HI31V - 'ONE WORLD: A HISTORY OF GLOBALIZATION, 1750-2050'

Week 3. Population and Demography: Globalisation in Numbers

How has the world population changed over time? And has its geography changed? Are modern demographic trends important to understand wealth inequality? Is there a correlation between population trends and the divide between North and South or Developed and Under-developed world? What are the problems caused by shrinking population in Europe viz-a-viz a demographic explosion in Africa? Is state intervention a meaningful tool to shape demography?

1. Key Readings

Please read all key readings

Jeffrey D. Sachs, *Common Wealth: Economics for a Crowded Planet* (London: Penguin, 2008), pp. 1-53 and 159-182.

R. Kunzig, "Population Seven Billion," *National Geographic*, January 2011, pp. 42-63.

Massimo Livi Bacci, *A Concise History of World Population* (several editions, 1992, 1997, 2008), chs. 4 'Toward Order and Efficiency', 5 'The Population of Poor Countries' and 6 'The Future'.

'A Slow-burning Fuse', *The Economist*, 27th June 2009.

2. Fact Finding

Read (and examine) the handouts online.

3. Quiz

Complete the 'Population Quiz'. You might wish to exchange information on the Course Forum.

Week 3. Population: QUIZ

POPULATION

1. How large was the world population?

1/2 billion	in
1 billion	in 1800
2 billion	in
3 billion	in
4 billion	in 1974
5 billion	in
6 billion	in
7 billion	in
8 billion	in 2023
9 billion	in
10 billion	in

1b. The population of the UK was

1700	million
1815	million
1900	million
1950	40 million
2004	million
2012	53 million

1c. The population of the 27 EU countries in 2012 is:

00 million, of which half live in the four most populated countries (....., France, ... and .....)

DISTRIBUTION

2. The current world population is 7 billion. Where are they?

America	....
Europe	....
Africa	1051
Asia	....
Oceania	37

3. The most populated countries in the world in 2011 are:

China	1346 million
India	....
USA	312
Indonesia	....

3b. And in 2050?

India	....
China	1313
Nigeria	.... (currently 162)
USA	....

LIFE EXPECTANCY

4. Average male life expectancy in 2012

73	America
....	Europe
56	Africa
....	Asia
75	Oceania

MORTALITÉ RÉDUITE, ESPÉRANCE DE VIE ACCRUE

Mais, à côté de ces conséquences matérielles, il convient surtout de mettre l'accent sur l'essor des sciences et de la médecine qu'a permis la révolution industrielle en rendant possibles une grande quantité de recherches et un élargissement de l'éducation. Les progrès de la médecine ont permis de réduire fortement les taux de mortalité aussi bien générale qu'infantile. Parmi ces progrès de la médecine, une place importante est occupée par la vaccination contre la variole. Aussi importante, sinon davantage, a été la contribution des progrès de l'hygiène. Le recul le plus accusé de la mortalité a concerné la mortalité infantile, laquelle est passée d'environ 250 pour 1000 pour la période préindustrielle (c'est-à-dire plus de 250 décès d'enfants de moins d'un an pour 1 000 naissances viables) à 6 pour 1000 actuellement pour les pays développés les plus avancés dans ce domaine. Déjà pour la période 1861-1870, cette mortalité infantile était descendue en Angleterre à 154 pour 1000. Toutefois, dans ce domaine, l'Angleterre n'avait pas le leadership, car la mortalité infantile ne dépend pas seulement du niveau de vie, mais aussi des conditions socio-économiques, telles que notamment l'éducation, le lieu de résidence. C'est ainsi par exemple qu'en Écosse, au cours de la même période, le taux de mortalité infantile n'était que de 121 pour 1000. La surmortalité urbaine et les conditions de vie déplorables des ouvriers expliquent largement cette différence. C'est déjà là une des indications du revers de la médaille des premières phases de développement, revers auquel nous reviendrons plus loin.

TABLEAU VIII.2
QUELQUES INDICATEURS DES MODIFICATIONS SOCIO-ÉCONOMIQUES DE L'EUROPE (SANS LA RUSSIE) ET DE L'ENSEMBLE DU MONDE, 1300-1990

	Vers l'an 1300	*Vers l'an 1700*	*1900*	*1990*
Population totale (millions)				
Europe	60-90	95-110	285	499
Monde	370-530	630-740	1 640	5 280
PNB par habitant ($ et prix US 1960)				
Europe	150-180	170-200	560	3 110
Monde	160-180	160-190	300	1 150
Espérance de vie à la naissance (hommes)				
Europe	23-30	26-35	45	72
Monde	22-28	25-33	31	62
Mortalité infantile (par mille naissances)				
Europe	200-300	220-260	190	8
Monde	200-300	220-260	230	67
Pourcentage d'agricult. dans pop. active				
Europe	76-83	76-80	50	11
Monde	76-83	76-83	72	49
Rendement du blé (quintaux à l'hectare)				
Europe	6-8	7-8	14	47
Monde	7-8	7-8	8	25
Taux d'urbanisation[a]				
Europe	9-11	11-13	38	70
Monde	9-10	10-11	16	43
Nombre de villes de plus de 100 000 habit.				
Europe	4-6	10-12	125	460
Monde	40-55	70-85	300	2 900
Production de fer[b] par habitant (kg)				
Europe	0,5-1,5	1,0-2,0	80	390
Monde	0,5-1,5	0,5-1,5	25	143
Consommation d'énergie par habitant[c]				
Europe	250-400	300-450	1 500	4 400
Monde	200-400	250-400	460	2 020

a. Pourcentage de population totale vivant dans les villes de 5 000 habitants et plus.
b. Pour 1990 : acier brut.
c. Exprimée en kilos d'équivalent de charbon. Pour 1900 et 1990, non compris la plupart des énergies «traditionnelles» : bois, moulins, etc. Ces énergies «traditionnelles» représentaient vers 1900 environ 500 à 600 kg/hab. sur le plan de la moyenne mondiale.

Note : En règle générale, il s'agit de moyennes annuelles triennales ou quinquennales.

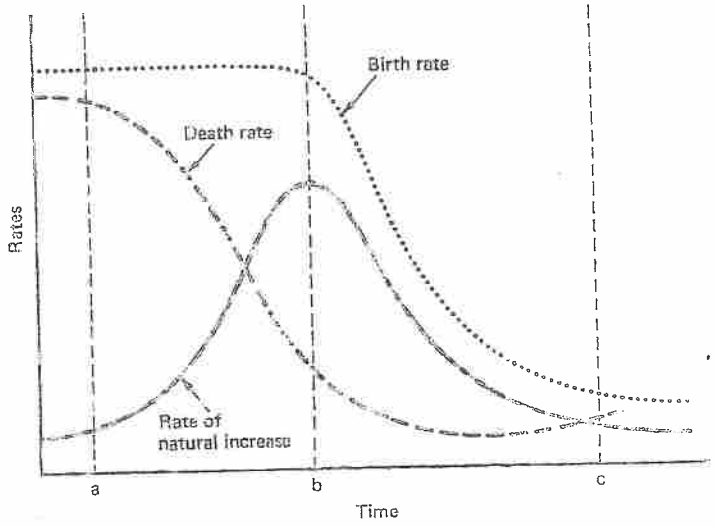
Sources : Bairoch, P. (1990b) ; avec révision des données de 1990.

Table 5.1 World population, rich and poor countries (1900–2000)

Year	Population (in millions)			Annual increase (%)[a]			Percentage share (%)		
	Rich	*Poor*	*World*	*Rich*	*Poor*	*World*	*Rich*	*Poor*	*World*
1900	563	1071	1634	–	–	–	34.5	65.5	100
1920	654	1203	1857	0.76	0.58	0.64	35.2	64.8	100
1930	727	1309	2036	1.06	0.84	0.92	35.7	64.3	100
1940	794	1473	2267	0.88	1.18	1.07	35.0	65.0	100
1950	809	1711	2520	0.19	1.50	1.06	32.1	67.9	100
1960	911	2110	3021	1.19	2.10	1.81	30.2	69.8	100
1970	1003	2695	3698	0.96	2.46	2.02	27.1	72.9	100
1980	1080	3364	4444	0.74	2.22	1.84	24.3	75.7	100
1990	1143	4141	5285	0.67	2.08	1.73	21.6	78.4	100
2000	1186	4972	6158	0.37	1.83	1.53	19.3	80.7	100

[a] Compared with previous date.

Sources: United Nations estimates (1920–90); United Nations Projection (2000); author's estimate (1900)



a = beginning of the transition
b = greatest difference between birth and death rates
c = end of the transition

Figure 4.2 Demographic transition model

Table 5.5 Demographic indices for India and China, 1950–90

Year	(Population in millions) India	China
1950	358	555
1960	442	657
1970	555	831
1980	689	999
1990	851	1155
2000	1022	1285
Index 1990 = 100	285	232

Year	Birth rate (per 1000) India	China	Death rate (per 1000) India	China	Children per woman (TFR) India	China	Life expectancy (e_0) India	China	Annual growth rate India	China
1950–55	44.1	43.6	25	25	5.97	6.11	38.7	40.8	2	1.87
1955–60	43.6	35.9	21.7	20.6	5.92	5.38	42.6	44.6	2.26	1.53
1960–65	42	37.8	19.4	17.1	5.81	5.61	45.4	49.5	2.26	2.07
1965–70	40.2	36.9	17.5	10.9	5.69	5.94	48	59.6	2.28	2.61
1970–75	38.2	28.8	15.8	6.3	5.43	4.76	50.3	63.2	2.24	2.21
1975–80	34.7	21.5	13.9	6.7	4.83	3.26	52.9	65.3	2.08	1.48
1980–85	33.8	20.6	12.6	6.6	4.47	2.5	55.4	66.6	2.18	1.38
1985–90	31.3	22.2	11.2	6.7	4.07	2.41	57.9	67.1	2.04	1.53
1990–95	29.1	18.5	10	7.2	3.75	1.95	60.4	68.5	1.91	1.11
Index 1950–5=100	66	42	40	29	63	32	156	168	96	59

Note: Figures for 1990–5 are estimates based on partial information.
Source: United Nations, *World Population Prospects: The 1994 Revision* (New York 1995).

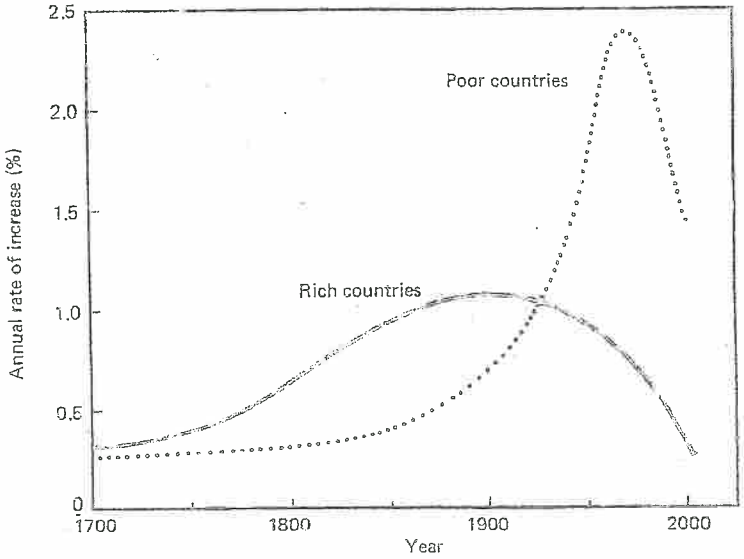


Figure 5.1 Comparison of demographic transitions: rates of increase for poor and rich populations (1700–2000)

Population and recession

Europe's other crisis

VIENNA

Recession is bringing Europe's brief fertility rally to a shuddering halt

EUROPE'S crisis is worse than it looks. As if the continent's troubled financial markets and economy were not a big enough burden, a decade-long (and largely unnoticed) improvement in its fertility rate seems to have come to an abrupt end.

Of the 15 countries that have reported figures so far this year, 11 saw falls in their fertility rates in 2011 (the fertility rate is the number of children a woman can expect during her lifetime). Some of the biggest declines occurred in countries hardest-hit by the euro crisis. Spain's fertility rate fell from 1.46 in 2008 to around 1.38 in 2011. Latvia's fell from 1.44 to below 1.20. Tomas Sobotka of the Vienna Institute of Demography points out that, in these countries, the fertility rise of the previous ten years has been wiped out in three. Big declines also occurred in Nordic countries that do not have fast-rising unemployment or big cuts in state spending. Norway's fertility rate fell from 1.95 to 1.88 in 2010-11; Denmark's from 1.88 to 1.76. But whether countries have high fertility rates, like Britain, or low ones, like Hungary, the trend is similar: a ten-year fertility rise stopped around 2008 as the economic crisis hit, and started to slide in 2011 (see chart 1).

In the markets, three years is an age; in demography, it is the blink of an eye. Nine months at least must pass between an event and a corresponding change in the birth rate. Demographic statistics also tend to lag by a year or so. To see such a change in trend so soon after the start of recession is remarkable. But although there is a link between hard times and family formation, its nature is controversial. Adam Smith thought that economic uncertainty was bad for fertility. Others argued that recession increases births, by lowering the opportunity cost of children and encouraging women to have babies they wanted anyway during periods of unemployment.

Europe's recent experience supports Smith. The economy has acted on population trends through migration, marriages and births. In some countries, recession has caused migrants to return home—and those migrants had high fertility. Spain saw an immigration wave from Latin America in the late 1990s and early 2000s. Partly because of this, the number of births in Spain exploded from 363,500 in 1995 to 518,500 in 2008 (a 43% rise). But as migrants went home, the increase in births went into reverse, falling to 482,700 in the year to June 2011. Marriages traced a similar course, rising from 199,000 in 1995 to peak at 214,300 in 2004 before tumbling to 164,600 in 2011.

Not all migrants have behaved in the same way. Relatively few Poles have left Britain. And some migrants came from places with lower fertility than their hosts (eg, Balts in Scandinavia). But in most countries with large populations of untethered migrants, a recession-induced reversal of migration has cut fertility.

Recession has affected the marriage and birth rates of native-born citizens, too. If young couples wait until they have a secure income before setting up home and having children, there will be a link between family formation and unemployment (especially male unemployment). France Prioux, of the Institut national d'études démographiques, plotted French unemployment against couples forming a union (marriage or cohabitation) over more than 20 years. The result is an almost perfect mirror image (see chart 2).

These numbers go only to 2002, but the pattern seems to continue. America's Pew Research Centre asked 18-to-24-year-olds about their reaction to the recession of 2009: 20% said they had postponed marriage. Mr Sobotka plotted the link between unemployment and fertility in Latvia. He, too, found a mirror image, with births falling as unemployment took off, then rising as jobs flowed back. In Europe there is little doubt that recession has reduced fertility by cutting migration, marriages and births.

What is in doubt is whether the fall is permanent or temporary. There are different ways to reduce fertility. Couples can decide to have fewer children, or can postpone the birth of a child. Both lower the fertility rate; but in the second case, it may recover later. Demographers call this a "tempo" effect.

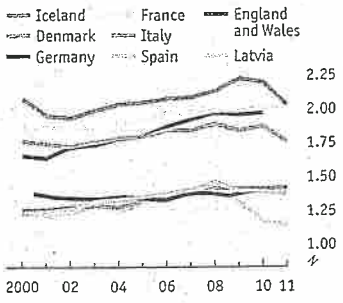
In most of the world, fertility rates have fallen because couples want fewer children. But a recent paper* by Mr Sobotka and John Bongaarts of the Population Council, an American think-tank, argues that in Europe the tempo effect is what counts. As they note, the average age of first births has risen in most of western Europe since 1970. In 1970 the age at which most women had their first child was 22-25. In 2008 it was 27-29. But from about 2000 to 2008 the pace of increase slowed markedly: women were no longer deferring children as much, and some were starting to have the children whose births they had postponed. Now the number of first births is falling more than later births in some countries, suggesting that people are postponing starting families.

Three broad lessons emerge. First, population trends are more sensitive to the economic cycle than might be expected. Population trends are thought to set the stage for everything else ("demography is destiny" said a 19th-century French scientist). Second, the rise in fertility in the 2000s suggests that not all of Europe is caught in a low-fertility trap. Scandinavia, Britain and France all have relatively high fertility. Third, governments may have scope for policy measures to moderate the fall. Old-fashioned demographic policies were usually "natalist": they rewarded women who had many children. (Russia still has these.) They almost never work.

But if demographic tempo is what matters, Europe's fertility might be more susceptible to government policy. Couples might respond to incentives like cheaper kindergartens or more parental leave by changing the spacing of children they want anyway. If Europe is to avoid yet another downward twist in its demographic spiral, "tempo-adjusted fertility" may hold the secret. ■

The "tempo" effect

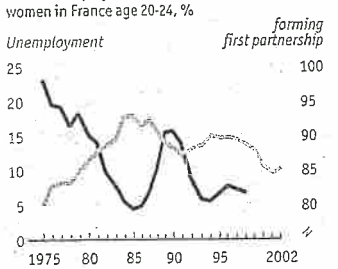
Fertility rate, live births per woman over lifetime



Source: Tomas Sobotka, Vienna Institute of Demography

Love's labour's lost

Youth unemployment and partnership* formation, women in France age 20-24, %



Source: France Prioux, "Age at First Union in France: A Two-Stage Process of Change", *Population-E*, 2003

*Marriage/cohabitation

*"A Demographic Explanation for the Recent Rise in European Fertility". By John Bongaarts and Tomas Sobotka, *Population and Development Review*, March 2012.

maniglia il cartello «Non disturbare, please» (*vedi anche KILLER*).

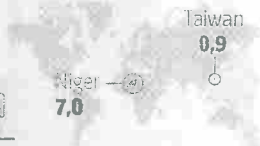
48% della popolazione mondiale vive **con meno di 2 dollari al giorno**

83 anni l'aspettativa record di vita a Hong Kong, in Giappone e a San Marino

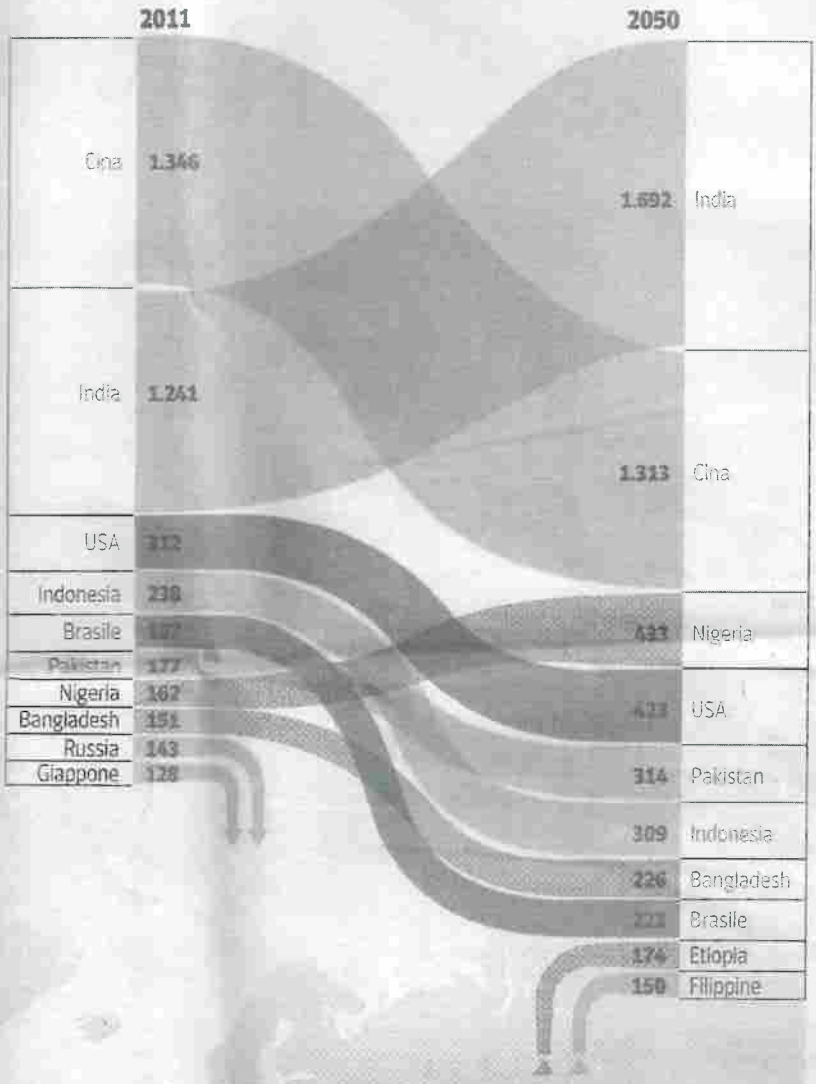
14,3% la popolazione malata di AIDS nello Zimbabwe nel 2009

Nel 2011 era **23,7**

2,5 media figli per donna nel mondo

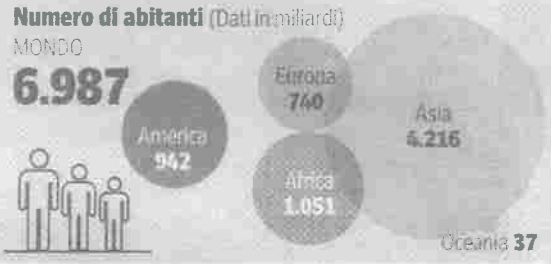


I CONTINENTI PIÙ POPOLOSI (Dati in milioni)



I NUMERI

Numero di abitanti (Dati in miliardi)



Nascite ogni 1.000 abitanti

Morti ogni 1.000 abitanti

Malati di AIDS tra i 15-46 (Dati in %, anno 2009)

PIL pro capite (Dati in dollari)

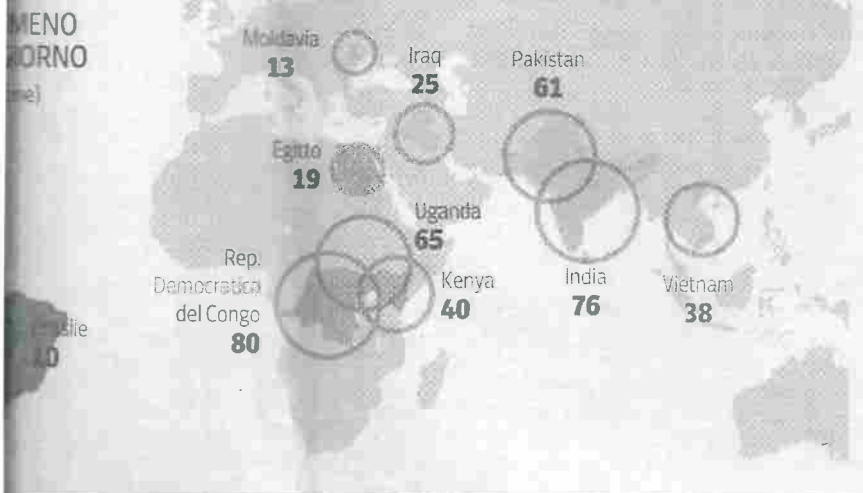
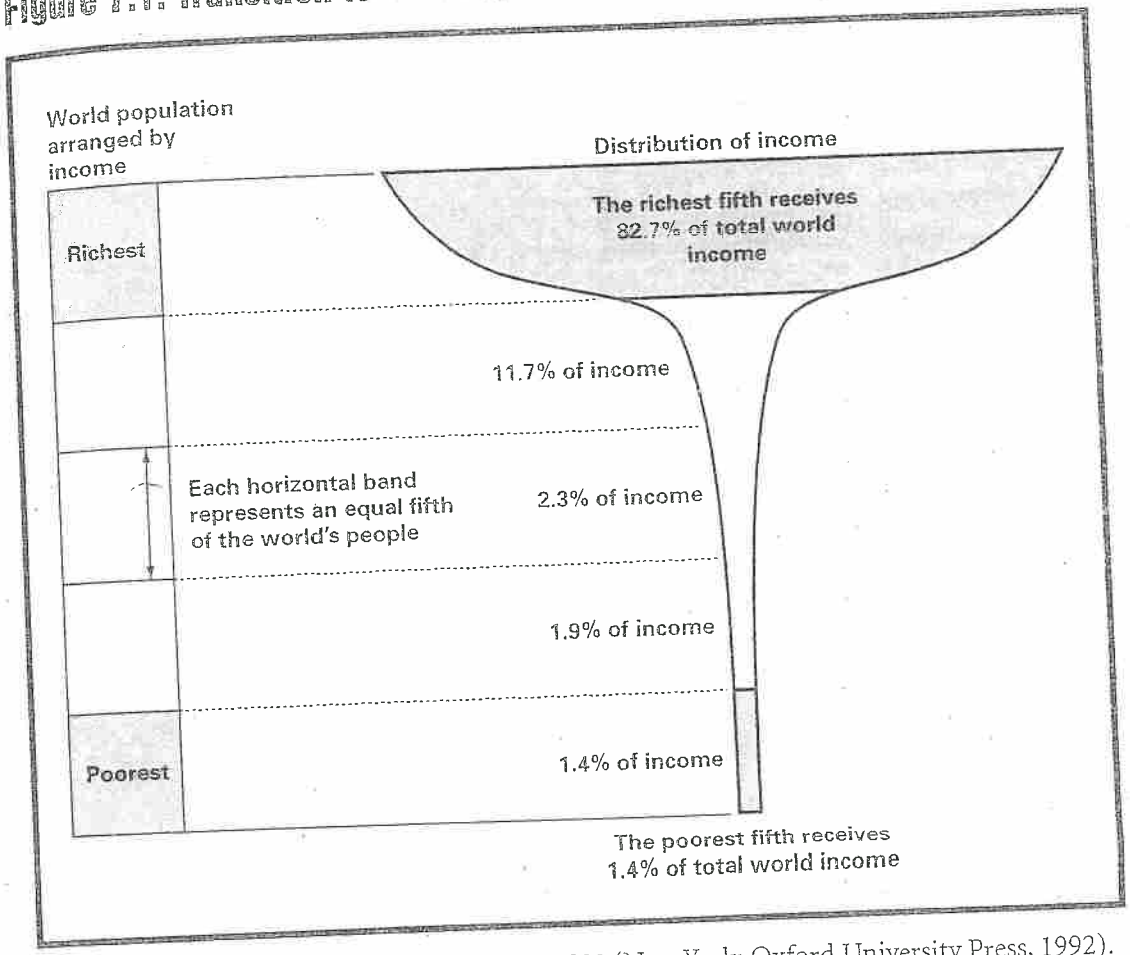


Figure 7.1: Transition to a Full World



Source: UNDP, *Human Development Report 1992* (New York: Oxford University Press, 1992).

[illegible] about thirty times that of the 20

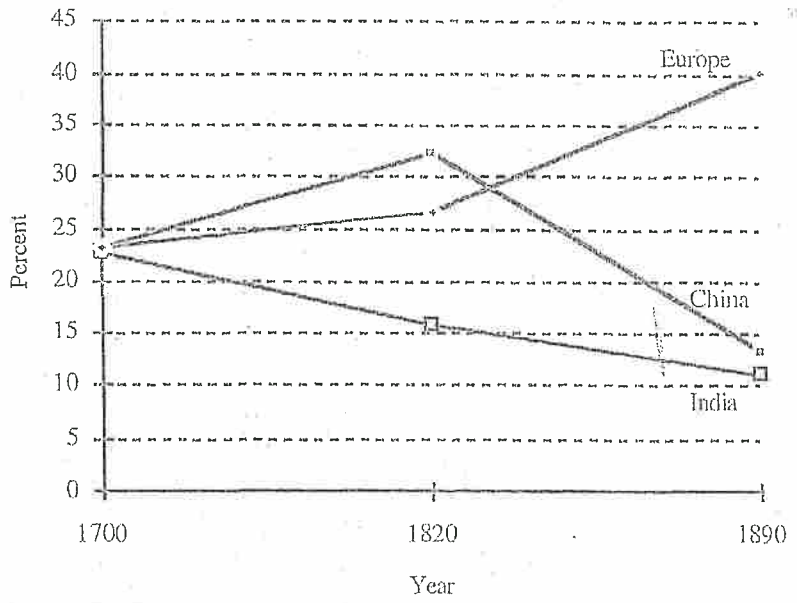


Figure 5.1. Share of World GDP, 1700–1890

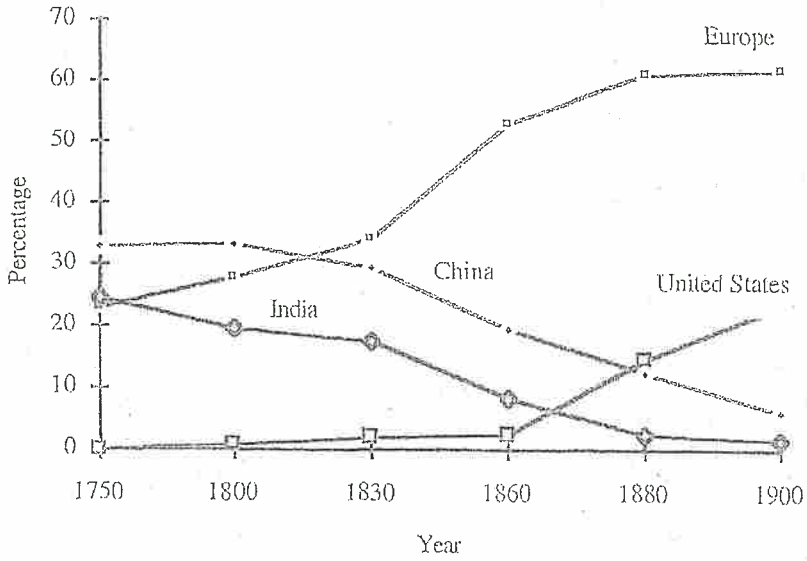


Figure 5.2. Share of World Manufacturing Output, 1750–1900

Source: Derived from data in Paul Kennedy, *The Rise and Fall of Great Powers* (New York: Vintage Press, 1989), 149.

Table 5.1 Gross national product per capita, mid-1950s (selected countries, in current U.S. dollars)

First World		Second World		Underdeveloped (above $200)		Underdeveloped (below $200)	
United States	2,343	USSR	682	Argentina	374	Iraq	195
Canada	1,667	Czechoslovakia	543	Cuba	361	Mexico	187
New Zealand	1,249	Poland	468	Malaya	298	Chile	180
Switzerland	1,229	Hungary	387	Hong Kong	292	Saudi Arabia	166
Australia	1,215	Romania	320	Turkey	276	Morocco	159
Luxembourg	1,194	Yugoslavia	297	Brazil	262	Ghana	135
Sweden	1,165	Bulgaria	285	Spain	254	Egypt	133
Iceland	1,146			Japan	240	Indonesia	127
France	1,046			Greece	239	Taiwan	102
Belgium	1,015			Portugal	201	Thailand	100
United Kingdom	998			Philippines	201	Iran	100
Norway	969					South Korea	80
Finland	941					India	72
Denmark	913					Nigeria	70
West Germany	762					Pakistan	56
Netherlands	708					China	56
Austria	532					Afghanistan	54
Ireland	509					Ethiopia	54
Italy	442					Nepal	40

Source: Bhagwati (1966, 10–11), based on GNP data from national statistical offices.

Note: Bhagwati labels all of the countries in the last two columns plus Bulgaria, Romania, and Yugoslavia "underdeveloped"; in Latin America, Africa, and Asia only Venezuela (762), Uruguay (569), and South Africa (381) are not classified as underdeveloped. In the text he observes that "Asia is the most depressed area, trailing behind Africa, the Near East, and Latin America in that order" (Bhagwati, 1966, 17).

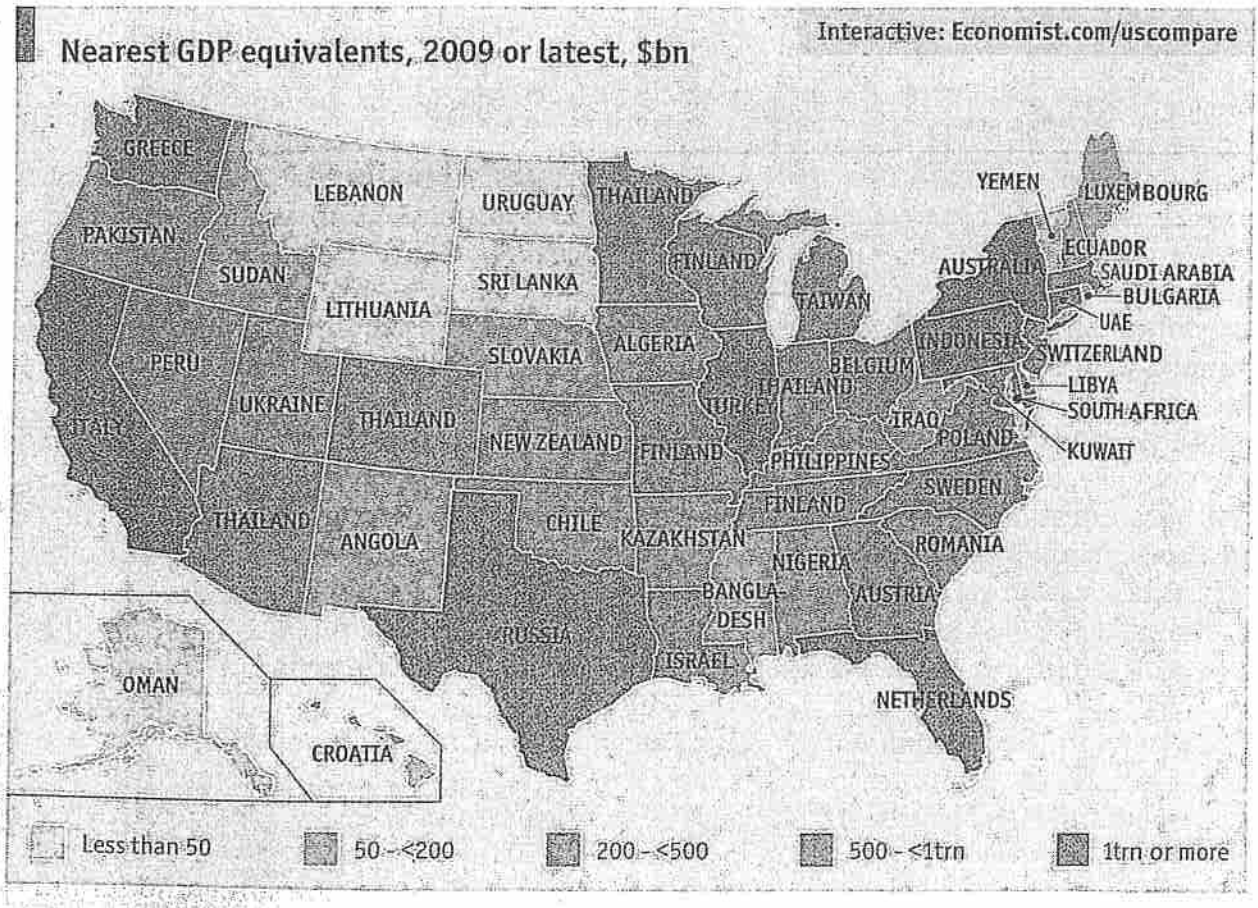
an economist, argues that clusters of clever workers themselves enhance productivity. Such clusters give firms a useful advantage in a productivity-obsessed, cost-conscious world. And in tighter labour markets, firms are more eager to snap up talent while they can. But with conditions improving for those who were never that badly affected to begin with, new hiring is less likely to lead to a surge of fresh optimism.

A manufacturing turnaround is not lifting spirits either. In some respects the Midwest's economy looks perky. Regional manufacturing output in November was up 7.9% from a year earlier, compared with 6.0% for America as a whole, according to the Chicago Federal Reserve's Midwest Manufacturing Index. The steel and car industries led the way, up 18% and 6.1% respectively, thanks to a 13% rise in vehicle

WASHINGTON, DC

The president appoints a new top team

AS THE White House girds itself for battle with the new Republican majority in the House of Representatives, it is drafting some fresh recruits. On January 10th David Plouffe, the manager of Barack Obama's presidential campaign, reported for duty as an adviser. He was joined two days later by William Daley, Mr Obama's new chief of staff. The president has also filled several vacancies in his economic team, most notably by appointing Gene Sperling as head of the National Economic Council, a co-ordinating body for policy. He will soon



The size of the states

It has long been true that California on its own would rank as one of the biggest economies in the world. At present it would rank 8th, falling between Italy and Brazil on a nominal exchange-rate basis. But how do other American states compare with other countries? Taking the nearest equivalent country from 2009 data reveals some surprises. Who would have thought that despite years of car-industry hardship, Michigan's economy is about the same size as the whole of Taiwan's?

THE 50 RICHEST IN THE WORLD

*denotes family wealth

				2010 Wealth	2009 Wealth
1	The Walton family	America	Retailing (Walmart)	£53.3bn	£52.3bn
2	Carlos Slim Helu*	Mexico	Telecoms	£34.1bn	£24.3bn
3	Bill Gates	America	Software (Microsoft)	£33.6bn	£27.7bn
4	Warren Buffett	America	Investment	£29.9bn	£25.6bn
5	Mukesh & Anil Ambani	India	Petrochemicals	£27.2bn	£20.5bn
6	Karl & Theo Albrecht*	Germany	Supermarkets	£25.6bn	£27.9bn
7	Charles & David Koch	America	Oil services	£22.3bn	£19.4bn
8	Forrest & John Mars*	America	Confectionery	£21bn	£18.7bn
9	Lakshmi Mittal*	UK	Steel	£20.4bn	£10.8bn
10	The Mulliez family	France	Retailing (Auchan)	£19.1bn	£15.2bn
11	Larry Ellison	America	Computers (Oracle)	£17.8bn	£15.6bn
12	Bernard Arnault	France	Luxury goods (LVMH)	£17.5bn	£11.4bn
13	The Brenninkmeyer family	Holland	Retailing (C&A)	£17.3bn	£19bn
14	Eike Batista	Brazil	Mining, metals	£17.2bn	£5.2bn
15	Stefan & Liselott Persson	Sweden	Retail	£16.2bn	£11.4bn
16	Amancio Ortega	Spain	Fashion (Zara)	£15.9bn	£12.7bn
17	Ingvar Kamprad*	Sweden	Retailing (Ikea)	£14.6bn	£15.2bn
18	Johanna Quandt*	Germany	Cars (BMW)	£13.9bn	£13bn
19	Li Ka-shing	Hong Kong	Industry	£13.4bn	£11.2bn
20=	Sultan of Brunei	Brunei	Oil	£12.8bn	£10.7bn
20=	Liliane Bettencourt	France	Cosmetics (L'Oréal)	£12.8bn	£9.3bn
22	David Thomson*	Canada	Media, oil	£12.7bn	£9bn
23=	Prince Alwaleed	Saudi Arabia	Investment	£12.4bn	£9.2bn
23=	Abigail & Edward Johnson	America	Investment	£12.4bn	£11.8bn
25	Michael Otto*	Germany	Mail order	£11.9bn	£9.1bn
26	Lee Shau Kee	Hong Kong	Property	£11.8bn	£6.2bn
27	Michael Bloomberg	America	Media (Bloomberg)	£11.5bn	£11.1bn
28	Sheikh Khalifa Bin Zayed Al Nahayan	UAE	Oil	£11.4bn	£14.7bn
29=	Sergey Brin	America	Internet (Google)	£11.2bn	£8.3bn
29=	Larry Page	America	Internet (Google)	£11.2bn	£8.3bn
31=	The Kwok Brothers	Hong Kong	Property	£10.8bn	£7.3bn
31=	King Abdullah	Saudi Arabia	Oil	£10.8bn	£11.3bn
31=	Michele Ferrero*	Italy	Chocolates	£10.8bn	£6.6bn
31=	Azim Premji	India	Software	£10.8bn	£4bn
35	The Al Rajhi family	Saudi Arabia	Finance	£10.3bn	£4.3bn
36	Vladimir Lisin	Russia	Steel	£10.1bn	£3.6bn
37	The Oeri/Hoffmann family	Switzerland	Pharmaceuticals	£9.8bn	£8.5bn
38	The Pritzker family	America	Hotels, investments	£9.3bn	£7.5bn
39=	Steve Ballmer	America	Software (Microsoft)	£9.2bn	£7.6bn
39=	Robert Kuok	Hong Kong	Agriculture	£9.2bn	£4.8bn
41	George Soros	America	Finance	£8.9bn	£7.6bn
42=	Michael Dell	America	Computers (Dell)	£8.6bn	£8.5bn
42=	Paul Allen	America	Software (Microsoft)	£8.6bn	£7.3bn
44=	The Herz family	Germany	Coffee	£8.5bn	£7.5bn
44=	Mikhail Prokhorov	Russia	Metals	£8.5bn	£6.6bn
46=	The Sawiris family	Egypt	Telecoms, construction	£8.3bn	£5.4bn
46=	Birgit Rausing *	Switzerland/UK	Industry	£8.3bn	£6.9bn
46=	Shashi & Ravi Ruia	India	Steel, oil, telecoms	£8.3bn	£3.9bn
49	Mikhail Fridman	Russia	Oil, banking	£8.1bn	£4.4bn
50=	Jeff Bezos	America	Amazon	£7.8bn	£4.7bn
50=	Savitri Jindal	India	Steel	£7.8bn	£1.9bn

Sources: Sunday Times Rich List 2010, Forbes World Billionaires March 2010, Forbes Royal Rich List June 2009, Quote 500 2009, Dutch Rich List, Bilan Swiss Rich List December 2009, Challenges French Rich List.

For the world's richest 100, see www.thesundaytimes.co.uk/richlist from May 2