

# Chapter 1

## General Introduction

France Meslé and Jacques Vallin

In 1938–1939, just before the Second World War, life expectancy was still only 50.8 years in Ukraine and 43 years in Russia,<sup>1</sup> whereas it had already reached 59.3 years in France and 63.6 in the United States. However, in Japan it was still only 49.

In the few years immediately following the War, Ukraine and Russia – just like Japan – largely caught up with Western Europe and North America, seeing absolutely spectacular changes. In the early 1960s, Ukraine reached the same level as France, even before Japan did, so that by 1965, life expectancy at birth was 71.3 years,<sup>2</sup> compared to 71.1 years in France and 70.3 in Japan (Fig. 1.1). However, from then on everything changed.

In all countries except Japan (which continued to make progress), life expectancy trends during this era were simply marking time. The fight against infectious diseases had just reached its peak of effectiveness, notably through the widespread use of antibiotics. The role of these diseases was so much reduced – most especially in childhood – that, although their decline continued, it could no longer lead to substantial improvements in life expectancy. From now on, it would be diseases of the circulatory system and cancers that occupied first place in mortality, by a long

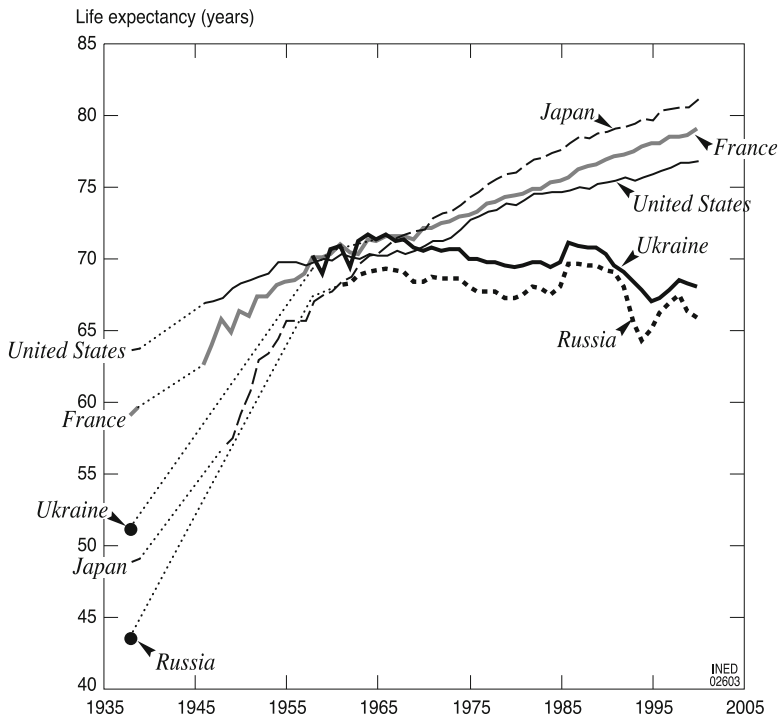
---

<sup>1</sup> These estimates for Ukraine and Russia rely on the simple ratio of registered deaths to recorded census population (Adamets and Shkolnikov 1995). We shall see a little later that they slightly over-estimate the real situation, which for Ukraine was very close to 50.0 years (see Table 7, Chap. 2).

<sup>2</sup> However, it is likely that life expectancy in Ukraine is still slightly over-estimated here, in particular because of the definition of infant deaths. This will be discussed below (Chap. 4). We shall also see that the extent of this over-estimation (roughly two-tenths of a year) in no way calls into question the terms of the overall comparison.

F. Meslé (✉) • J. Vallin

Institut National d'Études Démographiques, Bd. Davout 133, 75980 Paris Cedex 20, France  
e-mail: mesle@ined.fr; vallin@ined.fr



**Fig. 1.1** Trends in life expectancy at birth since the late 1930s in Ukraine, Russia, France, the United States and Japan, according to available data before reconstructions for years prior to 1959

way, while economic and social changes led to a rise in aggravating factors such as alcoholism, smoking and road accidents. Therefore any further improvement in mean length of life at this stage required both the rise in these ‘man-made’ diseases to be stemmed and effective ways to combat diseases of the circulatory system and cancers to be found. This was achieved in France (Meslé and Vallin 1993) and in the United States, like most Western countries (Vallin and Meslé 2004), but not in Ukraine or in Russia. And that is why, from the 1960s, life expectancies diverged radically, returning to sustained growth in France and the United States, regressing in Ukraine and Russia. In the early 1980s, as Jean Bourgeois-Pichat (1985) emphasized, there was a divergence between Eastern bloc countries (Central Europe and the Soviet republics) and other industrialized countries. This divergence has repeatedly been confirmed since then (Meslé 1991; Okólski 1993; Meslé and Hertrich 1997).

Seen from this angle, the comparison with Japan is even more telling (Fig. 1.1). Until the mid-1950s, Japan followed a very similar trend to those of Ukraine and Russia: just before the Second World War, it was lagging far behind Western countries, then in the years that followed, it suddenly caught up with them. But since the mid-1960s, the divergence here has been even greater than the divergence from France or the United States. Japan’s spectacular success in moving from victory over infectious diseases to mastery of diseases of the circulatory system stands in

striking contrast to the failure of the countries of the former Soviet empire. Ukraine's failure appears even more striking than Russia's, since it contrasts strongly with the fact that, in the second half of the 1960s, Ukraine succeeded in pulling itself up to the same level as France, which was then overtaking Japan and the United States.

In order to better understand the health crisis that Ukraine has experienced since the late 1960s, we needed to analyse age-specific and cause-specific mortality trends. During the 1990s, we gathered annual sex-specific, age-specific and cause-specific death statistics for the former USSR and each of its constituent republics. These data had remained secret for a long time; but as soon as it was possible to gain access to them, INED and the Centre for Demography and Human Ecology (Moscow) undertook a systematic joint project to reconstruct complete, consistent cause-of-death series covering as long a period as possible. As we shall explain later, the work involved in reconstructing this kind of series requires lengthy, meticulous reclassification of data into the same detailed list of causes of death, and can be accomplished only in stages. Although we were able to gather data from 1959 onwards, up to now we have been able to reconstruct consistent series only from 1965, and therefore the results for Ukraine that we give here relate mainly to the period 1965–2006.

But before going into more detail about age-specific and cause-specific mortality trends in Ukraine since the mid-1960s, it is well worth recalling the more distant past, highlighting the serious crises that Ukraine has already had to face, even though they were extremely different in nature from the current crisis.

So the three parts of this book will cover the following themes in turn:

1. long-term trends in life expectancy and the demographic disasters of the past,
2. recent changes in sex-specific and age-specific mortality,
3. cause-specific mortality trends from 1965 onwards.

The last section, based on data that have never been published before, is of course the main part of the book. It includes a systematic comparison of the results obtained for Ukraine with those already published for Russia (Meslé et al. 1996); we shall also use French data as a reference point, as we did for Russia. We have provided tables available on the website of the electronic version (<http://www.demogr.mpg.de/books/drm/009> or <http://extras.springer.com/>), showing numbers and rates of deaths, to allow interested researchers to go into more depth.

## References

- Adamets, S., & Shkolnikov, V. M. (1995). *О довоенных таблицах смертности СССР* [Pre-war life tables for the USSR]. Moscow: Institute of Economic Forecasting, Centre for Demography and Human Ecology, 27 p. Paper presented to the conference “Population of the USSR in the 1920s and 1930s in Light of Newly-Declassified Documentary Evidence”, Toronto, January 1995.
- Bourgeois-Pichat, J. (1985). L'évolution récente de la mortalité dans les pays industrialisés. In J. Vallin, A. Lopez, H. Behm (Eds.), *La lutte contre la mort* (Travaux et Documents, No. 108, pp. 489–521, 542 p.). Paris: INED/PUF. Also published in English as: Recent changes in mortality

- in industrialized countries. In J. Vallin & A. Lopez (Eds.), *Health policy, social policy, and mortality prospects* (pp. 507–539, 557 p.). Liège: Ordina Éditions/IUSSP.
- Meslé, F. (1991). La mortalité dans les pays d'Europe de l'Est. *Population*, 46(3), 599–650.
- Meslé, F., & Hertrich, V. (1997). Évolution de la mortalité en Europe: la divergence s'accroît entre l'Est et l'Ouest. In *International population conference/Congrès international de la population*, Beijing (pp. 479–508). Liège: International Union for the Scientific Study of Population (IUSSP), 1532 p.
- Meslé, F., & Vallin, J. (1993). Développement économique et espérance de vie: la transition sanitaire au tournant des années soixante. In *International population conference/Congrès international de la population*, Montreal (Vol. 2, pp. 365–382, 493 p.). Liège: International Union for the Scientific Study of Population (IUSSP).
- Meslé, F., Shkolnikov, V. M., Hertrich, V., & Vallin, J. (1996). *Tendances récentes de la mortalité par cause en Russie 1965–1994* (Bilingual French and Russian publication, Données statistiques, No. 2, 140 p. + 2 diskettes). Paris: INED and CDEH.
- Okólski, M. (1993). East-West mortality differentials. In A. Blum & J.-L. Rallu (Eds.), *European population/Démographie européenne: Vol. 2. Demographic dynamics/Dynamiques démographiques* (Congresses and Colloquia, No. 9, pp. 165–189, 526 p.). Paris: John Libbey Eurotext/INED.
- Vallin, J., & Meslé, F. (2004). Convergences and divergences in mortality. A new approach to health transition. *Demographic Research*, 12–43 (Special collection 2. Determinants of diverging trends in mortality).