



Population ageing refers to a process where a population ages, i.e. the median age of a population increases. It is the result of two triumphs of science: as people have become able to avoid unwanted pregnancies and premature death. These positive and irreversible developments have profound long-term implications for social and economic development. Policy makers need to create new societal structures to deal with the challenges that arise from them.

It is important for young people too: health after 60 is greatly determined by habits formed in youth (for example eating, smoking, exercise).

人口老龄化是指老年人口比例上升的过程,表现为人口年龄中位数的升高。老龄化是科学上两大成功的结果,即人们逐渐能够避免意外怀孕和过早的死亡。这些积极的,不可逆的发展趋势将对社会 and 经济发展产生深远影响,而决策者们也需要建立新的社会结构来应对这些挑战。

这对年轻人也同样重要:60岁以后的健康状况很大程度上由年轻时建立的习惯所决定(例如饮食、吸烟和锻炼习惯)。

Definitions

A population is generally considered to be 'aged' if persons over 60 account for more than 10 per cent.

Working age population: refers to persons 15-59. Depending on the retirement age, some countries refer to 15-64.

Life expectancy (LE) at birth: estimated number of years a person can expect to live, given current age-specific mortality rates.

Total fertility rate (TFR): estimated number of children a woman would have during her lifetime, given current age-specific fertility rates.

定义

如果总人口中年龄在60岁以上的人超过10%,这一类型的人口通常称为老年型人口。

工作年龄人口:年龄在15岁至59岁的人口。根据某些国家的退休年龄,则为15岁至64岁的人口。

出生时平均预期寿命(LE):按照当前的年龄组死亡率估测的一个人预期的存活年数。

总和生育率(TFR):按照当前的年龄组生育率估测的一名妇女一生中生育的子女数量。

Ageing is an inevitable mathematical consequence of two underlying demographic trends: decreasing total fertility rate (TFR) and increasing life expectancy at birth (LE).

老龄化是人口统计学两种潜在趋势的必然结果：即日益下降的总和生育率和日益延长的出生时平均预期寿命。

World

200 years ago, in all countries, life expectancy was low (around 40 years) and fertility high (more than 5 children per women). As countries began to industrialize, in more developed regions (MDR) LE increased to over 75, and TFR fell to around 1.5.

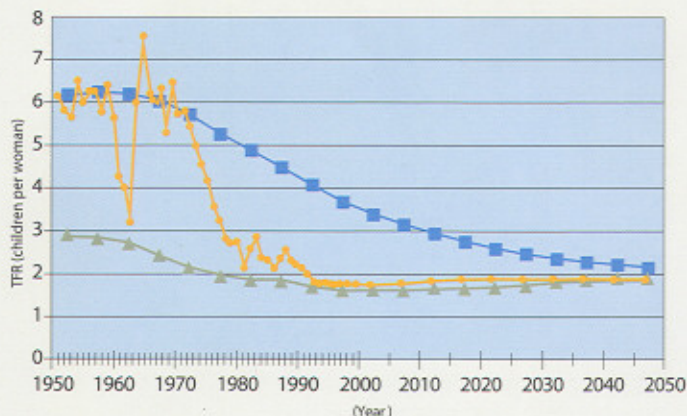
In less developed regions (LDR), this transition began later. From 1950 to 2000, LE increased from 41 to 64. TFR began to fall a generation later: between 1970 and 2000 it decreased from about 6 to 3. (1)

世界

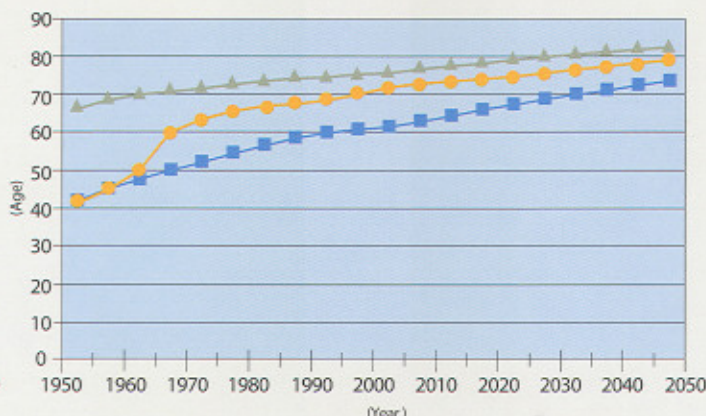
200年以前，所有国家的预期寿命都很短(大约为40岁)，但生育率很高(每位妇女生育超过5个孩子)。随着各国开始实现工业化，比较发达的地区预期寿命增加，高于75岁，总和生育率降至1.5。

在欠发达地区，这种转变开始得较晚。1950年到2000年期间，预期寿命从41岁增至64岁。总和生育率一代人以后(即1970年至2000年)开始下降，由6降为3。(1)

TFR per Woman, China and World, 1950-2050
中国与世界妇女总和生育率(1950年-2050年)



Life Expectancy, China and World, 1950-2050
中国与世界人口预期寿命(1950年-2050年)



— China — Less Developed Regions less China — More Developed Regions

Source: UNDESA, World Population Prospects: 2004 Revision, Data on TFR by year for China (1950-2000) are from Du, 2006

China

In China TFR decreased from 5.8 to 2.4 in just 10 years, from 1970 to 1980, and LE increased from 36 to 63 from 1949 to 1980. (1) Thus, the transition which took around 150 years in MDRs, took 50 years in LDRs, and only 10-20 years in China. Moreover, the TFR fluctuated over time, e.g. during the Great Leap Forward (1959-61).

中国

在中国，总和生育率在短短10年间(1970年至1980年)由5.8降至2.4，预期寿命则在1949年至1980年期间从36岁提高到了63岁。(1)由此可见，实现这一转变，发达地区用了大约150年、欠发达地区用了50年，而中国仅用了10到20年时间。此外，总和生育率还随着时间的变化而波动例如大跃进时期(1959-61年)。



Population ageing —structure

人口老龄化—结构差异

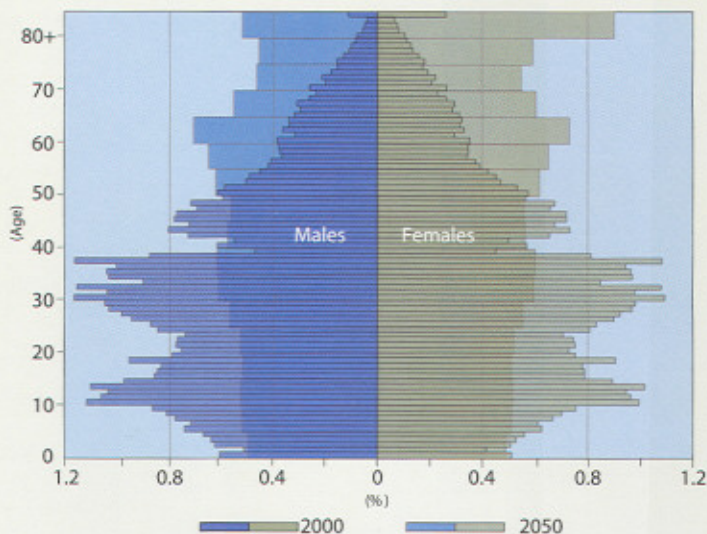
World

In 2000, 10 per cent of the world population was aged 60 or older. Thus, the world population as a whole can be seen to have entered the 'aged' stage at the turn of the Millennium.

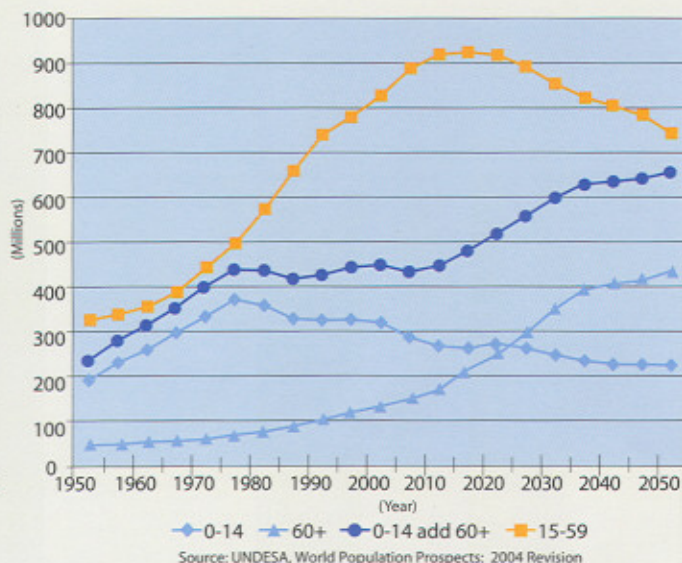
世界

2000年,全球10%的人口年龄在60岁或以上。因此,总体而言,在进入新千年之际,全球已进入了老龄化阶段。

Age Pyramid of China, 2000 and 2050
中国人口金字塔 (2000年, 2050年)



Working/Non-working Age Population, China, 1950-2050
中国工作年龄人口和非工作年龄人口构成 (1950年-2050年)



China

Since China's transition was so rapid and irregular, the resulting age pyramid is also irregular.

In 2000, the proportion of people of working age (15-59) was one of the highest in the world. However, around 2015, small numbers of children will reach the age of 15 at the same time as large numbers of people will reach retirement age. This means that the size of the working age population will decline rapidly.

Today, China's average is equal to that of the world in terms of the proportion of people aged 60+ (10 per cent). However, by 2050, this proportion is expected to rise to 30 per cent. The absolute numbers are estimated to increase from 128 million in 2000 to 431 million in 2050. (2)

中国

由于中国的转变迅速而不规律,因此其年龄金字塔结构也呈不规则变化。

2000年,中国是世界上工作年龄人口(15岁-59岁)比例最高的国家之一。然而,到2015年时,只有少量的儿童会达到15岁,同时却有大量人口会达到退休年龄。这也就意味着,工作年龄人口将急速下降。

目前,中国年龄在60岁以上人口的比例(10%)与世界平均水平相当。但据估计,到2050年,这一比例会上涨至30%。绝对数字将从2000年的1.28亿上升至2050年的4.31亿。(2)

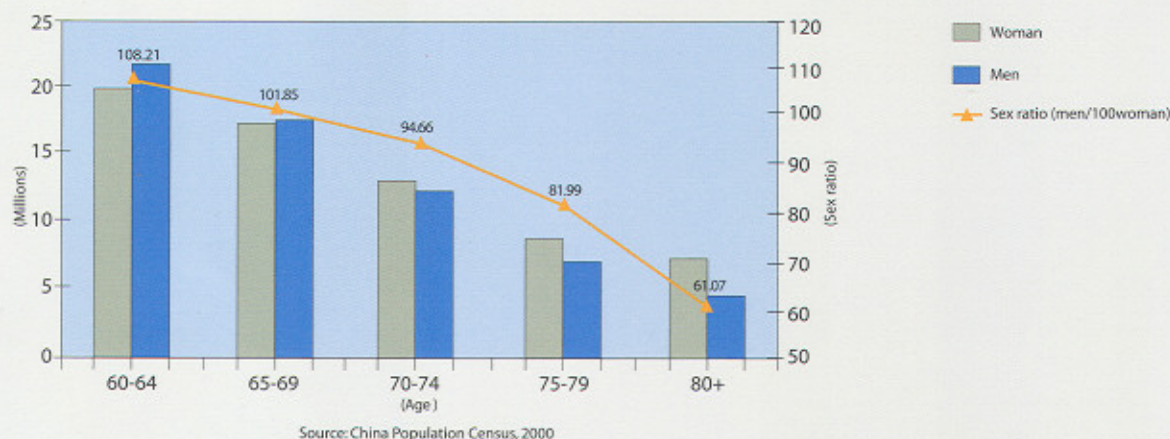
World

In most countries, more boys than girls are born (between 103 and 107 boys per 100 girls), however, mortality rates are higher for males than females. Therefore, in More Developed Regions, by around age 30, there are more females than males. In most Less Developed Regions there is less difference between male and female mortality and females start to outnumber males at around age 50. (2)

世界

在世界上大部分国家,出生时男孩的数量都多于女孩(每出生100个女孩就会有103至107个男孩出生)。然而,男性的死亡率一般高于女性。因此,在比较发达的地区,在他们30岁左右时,女性会多于男性。在大多数欠发达地区,男女死亡率的差异较小,在他们50岁左右时,女性人数会多于男性。(2)

Older Persons by Age and Sex, China, 2000
中国分年龄和性别的老年人口(2000年)



China

In China, females have historically had higher mortality than males in early stages of life. Therefore the male surplus at birth was accentuated, even before sex ratio at birth began to rise in 1980. Thus, there are more males than females for all ages up till around age 70.

Female life expectancy is higher than male at 74 compared to 69 in 2000. (1) However, although living longer, women tend to live longer years in ill health.

Older women have generally had less formal employment, and therefore less pension and medical insurance. This leaves them vulnerable, particularly when widowed. In 2000, 42 per cent of women 60+ in China were widowed, compared to 18 per cent of men 60+. (3)

中国

历史上,中国女性的死亡率在生命周期中的早期阶段都高于男性。因此,甚至在1980年出生性别比升高之前,男性的出生人口数高的情况就已经得以加强。因此,在他们70岁左右之前,所有的年龄组一直是男性人数多于女性。

在2000年,女性的预期寿命是74岁,高于男性的69岁。(1)但是,尽管寿命更长,女性在不健康状态下度过的时间比男性长。

年龄较大的女性一般都从事不太正式的工作,因而她们所获得的退休金和医疗保险也就较少。这使得她们缺乏保障,对丧偶的妇女而言情况尤为严重。2000年,中国有42%的60岁以上女性丧偶,但60岁以上的男性丧偶的比例只有18%。(3)



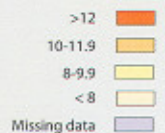
Population ageing — geographical variation in China

人口老龄化—中国地区差异

Proportion of People Aged 60+, China, 2000
中国60岁以上人口比（2000年）



1990



Area Name 地区	Proportion of People 60+ 60岁以上人口比	Area Name 地区	Proportion of People 60+ 60岁以上人口比	Area Name 地区	Proportion of People 60+ 60岁以上人口比
Shanghai 上海	14.98	Anhui 安徽	11.02	Jiangxi 江西	9.36
Jiangsu 江苏	12.62	Guangxi 广西	10.69	Yunnan 云南	9.17
Beijing 北京	12.54	Hebei 河北	10.28	Heilongjiang 黑龙江	9.02
Zhejiang 浙江	12.34	Henan 河南	10.18	In. Mongolia 内蒙古	8.87
Tianjin 天津	12.05	Hainan 海南	9.85	Guangdong 广东	8.78
Chongqing 重庆	11.87	Shaanxi 陕西	9.61	Gansu 甘肃	8.69
Liaoning 辽宁	11.63	Fujian 福建	9.55	Xinjiang 新疆	7.84
Shandong 山东	11.60	Hubei 湖北	9.49	Qinghai 青海	7.63
Sichuan 四川	11.39	Shanxi 山西	9.46	Tibet 西藏	7.45
Hunan 湖南	11.20	Jilin 吉林	9.39	Ningxia 宁夏	7.29
		Guizhou 贵州	9.38	National average 平均值	10.17

Source: China Population Census, 2000

Generally, regions with higher fertility have younger populations.

However, migration counteracts this. Most rural-urban migrants are young adults. Therefore, the proportion of people aged 60+ is higher in rural areas than in urban areas (10.9 per cent versus 9.7 per cent). This difference is expected to widen as migration continues to increase.

一般来说,生育率高的地区的人口相对年轻。

然而,人口流动抵消了这种趋势。大部分从农村到城镇的流动人口都是年轻的成年人。因此,农村地区年龄在60岁以上的人口比例高于城镇地区(10.9%对9.7%)。随着流动人口的不断增加,预计这种差别会更大。

World

In MDRs, where the proportion of old people is large and social pension coverage is near universal, public expenditure on pension as a percentage of GDP amounts to 6-18 per cent. (7) Very few older persons live with their children, and 3-6 per cent live in institutions. (4)

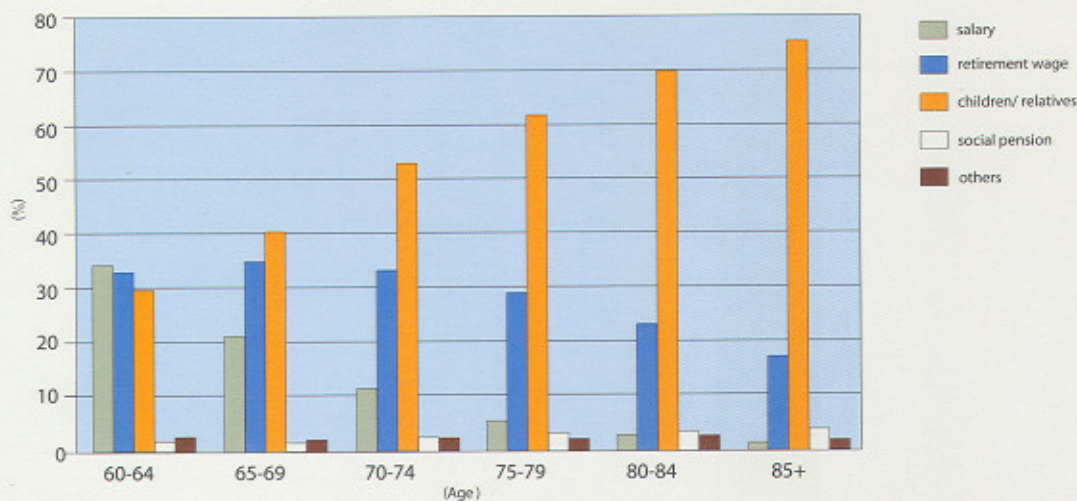
In LDRs a large proportion of older persons live in multigenerational households. This means that much of the responsibility for old age support lies with the family rather than with the government.

世界

在比较发达的地区,社会养老金基本上完全普及。国内生产总值的6-18%用于养老金的公共支出。(7) 与儿女同住的老人非常少,有3-6%的老年人居住在养老机构。(4)

在欠发达地区,大部分老人生活在多代家庭之中。这说明赡养老年人的大部分责任在于家庭而非政府。

Primary Financial Source of the Elderly by Age, China, 2004
中国分年龄老年人主要生活来源 (2004年)



Source: National Population Sample Survey in China, 2004

China

In China, public expenditure on pension accounts for 2.7 per cent of GDP. (7)

For people aged 85+ nearly 80 per cent are dependent on their children/relatives for financial support. Around 70 per cent of people aged 60+ live with children or relatives, and just 0.8 per cent live in institutions.

In comparison, China's current demographic rates are similar to the MDRs, but its economy and social welfare institutions are more similar to LDRs.

China plans to quadruple its GDP per capita by 2020 from around US\$1,000 in 2000. (8) This will still be significantly lower than the present average GDP per capita for high income countries (around US\$30,000 in 2003). (9) If the projections are correct, China will become old before it gets rich.

中国

在中国,用于养老金的公共支出占国内生产总值的2.7%。(7)

对于年龄在85岁以上的老人而言,将近80%的人依靠子女或亲属提供经济支持。年龄在60岁以上的老人中大约有70%与子女或亲属同住,而只有0.8%的老人居住在养老机构。

比较而言,中国当前的人口比例与比较发达的地区相似,但其经济和社会福利设施更与欠发达地区相似。

中国计划到2020年,实现人均国内生产总值从2000年的大约1000美元翻两番。(8) 这还是远远低于当前国内生产总值较高国家的平均水平(在2003年约为30,000美元)。(9)如果预测正确的话,中国将会面临“未富先老”的问题。



Population ageing —responses

人口老龄化一应对

International standards and experience

The First World Assembly on Ageing was held in Vienna in 1982. Other important conferences include the International Conference on Population and Development in Cairo 1994, and the Second World Assembly on Ageing in Madrid 2002, which adopted the Madrid International Plan of Action on Ageing (MIPAA).

MIPAA calls for changes in attitudes, policies and practices at all levels in all sectors so that the enormous potential of ageing may be fulfilled. The MIPAA solution to the "ageing problem" is not so much to increase fertility or mortality. Instead it is to look at human capital - 'aged' does not have to equal 'dependent' or 'unproductive'. A person does not automatically transform from a credit into a debit at age 60. Health, employment, and productivity are equally important in determining demographic burden. With good social policy, including pension and health care, ageing populations may be seen as a second demographic dividend, rather than as a burden. Please see further: <http://www.un.org/esa/socdev/ageing/>

In Asia and the Pacific, the Macao Plan of Action on Ageing (1999) and the Shanghai Implementation Strategy (2002) have been instrumental in setting out specific courses of action to address ageing, as well as developing strategies for their implementation.

There is no international convention on human rights for older persons. However, the United Nations Principles for Older Persons of 1991 (Resolution 46/91) provide guidance, and are based on the basic UN human rights conventions and instruments. Please see further: <http://www.un.org/documents/ga/res/46/a46r091.htm>

National response in China

The Chinese government has attached importance to the developing trends of ageing in China ever since the founding of the China National Committee on Ageing in 1982. In 1999, the China National Working Commission on Ageing was founded. It consists of 26 government and non-governmental organizations. Working Committees on Ageing as well as Old Persons' Associations exist at both central and local levels.

Over the past two decades more than 70 laws, policies, and regulations have been issued. Some of the most important ones include: Law of the People's Republic of China on Protection of the Rights and Interests of the Elderly (1996), the 10th 5-year Development Plan on Ageing (2001-05) and the 11th 5-year Development Plan on Ageing (2006-10). Provincial, autonomous regions and municipalities also constitute local regulations to protect the rights and interests of older persons.

UNFPA response

UNFPA has supported China since the 1980's to build research and policy capacity for ageing, since 1985 in collaboration with the China National Committee on Ageing.

The results generated from these studies and interventions were presented to policy makers on several occasions, including a consultation meeting for drafting the 11th 5-year Development Plan on Ageing in September 2005.

In the Sixth Country Programme (2006-2010) UNFPA will support building of government capacity to formulate and implement evidence-based strategic plans and policies on ageing, with special emphasis on active and healthy ageing. Activities will be implemented in pilot projects in 6 counties.

For UNFPA work and mandate, please visit <http://www.unfpa.org>

国际标准与经验

首届老龄问题世界大会于1982年在维也纳举行。其他重要会议包括1994年在开罗举行的国际人口与发展大会以及2002年在马德里召开的第二届老龄问题世界大会，此次大会采纳了马德里老龄问题国际行动计划（简称“MIPAA”）。

MIPAA 呼吁各行业、各阶层改变态度、政策和做法，以便发挥老龄化的巨大潜力。作为解决老龄化问题的方案，MIPAA并不等同于提高生育率或死亡率。相反，该计划将着眼于人力资本——年迈并不一定意味着“依赖”或“没有生产力”。一个人不会在60岁时自动从贷方转为借方。健康、就业、生产力在决定人口负担方面同样重要。凭借良好的社会政策，包括养老金和卫生服务，可以将老龄化人口视为第二次人口红利，而不是负担。欲知更多信息，可查询 <http://www.un.org/esa/socdev/ageing/>。

在亚太地区，《澳门行动纲要(1999年)》和《上海执行战略(2002年)》为确定具体的行动计划，从而解决老龄问题，以及制订执行战略提供了可靠的依据。

目前还没有针对老年人人权的国际性协定。但1991年《联合国老年人原则》(46/91决议)以基本的联合国人权惯例和文件为基础，提供了指导方针。欲知更多信息，可查询 <http://www.un.org/documents/ga/res/46/a46r091.htm>。

中国政府的应对

自中国老龄协会于1982年成立以来，中国政府一直重视中国不断变化的老龄化趋势。1999年，全国老龄工作委员会成立。该委员会由26个政府和非政府机构组成。在中央和地方均设立了各级老龄工作委员会以及老龄协会。

过去20多年以来，有70多项法律、政策和规定出台。其中最重要的包括：《中华人民共和国老年人权益保障法》(1996年)、《中国老龄事业发展“十五”计划纲要(2001年—2005年)》以及《中国老龄事业发展“十一五”规划(2006年—2010年)》。各省、自治区和直辖市也制定了地方法规以保护老年人的权益。

联合国人口基金的应对

自20世纪80年代以来，联合国人口基金会一直支持中国的老龄问题研究和政策制定的能力建设，从1985年开始与中国老龄协会合作。

这些研究和干预活动的成果已经在多个场合向决策者展示，其中包括2005年9月召开的老龄事业发展“十一五”规划咨询会。

在第六周期国别方案(2006年—2010年)中，联合国人口基金会将会支持政府的能力建设，制订和实施循证的老龄规划和政策，着重关注积极老龄化和健康老龄化。试点项目活动将在6个县开展。

有关联合国人口基金的工作和使命，请访问 <http://www.unfpa.org>。

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