transitions, notably Pakistan. By mid-century many currently less developed populations should be approaching 'demographic maturity'. Population ageing will impose new demands on their domestic population resources, and further economic growth should have moderated the attractions of emigration. In the very long run the world will start to run out of potential migrants. Demand for labour arising from population ageing will have to be met more from domestic sources. When they become economically developed, therefore, the future population composition of some large currently developing countries may not have changed much from that of the present, except where their national territory already include regional populations or indigenous minority groups at different stages in fertility transition. In China, these number only about five per cent of the population. India, however, is a complex mosaic where internal differentials in fertility transition will alter the future ethnic and religious population balance even without substantial immigration.

Political contrasts

Political considerations also militate against a 'European' experience being closely repeated in all other countries. Most immigration into Europe since the 1970s has been of dependants, spouses, students, asylum seekers or illegal. Many may work but they did not enter as part of a formal labour recruitment stream. This inflow was greatly facilitated by the adoption of human rights and asylum conventions by liberal democracies. Such liberal democracies do not find it easy to control immigration (Freeman 1994) even when public opinion, as it frequently does, favours control. Many non-European countries do not adhere to such conventions and, *pace* Fukuyama (1992), may be unlikely to develop Western-type liberal systems or adopt human rights conventions in the foreseeable future. Indeed some argue that the acquisition of forms of democracy without liberal structures, accentuates hostility to minorities and immigrants by focussing attention on relative numbers and ethnically-focused

interests (Chua 2002). Middle Eastern and African states, and some Asian ones can and do control migration effectively, prevent the settlement of dependants and remove *en masse* migrants whose presence is not required. Mass expulsions of Palestinians from the Middle East, and of Ghanaians and others from Nigeria are cases in point. The constrained position of the very large migrant labour populations in the Gulf States was noted earlier. Highly developed non-Western countries where the rule of law is fully established, notably Japan, have also controlled immigration and kept immigrants constitutionally at arm's length, more effectively than European countries have wished or been able to do.

Climate change

The intervention of climate change may push migration patterns onto very different paths and throw a spanner into the speculations outlined above. Initially, climate change was believed to be progressing slowly, with its dire effects measurable on a century-long scale (Manabe et al 2004). While demographers recognised the effects of population on climate change (Meyerson 1998) effects of climate on population seemed far off. Climate change was not mentioned by the UN as a possible constraint in a projection to 2300 made in 2002 (United Nations 2004)), although commentators drew attention to the likely constraints of climate change on projected growth {Dyson, 2004 #2983}. Ecological constraints, while mentioned in the UN projections to 2150 of eleven years ago, were not incorporated in them. Even without global warming, sustainable population is notoriously difficult to estimate: the middle half of Cohen's range of long-term carrying capacity estimates lay between 5 billion and 30 billion (Cohen, 1996) United Nations 1999), p 36). These possible constraints are not repeated in the revised long-term projections ({United Nations, 2000). Other projections, however, have attempted to incorporate negative feedbacks. (Lutz, Sanderson et al. 2003).

But recent analyses point to a faster the pace of climate change, and weaker prospects of averting it (Dyson 2005). Important (mostly damaging) climate changes are now expected within the conventional 50-year time-horizon of population projections. Some models forecast a rise of 4 degrees C by mid-century. Even with a rise of between 2 and 4 degrees there is a strong possibility that serious climatic problems will arise and furthermore that they will arise not progressively but in a sudden, non-linear fashion (Lenton et al 2007): the near – certainty of the loss of Arctic summer ice, and less likely and later on of the Greenland Ice Sheet, the West Antarctic Ice sheet, the beginning of the conversion of the Amazon rainforest to savannah and the overturning of the North Atlantic circulation that keeps NW Europe temperate. Rising sea levels would affect millions of people in African and Asian delta areas and Pacific islands, and higher temperatures would damage agriculture (Battisti et al 2009) making some areas increasingly uninhabitable. Most scenarios suggest that , while some high Northern latitudes and other areas will benefit, severe environmental damage will be inflicted on some of the poorest and most marginal tropical and subtropical areas, notably sub-Saharan Africa and the Indian subcontinent (Martin 2007) making human populations unsustainable there, as well as in parts of Australia, Southern Europe and other developed areas.

The double uncertainties of climate warming and of demographic response to it make the magnitude of numbers of people potentially displaced by future climate change very difficult to estimate. 25 million people are already claimed to be 'environmental

refugees', although not necessarily just as a result of global warming. A widely-cited estimate of the number of persons likely to be displaced by future climate change is 250 million. It is mentioned because it is the only estimate. Climate change has already been cited as contributing to the flight of about a million Africans across the Mediterranean to Southern Europe in recent years (Myers 2001; Myers 2005). Large numbers of people could not be accommodated in poor neighbouring African or Asian countries if the scale of environmental damage were great and if many parts of each region can no longer sustain large populations; all would be suffering to some extent. The most attractive option would be movement to the developed world, much of which would be less affected and has greater resources. That would disrupt in ways impossible to simulate the sequence of migrations sketched above, as well as damaging severely the assumed economic progress that underlies the demographic and economic projections. Migration might continue to be focussed on Western Europe and North America, not to more vulnerable areas whose economic growth might be stifled. Some predictions could be made though; India would surely find itself hosting a large part of the population of Bangladesh. Bangladeshis already comprise a big component of the 5.7 million immigrants in India.

Long-term consequences

Setting aside the unpredictable consequences of severe climate change, what would be the consequences of different patterns of ethnic transformation? In today's developed world, continuation of current levels of immigration for just a few more decades would raise the foreign-origin proportion of the population to between 20-30 percent of the projected mid-century total. Further change would be built into the age-structure. In the UK projection, for example, while 80% of the 2051 projected population would be of British origin, only 54% of the 0-14 age group, and just 52% of the 0-4 year olds would be of 'indigenous' origin. If continued further to the end of the century and beyond, immigration combined with below-replacement fertility of the indigenous population would lead to the eventual displacement of the original population from its majority position, both nationally and, earlier, in major cities. However, some of the developments described above make that outcome rather unlikely. And the exact balance, though much talked about in some circles, would hardly be crucial. But in that eventuality the character, identity and cohesion of countries that formerly regarded themselves as nation-states could hardly remain unchanged.

The prospect of progressive ethnic transformation, which has been labelled a 'third demographic transition' (Coleman 2006) raises political and philosophical considerations untouched by earlier demographic transitions. The social, cultural and political impact of the projected changes could be substantial, indeed transforming. Depending on the level of adaptation and the pace of demographic change, a pessimistic outlook would be that small scale, urban daily life outside the home could be conducted more and more in the company of people who might be regarded as strangers, and the distribution of an older indigenous population increasingly confined to suburban and rural areas. On the larger scale, unless integration became more successful than it has been to date, national identity and the perception of national interests would become more complex and possibly contentious, and older national history and formerly shared myths and values increasingly irrelevant to a newer population. The culture to be taught in schools, and whose history, if any, is already a vexed question. Popular opinion, expressed in opinion polls, tends to object to such

developments. Postmodern elite opinion is more nuanced and optimistic, feeling that society should have evolved beyond identities defined by religion and nation and its past (Fukuyama 2007). Some find it difficult to articulate acceptable reasons for objecting to the prospect of ethnic change, others actively welcome a more diverse society on various liberal humanitarian grounds or because of a distaste for the current nature of their society. A positive interpretation emphasises the extent to which the presence of people of varied origins is increasingly taken for granted in neighbourhoods, in the workplace and among circles of friends, and the (mostly) peaceful nature of the process.

Whether minority religions, especially Islam, retained their ethnic associations and customs or developed a new form would be especially important. Much would depend on the origins of the immigrant populations, their desire to integrate or otherwise, and the policies put in place on integration and immigration. But with such a major transition in origins in a relatively short historical time, shifting numerical balance would make it difficult to insist on (former) minority populations adapting to former 'majority' identities or values. It could be that the former majority would have to do the adapting. Slower inflows might facilitate a gradual accommodation. The introduction of new cultures into different environments has been a set of unintended natural experiments on a very large scale. The final outcomes are yet unclear, but the result is unlikely to be uniform.

There might be important consequences for foreign policy. Already European countries with many Asian and Middle Eastern voters find themselves drawn into overseas conflicts where important sections of the electorates have specific ancestral loyalties or grievances (Armenia, Kurdistan, the Punjab, Kashmir, Israel, the Muslim world in general). Parliamentary representation, possibly the outcome of elections, may depend on the position taken by candidates on such matters. Defining the 'national interest becomes more difficult, and the orientation of foreign policy may change. For example it has been suggested that the traditional orientation of US policy towards Europe will make less sense to future American electorates. a high proportion of whom will have origins in South America or Asia, quite apart from global shifts in the balance of power and *realpolitik*.

Former sending counties, however, by virtue of their very large populations, their different policies on admission or integration, or some eventual global shortage of suitable labour migrants may retain a more traditional and more relatively homogeneous population composition. That may be of assistance to them in preserving national identity and community of purpose. And by no means all are 'liberal democracies' strongly concerned with the rights of immigrants and conventions to protect them. In the long run, the former sending countries, lacking such fissiparous foreign policy pressure arising from imported minority loyalties, might retain a reasonably coherent national interest in their foreign policy. The countries that developed early, by virtue of the special interests of their substantial immigrant-origin populations, would by contrast have to incorporate, or at least take into account, concerns proper to foreign governments in their own policy. Clearer foreign policy and interests would be to the diplomatic advantage of the new emerging countries. Countries coming late to demographic and economic transition might not share, at least for a long time, the ethnic diversification characteristic of the pioneers in transition, while the original cultures of the later would be to some extent

lost, or at least modified or marginalised. Were that to be the case, the ‘third demographic transition’ mentioned earlier would not be a ‘transition’ at all. It would remain incomplete at global level

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