

Executive summary

Increasing life expectancy coupled with a proportionately smaller working age population around the world is creating challenges for maintaining unfunded social security and defined benefit (DB) pensions in many countries. On the one hand, policy makers are grappling with the costs of unfunded pay-as-you-go schemes. On the other, companies with DB schemes are struggling with funding shortfalls due to poor investment performance.

The levers available for policy makers and employers to tackle the long-term pension funding issue often have a combined effect of increasing individual and employer contributions, increasing retirement age and reducing pension payouts. Key approaches involve making pension provisions funded and shifting the onus for retirement savings and longevity risk onto individuals. This has resulted in a growth in pension assets and a shift towards defined contribution (DC^(a)) pensions in some countries. The success of this approach, combined with the challenges associated with unfunded and DB schemes, is making DC pensions an attractive solution in a growing number of countries⁽¹⁾.

This trend is creating opportunities for asset managers, service providers and life insurers globally, potentially by targeting expansion into new markets and geographies, as growth in DC assets is set to accelerate in the coming years.

The growing size of the DC market

Pension assets grew from US\$16.0 trillion in 2000 to US\$26.5 trillion in 2010 across 13 major markets⁽²⁾. Our analysis of the pension market across 22 major countries shows that the DC share of total pension assets reached 45% in 2010 (Figure 1). The DC pension market, however, is currently dominated by the US, UK, Australia and Switzerland, which together accounted for 91% of the global DC pension pool. The DC market outside these countries is likely to experience rapid growth in the coming years, primarily due to demographic and economic factors.

Drivers of change underpinning a shift to DC pensions

Demographic trends

Average life expectancy in OECD countries increased from 68.2 to 79.1 years from 1960 to 2008: an average of 83 days per annum during the period (Figure 2). This approximately equates to individuals living one year longer every four years. Advances in medicine and better health provision globally are likely to continue this trend.

At the same time birth rates have been falling in developed economies. Among OECD countries, the weighted average fertility rate per woman^(b) was 1.82 in 2009^(1,12,13), suggesting

that new births are not replenishing populations. The result of these demographic changes is that the provision of pay-as-you-go unfunded social security payments and government funded public sector DB pensions are becoming increasingly unsustainable.

Illustratively, if the retirement age across the OECD were 60 and 65 years in 1960 and 2008, then the average number of years for which people would have drawn a pension would have risen from 8.2 years to 14.1 years (see Table 1). This would suggest that in 1960 people would have worked 4.9 years for each year of retirement, compared to only 3.2 years in 2008, an approximate 31% reduction.

In addition, there are proportionately fewer people of working age to

Figure 1
Total pension assets 2010 (US\$ billions)⁽¹⁻¹¹⁾

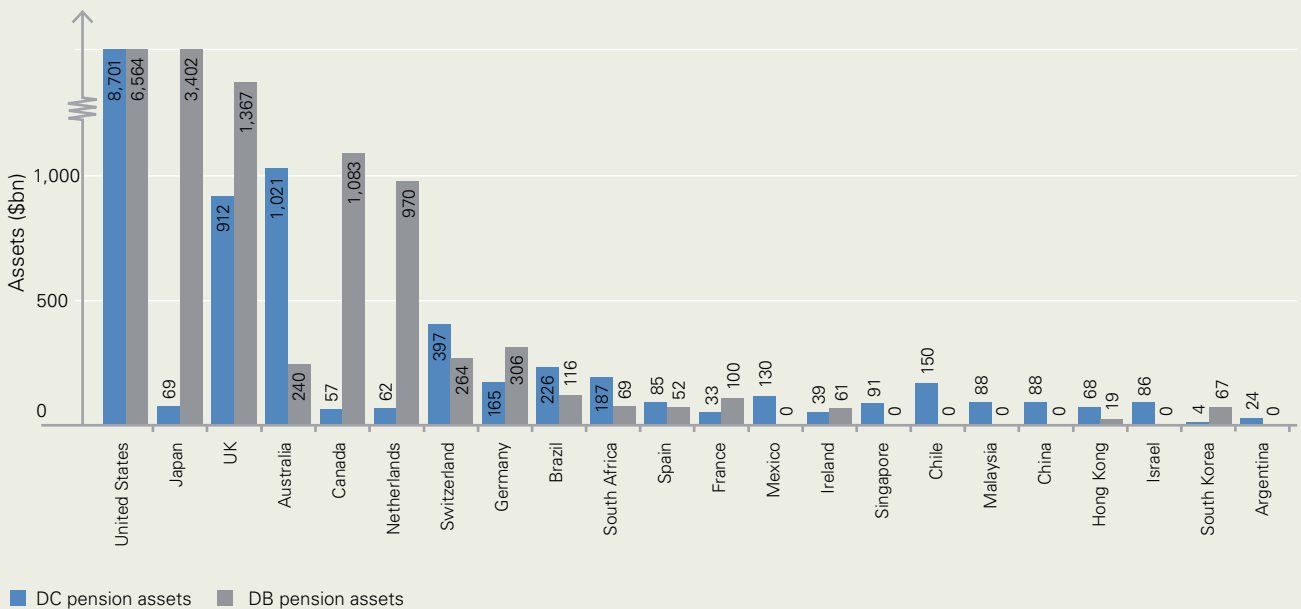


Figure 2
OECD life expectancy, 1960–2008⁽¹²⁾

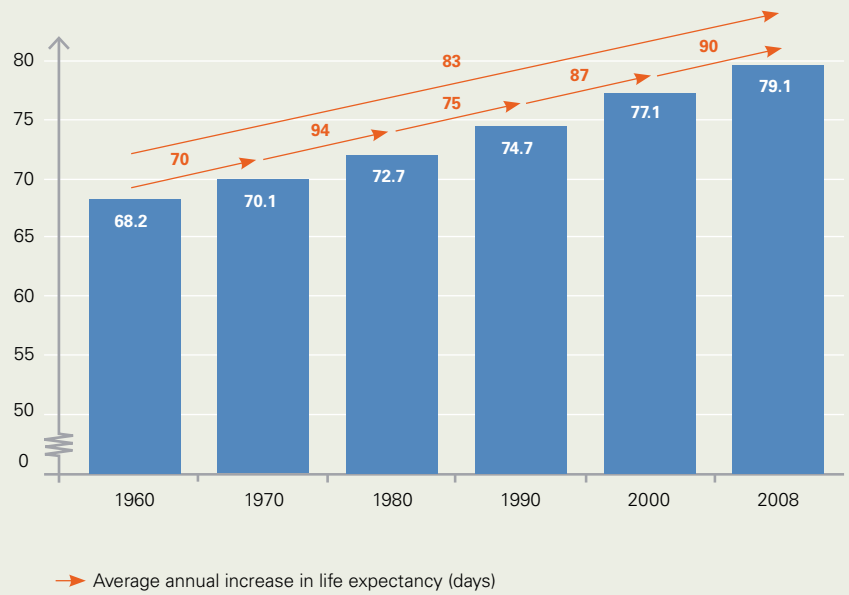


Table 1

Illustrative reduction in the number of years to earn a pension across OECD, 1960–2008^(1, 12)

Year	1960	2008
Average life expectancy	68.2	79.1
Illustrative average retirement age	60.0	65.0
Years lived drawing a pension	8.2	14.1
Years in working age (20 to retirement age)	40	45
Ratio of years in working age to post-retirement	4.9	3.2

In 1960 people would have worked 4.9 years for each year of retirement, compared to only 3.2 years in 2008.

(a) Defined contribution pensions are intended to refer to fully funded vehicles, which are funded by a combination of individuals and their employers. These contributions are invested in underlying assets, the value of which determines retirement income.

(b) Fertility rate represents the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with current age-specific fertility rates.

pensioners. In OECD countries with populations above 10 million, if the pensionable age remains as at 2010, the average ratio of working to pensionable age individuals is set to decline from 3.5 in 2010 to 3.0 and 2.4 in 2020 and 2030 (Figure 3). This puts a strain on the public finances of countries that effectively have pay-as-you-go pension systems, potentially rendering them unsustainable. For instance, in Turkey, Greece and Italy, which had average male-female retirement ages of 43, 57 and 59, there were fewer than 2 people of working age to every pensioner in 2010.

Austria, France, Greece, Italy and Portugal spent approximately 30% or more of their government revenue on state pensions in 2010.

Assuming the retirement age is not increased, then by 2020 Japan, France, Belgium, and by 2030, Czech Republic, Hungary and Austria will also have fewer than 2 people of working age to each pensioner. This trend points to a chronic pension funding issue in many countries.

The issue of having too few people in employment in countries which do not have adequately funded pension systems is exacerbated by high unemployment levels. For example, while in Spain the ratio of working age to pensioners was 3.7 in 2010, unemployment of 20%⁽¹⁷⁾ further reduced the ability of those of working age to finance the state pension provision.

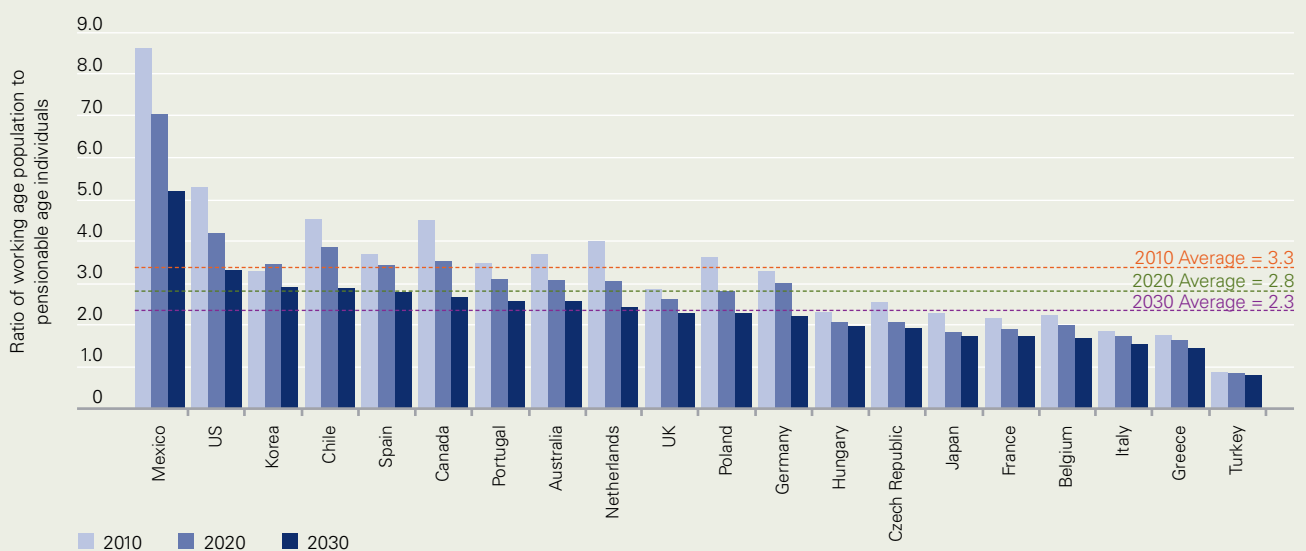
While there have been moves in some countries to address the demographic issues by increasing the statutory retirement age, this often does not adequately reflect the rate of longevity. For example, in the UK the state retirement age for men is set to rise from 65 to 66 in 2016 and to 68 in 2046⁽¹⁸⁾. Should the UK life expectancy continue to rise at the OECD trend rate of approximately

Case study: Italy

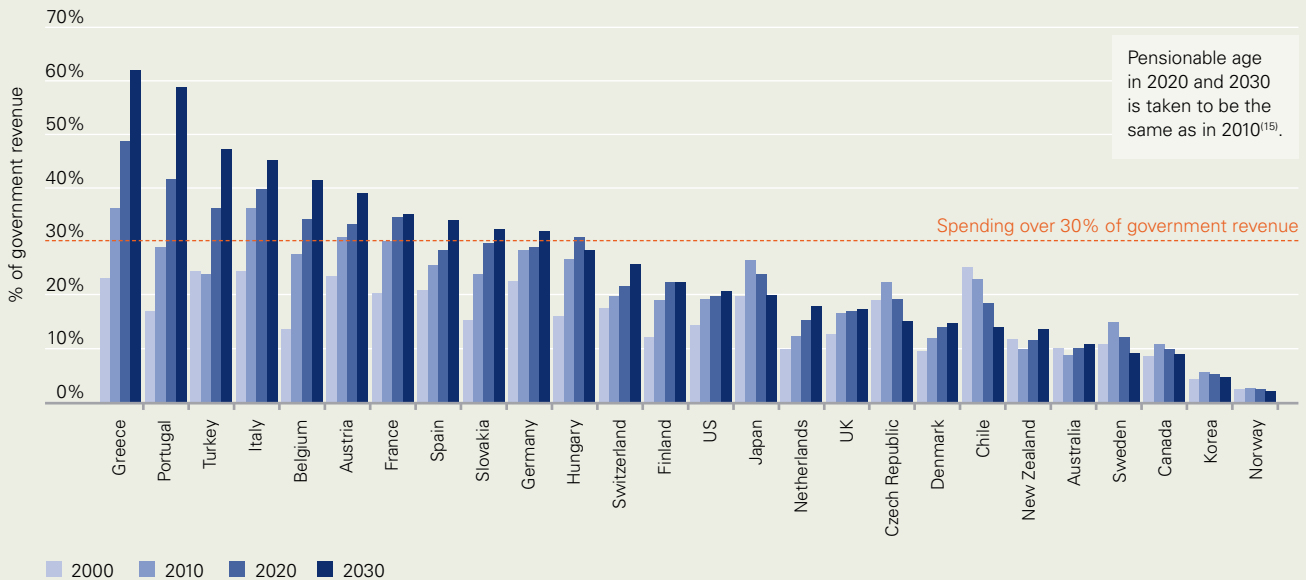
“In Italy there were 16.9 million pensioners^(1, 14) compared to 23.4 million people in employment in 2010⁽¹⁹⁾. The average public spending per pensioner was €12,900 per year^(1, 15, 20), equating to 49% of the average earnings of €26,300⁽¹⁵⁾. Therefore total pension payout was approximately 35% of total employee pay⁽¹⁾. This is set against a background of an aging population and a particularly low birth rate of 1.4 children per woman as at 2009⁽¹³⁾. Therefore the pension funding challenge in Italy is only set to exacerbate unless significant pension reforms are implemented.

Figure 3

The ratio of working to pensionable age individuals in OECD countries with populations above 10 million^(1, 14-16)



© 2011 KPMG International. KPMG International is a Swiss cooperative. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. No member firm has any authority to obligate or bind KPMG International or any other member firm vis-à-vis third parties, nor does KPMG International have any such authority to obligate or bind any member firm. All rights reserved.

Figure 4Proportion of government revenue spending on state pension provision, 2010–2030^{(c)(d)(1, 15, 20–23)}

one year every four, it would rise by 10 years from 80 in 2008 to 90 by 2046. Modest government plans such as this to increase the retirement age have been widely resisted with strikes and demonstrations in many countries such as the UK, France and Greece during 2011.

DC pensions provide a pragmatic solution to the longevity risks associated with funding pension provisions from a fund sponsor's perspective.

Lack of government funding for social security payments

Pay-as-you-go social security payments equate to a significant proportion of government income in many OECD countries. Austria, France, Greece, Italy and Portugal spent approximately 30% or more of their government revenue on state pensions in 2010 (Figure 4). Many of these countries have experienced severe government funding shortfalls during 2011. Furthermore, government pension expenditure is projected to rise above 30% of revenue for Belgium, Hungary,

Slovakia and Turkey by 2020 and Germany and Spain by 2030. The true scale of the funding challenge may be greater than that indicated in Figure 4 as in some countries government revenue includes income from state owned companies. For instance, utilities and even the betting monopoly in Greece are state owned.

Unless one or a combination of raising the retirement age, reducing pension provisions or increasing individual contributions are implemented, the proportion of government revenue which needs to be spent on pensions in all these countries is projected to rise significantly through to 2030.

(c) The calculation methodology for Figure 4 includes the following assumptions:

- Future spending per pensioner increases in line with The EIU CPI projections through to 2015⁽²⁰⁾, and with 2010–2015 CAGR through annually to 2030.
- GDP increases in line with EIU projections through to 2015⁽²⁰⁾, and with 2010–2015 CAGR annually to 2030. Where GDP growth to 2015 is negative, it is assumed flat at its 2015 value through to 2030.
- Government revenue as a percentage of GDP⁽²³⁾ is assumed constant at its 2010 value.
- Pensionable age in 2020 and 2030 is taken to be the same as in 2010⁽¹⁵⁾.

(d) Projections for Greece do not factor in recent austerity measures impacting pensions.

Case study: Spain

One example of a country with a generous state funded pay-as-you-go pension provision is Spain. The state pension payout is calculated based on earnings, capped at €38,761 per annum in 2011. With 35 years of contribution, at the retirement age of 65, this generates the maximum annual pension annuity of €34,971, equivalent to 90% of the earnings ceiling cap⁽¹⁾. This level of pension payout, which normally rises at the rate of inflation, is considered very generous in many countries for middle-income earners.

One option available to policy makers to alleviate the long-term public pension funding challenge is to incentivize or compel a greater use of DC pension provisions. Those countries that have adopted DC pensions as the primary method of pension provision appear to experience less strain on their public finances. Australia and Chile are examples of countries which have mandatory DC pension provisions. The public cost of pensions in these countries is projected to remain comparatively stable or decline through to 2030.

High cost of unfunded government employee DB schemes

In addition to funding state pension provisions, governments also have to finance the retirement of public sector employees. In a number of countries around the world, many government employees enjoy pay-as-you-go DB pensions, which are essentially financed by the tax payer.

The lack of transparency in government finances often makes it difficult to precisely quantify the cost burden to tax payers globally. However, in many countries such pension liabilities are likely to increase the actual level of government expenditure on pensions above what is indicated in Figure 4. For example, the cost of unfunded government DB schemes in the UK in 2010 was estimated at £35 billion⁽²⁴⁾. Of this total, the contribution of current government employees towards meeting the pension payout of their predecessors was only £17 billion. The balance of £18 billion was paid for by the tax payers, equating to 1.2% of nominal UK GDP or 2.9% of government revenue in 2010^(1, 23).

A shift towards DC or hybrid DB/DC schemes are among the potential solutions to the funding challenges relating to government employee DB schemes.

Poor investment returns and funding shortfalls in occupational DB plans

The trend towards occupational DC pensions is driven by many DB pension schemes facing long-term deficits in a number of countries. As DB schemes are accounted for on-balance sheet, in accordance with IAS 19, these deficits are adversely affecting the bottom lines of many organisations.

OECD estimates that US\$5.4 trillion was lost in the value of global pension assets during the 2008 financial crisis, of which 60% was invested in DB schemes⁽²⁵⁾. In the US, the largest global pension market by assets under management, S&P 1500 companies experienced the largest ever aggregate pension deficit of US\$506 billion in 2010⁽²⁶⁾.

Funding shortfalls in occupational DB schemes have been due to the poor performance of equity and bond asset classes, in which pension funds are primarily invested. In 2010, 47% of global pension assets were invested in equities. The FTSE All-World Index total return declined

by 14% from 2000 to 2010 (Figure 5). At the same time, lower discount rates which are applied to calculate DB pension liabilities have compounded the pension deficits issue. This has continued to motivate the trend towards fully funded DC schemes.

While a trend towards DC schemes may help resolve the DB pension funding challenges, the poor performance of underlying DC assets may also result in lower annuities than may be expected by scheme participants.

Those countries that have adopted DC pensions as the primary method of pension provision appear to experience less strain on their public finances.

Figure 5

FTSE All-World Index total return, January 2000 – August 2011^(1, 27)



Policy maker options to mitigate pension funding shortfalls

To address the long-term pension provision shortfalls, there are a number of options available to policy makers:

- Putting greater onus on individuals and their employers to provide for pension provisions, primarily by contributing to funded DC plans by offering incentives in most instances
- Raising retirement age, thereby increasing the number of years when pension contributions are accumulated, while reducing the draw-down period
- Reducing payout levels by lowering DB accrual rates or potentially linking pension payouts to indices below the rate of inflation
- Putting new government employees on fully funded pension plans
- Shifting government DB schemes' basis of annuity calculations from final salary to career average, introducing salary ceilings on the level of pensionable pay or adopting hybrid DB/DC schemes
- Facilitating growth in the working age population through incentivizing a greater birth rate or relaxing migration policies

Despite public resistance to many possible changes to pension systems globally, the use of some of these levers is inevitable due to the demographic and funding challenges facing policy makers. A shift towards a greater use of DC pensions is likely to be a global trend in this regard in the coming years.

The global DC pensions landscape

Pension systems globally vary significantly from one country to another. The global DC pension market may be characterized into four quadrants, based on DC market maturity and national affluence (Figure 6).

Developed economies, developed DC markets

These countries currently account for the majority of the DC pension asset pool globally. The US, UK,

Australia and Switzerland together accounted for 91% of total global DC pension assets in 2010. Countries in this quadrant have medium-to-large established and growing DC markets. While these countries present immediate business opportunities for asset managers, service providers and life insurers to target, they typically have high levels of competitive intensity.

Emerging economies, developed DC markets:

Brazil, Chile, Malaysia and South Africa are rapidly growing emerging economies, which have widely

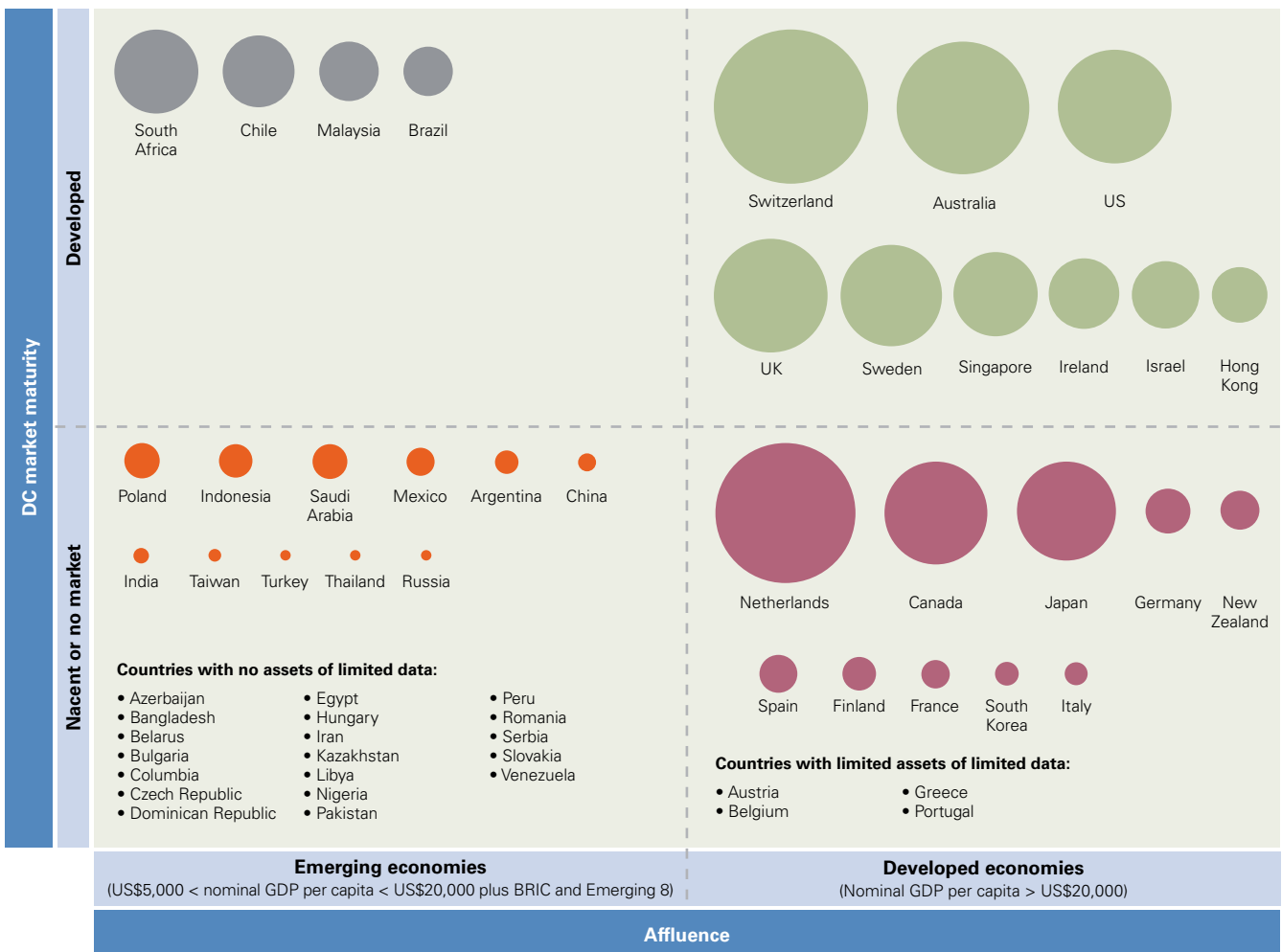
adopted the DC pension model. While the DC markets in these countries are already sizeable, strong growth in their underlying economies is expected to fuel significant growth in their DC pension assets.

Developed economies, nascent or no DC markets

These countries tend to have generous social security pension schemes, with heavily unionized workforces. Some encourage occupational or individual DC pension schemes to a limited extent. For instance, 70% of the comparatively limited size of the overall pension market in Spain is

Figure 6

The global DC pension landscape^(e,f)



(e) Market map only includes analysis of countries with greater than 5 million inhabitants, as per World Bank 2010 statistics.
 (f) Size of bubbles denotes the ratio of total pension assets (both DB and DC) to purchasing power parity GDP.



There are signs that some international players are considering developing their DC businesses as distinct global business units.

invested in DC schemes⁽¹⁾. The small DC market size in these countries may experience a step change in growth upon implementation of pension market reforms in the future. These countries may represent opportunities to allow asset managers, service providers and life insurers to potentially establish themselves as early entrants focused on the DC market.

Emerging economies, nascent or no DC markets

The DC pension markets in these countries are small or not established. However, large population size and rapidly growing economies in many of these countries may make them potentially large DC pension markets in the future. The 30 countries represented in this quadrant together account for 60% of the global population⁽²⁾. Some of these markets may require early investment and relationship building to create profitable businesses in the long-term.

Global opportunities in the DC pension market

The global DC pension asset pool, which stood at US\$12.4 trillion in 2010⁽²⁾, is set to grow rapidly. The current and likely future growth in global DC assets creates opportunities for asset managers, service providers and life insurers. There are signs that some international players are considering developing their DC businesses as distinct global business units. Geographies being systematically targeted for expansion have extended beyond the major mature markets of the US, UK and Australia, outside of which the global DC pension asset pool was US\$1.8 trillion in 2010⁽¹⁾.

Attractiveness of an individual country to a business targeting this space depends on a number of external market and company specific factors. Market considerations include:

- Pension market structure;
- Size and growth prospects for the DC pension asset pool;

- Competitive intensity;
- Value chain and customer segment profitability;
- Distribution models; and
- Regulatory and tax frameworks.

Company specific considerations, which impact on the ability of an asset manager, service provider or life insurer to create a global or regional DC-focused business includes:

- Financial ambition and materiality of key markets;
- Ability to invest and desired investment return period;
- Products and brands which may be marketed in new countries;
- Existing capabilities, infrastructure and third party relationships;
- Permissions, licences and legal structures; and
- Acceptable level of implementation and risk appetite.

The attractiveness of each market to target for entry will therefore vary by company depending on its competitive positioning, sources of advantage and strategic priorities.

Conclusion

There is a global trend towards the greater use of DC pension schemes as a potential solution to the pension funding challenge and increasing longevity. This is creating opportunities for asset managers, service providers and life insurers to target the growing global pool of DC pension assets.

Several leading competitors are seeking to establish global DC lines of business, or otherwise pursue a coherent strategy to address this growing market by geographic region. The attractiveness of each geographic market varies by company due to its individual strengths, competitive position and investment and risk appetite. Early movers into growing DC markets would be well placed to create sustainable competitive advantages by building capabilities, developing key distribution partnerships and achieving scale. Successful competitors are likely to be those which appropriately prioritize their investment and resources to support entry into new markets.



Early movers into growing DC markets would be well placed to create sustainable competitive advantages by building capabilities, developing key distribution partnerships and achieving scale.



Sources

- (1) KPMG analysis
- (2) Towers Watson, "Global Pension Asset Study", 2010 and 2011
- (3) Economist Intelligence Data Unit Tool, Apr 2011
- (4) TheCityUK, "Pension Markets 2010", Feb 2010
- (5) Pension Funds Online, "Country Profile – Pensions Systems Design", 2011
- (6) Financial Planning, "Global Pension Assets Will Hit US\$46tn by 2020", 3 Sep 2010
- (7) Best's Insurance News, "Regulation Seen as Crucial to Pension Development in China", 19 Oct 2010
- (8) Bloomberg, "Hungary Follows Argentina in Pension Fund Ultimatum", 5 Nov 2010
- (9) Indonesia Finance Today, "Managed Funds to Rise 18% for Pension Funds", 25 Feb 2011
- (10) Shomer Shekalim, "How the Israeli pension system works – part 4", 11 Apr 2010
- (11) Hong Kong Investment Funds Association, Industry Information, Apr 2011
- (12) OECD, "Health Data 2010", Oct 2010
- (13) The World Bank, Data Statistics, "Fertility rate, total (births per woman)", 2006–2009
- (14) World Bank Data Statistics
- (15) OECD, "Pensions at a Glance 2011", 2011
- (16) National Centre for Policy Analysis, "Chile's way", Aug 2010
- (17) Eurostat, "Table of unemployment", Jan 2011
- (18) Department of Work and Pensions, "Pensions Bill 2011", May 2011
- (19) WolframAlpha, Italy employment, 2010
- (20) Economist Intelligence Unit, "Nominal GDP, Consumer price index, historic and forecast, 2000–2015", Sep 2011
- (21) The World Bank, Health, Nutrition and Population Statistics, "Population projections, 2010 to 2030", Sep 2011
- (22) OECD, "Historic Population statistics database", Sep 2011
- (23) OECD, "Country statistical profiles 2010", as at Sep 2011
- (24) Public Sector Pension Commission, "Reforming Public Sector Pensions", July 2010
- (25) OECD, "The Impact of the Financial Crisis on Defined Benefit Plans and the Need for Counter-Cyclical Funding Regulations", July 2010
- (26) Mercer, "Global Defined Benefit Pension liabilities hit new highs", Sep 2010
- (27) FTSE All World Index, Jan 2000–Aug 2011

For more information please contact:



Dr. Nicholas Griffin
Partner
Head of Financial Services Strategy,
KPMG ELLP
Tel: +44 20 7311 5924



Dr. Pendar Ostovar
Financial Services Strategy
KPMG ELLP
Tel: +44 20 7694 1795

This is a supplement to *frontiers in finance* produced by KPMG International. Please visit www.frontiersinfinance.com for this and other supplements.

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act upon such information without appropriate professional advice after a thorough examination of the particular situation.

The views and opinions expressed herein are those of the authors and interviewees and do not necessarily represent the views and opinions of KPMG International or KPMG member firms.

© 2011 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. No member firm has any authority to obligate or bind KPMG International or any other member firm vis-à-vis third parties, nor does KPMG International have any such authority to obligate or bind any member firm. All rights reserved.

The KPMG name, logo and "cutting through complexity" are registered trademarks or trademarks of KPMG International.

Produced by KPMG's Global Financial Services Practice in the UK.

Designed by Mytton Williams

Publication name: Islamic finance: The new agenda

Publication no: 314815

Publication date: November 2011

Printed on recycled material