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The Future of Pensions and Healthcare in a Rapidly Ageing World

Scenarios to 2030

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The Future of Pensions and Healthcare in a Rapidly Ageing World
Scenarios to 2030

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Preface

One of the most eminent challenges facing the world today is the ageing of our societies. The United Nations (2007) predicts that by 2050 the number of people aged 60 and older in developed countries will have increased from 21% today to 32%, and in the less-developed countries from 8% today to 20%. This will have profound implications for labour markets, aggregate demand, politics and societal structures. In addition, ageing societies will significantly challenge the affordability of traditional pension and healthcare systems. New approaches and new solutions from both governments and the private sector are required.

In order to stimulate the dialogue between governments and the private sector regarding the future of pensions and healthcare in an ageing world, the World Economic Forum in mid 2007 launched a project, ***Financing Demographic Shifts 2030***, addressing the following central questions for phase one:

How may the future of pensions and healthcare look like in 2030, by taking the various key drivers and critical uncertainties into account? What may be the role of governments, the private sector and individuals?

The project was mandated by the World Economic Forum's financial services and healthcare communities and consists of two phases. The first phase (mid 2007 to mid 2008) has focused on the development of a number of scenarios for the future of pensions and healthcare to 2030. The second phase (mid 2008 to mid 2009) will look more deeply into the strategic options available to stakeholders to proactively shape the future.

This report is the outcome of phase one and presents three broad global scenarios on the future of pensions and healthcare. Each of these scenarios provides a very different perspective on how the various driving forces and stakeholder responses to the demographic challenge could evolve over the next two decades. Challenging yet plausible, these scenarios are supported by deep research and insightful thinking from leaders in the private sector, government, academia and international and non-governmental organizations.

The report also includes a "deep dive" into two case-study countries: Italy and China. These case studies explore in more detail how the three global scenarios could play out in specific developed and emerging economies. Italy is an interesting case study as it has one of the oldest populations in the world due to low fertility rates and very high life expectancies. China presents an equally interesting case as it is not only one of the world's fastest-growing economies but also one of the fastest-ageing societies due to its family planning policy. Finally, this report also presents a number of strategic options based on preliminary research and insights from leaders in the field. These and other strategic options will be further explored in phase two.

We trust that this publication will challenge your thinking and offer new perspectives on how demographic shifts may dramatically alter our economic, political and social environment. Above all, we hope the insights it provokes may contribute towards ensuring that together we will find ways to afford adequate and accessible retirement and healthcare services for the world's ageing populations in 2030 and beyond.

Professor Klaus Schwab
Founder and Executive Chairman
World Economic Forum

Introduction

The scenarios presented in this report are informed and provocative narratives about the future, based on rigorous research and creative insights from a wide variety of stakeholders. They are not attempts to predict the future, but rather are designed to make explicit the uncertainty inherent in considering long-term trends. The objective is to provide structured means of anticipating and understanding such trends, enabling the consideration of proactive policies and strategies that can maximize beneficial outcomes.

The purpose of the ***Financing Demographic Shifts 2030*** project is to facilitate debate among multiple stakeholders about how to overcome the financial challenges related to pensions and healthcare in a rapidly ageing world. This project seeks to offer new insights into the future of pensions and healthcare, and to define a range of robust strategic options available to stakeholders.

- For **leaders in the private sector** (financial institutions, healthcare providers, employers, etc), this report will provide three radically different frameworks and policy environments against which to consider future challenges and opportunities in terms of pension and healthcare service provision.

- For **policy-makers**, it will provoke discussion about the political ramifications and potential outcomes of specific programmes and their alternatives.

- For **individuals**, families and informal carers, we hope the report will spur a new focus on the mix of resources that may be required to maintain currently expected lifestyle and healthcare levels in the year 2030.

For all readers, we hope this report will be both informative and challenging, inspiring novel and constructive discussions between stakeholders and giving rise to new insights about retirement and healthcare financing.

Along with the supporting analysis on challenges and driving forces, the scenarios contained in this report represent the culmination of 12 months of work interacting with CEOs, senior executives, world-class academics, top government officials, high-level representatives from international organizations and senior politicians. Over the year, the scenario development process has involved nine major workshops in New York (twice), Beijing (twice), Milan, Rome, Geneva, Dalian and Davos, with representatives from over 60 companies (financial institutions, healthcare firms, employers) and over 40 non-business organizations (ministries, academic institutes, international organizations).

We have greatly enjoyed the challenge of this project, and wish to particularly thank our colleagues from the World Economic Forum for their continuous assistance, and our partners at Mercer for providing us with boundless support. Finally, we would like to thank the many people[1] who responded to our invitation to participate in workshops and interviews and who gave so generously of their time, energy and insights.

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1 For a full list of acknowledgements, see pages 111-114. This list includes the members of the Steering Committee and the Expert Group, the workshop participants, and those interviewed during the project.
2 For details of the complete project team, see page 115.

Executive Summary

Ageing societies: Exploring the future of pensions and healthcare

Populations around the world are ageing rapidly, not only in the advanced economies but also in the emerging and developing economies. The UN predicts that by 2050, one-third of the populations in developed countries and one-fifth of those in developing countries will be aged 60 or older.

This phenomenon will have significant impacts on societal, economic and political structures. Socially, ageing societies imply a larger proportion of the population will be less economically active and more dependent on others. Economically, ageing populations imply smaller proportional labour forces, a potentially higher burden on health services, and a different demand profile for products and services. Politically, the power balance will shift towards older citizens and intergenerational conflicts may arise.

While ageing societies raise a range of critical questions, this study focuses on the effects these demographic shifts could have on how societies plan for and deliver pensions and healthcare services to the elderly. In both of these areas, the world faces the challenges of financial sustainability, equitable access, minimum standards of adequacy and quality, efficient delivery models and, potentially, new industry structures[3].

The ***Financing Demographic Shifts 2030*** project addresses the following central question:

How may the future of pensions and healthcare look like in 2030, by taking the various key drivers and critical uncertainties into account? What may be the role of governments, the private sector and individuals?

It does so from a multistakeholder perspective, taking into account the roles of governments, financial institutions, healthcare providers, employers, individuals, and families and informal carers. The aim of this project is to:

- **Create an effective dialogue** among stakeholders on how to overcome the challenges ageing societies pose to pensions and healthcare;
- **Challenge current thinking** about the future of pensions and healthcare by immersing readers in deeply contrasting yet plausible visions of how the future could unfold;
- **Provoke new insights** about the strategic options available to stakeholders to grasp opportunities and overcome the challenges presented by shifting demographics.

The many futures of pension and healthcare financing and delivery

While demographic trends themselves are fairly predictable in the absence of major pandemics and/or conflict on a global scale, there are associated drivers that could push the future of pensions and healthcare in different directions.

For example, a range of highly uncertain economic factors will influence the ability of governments, corporations and individuals to finance both lifestyle and healthcare needs. Thus, capital market performance, real economic growth and the distribution of wealth are all high-impact and high-uncertainty drivers that need to be explored carefully. Similarly, shifting patterns of infectious and chronic diseases and the possible effects of environmental degradation could induce new pressures on public health that demand expensive responses. Technology will no doubt play an important role – but will it be cost-increasing or efficiency-promoting for the bulk of the world's population that lacks adequate access to healthcare? Attitudes by both governments and individuals towards social welfare, retirement and well-being will drive critical social and political outcomes that could dramatically alter the future of pension and healthcare services.

To explore possible futures in a way that will be useful to the numerous stakeholders interested in these challenges, this report presents three plausible, challenging and completely different scenarios.

3 This report focuses primarily on the impact of demographic shifts on the future of pensions and healthcare, and not on other domains such as poverty, population explosion, energy sufficiency, environment, etc.

The Winners and the Rest: This is a world in which high global growth delays the financial consequences of the growing demographic crisis. Despite growing liabilities from ageing populations, most governments are able to maintain scaled-back versions of existing social security systems, which they do as a matter of political expediency. However amid growing inequality and under-investment in the public sector, such systems are seen as increasingly inadequate by those forced by low incomes to rely on them, creating a conflict-ridden climate of "The Winners and the Rest" on a global scale.

We Are in This Together: This is a world distinguished by a concerted effort on behalf of leaders and electorates to rein in growing inequality and reassert the idea of collective responsibility and accountability for social services. In this world, growth is moderate, but lower-than-expected returns on capital are compensated for by an emphasis on finding innovative, efficient and inclusive ways to manage the financial implications of the demographic shift, including family and community-based solutions.

You Are on Your Own: This is a world in which an economic recession is prolonged in the early 2010s, causing fiscal difficulties for most state-funded pension and health systems. Individual responsibility is forced upon many people by the failure of existing social security systems under extreme financial pressure. Struggling to borrow or raise taxes sufficiently, many governments take aggressive measures to push healthcare and pension liabilities onto individuals and the private sector, maintaining only an absolutely minimal role in social security provision for the very needy.

These scenarios can be broadly positioned along two key axes, as displayed in the figure below. One critical determinant (on the vertical axis) is the path of economic growth between today and 2030, which could and probably will vary considerably. The second (on the horizontal axis) comprises social and political attitudes towards responsibility for the provision and financing of social services.

This spectrum ranges from a shift towards individual responsibility to a movement towards collective accountability.

This report explores two countries in further detail: China and Italy. These countries were chosen by our partners as two interesting case studies that could be used to highlight the themes developed in the global scenarios. China is fascinating as it possesses not only the world's largest population but the world's most rapidly ageing one. Italy, meanwhile, has Europe's oldest population and faces a range of economic, political and social challenges to both its pension and healthcare structures. Through the examples of these case studies, we hope you will be inspired to apply the concepts of the scenarios to your organization's own environment.

Matrix overview of the scenarios

China

Demographic shifts

- China faces considerable pressure from the inevitable ageing of its population, a product of its planned-birth policy implemented in 1979. The current total fertility rate is approximately 1.5 to 1.8 and has been below the replacement rate of 2.1 since 1992.
- A low fertility rate translates into an increased dependency ratio and a smaller workforce. With a life expectancy that has risen to approximately 73.18 (2008 estimated, average for men and women) and existing pension schemes that assume a payout period of only 11 years, China faces increasing pressure on the financing of pensions and healthcare.

Key challenges

- Adequate coverage, access and sustainability of pensions and healthcare for the Chinese population are central for the long-term stability and competitiveness of the country.
- Institutional structures for the provision of pensions and healthcare require proper incentive schemes which ensure trust, efficiency, and timeliness of intervention.
- Further development of capital markets and diversification of investment options is essential to secure sufficient wage-replacement rates and reinforce the growth of enterprise annuity assets and individual savings to complement social insurance.
- Changing patterns of infectious and chronic diseases and limited high-quality care providers leaves the elderly with fewer options for receiving long-term care.

Key driving forces

- The Chinese social pension and healthcare system is unequally distributed and expensive, and reforms are only implemented after cautious scrutiny and assessment. With urbanization, internal migration, changing patterns of chronic and infectious diseases, the form of traditional familial support system is gradually changing.
- China's economic development fuelled by impressive growth of 8-11% per annum could be challenged by global systemic risks, domestic stock market volatility and government efforts to tackle inflation. Budget allocation and structural changes to pensions and healthcare could be impacted by the prerequisite resources generated through this growth.
- Financial and capital market advancement that ensures equity and sustainability, which allows for an array of choices to investment needs, is an imminent issue.

Scenarios

The Winners and the Rest: In a world where the Chinese economy chases rapid growth at the expense of fundamental structural adjustments for sustainability, will the Chinese government be able to improve public and corporate governance to secure adequate pension and healthcare systems that benefit the population at large?

We Are in This Together: In a future where China reaps the rewards of bold and visionary leadership in improving and streamlining its governance for pensions and healthcare provision, will stakeholders collaborate to deliver standardized basic care and pension systems equitably across the entire country?

You Are on Your Own: In a world of low economic growth, internal unrest spreading to new sectors of the population and a changing family-support system, will the government be able to tackle bureaucratic bottlenecks and collaborate with the private sector and emerging entrepreneurs to provide minimum social security?

Italy

Demographic shifts

- Italy is being severely hit by population ageing; it has one of the lowest fertility rates (1.4 in 2007) and one of the highest life expectancies (about 78.6 years for men and 84.1 years for women) in the world.
- The ageing of Italy's population has significant implications for the economy and for public finances as it translates into significant labour shortages, slower long-term growth and increased strain on public expenditures.

Key challenges

- The Italian public pension system is expensive and reform is slow. Protecting the current and imminent retiree populations will place the majority of the burden on younger generations.
- Italy faces a struggle to finance future long-term care needs, with increased demand and concerns over the availability of human resources and the role and status of informal carers.
- Rapidly rising healthcare costs are straining the ability of individuals, families, employers and the government to sustainably finance adequate levels of care. A rise in chronic and new infectious diseases exacerbates the problem.

Key driving forces

- Economic growth in Italy averaged 1.4% in the ten years between 1998 and 2007, while the long-term average return on equity markets was approximately 9%. Between today and 2030, there is potential for these figures to vary wildly; even minor shifts in economic and capital market performance could have significant impacts on both public and private financing of retirement lifestyles and healthcare services.
- The prevalent perception of the Italian population regarding pension and healthcare provision is that they enjoy a generous state-provided system of high quality. However recent reports of declining public healthcare quality in southern Italy, and the major reforms to the pension system made between 1990 and 2006, could eventually provoke significant shifts in who Italians trust to provide for their future.

Scenarios

The Winners and the Rest: In a world where the Italian economy returns to a relatively high-growth path, will the Italian government be able to make the necessary long-term adjustments to provide both sustainable and adequate pension and healthcare systems that benefit the entire population?

We Are in This Together: In a world where economic challenges cause major concerns for the Italian middle class, will stakeholders be able to work together on a national and international level to re-establish an equitable but growth-oriented welfare state?

You Are on Your Own: In a world of economic crisis, could Italians embrace a new set of attitudes towards saving for the future and caring for their families, characterized by a focus on skills investment and individual responsibility?

From scenarios to strategies – using these scenarios

These scenarios have been designed to inform, challenge and provoke strategic thinking. It is possible to use these scenarios as a framework for testing current strategies, evaluating potential strategic actions or generating new strategic options for key stakeholders. This report, describing the key challenges, driving forces and the scenarios themselves, is a key input in this process, which is described in more detail in Section 3 and Appendix A. Phase two of the Financing Demographic Shifts 2030 project will focus on different sets of strategic options for both private and public sector stakeholders. We hope this work will assist readers in facing the challenges and capitalizing on the opportunities for pensions and healthcare financing and delivery in a rapidly ageing world.

Reading this report

This report is presented in three sections. In each case, a global overview encompassing both developed and less-developed countries is followed by a more in-depth exploration of Italy and China as case studies.

- **Section One** is an overview of the main challenges related to providing and financing pensions and healthcare in ageing societies.
- **Section Two** presents three challenging scenarios for how the business environment around the pensions and healthcare industries could look in the year 2030, considering such factors as attitudes towards retirement and health, global economic performance and investment returns, patterns of infectious and chronic diseases, innovation and the role of governments.
- **Section Three** provides a brief overview of the types of strategic options that may be available to stakeholders to overcome the challenges and grasp the opportunities presented by shifting demographics. These strategic options will be further explored in phase two of this project.

From today to 2030

We hope you will be informed and challenged by the content and form of this report. This work is based on extensive research and input from more than 190 workshop participants and interviewees representing over 60 companies and over 40 non-business organizations, all of whom engaged in a provocative scenario-thinking exercise. We now invite you to read the challenges, be immersed in the scenarios and consider some initial implications and strategic options for pension and healthcare delivery and financing in the year 2030.

Section 1

The Key Challenges for Pensions and Healthcare

Section 1

The Key Challenges for Pensions and Healthcare

Global Challenges

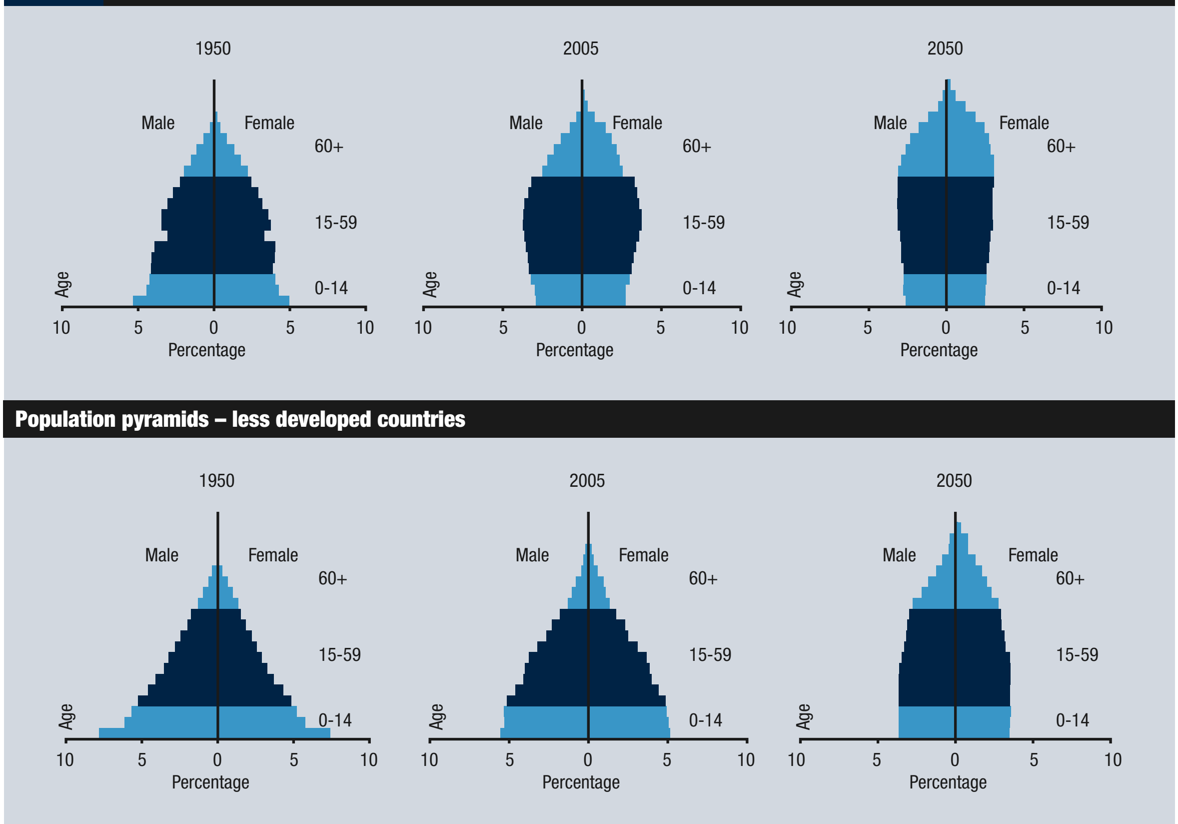
Demographic shifts

In the next few decades, rapid population ageing worldwide and a decline in the labour force mainly in the developed countries will challenge the financial sustainability of most public pensions and healthcare systems. Less-developed countries will be particularly challenged, with many facing a greater risk of poverty among the elderly due to the absence of universal or even widespread pension or healthcare coverage.

The world is ageing rapidly in developed and less-developed countries

The UN predicts that globally the percentage of people aged 60 years or older will double between 2007 and 2050. By 2050, one-third of the total population in developed countries will be 60 years or older, while in less-developed countries one-fifth will be over 60.

Figure 1.1 **Population pyramids – developed countries**



Source: United Nations (2007)

Note that the references for data in this section can be found in the key references section, p 108

Table 1.1 **Demographic statistics and predictions in detail**

	Population (millions)			Total fertility rate (per woman)			Life expectancy at birth (years)			% of total population age 60+			Median age (years)		
	1950	2007	2050	1950	2007	2050	1950	2007	2050	1950	2007	2050	1950	2005	2050
World	2519	6616	9076	5.0	2.5	2.0	46.6	66.5	75.1	8.2	10.7	21.7	23.9	28.1	37.8
Developed countries	813	1217	1236	2.8	1.6	1.8	66.1	76.2	82.1	11.7	20.7	32.4	29.0	38.6	45.5
Less developed countries	1707	5398	7840	6.2	2.7	2.1	41.1	64.6	74.0	6.4	8.4	20.0	21.4	25.6	36.6

Source: United Nations (2007)

Old-age dependency ratios not only spike due to population ageing, but also because of a decline in the labour force

Of the world's major regions, Europe had the highest old-age dependency ratio (24%) in 2007, and is also expected to be the oldest region in 2050, with an old-age dependency ratio of 48%. However, the UN predicts all regions will experience dramatic increases in the dependency ratio.

These increases will stem not only from a rapid increase in the number of elderly, but also from a decline in working-age populations (typically, those aged 15 to 64), particularly in the high-income countries. The World Bank (2007) expects the labour force in high-income countries to peak in 2010 and then begin to shrink significantly. In Japan, the working-age group has already begun to shrink, while in Europe the peak will be reached in 2007-2008. In other high-income countries the peak will occur later – in around 2020 for the US and 2015 elsewhere. There will also be a considerable slowdown in labour force growth in East Asia, including China.

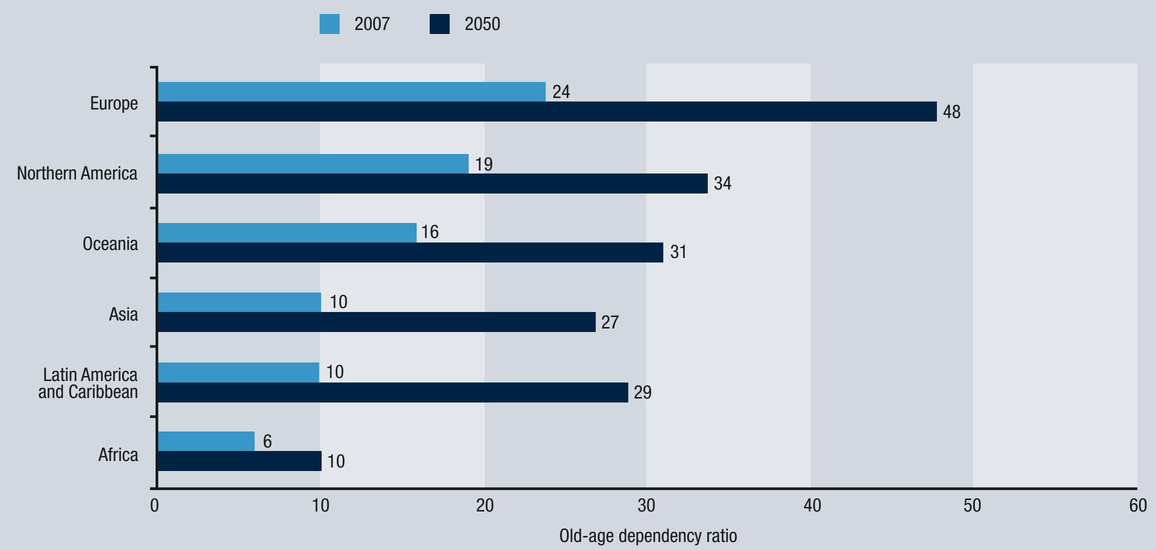
Less-developed countries are forecast to add nearly one billion workers to the world's labour force by 2025, assuming there is no change in the labour force participation rate; however, according to the International Labour Organization (2007), the productivity of these workers is a concern.

Key challenges for pensions and healthcare in developed and less-developed countries

Developed and less-developed countries are confronted with a number of similar challenges regarding pensions and healthcare. Examples include:

- **Significant pressure on pay-as-you-go (PAYG) public pensions and healthcare systems** due to rapid population ageing, cost-increasing medical technologies and higher incidences of chronic diseases. China, for example, will be confronted with a significant increase in old-age social security expenditures in the next few decades. World Bank (2005) projections for China, based on existing

Figure 1.2 **Old-age dependency ratio (%) in major areas, 2007 and 2050**



Source: United Nations (2007)

pension provisions and a no coverage expansion scenario, show China's implicit pension debt (i.e. the present value of projected accrued liabilities) amounts to approximately US$ 1.6 trillion.

- **Growing expectations that the private sector will come to the rescue**. As governments continue to struggle with rising pension and healthcare costs, further political reforms and a growing role for the private sector are likely to emerge. Pressure on employers to fund and facilitate healthcare for their employees will increase. Meanwhile, expanding middle classes in emerging markets will increasingly demand higher quality services and care.

- **Lack of individual financial knowledge as a major policy concern**. A better understanding of savings and investment alternatives has become increasingly important due to the shift towards greater individual responsibility and personal choice in defined-contribution retirement schemes, especially in developed countries.

- **The growing prevalence of chronic diseases around the world**. According to the World Health Organization (2005), cardiovascular diseases (mainly heart disease and stroke) are the leading cause (30%) of death in the world. The WHO expects deaths from chronic diseases will increase by 17% between 2005 and 2015.

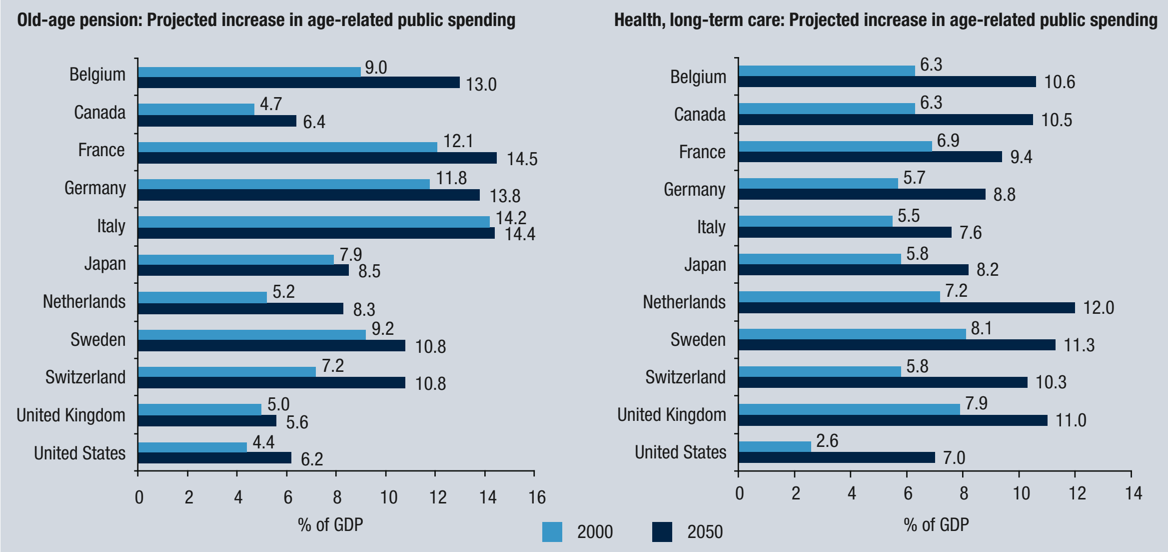
Most less-developed countries are confronted with even larger challenges. Specific examples include:

- **The lack of formal social security coverage**. According to the UN (2007), on average only 20% of populations in less-developed countries are covered by social security benefits.

- **Underdeveloped private-pension and health insurance markets**. According to the OECD (2006), pension markets in most non-OECD countries are at an early stage of development. The weighted average ratio of pension fund assets to GDP across 27 non-OECD economies was only 34% in 2005. By comparison, this ratio was 88% for the OECD area in 2005.

- **The double burden of infectious and chronic diseases**. Many less-developed countries have not yet adequately addressed public health goals such as mass vaccination. At the same time, they are confronted with rapid population ageing, which is leading to greater demands for healthcare services by older persons with chronic diseases.

Figure 1.3 **Projected increase in ageing-related public spending, 2000-2050 (Assuming unchanged policies as from the early or mid-2000s, in % of GDP)**



Source: OECD (2005)

In addition, infectious diseases are now spreading geographically much faster than at any time in history. At the same time, gains in many areas of infectious disease control are being seriously jeopardized by increasing drug resistance and climate change, which alters the distribution of malarial mosquitoes and other carriers of infectious diseases.

- **Unfulfilled existing health systems**. In less-developed countries, particularly low-income nations, current health systems are still mainly oriented towards providing care for acute episodic conditions and are **not geared towards chronic care needs and care that is specific to older persons**.

- The structural **shortage of well-trained healthcare workers**. According to the WHO (2006), a global deficit of 2.4 million doctors, nurses and midwives exists. Currently 57 countries, primarily in less-developed countries, face critical shortages of healthcare workers. Old-age care is especially in need of more personnel.

- **The diminishing role of the family in old-age social security**. In many less-developed countries and in some developed countries, families traditionally have played an important role in supporting ageing populations. The tradition is that every individual will support his/her parents in old age, and in turn will be able to rely on the financial support of his/her children. This tradition is codified in law in some countries (e.g. children have the legal obligation to support their parents in China and Singapore). However, this social convention is being challenged as many young people migrate to cities, family sizes shrink and people adopt more individualistic attitudes.

Figure 1.4 **Critical shortages of healthcare workers, 2006**

Source: World Health Organization (2006)

China-specific Challenges

Demographic shifts in China

With its ageing population and falling birth rate, China has one of the steepest total dependency ratio (TDR)[4] curves in the world. It is already under severe pressure in providing pensions and public-health services to its huge elderly population, and that pressure will increase as the "baby boomer" generation retires, which will start in the 2010s and peak in the 2020s and 2030s. Already, one-fifth of the world's elderly live in China; by 2035, it is estimated China's elderly will number 391 million – more than one-fifth of China's total projected population, and more than the entire populations of France, Germany, Italy, Japan and the United Kingdom combined.

China's demographic shift is exceptional for a number of reasons:

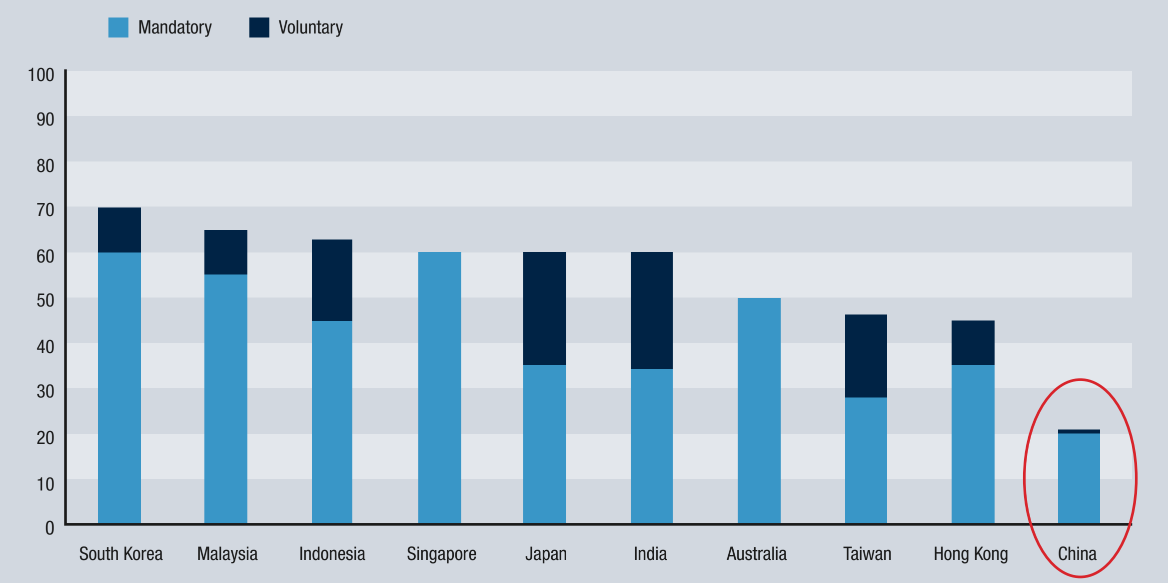
- The population is **ageing more rapidly** than in many other countries. While the number of elderly is forecast to take 115 years to double in France and 69 years in the United States, in China it is expected to take merely 27 years.

- The Family Planning Policy has created the **"4-2-1" issue** of individuals facing the expectation of needing to look after two parents and four grandparents. The fertility rate has been lower than 2.1 since 1992 which is currently in the range of 1.5-1.8, significantly lower than many other countries. Most old people, especially in rural areas, live with their children – usually their sons – and depend on their own savings and their children's income. Family support is the primary source of income for nearly half of those aged over 60.

- In comparison to its OECD counterparts, China is **ageing rapidly at an earlier stage of economic development than most other ageing societies**.

- Pensions are less widespread and less adequate. As Figure 1.5 shows, the income replacement ratio – that is, social benefits compared to pre-retirement incomes – is lower in China than in neighbouring countries. Older people are consequently vulnerable to **poverty and social marginalization**, with women more at risk of impoverishment than men.

Figure 1.5 **Retirement benefit expressed as a % of salary at retirement**



Source: Mercer 2008 analysis

4 The number of persons under age 15, plus persons aged 65 or over, per one hundred persons aged 15 to 64

Note that the references for data work in this section can be found in the key references section, p 108

- China has a deep **urban-rural divide**. Most of the approximately 135 million Chinese who live on less than one dollar a day are rural dwellers, largely living in remote and resource-poor western and interior areas – although urban poverty is also an emerging issue. Restrictions on movement stemming from the 1958 hukou system, which affect urban, rural, and agricultural households, make it harder for rural Chinese to acquire equal status and welfare once migrating to relatively more prosperous cities. Internal migration also affects the traditional family support system for approximately two-thirds of China's elderly living in rural area.

- There are also significant **differences among the provinces in fertility rate and elderly ratio to the population**. Shanghai and Beijing have the lowest fertility rate in China. The elderly make up 20% of the population in Shanghai and 16% in Beijing respectively, but they have enough labour force inflows from other provinces. Western provinces, on the contrary, have higher fertility rates and lower than 10% elderly population. However, they are losing the young labour forces to migration.

- The nationwide pension-insurance system is **unequally implemented**, partly because of the uneven distribution of state-owned enterprises per region, and partly because of the central government's focus on rolling out new programmes in the urban areas before extending them to rural areas.

- There are **strong incentives for evading contributions** and opting out of programmes because the cumulative financial burden of social security contributions is so large. Pensions, healthcare, unemployment insurance, injury insurance, maternity insurance and housing provident fund[5] payments can add up to about 40% of the typical worker's income.

5 Housing provident fund refers to long-term housing savings paid and deposited by State organs, State-owned enterprises, collective enterprises in cities and towns, foreign-invested enterprises, private enterprises in cities and towns, institutions, private non-enterprise units and associations.

Key challenges for pensions in China

Limited coverage and public doubts about sustainability

Less than 20% of those over age 60 are covered by pension programmes and among them, nearly 40% are under urban programmes (Figure 1.6). It has been estimated around half of current urban workers lack pension coverage because of the ambiguous status of part-time or temporary employees and those working at smaller firms not covered by pension regulations.

Serious public doubts about the sustainability of current pension schemes exist, as they are generally PAYG plans, with pensions being financed from the employer's current revenues. It is officially forecast that maintaining this PAYG system will require contributions reaching 38% of wages by 2030. The pension insurance fund also has a historical implicit debt despite efforts to reduce it. These efforts include the National Social Security Fund (NSSF), which receives money from state-run lotteries and 10% of proceeds from the initial public offerings of certain SOEs. These funding measures have had only modest effects on the fund's financial position.

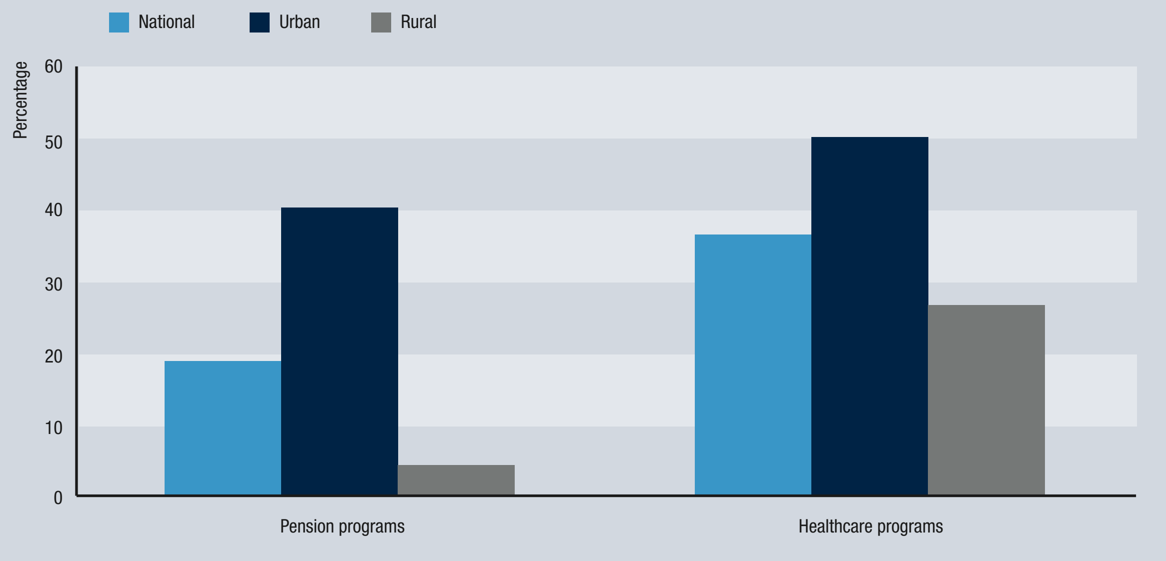
The sustainability issue is compounded by China's effective retirement age, which is relatively early in relation to life expectancy. The legal retirement age is 60 for men and 55 for women – except for female blue-collar workers, who retire five years later – but the effective retirement age has been reported to be as low as 51.2 years. Early retirement has the double effect of reducing contribution revenues while increasing pension expenditures. Pension schemes assume a payout period of only 11 years, yet average life expectancy at current retirement ages is estimated to be 20 years for men and 27 years for women. The percentage of 65 and above continues to increase even after the population inflection point in 2040s (Figure 1.7).

Regulatory fragmentation impedes portability and pooling

Approximately 200 million of the Chinese citizens who lack pension coverage are migrants who have fallen through the cracks in the regionally fragmented social-protection schemes. Migrant workers can withdraw their own social-insurance contributions if they change jobs, but not the portion paid by their employers. This lack of pension portability creates a more rigid labour market by making workers less willing to move across administrative borders, and leads to poverty in retirement – exacerbating the negative effects on rural provinces of losing their most productive workers.

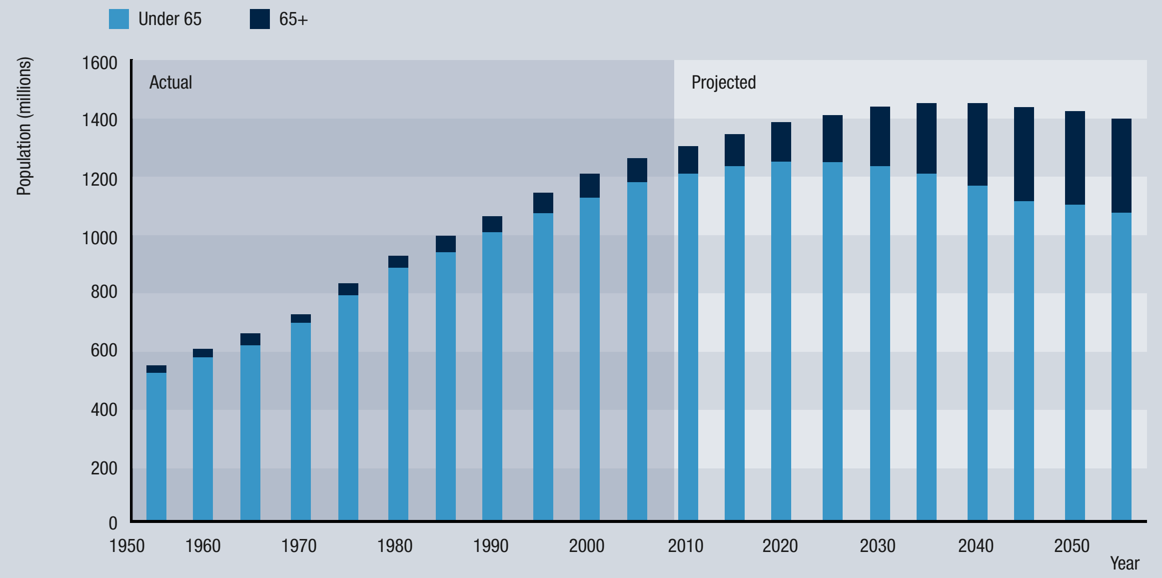
The portability of pensions is frequently advocated as a solution to this problem. A few cities (notably Shanghai, Changchun and Chengdu) and several provinces do allow portability among work units – but in the absence of clear regulatory guidelines such agreements are not easy to reach. Old and new employers or pools tend to be more concerned with their own bottom lines than with ensuring equitable treatment of their employees. There is practically no portability between provinces, not only because of the administrative difficulty of transferring individual accounts

Figure 1.6 **Proportion of China's population age 60+ covered by social security programmes**



Source: China National Bureau of Statistics (2007)

Figure 1.7 **The increasing Chinese population share above 65 years of age**



Source: United Nations Population Fund (2008)

and pension claims across local borders, but also because of the complexity of the administrative hierarchy from the local to the national level.

Similar administrative difficulties stand in the way of aligning the expenses and contribution rates of local pension funds to allow risks to be pooled more broadly. China's social security benefits, including pensions and medical treatment, are currently spread over more than 2,000 pooling units, mostly at the county and city levels. Compounding the problem, the fragmented nature of the system creates perverse incentives for non-compliance and false reporting to maximize financial subsidies.

Attempted reforms have limited effect

In 1997, a new three-pillar system was implemented with the aim of easing the growing pension burden – essentially, a defined-contribution plan with funded, individual accounts (Figure 1.8). Employers now pay around 20% of wages towards a specified schedule of benefits, and employees pay 8% into individual accounts. However, this scheme has not been as effective as hoped, not least because these payroll taxes are often "borrowed" by provinces to help pay the benefits due to retired workers from the pre-1997 era.

The enterprise annuity (EA) scheme, which was part of these reforms, has not spread sufficiently to significantly complement public old-age insurance. By the end of 2007, only around 30,000 of the estimated 4.3 million registered companies in China had EA schemes, covering 10 million employees. This is attributed to a variety of causes, including the system's complexity, inadequate public education and insufficient tax incentives.

Social pensions are the subject of more general public concerns: perceived intergenerational inequity, a general lack of trust in the system, and more specific doubts about whether savings are genuinely going towards funding participants' own retirements. These are accentuated by the high levels of required contributions, which create the temptation to evade payments. Social-insurance agencies at the provincial and local levels have limited enforcement powers to collect contributions.

There have been efforts to rectify the situation. For instance, on 1 January 2008, the Labour Contract Law took effect which is deemed to be a pro-employee legislation and improve social insurance coverage. The NSSF has run pilot programmes where it helps provincial governments put actual assets into personal accounts – rather than merely notional, unfunded "credits" financed by state-run lotteries and 10% of the initial public offering proceeds of designated SOEs. However, even here the personal accounts involved have been only partially funded to date.

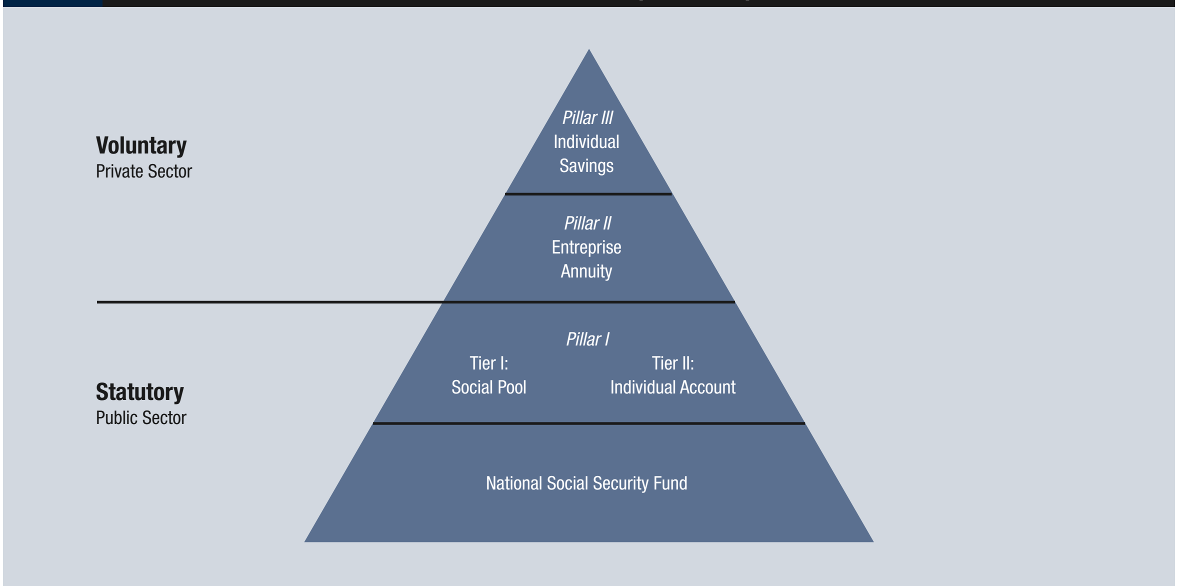
Capital markets remain largely unreformed

China has been slower to reform and diversify its financial sector than many had expected when it joined the WTO in 2001. Because of limited innovation and choice in investment products, the vast majority of retirement funds are still invested in relatively low-yielding bank deposits and government bonds (Figure 1.9). More dynamic capital markets, offering more sophisticated investment products and opportunities for efficient portfolio management, would use domestic saving more effectively to support economic growth and the financial sustainability of pensions.

Towards adequate retirement benefit coverage

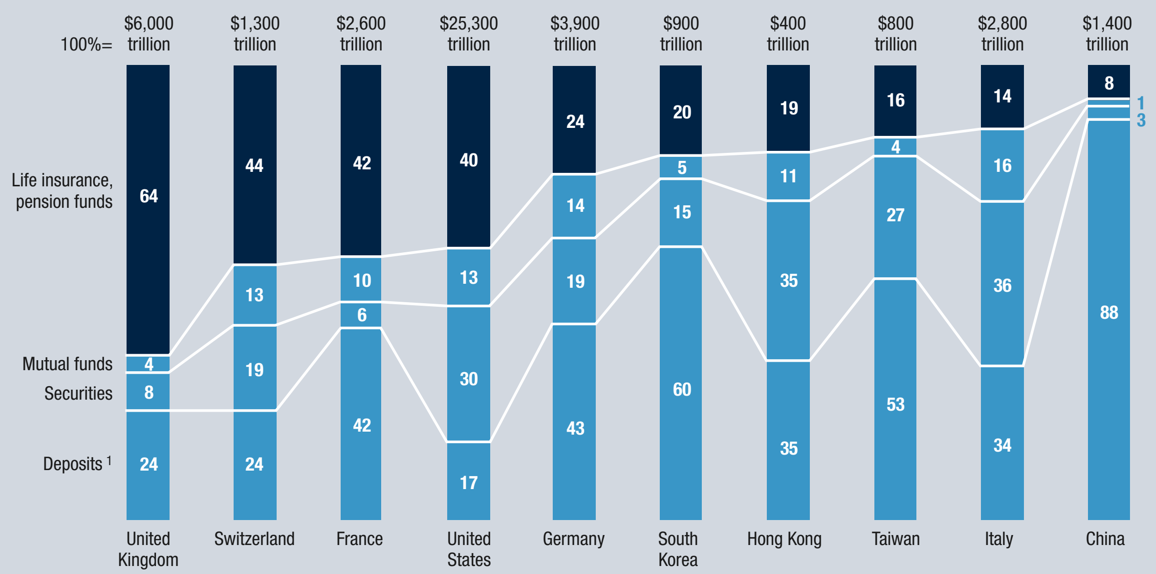
Reform efforts to date may, as noted above, have had limited effects, but there is no doubt that commitment to further reform comes from the highest political level. At the 11th National People's Congress, President Hu Jintao and Premier Wen Jiabao both agreed that by 2020 all citizens should be covered by elderly social security, first rolled out in the cities and then extended to rural areas. The latest reforms include the establishment in 2008 of pilot schemes in five provinces providing old-age insurance for around 8 million employees of public institutions.

Figure 1.8 **Structure of China's pension system for urban workers (since 1997)**



Source: OECD (2007)

Figure 1.9 **Distribution of personal financial assets, %**



1 Includes cash deposits

Source: McKinsey & Company, Inc. (1992-2008)

Key challenges for healthcare in China

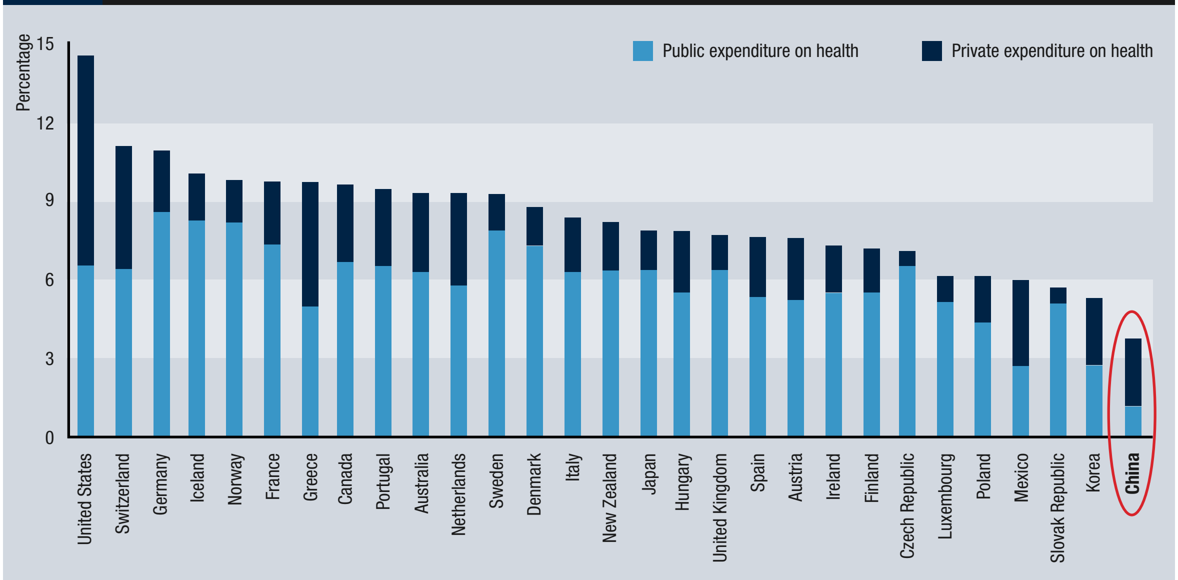
Limited coverage impacts the poor

As recently as the 1970s, healthcare coverage in China was universal – if rudimentary – as the central government owned, funded and ran all hospitals. The system was then decentralized to the provincial and local level, and effectively privatized. Today, an estimated 36.5% of Chinese are covered by healthcare programmes, including medical insurance. Around half of all urban dwellers are covered, and just over a quarter in rural areas.

Expenditure on health as a percentage of GDP has been steadily increasing – at an average rate of 13% per year in the first half of this decade, according to research by Swiss Re. But China's per-capita health expenditure remains low in international terms – by UNDP figures, Russia spends roughly twice, South Africa three times and Brazil more than five times as much[6].

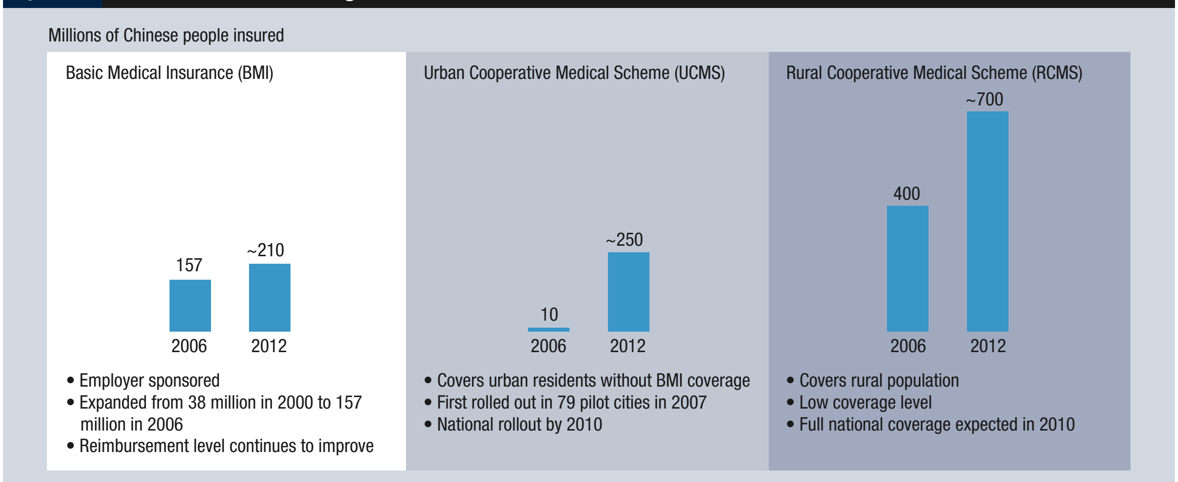
China's increases in healthcare expenditure are attributable to private, not public, spending (Figure 1.10). It is often perceived that the changes in healthcare financing over the

Figure 1.10 **Public and private health spending as % of GDP in selected countries**



Source: OECD (2006)

Figure 1.11 **Toward universal coverage**



Source: McKinsey Quarterly (2008)

6 China's health expenditure per capita is still significantly lower at US$ 277(PPP, 2004) compared to Brazil US$ 1,520, South Africa US$ 748, and Russia US$ 583 (UNDP 2007/2008 Human Development Report).

last three decades have benefited well-off citizens at the expense of the poor. Facing a struggle to afford medical care, the poor often delay or do without essential treatment. This problem is exacerbated by a system that is not consistent with the goal of cost-effective healthcare in that it allows hospitals to profit from prescriptions and diagnostic tests, creating incentives to overprescribe medications and perform unnecessary tests.

Infectious and chronic diseases are a growing burden

China's rapid socio-economic development is profoundly impacting its population's health, with a surge in "diseases of affluence" such as diabetes, breast cancer and cardiovascular disease. An obesity epidemic is imminent, as more than 20% of children aged 7–17 who live in large cities are now classed as overweight or obese. According to the Ministry of Health, chronic diseases account for an estimated 80% of total deaths China also faces challenges with acute contagious diseases and premature deaths caused by pollution. It was the epicentre of the global SARS outbreak in 2003, and Axco Insurance warns that it is widely expected to be the epicentre of any avian-flu pandemic which might break out.

Limited supply of high-quality care providers strains healthcare delivery

Approximately 90% of all adult illness is due to the degenerative processes of ageing, including heart disease, most cancers, adult-onset diabetes, stroke, high blood pressure, osteoporosis, osteoarthritis, autoimmune disease, glaucoma and Alzheimer's. Despite this, China's healthcare system is not fully geared to the needs of the elderly.

The government has encouraged the construction of nursing homes as an alternative to family care, but as yet they exist only in major population centres and are beyond the financial reach of most. There are serious shortages of beds in elderly care facilities and of qualified caregivers for the elderly in general; some local government agencies have recently introduced training programmes for elderly carers but these are relatively brief and limited.

Institutional complexity limits success of reform efforts

In recent years there have been numerous efforts to move China in the direction of providing universal health coverage, and there have been significant successes (Figure 1.11). But the reforming effort is made harder by the complexity of the country's healthcare delivery system: financing is decentralized to the lowest administrative level, and at least 12 ministries and government agencies share responsibility for healthcare policy. Regulatory quality is compromised by the fact that government agencies are responsible for regulating the delivery systems they own and bureaucratic rivalries block forward movement.

Attempts to reform the state healthcare system have extended coverage to only a relatively small percentage of the population. The Basic Employee Medical Insurance Scheme, introduced in 1998 to provide basic nationwide coverage, does not cover most urban migrant workers. The Rural Cooperative Medical Scheme, which aims to cover all rural residents by 2010, is projected by the IMF to have reached only 20% of its target. While the 10 yuan (US$ 1.30) annual fee is affordable and the government supplies an additional 40 yuan, members are expected to pay for as much as 70% of total medical bills. This effectively disqualifies the poor from participating in the scheme, making it harder for them to access medical treatment, including adequate preventive medicine.

Beyond public systems, there is considerable potential for commercial health insurance companies to play a greater role in China's healthcare system. According to a study by Swiss Re, China spent more than RMB 1,000 billion (US$ 137 billion) on healthcare in 2007, 52% of which was directly paid by households. Commercial medical insurance covered less than 6% of total healthcare costs, which translates to only RMB 60 billion (US$ 822 million) out of a market potential of RMB 489 billion (US$ 67 billion). Realizing this potential, however, will require more professionalism, higher standards and better infrastructure across the entire insurance value chain.

Despite the challenges China faces, there are strengths which could enable a breakthrough for old-age support through pensions and healthcare. For instance, China has large accumulated reserves, a strong fiscal position, pragmatism in its economic policy and the increasing penetration of technology. How, when and where these strengths are deployed are key to the future of financing pensions and healthcare access and provision.

Italy-specific Challenges

Demographic shifts in Italy

Italy severely affected by population ageing

While Italy is ranked as the eighth-largest economy in the world and the fourth largest in Europe, it is distinguished in demographic terms by simultaneously having one of the world's lowest fertility rates (1.4 children per woman in 2007) and one of the highest life expectancy rates (around 78.6 years for men and 84.1 years for women).

These trends are set to continue. The UN projects that life expectancy in Italy will rise even further, to 82.2 for men and 88.1 years for women, by 2050. The combination of low fertility and increasing life expectancy implies significant population ageing. Indeed, Italy currently has the world's highest percentage of "old old" – persons aged 80 years or more – and the EU's highest percentage of population aged 65 and over. As shown in Table 1.2 and Figure 1.12, the UN predicts the percentage of those aged over 60 will grow to 41% of Italy's total population by 2050 as the ageing trend continues.

Ageing has significant implications for the national economy and public finances

With fewer working age people available to fund a population weighted towards the old, these demographic trends are likely to result in significant labour shortages and slower long-term economic growth, and will also put increased strain on public expenditures that are already high by OECD standards. After Japan, Italy currently has the highest old-age dependency ratio among the OECD countries. Exacerbating these problems is a number of related factors:

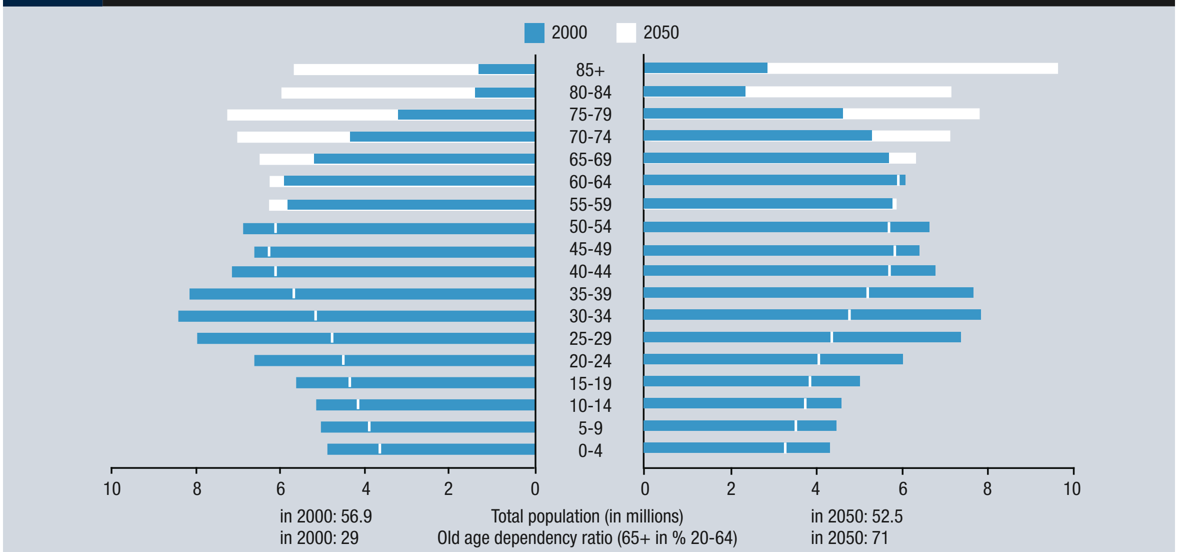
- Compared to other OECD countries, the Italian pension system is particularly expensive, yet still encourages early withdrawal from the labour market.
- According to OECD projections, total health and long-term care spending for Italy will almost double between 2005 and 2050.

Table 1.2 **Demographic statistics and predictions in detail**

	Old-age dependency ratio			Total fertility rate (per woman)			Life expectancy at birth (years)			% of total population age 60+			Median age (years)		
	1950	2007	2050	1950	2007	2050	1950	2007	2050	1950	2007	2050	1950	2005	2050
Italy	12.6	31.1	69.2	2.3	1.4	1.8	66.1	80.6	85.1	12.2	26.4	41.3	29.0	42.3	52.5
Developed countries	12.2	22.9	44.4	2.8	1.6	1.8	66.1	76.2	82.1	11.7	20.7	32.4	29.0	38.6	45.5
Less developed countries	6.7	8.8	22.6	6.2	2.7	2.1	41.1	64.6	74.0	6.4	8.4	20.0	21.4	25.6	36.6

Source: United Nations (2007)

Figure 1.12 **Population pyramid – Italy**



Source: OECD (2006)

Note that the references for data work in this section can be found in the key references section, p 109.

- Italy's level of public debt is one of the highest in the EU, at more than 100% of GDP. This makes the country's fiscal position extremely sensitive to movements in interest rates and places pressure on policy-makers to contain ongoing public liabilities.

Additional labour constraints compound the demographic challenge

A viable, market-driven response to the inevitable sharp rise in the dependency ratio over the next 30 years would be to better use the human resources available to the Italian economy. Here too, however, Italy faces a number of challenges:

- Tertiary education levels in Italy are far lower than in the rest of Europe: Only 60% of those aged 25-34 have advanced beyond lower secondary education, compared to the EU and OECD average of around 75%.

- Participation rates of women and older workers in the formal sector, as well as youth employment rates, remain well below corresponding European and OECD averages. Incentives for women to work while managing a young family are inadequate, and the majority of elderly care services provided by informal sources are not included in reported activity rates.

- While Italy has one of Europe's highest levels of net immigrant flows, the country has had significant difficulties integrating immigrant communities, with examples of xenophobia towards both illegal and legal migrants causing social concerns across the country.

Italy's problems tend to represent the most extreme manifestation of broader European trends in ageing and the subsequent threat to both fiscal and economic stability. However, Italy is a particularly interesting case study in that it faces additional problems. The country has one of the lowest rates of employment in the EU and extreme regional and gender imbalances with regard to unemployment. According to one recent survey by the Italian Institute of Statistics (ISTAT), the unemployment rate in the southern part of the country is estimated at 11.8%, compared to approximately 3.8% in the prosperous north.

Key challenges for pensions in Italy

The public pension system is expensive and reform is occurring only slowly

Italy spends more of its national income on public pensions and has the highest pension contribution rates of any OECD country. Employee and employer contributions combined are nearly 33% of individual earnings, compared with an OECD average of only 20%.

Pension reforms introduced in the 1990s (see Appendix C) altered the outlook for the Italian pension system by offering the prospect that expenditure growth could be contained by reducing incentives for early retirement and gradually raising the retirement age, changing the current pension-indexing formula to prices from wages, moving future retirees to a notional contribution system, and devising a formula to periodically adjust payments to changes in longevity and GDP growth. If these reforms are fully implemented, the implied savings and benefit reductions mean that, by most projections, the Italian public pension programme will become financially sustainable by 2050.

Sustainability is nevertheless threatened by a number of factors, including delays or scaling back of the reforms, the possible worsening of public debt levels, and the potential for rapidly decreasing rates of labour force participation in the future. In addition, while savings have been realized through benefit reductions, it is likely that social costs will increase dramatically elsewhere as a lower replacement rate implies a rise in the number of elderly living in poverty. (This is already an issue of concern, given that Italy is one of only a few industrialized countries where more than 10% of older people have incomes below the population median.)

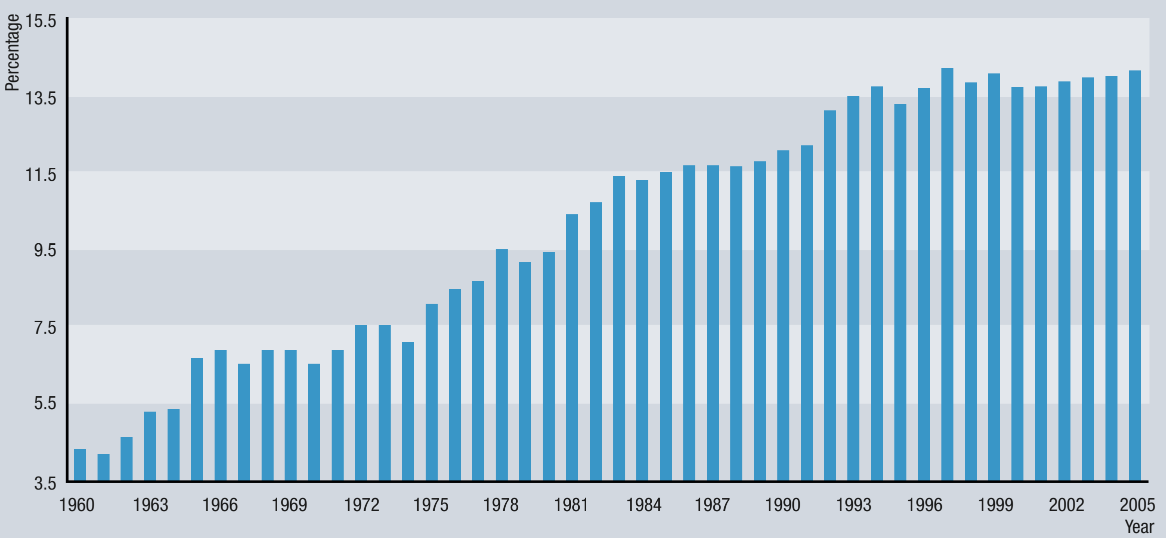
The burden of pension reform will fall largely on younger generations

Partly as a result of intense political opposition to public pension reforms, implementation has been designed to protect current retirees and the near-retirement population, with most of the burden of reform falling on younger generations.

The reduction in pension benefits for Italy's future retirees is one of the largest in the OECD countries. Once the reforms are fully effective, the replacement rate – pension during retirement relative to earnings when working – is projected to fall from approximately 90% to a little over 60% (after accounting for gender disparities; see Table 1.3). While this will bring pension benefits into line with other OECD countries, as discussed below, most of those countries have better developed second- and third-pillar pension schemes to compensate for lower public benefits. In addition, the timing of this fall in benefits will create large differences in replacement rates between current and future retirees, heightening the possibility of social tension.

While the gradual introduction of a notional contribution system will reduce public pension expenditures, the system will likely face new sets of problems in terms of adequacy and political palatability.

Figure 1.13 **Italian pension expenditure as a percentage of GDP**



Source: EuroFrame (2007)

Table 1.3 **Pre- and post-reform gross replacement rates for workers on average earnings in selected OECD countries (percentage of individual earning)**

	Men		Women (where different)	
	Pre-reform	Post-reform	Pre-reform	Post-reform
Austria	90.0	80.1	80.0	80.1
Finland	66.3	63.4		
France	64.7	51.2		
Germany	48.7	39.9		
Hungary	57.7	76.9	52.7	76.9
Italy	90.0	67.9	80.0	52.8
Japan	40.7	34.4		
Poland	62.2	61.2	57.3	44.5
Portugal	90.1	54.1		
Sweden	78.9	62.1		
Turkey	107.6	72.5	102.8	72.5
United Kingdom	30.8	30.8		

Source: OECD (2007)

A more flexible labour market will mean greater career volatility for younger generations, which will in turn reduce the overall amount of contribution for the computation of benefits, further lowering replacement rates for those with temporary jobs or interrupted careers.

In addition, the self-adjustment mechanisms within the notional contribution system are expected to reduce the average pension benefit from the current 18% of GDP per employee to just under 15% in 2030 and approximately 12% in 2050. Thus, in the event that real economic growth rates decline (along with the projected population decline or due to other factors), the adequacy of the absolute level of benefits could become a critical question.

A lack of personal savings culture will further endanger pension adequacy

With state pension provision the historical norm, there is a notable lack of a personal savings culture in Italy other than bank accounts. The private pension market in Italy is in the early stages of development, and a generous social security system has meant limited scope for supplementary pensions.

Attempts to boost supplementary retirement plans, such as the Trattamento di Fine Rapporto (TFR) reform of 2006, have focused on shifting company-managed TFR severance benefits from company accounts to pension funds in an attempt to stimulate the pension market. However, as of 2007, only 2.7 million people were participating in private pension funds, amounting to 22% of subscribers from a total of 12.2 million private sector workers affected by the TFR reform. Surveys indicate that this is due to concerns about the security of the funds as well as a desire by the population to retain the ability to take TFR benefits as a lump sum on retirement (as opposed to the annuity-only option of moving the TFR to a pension fund). The reform has therefore failed to significantly stimulate the development of second-pillar pension schemes and has raised concerns about the adequacy of future benefits.

Furthermore, Italians are neither engaged by, nor adequately informed about, the requirements of retirement planning. Commentators have argued that a major hindrance to participation in second- and third-pillar schemes is a widespread lack of financial knowledge – in particular, an understanding of the savings rates and investment returns required to fund retirement and healthcare costs over an individual’s lifetime. This suggests a need to implement mandatory schemes or limit freedom of choice to ensure rational behaviour with regard to private and occupational pensions. It also implies that better financial education and expanded information on current and projected pension holdings are required.

- The disparity between the very rich and the poor rises rapidly as only a few benefits trickle down; there is increasing social unrest
- Middle classes do not grow as expected
- Traditional family obligations erode

Pensions and healthcare in China

- Reform of state systems does not yield the expected benefits due to bureaucracy
- Adequate public pension coverage for the population remains to be addressed
- Financial reforms improve the range and availability of private pension products for the wealthy
- Government health insurance scheme covers catastrophic insurance for all but not primary healthcare
- Private healthcare booms for the affluent with integrated insurance and treatment options, but to a lesser extent due to slower middle-class growth
- Institutional elderly care becomes common for wealthier classes

China context

- Through the establishment of a super ministry in 2013, the government pursues bold structural reforms, tackles corruption and simplifies bureaucracy
- Visionary leadership has put in place economic and social fundamentals that leave China well positioned for the future
- Consumers have stronger influence over retirement and healthcare
- Community-based initiatives empower local communities as the unit of care
- Family structures and communities are strengthened amid better social cohesion
- Rural-urban gap narrows but is not fully closed

Pensions and healthcare in China

- With the simplification of the regulatory regime, pensions are now pooled nationally and fully portable across China
- Mandatory defined contribution pensions are established
- Private providers are given incentives to move into poorer areas as a precondition for expanding their core businesses
- Nation-wide comprehensive social insurance is put in place covering primary and catastrophic care
- The mandatory education system includes financial education and preventive healthcare
- The Internet is crucial in empowering communities to take responsibility for delivery of services such as medical information and education
- E-records are centrally stored in a biometric identity system, keeping healthcare costs low

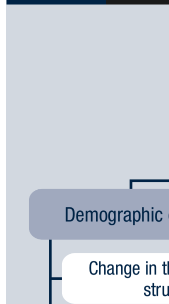
China context

- Efforts at governance and institutional reform are scattered and ineffective
- Succession of economic backlashes aggravated by high commodity prices and reduced export demand severely undermines confidence in Chinese financial institutions until the early 2020s
- Protests spread to new provinces and demographic groups; water shortages, crop failures and river pollution cause unrest
- The young increasingly feel more connected through mobile technology to peers in their virtual networks than to their families in the real world
- Young entrepreneurs and innovations drive recovery in late 2020s

Pensions and healthcare in China

- Government scales back existing pension commitments by “retiring retirement”; measures are taken to shift pensions commitments onto

Figure 1.14 Drive



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Section **2**

Scenarios to 2030

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ITALY SCENARIOS

Italy context
- Export sector blossoms as Italian high-quality products and style are in high demand among the global elite
- Small and medium size enterprises are at the heart of strong economic growth exceeding 3% to 2025
- Income inequality rises between northern and southern Italy and between skilled and less-skilled workers
- Late 2020s slowdown puts public finances under pressure
- Labour shortages challenge the Italian economy in the 2020s

Pensions and healthcare in Italy
- Politicians bow to populist pressure and delay pension reforms
- The divide between those with public pensions and those with private pensions grows
- Wealthy are concerned with wellness and lifestyle
- Chronic and new infectious diseases are both on the rise, the latter especially in southern Italy
- Public elderly care systems are under strain and short of labour

Italy context
- Economic downturn forces reassessment of social welfare role by government
- More favourable attitude towards migrant workers evolves as people realize they are needed to compensate for the decline in the labour force
- Drive to close regional divide and integrate migrants shows signs of success
- Italy slowly becomes a more heterogeneous and equal society
- Strong sentiment of togetherness and community building exists
- Many public-private partnerships form to address societal challenges

Pensions and healthcare in Italy
- State pensions are no longer dependent on earnings, but are based on a fixed amount for every retiree; top-up on service could take place via private market solutions and credits earned through volunteerism during retirement
- Incentives encourage community-based social services such as child care and elderly care
- Low intervention and preventive approaches improve health outcomes across the country
- Improved systems in southern Italy narrow regional health gap
- Social enterprise, including elderly care, is central to public-private partnerships

Italy context
- Prolonged recession pushes public debt to crushing levels, forcing budget crisis
- Electorate turns in desperation to liberal market reformers
- Radical reforms slash public spending and deregulate markets
- Loss of state benefits causes a rise in poverty, forcing many elderly to work until high age
- Effect of market reforms kick in around 2025 and the Italian economy starts to blossom again
- With a new education system, youth become the driving force of the economy

Pensions and healthcare in Italy
- State social welfare systems are restructured to focus on means-tested help for the neediest (regardless of age)
- Lower middle-class retirees are hit hardest by unmet expectations as benefits disappear
- Financially educated young embrace personal responsibility, but many others are left behind
- Market reforms encourage more affordable private medical care through greater competition
- Responding to social norms and incentives, Italians take preventive healthcare education to heart

Section 2 Scenarios to 2030

"I live in the present. I only remember the past, and anticipate the future."
Henry David Thoreau

"There is no favourable wind for the man who knows not where he is going."
Seneca

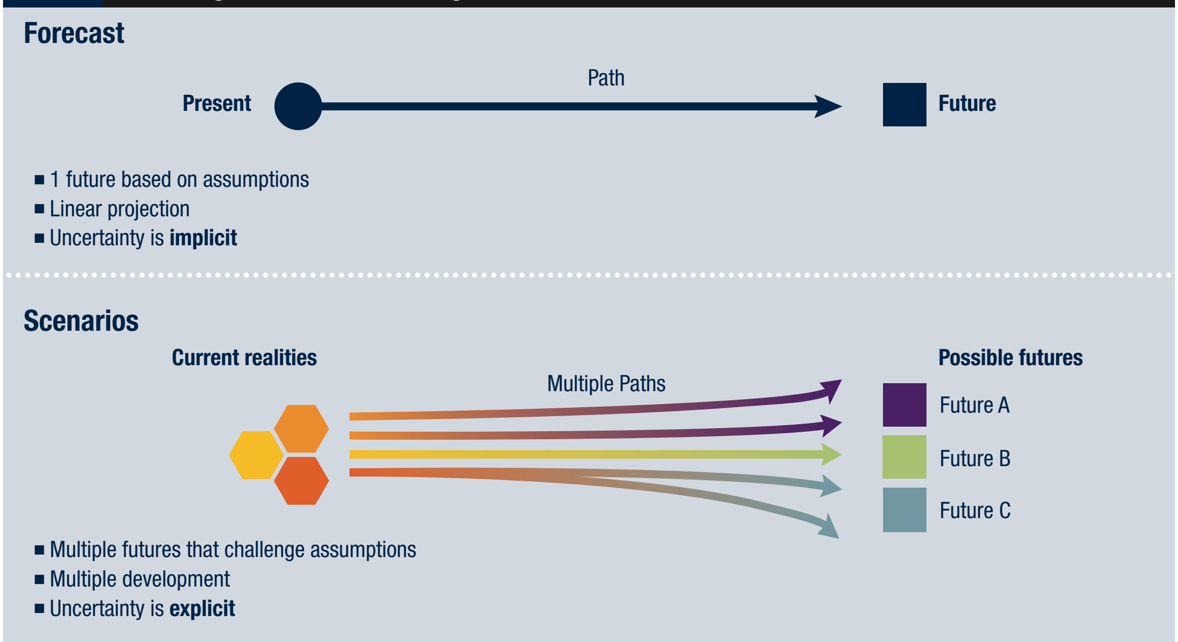
The Forum's Scenario Approach

Scenario thinking is a strategic management tool that can be used in the private, public and non-profit sectors. By making uncertainty about the future explicit, it helps decision-makers to understand and appreciate their own and others' conceptions about how events may unfold. Scenario thinking is used to improve organizational performance at the strategic level, enrich individual decision-making and enhance human and organizational learning. It is growing in popularity – the Bain Management Tools Survey reports that the use of some form of scenario thinking or contingency planning rose from 38% of global companies in 2004 to 69% in 2006.

Scenarios can be presented in many ways. Essentially, they are plausible yet challenging stories about the future, which address a core issue (or "central question") of importance to a particular set of stakeholders. Scenarios are not predictions or forecasts; rather, they seek to define uncertainty and make it explicit, broaden perspectives and trigger insights that enable people to make better decisions (see Figure 2.1).

Scenarios give diverse stakeholders a shared basis for discussion, allow each to consider their reactions to possible developments, and enable more creative thinking about how to proactively shape the future.

Figure 2.1 **Forecasting versus scenario thinking**



Source: World Economic Forum

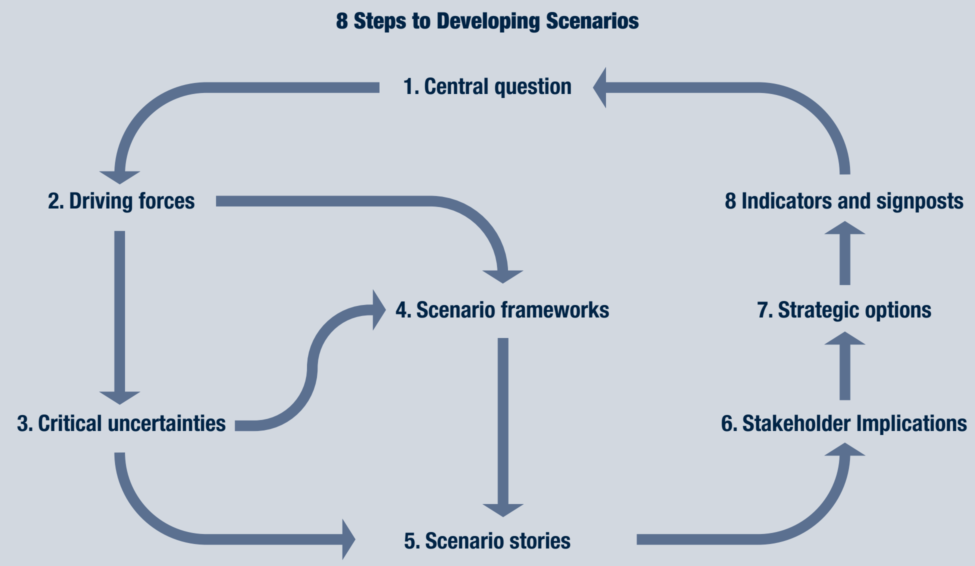
The Forum has been developing scenarios since 2004. Its approach is inspired by Shell's famous scenarios on geopolitical events linked to energy markets, which were pioneered during the 1970s and are given credit for much of the company's strategic success. The Forum's approach is primarily qualitative in nature, focusing on the importance of generating challenging insights from a broad set of interdisciplinary and multistakeholder participants. The Forum's scenario methodology is informed by the organization's own considerable experience as well as by a global set of academics, consultants and scenario practitioners. This approach has eight key steps, as shown in Figure 2.2 below.

Scenarios on the future of pensions and healthcare to 2030

In the year-long process of building the scenarios that follow, the Forum held a series of workshops involving almost 200 participants.

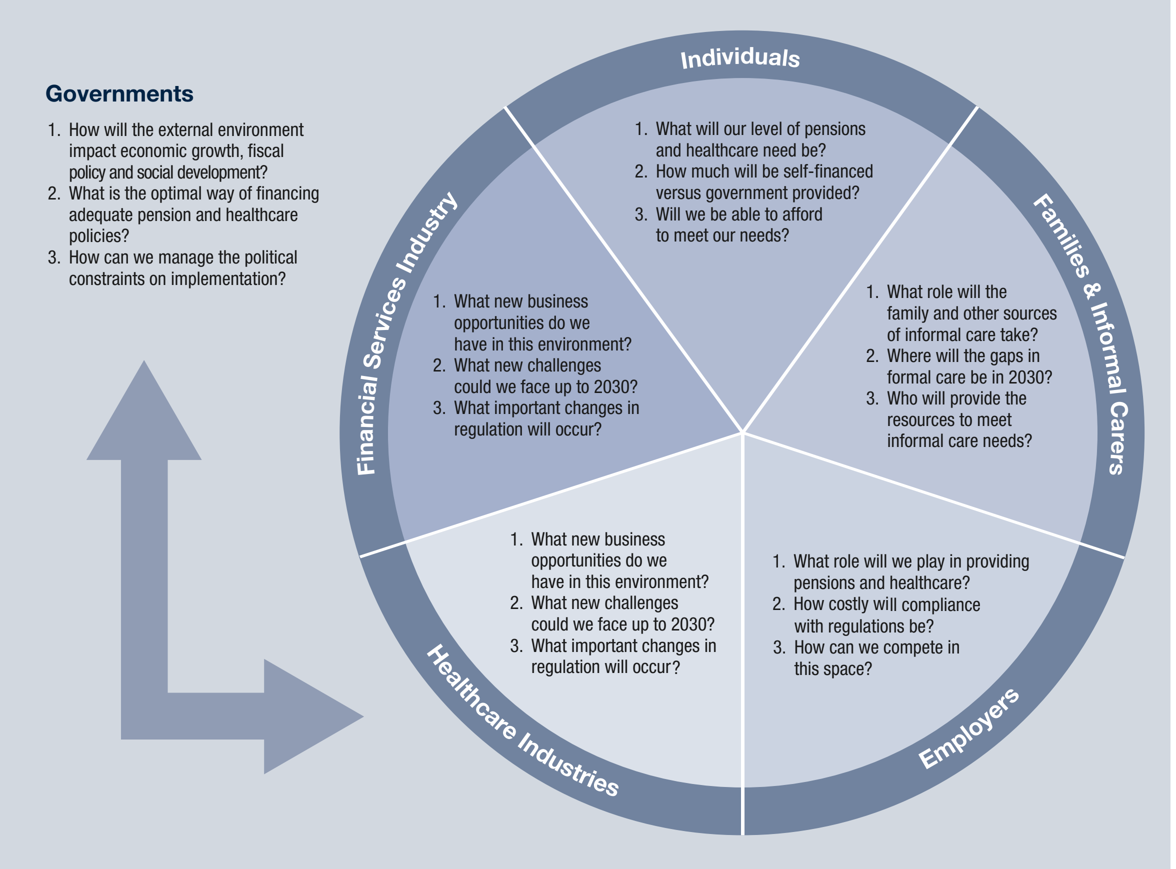
The Financing Demographic Shifts 2030 project has been designed and developed with six stakeholder groups in mind. These groups, shown in Figure 2.3 (the stakeholder diagram), consist of individuals, governments, financial institutions, healthcare providers, employers and families (including informal carers).

Figure 2.2 **The World Economic Forum's approach to developing scenarios**



Source: GBN, World Economic Forum

Figure 2.3 **Examples of stakeholder concerns**



Source: World Economic Forum

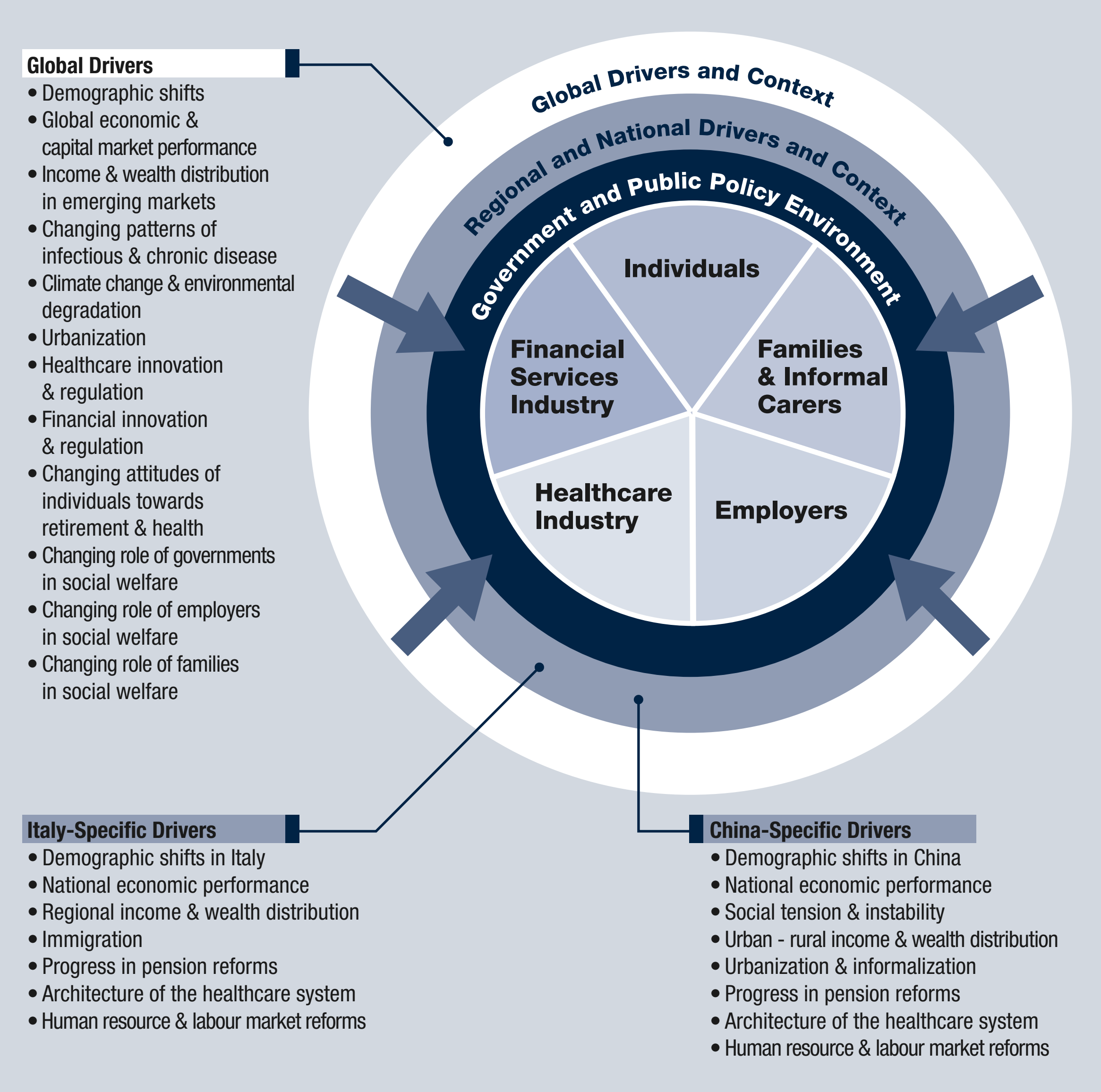
Step one: Formulating the central question

From discussions with these stakeholders, the following central questions were developed:

How may the future of pensions and healthcare look like in 2030, by taking the various key drivers and critical uncertainties into account? What may be the role of governments, the private sector and individuals?

The following scenarios do not focus solely on the financing questions of social services, but on their adequacy and accessibility in the broader social, economic, technological, political and environmental context.

Figure 2.4 **Model of Drivers Shaping the Future of Pensions and Healthcare**



Source: World Economic Forum

Step two: Identifying driving forces

Once the central question has been chosen, scenarios are built by generating a set of driving forces that are judged to be of great importance in shaping the future. Those forces that are both highly important and highly uncertain – the so-called "critical uncertainties" – are of particular interest in building scenario frameworks and shaping differences between the scenario stories. These drivers are then combined in various ways to produce the scenario framework and, ultimately, the scenario stories (see Figure 2.2).

For this project, driving forces were identified through expert interviews and refined at workshops in Dalian, New York and Milan. The driving forces, superimposed on the scenario model, can be seen in Figure 2.4. How the driving forces play out at the country level depends very much on the starting point and on national characteristics (the "current realities"). Differences among countries in the pension and healthcare space most notably include cultural preferences, expectations, legacy pension promises and historical forms of financing (pre-funded or PAYG).

Above we provide an overview of the major driving forces. The list is not exhaustive, and it is important to bear in mind that the forces are not mutually exclusive but may dynamically interact. Further details about these driving forces can be found in Appendix B.

Selected Driving Forces

Social drivers

Demographic shifts are regarded as a major driver of the scenarios, as population structures change with the ageing trend. While the future demographic structure of most nations is regarded as fairly stable across all scenarios, the impact of this structure varies from country to country and has different effects in different contexts. **Urbanization** is likewise considered to have major impacts on the future of pension and healthcare financing and is also regarded as fairly stable across all scenarios.

Another important social driving force is the **role of families in social welfare**, which has the capacity to shift substantially based on trends in social cohesion, the mobility of people and the relative availability of formal and informal sources of care. A final major social driver, which can be considered a deep cause of **"changing attitudes of individuals, employers and families towards retirement and health"**, is the level of knowledge regarding financial and health issues among individuals. Experts consider this key to determining behaviour in terms of savings, investment and preventive health measures.

Technology and innovation drivers

Medical innovation and/or new technological applications could increase either the cost or the efficiency of healthcare intervention. In addition, participants considered **innovation in financial services** as important given the changing needs of pension and healthcare systems in different scenarios.

Economic drivers

Economic performance (at both the global and country levels) and **capital market performance** (of all kinds of assets, such as pension fund portfolios, that can be used to create wealth and finance retirement) are key influencing factors, both in terms of available public funding and the potential effects on politics and society. Considered of particular importance, and represented as a separate driver at both the global and country levels, is **income and wealth inequality**.

Environmental drivers

The influence of **climate change and environmental degradation** was raised by participants as a critical driver, as were **changing patterns in infectious and chronic diseases**.

Political drivers

Pension and **healthcare reforms** are two key drivers of public policy at the country level as governments can drastically change regulations and incentive structures. In addition to the **changing role of governments in social welfare**, other political drivers considered at the country level were **labour markets and education reforms**.

Step three: Considering critical uncertainties

Critical uncertainties are drivers that have both high impact and high uncertainty. Among the various drivers, it was generally agreed that the demographic structure of societies in 2030 was likely a "predetermined event" in most futures, barring a major global pandemic or war. However the other drivers listed were regarded as critical uncertainties, as they represented high-impact forces that could have a wide range of possible values in 2030.

Step four: Constructing scenario frameworks

Some scenario projects arrive at differentiated futures by developing their frameworks based on a limited subset (typically two) of critical uncertainties, which are then plotted on a two-by-two matrix to produce up to four scenarios. This methodology is known as the deductive approach, and its advantages include forcing differentiation between the scenarios and communicating simply the essence of those differences in a matrix format.

However, the scenarios depicted by the Financing Demographic Shifts 2030 project were developed by using an inductive approach. These scenarios emerged from discussions between experts about challenging combinations of a larger number of critical uncertainties, in this case between six and eight. An inductive approach allows the resulting scenarios to take a wider variety of driving forces into account in the initial building process, and makes it possible for a diverse group of stakeholders to more rapidly generate multiple scenarios, with the most challenging ones then chosen for further development.

Although these scenarios were developed inductively, it is possible to capture the main distinctions between them in a two-by-two matrix. Many readers may find such a diagram helpful as it allows them to quickly differentiate the core scenario characteristics.

For the Financing Demographic Shifts 2030 project, such a matrix can be defined by the following focal questions:

- **Will global and national economies be shaped by high economic and financial performance or low economic and financial performance?**
- **Will the dominant social norms in relation to pension and healthcare financing be characterized by individual responsibility or collective accountability?**

Figure 2.5 **Matrix overview of the scenarios**

Step five: Developing scenario stories

Over the course of numerous workshops, interviews and expert consultations, the frameworks above were developed into three distinct scenario stories.

The Winners and the Rest: A world where high global growth delays the financial consequences of the demographic crisis. Fiscal prosperity allows governments to maintain existing social security systems, which they do as a matter of political expediency. As inequality rises, however, these systems are seen as increasingly inadequate. The ascendant norm of individual responsibility enables more successful individuals to separate their lifestyles from those of the poorer majority to an ever-more extreme extent.

We Are in This Together: A world distinguished by a concerted effort on the part of leaders and electorates to rein in growing inequality and reassert the idea of collective responsibility and accountability for social services. In this world, economic growth is moderate. As populations seek to establish diverse, equitable and middle class societies, there is an emphasis on finding innovative, efficient and inclusive ways of managing the financial implications of the demographic shift, including family- and community-based solutions.

You Are on Your Own: A world where recession is prolonged and the fiscal effects of the demographic crisis hit hard. Individual responsibility is forced on many people by the failure of comprehensive social security systems under extreme financial pressure. Struggling to borrow or raise taxes sufficiently, many governments take aggressive measures to push healthcare and pension liabilities onto individuals and private sector enterprises, maintaining only an absolutely minimal role in social security provision for the very needy.

Reading the scenarios

The three scenarios are presented in different narrative forms, looking back from 2030: *The Winners and the Rest* as an article in an opinion magazine; *We Are in This Together* as a panel interview on a public service broadcasting network; and *You Are on Your Own* as an academic paper on the transition to a post-retirement paradigm. The aim of using these narrative forms is to bring each world to life, allowing the reader to be immersed in each future in turn. The stories are intended to be plausible, interesting and, above all, challenging.

While some elements of the stories that follow may strike you as unrealistic at first glance, we ask you to recall that 2030 lies more than 20 years in the future. Take a moment to think back to the late 1980s, and consider the range of rapid and often surprising developments that occurred since then, such as the massive uptake in communication technology, the shift in attitudes towards security, fundamental changes in geopolitics, the strong financial performance of equity markets in the 1990s and the later dotcom bust, the trend towards individualism in many countries, the rise of China and Russia under quasi-capitalist economic models and, not least, the degree of pension and healthcare reforms in many countries.

Inevitably the next two decades will bring a new range of surprises. We hope these stories will help you anticipate some of the possibilities. More importantly, we hope they will inspire you to be a proactive partner in constructing the future of financing pensions and healthcare in a rapidly ageing world.

The Winners and the Rest

The Winners and the Rest

Overview

Economic concerns following the financial turmoil of 2007-2009 prove to be misplaced as resilient emerging economies and robust capital markets power **strong global growth** through the 2010s and into the early 2020s. This prosperity **delays the financial consequences** of ageing societies by reducing the need to embark on painful restructuring. However, there is **burgeoning inequality** both within and among countries, as returns on capital outstrip returns on labour. Hence, the lifestyles of “the winners” diverge rapidly from those of “the rest” around the world. Wealthy elites gain access to **impressive new medical technologies** that remain too expensive for increasingly stretched state systems, while in a country like the US more and more low-income earners forgo expensive medical insurance, widening the healthcare gap.

As rising inequality in developed economies is mirrored in the developing world, most of the poorer nations and the lower middle class in emerging economies are left behind despite strong growth. The situation worsens in the late 2020s as the **economic outlook worsens** and climate change and resource shortages begin to bite. As state pension systems come under **renewed fiscal pressure**, the demographic crisis comes firmly back onto the agenda and extremely divided societies call for change.

China chases rapid growth at the expense of fundamental structural adjustments for sustainability. Wealthy elites benefit, but the middle class emerges only slowly. Few of the benefits of growth trickle down to the poor. Attempts to improve public and corporate governance are only partially successful and structural problems come to the surface as the boom finally slows.

Italy is a prime example of a country where economic success allows politicians to repeatedly postpone the need for hard political choices on pension adequacy and healthcare reform. Italian society grows considerably more divided along numerous fault lines, meaning that when growth falters the demographic problem looks more difficult to solve than ever.

The Winners and the Rest is a world of opportunities for some, but opportunity lost for many more.

SPECIAL REPORT

Making Sense of the "Demographic Crisis"

The Strategist | 9th September 2030

The Winners and the Rest – global perspective

It could be a headline from any news outlet this month: “Experts debate solutions to demographic crisis”. In fact, it is from The Strategist in September 2010, exactly 20 years ago. Experts have had two decades to address the challenge that ageing populations pose to public finances and healthcare services, so why is the issue still making the news? In this week’s special report, The Strategist looks at why the demographic crisis was ignored – and what the future could now hold that it is back atop the political agenda.

A major social challenge fades temporarily from view

Analysts in 2010 were concerned, as we are today, about slower growth and its potential impact on public debt and pension adequacy. Of course, as it turned out, their fears were premature: The economic downturn of 2008-2010 was light and brief, as the resilient BRIC economies returned the world to a path of fluctuating but solid growth. That growth explains why demographic concerns were allowed to fade from view – and also why the economic slowdown of the late 2020s has brought them sharply back into focus.

To be sure, there have been reforms in the past two decades inspired by demographic foresight. Most noteworthy are Germany’s moves throughout the 2010s to shift large sectors of its working population to fully funded, defined contribution pension systems. At the same time, the BRICs helped fuel the remarkable global boom in financial services by implementing or supplementing, to varying degrees, defined contribution schemes for future retirees. And many developed countries established public pension reserve funds, although it appears these will cover only a fraction of their future liabilities.

But most countries with expensive legacy systems – notably Italy, at which we will look in greater depth – failed to face up to the tough choices that long-term demographics now appear likely to demand. Despite rising numbers of retirees, most European nations had just enough tax revenues to sustain their social security systems and service their debts. And their elected leaders had strong incentives to defer any decisions that risked upsetting the PAGs (Pensioner Action Groups), especially after the “grey riots” that swept France in 2014 (see box). PAGs became an increasingly influential political force in the 2010s as volatility in food and fuel prices angered large numbers of elderly people on relatively low fixed incomes.

Yesterday’s problems look harder to solve in today’s world

The proposals that sparked the “grey riots” in Europe look tame in comparison to what might be needed now, not to mention the negative economic and social effects that have resulted from delay. Not only are the economic fundamentals of the present slowdown looking more ominous than they did in 2010, the demographic »

The Grey Riots

The Broussard administration in France was brought to its knees in 2014 as pensioners – many of them veterans of student demonstrations in the 1960s – took to the streets again in the so-called “grey riots”. The government’s public debt was already at crisis levels when localized disruptions in energy supplies led to stock-market turbulence and required the state to bail out a major French employer’s pension scheme. President Broussard argued that all pensioners should be expected to make some sacrifices as part of the necessary fiscal belt-tightening, but in a context of rising food prices the public backlash against even a minor cut in benefits was ferocious.

picture has since grown darker. Labour forces have rapidly declined, with over 20 countries – led by Italy and Japan – now having more than one pensioner for every two persons of working age.

There are other salient differences between 2010 and 2030. The effects of climate change had barely kicked in two decades ago – freak weather events were much rarer then than they are today, and coastal property markets had not yet been plunged into chaos by rising sea levels. Capacity constraints, which are largely blamed for today's troubling economic outlook, have moved from worrisome to dire. Mineral and energy sources in 2010 were far from the critically low levels they are hitting today – industrialized Saudi Arabia, for example, now uses the bulk of its own oil production – and progress towards perfecting alternative sources of energy has been frustratingly slow.

Inequality rises as the middle class splits

Perhaps most significantly, the last two decades have seen a vast increase in wealth inequality. You don't need to study the GINI coefficients to see that recent economic history has been a story of "The Winners and the Rest" – simply witness the security-guarded gated communities and enclosed neighbourhoods that have sprung up across every continent.

Inequality has risen hand in hand with frictional unemployment and job fragmentation, trends which are blamed by many on inadequate investment in education and skills development. Others point to the expansion of information and communications technology, and it is certainly true that the digital divide is as meaningful today as any physical borders. Thanks to near-total global penetration of high-speed Internet, along with smart online services such as semantic search, opportunities for outsourcing have mushroomed. Accountancy, software development, legal services, medical diagnosis and quality control are among the professions that were previously the domain of the skilled middle classes, but can now be done anywhere in the world by modestly skilled workers operating artificial intelligence systems – or, in more and more cases, are automated altogether.

Mervin Drabble's recent bestseller, *"I'm a Creative": The Only Real Career Choice In Today's Knowledge Economy*, illustrates how these technological trends have contributed to a gradual oil-and-water separation of the traditional middle class in the developed world. Some careers that once demanded high levels of skill have seen their relative salaries fall as workers in the emerging world proved they could deliver quality services at a distance. On the other side of the divide, professionals who can demonstrate the kind of creative insight and problem-solving talents that have so far eluded adequate computerization are able to command ever higher fees.

The situation has been exacerbated (or perhaps, as progressives have argued, driven) by the continued determination of some governments to lower taxes, purportedly to maintain high economic growth. This has resulted in reduced funding of welfare policies in the US, the United Kingdom and across most of Asia. Certainly, inequality remains highest in those countries with the least redistributive tax systems, such as the US.

In old age, many face poverty in the midst of plenty

The diverging lifestyles of The Winners and the Rest are starkly visible in old age. Retirement has long since become a lifestyle choice for the "winners" – largely the capital-owning and creative classes, who combine leisure with work projects as they choose. Research by NewLook, a consultancy in five OECD countries found that around 30% of pensioners aged 65 to 75 are working flexibly, with at least a further 20% volunteering. However, the "rest" have far fewer opportunities for a dignified retirement.

The UNDP's recently published *State of the World's Elderly* report for 2030 divides these other retirees into three broad groups. First, there are the expanding middle classes in the emerged economies who have benefited from both technology and outsourcing. With increasing access to a similar range of second- and third-pillar pension schemes, as long as they have saved prudently these workers can expect to retire in adequate material security.

Second, there are growing numbers in developed countries who rely primarily on state benefits and minimal savings to fund their retirements. Worst hit are those workers who spent much of their careers as temporary employees. With inflation eating away at the value of benefits, they can look forward to subsisting in the most basic accommodation and being "warehoused" for efficiency when they grow frail. Counting the pennies as they struggle to cope with volatility in food and fuel prices, they are increasingly unhappy with their lot.

The "Genetic Aristocracy"

Top-end embryo screening firms now offer legally enforceable guarantees that children conceived through their facilities will be immune from a lengthening list of diseases. And as neuroscientists uncover more details about the genes that influence intelligence, at least one firm already offers a money-back guarantee if its children fail to register at genius level on IQ tests by the age of eight. With the latest expensive silicon brain enhancement technology now licensed for implantation in children in a small number of jurisdictions, many analysts predict that inequalities in intelligence will become as great as those in wealth and health within a generation or two.

And third, there are the large numbers who face retirement in the poorest countries – including much of Africa – which have been largely left behind by the global economic advances of the last two decades. Without any meaningful assistance from their governments or access to private schemes, they must rely, as they always have, on themselves and their children.

Governments have, as we know, been aware since well before 2010 that proactive policy shifts would be necessary if the possibility of comfortable retirement was to be spread more widely. But most have not been able to find a politically palatable time for reforms.

Growing gap in sophistication between public and private healthcare

If anything, the effects of inequality on healthcare have posed governments with an even greater challenge than the impact it has had on pensions. Most countries have invested heavily in their public healthcare systems, and many have achieved modest gains in efficiency. Nonetheless, such has been the pace of technological development that the overall trend has been a growing gap in sophistication and expense between the latest cutting edge treatments and those available to the masses.

Today's "winners" can look forward to a healthy old age thanks to headline-grabbing medical breakthroughs, from ingenious gene therapies and nanotechnology treatments to regular check-ups with extremely detailed and individualized wellness advice. To see the impact of the boom in the personalized wellness industry over the last two decades, simply go to a graduation ceremony at an elite university and try to distinguish the students from their parents.

Some of these headline-grabbing breakthroughs have been adopted by state systems. But many have not. And the latest genetic techniques and nanotechnologies are even more niche-oriented and expensive than before, making them available only to the super-rich and then only in a small number of countries that have chosen to capitalize on high-end health tourism by adopting liberal regulatory regimes for controversial innovations. Many analysts believe a "genetic aristocracy" is already becoming entrenched (see box on p44).

As a consequence, the issue of healthcare inequality is attracting serious political attention around the world for the first time since US President Rodriguez (2016-2020) failed to pass his campaign pledge to make genome scans affordable for all Americans (see box). Since then, politicians in the developed countries have generally been preoccupied with the pressure of maintaining existing levels of healthcare service. In the US, this means the country continues to rank 35th in the world on most health outcome measures, despite outspending the average of the other advanced economies by almost 3 to 1.

Despite breakthroughs, the world's poor still lack basic healthcare

In the emerged economies, meanwhile, the booming upper middle classes have been responsible for the growth of lucrative new markets in private healthcare. Unfortunately, both the quality and the reach of remaining state-funded healthcare systems in the BRIC countries have remained low as leaders have invested in other priorities. As discussed in our China deep-dive, most have been bypassed by the healthcare boom. And, as the latest research from the World Health Organization (WHO) makes clear, the same is true for most of the populations of the world's poorest countries, especially in sub-Saharan Africa.

The WHO's conclusions may sound puzzling when you recall such breakthroughs in infectious-disease control as the universal TB vaccine developed in 2013, and the HIV vaccine made commercially available in 2020. But these newsworthy advances have not solved deeper problems, such as the accelerating brain drain of medical graduates and the increased frequency and unpredictability of epidemics as environmental changes become more marked. The structural improvements that would be necessary to underpin universal basic healthcare coverage have also been largely ignored as philanthropists have poured money into medical research.

As governments in 2030 rediscover the demographic worries that preoccupied their counterparts in 2010, we need to face up to some unpalatable truths. Market forces and technological advances have not solved the crisis of unsustainable social services, only papered over the cracks – and the recent slowdown is revealing that those cracks have widened into precipitous chasms. Meanwhile, public policies that favour the wealthy while maintaining legacy systems for political reasons alone have only served to worsen the distribution of pension and healthcare assets around the globe while doing nothing for the long-term sustainability of these systems. Renewed growth came to the rescue once before. This time world leaders may not be so lucky. ■

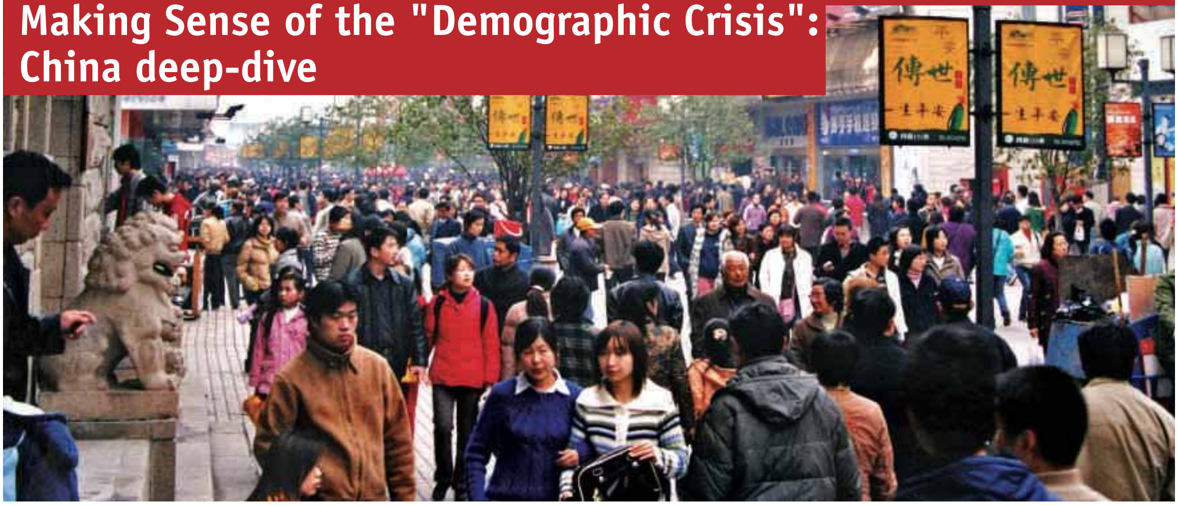
The Rodriguez Genome Scan Plan

In the United States, President Rodriguez was elected in 2016 on a pledge to make genome scans with personalised lifestyle advice available to all Americans within five years. The scans, which then cost around $50,000 as part of personalised wellness advice packages, had already proved their worth in greatly improving states of health. The plan was defeated in Congress, as opponents argued that a focus on making existing technologies more affordable would divert research efforts from the priorities of cancer, obesity and heart disease. New treatments have been developed in these areas, but – along with genome scans – they remain affordable only to a minority.

SPECIAL REPORT

The Strategist | 9th September 2030

Making Sense of the "Demographic Crisis": China deep-dive



The Winners and the Rest – China perspective

When it comes to the challenge of managing ageing societies, the global story of 2010 to 2030 has been one of "opportunities lost" – and nowhere is the cause for regret greater than in China. Even back in 2010, when China had far fewer retirees than today, there were many who argued that the country's growth was obscuring structural problems and that policy-makers needed to do more to lay solid socio-economic foundations for the long term.

China's health gap mirrors its wealth gap

Government health insurance covers catastrophes but, despite some progress in centralizing health records and training rural medical officers, primary healthcare remains of varying and often poor quality. For the middle classes, private healthcare is an aspirational product but relatively few can afford the integrated insurance and treatment options on offer, which include linked networks of hospitals and "wellness clinics" along with the increasingly popular hospices. Meanwhile, wealthy Chinese have access to the best medical treatment money can buy anywhere in the world, and are strongly represented among the new global "genetic aristocracy".

China has had more opportunities to do this than most people would then have predicted – because far from being vulnerable to the global economic slowdown of that era, China was significantly responsible for powering the global economy forward in the 2010s as its domestic consumption took up the slack of falling exports. Until the late 2020s, China averaged a remarkable annual growth rate of nearly 10%. But now, the overheated economy seems finally to be running out of steam, and even China's geopolitical dominance cannot ensure adequate supplies of low-cost energy and natural resources.

Many analysts doubt whether the economic and social fundamentals are in place for China to reinvent itself. The government's recently announced campaign to hasten the transition to a knowledge economy may be too little, too late. And extreme inequality is threatening the social fabric, which analysts say is also being undermined by the growing trend towards private institutional rather than family-based care for the elderly.

The super-rich, the middle classes and the "forgotten" rural rest

Globally, this is a story of The Winners and the Rest – and China's "winners" have won big. According to The Strategist's recently published list of the world's wealthiest individuals, 37 of the top 100 are Chinese. Indeed, demand from China's super-rich elites has been largely responsible for pushing the boundaries of medical research in today's cutting edge virtual "dry labs", notably in such fields as genetic embryo screening and silicon brain enhancement.

But the benefits of the last two decades of growth have been concentrated largely among these privileged few. Their political influence is credited with blocking reforms that might have stimulated a more significant broadening of the middle classes: the complex network of indirect representation mechanisms known as "Chinese Democracy", introduced in 2018, has in practice tended to conflate influence over decision-makers with wealth. According to research by NewLook, the middle class today constitutes a surprisingly small 13% of China's population, the most successful being entrepreneurs with connections to the government and the Chinese diaspora.

Meanwhile the majority of Chinese, especially in rural areas, remain mired in poverty. The much publicized campaign to guarantee "adequate and comfortable living for all" has increased average incomes somewhat, but has not significantly improved the lives of most.

And it is not only because they have been left behind in relative terms that the rural poor feel "forgotten" – they are also most vulnerable to the water shortages, droughts, crop failures and heat waves that are becoming evermore serious as climate change worsens.

A particularly potent source of anger among many poor Chinese is the ability of the wealthy to command top-quality healthcare, which they see as diverting medical resources away from basic care for the needy (see box on p46). The goal of universal basic healthcare was announced with great fanfare, and inter-provincial differentials have been reduced somewhat; but the system remains patchy and inadequate, with especially significant differences at the county and township level.

Only a minority can face old age with confidence

As with quality private healthcare, only the super-rich and some in the relatively small middle classes have benefited from products such as private pensions and life insurance, which are now on offer in the Chinese financial services market. The government's reforms to the financial system in the early 2010s, which integrated it globally and facilitated collaboration with foreign providers, were justifiably praised – but still, the possibility of accumulating assets is far beyond the reach of the majority of Chinese workers.

Like the healthcare system reforms, the push for universal pensions was also much-heralded, but it has suffered from a lack of leadership in tackling difficult issues of decentralization (see box). The ambitious plan to achieve national pension portability seems to have stalled indefinitely at the regional level, while the problem of unfunded pension schemes has never been fully addressed. There are still many workers who are not reached by social pension programmes, and benefits are inadequate for many who are.

Critics argue that what little progress has been made in improving social security represents no more than the bare minimum necessary to prevent more significant unrest among the rural poor. Nervous about endangering prosperity or provoking the wealthy, China's politicians have lacked the appetite for raising the tax burden to improve benefits for future retirees. And occasional suggestions that future benefits should be improved by compromising those of existing pensioners have been strongly resisted by what is known in Chinese democracy as the influential "silver voice".

Younger politicians are right to be concerned

Over the last 12 years, China's unique version of democracy has gained widespread acceptance and delivered relative stability, and even critics concede it has gone some way towards improving the quality of the country's governance. But much remains to be done, and a growing number of younger Chinese politicians privately admit to concerns that their country may soon pay a price for failing to pursue structural reforms more boldly in the last two prosperous decades. They worry that corruption remains a significant problem; that there has been only limited progress in attempts to streamline complicated and overlapping bureaucracy at the ministry level and harmonize laws and regulations among the provinces; that the relaxation of the one-child policy has not increased the birth rate enough to improve the demographic structure, leaving the ratio of productive workers to retirees dauntingly low; and that a lack of attention to preventive healthcare has put in store a costly chronic disease crisis.

They are right to be concerned. As China's economy heads for a painful correction, it will fall to the new generation of leaders to implement structural reforms that should have been attempted long ago in a society that has since become more atomized, unequal and old. ■

Pension choice is impressive – if you can afford it

Retirement is a lifestyle choice for wealthy Chinese, and the middle classes have grasped new opportunities provided by the market to plan for their futures through second- and third-pillar saving schemes. However, the great majority of Chinese rely on state provision, where there has been only piecemeal progress: Universal pension benefits at age 65 apply only in the urban areas, and mandatory defined contribution pension schemes do not cover much of the working population. One consequence of the patchwork pension system has been migration among the elderly to live in areas that offer better benefits, although options are limited as pensions are portable only on a regional basis.

SPECIAL REPORT

The Strategist | 9th September 2030

Making Sense of the "Demographic Crisis": Italy deep-dive

The Winners and the Rest – Italy perspective

In its recent report, NewLook named Italy as the country most damaged by policy stagnation with regard to ageing societies. "Venture beyond the comfortable and secure gated communities of the well-off, which are now marked features of the suburban landscape from Milan to Naples," they wrote, "and you will find an Italian society that appears to be rapidly fragmenting. Southern regions continue to lag far behind their counterparts in the north. Hard-pressed second-tier workers are vocal in their resentment of subsiding generous payouts to previous waves of retirees, while having less to look forward to themselves."

Ironically enough, Italy's current troubles have their roots in the country's economic success since 2010. As the world came to terms with higher commodity prices and market confidence returned, Italy was among the leading beneficiaries of renewed growth. Newly wealthy elites from fast-growing economies proved keen to pay ever-higher premiums for custom-made luxury goods embodying traditional Italian virtues such as craftsmanship and style. This supported the country's many small and medium size enterprises, rewarding innovation in both design and branding.

Falling pension adequacy, rising inequality

This benign economic climate, however, meant that successive governments largely ignored the social impacts of the pension reforms of the 1990s and early 2000s, while blocking possibly beneficial adjustment measures for fear of "reform fatigue" among the Italian population. In particular, stable GDP growth and fiscal solvency allowed the Italian Treasury to decide it could maintain the legacy public pension system while doing little for the post-boomer generation that is now beginning to retire. The one area that has been meaningfully restructured is the educational system, with reforms in 2016 and 2024 aimed at better preparing Italian graduates for the global marketplace.

As a consequence, the purchasing power of Italian pensions has quickly eroded. Inflation, a persistent problem as Italy's economy powered ahead, has negatively affected pension adequacy despite price indexing. But even more threatening are the growing societal concerns about rising pension inequalities among and within generations (see box). Italian governments have tried a range of measures to dampen public discontent about the "two-tier" society, with limited success. For example, the recent half-hearted attempts to limit executive salaries have proven ineffectual, due in part to the global nature of most major Italian employers today.

Pension inequality mirrors the broader trends towards income and savings inequality, which has rocketed among and within Italy's regions since 2010. The North-South divide, already troubling, has widened further. And a growing gap has emerged between the highly

Public pensions: even less adequate than feared?

With its pension system largely unreformed since coefficient adjustments were abolished in 2018, Italy's government has continued to pay state pensions at historically high levels as a percentage of GDP. However, in purchasing-power terms these payments are increasingly seen as inadequate and unsustainable sources of retirement income, especially as prior reforms now mean even lower benefits for new retirees. As Italian society becomes ever more starkly stratified, lower income pensioners see their real incomes from state benefits falling further behind. The "grey riots" which broke out in Palermo and Naples earlier this year look likely to grow more common.

educated and the rest of the workforce, in terms of earnings as well as pension and healthcare provision.

The healthcare divide in Italy

The divide between The Winners and the Rest in Italian society is starkly visible in healthcare (see box). In line with global trends, the health status of top-quartile earners has increased markedly as wealthy Italians have been able to afford the innovative medical treatments that have come onto the market in the last two decades. But, due to the overwhelmingly cost-increasing nature of most new medical interventions (most of which require significant co-payments), the less wealthy have far less access to the most effective treatments. As a consequence, chronic diseases are particularly acute among low-wage earners in Italy, and wait lists for the most popular targeted interventions often exceed the life expectancies of the waiting sufferers.

The health situation is especially challenging in southern Italy, where the burden of chronic disease is compounded by heat waves and tropical diseases blamed on climate change. Furthermore, many hospitals and elderly care facilities, stretched to the limit by demand, are struggling to meet government standards while commonly prioritizing care for the younger elderly over the old old.

Labour shortages are challenging the elderly care sector

As the elderly care sector is heavily reliant on migrant labour, it is suffering especially badly from the labour shortage that has hit the Italian economy as immigration flows have fallen over the past five years. Economists predict this trend will continue as wage differentials between Italy and the countries of those the Italian government has categorized as "preferred migrants" continue to decline. With the cost of elderly care rising rapidly in response, the Italian economy seems to be finally paying full price for its populist regulations and restrictions on migrant workers, which were progressively enacted throughout the 2010s.

The labour shortage now looks sure to exacerbate the effects of the post-2025 slowdown on Italy's economy. Public finances are once again under pressure, as the savings envisaged from earlier pension reforms are eroded by specific government programmes for means-tested payments. And with a new generation of pensioners facing up to the reality of retiring on substantially lower benefits, intergenerational inequality is back on top of the political agenda.

Tough times ahead

High levels of inequality, an economic downturn and inadequate public benefits spell disaster for the current government, and indeed for the outlook for Italian society in general. Only last week, for example, a coalition of Italian trade unions announced a high-profile campaign for a return to defined pension benefits, and opinion polls say 68% of the Italian public supports them. As the NewLook report rightly concludes, "Italy's new government certainly has its work cut out". ■

Public systems struggle to contain health crisis

Through privatizations and numerous other reforms, successive Italian governments have attempted to improve the efficiency of the state-funded healthcare system. But many of the most effective new treatments are still too expensive to be rolled out. Efforts to stem the rising incidence of chronic disease through "wellness" initiatives have not had a significant impact on health outcomes beyond the middle and upper classes. With the economic outlook bleak and public funds tight, the chances of reviving Italy's struggling public healthcare system seem slender.

We Are in This Together

We Are in This Together

Overview

A global recession from 2011 to 2013 helps provoke a worldwide **backlash against extreme wealth inequality** while the effects of climate change and a major pandemic solidify a **sense of global interdependence**. Electorates demand more responsible and far-sighted leadership. Progressive governments renew their commitment to **universal social security and healthcare**, simplify and harmonize tax systems to distribute wealth more equally, and encourage a back-to-basics approach to healthcare.

In their search to reduce inequality and find efficient and inclusive ways of managing the financial implications of ageing societies, governments place more emphasis on supporting **community-based initiatives.** Through knowledge-sharing schemes and new incentive structures, leaders guide partnerships between the public and private sectors to deliver health and elderly care services more efficiently. However, **public debt remains a serious concern** due to high levels of spending.

China reaps the rewards of bold and visionary leadership in improving and streamlining its governance. The government sets out to manage risks at the national level while devolving implementation to individuals and communities, strengthening family structures. It has considerable success delivering standardized basic care and pension systems equitably across the entire country.

Italy, increasingly aware of rising inequality, proclaims a progressive commitment to the ideal of social welfare and finds the motivation and mechanisms to keep this ideal alive. Simpler taxation, a drive to integrate immigrants into Italian society, and community-based innovations all play their part in keeping public debt just below critical levels as Italy makes tentative steps towards becoming a more heterogeneous and equal society.

We Are in This Together is a world where demographic challenges are collectively and effectively, though not perfectly, addressed.

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We Are in This Together – global perspective

Announcer: You're streaming the Joint Educational Broadcasting Network, a collaboration of public service broadcasters and the World Wikiversity Alliance. It's 13:00 hours Zulu time on Monday 9 September. And now Thinkforward_Thinkback with Emilia Leffel.

EL: Hello. On today's edition of Thinkforward_Thinkback, we look at how the world has handled the impact of ageing societies. I'm joined by Sulakshana Janardhan, Secretary-General of the International Future Funding Institute; by Francesca Secolo, the former Italian Minister for Community-based Initiatives; and by Chen Shangbin, former Director of the China Solidarity Fund. Welcome to you all.

Sulakshana Janardhan, for the benefit of those who don't know, what exactly is the International Future Funding Institute (IFFI)?

SJ: Thank you and good afternoon. The IFFI was set up by the World Bank in 2020 to, in technical terms, act as a guarantor of securitized pension liability transactions at the macro level. To put it more simply, we help nations manage the financial burden of ageing in a socially just and equitable way. For example, we provide a framework that allows countries with lots of young people to help meet the pension payments of older countries, in return for capital investment. We also manage the regulation and exchange of the inter-industry swaps used by over 10,000 global companies, local governments and private funds to manage their exposure to demographic risk.

The origins of the IFFI can be traced back to the changes in global politics set in motion by the Great Recession of 2011-2013. In particular, the IFFI's mission is rooted in the political philosophy of Dr Zelma Petrovich, which I'm sure will be familiar to most of your listeners. Her book, We Are in This Together: Recognizing Our Common Humanity to Safeguard Our Future, remains, to my mind, the single most influential work of the 21st century.

In the early 2010s, when Petrovich wrote, people were just starting to figure out how to transform the online communities of the early Internet era into forums for real-world action and true community behaviour. Flashmobbing was becoming a mainstream group-building channel. Local networks based on early wireless technologies were bringing neighbours together – first virtually, then physically. It was Petrovich who first set out how the power of these grassroots initiatives could be both liberated and leveraged through government incentives to help tackle a whole range of issues, from international development and climate change to healthcare and pension provision.

Petrovich's genius, of course, was her ability to persuade people to think beyond the old "left-right" divide. She made us understand that the economic drivers of the modern world are entirely compatible with the kind of inclusive and community-focused societies we all, if we're honest, want to live in. She redefined government as being a catalyst for harmony and mutual support which supported redistributive measures without being overly intrusive, and her insights spawned a new school of political science that heavily influenced international law and local politics around the globe, including the founding of new institutions such as the IFFI.

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EL: For our younger listeners, can you quickly remind us how the global landscape looked before Petrovich and the Great Recession?

SJ: Well, as you know some historians refer to the Great Recession as the Global Realization, and there's truth in that. In economic terms, India and China saw the greatest shocks in terms of temporarily stalled growth; in India's case because of energy capacity constraints. But the psychological effect of the downturn was undoubtedly more profound in the old industrialized countries, particularly the US and Europe. Despite attempts by central banks and governments to limit the damage, the resulting poverty – especially among the elderly – shocked many and contributed to a re-evaluation of social priorities.

You must remember that back then wealth inequality both within and among countries was much more extreme than it is today. Astonishingly, in 2010 the GINI coefficient – a standard measure of income inequality – averaged close to 35 in the industrialized countries and was even higher for the developing countries. Of course, that was politically and morally untenable. The existence of super-rich elites had been only a marginal political issue while economic growth remained healthy, but social justice and redistribution came firmly back onto the agenda as the recession took hold.

And, as if the recession wasn't enough, three other factors intervened to demonstrate our global inter-reliance. First, the "pig flu" pandemic of 2013 exposed the limits of our ability to predict global risks; you may recall that most of the world's public health officials had focused on the risk of avian flu in China. Few suspected a deadly virus might migrate from pigs to humans in North America. Second, climate change was becoming harder to ignore, with serious weather disruptions affecting food prices even as aggregate demand fell. Finally, dwindling fossil fuel resources made everyone realize the need for local and international communities to cooperate on both alternative energy sources and distribution channels. In this environment, the world was ready for Petrovich to provide an intellectual framework to support the required shift in mindset from individual to collective responsibility for our shared future.

And so, through the 2010s progressive governments came to power around the world. One top priority was simplifying and harmonizing tax and financial regulation systems and collaborating to stamp out the menace of "tax havens". Many of the extremely wealthy bitterly opposed the reforms, but as the e-government revolution (see box) led to an upsurge in civic engagement, the bulk of industrialized electorates strongly supported the need for greater togetherness in the face of global challenges. Opposition gradually ebbed away as economic growth continued to pick up and it became clear to everyone that incentives for effort and enterprise had not somehow disappeared. Thus, we've seen a significant compression of wages around the world that has also contributed greatly to social and racial harmony.

E-government and community civic engagement

The Secure Governance Protocol (SGP) of 2014 was an achievement of great technical complexity but one that also had far-reaching social consequences. By making it possible for online elections to be held without fear of fraud, the SGP laid the foundations for a resurgence of civic engagement. As it became commonplace for citizens to receive in their inbox regular invitations to vote on matters of local governance, more voters developed a sense of involvement in their local communities. A willingness to pay higher taxes to have quality services delivered locally – including healthcare and care for the elderly – has been a common consequence.

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EL: Let's talk about the impact of this new mindset on the healthcare sector.

SJ: Well, Emilia, the shock of the pandemic naturally had enormous ramifications – but not in the negative way many had feared. Thankfully, the careful handling of the crisis by the WHO and national health ministries prevented paranoia from taking hold. Indeed, it actually reinforced the togetherness ethic as it was made very clear to everyone that improving basic healthcare standards in poorer countries could help prevent the spread of another devastating pandemic. It also led to the establishment of coordinating mechanisms for health aid, which did much to increase the effectiveness of vertical, or targeted, health programmes in improving overall health in the developing world.

This was also the time when the governments of developed countries realized with considerable embarrassment that they would fail to meet almost all of the Millennium Development Goals set for 2015. They grew determined to renew their commitment to structural aid and community support. You could argue that despite the tragedy of the pandemic, it generated considerable gains for the developing world in the shape of the marked improvement in healthcare coverage.

Of course, in the developed world, it was the FF21 superbug which had the more immediate impact. As you may recall, many health systems were under such enormous strain from the flu pandemic that they were entirely unprepared for the emergence of the deadly and highly drug-resistant FF21 mutation. The combined effects of the superbug and the pandemic led governments to a "back-to-basics" approach in public healthcare, focusing on efficiency in delivery. This made considerable savings in health spending possible, when combined with newly integrated thinking about the complementary roles of preventive care, insurance and hospitals. In the US, it was also a key catalyst for extending Medicare to the whole population.

On the subject of preventive care, the new togetherness ethic opened up interesting opportunities to reframe social norms around healthy lifestyles. Public information campaigns successfully portrayed unhealthy lifestyle choices as selfish, because it would fall to others in the community to pick up the future healthcare bills. This also paved the way for social taxes on high sugar and cholesterol foodstuffs. Nowadays, most people see eating so-called "junk food" as no less socially irresponsible than smoking.

The worldwide wellness monitor initiative

More than 540 million wellness monitors are currently in use around the world, enabling the global population to keep tabs on health indicators including blood pressure, cholesterol, blood sugar and oxygen levels. In 2017, the World Health Organization partnered with a group of leading healthcare providers to develop worldwide wellness monitors (WWMs) which were extremely robust, dust-proof, water-resistant and easily rechargeable using renewable power sources. Many consumers in developed countries coupled their own purchase of a home wellness monitor (HWM) with a financial contribution towards the purchase of a donated WWM and training for a community health worker in the majority world. HWMs are now nearly universal in wealthy countries, and most villages or neighbourhoods in the developing world have a WWM.

In the drive for greater preventive health, governments embraced a range of community-based activities and education schemes to promote well-being. There was also a major push to democratize healthcare technology. Thanks to funding from government agencies and the promise of mass markets in the developing world, medical companies focused on developing accessible, distributed healthcare technologies that could be used by almost anyone, such as the wellness monitor (see box on p55). This helped offset the effects of the declining labour force in the health sector, as of course did universal access to the online Global Health Record Network.

The togetherness ethic can also be seen in the public's remarkable willingness over the last 10 years to donate their spare computer processing power to crunch data for the Public International Genetic Research Project. As well as making personalized wellness advice more accessible, the project's database of genome profiles has contributed greatly towards our understanding of epidemiology.

EL: **But, of course, the fact that better healthcare promised us a longer lifespan was one of the reasons the IFFI became necessary.**

SJ: Exactly. Governments soon realized they needed long-term solutions to make quality elderly care sustainable, and so they mounted a major international campaign to make clear the link between better healthcare, longer lifespan and the need for new financing models. As inclusive reforms were supported politically, countries continued to move towards defined contribution or notional defined contribution schemes for future retirees and adequacy guarantees for those in low-income brackets, in many cases supplemented by community pooling. Globally, citizens were encouraged to contribute to second- and third-pillar pensions schemes. And more and more governments entrusted their public funds to private financial services companies, albeit with strict regulations about risk exposure.

However, despite these reforms, huge and troubling liabilities remained from legacy systems. Industrialized countries looked to the future and saw long retirements of aged populations, and corporations and pension funds saw their liabilities increasing along with rising life expectancy. On the other hand, the economic powerhouses in the developing world were hungry for investment to realize their growth potential, and healthcare companies saw massive opportunities in providing care for the elderly. Thanks to the foresightful leadership of 2020, the IFFI was established to take advantage of these synergies.

EL: **How has the IFFI improved options for pension financing?**

To date, we have enabled cross-country and cross-industry pension swaps totalling in excess of 300 trillion euros. But, more than that, we have acted as champions and regulatory facilitators for innovative new financial products, many of which bundle pension and healthcare services to provide comprehensive and comprehensible old-age planning solutions. For example, we championed the growth of the "generation link" model, which first gained prominence in France in 2018, where elderly care facilities are combined with community childcare facilities, and the "old old" are often cared for by more recent retirees.

We've also been instrumental in urging the adoption of workplace participation incentive schemes that encourage immigrants, students and the elderly to be accepted as productive members of the workforce, and we've supported the move towards compulsory parental leave for both members of a child-rearing couple, a trend which has done so much for gender equality in the workplace.

Another IFFI-supported scheme that has been much in the news recently is the growing trend of large-scale retirement communities for pensioners from the developed world being established in developing countries (see box). Of course, this policy brings economic benefits to the recipient countries as well as to the migrating retirees. I expect these retirement communities to become an increasingly popular choice as the first wave of "bridge generation" retirees comes to terms with the combination of lower state benefits and increased life expectancy.

EL: **Finally, what are the challenges facing the IFFI going forward?**

SJ: Well, we've by no means solved the demographic crisis yet. Despite everything the IFFI has done, the best efforts of governments and steady global economic growth, public debt is still higher than we would like. Indeed, it is actually on the rise in many countries as growing longevity puts pressure on public assistance schemes for the least well off.

And although the rise in global sentiment of community solidarity has of course been a very welcome development, its effects are not uniformly positive. Immigrants who boosted the workforces of developed countries have been well integrated into many societies, but in some countries we have seen a distressing degree of ghettoization. The way that marketing campaigns by multinational companies have sometimes stressed tribal or nationalistic identities as a way of penetrating new markets makes me concerned about the depth of global sentiments of togetherness.

Likewise, I see the concentration of creative professionals in certain cities and communities – the so-called "spiky world" – as a mixed blessing. Most analysts agree these clusters of innovation have boosted economic growth, and that an open and inclusive attitude towards migration and diversity have been the keys to their success. But there have also been signs of rising discontent within richer communities that subsidize poorer ones through the tax system. We need to remind people of the huge negative externalities of inequality, and the massive gains in economic and social harmony that have been made through the community-focused and inclusive approach to governance that has developed around the world.

Nonetheless, we have come a long way in the last two decades. The world has risen to the challenge of finding new ways of managing demographic shifts. Although certainly not perfect, they are at least workable and fair. And the kind of innovative, cooperative endeavours being championed by the IFFI make me cautiously hopeful that we will continue to succeed.

EL: **Sulakshana Janardhan, thank you very much. After the break, we'll hear from Cheng Shanbin what has happened in China since 2010.**

Retirement migration

Developed countries had long been importing workers to support their ageing populations. It was only logical for them to look at exporting pensioners instead. With structural aid having stabilized many developing countries politically, and the International Future Funding Institute providing financial guarantees and technical support to enable long-term planning, the 2020s saw many developing countries establishing "grey towns" designed entirely to accommodate populations of retirees from countries in the industrial world.

We Are in This Together – China perspective

EL: And now, for a Chinese perspective, let me turn to our second guest. Cheng Shanbin directed the China Solidarity Fund from 2019 to 2029 and now serves as an adviser. Cheng Shanbin, how has China changed since 2010, and why?

CS: Well, Emilia, I would say China has become a more cohesive society with more equality and a greater sense of solidarity among all population sectors, including the generations. And although we lost some of our low-cost manufacturing edge as we improved worker rights and pay, we have made considerable progress in transitioning towards a more knowledge-based economy and spreading the benefits of prosperity more equitably.

I believe we have become more willing to make sacrifices for each other – as seen, for example, by the popular acceptance of the idea that the state retirement benefit age needed to be raised to 65 for men and 60 for women as part of the price of extending quality pension coverage to the entire population. And we have managed to extend traditional family ties to encompass broader notions of community, not least because so many "baby boomer" retirees are helping with community schemes such as caring for children and the frail elderly, and in the process are passing on their traditional Chinese values to the rising generation.

As to what inspired these social shifts, you mentioned the phrase "Global Realization" to describe the Great Recession of 2011 to 2013, and that is certainly apposite in China's case. Chinese people were shocked by the fragility of the progress we had made in the previous two decades. Amid the turbulence and confusion – and struggling, of course, to cope with the burdens of the pig flu pandemic and the FF21 superbug – the government responded to public concern by expressing a strong determination that China's people should pull together and seize control of their own destiny.

This proved to be an astute judgement of the public mood. Under the slogan "higher greatness from societal contribution than personal wealth", we renewed our commitment to building a harmonious society. Our core principle was to manage risks at a national level – notably through the China Solidarity Fund, the body I chaired – while creating incentives that encouraged taking responsibility for social services at a local level.

EL: What was the China Solidarity Fund created to do?

CS: The China Solidarity Fund was created in 2013 under the jurisdiction of the so-called "super-ministry" – the Ministry of Solidarity and Social Security. Our mandate was to streamline the jurisdiction for financial services related to social security and retirement, which had been fragmented among the different ministries and provinces. Our initial funding came from the central government, from the decision to decrease the government's foreign exchange reserves, and from the China Investment Corporation's investment portfolio. I am proud to say that by working closely with private sector, we were able to deliver on our ambitious pledge to underwrite a nationwide safety net for the elderly and ill within ten years.

The determination and vision necessary to achieve such advances as allowing public pension funds to be pooled and making pension benefits portable across the whole nation (see box p59) were colossal. For a start, we had to overhaul the old household registration system – a task many said would be impossible. But by setting a clear vision and pursuing it with unwavering persistence, we surprised everyone by completing the job in just over a decade.

Two factors were key. The first was our success in creating a cadre of enlightened administrative leaders committed to the broader goal of improving governance by drafting unambiguous written rules to bind decision-makers. Crucially, this cadre of leaders had already gained a cross-ministerial approach by being exposed to work in several different ministries.

The second factor was our use of the Internet. We engaged the public in our anti-corruption campaign by decentralizing access to information. Communications technology was also crucial in empowering communities to take responsibility for the delivery of services such as hospital care, hospice care, child care and education, often in partnership with the private sector. We may not have practised e-democracy in a way other countries would recognize, but we found our own ways to fuse virtual and physical communities to build a strong civil society.

EL: How has China tackled its demographic issues?

Let me start with education – a sector which has been transformed by China's e-revolution. Our national online education service, using some elements of the Wikiversity model, helps teachers deliver the mandatory twelve years of high-standard schooling to every child, and has popularized the idea of flexible lifelong learning. Of course, financial planning is central to the curriculum, with education about both incentives and the options for the second- and third-pillar savings schemes made possible by our careful restructuring of the financial markets.

Countrywide and fully portable pensions

Thanks to the simplification of the regulatory regime, pensions are now fully portable across China, universal coverage guarantees minimum welfare levels and there is a wide range of private investment opportunities. Payments into defined-contribution pension funds are mandatory for individuals and corporations. Funds are pooled nationally and consolidated with the China Investment Corporation. Initially run entirely by the government, these pension funds are now largely run in partnership with commercial providers. Overseas companies may penetrate the market only on condition that they offer products in poor rural areas and transfer knowledge by training Chinese middle managers.

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Through credits to their health savings accounts (see box below), we reward people for completing healthcare awareness classes and exercise courses. We have also improved the nation's health by imposing punitive taxes on the junk-food industry, reversing its troubling growth. The incentives we have offered mean that China has been at the global cutting edge of innovation in healthcare technologies which deliver better outcomes at lower costs, like the worldwide wellness monitor (see box on p55). And I am gratified to see the growing international interest in Chinese traditional medicine, supported by a regulatory system that allows greater consumer confidence.

When people do need treatment, they can access their centrally stored medical records securely through any approved doctor's surgery using their China Health Card – a biometric identity system, the world's first, which we rolled out in the mid-2010s. This has had many benefits. Apart from making it easier for workers to move between provinces, it has held healthcare costs down by avoiding duplicate diagnosis and treatment and making it easier for people in rural areas to access high-quality health advice remotely.

EL: **And in your new role as an adviser, what further challenges remain?**

CS: Naturally, Emilia, there is always more to achieve, and I don't want to paint too rosy a picture. Living standards and health outcomes in rural China still lag behind those in urban areas, although the gap has narrowed substantially. And in the process of trying to close that gap, amid some global economic volatility, the government has occasionally been in danger of tolerating an excessive increase in public debt as we struggle to achieve the right balance between savings and consumption. But I believe our bold leadership has put in place economic and social fundamentals that leave China well positioned for the future.

Healthcare system delivers quality and choice

China's healthcare system combines a traditional, holistic approach with evidence-based diagnosis that takes account of individual risk factors. Comprehensive state social insurance covers both primary and catastrophic care, and guarantees a basic level of health service that is relatively consistent across different regions. A mandatory copayment system of tax-exempt health saving accounts for those earning more than a basic income gives individuals greater control over their healthcare spending.

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We Are in This Together – Italy perspective

EL: Finally, I'm delighted to welcome Francesca Secolo, minister for community-based initiatives from 2014-2020 in Italy's Barazzo administration. Francesca Secolo, how do Italy's social security and healthcare systems differ today from 2010?

FS: Good afternoon. I would say that, unlike in the US, Italy's system hasn't fundamentally changed its underlying values. But there is no doubt that today it is much more effective at delivering adequate funding and healthcare for the vast majority of the population. What has changed is the attitude of Italians in the way we think about healthcare.

Like many countries in 2010, Italy was in a state of flux. For us, the economic downturn between 2011 and 2014 led to a surge in populism at both ends of the political spectrum. The right gravitated even more towards a platform of anti-immigrant sentiment – as the popular belief at the time was that migrant workers were taking the jobs of native Italians. The left, influenced by the trade unions, demanded the government guarantee wages and benefits, without any real appreciation of the costs involved and the knock-on effects on the Italian economy.

Meanwhile, progressive politicians such as myself became bolder in our willingness to take up the challenge of strengthening the financial sustainability of Italy's social security system in an economically harsh environment. On the one hand, we listened carefully to the Italian public's demands for a high-quality social security model, but we also realized this had to be done in an economically rational way (see box below).

A revised pension paradigm

Following the reforms of the mid '00s, the first significant shift in the Italian pension system came in 2012, when the Barazzo government promised to find ways to help the next generation of retirees adequately save for retirement. Of particular concern was ensuring that workers with nontraditional employment histories would be guaranteed a sufficient pension. The government's plans also included a range of new incentives for private pension saving, focusing on flexibility and tax advantages. These new costs were financed by taxes on the extremely wealthy in Italy, assisted by the global tax-haven agreement signed by Italy in 2014.

In addition, a concerted effort was made by both the government and the private sector to increase formal-sector workforce participation at all levels of society, both to address labour shortages and to increase tax receipts.

Coupled with emerging forms of community-owned support for young children and the elderly, as well as increasing numbers of elderly remaining in the workforce, these policies have driven a new pension paradigm in Italy that is both fair and fiscally sustainable.

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Dr Janardhan alluded to the conceptual framework provided by Zelma Petrovich, whose mother was Italian, which may explain why so many Italians were quick to share the values she espoused. Many of these sentiments of community and togetherness were rooted in Italian tradition but had been eroded by changes in lifestyle and growing wealth. A desire to create a new paradigm for community action was a crucial factor behind Prime Minister Barazzo's landslide win in 2014.

Another fundamental paradigm shift during that period was the change in attitude towards migrant workers. Around 2014, the general feeling was that hostility to immigrants had been taken to unacceptable extremes. People also realized that Italy's economic growth and the financial sustainability of its social security system depended heavily on migrant workers. We won widespread support with our ambitious pledge to forge a "new Italy", which included a drive towards greater equality among Italy's regions as well as promises of integration and a path to citizenship for immigrants. Not everything worked, of course, but it was a great time to be in politics.

EL: **What else was on your policy agenda in 2014?**

Domestically, we were committed to finding innovative ways to realize the ideal of universal access to adequate social services. Italy, like other European countries, had been hard hit by the FF21 epidemic in 2013, and our new healthcare policy focused on efficiency and value for money for all users of the health system. The incentive structure we devised has given rise to a new generation of technologies and mobilized human resources to provide higher quality care at lower costs.

A major part of our approach was solving the cost issues related to decentralization by empowering local health authorities in partnership with community initiatives (see box below). Thanks to the policies my government initiated, every Italian home is now connected to the Global Health Record Network, and has real-time access to automated diagnosis, health advice and emergency services.

EL: **This must have been an expensive public health policy, especially during an economic downturn.**

Absolutely, the cost of these adjustment measures and new policies was a major challenge for our government, but also a positive challenge. To raise the funds for new social programmes, and heal the social divisions caused by inequality, we needed to simplify the taxation system. We were greatly helped in this regard by our collaboration

Local preventative healthcare reduces regional disparities

Since 2010, Italy has further decentralized its state healthcare system and has pledged to focus on improving quality and efficiency, with strong incentives for national and regional knowledge-sharing. Thanks in part to experiments with public-private partnerships, the Italian government has had some success in improving the quality of regional healthcare systems and reducing disparities among the regions. Community-based initiatives in particular have made a difference in the South, while low-intervention and preventative approaches involving scanning and monitoring have reduced the impact of chronic disease across the country.

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with other newly elected administrations on international tax harmonization measures, which made it harder for companies and wealthy individuals to reduce their taxes by offshoring.

Of course, we faced serious opposition from political and interest groups to these redistributive measures. But we won, thanks to strong support from the southern regions as well as the global shift in attitudes towards inclusive, quality-focused policies that Sulakshana spoke about. The steady recovery of the domestic economy since then has further helped our cause, proving that economic growth is not incompatible with progressive values.

EL: **Apart from healthcare, how have you tackled the challenge of an ageing Italy?**

The main issue was to provide adequate pensions and elderly care in an economically sustainable way. The new pension paradigm, with its focus on community engagement, volunteerism and working in retirement, helped considerably. We are now seeing both extended activity in older people such as myself, and compressed morbidity in the general population. We have also opened up a whole new workforce that is formally recognized and a significant contributor to both the economy and society. Schemes such as allowing tax credits to be earned through volunteerism in retirement – for example, in community-based childcare or facilities that cater to the frail elderly – have become central to Italy's social development. Nowadays, we hardly remark on socially responsible companies and entrepreneurs participating in public-private partnerships to address societal issues such as employment and education, but it wasn't common 20 years ago. I am pleased to note that during the 2020s, southern Italy has become broadly recognized as a world leader in community-based social services.

EL: **Do you regard the "New Italy" project as a complete success?**

Not yet. As always, there is still much to be done. I agree with Sulakshana: Although most second and third generation migrants are effectively integrated into Italian society, suspicion of foreigners can still be seen in some areas – particularly after media reports of possible new pandemics. In some towns, the rise of localism has led to more cohesion within ethnic groups but less cohesion between them. This trend threatens to hold back Italy's future progress as a unified, prosperous country. We also need to pay down more of our public debt, which thankfully should be possible if current economic conditions continue.

Nonetheless, we can be proud of what we have accomplished. Italy has become a more heterogeneous and more equal society. Thanks to the commitment of both government and citizens to finding collective solutions to our social problems, I am confident Italy is set to thrive over the course of this decade.

EL: **Francesca Secolo, and to all my guests, thank you very much. That's all we have time for this week, but do join us again for the next edition of Thinkforward_Thinkback.**

You Are on Your Own

You Are on Your Own

Overview

In the 2010s, global growth is slow to recover from a **prolonged depression induced by a financial crisis combined with soaring commodity prices**. As a result, many state systems run into fiscal difficulty. Struggling to borrow or raise taxes sufficiently to cover soaring welfare costs, many governments take aggressive measures to **privatize healthcare systems** and "retire retirement". Under the new paradigm of "lifestyle activity management and planning", increasing numbers of governments limit themselves to providing only **minimal, means-tested assistance** to the most needy regardless of age.

While this transition from social welfare to individual responsibility is difficult and resented by many, there are finally some positive effects from this difficult period. Thanks to a focus on educating children about preventive health and financial planning, as the global economy finally **starts to recover** in the late 2020s, many members of the younger generation take to heart the need to accept individual responsibility for their finances and health. Meanwhile, **new entrepreneurial models** evolve to help them to do so.

China sees internal unrest spread to new sectors of the population, and government attempts to reform the bureaucracy and tackle corruption are ineffective. Migrants and the rural poor are especially hard hit by inadequate social security, Many young Chinese, who are in any case struggling to find employment, have come under intense pressure to support their parents and grandparents. But some hopeful signs emerge in micro-insurance and mobile financial technology.

Italy is forced to radically reform its social model as it struggles to recover from the global economic slump and the country's public debt hits crisis levels. In line with global trends, the state ends universal entitlement to pensions and healthcare, instead offering means-tested support only to the poorest. Many are left disappointed and embittered, but most younger Italians embrace the need for individual responsibility in long-term planning.

You Are on Your Own is a world of rapid and painful adjustments, which may ultimately prove to have been part of a process of creative destruction.

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youareonyourown.wiki

About this site: youareonyourown.wiki is a space to exchange advice on Lifestyle Activity Management and Planning (LAMP) and preventive healthcare – because it's never too early to take responsibility for your future.

You Are on Your Own – global perspective

LAMP FORUM ENTRY

Datestamp: 17:37.02 GMT+1 30/09/30 | User: Sophia Trapattoni | Age: 20 | Posts: 613

Edit

Though this is an unusual post for this forum, I thought many of you would be interested in some historical backdrop to our discussions. I'm posting a draft of a recent paper focusing on social and cultural shifts related to plans for long-term care. I'd like to submit this to one of the leading lifestyle management journals, so I welcome your comments.

"You Are on Your Own": A study of global trends in Lifestyle Activity Management and Planning (LAMP) and healthcare from 2010 to 2030, by Sophia Trapattoni

Historians agree the last two decades have seen a "profound sociocultural shift in mindset relating to health and old age care", for which Mehrota (2029) identifies three drivers. The first, and in Mehrota's view the most important, driver has been economic. While most historians agree the end of state-funded universal care was inevitable, the process would have been less stark and rapid were it not for the 2010-2012 depression and subsequent prolonged period of low growth, from which the global economy has only begun to convincingly recover since 2025.

The second driver has been political, with governments taking advantage of the opportunity created by the economic crisis to privatize health services and "retire retirement" (Krantz, 2028). And the third has been technological, as improved access to information and virtual support networks has gradually enabled the new mindset to which Mehrota refers. This mindset is associated with those born after the year 2000, universally known as the "Me-llennial Generation" after the seminal 2022 business bestseller, Cracking the Me-llennial Market: What Entrepreneurs Need to Understand about Hard-Headed, Far-sighted, Self-Reliant Young Consumers.

I will discuss these three drivers briefly in turn, but first it may be useful to outline the attitudes of members of this age cohort towards the social welfare systems that existed prior to 2015.

As the Forrest Institute (2026) put it: "Probably in part due to the high education levels among its members, the Me-llennial Generation sees it as obvious and natural to look ahead over their expected natural lifespan, consider what lifestyle standards they desire for old age, and then plan how best to save and behave to maximize their chance of achieving that lifestyle." The institute attributes this attitude to the fact that health dialogue coaching sessions and LAMP studies are now core topics on school curricula in most countries, and to the popularity of discussion forums focused on holistic planning strategies such as youareonyourown.wiki.

This was not the case for previous generations. Today's students are typically surprised to learn that even in the recent past, large segments of the population failed to plan for their old age and led unhealthy lifestyles in the expectation that state-funded "intervention-based" healthcare systems would rescue them when they became ill.

In less wealthy countries, the historical assumption was that your children would look after you in old age – indeed, this was even a legal requirement in countries such as China. In more wealthy countries, it became commonplace to assume that the government would provide an acceptable standard of living; in these countries, retirement was

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commonly held to describe the expectation of state-sponsored inactivity for almost everyone over the age of 65, with the retired often anticipating government payouts for the rest of their natural lives. Many countries not only expected but required their workers to "retire" at an arbitrary and comparatively youthful age.

By 2010, it was increasingly obvious that the concept of retirement was unsustainable in the long term, as rising life expectancies and falling birth rates meant the proportion of older to younger people would increase significantly (Davidson, 2010). Even so, contemporary news reports show there was significant surprise when publicly funded social benefit systems around the world were drastically scaled back, starting with France in 2015 under President Boucher. The fact that members of the Me-llennial Generation struggle to understand this reaction is proof of Mehrota's thesis that a fundamental shift in mindset has occurred.

The influence of economic and financial crisis

Regarding the first driver identified by Mehrota, Franklin (2029) describes how developed countries became mired in crisis as stagflation took hold during the 2010-2012 depression. He traces this to oil price hikes caused by supply shortages, demand from emerging markets and sporadic turbulence in the Middle East. The combination of low growth and rising prices put immense pressure on state-funded healthcare and pension systems – most of which operated without capital funding, relying on tax receipts to pay often generous benefits to older people.

Relief was slow to come throughout the 2010s. As Franklin (2029) puts it: "Every time recovery was in prospect, an event occurred to damage investor confidence and induce another slowdown". The San Andreas earthquake of 2013 set back the US economy, with global knock-on effects. Long-term planning was made difficult by heightened market volatility, as speculators looked to capitalize on uncertainty, especially in the emerging markets. Amid a proliferation of new financial instruments that were highly opaque and often dubious, bubbles formed and burst; the 2010s were therefore characterized by repeated currency crises, devaluations, and bank and pension fund failures (see box).

Public debt and currency volatility

Low growth and rising prices drove up public borrowing in the 2010s to a point where investors queried the solvency of many governments. Large interest rate differentials appeared within the Eurozone, forcing Greece and Spain to withdraw from Euro membership in 2014. As the Eurozone struggled to maintain credibility, speculators targeted one vulnerable government after another. Speculators were also blamed by President Belikov for the Russian rouble's collapse in 2019, although others traced the default to a combination of oil prices falling back from their historic highs and Russia's oligarchs abandoning the currency.

Low levels of investor confidence were not caused solely by turbulence in the financial markets. In a wider context, there were outbreaks of social unrest and ethnic strife as the prolonged downturn led in some places to the rise of populist movements and demands for protectionist policies. Extremist and terrorist organizations found a growing pool of recruits. Particularly in the emerging world, localized wars over water and food caused by heat waves, droughts and poor harvests were a standard feature of the late 2010s and early 2020s.

As will be discussed in the next section, the prolonged economic downturn pushed many state-funded healthcare and retirement systems to the point of crisis. But it had another important effect. While the short-term impact of "suddenly and dramatically reduced pensions adequacy, even among those corporate and private systems that survived" (Mehrota, 2029) was to increase levels of poverty in developed countries, the long-term effect was to give the middle classes the incentive to demand the diverse range of long-term saving options that Me-llennial consumers now regard as standard.

Political change: from "retirement" to "lifestyle activity management and planning"

Throughout the 2010s, governments in developed countries that had expensive state-funded, intervention-based healthcare and retirement systems attempted to ride out the storm with increased borrowing and reassuring public statements. The US, which relied primarily on corporate pensions, saw repeated government bailouts of private funds. The situation became progressively more difficult to sustain as public debt around the world reached higher levels, forcing interest rates up. Several governments – most notably Italy – were forced to levy extraordinary taxes to meet their pension commitments.

As crisis spread, electorates around the world lost confidence in the economic competence of their leaders as they proved unable to turn the situation around (Mehrota, 2029). With currency devaluations an ever-present threat, a mood of panic took hold as people saw the value of their savings eroded by inflation and correctly began to doubt the future availability of adequate government assistance. By 2015, new governments had swept to power in the developed world on their promises of radical action to address the crisis, beginning with the Boucher administration in France and closely followed by most of Europe. Their reforms typically had two elements (Krantz, 2028):

- A shift from wage-linked pensions to a (lower, on average) base of "minimum lifestyle" payments, to be supplemented by private capitalized pensions. Public healthcare systems, particularly in Europe, were largely privatized, and widespread insurance schemes introduced. As a stopgap measure to defer payments, the age of retirement was initially raised to 70 or 75 by most OECD countries, before being phased out entirely and by 2020 replaced almost everywhere with the modern LAMP concept (see box).

- Deregulatory efforts aimed at boosting the economy by liberalizing both product and labour markets. These reforms made it easier to hire and fire, reduced minimum wages, provided funding and incentives for worker retraining and so forth. Although these efforts initially appeared to have limited effect, many commentators (Green, 2030) credit them with laying the foundations for the economic growth we have seen in the last few years.

Lifestyle Activity Management and Planning (LAMP)

In the late 2010s, governments around the world "retired retirement". The conceptual framework of non-activity after an arbitrary age limit was abandoned in favour of a system that has come to be known as Lifestyle Activity Management and Planning (LAMP), in which old age is typically seen as an age for part-time or project-based work or volunteering. Managerial professionals who once commanded increasing salaries with seniority are now typically encouraged by their employers to shift to consultancy work. LAMP incorporates an ethos of means-tested state assistance only to those who are most in need, regardless of age, with those who are physically and mentally capable expected to earn their assistance through community service.

Most historians agree these policies would have encountered near-insurmountable opposition had they been proposed just 10 years earlier. As it was, the transition was difficult, especially as economic performance initially remained sluggish. Meanwhile, lack of investment meant the quality of public healthcare systems around the world deteriorated and waiting times lengthened amid the twin pressures of more widespread chronic diseases and shortages of trained staff. In countries that had formerly provided high-quality, universal public healthcare systems, anyone who was able to do so stretched their finances to afford private healthcare.

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Especially hard hit were those on incomes too low to give them access to high-quality private healthcare but not low enough to qualify for means-tested state assistance, and those recently retired or approaching retirement as the reforms of the 2010s came on stream. Commentators have dubbed the "lost generation" (Franklin, 2029) those people who assumed throughout their working lives that state-funded social care systems would provide well for them after a certain age, and who therefore failed to take sufficient individual responsibility for their quality of life in old age (see box). One solution to this problem, adopted by many countries (including the US in 2020), was to move to a system of private insurance with community rating, mandated minimum coverage and subsidies for low-income families.

The lost generation

Those who suffered most psychologically and financially from cutbacks in the 2010s were arguably current and imminent retirees on low to middle incomes in the developed countries. Too well off to qualify for minimal state-funded safety nets yet too poor to afford quality private care, they experienced a standard of living in retirement that was above poverty but well below what they had expected. This provoked widespread bitterness. Many looked to their children for financial help, which often caused resentment, especially among children who no longer lived nearby. The 2020s saw a sharp rise in social isolation, depression, suicide and voluntary euthanasia among the elderly.

In the developing world, the story of China is typical: Hopes held in 2010 of extending the limited state pension and intervention-based healthcare systems were abandoned due to the lack of resources (Krantz, 2028). The private healthcare and age-finance industries have been encouraged by governments in most of the developing countries, but the quality of information available to consumers is generally less reliable than in the developed world. High-quality care has typically been accessible only for the wealthy minority who could afford foreign provision.

Technology's impact on healthcare, LAMP and social norms

Many older commentators (Krantz, 2028, Mehrota, 2029) link the central role of technology in modern society to what they see as the abandonment of desirable values such as community spirit and compassion. Most recent writers from the Me-llennial Generation would dispute this (Vader, 2029, Pope, 2030). Although it is true that intergenerational tensions have weakened family ties in some cultures, in other cultures there has been a resurgence of the idea of extended family. More fundamentally, technology has enabled radically new forms of social organization to emerge as younger people have fully embraced the concept of individual responsibility. Many young people now identify themselves with social groupings based on interests that transcend the old notions of family and nation state. These are often misunderstood by the older generation (see box).

Virtual mutuals

As they seek to decide who they can trust with their future well-being, a growing minority of young people in 2030 put their faith in groups of like-minded individuals. "Virtual mutuals" are commercial or non-profit entities that incorporate the idea of a mutual society. They are based around a common commitment to a particular idea, such as religion, transhumanism or ecology, or even a particular band or TV show. Members contribute money – or time, with peers rating the value of their efforts – and gain benefits which can include insurance against sickness. The birth of the first cloned human, in 2028, resulted from the efforts of a virtual mutual.

The Wikimed system of open-source medical innovation is perhaps the most widely acknowledged example of how an online social support network has helped supplant the traditional structures to which older generations once looked for support. Supplemented by continually updated actuarial information, Wikimed has greatly enhanced the availability of basic medical knowledge and self-treatment options.

Members of the Me-llennial Generation do not lack compassion, but mainstream groups are relatively strict in expecting others to share their ethos of personal responsibility for collective goods – notably when it comes to preventive healthcare (Pope, 2030). This explains why so many healthcare schemes are based around shared lifestyle commitments, with insurance companies linked to "virtual mutuals", such as VeganCare and RamblerMed, offering low premiums for members who meet their monitored fitness activity thresholds and submit monthly blood samples to prove their healthy dietary intake. It is equally standard for major employers who offer healthcare benefits to link the levels of benefit to employee participation in health dialogue coaching.

While it is often criticized, the growing worldwide survivalist movement, which encompasses such diverse groupings as back-to-nature communes and militias, can also be seen as an example of how community spirit is reasserting itself in novel guises based on individuals' long-term assessments of their own self-interest (Vader, 2029).

Looking to the future: meeting the needs of those falling behind

Thanks to the recent increase in investor confidence, healthcare and financial services firms are at the forefront of the economic revival (Green, 2030). Countries that drastically cut public health expenditures have recently seen renewed demand for private services, and the benefits of deregulation have become clear as innovative new insurance products have made premiums for some higher-coverage schemes more affordable. While chronic disease remains a major problem among those over the age of 50, recent figures show that healthcare spending should be manageable in the long run after taking into account the lower predicted costs given healthier Me-llenial lifestyles (Mehrota, 2029).

A similar boom is now belatedly underway in the financial services sector, which has emerged in a powerful position after suffering badly during the prolonged economic slump. As more Me-llennials enter the workforce, the amounts being invested with private pension providers are at an all-time high. Financial innovation for both companies and individuals has grown dramatically in the last decade. Since financial education was prioritized as part of the LAMP transition, its quality has increased greatly, and today's consumers can gain information from many virtual and personal advice sources to help choose among the millions of available options.

In many ways, the demographic outlook seems far brighter now than it did in 2010. State-funded benefits to the needy have been reduced to levels that are fiscally sustainable, and countries that retain large levels of public debt should see those fiscal burdens disappear if the current economic upswing continues. Furthermore, there are no longer many unrealistic expectations among individuals in younger generations: Few Me-llennials who face poverty in old age will honestly be able to claim they did not realize what the future might hold.

Nevertheless, a range of problems remain to be addressed. Notably, developing countries must act to improve the quality of financial education: While investment returns will of course always be unpredictable, we can expect individual responsibility to become popular in highly unequal societies only if wisdom rather than luck is seen to play the bigger role in financial planning (Pope, 2030). Poverty, especially in old age, also remains a major concern. Here, much hope is pinned on promising breakthroughs in artificial intelligence and robotics: The third generation Carebot™ is still too expensive to have penetrated much beyond Japanese nursing homes, but future models potentially may offer mass affordability of home-based nursing care.

These issues have no easy solutions, but Pope (2030) is surely correct to identify "confidence, enthusiasm and optimism that for every problem there is a sustainable solutions" as the defining characteristics of the Me-llennial Generation.

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You Are on Your Own – China perspective

For the majority of Chinese, especially the rural poor, it could be argued that little has changed in the era of Lifestyle Activity Planning and Management. After all, only a minority of people in 2010 expected to be able to retire in comfort, despite pledges to create universal pension benefits; most Chinese correctly assumed it would still be largely or wholly up to themselves – or, as tradition demanded, their children – to take care of them in old age (Lu, 2028). China's transition has nonetheless been difficult. But its future looks bright, as the solutions to long-term planning being pioneered by young Chinese are among the most imaginative and innovative in the world.

As elsewhere, the catalyst for pushing more care responsibilities onto individuals was the depression of 2010-2012 and the prolonged slow growth thereafter. It had commonly been predicted that China would challenge for global hegemony by transforming itself into a service-based economy. The reality, of course, was different: China found itself suffering an unexpected reversal: its export position was significantly pressured while the prices of oil and other commodities remained stubbornly high.

Emerging pension business models

Most Chinese can expect no state benefits in their old age, as the limited provision that existed prior to the global paradigm shift of "retiring retirement" has been scaled back still further: Only those in direst need can apply for means-tested benefits, and coverage varies by region. This has left many Chinese in a difficult position: without public support, suspicious of private pension providers, and with children who have come to resent their filial responsibilities. Yet many younger Chinese are becoming leaders in pioneering innovative models of long-term planning, as entrepreneurs work out how to translate virtual networks and mobile technology equivalents into real-world, face-to-face trust.

It is perhaps not surprising that the government saw the global trend of "retiring retirement" as a welcome chance to dig itself out of a fiscal hole caused by these economic setbacks. Although the Chinese government did not have such extensive commitments to legacy pension schemes as Western countries, it still faced a struggle to meet the generous promise of retirement packages for workers at state-owned enterprises. China's enthusiastic embrace of the LAMP paradigm as the philosophical underpinning of measures that shifted pension commitments onto individuals (see box) has been described by Lang (2030) as "sheer cynical opportunism".

Reform efforts stall amid recession and protest

Naturally, this policy was not popular – but it was far from the only reason behind the political protests that spread throughout the 2010s. Water shortages and crop failures led to internal displacement, and river pollution caused disquiet in many villages. Ethnic tensions grew as separatist uprisings became bolder and more widespread. The government was especially alarmed when protest movements spread beyond the usual poverty-stricken rural hotspots to encompass urban dwellers and younger, better connected demographics. Meanwhile, tensions with Taiwan, China repeatedly threatened to boil over into a full-scale military confrontation.

Struggling to adjust to external economic shocks in the 2020s, the government understandably failed to push through much-needed structural reforms (Wu, 2028). China's leaders did attempt to rationalize the country's fragmented decision-making structure and mount a campaign against corruption, but these efforts soon became bogged down by bureaucratic vested interests. Lynn (2027) has also argued that the failure to push through improvements in China's healthcare system was, paradoxically, partly a result of the absence of major outbreaks of infectious disease, which created a false sense of security.

With the economy stagnating, government ineffectiveness left China with an unfortunate mix of regulations that led to a burgeoning of the informal sector. On the one hand, regulatory fragmentation and complex bureaucracy made life

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difficult for reputable and responsible companies. On the other, China lacked rigorous enforcement of positive regulations to guarantee quality and reliable information, and the government made few efforts to educate consumers.

Poverty rises as consumers make poor choices

The predictable result was that many Chinese were not prepared to make long-term plans. Throughout the 2010s and early 2020s confidence in Chinese financial institutions was severely undermined by a succession of pyramid schemes, speculative bubbles, bank failures and breaches of customer data security, all of which exacerbated the sluggishness of the recovery.

The healthcare sector, too, suffered from unreliable providers and a lack of public education as state-supported systems failed to progress (see box). Zhang (2030) points out that the Chinese government was less proactive than many others in mounting public education campaigns encouraging people to look after their own health, predictably resulting in an increase in chronic disease that piled further pressure on already inadequate state healthcare systems.

Poor state healthcare fuels rural elderly unrest

Far from being expanded, state-funded primary healthcare has become less adequate while catastrophic insurance has been shunted to the private sector – which has been held back by an unhelpful bureaucracy. Especially in rural areas, medical services are unaffordable for many – a major cause of the persistent social unrest which is seen among the older population. But young Chinese are becoming enthusiastic about preventive healthcare as they see the impact of chronic disease on their parents' generation.

With few benefits on offer from the state, poverty in old age is nowadays common, especially among migrants and rural dwellers. The mortality rate has increased, and "voluntary euthanasia" is unofficially a growing trend. Many young Chinese, who are in any case struggling to find employment, have come under intense pressure to support their parents and grandparents. In some families, although not all, this has undermined the traditional sense of filial obligation – especially among children whose parents were migrant workers and usually absent during their childhood.

Signs of hope in the younger generation

Shu Zhao (2030) has argued that young Chinese people often seem to feel more connected, through mobile technology, to peers in their virtual networks than to their families in the real world. She has strongly criticized what she sees as their "escapism and denial". Yet some of these virtual networks are emerging as the foundations for better long-term planning.

As economic confidence returns, initiatives from beyond the state are at the forefront of pension planning. China is a world pioneer in the development of community-based micro-insurance schemes, which are fast gaining popularity as a bottom-up replacement for ineffective state social security systems (Mingyu, 2030). China's mobile network providers are using the secure cash-transfer capability of modern mobile technology to partner with various institutions in offering long-term saving schemes bundled with network subscriptions.

Many individuals still find it hard to make the right choices about their long-term care. But young and technologically savvy Chinese are proving as pragmatically foresightful as any other members of the Me-llennium Generation. They are health-conscious, having seen the rise in chronic diseases among the older generation. And they have developed increasingly authoritative wikis to exchange opinions about the reliability of private service providers in the healthcare and financial sectors. Forced to be self-reliant, China's Me-llennials are slowly but surely discovering the tools and knowledge they need to have confidence in their ability to face the future.

You Are on Your Own – Italy perspective

Case study: Italy

Italy is an interesting case study as it was among the countries that found the transition from the "retirement" paradigm to the current Lifestyle Activity Management and Planning (LAMP) system most traumatic (Petochi, 2021). The Italian government initially tried to overcome the demographic challenge in the early 2010s by encouraging private pensions through tax incentives and an extensive public financial education campaign. Still, the prolonged global economic downturn reluctantly forced the Italian government to abandon its traditional (and what is now regarded as generous) social welfare model in favour of a more "Anglo-Saxon" system consisting of basic pension benefits supplemented by personal savings (Ambrosini, 2029).

Behind this, of course, was the global recession in the 2010s, which was the most serious economic challenge since the Great Depression in the 1930s. A succession of crises repeatedly knocked back any fragile signs of economic recovery, and the forced withdrawal of Spain and Greece from the Eurozone led speculators to turn their attention to Italy's precarious debt position. By 2015, the Italian government faced the humiliating prospect of debt default. Interest rate differentials with the rest of the Eurozone had widened significantly and public debt had risen to even higher levels.

The reform years

Wearied by years of stagflation and empty reassurances, the Italian electorate was hungry for the promise of economic competence and a new government led by Prime Minister Conti swept to power on a platform of radical reform. After raising emergency funds through a heavy one-off tax – following the precedent set in 1982 – Conti's administration radically overhauled the social benefits system under the slogan "*Salvataggio dell'economia, protezione del bisognoso*" ("Rescuing the economy, protecting the needy").

Younger Italians embrace long-term planning

In line with most other countries, by 2020 Italy had retired retirement. Nowadays, instead of becoming entitled to state benefits at a certain age, Italians can claim benefits only if they are needy – and those who are physically and mentally capable of doing so, regardless of their age, are required to qualify for their benefits through community service. While bitterness lingers among the generations whose financial expectations for old age were undercut by this relatively sudden conceptual shift, the new generation of young Italian workers is fully educated about the need to plan financially for their expected lifespans.

In 2016, healthcare budgets were slashed and a new system of basic state-funded services rationed by means-testing was introduced, which involved some recentralization of state healthcare provision. These basic services quickly became oversubscribed, making private care an expensive necessity for those who could afford it (Franklin, 2027). In 2018, Italy moved to the now-standard system of mandated private insurance for healthcare, following the Swiss model but also allowing public-private competition to maximize the efficiency of health providers.

Meanwhile the state pension age was first raised to 70 with immediate effect and then abolished altogether in 2019, part of the global trend of abandoning the principle of universality in favour of providing means-tested benefits for the poorest regardless of age (see box).

Other reforms pushed through by Conti and her successors between 2015 and 2025 included widespread deregulation, labour market liberalization and reforms of the education system; the latter including shorter degrees, stricter standards, an emphasis on lifelong learning to encourage retraining, and incentives for companies to take on young school-leavers and train them in-house. Intensifying the previous government's efforts to educate Italians about financial responsibility, Conti's administration made preventive healthcare and LAMP core topics on every school curriculum.

There is no alternative – dealing with the opposition to reform

Most unhappy with these reforms were the lower middle classes, who faced the prospect of growing old without the state assistance they had been counting on and without adequate private resources to compensate. Similarly, lower middle class Italians were most likely to be considered too wealthy to qualify for means-tested healthcare, but struggled to afford the high premiums of compulsory insurance (Ferrini, 2028). To alleviate some of this pain, as mandatory insurance was introduced, new regulations required companies to take more responsibility for employee health, but few small and medium size employers were able to do so.

The negative effects of the transitional period have been felt more by Italy's south – and not only in terms of healthcare, although in this sector the regional disparity is highly noticeable (see box). More broadly, internal migration put pressure on community cohesion in the South as people looked North in search of work (Ferrini, 2028). With many of their children having migrated, the elderly in the south were left at high risk of poverty.

North-South divergence in healthcare approach

In the South of Italy, the growing involvement of philanthropists and non-governmental organizations has had some limited impact on slowing the deterioration of treatment available to the poor. In the North, the emphasis has been on making private healthcare more affordable for the average person – and here the benefits of deregulation and competition, with higher wages attracting more doctors and nurses, have quickly become apparent. With insurance companies providing financial incentives for healthy lifestyles and preventive healthcare education a priority in schools, young Italians are typically far less prone to chronic disease than the older generation.

However, looking back at the crises of 2012, it seems the Italian population accepted the changes as a natural transition in a turbulent economy. Kim (2029) argues that this is due to the significant investments in education the Italian government made around the time of the reforms, which, he states, "have prepared a new generation of Italians to modify their consumption patterns to the reality of modern life". This is an optimistic view, and one that will be sorely tested in the coming years as the transitional generation begins to retire, perhaps with many of them in poverty.

The outlook for 2030 - 2035

Recent economic data indicating strong growth (Banca d'Italia, 2030) may suggest that the positive effects of the liberalizing reform programme initiated by the Conti administration are finally being felt. Productivity is rising and the outlook for the Italian economy is improving. Companies across the country are embracing wider segments of the working population, including trainees and older workers. And, importantly, a new generation of young Italians is emerging with a mindset wholly different from their parents. According to a recent survey by La Tribuna, 88% of Italians aged 21 to 30 agreed with the statement: "Welfare in old age is entirely the responsibility of the individual".

As entrepreneurship expands the choice of financial products and makes quality healthcare increasingly affordable, Italy is now seen by most analysts as well positioned to be successful as the global economy recovers (Verdi, 2030). While the factors of production seem to be working well again, some political scientists argue that the next crisis will produce a swing in entirely the opposite direction, and with demographic pressures indicating that the workforce will continue to decline despite the increases in old-age workforce participation, such a crisis might not be too far off.

Section 3

From Scenarios to Strategic Options

Section 3

From Scenarios to Strategic Options

"Long-range planning does not deal with future decisions, but with the future of present decisions."
Peter Drucker

"Your future is created by what you do today, not tomorrow"
Robert Kiyosaki

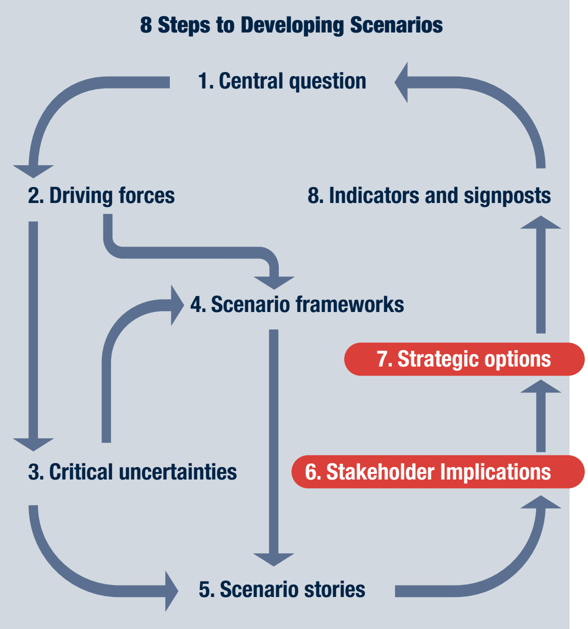
Introduction

We hope you have enjoyed reading the scenario storylines. Please remember that they are not ends in themselves. They exist solely to spur scenario thinking, which can be a powerful tool to stretch your imagination, facilitate debate, generate new strategies and test existing ones. These strategies can then serve as the basis for action.

The link between the scenarios and positive strategic action on the part of stakeholders comes through considering two sequential steps:

a) **Stakeholder implications**: What do the scenarios imply in terms of opportunities and challenges;
b) **Strategic options**: What possible actions could be taken to benefit from the opportunities and/or overcome the challenges (see Figure 3.1)?

Figure 3.1 **The World Economic Forum's Approach to Scenario and Strategic Option Development**



Source: GBN, World Economic Forum

Generating useful implications and strategic options

As described in Figure 3.1 above, scenarios are often used to generate stakeholder implications which, in turn, lead to strategic options.

This being a multistakeholder project, different stakeholders naturally will perceive different implications depending on the context in which they operate. Implications are revealed by asking questions such as:

- In what new areas could my organization create sustainable competitive advantages in this scenario?
- Who might be new potential partners for value creation in this scenario?
- What kind of competitors or new entrants may emerge in this world?
- What implications does the regulatory environment have for my organization in this scenario?
- How will the profile of our customers or service recipients change in this scenario?
- What additional second- or third-order effects stemming from the economic, political, social, environmental or technological drivers might negatively or positively impact my organization?

The answers to these questions are then commonly grouped as "challenges", "opportunities" or "important shifts". Best practice is to create a separate list for each scenario and then identify the most important implications in each group. These implications can then act as a starting point for discussions about general and specific strategic options of interest to an organization.

Helping stakeholders identify implications and strategic options from the consideration of these scenarios – from the perspectives of both public policy and private sector market opportunities – is the purpose of phase two of the Financing Demographic Shifts 2030 project, which is described below. This will result in a second main publication in the first half of 2009, and a presentation of key findings at the World Economic Forum Annual Meeting in Davos.

Examples of strategic options in the context of the future of pension and healthcare financing

The six stakeholder groups for whom this project has relevance – individuals, governments, financial institutions, healthcare providers, employers, and families and informal carers – have some joint interests, but their financial interests often conflict. For example, many employers would prefer to offload the burden of financing pensions and healthcare onto individual employees. Another example: medical innovation is good for individuals and the healthcare industry, yet by increasing life expectancy it may add to the retirement-financing burdens facing governments and companies that have made defined benefit promises to individuals.

How the future will play out largely depends on the power balance and the degree of collaboration between the various stakeholders. Three objectives must be balanced (see Figure 3.2):

- Improving the financial sustainability of retirement provisioning and healthcare for the elderly;
- Increasing the proportion of the elderly population covered by formal and/or informal sources of retirement provisioning and healthcare
- Optimizing the quality of services and the adequacy of benefits for the elderly.

"The key to wise decision-making lies in selecting from a great number and variety of options."

Roger Fisher & William Ury

As the prime objective of this project was to identify strategic options for improving financial sustainability, this section mainly presents options relating to system financing. However, it also briefly presents some examples of strategic options for improving coverage, quality or adequacy. The strategic options reviewed in this section arose from conversations with leading experts and the analysis of research. Please note that they are not intended to be prescriptive or exhaustive, and are offered here only as an initial stimulus to strategic thinking.

Figure 3.2 **Retirement and healthcare objectives**

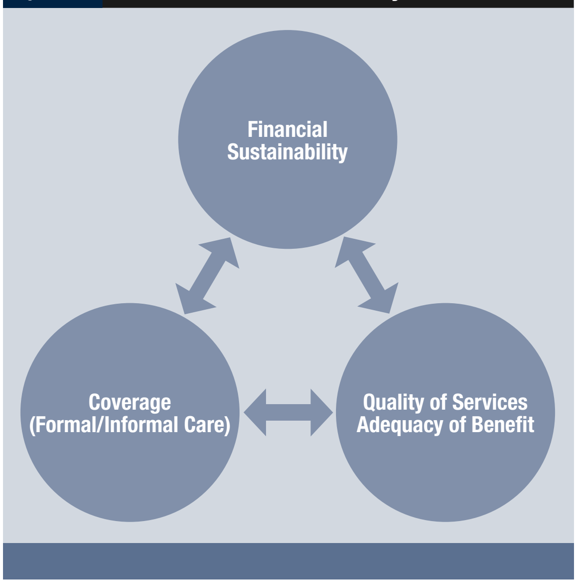


Figure 3.3 **Example of strategic options for improving the financial sustainability of retirement provisioning for the elderly**

Figure 3.4 **Example of strategic options for improving the financial sustainability of healthcare provisioning for the elderly**

Phase two of the Financing Demographic Shifts 2030 project: focusing on strategic options

With these scenarios in mind, the project team will now embark on the second phase of the project, where the focus will be on further exploring the strategic options for key stakeholders (see Figures 3.5 and 3.6).

Objectives for phase two

In essence, the overall goal will be to identify effective private market solutions and public policy responses to overcome the financial challenges (and capitalize on the opportunities) related to pensions and healthcare in a rapidly ageing world. Taking into consideration an array of uncertainties about retirement benefits for the elderly, social security and welfare provision, the specific objectives of phase two are to:

1. Create an effective dialogue among key stakeholders by discussing the **strategic options to capitalize on the opportunities and overcome the challenges** related to pensions and healthcare to a rapidly ageing world.
2. Examine **global best practices** and draw lessons from what worked and what didn't work; discuss policies and strategies that are applicable and scalable.
3. Discuss **how the public and private sectors can effectively work together** to find innovative solutions and manage risks.

Who will be involved?

Phase two aims to bring together the world's leading experts and key decision-makers in the fields of pension and healthcare financing and delivery. We aim to involve senior executives from the financial services and healthcare industries and partner companies in other industries, as well as leading policy-makers and senior academics.

Value proposition to policy-makers, industry partners and academics

- The project will provide a neutral platform that encourages collaborative learning, knowledge-sharing and new insights among key stakeholders.
- Participants will engage in a multistakeholder, multidisciplinary approach that addresses strategic implications and options for financing and delivering pensions and healthcare services to an ageing world.

Contact information

If you would like to be involved in this project, or if you have any comments or questions about this report, please contact us at scenarios@weforum.org

Figure 3.5 **Project approach**

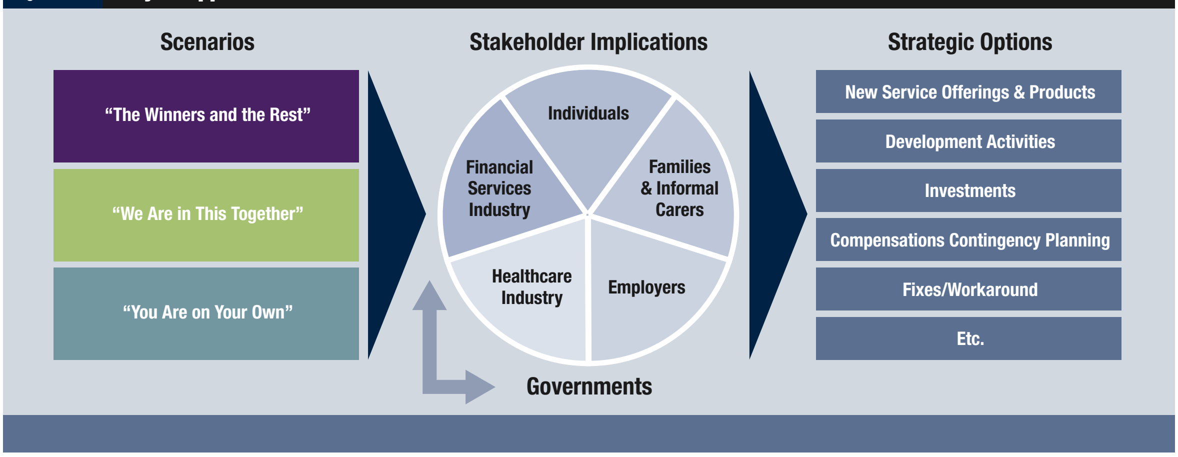
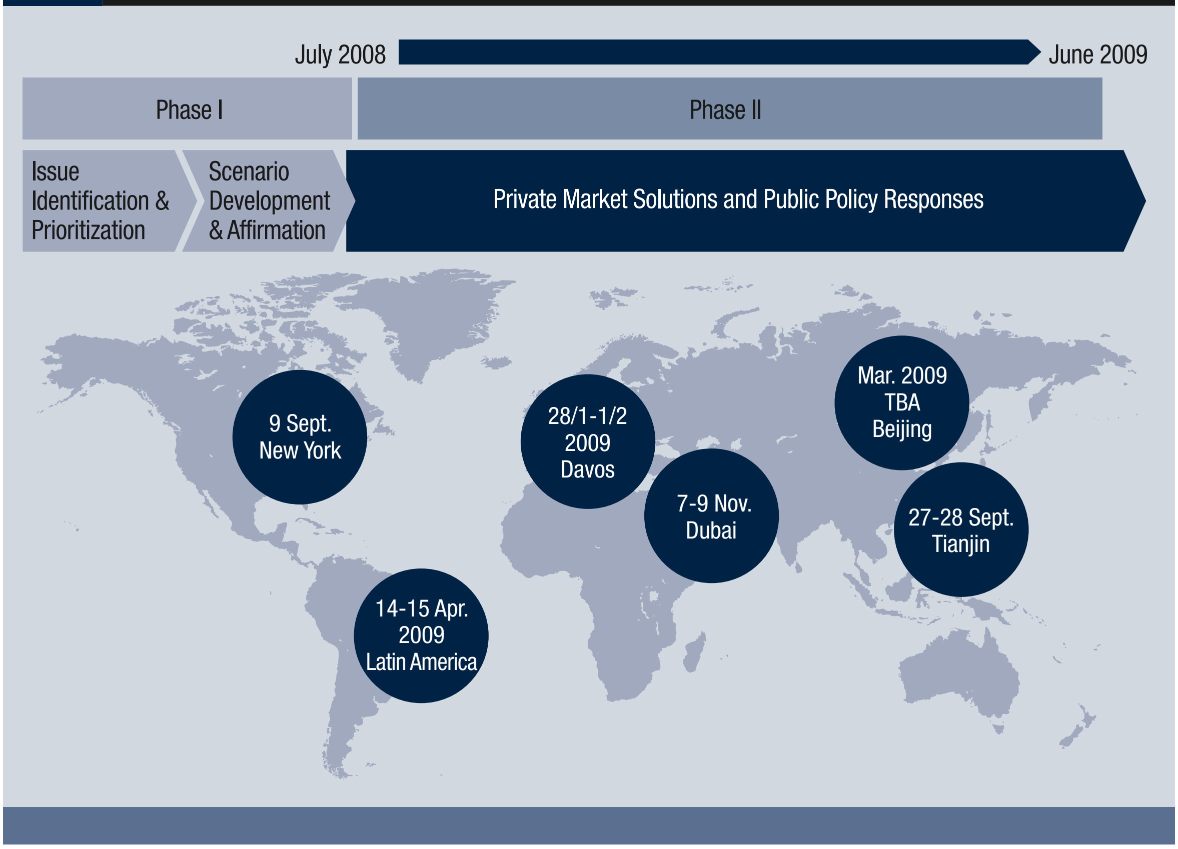


Figure 3.6 **Project planning phase two**



Planned as of september 2008 TBC

Section

4 Conclusion

Section 4 Conclusion

Conclusion

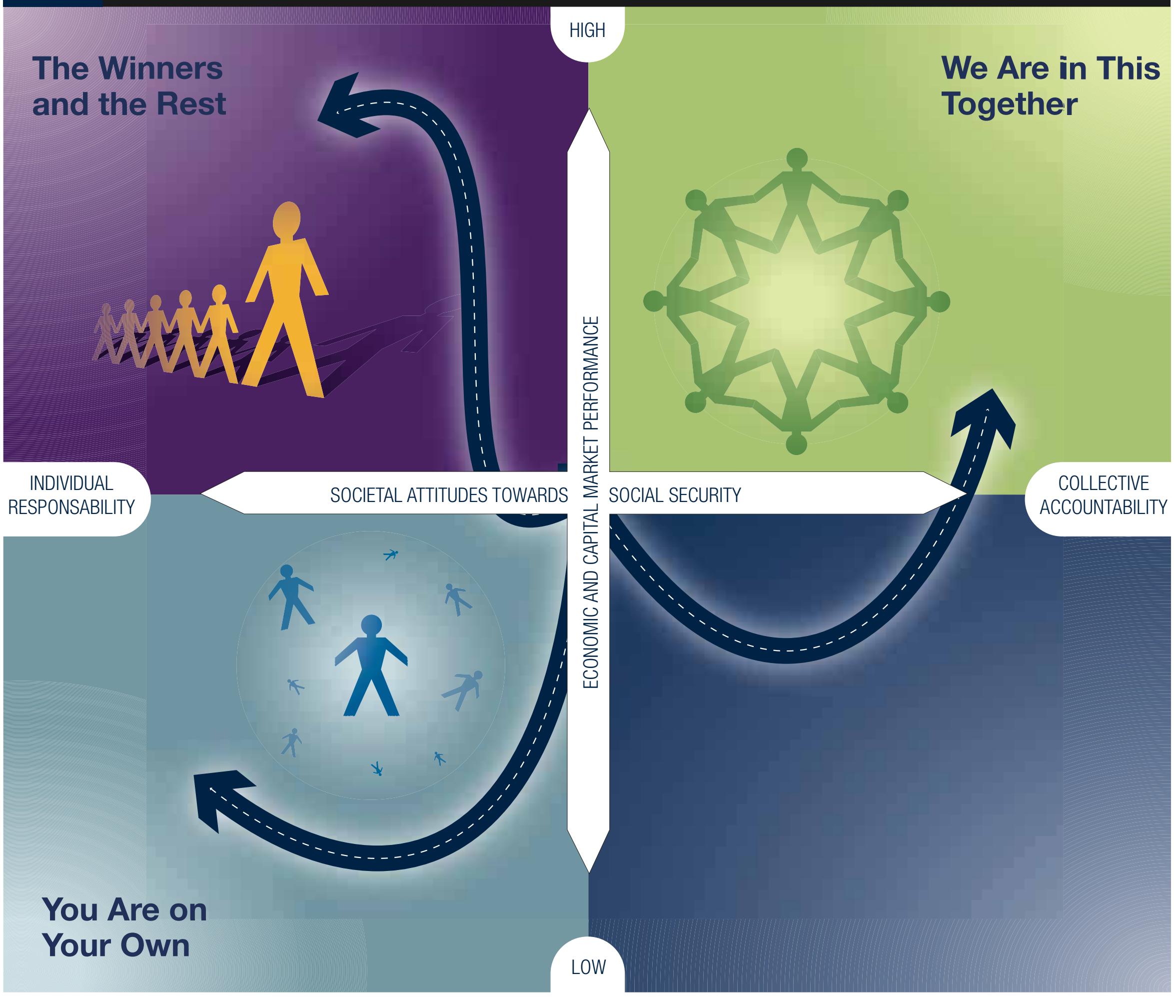
The scenarios presented in this report have not been designed to predict the future, but rather to explore the boundaries of the plausible. These scenarios will have had their desired effect if they succeed in teasing out some underlying issues and helping you to envisage and reflect on what could happen. A reading of these scenarios should prompt such questions as:

- Which world would I prefer to live in?
- What can I do to bring that world into existence?
- If another world came about, what would it mean for me?
- What would I need to do to fare well in each world?

An awareness of the worlds described in these scenarios should help many stakeholders in the pension and healthcare domain – e.g. financial institutions, healthcare providers, employers in other industries and governments – to build strategies and policies that are flexible and robust enough to withstand diverse possible futures.

The World Economic Forum is keen to facilitate the debate between the key stakeholders to overcome challenges related to pension and healthcare delivery and financing in a rapidly ageing world. Together we can improve the state of the world.

Figure 4.1 **Matrix overview of the scenarios**



Partners' View
The value of the Financing Demographic Shifts 2030 project

"A rapidly ageing world population will have profound implications for both developed and developing countries. How elderly people are regarded and treated is the hallmark of a civilized society. This report is timely because all stakeholders recognize that a secure retirement and access to healthcare in older age are significant forces for social cohesion. This, in turn, is essential to global economic and social stability. In publishing this report, the World Economic Forum has contributed to the deeper understanding of a profound global trend, appropriately setting the stage for Phase 2 of this project, which will explore flexible approaches to policies, products and services that can be successfully delivered under a wide range of economic and social circumstances."

M. Michele Burns
Chairman and Chief Executive Officer,
Mercer

"The World Economic Forum project on Financing Demographic Shifts will certainly stimulate critical thinking on one of the most important challenges facing major economies. One of the striking dimensions of this Forum report is the diversity of future scenarios that are plausible - from the constructive to the chaotic. This range underscores the fact that stakeholders in government, business and civil society have the opportunity, and indeed the ability, to shape the future in a positive direction. The report also makes clear that no single stakeholder has the competence or the resources to fashion solutions. Rather, all stakeholders including, very significantly, the private sector, must come to the table in order to fashion sound solutions. Using the World Economic Forum report as a foundation, the dialogue between various stakeholders in Phase 2 can make a tremendous contribution to creating long-term retirement and healthcare solutions that responsibly balance competing considerations."

Olin Wethington
Chairman, AIG Companies in China
American International Group (AIG)

"Being a Western European 'babyboomer' myself, I have always appreciated that my elders had the foresight, sense of responsibility and will to put in place long-range programmes addressing the financial and healthcare needs of future generations, especially in such a fashion that they would not only be reliant on government action and programmes. It was therefore a real privilege to participate in this World Economic Forum project resulting in this great document. I hope it stimulates thinking that will lead to strong joint private and public sector action so as to make the world a better place in the decades to come."

Dennis Ziengs
Chief Executive Officer, Asia
Fortis Insurance International

"The Financing Democratic Shifts project is an important initiative that should be a catalyst for effective private market and public policy responses to the significant pension and healthcare challenges facing ageing societies. The combined cost of meeting pension and healthcare expectations of elderly populations will require new approaches to financing benefits in old age. While we manage the transition from public to private systems, a key challenge will be to maintain the motivation of younger workers who face the double burden of financing public benefits for older generations as they make private provision for their own futures. I look forward to building on the thought-provoking scenarios in this report to develop innovative options that address these challenges in Phase 2."

Dr Dieter Wemmer
Member, Group Executive Committee and
Chief Financial Officer, Zurich Financial Services

"Facing retirement and health challenges, and their combination, will be on top of the policy agenda in the 21st century. Public-private partnership will play a key role in helping our societies to address them. There is still a lack of political awareness – or willingness - on these indispensable systems and schemes to prevent expected economic and social disruptive factors absent proper actions. Private schemes will be essential, to complement public schemes and to develop innovative solutions, but they will call for proper regulation. Special efforts are also requested to help populations become more aware of risks and responsibilities which they will increasingly have to bear. The World Economic Forum initiative provides a benchmarking source for addressing these challenges."

André Laboul
Head, Financial Affairs Division, Organisation for
Economic Co-operation and Development (OECD)

"No social force is as predictable in its arrival as the disruptive demographics of ageing – what remains unclear is the magnitude of its impact on pensions, healthcare and innovation. *The Future of Pensions and Healthcare in a Rapidly Ageing World* is a timely study providing both insight and a compass to decision-makers in both business and government navigating the new world of old age."

Joseph F. Coughlin
Director, AgeLab, Massachusetts Institute of Technology

"The scenarios, built on a strong contextual background about the nature of ageing in contrasting societies, provide fertile ground for planning and policy-making. The growing trend of inequalities in ageing is rightly highlighted. Older people are not homogeneous; some will have a positive view of old age and will pioneer a more active (and wealthy) retirement. Others will struggle to enjoy the basic determinants of healthy life expectancy. The Forum has challenged us to make explicit decisions about the kinds of society we could plan: consolidating or separating around the needs of some of the most vulnerable. The worst scenario is no planning at all. This is likely to disproportionately damage the vulnerable and lead to unintended and undesirable consequences for many more."

Yvonne Doyle
Regional Director of Public Health & Medical Director
Government Office for the Southeast and Southeast
Coast Strategic Health Authority, UK

Appendices

Appendix A: How to Use Scenario Thinking Inside Your Organization

Beyond the Forum context, the scenarios outlined in this report may be useful tools to aid strategic decision-making within your organization. This section briefly overviews the process of using scenarios to catalyse strategic conversations, enhance decision-making, and better understand uncertainties in the external environment that could impact your organization.

From scenario planning to strategic action

As mentioned previously in this report, scenarios are not an end in themselves. But they are a powerful management tool that can improve the quality of executive decision-making. Many leading global companies use scenario thinking to help formulate their business and investment strategies.

Moving from the scenarios themselves to strategy development and action is one of the most critical phases of the scenario-thinking process. If a scenario project fails, it is typically because the scenario-planning process is not sufficiently integrated into the executive decision-making process, rather than because the scenarios themselves were poorly designed or lacked creativity.

Scenarios are useful because they bring an additional dimension to the understanding and interpretation of the data upon which strategic decisions depend. By clarifying future uncertainties, scenarios can bring into sharper focus a range of seemingly distant forces that have the potential to evolve and affect the overall environment.

The scenario stories in this report have a very broad scope and are intended to increase our understanding of the various uncertainties regarding the future of pensions and healthcare, both in a global context and for China and Italy specifically. Such high-level scenarios can provide a useful framework for positing more detail about an organization's specific external environment at the country, industry and even product-line level.
Used purposefully, scenarios can:

- **Enhance a strategy's robustness** by identifying and challenging underlying assumptions
- **Allow better strategic decisions** by discovering and framing uncertainties, leading to a more informed understanding of the risks involved with substantial and irreversible commitments and promoting strong and pre-emptive corporate positioning
- **Improve awareness of change** by shedding light on the complex interplay of underlying drivers and critical uncertainties, and enhancing sensitivity to weak and/or early signals of significant changes ahead
- **Increase preparedness and agility in** coping with the unexpected by making it possible to visualize possible futures and mentally rehearse responses
- **Facilitate collaborative action** by providing different stakeholders with common languages and concepts in a non-threatening context

How to make the most of scenarios

The main danger in moving from scenarios to strategic action is that discussions may degenerate into broad generalizations. For that reason it is wise to clarify at an early stage the objectives and strategic decisions to which the scenarios are intended to contribute. The following points suggest some practical ways to translate the scenario process and the materials provided in this report into action.

1. Strategic decision-making

If you have a known set of strategic options for future implementation, it is possible to use scenarios to evaluate their resilience and vulnerability to future factors in the external environment. In this case the need for the decision is known beforehand, and the aim is to assess the decision's resilience in different external conditions. The main steps are:

- Identifying the key criteria and assumptions about the external environment that would have to be met in the future to support a "go" decision for each of your known strategic options (e.g. required growth rate, technological developments, regulatory environment etc.)
- Assessing the state of these criteria or assumptions in each scenario to decide on the overall resilience of the strategies to different, plausible futures
- Ascertaining which options fit best in which scenarios, and which ones are robust across multiple scenarios

- Considering the need to hedge or modify the original set of options to increase their resilience to future uncertainties, and adding these factors to the data set you consider before taking a final decision on strategy implementation

2. Strategy evaluation

If you have an existing strategy, scenarios can be used to evaluate its viability and identify any need for modifications and/or contingency plans. The main steps are:

- Identify specific elements of the current strategy and spell out its goals and objectives
- Assess the likely success of the strategy in each scenario
- Based on this analysis, identify opportunities addressed or missed, risks foreseen or overlooked, and comparative competitive successes or failures
- Identify options for changes in strategy and the need for contingency planning

3. Strategic option development

Developing strategic options is probably the most interesting and challenging phase in a scenario-planning exercise. The goal here is to develop and then evaluate a range of options for consideration as either robust or scenario-specific strategies. The former may be useful for immediate implementation, while the latter may be considered either as a potential gamble that the future will most resemble that scenario or as a potential hedge against it. The main steps are:

- For each scenario, consider the main implications for your organization in terms of new challenges, opportunities or major shifts in the operating environment (regulations, market forces, key risk events, shifts in cultural attitudes, geopolitical shifts, etc.)
- For each challenge, opportunity or major shift in a given scenario, consider how your organization might respond so as to overcome challenges, take advantage of opportunities and maximize the benefits from change
- Use other resources, such as a long list of strategic options (see section 3) or an analysis of previous occurrences in history, to ensure you have identified a broad spread of relevant options
- Consider the total set of strategic options to identify those that would create value across multiple scenarios and therefore may be particularly robust to the future set of outcomes
- Consider integrating the most pertinent strategic options into an overall, coordinated business strategy

When using scenarios to engage in strategic analysis of this kind, it is most useful to convene a small group of diverse participants with expertise in the relevant area and organizational responsibility. We have found that working with someone with scenario experience who can help design and facilitate this type of workshop is very useful in enhancing the value of subsequent discussions.

Phase two of the Financing Demographic Shifts 2030 project will explore the strategic options for the various stakeholder groups in further detail. This phase may help you to develop your specific strategic options at the organizational level.

If you would like more information on developing strategic options for your organization, please contact us at scenarios@weforum.org.

Appendix B: Details of Driving Forces

Global driving forces

Demographic shifts

Facts and/or projections	Relevance for pensions/healthcare
The UN (2007) predicts the old-age dependency ratio at the world level will increase from 11.5% in 2007 to 25.4% in 2050. The World Bank (2007) expects the labour force in high-income countries to peak in 2010 and then begin to shrink significantly.	Rapidly ageing populations – all other things being equal – will increase the demand for retirement benefits and long-term care for older persons. A decline in the labour force – all other things being equal – will undermine the financial sustainability of PAYG pensions and healthcare systems.
Uncertainties	
Demographic shifts in the next two decades are fairly predictable. Only extreme events such as pandemics, heat waves and breakthrough life-extension innovations could influence these shifts significantly. What is less certain is the proportion of the very elderly within the population and the number of years of good or ill health prior to death.	

Global economic and capital markets performance

Facts and/or projections	Relevance for pensions/healthcare
Real stock market returns can vary significantly. For example, in the past 50 years, the cumulative real (inflation-corrected) return on the S&P 500 Index over different rolling 20-year periods has been as high as 1097% between 1980 and 1999 and as low as 15% (cumulative) from 1961 to 1980. Based on data from 1952-2002, the average 20-year cumulative real return on the S&P 500 was 284% (NDR, World Economic Forum analysis, 2008). US Bureau of Labor Statistics data show the volatility of labour productivity growth. From 1973 to 1995, US non-farm labour productivity grew at 1.2%, while from 1995 to 2000, the annual average rate doubled to 2.3%, a significant acceleration (BLS, 2007).	Future investment returns will have a major impact on the sufficiency of capital-funded pensions. Economic performance (e.g. long-term labour productivity growth) will have a major impact on the financial sustainability of PAYG pensions and healthcare systems. Economic performance will also influence the expectations of individuals regarding pensions and healthcare quality and benefit levels.
Uncertainties	
Historical evidence indicates capital market returns are uncertain also from a long-term perspective. Changing patterns in labour productivity are also uncertain, particularly in terms of technology improvements.	

Income and wealth distribution in emerging markets

Facts and/or projections	Relevance for pensions/healthcare
The global middle class is growing twice as fast as the overall world population (World Bank, 2007). The World Bank (2007) predicts that by 2030 fully 1.2 billion people in developing countries –15% of the world population – will belong to the global middle class, up from 400 million in 2005. Families of four in that class can expect to earn between US$ 16,000 and US$ 8,000 in PPP terms.	Demand for healthcare and retirement services is likely to rise with the growth of the global middle class.
Uncertainties	
Political instability and failure of market, social and institutional reforms could slow growth and distort income distribution, hindering the expansion of the middle class. There is also uncertainty about which new markets will emerge.	

Note that the references for data work in this section can be found in the key references section p 108.

Patterns of infectious and chronic diseases

Facts and/or projections	Relevance for pensions/healthcare
Chronic diseases are the leading cause of mortality in the world, representing 60% of all deaths (WHO, 2007). The WHO (2005) expects deaths from chronic diseases to increase by 17% between 2005 and 2015. The "Spanish Flu" pandemic of 1918-1919 killed 50-100 million people at the beginning of the 20th century (Asian Development Bank, 2005). The threat of similar pandemics has not been wholly mitigated by advances in disease management and vaccinations. **Uncertainties** The impact of infectious diseases is particularly uncertain in a highly interconnected world, given the emergence of drug resistance and the potential for new vaccines. In addition, uncertainty exists as to how chronic diseases will develop alongside changes in lifestyle.	Infectious and chronic diseases lower the quality of life and create significant costs for care, both acute and long-term. Trends indicate that low- and middle-income countries will see a rise in demand for more medicines and devices that treat chronic diseases as these become more prevalent, impacting public and private budgets. More companies are implementing wellness programmes focusing on prevention to reduce future healthcare costs. In disease pandemic cases, international patent rules will be overridden more often in favour of international licensed healthcare manufacturing agreements and discounted supply deals.

Climate change and environmental degradation

Facts and/or projections	Relevance for pensions/healthcare
The 2003 heat wave in Europe claimed the lives of 35,000 people (WHO, 2007). The top 10 warmest years over the last century have all occurred since 1990 (EDN, 2007). Less rain and warmer temperatures from climate change could reduce agricultural yields by one-third or more in the US grain belt, vast areas of Asia and much of Australia (UN, 2003). **Uncertainties** The rate and extent of climate change is very uncertain, as is the timing of extreme weather events associated with it. There is also uncertainty about the effectiveness of human societies' response.	New patterns of heat waves and cold snaps, floods and droughts, and local pollution and allergens will affect health directly. Indirect effects will result from changes to ecological and social systems, such as changes in the distribution of infectious diseases, freshwater supplies and local food production.

Urbanization

Facts and/or projections	Relevance for pensions/healthcare
In 2008, for the first time, more than half of the globe's population is living in towns and cities (UN, 2007). Future population growth will primarily occur in urban areas of less-developed countries. The urban population of Asia and Africa is expected to double between 2000 and 2030 (UN, 2007). Between 2000 and 2030, the world's urban population is expected to increase by 72% (UN, 2007). **Uncertainties** The urbanization trend itself is relatively predictable, but secondary effects and the precise patterns are less so.	Cities are in a better position to provide healthcare simply because of their advantages of scale and proximity. In cities of poorer countries, concerns include inadequate water and sanitation, poor air quality (inside houses as well as outside) and limited or non-existent waste disposal services.

Changing attitudes of individuals towards retirement and health

Facts and/or projections	Relevance for pensions/healthcare
The length and nature of retirement has changed dramatically. In contrast to the sedentary past, retirement now accounts for fully one-quarter of people's lifetimes. What is more, retirees are generally healthy, energetic and eager to get the most out of life. (AXA, 2007) Across the G7 countries studied, employees increasingly appear to view "retirement" as a transitional period in which they leave their primary occupations and then continue to work for a number of years in a new field or on a reduced basis (AARP, 2007).	Attitudes towards retirement govern both length of labour participation and saving behaviour. Current expectations regarding retirement income and healthcare provision may not be met, and this may influence retirement and healthcare burdens on public and informal care systems.
Uncertainties	
Attitudes towards retirement are shifting both socially and politically and are heavily dependent on economic circumstances.	

Changing role of governments in social welfare

Facts and/or projections	Relevance for pensions/healthcare
Nearly all 30 OECD countries have made at least some changes to their public pensions since 1990. The average pension promise in 16 countries studied by the OECD was cut by 22%. (OECD, 2007) More governments are introducing stricter minimum funding requirements for company-sponsored pension plans to protect employees and reduce the government's risk of bailouts if companies become insolvent. More governments are taking an active role in promoting healthy behaviours (e.g. anti-smoking, exercise, healthy eating).	Unfunded pension liabilities, combined with anticipated demographic trends, pose a considerable challenge to policy-makers that could imply slow growth, economic instability, or both.
Uncertainties	
Uncertainty exists whether and to what extent governments will continue to retreat in the developed countries. Furthermore, how will the role of governments in social security evolve in less-developed countries?	

Changing role of employers in social welfare

Facts and/or projections	Relevance for pensions/healthcare
Companies are increasingly reducing their spending on employee benefits through measures such as employee cost sharing and flexible benefit programmes, and are moving from defined benefit to defined contribution pension schemes. Generally, in addition to changing the style of benefits, companies are cutting the amount they are prepared to contribute. More companies are implementing phased retirement programmes due to labour shortages. More companies are implementing wellness programmes focusing on prevention to reduce future healthcare costs.	With declining numbers of people of working age in developed countries, high labour participation by older workers is essential to support PAYG social security systems. Employers play a crucial role in shaping the employment prospects of older workers.
Uncertainties	
In many countries, firms have played a role in providing healthcare and pension benefits for workers. However, as competitive pressures continue to increase, there is uncertainty as to what benefits companies will offer.	

Changing role of families in social welfare

Facts and/or projections	Relevance for pensions/healthcare
There has been a shift from extended to nuclear families, including an increase in one-person households. The escalating cost of providing institutionalized long-term care for the elderly, combined with the preference of many older people for remaining in their own homes, has slowed the growth of nursing homes and assisted living facilities in recent years. A major healthcare challenge is how to support community initiatives for the elderly (UN, 2008).	The role of families in caring for the elderly is declining worldwide. This may put extra pressure on public and private pensions and on long-term care. With the slow growth and unpopularity of nursing homes and assisted living facilities, alternative living and care arrangements for older people in developed countries may grow in importance.
Uncertainties	
It is not clear how informal and family care structures will evolve, especially vis-à-vis the actions of the welfare state and alternative private channels through which families can support the elderly and infirm.	

Healthcare innovation and regulation

Facts and/or projections	Relevance for pensions/healthcare
DataMonitor (2007) predicts a number of new products will reach the market in the orthopaedic, oncology and cardiology sectors due to significant increases in R&D spending. In addition, biotechnology, nanotechnology and gene therapy offer the potential for significant but costly advances in both life extension and improved quality of life. New infrastructure is arguably bypassing the lessons of history. Many countries are trying to move care closer to home and supporting self-administration through telemedicine. The European Patent Office (EPO) recently published scenarios describing significantly different intellectual property (IP) systems that have the potential to impact health innovation and regulation (EPO, 2007).	Medical innovation partly creates its own demand (e.g. due to health-seeking behaviour) and thereby raises medical expenses. Medical innovation may further increase life expectancy, thereby increasing the need for old-age social security. New IP regimes would affect pharmaceutical companies, drug regulations and healthcare provision.
Uncertainties	
The extent and impact of new health technologies over the next 25 years is highly uncertain, as is the regulatory frameworks (including IP) that surround them.	

Financial innovation and regulation

Facts and/or projections	Relevance for pensions/healthcare
While many countries still maintain capital controls, the world has nonetheless seen a huge increase in financial flows both in gross and net terms (World Bank, 2007). Chinese citizens traditionally have been restricted from overseas investments. However, these restrictions are loosening. In May 2007, Chinese regulators lifted the ban to allow Chinese citizens to invest in Hong Kong securities markets. Since December 2007, Chinese citizens have been allowed to invest in the British stock market through commercial banks.	Modifying a funding mechanism can shift risk over time. There may be more creativity in annuity products, for example, or in other ways of managing longevity risk. Perceptions of financial products may be greatly influenced by relatively minor failings that are highly publicized. This may lead to overdependence on informal saving vehicles such as personal property or real estate. Cross-border investment opportunities allow for more diversified pension-fund investment portfolios and potentially higher returns.
Uncertainties	
There is considerable uncertainty as to the range and effectiveness of financial innovations in the area of pensions and healthcare, and a wide range of possible policy responses by regulators to future economic circumstances.	

China-specific driving forces

Demographic shifts in China

Facts and/or projections	Relevance for pensions/healthcare
China's population is ageing rapidly due to rising life expectancy, falling fertility rates and reduced infant mortality. The median age is projected to rise from 32.6 in 2005 to 44.8 in 2050. Using the conventional definition of elderly, by 2050 China is expected to have 39 elderly persons per 100 working age persons, but taking earlier retirement ages into account, that figure may rise to 79 retirees for every 100 working age persons.	Ageing societies increase the demand for both pensions and healthcare services while decreasing the workforce available to provide them. This implies increasing strains on familial and informal networks of elderly care.
Uncertainties	
There are relatively few uncertainties regarding demographic shifts. The most significant uncertainty is the possibility that a serious epidemic could cause a disproportionate death toll.	

China's economic performance

Facts and/or projections	Relevance for pensions/healthcare
China has grown to be the second-largest national economy in the world in PPP terms. Over the 2003-2008 period, income per capita rose an average 10.2% per year, dwarfing India's 6.8% gain. However, in per-capita terms China still falls in the lower middle-income category. There are also warning projections for Chinese economic growth, which could slow to a 7% annual rate by the end of 2008 if severe global weakness is combined with a collapse in the mainland stock market and aggressive tightening by the government to tackle inflation.	China's economic growth will determine how much service the government will be able to offer, as well as the availability of public and private savings to finance retirement and old-age healthcare needs.
Uncertainties	
Reliance on exports makes China vulnerable to a global economic slowdown. China is also vulnerable to shocks in raw materials and energy supplies. Predictions vary as to how soon China will reach the point where it can no longer drive growth simply by expanding the workforce, requiring the country to find ways to improve labour and capital productivity.	

Financial and capital-market development in China

Facts and/or projections	Relevance for pensions/healthcare
Despite economic growth, China's equity and fixed income markets both have much scope for development to provide diverse options for investment. Currently the vast majority of retirement funds are invested in relatively low-yielding (about 2-3%) government bonds and bank deposits. In 2005, the Chinese bond market equalled only 34% of GDP, while stock market capitalization was still slightly below 20% of GDP. There are other challenges, such as broadening the participation of foreign investors and giving Chinese investors greater leeway to invest pension assets abroad.	Robust financial and capital market development are essential to generate rates of return sufficient to produce the wage replacement rates the government wants to provide in a transition to a capital-funded pensions system.
Uncertainties	
The maturing of China's financial system and capital markets depends on a variety of issues, such as how the government balances direct and indirect financing and bond and equity markets, the development of a corporate bond market, improvements in information disclosures, credit ratings and other essential reporting mechanisms and an increase in the range of financial products available.	

Note that the references for data work in this section can be found in the key references section, p108.

The urban-rural divide in China

Facts and/or projections	Relevance for pensions/healthcare
Nominal income per capita for China's urban residents is more than three times that of rural residents. The gap doubles when education and healthcare are factored in; urban dwellers benefit from many more public or subsidized services. About three-fifths of China's elderly are rural and consequently at higher risk of poverty and ill health. Urban dwellers are more than four times as likely to be covered by public pension benefits and more than twice as likely to receive public healthcare benefits.	Policies on income redistribution and pension portability will affect the urban-rural divide and the patterns of internal migration.
Uncertainties	
Economic and policy factors could widen or narrow the urban-rural divide. Although the gap has been widening overall since 1985 – when urban and rural incomes were equivalent – evidence that narrowing is at least possible comes from the mid-1990s, when the urban-rural income ratio decreased.	

Patterns in chronic and infectious diseases in China

Facts and/or projections	Relevance for pensions/healthcare
China is suffering more from chronic diseases as urbanization leads to a different lifestyle; obesity and hypertension are becoming increasingly common. Infectious diseases also pose concerns: around 1 in 10 Chinese carries hepatitis B, about five million Chinese suffer from tuberculosis, and AIDS is a growing problem with projections that 10 million people will be HIV positive by 2010. Finally, as evidenced during the global SARS outbreak in 2003, China is often considered at relatively high risk of possible future pandemics.	Chronic and infectious diseases put healthcare systems under logistical and financial strain.
Uncertainties	
Chronic disease is likely to continue to rise in the absence of effective preventive policies, for example with regard to lifestyle, smoking and diet. The outlook for infectious disease is less predictable.	

Environmental degradation and climate change in China

Facts and/or projections	Relevance for pensions/healthcare
China's environment has suffered dramatically from its rapid economic growth. Air quality is a major issue, as 16 of the world's 20 most polluted cities are in China. Water pollution is also endemic, due to chemical fertilizers and pesticides or industrial waste. One-third of China's major water basins are classified as "highly polluted". Finally, significant amounts of agricultural land are lost each year to erosion and desertification.	Air and drinking-water quality have major impacts on health, and infectious and chronic diseases. There are controversial figures for premature deaths each year in China attributable to pollution, with an additional 1.3 million deaths annually from pulmonary disease, which is linked to poor air quality.
Uncertainties	
There is uncertainty about the extent to which the government's public commitments to tackle environmental problems will translate into effective action, as environmental laws are enforced to varying degrees by local officials. Any post-Kyoto global agreements on climate change may also have significant impacts on China.	

Urbanization in China

Facts and/or projections	Relevance for pensions/healthcare
China is rapidly urbanizing. A 2005 National Survey indicates that 145 million floating migrants now live in urban areas despite having household registration in rural areas, putting them at a considerable disadvantage in accessing social services. It is projected that half of China's population will live in urban areas by 2030. The majority of the increase in the urban population will consist of migrants from rural areas and a large percentage of them will enter the informal labour force.	Unregistered migrants from rural areas typically are unable to access state healthcare services or to accumulate public benefits for their retirement. Urbanization also changes morbidity patterns, with urban lifestyles increasing the prevalence of illnesses such as heart disease and diabetes.
Uncertainties	
Although the overall urbanization trend is almost certain to continue, government policies have the potential to significantly shape how it happens – by determining, for example, how many migrants will be registered or unregistered, or whether there will be a smaller number of very large cities or a wider spread of smaller cities.	

Pension reforms in China

Facts and/or projections	Relevance for pensions/healthcare
A three-pillar system involving social pooling and funded individual accounts is being introduced, with the aim of providing minimum social security at old age. However, the heavy contribution burden discourages participation, while the lack of pension portability and the gap between urban and rural schemes means many workers benefit less than others or not at all. Commercial insurance schemes are underdeveloped and investment choices are still limited.	Pension reforms will impact the development of China's public pension system and private pension plans.
Uncertainties	
Uncertainty surrounds the pace and implementation sequence of reform, the extent of coverage it will achieve, and the level of future retirement benefits. There are further questions about the role of the private sector and the speed, degree and timeliness of financial and capital-market reforms.	

Healthcare reforms in China

Facts and/or projections	Relevance for pensions/healthcare
China's total expenditure on health in 2005 was 4.7% of GDP, vs 15.2% in the US. Total per capita expenditure on health that same year was Intl$ 315, compared to Intl$ 6,350 in the US. Since 2000, China has implemented urban cooperative medical schemes, rural cooperative medical schemes and basic medical insurance. However, the system of healthcare delivery remains complex: there are 12 decision-making ministries, administrative responsibilities are dispersed, and urban and rural schemes are separate. Hospitals have incentives to overprescribe medication, adding to the financial burden on patients.	Equity of access and quality of care are affected by the design of the healthcare system. Health policy decisions have considerable economic consequences and the speed of developments in medicine and the evolution of healthcare objectives inevitably make health systems reform an ongoing, iterative process.
Uncertainties	
Doubts surround the sufficiency, sustainability and financial viability of China's healthcare system. Questions include whether there will be universal coverage with equal access to medical services for all, whether investment in human resources across the country will allow for wide coverage of high-performing health systems, and the prospects for accurate data collection and performance measurements for analysis and prevention.	

Human-capital & labour-market reforms in China

Facts and/or projections	Relevance for pensions/healthcare
China's labour market faces 5-to-10-year supply constraints in five key skill areas: management talent, English-language skills, research & development personnel, senior and secondary technically skilled workers and holders of professional certificates. Barriers such as the hukou (household registration) system stand in the way of establishing a national labour market. China's recent growth needs to be accompanied by a degree of labour market reform necessary to sustain a high growth rate by transitioning to a knowledge-based economy.	Rigidity in the labour market reduces the flow of contributions into social security funds, with implications for sustainability. A career focus among women, meanwhile, reduces their traditional availability to provide informal long-term care.
Uncertainties	
While China is moving towards more flexible employment and a higher-quality labour force, questions surround the speed and relevance with which it is doing so and whether sufficient incentives exist to prevent brain drain and maintain high growth in the longer term.	

Italy-specific driving forces

Demographic shifts in Italy

Facts and/or projections	Relevance for pensions/healthcare
Italy has one of the lowest fertility rates in the world (1.4 children per woman in 2007), while life expectancy is among the highest (around 78.6 years for men and 84.1 years for women) and rising rapidly. UN projections indicate that by 2050 life expectancy could be 82.2 for men and 88.1 for women. This means the Italian population is ageing rapidly – Italy already holds the world record for the highest percentage of what experts call the "old old", persons aged 80 years or more, and currently has the second-highest old-age dependency ratio among OECD countries (after Japan).	A rapidly ageing Italian population will tend to increase the demand for retirement benefits, healthcare and long-term care services. Simultaneously, a relative decline in the labour force as more of the population enters retirement will tend to undermine the financial sustainability of Italy's pay-as-you-go (PAYG) pension and healthcare systems, requiring a significant reduction in benefits to maintain fiscal stability. Such reforms have significant implications for future pension adequacy.
Uncertainties	
While the demographic shifts are fairly predictable (barring extreme health crises), the health status of an older population and its willingness or ability to be productive is less certain, despite recent evidence showing that Italy currently enjoys high and increasing levels of disability-free life expectancy.	

Italy's economic performance

Facts and/or projections	Relevance for pensions/healthcare
According to the OECD, Italy faces a range of economic challenges: a lack of total factor productivity growth, relatively low human capital accumulation, weak market competition, a large North-South regional gap, low labour market participation and a fiscal policy in need of consolidation. Italy's previously dominant export sector has declined – between 1995 and 2005, nearly 50% of Italy's export market shares evaporated and Italy's share of world trade in value terms declined by one-third. Over the same period relative unit labour costs jumped by more than 50%, indicating a significant loss of competitiveness. Real GDP growth in 2007 was 1.5%, lower than the government target of 1.9% and little more than half the Eurozone average of 2.7%.	Less than desirable economic growth combined with expensive social programmes contributed to the doubling of Italy's public debt ratio between 1980 and the mid-1990s, and a further increase to an estimated 105.6% of GDP in 2007, making Italy's debt burden among the highest in the world. This will impact the state's ability to fund PAYG social security, particularly in light of the gaps that exist between tax receipts and ongoing liabilities. In addition, global and national economic performance will influence the expectations of individuals regarding pensions, healthcare quality standards and benefit levels. Finally, investment returns in the capital markets will impact the sufficiency of capital-funded pensions.
Uncertainties	
Historical evidence indicates that capital market returns are uncertain from both a short- and long-term (e.g. 10 to 20 years) perspective. The performance of the global economy and Italy's ability to adapt are likewise uncertain.	

Regional income and wealth distribution in Italy

Facts and/or projections	Relevance for pensions/healthcare
According to UNDP, the GINI index (a measure of income equality) for Italy in 2000 was 36, indicating a relatively high degree of income inequality, compared to an average 30.8 across the other EU-15 countries. In addition, regional imbalances across Italy are remarkably high; the unemployment rate in the southern regions of Italy is approximately 20%. In the north, the unemployment rate is less than 5%. This has already led to health inequalities.	Income and wealth distribution are important in terms of anticipating the needs of different populations for pension and healthcare services, particularly in a decentralized healthcare system. Recent research has indicated that income inequality has an effect on health investment at the regional level, thereby influencing health outcomes. Income inequality also leads to health inequalities, with middle age and older people being particularly vulnerable. The consequences are earlier mortality and, for survivors, earlier and more profound disability.
Uncertainties	
There is uncertainty about whether inequality will increase or decrease. Empirical evidence shows an increase in income inequality from the mid-1980s to the mid-1990s, but whether this trend will reverse, and how it will affect regional imbalances, both remain uncertain. Research differs on whether inequality has been increasing or decreasing in recent years, but anecdotal evidence suggests continuing divergence in income distribution between the north and south.	

Note that the references for data work in this section can be found in the key references section, p109.

Patterns of infectious and chronic diseases in Italy

Facts and/or projections	Relevance for pensions/healthcare
Compared to the other EU15 countries, the Italian population generally enjoys lower rates of mortality for all main causes of death. Cardiovascular disease and malignant cancer accounted for 38% and 32%, respectively, of all deaths in Italy in 2001. However, there is evidence the pattern of mortality from some high-incidence chronic diseases (such as Ischaemic heart disease) is shifting in terms of both the overall impact and regional distribution. Demographic changes are affecting the overall incidence of chronic pathologies, as almost 90% of those older than 65 are estimated to have an illness requiring care. In addition, the effects of climate change and environmental risks to health are having a measurable impact on disease profiles. **Uncertainties** Shifts in disease incidence due to population ageing are relatively certain; however, those associated with environmental factors, new infectious diseases or emerging epidemics – including chronic conditions such as obesity – are uncertain.	Shifts in the epidemiology of both chronic and infectious diseases have the potential to significantly impact healthcare costs and pensions spending. This can occur directly through increased costs and indirectly through the effect on the life expectancy of population segments.

Climate change and environmental degradation in Italy

Facts and/or projections	Relevance for pensions/healthcare
Recent reports of previously unknown, mosquito-borne tropical diseases in southern Italy are examples of the human impacts of climate change. Chikungunya (a relative of dengue fever), malaria, tick-borne encephalitis and other climate-related diseases are all experiencing resurgence. In addition, an increased incidence of drought has impacted Italy's economy by contributing to desertification, while air and water pollution are significant (and rising) problems in the country. Finally, the record-high temperatures seen in the summers of 2003 and 2006 point to the increased risk of deaths related to heat waves. **Uncertainties** As climate change progresses, key uncertainties surround the extent to which environmental changes pose a public health challenge.	Climate change and environmental degradation may negatively affect the Italian economy and thereby undermine the funding of pensions. Climate change and environmental degradation may also affect healthcare needs due to their impact on food, water and air quality, and the spread of infectious diseases (see above).

Immigration in Italy

Facts and/or projections	Relevance for pensions/healthcare
According to Eurostat, the rate of natural increase in the Italian population has dropped dramatically since 1980, from 1.8 to -0.45 per 1,000 in 2001, then further to -0.7 per 1,000 in 2003. In contrast, the rate of net migration into the country has risen 30 times between 1980 and 2001. In 2006, Eurostat estimated crude net migration rates of 5.8 per 1,000 population for Italy, compared to 1.7 for France and 3.3 for the United Kingdom, representing a huge flow of migrants into the country. At the same time, Italy has a relatively low proportion of foreign-born inhabitants, and reports indicate that, compared to its European neighbours, the country may have difficulty integrating migrants at such a rapid pace. **Uncertainties** There is significant uncertainty about social attitudes and hence government policies towards immigration. The Italian economy has become increasingly reliant on the low-cost (and often illegal) labour that immigration provides, but at the same time Italian society seems to be having trouble assimilating the large numbers of foreign-born.	Immigration is one tool for offsetting demographic changes in the national population and labour market, as immigrants are often seeking jobs. Currently, privately employed (and often illegal) immigrants comprise an estimated 86% of all home-care workers for the elderly. However, migrants can also strain public services and may find it difficult to integrate into the national culture and existing administrative systems.

Pension reforms in Italy

Facts and/or projections	Relevance for pensions/healthcare
Experience indicates that delays (if not complete revisions) of current reforms are possible due to pressure from labour unions, interest groups and political parties. In 2007, the Prodi government extended the timing of the change of retirement age to avoid an abrupt "step", thereby lengthening the time for savings from the policy to be realized. In addition, the commitment to revise the coefficient for calculating benefits in line with longevity and GDP has been delayed since its due date of 2005. There is no guarantee it will be enacted, as now planned, in 2009.	As noted above, the financial sustainability of Italy's pension system relies on full implementation of planned reforms. Without this, public funding of an estimated additional 2% of GDP per year will be required over the long term. This will have negative effects on healthcare spending as public funds are diverted to finance pension benefits.
Uncertainties	
The actions of the new Berlusconi government, a changing political climate, the ability of ruling parties to successfully negotiate with labour unions and the prevailing economic environment will all influence progress on pension reform, yet all these factors are very uncertain.	

Healthcare reforms in Italy

Facts and/or projections	Relevance for pensions/healthcare
Since 1992, the Italian health system has undertaken a series of reforms, creating a decentralized system with three levels, from the national Ministry of Health (responsible for national health planning, budgeting, general administration and health standards) down to regional and local health authorities (responsible for management, healthcare expenditure and fund allocation). However, with rising healthcare costs and concerns over regional disparities, there is pressure for further changes in incentives to encourage efficiencies and equalize health outcomes across the country.	The structure, efficiencies and incentives in the healthcare system directly impact equity of access, patient satisfaction, value for money and certain clinical outcomes. These factors also often interact with pension levels in terms of required co-payments and private costs, particularly for long-term care.
Uncertainties	
A range of possibilities for further reform can be envisaged, with both design and effectiveness uncertain. Further, the implementation of such reforms relies on successful negotiations between the central government and the regions on the way further changes to the system will affect current responsibilities and relative funding levels.	

Labour-market and education reforms in Italy

Facts and/or projections	Relevance for pensions/healthcare
Research by the OECD claims that Italy's poor innovation performance can be traced to deficiencies in the tertiary education system – in particular the fact that, relative to other OECD economies, a very high share of Italy's workforce (40% of the population in the 25-34 age group) has little or no formal qualifications beyond compulsory schooling. Furthermore, participation rates of women and older workers, as well as youth employment rates, are still well below corresponding European and OECD averages. Researchers point out that Italy's labour market remains very rigid, particularly in terms of wage inflexibility, wage bargaining and dismissals, despite changes such as the 1993 abolition of the price indexation clause (scala mobile), increased use of temporary contracts and other reforms set to come into effect in 2008.	The increase in the labour market participation of older workers in Italy is crucial both for fiscal sustainability and offsetting the projected shrinkage of the labour force due to demographic shifts.
Uncertainties	
While both labour market reform and education reform are proceeding to various degrees, the existence of strong labour unions and powerful lobby groups leaves the effectiveness of planned and future reforms in doubt.	

Appendix C: Past Policy Reactions

Key milestones in pensions and healthcare reforms in Italy

Historically, Italian pension reform has been a relatively slow and gradual process of reducing social security promises and boosting private pensions. The reforms enacted during the 1990s constituted a radical departure from the past and a brave attempt to correct the prior regime, which was very generous.

Public sector pension reforms in Italy

Year of reforms	Prime minister	Change introduced
1992	Amato	Undertaken at a time of serious budgetary problems in Italy and stimulated by the entry requirements of the European Monetary Union, the Amato reforms: • Raised the normal retirement age for private sector workers from 55 to 60 for women and from 60 to 65 for men, with increases phased in over 10 years. • Retained seniority pensions, but tightened the eligibility criteria for public sector employees by gradually raising the number of contribution years to match the 35 required for private workers. • Increased the number of wage years used to establish benefit payments from 5 to 10 for older workers with at least 15 years of contributions at the time of the reform, and to a career average for younger workers with less than 18 years of contributions. • Switched the annual indexing adjustment for pensions in payment status from the growth in wages to the growth in prices.
1993	Amato	Legislative decree defining regulations for second-pillar (supplementary pension) schemes. Prior to 1993, only a few companies set up pension arrangements for their employees; these were generally defined benefit (DB) in nature. These funds were converted to defined contribution (DC) arrangements when the 1993 pension law limited the scope of new and continuing supplementary DB schemes. The law became operational in 1998.
1995	Dini	Second major public pension reform to replace, after a long transition, Italy's traditional DB public pensions with a new system of "notional defined contribution" (NDC) accounts. • The system's financing remains entirely pay-as-you-go as opposed to fully funded, hence the term "notional". • Benefits are based on a worker's actual contributions to the system, with an administratively established rate of return formula applied to contributions to determine a "balance" from which a retirement annuity is calculated. • The annuity is adjusted according to the retirement age of the worker, which, under the Dini reform, could range from 57 to 65. • Seniority pensions are eliminated for workers retiring under the new system, while it establishes a minimum eligibility age of 57 for workers under the old system.
1997	Prodi	More rapid reform transition.
2002	Berlusconi	Increase in minimum pension benefits.
2004	Berlusconi	Increase in retirement age from the flexible range in Dini reform (57 to 65) to fixed limits (65 for men, 60 for women); scheduled to come into effect 1 January 2008. TFR reform aims to boost supplementary retirement plans by creating an "opt out" system for the transfer of severance benefits to pension funds.
2006	Prodi	Amendment to Berlusconi's 2004 reform to smooth the rise in the retirement age through gradual increases from 2008 onwards .
Pending legislation		A further enhancement of the pension market is expected to allow: • More freedom for employees to choose any DC products offered by the market. • Employers to opt out of national labour agreement mandating industry-wide funds and to set up their own company scheme via a market-based open pension fund.

Sources: Elsa Fornero, University of Turin and CeRP; European Pensions & Investment News; Milliman; US Government Accountability Office

The creation of the public National Health Service has probably helped to improve standards of healthcare, although costs are rising rapidly

Public sector healthcare reforms in Italy

Year of reforms	Prime minister	Change introduced
1978	Andreotti	National Health Service (NHS) established. NHS aims at granting universal access to a uniform level of care throughout the country, financed by general taxation. Universal coverage has been achieved, although regions differ widely in terms of healthcare and health expenditure, with a clear North-South divide.
1992-1993 and 1999	Amato	Both reforms involved a profound process of decentralizing the NHS by devolving political and financial authority to the regions and delegating considerable managerial autonomy to lower level purchasing and providing organizations.
1992-1993 and 1994-1996	Amato	To slow the rate of expenditure growth and obligatory health contributions paid by workers, point-of-use charges have been introduced periodically. The 1992-1993 and 1994-1996 reforms succeeded in reducing public healthcare expenditure to about 5% of GDP – below the OECD average – but failed to eliminate numerous inefficiencies, many related to work practices.
2001	Amato	Pursuant to the 2001 reform of the Italian constitution, the state and the regions were given shared responsibility for healthcare. • The state has exclusive power to define the basic benefit package (livelli essenziali di assistenza), which must be uniformly provided throughout the country. • The 19 regions and 2 autonomous provinces have responsibility for organizing and administering the healthcare system. • Local health units (public health enterprises legally independent from the region) have responsibility for delivering healthcare services at the local level, serving geographical areas with average populations of about 300,000.
2001	Amato	A centre-left government, reversing the earlier policy course, abolished charges on prescription drugs and some medical services in 2001, just ahead of the general election that year. As a result, spending on pharmaceuticals rose by 32.8% in 2001, while the increase in total health spending was 10.1%.
2001-2006	Casa	In an effort to contain rising health costs, charges on prescription drugs and other services were reintroduced.
2002-2005	Berlusconi	Hoping to force lower spending, the state froze regional autonomy over tax rates and health co-payments.
2006	Prodi	A series of new reforms aimed at liberalizing the pharmaceutical market were introduced. The provisions allowed supermarkets and other retail outlets to sell non-prescription drugs. Previously, the sale of over-the-counter medication was restricted to licensed pharmacies. The measure was intended to lower prices and provide greater choice to consumers.

Sources: Economist Intelligence Unit; European Observatory; OECD; World Health Organization

European institutions have notable impact on policy debates in Italy

European Commission directives and papers have helped set the framework within which the debate on demographic ageing, pensions and healthcare has unfolded. Notable examples are outlined below.

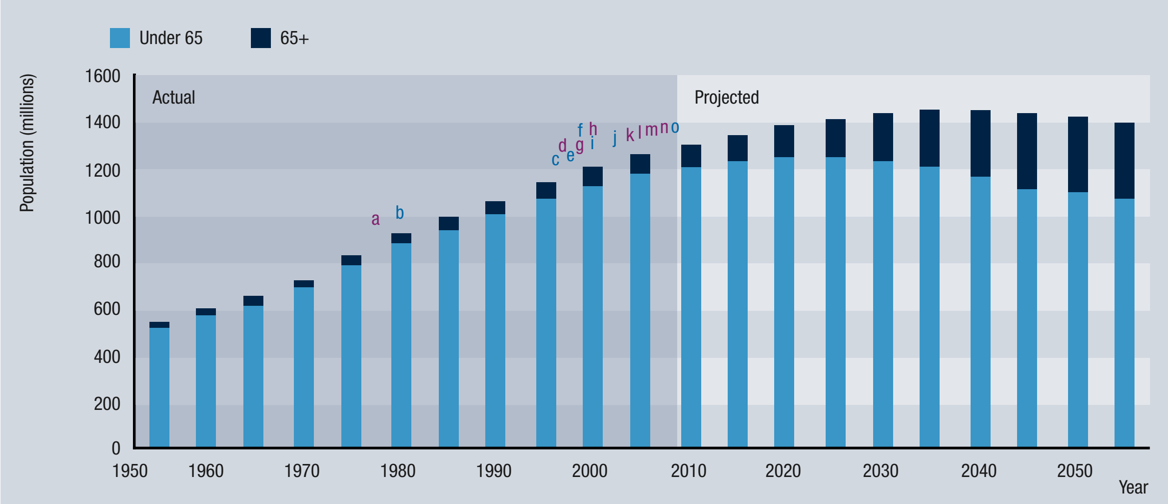
European institutional policy measures affecting Italy

Year of reforms	Name of reform	Change introduced
2000	Lisbon Strategy (also known as the Lisbon Agenda or Lisbon Process)	Adopted in 2000 in Lisbon by the European Council, the Lisbon Strategy broadly aims to "make Europe, by 2010, the most competitive and the most dynamic knowledge-based economy in the world". This is to be achieved through the formulation of various policy initiatives to be taken by all EU member states by 2010. The strategy includes an emphasis on confronting the demographic, health and financing implications of ageing.
2000	Anti-discrimination directives	A range of EC laws, or directives, designed to combat discrimination on a range of grounds including sex, race, nationality, sexual orientation, disability and age. These directives require implementation by national legislation.
2001	UCITS III directive	Italy is implementing the 2001 UCITS III directive of the European Commission. In February 2003, the Italian Parliament approved a law establishing the procedural steps needed to implement UCITS III. The new investment law will provide a better framework for international asset managers and depositary banks to do business in Italy. Opportunities will open up for foreign institutions as UCITS III is adopted and newer pension funds become more experienced in selecting asset managers. Italy has been a relatively closed shop for financial service providers. A strong universal banking model has enabled local banks to dominate the provision of both custody services and asset-management services.
2001	Stockholm Target	In 2001, at the Stockholm European Council meeting, EU members agreed on a goal of achieving a 50% employment rate for older workers (55-64 years).
2002	Barcelona Target	In 2002, the Barcelona European Council identified the retirement age of workers as a common European problem and concluded that the average exit age of older workers leaving the workforce should be raised by five years in each EU country by 2010.
2003	Pensions (IORP) Directive	The Institutions for Occupational Retirement Provision (IORP) Directive aims to facilitate the cross-border membership of occupational pension plans and lays down minimum standards for communication, solvency and regulation. It is a first step in developing an internal market for occupational retirement provision throughout the European Union. More companies are looking to achieve financial savings from managing their pension plans across the Europe region.
2005	Relaunch of the Lisbon Strategy	In 2004, Willem “Wim” Kok headed up a review and presented a report on the Lisbon Strategy suggesting ways to give new impetus to the process. The European Commission used this report as a basis for its proposal in 2005 to refocus the Lisbon Strategy on actions that promote growth and jobs.
2007	MiFID Directive	The Markets in Financial Instruments Directive (MiFID) is a European Union law that provides a harmonized regulatory regime for investment services across the 30 member states of the European Economic Area. The main objectives of the directive are to increase competition and consumer protection in investment services. As of the effective date, 1 November 2007, it replaced the Investment Services Directive.
Not yet approved	Portability Directive	The Portability of Pensions Directive was first proposed by the European Commission in October 2005. On 9 October 2007, the Commission adopted an amended proposal. If approved by the European Council and Parliament, the directive will reduce obstacles to worker mobility through improved access and better preservation of supplementary pension rights.

Source: European Commission

Key milestones in pensions and healthcare reforms in China

The increasing Chinese population share above 65 years of age



Source: United Nations Population Fund (2008)

	Pensions	Healthcare
a 1978	State Council amends the retirement component of the Labour Insurance Regulations, providing workers approaching retirement age with incentives to leave the labour force.	
b 1980s		Concept of primary healthcare is formally introduced in China.
c 1996		Regulations for the Protection of the Rights and Interests of Elderly People are enacted.
d 1997	Unified social security system for enterprise employees (State Council Directive No.20) approved. The plan establishes a unified, nationwide, basic pension insurance system to replace all pilot programmes in each province by the end of the century.	
e 1998		Central government promulgates "Decision on Establishing a Basic Medical Insurance System for Urban Employees".
f 1999		Ten Chinese central ministries, including the Ministry of Health, jointly issue a policy document entitled, "Planning and Guidelines on the Development of the Urban Community Healthcare Services".
g 1999	Central government promulgates "Regulations on Guaranteeing Urban Residents' Minimum Standard of Living".	
h 2000	National Council for Social Security Fund (NSSF) is established. Liaoning Province establishes a social security pilot programme (Document 42).	
i 2000		New urban cooperative medical-insurance system is introduced.
j 2003		Launch of the new rural cooperative medical scheme.
k 2004	Enterprise annuity rules are issued by the Ministry of Labour and Social Security (MOLSS) (former orders No. 20 & No. 23).	
l 2005	Thirty-seven enterprise annuity vendors are approved by the MOLSS (Order No. 24).	
m 2006	Major scandal uncovered in the Shanghai Pension Bureau.	
n 2007	Deadline for converting existing pension arrangements to enterprise annuity plans (MOLSS Order No. 12).	
o 2008		Basic medical-insurance coverage for all urban citizens scheduled to be in place nationwide.

Key References

Global

- International Labour Organization. Handbook on Establishing Effective Labour Migration Policies. Geneva: ILO, 2006.
- OECD. Financial Market Trends: Ageing and Pension System Reform. Implications for Financial Markets and Economic Policies. Paris: OECD, 2005.
- Pension Markets in Focus. October, 2006. Paris: OECD.
- World Economic and Social Survey 2007: Development in an Ageing World. June, 2007. New York: UN Department of Economic and Social Affairs (DESA).
- World Population Ageing 2007. June, 2007. New York: UN DESA.
- World Population Prospects: The 2006 Revision – Highlights. March, 2007. New York: UN DESA.
- Global Economic Prospects 2006: Economic Implications of Remittances and Migration. November, 2005. Washington DC: The World Bank.
- China: Pension Liabilities and Reform Options for Old Age Insurance. May, 2005. Washington DC: The World Bank.
- Preventing Chronic Diseases: A Vital Investment. October, 2005. Geneva: World Health Organization.
- The World Health Report 2006: Working Together for Health. June, 2006. Geneva: World Health Organization.
- World Health Report 2007: A Safer Future. August, 2007. Geneva: World Health Organization.

China

- Insurance Market Report: China Life and Benefits. 2007. London: Axco
- Social Security Reform in China. January, 2005. Singapore: China Economic Research and Advisory Programme.
- The Graying of the Middle Kingdom: The Demographics and Economics of Retirement Policy in China. April, 2004. Washington: Center for International and Strategic Studies, Prudential Foundation.
- China's Pension System: Caught between mounting legacies and unfavourable demographics. February, 2006. Frankfurt: Deutsche Bank Research.
- China Economy, 2006. London: Economist Intelligence Unit.
- Kovac, M. "China's Ageing Population Threatens to Derail Growth". Global Pensions, November, 2005.
- Heller, P. "Asia: Ready or Not?". International Monetary Fund,
- Is Asia Prepared for an Aging Population, December, 2006. Washington: International Monetary Fund.
- Facing Up to the Problem of Population Aging in Developing Countries. December, 2006. Tokyo: Japan International Cooperation Agency.
- The Heavenly Mandate: Winning a Piece of China's Pensions Market. October, 2006. Hong Kong: KPMG Reuters.
- Total Benefits Trend Survey: A Study of Benefits Trends in China. October, 2007: Shanghai. Mercer
- Pozen, R. An American Perspective on the Chinese Pension System. In Employee Benefit Research Institute Notes, 2006, 27:5-7.
- Wang, L . et al. Preventing Chronic Diseases in China. In The Lancet, 2005, 366:1821-1824.
- China Strategy – From Demographic Dividends to Deficit: Strategies along Aging. 2007. Hong Kong: Morgan Stanley.
- Mu Mian, 4-2-1 Phenomenon: New Partnership Explores Aging in China. In Social Impact, Winter 2007: 25-29.
- China's Lopsided Population Pyramid. 2007, Tianjin: 3:54-65. Nankai University:
- Population Aging in China as Reflected by the Results of the 2005 Population Sample Survey. April, 2007. Beijing: National Bureau of Statistics of China.
- Challenges for China's Public Spending. March, 2006. Paris: OECD.
- Chinese Medicine and Wisdom. July, 2006. Paris: OECD.

- Pension Reform in China - Progress and Prospects. 2007. Paris: OECD.
- China's Concern Over Population Aging and Health. June, 2006. Washington DC: Population Reference Bureau.
- Regulating Medical Services in China. July, 2007. New York: Milbank Memorial Fund, State Council of the People's Republic of China.
- World Population Ageing 2007. June, 2007. New York: UN DESA.
- A Health Situation Assessment of the People's Republic of China. July 2005. Beijing: UN Health Partners Group in China.
- Frazier, M. Pensions. Public Opinion, and the Graying of China. In Asia Policy, 2006, 1:43-68.
- Pension Liabilities and Reform Options for Old Age Insurance. May, 2005. Washington DC: World Bank.
- China: Health, Poverty and Economic Development. December, 2005. Beijing: World Health Organization and China State Council Development Research Center.
- China Country Cooperation Strategy. April, 2006. Beijing: World Health Organization Representative Office in China.
- McKinsey Quarterly, Seizing China's pharma opportunity, February 2008.
- Binder., S. Hu, H., et al. A life insurance policy for China. March 2006: McKinsey Quarterly.
- Leckie, S., and Pai, Y. Pension Funds in China - A New Look. ISI publications. 2005. Hong Kong: ISI Publication.
- China Development Review. August, 2007: Volume 9. China: Development Research Center of the State Council of the People's Republic of China.
- China Development Review. March, 2005: Volume 7. China: Development Research Center of the State Council of the People's Republic of China.
- Migration, Development and Poverty Reduction in Asia. 2005. Geneva: International Organization for Migration.

Italy

- Insurance Market Report: Italy Life and Benefits. 2007. London: Axco
- Global Aging and the Sustainability of Public Pension Systems. January, 2007. Washington DC: Center for Strategic and International Studies.
- Italy Country Profile. December, 2006. London: DataMonitor
- Italy Country Profile. January, 2006. London: DataMonitor.
- Italy Country Profile. July, 2007. London: Economist Intelligence Unit.
- Marchese, M. "Defined Contribution in Italy: Overcoming Ignorance". European Pensions & Investment News, August, 2007.
- Cevik, R. "Pensions Snapshot Italy". European Pensions & Investment News, July, 2006.
- The Pension Reforms in Italy: a Never Ending Story. September, 2007. Dublin: European Forecasting Research Association for the Macro-Economy.
- Giannoni, M. Universality and decentralisation: The evolution of the Italian health care system". In Eurohealth, 2006, 12:10-13.
- Healthy Ageing ? Keystone for a Sustainable Europe. January, 2007. Brussels: European Commission.
- Carone, G. and Costello, D. "Can Europe Afford to Grow Old?". International Monetary Fund.
- National Institute of Statistics of Italy. "Demography in Figures".
- Ageing and Employment Policies: Italy. August, 2004. Paris: OECD.
- Economic Surveys: Italy. June, 2007. Paris: OECD.
- Pensions at a Glance: Italy. May, 2007. Paris: OECD.
- OECD. "Population Pyramids in 2000 and 2050".
- D'emilio, F. "Italy's Aging Turn to Foreigners for Help". The Associated Press, July, 2007.
- World Population Ageing 2007. June, 2007. New York: UN DESA.
- Italian Pension Reform. February, 2006. Washington DC: US Government Accountability Office.
- Ageing and Demographic Change in European Societies. March, 2007. Washington DC: The World Bank.
- Ageing in Asia and Oceania. March, 2007. Washington DC: AARP, Princeton Survey Research Associates
- Ageing and Pension System Reform: Implications for Financial Markets and Economic Policies. September 2005. Basel: G10 Secretariat.
- China Economy. 2006. London: Economist Intelligence Unit.
- World Policy: Demographics & Healthcare Spending in 2020. May, 2008. London: Economist Intelligence Unit.

- Addressing the Challenges of an Aging Workforce: A Human Capital Perspective for Companies Operating in Europe. March, 2005. Somers, NY: IBM Business Consulting Services.
- It's Time to Abolish Retirement (And Here's How to Do It). September, 2007. Sydney: Institute of Actuaries of Australia.
- Benefit Plans Around the World in 48 Countries. March, 2008. New York: Mercer.
- Financial Market Trends: Ageing and Pension System Reform. Implications for Financial Markets and Economic Policies. November, 2005. Paris: OECD.
- Ageing and Employment Policies: Live Longer, Work Longer. March, 2006. Paris: OECD.
- Pensions at a Glance: Public Policies Across OECD Countries. June, 2007. Paris: OECD.
- Protecting Pensions – Policy Analysis and Examples from OECD Countries. November, 2007. Paris: OECD.
- Governance and Investment of Public Pension Reserve Funds In Selected OECD Countries. January, 2008. Paris: OECD.
- Harper, S. Ageing Societies: Myths, Challenges and Opportunities. London: Arnold, 2006.
- Working Towards Wellness: Accelerating the Prevention of Chronic Disease. 2007. Geneva: World Economic Forum and PriceWaterhouseCoopers.
- World Economic and Social Survey 2007: Development in an Ageing World. June, 2007. New York: UN DESA.
- World Population Ageing 2007. June, 2007. New York: UN DESA.
- Forum on Population and Development in East Asia. May, 2005. New York: UN Population Fund (UNFPA).
- The World Health Report 2006: Working Together for Health. April, 2006. Geneva: World Health Organization.
- Leckie, S., and Pai, Y. Pension Funds in China - A New Look. ISI publications. 2005. Hong Kong: ISI Publication.
- China Development Review. August, 2007: Volume 9. China: Development Research Center of the State Council of the People's Republic of China.
- China Development Review. March, 2005: Volume 7. China: Development Research Center of the State Council of the People's Republic of China.
- Migration, Development and Poverty Reduction in Asia. 2005. Geneva: International Organization for Migration.
- Le Deu, F., Parekh, R., et al. Seizing China's pharma opportunity. February 2008: McKinsey Quarterly.
- Binder., S, Hu, H., et al. A life insurance policy for China. March 2006: McKinsey Quarterly.

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