THE MAKING OF EUROPE

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The End of a Cycle

Demography in the Twentieth Century: Mortality and **Fertility**

In the year 2000 the population of Europe will be 730 million. This is almost four times the population of 1800 (188 million), and 60 percent more than in 1914 (458 million). Considerable though this growth may be, especially when factoring in the high mortality of two world wars, it nevertheless conceals a downward trend that has led European population today to the verge of a standstill. Population between 1920 and 1930 was growing at an annual rate of 4.5 million, and between 1950 and 1960 at 6 million annually; today it has all but ceased to grow (see table 7.1). The cycle of growth that began with the Industrial Revolution has come full circle, and an era of abundant human resources has given way to one of scarcity; in short, we have reached the end of the great demographic transition.

We can identify three distinct periods. The first occupies the years between the two world wars, and was marked by high First World War mortality, the end of mass emigration, and relative demographic isolation as migration declined during the Great Depression. The second phase, ushered in by the demographic deficit of the Second World War and geopolitical boundary

Population of selected European Table 7.1

	I commission of the commission							
Year	United Kingdom	France	Germany	Italy	Spain	Ussr/Russia (European)	Other	Europe
				Population (millions)	(lions)	(amo J)		
1920	43.7	39.0		37.4	2.1.2	139 1	1341	7 11/7
1930	46.1	41.6	55.9	40.8	23.4	1.751	1.4.4	467.1
1940	48.2	41.0	60.1	44 3	25.5	0.001	14/.7	511.8
1950	50.6	41.8	489	47.1	0.67	1.0.4	160.6	556.4
1960	4 65	127	1 66	1.77	0.07	7.961	136.6	548.7
17.00	F ' ' ' '	/·C+ -	//	20.7	30.5	180.3	173.5	605.3
1970	55.6	50.8	77.7	53.8	33.8	197.2	187.5	656.4
1980	56.3	53.9	78.3	56.4	37.5	209.5	201.1	693.0
1990	57.4	56.7	79.4	57.0	39.3	222.1	3 60 6	72.17
2000	59.0	59.0	81.7	57.3	39.8	218.8	214.2	7799
)		7.1.7	17.0
			Average	annual rate o	f growth (%)			
920-30	0.53	0.65	0.67	0.87	66 0	1 20	0 03	
1930-40	0.45	-0.15	0.72	0.87	860	7.70	7.0	0.91
194050	0.49	0.19	1 29	0.51	0/:0	7.10	0.8/	0.84
050-60	0.35	68.0	77.0	0.01	70.0	77.1-	-0.25	-0.14
00 000		70.0	0.01	0.64	0.86	1.43	1.02	0.98
0/-096	0.59	1.06	0.67	69.0	1.03	0.90	0.78	0.81
1970-80	0.13	0.59	0.08	0.47	1.04	0.61	0.70	0.54
06-086	0.19	0.51	0.14	0.11	0.47	0.58	0.42	15.0
990-2000	0.27	0.40	0.29	0.05	0.13	-0.15	0.21	0.11
1920–2000	0.38	0.52	0.56	0.53	0.79	0.57	85 0	73 0
					· · · · ·	6:0	0.70	0.56

Note: Europe includes the European territories of the former USSR (Estonia, Lithuania, Latvia, Belarus, Moldavia, Russian Federation, Ukraine). Borders of the various countries are present-day Sources: From 1950 to 2000: United Nations, World Population Prospects. The 1994 revision, New York 1995. For 1920-

Nations, Demographic Yearbook 1955, New York 1995 and national sources

changes, was one of demographic recovery fed by the economic boom in western European countries, and of renewed international as well as internal migration. The energy and manufacturing crises of the early 1970s marked the end of this phase, together with the decline of migration within Europe and from several nearby countries. The third phase covers the last three decades of the twentieth century and is marked by extremely low fertility, a rapidly aging population, and the gradual closing to migration from outside Europe. The economic and demographic situation of the second period made possible the creation of a generous and promise-filled social welfare state, while the demographic evolution of the third phase has made revisions and reconsiderations necessary.

In the last chapter I examined at length the nature and causes of the nineteenth century transition, and so can fairly briefly describe its development and conclusion, leaving room to reflect on the impact it has had on European society. Five phenomena in particular are worthy of careful attention: the almost uninterrupted, and greater than expected, decline in mortality; the widespread practice of birth control and the plunge in fertility to below replacement levels; the end of mass transoceanic emigration and the beginning of immigration from poor countries; the rapid aging of the population and its economic implications; and finally, changes in social

Table 7.2 Life expectancy (men and women) in major European countries, 1920-94

Country	1920	1930	1950	1970	1994
United Kingdom	57.6	60.8	69.2	72.0	76.8
France	54.0	56.7	66.5	72.4	77.5
Germany	53.6	61.4	67.5	71.0	76.3
Italy	50.0	54.9	66.0	72.1	77.5
Spain	45.8	54.6	63.9	72.9	77.1
Soviet Union	42.9	****	67.3	68.2	64.5

Note: United Kingdom: before 1950, England, after 1950, United Kingdom; Germany: before 1950, borders at the time, after 1950, present-day borders; USSR: before 1950, borders at the time, after 1950, borders of Russian Federation. Values for 1920 refer to 1920–2 (England), 1920–3 (France), 1924–6 (Germany), 1921–2 (Italy), 1926–7 (USSR); values for 1930 refer to 1930–2 (England), 1928–33 (France), 1932–4 (Germany), 1930–2 (Italy); values for 1950 and 1970 refer respectively to 1950–5 and 1970–5. Sources: Before 1950: Dublin, Lotka, and Spiegelman, Length of Life, Ronald Press, New York, 1949. After 1950: United Nations; 1994 (1993 for Spain): national sources

rules and conventions regarding marriage and the stability of procreating couples; traditionally those rules governed reproduction and cohabitation, but today in many cases they no longer apply.

Briefly, mortality has evolved along these lines: over the course of the entire century there has been a continual decline in mortality (for men and women alike) illustrated by an increase in life expectancy at birth (see table 7.2) from about 50 years in 1914 to about 75 years today. There is virtually no break in the decline if we exclude periods of war and the unusual developments in eastern Europe, of which more below. Put another way, life expectancy has increased by close to four months per calendar year, an extraordinary gain, and one which shows no sign of slowing in spite of the fact that today an average life expectancy of 80 years, not long ago considered the biological limit, has been exceeded by many female populations.

Several important aspects of this process of mortality decline deserve mention: (a) until average life expectancy reached 65-70, gains were chiefly the result of declining mortality for both infants and adults, while recent gains have been almost exclusively due to improved survivorship of the elderly; (b) in the earlier phase much of the gain in life expectancy was the result of the gradual control of infectious diseases both through vaccines and pharmacology (sulfa drugs and antibiotics) and disease prevention and improved hygiene; while more recent gains in old-age survivorship have mainly been the result of a lower incidence of noninfectious disease (e.g., cardiovascular) because of better information about their causes, healthier lifestyles, and effective treatment for them; (c) life expectancy has improved more for women (over 82 years in some countries) than for men, and the gap is currently between 6-8 years; and (d) there have been some interesting variations in the geography of life expectancy: significant pre-First World War differences between countries were primarily a function of economic development. Life expectancy in a country like Russia was barely over 35, while in Sweden and England it was well over 50 (see table 6.4, on p.135); over the next 50 to 60 years national life expectancies evened out (in 1970 more or less between 70 and 75), but a gap has reappeared in the last 20 years due to worsening mortality in Russia and other former eastern-bloc countries as against continued progress in the rest of the continent.

Fertility, like mortality, declined steadily over the course of the long nineteenth century, reaching replacement level between the 1930s and the 1950s. In this case, too, fertility decline closely followed the course of economic development: earlier in "advanced" northern and western Europe, and later in predominantly rural Mediterranean zones and in much of Russia, eastern Europe, and the Balkans. In parts of western Europe the birth rate recovered slightly after the Second World War, while in others it leveled off, but from the 1970s it began to fall to an average of 1.5 children per woman in all of Europe, a level well below replacement (see table 7.3).

On the macro level the trend seems straightforward, but naturally it conceals complex mechanisms and models. Though we cannot discuss them at length in these pages, they include the following: (a) a dramatic restructuring of female reproductivity in terms of the number of offspring produced: today, in the countries

Table 7.3 Average number of children per woman in selected European countries, 1921–95

Years	England	France	Germany	Italy	Spain	Soviet Union/ Russia
1921–5	2.39	2.42	2,62	3.50	3.96	
1926-30	2.01	2.30	2.10	3.30	3.75	6.04
1931-5	1.79	2.16	1.84	3.07	3.50	4.53
1936-40	1.98	2.07	2.24	3.00	2.77	4.66
1941-5	2.39	2.11	1.90	2.56	2.72	_
1946-50	2.19	2.98	2.07	2.77	2.68	3.13
19505	2.18	2.73	2.16	2.32	2.52	2.51
1955-60	2.49	2.71	2.30	2.35	2.75	2.62
1961-5	2.81	2.85	2.49	2.55	2.89	2.48
1965-70	2.52	2.61	2.32	2.49	2.93	2.02
1971-5	2.04	2.31	1.64	2.28	2.89	1.98
1975-80	1.72	1.86	1.52	1.92	2.63	1.92
1980-5	1.80	1.87	1.46	1.55	1.86	1.99
1985-90	1.81	1.80	1.43	1.35	1.46	2.10
1995	1.71	1.70	1.24	1.17	1.18	1.39

Note: United Kingdom: 1931–50, England and Wales, after 1950, United Kingdom. Germany: before 1946, borders at the time, after 1946, present-day borders; USSR: before 1950, borders at the time, after 1950, borders of Russian Federation

Sources: 1950-90, United Nations. 1995, national sources (1994 for Russian Federation). Before 1950, Chesnais, La transition démographique, PUF, Paris, 1985; for the USSR, E. Andreev, L. Darskij, T. Kharkova, "L'histoire de la population de l'URSS 1920-59," Annales de Démographie Historique, 1992

with the lowest fertility, there are more women in a given generation with one or no children than with two or more; while for the generations born in the nineteenth century there were more women with four or more children than with zero to three; (b) a decline in the average age at the birth of a first child corresponding to a decline in the age at marriage between the 1930s and 1960s, followed by a sharp increase in the last few decades, which has both shortened and delayed the childbearing period for women; (c) a rapid rise in children born out of wedlock; (d) significant changes in birth control methods. Though the practice of coitus interruptus was responsible for much of European fertility decline, the commercial availability of traditional birth control methods in the first half of the twentieth century (though prohibited by law in much of Europe until fairly recently) and the introduction of modern and secure ones since the 1960s have made possible the precise planning of fertility. At the same time, legalized abortion offers a safe option for correcting planning errors.

Mortality was still a strong selective force at the beginning of this century, so that out of 100 births only about half lived to the end of their reproductive cycles, and these survivors were responsible for the continuation of the species. Today, almost all women (99 percent) survive to the end of their childbearing years, and mortality no longer interferes in the replacement process. Nonetheless, today's 1.5 children per woman cannot guarantee replacement, and so the road to decline is open; European societies accustomed to abundant human resources are finding themselves at the end of the millennium in a much changed situation.

Demography in the Twentieth Century: Migration, Structures, Models

Mass migration was the single most striking demographic event of the nineteenth century, in terms of scale and its implications for the development of several continents. Following the First World War, the conditions that had made it possible changed: demand in the traditional destination countries declined, and demographic slow-down in Europe shrank supply. Yet these changes acted slowly, while other factors – such as war and national migration policies – abruptly halted the migratory waves. Approximately 1.4 million people left Europe every year between 1906 and 1915. After the inevitable slowing due to the war, the figure dropped to about 0.6

million between 1921 and 1930, and barely over 100,000 between 1930 and 1940. Migration grew again in the immediate post-Second World War period but that trend was short-lived. The most effective controls to emigration were the restrictions introduced in the United States and culminating in the 1924 National Origins Act that not only imposed a quota on annual immigration (just over 150,000 down from the 900,000 per year before the First World War), but was designed in such a way as to penalize the "new immigration," namely that from southern and eastern Europe. Before the war, for example, Italy was responsible for almost 25 percent of total immigrants to the US, but the quota reduced this figure to less than 4 percent. In part because of the Great Depression, other destination countries also adopted restrictive policies and imposed quotas: South Africa in 1930, New Zealand in 1931, Australia in 1932, and Brazil in 1934. Whatever the reason - the pressure to exclude groups deemed ethnically or culturally undesirable, economic hardship, a feeling that nations created through immigration had reached stability - the era of mass migration, at least for Europe, had come to an end. Transoceanic emigration did resume briefly after the Second World War, but less for the purpose of finding work abroad than for family reunification and the settling of war refugees. America and Europe, paradoxically, were more closely linked at the beginning of the twentieth century than during its second half.

A look at earlier events helps complete this picture. With the opening of ocean routes to the Americas, Europe was transformed from a continent of immigration – through the large gateway of the Eurasian steppes or across the Mediterranean – to one of emigration. The second half of the twentieth century has reintroduced immigration, partly as the legacy of lost colonial empires and partly in response to a demand for labor not met by a slowly growing population increasingly unwilling to do certain types of work. About 20 million foreigners live in Europe today (excluding Russia), and over half are non-Europeans: there are north Africans in France, Spain, and Italy; Turks in Germany; Pakistanis, Indians, and Caribbeans in Great Britain. While throughout Europe states have adopted zero immigration policies, there seems little chance that those policies will change the general course of a phenomenon that in all likelihood will characterize the twenty-first century.

Age structure is another important demographic phenomenon, and though we have neglected it in our discussion thus far, for reasons which will become clear, it is of vital importance in popu-

lation issues today. Age structure itself depends on mortality and fertility: when those factors are more or less constant, as they were in the earlier centuries, then age structure does not change much. Of course stability in this case is relative and no longer holds in the face of age-specific crises or migration. Since fertility and mortality began their decisive decline in the second half of the nineteenth century, that is also when age structure began to change. Fertility decline reduces the relative size of the younger age groups and so increases that of the older, automatically bringing about the "aging" of the population. Increased life expectancy instead has a "net" effect depending on which age groups are affected. If, for instance, life expectancy is equally improved for all age groups, then age structure does not change, but if instead it improves disproportionately for infants or children (as it did up until the middle of this century and beyond), then age structure changes favor that age group and the population becomes "younger." And if life expectancy increases more for the elderly (as it has in the past few decades), then that group grows relative to the others.

Until 1910, changes in the birth and death rates had relatively little effect on the age structure of European populations. Taking the total populations of Great Britain, Germany, France, and Italy we find that from 1870 to 1910, the total population under 15 stayed at about 32 percent, while that over 60 was about 9 percent. After 1910 the percentage of young people began to drop and the percentage of elderly to rise: in 1950 in the same four countries 24 percent of the total population was younger than 15, while the figure for 2000 is about 17 percent; by 1950 the percentage over 60 had risen to 14 percent and at millennium's end it was up to 20 percent. The average age of the population, 29 in 1910, has risen to 39 in 2000, and the aging process shows no signs of abating.

Even though chronological age is too rigid an indicator of the phases of a human life span, the above statistics indicate a profoundly important transformation in the ratio of generations and age groups, in family structures, and in the distribution of social roles and duties. We shall return to this topic again later in the chapter.

The final point to consider in this background discussion are the changing rules governing reproduction. Traditionally these rules included: marriage as the "locus" of procreation; the stability of that union; and the simultaneous occurrence of separation from one's original family, the formation of a new nuclear family, and the occupation of a fairly fixed economic and social "niche." The

once monolithic system, needless to say, has been altered and in some cases undermined in the last few decades, and demographic indicators are clear in this regard: more couples live together without marrying; the divorce rate is higher; there are more and more single-parent families; and there is an ever greater separation between "economically productive" life and "reproductive" life. Because these changes vary widely from country to country, and the picture is constantly changing, I make no attempt to summarize them; which, moreover, would require a long excursion to that micro level we have generally avoided up to this point. Nonetheless, this change in the "rules" of the game will need to be kept in mind when evaluating the importance of the reproductive crisis of the late twentieth century.

Politics

The twentieth century brought with it a new demographic development, the attempt by governments to influence the course of demographic growth and the introduction of true population policies. In truth, this was not an entirely new concept; the mercantilist notion of "governar es poblar" was fairly widespread in the seventeenth and eighteenth centuries, and measures more or less designed to encourage large families and stimulate marriage can be traced to that period. Nonetheless, population policies in these earlier centuries primarily consisted in the physical movement of people for the purpose of establishing colonies or occupying new land and border territories. While some of these measures, as we have seen, failed miserably and others succeeded, it was only in the twentieth century that there emerged the idea of truly manipulating demographic events through public measures designed to convince, motivate, discourage, or prohibit certain behaviors. This could never have happened if not for two developments: early in the century it became clear that births were not only being controlled, but planned, and at the same time it was recognized that public health measures were successfully increasing life expectancy. The course of demographic development was no longer at the mercy of natural and unyielding forces of constraint, but could be changed and controlled. In addition, the distressing phenomenon of declining fertility struck many as a sign of weakness in the social fabric rather than the inevitable adjustment to the demographic transition.

Before we discuss population politics, though, it is worth pausing a moment over the brutal consequences of warfare for European populations, both in terms of deaths and the forced relocation of people after national boundaries were redefined. These too were the legacy of "politics" and profoundly marked the demographic history of the twentieth century. Approximately 58 million European men, roughly one-half of the active male population, were mobilized during the five years of the First World War, and about 9 million, or 15.5 percent of those mobilized, did not survive. In addition to soldiers, warfare also claimed civilian lives, both directly and by means of resurgent infectious diseases, the gravity and spread of which was favored by the chaotic conditions created by war; the 1918-19 influenza pandemic, for instance, killed over 2 million. In addition, the war generations suffered the long-term effects of injury and disability and of deprivation. Mass mobilization also lowered the marriage rate and separated husbands and wives, causing a dramatic drop in the wartime birth rate. Attempts have been made to estimate the "growth loss" for various countries by calculating excess deaths and the birth deficit, but they are crude at best, in part because of the rallying of the birth rate in 1919-21, and so estimates reflect the arbitrariness of the hypotheses chosen. Nonetheless, it is estimated that 22 million people died in Europe (excluding Russia) as a result of the war, a figure equal to about 7 percent of the 1914 population. The numbers for Russia are still less exact, and include casualties incurred by the Revolution. Lorimer has estimated that, not including emigration, war and revolution together cost 10 million lost births and 16 million deaths, both military and civilian. Losses in the Second World War were of a similar order, and the estimates - over 20 million - are equally uncertain because of the large share of civilian causalities. The birth deficit for 1939-45, though high, was considerably lower than for 1914-18. The two world wars had a particularly dramatic effect on age structure immediately following the war in those countries that suffered the greatest losses (Germany, Poland, the Soviet Union). The generations born during the war years were small, and the Second World War further reduced the generation born in 1914-18; the age groups corresponding to the ages of the majority of soldiers serving in the two wars were abnormally small (those born in the 1890s, and between 1915 and 1925); and the ratio of men to women was sharply out of balance.

The impact of the two world wars (especially the first) was important not only because it affected the growth, structure, and

distribution of European population, but also because it reinforced the general impression that Europe was speeding headlong towards demographic decline, already a source of anxiety in some countries before 1914. Gradually, and in some cases not so gradually, Malthusian doctrines - the fear of population growth not controlled by virtuous "preventive" checks - gave way to the opposite fear of potential demographic decline: a fear of "too many" was replaced by a fear of "too few." The earliest and most dramatic signs came from France, where the birth rate had clearly begun to decline early in the nineteenth century. The defeat by Prussia in 1870 dramatically heightened concern for the diminishing vitality of France: on one side of the Rhine a strong, unified, heavily populated, and steadily growing Germany, and on the other, a defeated France whose slow growth jeopardized the balance of population and so power. Concern about the demographic weakness, or even decline, of France grew, and by the beginning of the next century concrete pronatalist measures were proposed. Belief in the negative consequences of demographic weakness persists still today, in an updated and revised form, and encompasses military, politicaldiplomatic, cultural, and economic concerns. Briefly, from the military point of view, as long as wars are heavily dependent on the human element, to be numerically smaller than other nations (Anglo-Saxons, Germans, or Slavs) meant the abandonment of expansionist aims, and the search for security through alliances at the risk of encouraging other powers (in particular Germany) to attack France. Demographic feebleness also signified less capacity for colonial expansion, the inability to people new territories and spread French language and culture. The sum of this could not help but have a negative impact on the political importance of France. Low fertility in France and high fertility in other countries attracted immigrants and so weakened French culture and - insofar as immigrants tended to settle in boundary areas - undermined national security. Demographic frailty also weakened the economic system, as reflected in the supply of labor, the capacity to produce and save, and in entrepreneurship.

Anxiety over demographic decline spread slowly throughout Europe following more or less the birth rate decline – the effects of which were exacerbated by the First World War – and reached a peak in the interwar period. The population policies of first fascism, and then Nazism, were nothing more than distorted expressions of fear over demographic decline (which France had already made less sensational attempts to combat) and took root

in already fertile ground. These policies included a wide spectrum of demographic measures attempting to modify deeply rooted behaviors concerning procreation, marriage, and even mobility, and were consistent with a totalitarian ideology. Not surprisingly, in addition to Italy and Germany, they also flourished in Vichy France, Japan, and even the Soviet Union, where in the 1930s the "liberal" laws on marriage and procreation of the preceding decade were overturned. Population policy was officially announced in Italy by Mussolini in his Ascension Day speech of 1927:

I assert that a prerequisite, if not a fundamental aspect, of the political power of a nation, and so of its economic and moral power, is its demographic strength. Let us speak clearly: what are 40 million Italians in the face of 90 million Germans or 200 million Slavs? Look to the west as well: what are 40 million Italians as compared to 40 million French plus a colonial population of another 90 million or compared to 46 million Britons and 450 million colonials? Gentlemen! In order to count for something in the world, Italy must greet the second half of this century with no fewer than 60 million inhabitants.

The first concrete steps were taken in 1926 with the prohibition of the sale of contraceptives, and in 1927 with the bachelor tax (affecting men between 25 and 65), followed by tax deductions for large families, and birth and marriage prizes; the policy was reinvigorated in 1937 by the introduction of no-interest family loans with progressive debt cancellation on the birth of each child, the consolidation of earlier measures, and the introduction of a host of minor ones regarding wages, job preferences for married men and heads of large families, and the organization of propaganda. Nazi population policy, fundamentally racist, was pursued energetically beginning early in the regime. Based on the defense of "Aryan" racial purity, it outlawed "mixed" marriages (between Aryans and non-Aryans, especially Jews) and promoted the sterilization of individuals considered "unsuitable" for reproduction. In addition, the policy was backed up by hefty financial incentives that encouraged marriage, fertility, and large families. I will not deal here with Nazi genocide and the 6-7 million victims it claimed; for it has more to do with the history of criminal madness than the history of policy.

In Germany and Italy, and everywhere that fascist population policies were adopted or imitated, laws were passed to counteract "neo-Malthusianism" and the trend to smaller families: penalties

for abortion were increased, and migration to the cities – breeding grounds of neo-Malthusianism – was discouraged or forbidden. There was a great emphasis on country life, and its healthier and more fruitful lifestyle was exalted. Attempts were also made to strengthen the family against the "dangers of individualism and hedonistic egoism." If impossible to revolutionize deeply rooted behaviors, it was at least necessary to ensure that families produced the two or three offspring required for their own replacement. Although independently inspired, there is little doubt that the Catholic Church's stance on the non-permissibility of birth control, communicated in Pius XI's 1930 encyclical Casti connubii, seconded fascist propaganda.

Fascist and Nazi policies were, again, charactersite of the ideologies that produced them. In France, demographically enfeebled as a result of war and the target of intensive immigration, a clear pronatalist stance also emerged. In 1920, antiabortion laws were reinforced and neo-Malthusian propaganda was outlawed; birth control was classified with abortion as threatening "the greater rights of the nation" by depriving France of potential new citizens. In 1932, formerly private family allowances were taken over by the state and became a benefit available to all employed workers. In 1938, the pro-natalist position of the state was reinforced, and in 1939 the Code de la Famille (family law) was passed, increasing aid to families, especially those with at least three children. Under Vichy, French population policy came to resemble the fascist policies.

The case of the Soviet Union is highly unusual and complex. The liberal marriage, divorce, and abortion laws introduced following the Revolution were replaced between 1934 and 1944 by a populationist policy that limited abortion and divorce, reinforced the family unit and parental authority, and introduced food allowances for children and family allowances. Stalin announced this new policy in May 1935 in a speech entitled "Man, the most precious resource." Unlike the cases of other European nations, declining fertility could not explain this transformation, for the Soviet birth rate was still high. The explanation instead lay in the devastating demographic consequences of Stalinist policy itself; the end of the New Economic Policy, and the beginning of massive and ambitious industrialization, which fed large-scale urbanization and required stockpiling product from the countryside. In 1927-8 and 1928-9 these efforts at stockpiling fell far short of their goal, and it was necessary to ration bread in the cities.

With the industrial plan on the verge of collapse, two serious decisions were made: the liquidation of the kulaks, the wealthy class of peasants considered the enemies of the Revolution; and forced agricultural collectivization. The kulak resettlement took place in three waves and continued until 1932. According to Molotov, 6 or 7 million people (other estimates are closer to 10 million) were deported, and many did not survive the strenuous journeys or the labor camps, dying from cold, starvation, sickness, violence, or at the hands of firing squads. Rigidly supervised agricultural collectivization instead seemed to be the ideal method to guarantee wheat deliveries from tens of millions of previously independent (and protesting) households.

Wheat stockpiling in 1930 appeared to have been successful thanks to a good harvest, and it was mistakenly believed that even more could be collected in 1931 and 1932. Failure became inevitable, though, as farmers who had been forced to collectivize their estates sold their reserves and their tools, butchered their cattle, sowed little and harvested even less. Forty-five percent of the much reduced 1932 Ukrainian harvest was earmarked for delivery; shortage and famine followed, hitting all the wheat-growing regions, the Volga river area, and the northern Caucasus. The resulting famine caused huge number of deaths, and mortality for the whole of Ukraine tripled in 1933: this was a demographic catastrophe comparable to the most severe old-regime crises. Outside of the Soviet Union, the Great Famine and high mortality were hidden from or denied to the outside world; they were the price of gross planning errors and a project of brutal rural repression. The combination of the December 1926 census and the suppressed January 1937 census (later discovered in archives) plus other demographic data suggests that an extra 9 million people died during the decade of kulak resettlement and agricultural collectivization. Prior to the release of the 1937 census, Stalin, a convert to populationism, had triumphantly announced that the population of the Soviet Union had reached 170 million; he could not then accept the lower census figure of 162 million (which would have uncovered his earlier concealments), and so in February 1937 Pravda declared that "the glorious Soviet police had wiped out the viper's nest of traitors in the Soviet statistical apparatus." The politics of power had wiped out close to 10 million people, canceled a census, and eliminated the people responsible for it.

Generally speaking, pronatalist population policies had modest

results. Incentives and awards managed to accelerate marriages and births to some extent; especially in Nazi Germany where the investment was the greatest and produced some recovery. It was short-lived though and did not affect the fundamental choices made by married couples. Then the Second World War put an end to them. Yet the era of population politics left at least two negative legacies: first, many European governments maintained bans on free reproductive choice well into the 1970s; and second, the attempt to exorcise the past left the enduring notion that demographic variables are practically neutral and independent from other social phenomena .

Economics

The economic transformation of Europe between 1914 and the early 1990s has been extraordinary, in spite of the great costs of two world wars and much political upheaval. Per-capita income—if we leave out those countries that had socialist regimes for at least half of the century—has grown fivefold, whereas during the already very dynamic preceding century (1820–1913) the increase was less than threefold. While economic growth was particularly strong in the postwar period, 1950–73 (4.3 percent annually), it was also considerable in the decades that included both wars (1.2 percent during 1913–50), and has continued growing at 2 percent during the last two decades (1973–92). To what extent have demographic changes affected economic ones?

Though the relationship between population and economy is complex, several factors emerge clearly. The demographic evolution of the past two centuries has greatly augmented the capacity of populations to make choices – to control mortality and disease, fertility and reproduction, and mobility – that are vital to economic development. Declining mortality, by reducing the risk of premature death and leveling dramatic and unexpected oscillations in mortality, created greater stability in interpersonal relationships and allowed people to establish long-term goals for employment and career, two decidedly positive factors for economic development. In addition to lower mortality, the general state of health significantly improved, particularly in the twentieth century. There were fewer disabling illnesses (malaria, for example, left the victim debilitated and reduced his or her productiveness), less frequently recurring temporary disabilities, and a greater physical efficiency

illustrated by, among other things, a pronounced increase in height (roughly 10 cm. for young males between the early nineteenth century and today). In other words, illness became progressively less dominant in people's lives while at the same time physical efficiency was fortified by improvements in diet, medicine, and environment. In the third place, fertility decline cut the amount of time, energy, and resources devoted to childrearing and so allowed these resources (particularly in the form of female employment) to be spent on more directly productive activities. The fourth change was greater mobility thanks to expanding labor markets, faster and more economical communication, and the elimination of institutional barriers (such as different forms of bondage which still persisted in rural Russia, for instance, well after the 1861 liberation of the serfs); all of which allowed human resources to be better allocated, another boost to economic development. Fifth, for the 50 or so years leading up to the 1930s, changes in age structure favored the more productive ages, reducing the ratio of nonproducers (children and the elderly) to producers (adolescents, young- and middle-aged adults). Finally, demographic growth had a positive effect on economies of scale because it led to expanded markets, stimulating the creation of large infrastructures and encouraging entrepreneurship and the invention of "new" knowledge.

Taken together these changes had a strongly positive effect on economic development; and though their contribution was gradual and cannot explain the major cycles of modern economic growth, without a doubt they increased the average level of efficiency of the population. This process unfolded over most, though not all, of the twentieth century; during the last decades, however, the positive impact of demographic evolution on efficiency has been used up and cannot be replicated in the decades to come. Further decline of the already low birth rate will create serious problems; further extension of life expectancy might translate into a disproportionate amount of time marked by ill health and impaired autonomy; and changing age structure is radically reducing the ratio of producers to nonproducers in society and curtailing mobility. Finally, accepting that positive effects have followed upon demographic growth (of course only in certain contexts), these have surely been exhausted by now. Considering the overall "net" impact of demographic change over the past century (and the one before it as well), there have been many benefits derived from increased efficiency, though the returns have been

Per-capita gross domestic product in European countries, 1913-92 (1990 dollars) 4

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Country	1913	1950	1973	1992	Ratio	Annual	Annual percentage variation	ation
					1992/1913	1913–50	1950-73	1973–92
Austria	3.488	3,731	11,308	17,160	4.9	0.2	4.8	2.2
Belgium	4,130	5,346	11,905	17,165	4.2	0.7	3.5	1.9
Denmark	3,764	6,683	13,416	18,293	4.9	1.6	3.0	1.6
Finland	2,050	4,131	10,768	14,646	7.1	1.9	4.2	1.6
France	3,452	5,221	12,940	17,959	5.2	1.1	3.9	1.7
Germany	3,833	4,281	13,152	19,351	5.0	0.3	4.9	2.0
Italy		3,425	10,409	16,229	6.5	8.0	4.8	2.3
Netherlands		5,850	12,763	16,898	4.3	1.1	3.4	1.5
Norway		4,969	10,229	17,543	7.7	2.1	3.1	2.8
Sweden		6,738	13,494	16,927	5.5	2.1	3.0	1.2
Switzerland		8,939	17,953	21,036	5.0	2.0	3.0	0.8
United Kingdom		6.847	11,992	15,738	3.1	8.0	2.4	1.4
Greece		1,951	7,779	10,314	6.4	0.5	6.0	1.5
Ireland	2,733	3,518	7,023	11,711	4.3	0.7	3.0	2.7
Portugal	1.354	2,132	7,568	11,130	8.2	1.2	5.5	2.0
Spain	2,255	2,397	8,739	12,498	5.5	0.2	5.6	1.9
Arithmetic mean	3,316	5,077	12,095	16,973	5.9	1.2	4.3	2.0
Source: A. Maddison. Monitoring the World Economy 1820-1992, OECD, Paris, 1995	ison. Monitorin	g the World	Economy 18	820-1992, OE	CD, Paris, 1995			

diminishing in the last 25 years, and have perhaps already become negative.

A look at the three periods we have already identified – the inter-war period, recovery after the Second World War, and the slow down of the last quarter century – helps to clarify the relationship between population and economy.

Between the wars

The First World War, the Great Depression, post-Depression protectionism, and the exclusion of the Soviet Union from the world economy so deeply marked this period that it would be pointless to try to trace the specific effects of demographic phenomena on economy. Keynes offered a general interpretation of inter-war stagnation, linking it to demographic slowdown:

An increasing population has a very important influence on the demand for capital. Not only does the demand for capital . . . increase more or less in proportion to population. But, business expectations being based much more on present than on prospective demand, an era of increasing population tends to promote optimism, since demand will in general tend to exceed, rather than fall short of, what was hoped for. Moreover a mistake, resulting in a particular type of capital being in temporary over-supply, is in such conditions rapidly corrected. But in an era of declining population the opposite is true. Demand tends to be below what was expected, and a state of over-supply is less easily corrected. Thus a pessimistic atmosphere may ensue.

Demographic deceleration in the 1930s – compared to vigorous growth up to the First World War – may have had just these consequences. In the 50 years that preceded the Great War, demographic growth stimulated the demand for capital investments in construction, the creation of infrastructures, and so on. Between the wars, the exact opposite may have happened, and European economies slowed down. Another relevant demographic factor was the slowing down of demographic growth in urban areas, where the demand for investments in housing, railroads, highways, and industrial structures was high. The European cities that had populations above 500,000 in 1910 had grown in the period 1870–1910 at an annual rate of 2.0 percent, while between 1910 and 1940 growth slowed to 0.9 percent. Other factors may also have had a

negative impact: the Great Depression, for example, not only provoked a general backlash of protectionism but also curtailed migration within Europe (as well as intercontinental migrations which we have already discussed), and in some cases, internal migration (anti-urbanism measures), which had strong repercussions on the labor market. This change too was a drastic one compared to the prewar period characterized by great freedom of mobility. Lastly, geodemographic transformations affected the political and economic organization of Europe. Before the First World War (and excluding Russia), five large countries - Great Britain, France, Germany, Austria-Hungary, and Italy - accounted for three-quarters of the population of the continent and dominated the European scene; the rest of the population was divided among Spain and a dozen smaller countries with fewer than 6 million inhabitants each. The Treaty of Versailles transformed the space of Europe into 22 national entities, and cut the number of large countries from five to four with the dismantling of the Austro-Hungarian empire. Europe was further fragmented and economic development suffered from the barriers to international trade and migration.

From reconstruction to the energy crisis

The 25 years between the end of the Second World War and the early 1970s, which saw the exclusion of eastern Europe from the market economy, meanwhile brought strong growth to the west. From the demographic perspective there was an increase in the birth rate that peaked in the mid-1960s, renewed migration (especially strong from southern Europe), and greater general mobility. Economic reconstruction benefited from an unlimited supply of labor that held down the costs of labor and goods. In the stronger countries, immigration allowed commercial interests to self-finance and compete internationally, and promoted mobility between sectors. In weaker countries (Italy, Spain, Portugal, Greece), emigration eased the burden of unemployment and emigrant remittances helped raise standards of living and contributed to economic development. A similar process took place within "dual" countries such as Italy and Spain by means of massive internal migration from south to north.

Age structure also favored the creation in this period of generous

state welfare systems that provided pensions and a wide spectrum of social services; as there were far more workers who contributed to the system than aged retirees who withdrew from it.

The last quarter century

While recent demographic history has indeed been marked by demographic slowdown, at the same time the workforce has swelled with the coming-of-age of the fairly large generations born through to the end of the 1960s. Population aging has accelerated, and Europe has closed its borders to immigration. The specific effect of demography on the economy can be seen from two points of view. The first is high unemployment among the young, which some attribute to the entry into the labor market of those large generations cited above, creating a supply of labor that exceeds demand. There is however a problem with this explanation: in North America, where the "baby boom" was much more pronounced than in Europe, unemployment has remained low even though there has been greater competition for jobs among those born in the 1950s and 1960s. The explanation offered is that in North America the adjustment was made by lowering relative wages and, in effect, the standard of living for young workers. In Europe instead, wages have been protected and have remained high, and so the adjustment of supply to demand has been made by means of high unemployment.

Second, the generous welfare state has emerged as the primary victim of the demographic changes of the last few decades. In pension systems, normally pay-as-you-go, the group paying in (workers) continues to decrease substantially with respect to the group that takes out (pensioners). The current difficult adjustments being made, such as raising the retirement age, cutting benefits, and increasing contributions, are the consequence of adopting systems in the postwar period that could not hold up in the face of the demographic changes that have come to pass.

Values

Individuals, couples, and families and their motivations, behaviors, interpersonal relationships, and values have all been left out of this

book, which has instead concentrated on the major collective trends of the past millennium. In conclusion, a little reflection is in order regarding the impact that demographic change in this and the previous century has had on personal values linked to birth, death, sickness, solitude, family, and society. The population cycle that began with the Industrial Revolution has profoundly changed the individual journeys that link the two most important events in life: birth and death. Those journeys have multiplied as population has grown and have become considerably longer as the average distance between birth and death has more than doubled. They are journeys, however, much less rich in life events. Our forebears were born into large families with extensive kinship networks, and within this dense context death came like the dropping of a needle from an evergreen, a detachment from a greater whole as compared to today's world in which the individual tends to be more and more isolated in both birth and death. What is more, anyone in the past surviving to middle, or even old, age witnessed birth and death with a repetition that created a familiarity - both painful and joyful with life events: that familiarity has given way to an anxious estrangement.

To be sure, these changes have deeply affected the way we look at life and death and, as a result, the way we perceive others (about whom there are at once fears of too rapid growth and of decline). Some reflection on these topics may provide insight into the collective phenomena and their numerical representation.

Between the end of the eighteenth and the end of the twentieth centuries, the Western world has gone from a system of inefficiency and disorder to one of economy and order. Societies today can efficiently maintain themselves with a minimum waste of human lives; mortality crises diminished and then disappeared, and death is increasingly less frequent, less precocious, less unexpected. People have gradually become less afraid that something serious, inevitable, and unpredictable is likely to happen this year, or next, or the one after that. Disorder became less frequent and gradually disappeared. There is another even more important aspect of the transition from "disorder" to "order." In old demographic regimes, the likelihood that the natural chronological hierarchy of death would be inverted – that a child would die before its parent or grandparent, younger siblings before older - was high. The higher the mortality and the more frequent the mortality crises, the more serious the inversion of the hierarchy. In Europe in the eighteenth century the probability that a 30-year-old mother would outlive her newborn child over the course of the next 20 years was four in 10; that a 50-year-of-old mother outlive her 20-year-old child over the next 20 years was one in five. Given today's mortality levels, the likelihood of the same occurring is slim indeed. These examples give an idea of the disorder in the natural chronological hierarchy caused by the "unpredictable and capricious unfairness" of death.

Here is some more food for thought. European societies have passed from a state in which death was capricious, unpredictable, and subverted the natural chronological hierarchy, to one in which death is predictable, reliable, orderly. The consequences have been twofold. Modern societies have indeed lost their fear of disorder and the random nature of death, and the resulting stability of interpersonal relationships is a prerequisite for economic development. As Camus observed, "No one will be free so long as there is pestilence." On the other hand, the very rarity of a child dying before his parents makes that event, when it does happen, unbearable and irreparable, and is a source of anxiety and fear in today's world. Chekhov described this scene over a century ago:

Krilov and his wife were silent and did not cry, as if they felt the total pathos of their situation in their loss [Andrei, their son, has just died from typhoid]: as they had once lost their youth, they now, with the boy, forever lost their right to have children! The white-haired doctor already seemed an old man at 44 years old, and his wife, wizened and ill, was 35. Andrei was their only, but also their last, child.

The modern view of death – rare, remote, and late in coming – has deeply transformed its nature and image. Death is no longer the medieval domestic affair described by Ariès – where the dying person presides over a quasi-public group ritual that includes friends, relatives, and children – but is instead remote and hidden from view.

The dying person's entourage tried to spare him and hide the gravity of his condition from him . . . The first motivation for the lie was the desire to spare the sick person, to assume the burden of his ordeal. . . . But this sentiment very rapidly was covered over by a different sentiment, a new sentiment characteristic of modernity: one must avoid – no longer for the sake of the dying person, but for society's sake, for the sake of those close to the dying person – the disturbance and the overly strong and unbearable emotion caused by the ugliness of dying and by the very presence of death in the

midst of a happy life, for it is henceforth given that life is always happy or should always seem to be so.

Dying should be dignified, upsetting the equilibrium of family members, friends, and society as little as possible. The death ritual, once presided over by the dying person and in the hands of relatives has become an anonymous institutional event managed by doctors and taking place in the hospital, where it becomes a technical matter.

The demographic rationalization of death – less frequent, coming late in life, and respecting the natural chronological hierarchy – goes hand in hand with a remoteness that is both technical and physical (a hospital death, out of view from family and friends) and psychological (hiding death from the dying). The less familiar death becomes, the greater the effort to remove it and isolate it because of its uniqueness and inevitability. The thought of death, which once impregnated every living moment, is now relegated to a precise and circumscribed phase of life.

In old demographic regimes the disorder of death was accompanied by the unexpectedness and inevitability of disease. We have discussed epidemics at length, but even "normal" mortality was unexpected and dominated by infectious diseases. The gradual control of these, and the concept of recovery from disease – thanks to human intervention – has surely revolutionized our relationship to sickness and death. The degenerative diseases that prevail today, such as cancer or cardiovascular disease, are often foretold and have a long course of illness. A cancer patient who has had surgery or a person suffering from circulatory problems fears the specific action of his disease, even though it may never strike or may only do so after many years. Susan Sontag sees these "new" sorts of illness – tuberculosis in the nineteenth century and cancer in the twentieth – in metaphorical terms:

In contrast to the great epidemic diseases of the past (bubonic plague, typhus, cholera), which strike each person as a member of an afflicted community, TB was understood as a disease that isolates one from the community. However steep its incidence in a population, TB – like cancer today – always seemed to be a mysterious disease of individuals, a deadly arrow that could strike anyone, that singled out its victims one by one.

Today sickness, even if it does not lead to death, is viewed as a great failure. And the attempt to rationalize failure is perhaps

connected with the tendency to blame illness on individual characteristics or behavior. Sontag, again, explores the implications: "[W]ith the modern disease (once TB, now cancer), the romantic idea that the disease expresses the character is invariably extended to assert that the character causes the disease - because it has not expressed itself." Both the myth of tuberculosis and, today, that of cancer regard the individual as responsible for his own illness; TB was the disease of hypersensibility and passion, while cancer is the disease of repression and the inability to express oneself. In this way the burden and responsibility of illness fall on the patient and push him into isolation. Similarly, a greater risk of heart attack is attached to one's psychological state or fast-paced and stressful lifestyle; the burden of the illness is transferred to the patient, taking the weight of failure and inadequacy away from medical science. Still more striking, AIDS is our grimmest metaphor for catastrophe, much greater than syphilis once was: it is disease which carries with it an implication of "guilt" for its link to anomalous sexual behavior and illicit drug use; it is identified (denounced), drags on through time, and leads to the inevitable punishment of death.

Medical advances have attenuated the random and lethal nature of diseases, and prolonged their course; but the inadequacy of those advances has also contributed to personalizing disease, shifting responsibility to the patient, and socially isolating him.

The victory of orderliness and predictability in survival has come at a price, and that price is solitude. Take an elderly man or woman in the old demographic regime. His or her spouse had most likely died, but several children survived – two, three, perhaps even four – who were themselves married with children. Third-degree nieces and nephews – the children of siblings – and kin of the same degree from the spouse's side filled out the family tree; and in all, the old man or woman had a few dozen close relatives. Over time, this family network is added to or subtracted from through births and deaths; and some relatives may have migrated, but most have probably not gone very far away.

The same elderly man or woman in today's world may have two surviving children, who in turn have spouses or companions, and two, three, or maybe even four grandchildren. There may be living siblings as well, and their children. There are similarly fewer relatives on the spouse's side, and the resulting family network is less dense. Greater mobility in recent times will also likely mean that family members are more geographically dispersed, at distances

that modern communications can only in part bridge. Moreover, this network undergoes less modification over time by births and deaths.

Upon reaching the last phase of life's course, people are more alone than in the past. Less often do the lives of family members follow parallel and intersecting paths, and the solidarity between generations is often sorely tested. Solitude and a keen awareness of "fragility" are two major themes of old age and the price paid for living a long life.

The meaning and significance of birth as well as death has changed. In twentieth-century Europe, the child has moved from the periphery to the center of family life. The history of fertility decline, as we know, coincides with the greater investment of parents, families, and society in children, and the shift from quantity of offspring to quality, measured by well-being, nutrition, health, and learning. Childbirth itself has become an increasingly planned and prepared-for event, a function of family budget, expectations, and conceptions of ideal family size. The timing of a pregnancy has come to reflect future projects and plans, just as the day and hour of childbirth come to conform to doctors' or hospitals' schedules. The biophysical characteristics and the sex of the unborn child are known in advance. The great medicalization of pregnancy and childbirth may indeed be excessive and risks creating new syndromes of anxiety. Up until the end of the 1960s, despite already quite low fertility, couples still practiced fairly imperfect birth control and in the end a fair number of births were unplanned ones: one might say that parents had still left the door open to chance and the unexpected. But since the 1960s and 70s, the availability of reliable birth control methods has allowed for perfectly planned conceptions, and legalized abortion has made it relatively easy to correct any possible errors. Pregnancy and childbirth today are programmed and preordained; some of the unborn child's characteristics are known in advance of birth; medicalization is pervasive. Such a heavy investment in children – even before their birth - raises proportionately high expectations and leads to serious frustrations when those expectations are unmet.

We have reached the end of a population cycle, and not only because the end of the twentieth century marks the terminus of many centuries of growth. A major transformation has also occurred that makes demographic behaviors subject to control, and largely a function of subjective choices. The material quality of old-regime factors of constraint – space, food, disease – that once

directly affected demography has given way to an immaterial and less immediate quality. The factors of choice, which were so limited in the old regime, have won the final match. There is more choice, more knowledge, less room for chance, but on the other side of the scale, more responsibility, more fear, and greater worry.