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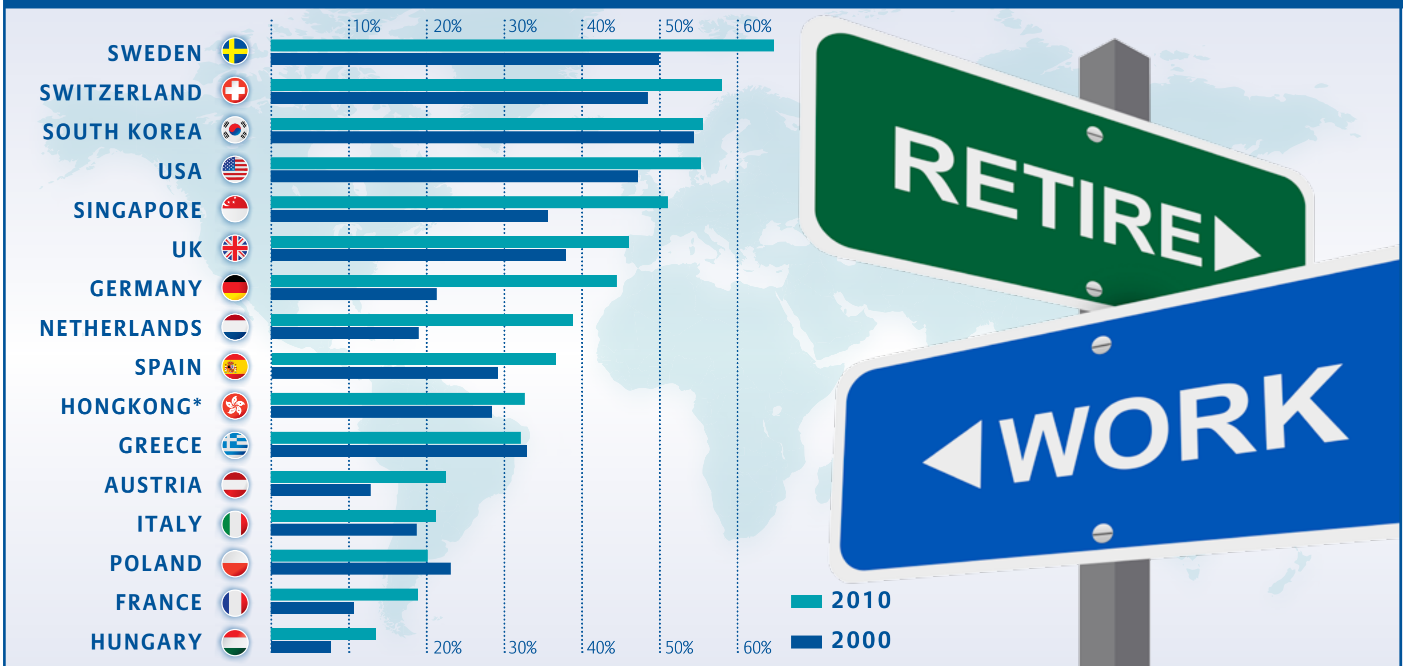
Allianz Demographic Pulse

"It's time to Rethink Retirement"

After a decade of pension reforms in Western Europe and the establishment of new systems in Eastern Europe and Asia, the structure of a retirement income has begun to change. This paper summarizes the driving forces behind this transformation and describes the new mix of sources of retirement income of households in selected countries. Second and third pillar plans, income from financial assets and employment – as well as the rise of the elderly in the workforce – are gaining importance. The changes in the retirement landscape are challenging for all parties involved – solutions providers, governments and employees. To achieve at an adequate retirement income for future retirees all parties have to work together to set up a modern pension system with strong different pillars. "It's time to Rethink Retirement", says Jay Ralph, Chairman of Allianz Asset Management and member of the Board of Management of Allianz SE.

Rise of Elderly Persons in the Workforce



Participation rate of people aged 60 to 64 years.

*Data for 2008 instead of 2010
Sources: Allianz / OECD Eurostat, ILO

The process of pension reform

Societal aging and the accompanying rise in the old-age dependency ratio has increased the pressure on public finances; particularly on the sustainability of pay-as-you-go (PAYG) pension systems. In 2001, when the European Commission began to make projections on the cost of aging for the 15 member states of Western Europe[1], the cost of pension systems was expected to increase by 2.9% of the GDP until 2050. In addition, they factored in the expected costs of healthcare and long-term care systems. In an effort to ease the pressure, **most countries began introducing pension reforms at the turn of the century. Though the latest report shows there has been some relief on average budgets (2.1% for the Eurozone until 2050),**[2] **there are still large differences between countries.**

The main components of these reforms were parametric changes in:

- Benefit calculation (for instance, lifetime earnings are now used as a basis for calculation rather than final pay or best years of earnings)
- Pension indexation rules
- Automatic adjustment to demographic change or actuarial adjustment mechanisms.

For the most part, these measures led to a **decrease in the replacement rates of the first pillar.** Calculations from the Organisation of Economic Co-operation and Development (OECD) show, for example, **that lifetime benefits in the 16 OECD countries that introduced the most wide-ranging reforms were cut on average by 22% for men and 25% for women**.[3]

> "Lifetime benefits in 16 OECD countries were cut on average by 22% for men and 25% for women."

As this poses a major change for most people, these declining public benefit levels had to be offset. Thus, during the last 10 to 15 years, many countries have accompanied the reform process in the first pillar by adding a complementary buildup of pre-funding elements and/or an improvement of existing second and third pillar plans by creating incentives for additional private pension savings, expanding existing occupational schemes, introducing new second and third pillar (occupational and private) pension plans and tax benefits, and even granting direct financial support payments to encourage people to save more for old age on their own. Some countries, particularly those in central and Eastern Europe (CEE), have voted in compulsory systems in order to ensure asset-building for a wide range of people. Others, like the United States and United Kingdom, have introduced auto-enrollment strategies or tax incentives to foster voluntary participation.

1 Comparison of projection results in: European Commission, 2006: The impact of ageing on public expenditure: projections for the EU25 Member States on pensions, health care, long-term care, education and unemployment transfers (2004-2050), Special Report No. 1/2006, p. 73.

2 It should be noted that the composition of countries compared differs slightly in these two reports.

3 Antolin, Pablo and Whitehouse, Edward R., 2009: Filling the Pension Gap: Coverage and value of voluntary retirement savings, OECD Social Employment and Migration Working Papers No. 69

This wave of funded pension plans has been introduced across the board since 2000.[4] New funded occupational pension schemes have even been introduced in emerging Asia, where aging, industrialization and urbanization have begun to erode the existing informal family-based retirement model.

> "New funded occupational pension schemes have even been introduced in emerging Asia, where aging, industrialization and urbanization has begun to erode the existing informal family-based retirement model."

In addition to parametric changes, targeted adjustments to the legal retirement age are being made to first pillar systems so that they are better prepared to meet coming demographic changes – increasing life expectancy, in particular. In addition to increasing the legal retirement age, many countries are also equalizing the retirement ages of men and women. Moreover, access to early retirement has been restricted in several countries over the last couple of years, thereby effectively increasing the retirement age.

The effects of all these changes on the pension landscape are multifold:

- Benefits from public pension systems (first pillar) have decreased
- New incentive structures are promoting an accumulation of assets in the second and third pillars
- In moving from defined benefit (DB) to defined contribution (DC) plans, risk is being transferred away from pension scheme sponsors and to the beneficiary.

After 10 to 15 years of reform process ...

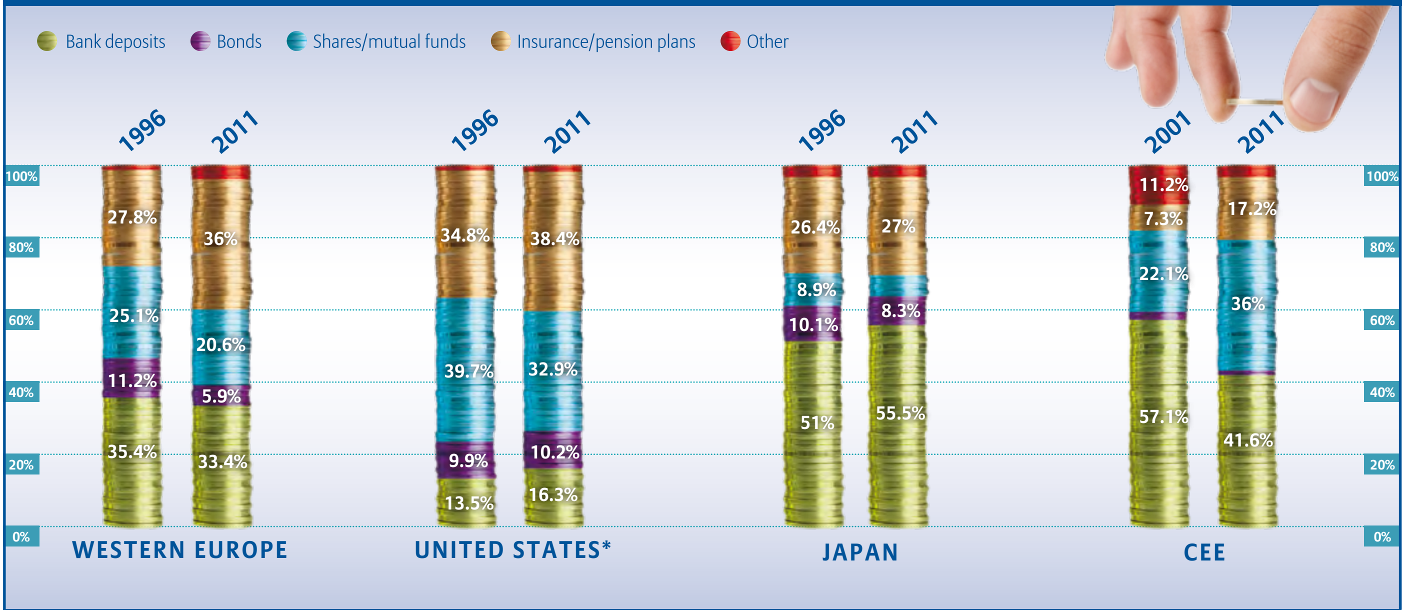
With the wave of reforms and the expected decrease in statutory pension insurance, people are retiring later[5] **and saving more. In the future, the retirement income mix will rest less on the previously dominant first pillar (state pensions) than on the funded elements.**

4 See overview in Allianz Global Investors, "Pension Systems in a Demographic Transition", Analysis and Trends 11/2011, p. 8

5 The younger generation will retire even later due to long term phasing-in processes.

Photo: shutterstock / Pincasso

New Asset Structure



Pension reforms have changed the structure of household financial assets within the last 15 years. Worldwide, the claims of private households from provisions at life insurance companies total more than EUR 10 trillion.

* Insurance and pension plans including IRAs (Individual Retirement Accounts); IRAs extracted from other products.
Sources: Allianz / Central Banks, National statistical offices, Allianz International Pensions.

… a shift in financial assets

From a macro perspective, this development has already affected the composition of private financial assets so that, over the past decade, there has been an increase in the percentage of pension and insurance assets within the financial portfolio of private households. This is particularly the case in Western Europe, where reforms ushered in major changes, including funded pension plans and insurance products. As late as the mid-1990s, pension plans made up only 28% of the financial portfolio; by 2011, this share had grown to over 36% in Western Europe. Although this trend is also noticeable in the **United States**, it is not as strong. With a much longer tradition of funded occupational and private pension plans, the shift took place much earlier in the United States, which is one of the reasons there has not been as dramatic a change in recent years. However, this trend is also attributable to the financial crisis, as US citizens' investment preferences resulted in higher losses than for investors who were more risk averse.[6] In 2011 38.4% of the financial assets of private US households were attributed to retirement products, basically the same as at the turn of the century.

> "Whether in Europe, Asia or the United States, the participation rate of people aged 60 to 64 years has risen over the last 10 years in most of the countries studied in this paper."

The strongest increase can be observed in the **CEE**, where reforms introduced new funded pension schemes. Only 7.3% of financial assets were held in insurance and retirement accounts in 2001, by 2011; however this percentage had risen drastically to 17.2%. In contrast to this emerging region, **Japan** is a good example of an "elderly" society, which has one of the highest old-age dependency ratios in the world. Under existing policies, new cash inflows barely cover outflows. Even so, the percentage of pension and insurance products has been stable at around 26.5% over the last 15 years.

… people working longer

The financial crisis put the changing structures of pension provisioning systems to the test and the reform path is still feeling the pressure of the debt crisis, high volatility of markets and low interest rates. The challenges that this environment poses for funded pillars are considerable.

The downturn reduced individual retirement assets substantially. In countries where the total retirement portfolio consisted of a large number of funded schemes and high equity exposure, people had to compensate: either save more or work longer.

In other words, it is not only the increase in retirement ages that has had an influence on the number of people staying longer in the workforce; so have the erosion of pension assets and the need to save longer for retirement. Whether in Europe, Asia or the United States, the participation rate of people aged 60 to 64 years has risen over the last 10 years in most of the countries studied in this paper.

In Europe, the biggest increase can be observed in **Germany** and the **Netherlands** (see chart page 1), where participation rates more than doubled. Even so, the levels reached in 2010 were still below those of other European countries like **Sweden** and **Switzerland** where participation rates even in 2000 were higher. High rates can also be observed in the **U.S., Japan, Korea and Singapore**; there more people aged 60 to 64 stay in the workforce than in most European countries.

6 See Allianz Global Investors, 2010: The Global Crunch and its Long-term Impact on US Retirement Investing, International Pension Studies No 4/2010

Photo: shutterstock / Africa Studio

"In contrast to continental Europe, the basic philosophy of many Anglo-Saxon countries is to provide a pension system to protect against old-age poverty."

Austria, France and Hungary, on the other hand, have very low participation rates, where the effective retirement age has stayed below 60 for much longer than other countries, probably due to later adjustments to early retirement schemes. Nevertheless, the trend is similar: within the last 10 years, there has been a distinct increase in participation. These developments are expected to increase the importance of work in the retirement income mix.

... a changed retirement income mix?

Moving from around 2000

Before reforms were introduced, most pension income was provided by the public PAYG system. Replacement rates in many continental European countries were designed to keep up with the standard of living achieved at retirement. Additional sources of retirement income were primarily important for high income earners whose replacement rates from the first pillar are low due to contribution limits.

In contrast to continental Europe, **the basic philosophy of many Anglo-Saxon countries is to provide a pension system to protect against old-age poverty. Using this as the basic premise, additional saving instruments had to be created to help people achieve a reasonable retirement income, which is why countries like the United Kingdom and United States developed funded pillars early on and now have mature funded pension markets.** That said, the Netherlands and Switzerland were also early to introduce funded second pillar schemes.

From a micro perspective, this is reflected in the structure of retirement income.[7] As of 2000[8], total retirement income in the **United Kingdom** and the **United States** was made up of a mix of sources of income: state pensions that provide a minimum standard of living (40% in the UK and 50% in the US), income from privately funded pillars (30 to 40% from occupational pensions and investment income) and then topped up from income earned by staying in the workforce. This was also the case in **Japan** and **Ireland**, where between 20 to 25% of total retirement income was derived from wages, which might be connected to the total replacement rate they had achieved taking all income sources together. The relative income level of people aged 65 and above compared to those under 65 years of age might give an indication: In **Ireland**, for example, this ratio only reached a bit more than 50 and just two thirds in the **United Kingdom** compared to 90 in **France** and 80 in **Germany**.[9]

The large share of occupational pension income in the **Netherlands** and **Switzerland** reflects the role these mandatory instruments play in the old-age provisioning system, just as the high percentage of public pensions in **France** and **Germany** reflects their traditionally strong role. **Finland** has a special first pillar model, which comprises two components: a residence-based national pension and an earnings-related pension. The latter is partially funded. The bulk of retirement income in Finland comes from this source.

Up to around 2010

After more than a decade of reforms, all the developments described in the first part of the paper have had an impact on the structure of retirement income in many countries, particularly in those with major early reforms, and are mirrored in the income mix.

The portion of income coming from the first pillar has decreased in all the countries considered in this paper except in **Ireland**, where it is broadly unchanged, and in **Finland**, where the percentage has increased from roughly 68 to 75%. Even so, the funded pillar is also gaining importance in Finland, which may in part be due to the system's mechanism: as residence-based national pensions decrease, earnings-related pensions increase.

The importance of (quasi-)mandatory funded systems as a source of retirement income in mature pension fund markets such as the **Netherlands** and **Switzerland**, has increased quite a bit: in the Netherlands from 31 to 40%, and in Switzerland from 26.6 to 32.8%. In contrast, people in the **United Kingdom** and **United States** have compensated for decreasing income from funded schemes by taking on additional work. The financial crisis has probably taken its toll, particularly in the United States where the percentage of funded schemes within the total retirement portfolio is high. With little time to recoup, cohorts approaching retirement were faced with the decision of whether to continue working during retirement, or to retire on substantially less than planned.

In **Sweden**, **Germany** and **France** lower levels from social security were compensated by a larger share of investment income and individual plans, as newly introduced plans from the last decade have not yet reached the payout phase. In most countries this compensation was achieved by additional income from work. Compared to the level in 2000, this share has gained importance in all countries except France and Ireland.

This might change in the future as plans reach maturity and reforms are phased in. Even so, the bulk of pension income in most countries will continue to be provided by public schemes. Even the

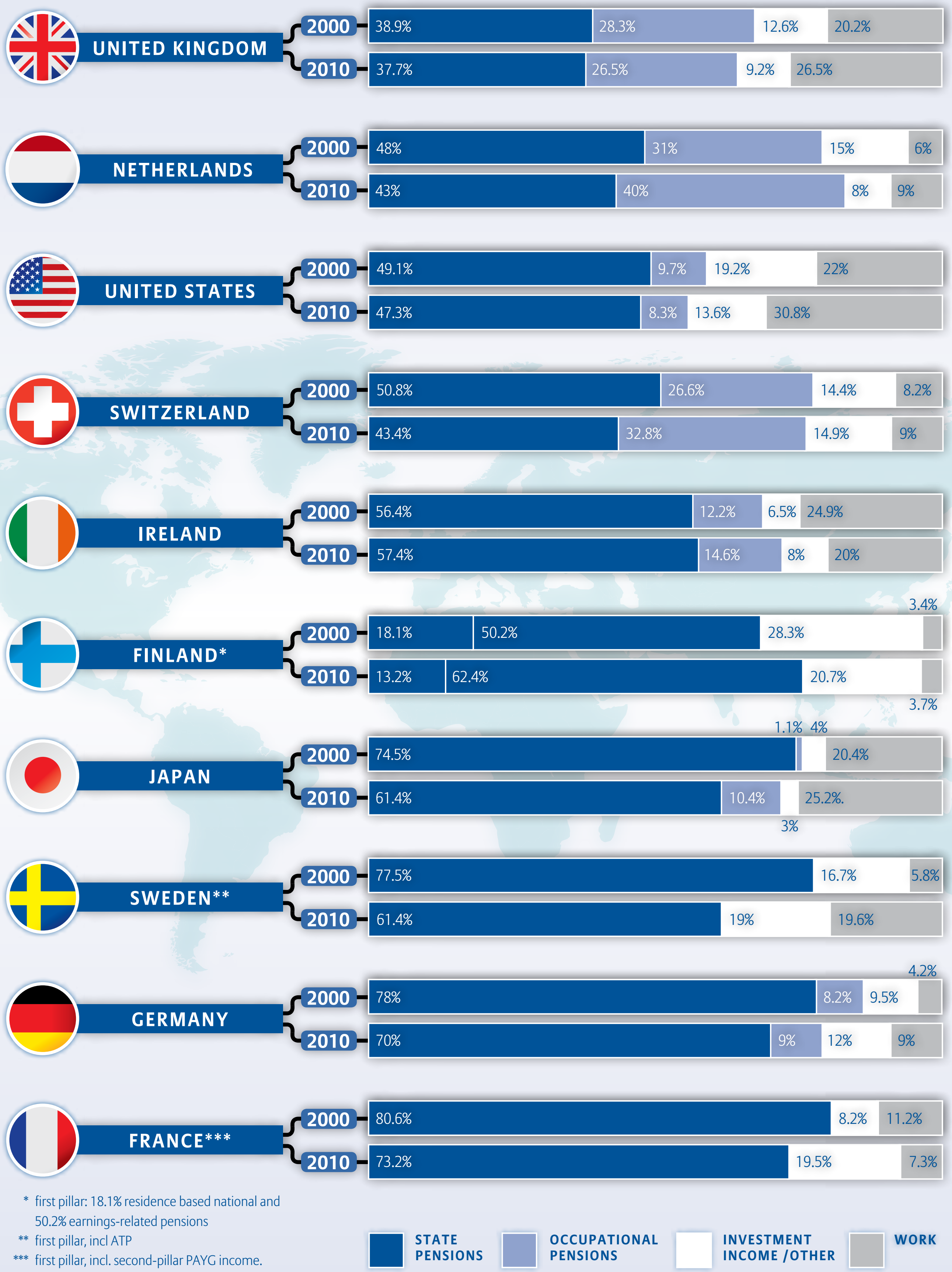
7 As there are a variety of different sources which also differ according to the situation of a household for example as to the occupation the average incomes only give a broad brush picture. The chart shows the income mix of a couple older than 65 years.

8 The results shown in the chart have slightly differing base years, which range from 1999 in Japan to 2002 in France.

9 OECD: Database on income distribution and poverty, StatExtracts (stats.oecd.org)

Retirement Income Mix

A Decade of Change: 2000 vs 2010



* first pillar: 18.1% residence based national and 50.2% earnings-related pensions
** first pillar, incl ATP
*** first pillar, incl. second-pillar PAYG income.

Sources: Allianz, National Statistics, Central Banks, Governmental Bodies

Photo: shutterstock / Andy Dean Photography

United Kingdom is modifying its system by increasing first pillar pensions.[10] The total effect on the income mix remains unclear however, due to the possible increase in private pension income from the introduction of auto-enrollment plans and mandatory employer contributions.

Italy and **Austria** belong to the group of countries which aimed at maintaining the standard of living in retirement with their public pension system. In Italy the majority of people rely on public pensions as the main source of income.[11] The replacement rate of the first pillar is high, thus the other pillars are still small and the proportion of occupational pensions within the retirement income mix has been small. Additional income is generated by investment income and work. After reforms in early 2000 in Italy and later on in Austria, this might change in the future when plans mature and reach the payout phase. But in the situation for people entering retirement now, the changes do not yet show up. Today about 72% of an average Italian's income comes from public schemes, 4% from capital and 24% from wages, according to the OECD.[12] In Austria the proportion of public pensions is even higher and the importance of income from work lower than in Italy.[13]

CEE: retirement income from the state – new pension schemes not in the pay-out phase

The current shape of pension systems in the **CEE** has been formed by decisions taken after the fall of the Iron Curtain, when former Eastern Bloc countries were faced with the daunting task of reforming their outdated pension systems. Under the old regime, pensions in the CEE were the exclusive responsibility of the state, and were incompatible with current demographic developments or the new economic reality. Central and Eastern Europe are ageing fast and are just as sensitive to demographic changes as Western Europe.
To cope with the enormous financial pressure and secure the solvency of public pensions, CEE countries initiated similar reforms to their first pillar pension systems in the 1990s as those in Western Europe. Deeper reforms have been made in most of CEE countries.
When second pillar plans were first introduced, most of them were offered to younger employees and were mandatory for people just entering the workforce. Older workers were allowed to decide on whether or not they wanted to participate, while people close to retirement were prohibited from joining as any capital they would be able to accumulate would be insufficient to cover retirement benefits. These regulations are mirrored in the retirement mix. Since older employees could not access second pillar pensions, their retirement income is primarily a mixture of income from first pillar pensions and work, with possibly a modest contribution from capital income.

Family support still important in Asia

The challenges of pension reform in several **Asian** countries have been, and still are, to establish well-functioning public pension systems and broaden the coverage of existing ones to alleviate a worsening demographic situation caused by a substantial increase in life expectancy and a drastic fall in once high fertility rates – a typical consequence of industrialization, rapid economic growth and urbanization. Until roughly a decade ago, the chief component of retirement provisioning in emerging Asian countries was its traditional system of strong family values and social norms in which most retirees relied largely on family support.

"According to the World Bank, about 55% of retirement income in South Korea was provided by the family in 1990. Today, it is about 30%."

Accompanying this informal system of old-age support was a weak and limited public pension system. However, socio-economic changes have put the family support system under pressure and as the need for organized retirement systems dramatically increased, countries began establishing formal pension systems to some degree. At the same time, Asia began to introduce new occupational pension schemes such as the Mandatory Provident Fund in **Hong Kong**, the New Labor Pension Fund in **Taiwan** and new corporate schemes in **South Korea**. In other words, the entire retirement landscape in Asia has changed and is still evolving.

Though reforms are in progress, the new systems don't provide for current retirees so that, to a large extent, they still have to rely on family support. This is reflected in our results. A survey in **Singapore** revealed that 60% of the elderly still receive the most support from their families and that only a small portion of their income stems from the Central Provident Fund, the main pillar in Singapore. In addition, some retirees were able to take out a private pension – probably thanks to Singapore's economic upswing – and are now drawing income from their accrued private savings.

As far as the family support network is concerned, the situation is similar in **Thailand** and, surprisingly, also in **South Korea** where pension reforms were implemented in the late 1980s. According to the World Bank, about 55% of retirement income in South Korea was provided by the family in 1990. Today, it is about 30%. Though the importance of family support is decreasing, it will take a long time for patterns to change completely.

10 PPI Pensions Policy Institute, March 2010: Retirement income and assets: outlook for the future, PPI Briefing note Number 54
11 Statistics Italy; http://dati.istat.it/?lang=en
12 Pensions at a Glance 2011; occupational pensions not separated in the OECD report. Thus it is not quite comparable to the other results.
13 STATISTIK AUSTRIA, EU-SILC 2010.

Outlook

The retirement income mix has started to change as the role of funded pensions grows and public pension levels decrease. Nevertheless this view does not show whether the complementary pillars are strong enough to compensate for decreasing levels in the first pillars in absolute terms. Thus, the question arises of whether retirement income is adequate. As the EU commission points out in its Adequacy Report: "There were great advances in the sustainability of public pensions, but adequacy outcomes are less impressive."[14] For future retirees to achieve retirement income levels comparable to those of today's retirees, they will have to change their working and savings behavior.

The challenge for the future is to foster labor market opportunities so that older employees can continue working. A survey of European countries indicates that providing flexible retirement alternatives could meet a growing demand: 65% of the European workforce is interested in having the opportunity to combine a part-time job and partial pension as an alternative to full employment.[15]
However, people will also have to save more in order to generate more income, which could be encouraged by the type of automatic and default solutions being introduced in the United Kingdom this year.

Eastern Europe will have to strengthen its emphasis on pension reform in order to compensate for the hit their pension systems took during the financial and economic crisis. Even so, future retirees can look forward to receiving an income stream from the funded pillars introduced over the last ten years. In Asia, the process of broadening pension coverage will lead to a major shift from informal to formal systems.

14 Social Protection Committee of the European Union, May 23, 2012: Pension Adequacy in the European Union 2010–2050

15 European Commission, 2012: Active Ageing, Eurobarometer 378 (special edition)

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Why does Allianz care about demography?

As a global financial service provider, Allianz believes demographic change to be of crucial importance. Identified as one of the major megatrends, demographic change will hold the key to many upcoming social challenges, whether with regard to health, old-age provision, education, consumption or capital markets.

Why does it matter to journalists and the public?

Demographic change is challenging today's societies in many ways: People are getting older, and this raises the issues of long-term care and dementia, amongst others. Furthermore, in the future there will be a significant decline in the workforce in most of the world's markets, triggering challenges in areas such as pension funding. Only information, awareness and discussion on the topic will help to change attitudes, behavior and situations, which can hopefully help solve urgent issues and come up with innovative solutions.

What are the benefits of the Allianz Demographic Pulse?

The Allianz Demographic Pulse is based on the latest research into various aspects of demographic change. Conducted and written by Allianz experts, it highlights current and globally relevant demographic data and provides an insight into its impact on worldwide economies and societies. To ensure up-to-date coverage of major developments in this field, the Allianz Demographic Pulse is published on a regular basis, thus providing ongoing and detailed information about a major trend that is shaping the world we live in.

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