

Europe Needs Saving

Defusing the pensions time bomb

The Stockholm Network

The Stockholm Network is Europe's leading pan-European think tank and market-oriented network. A one-stop shop for organisations seeking to work with Europe's brightest policy-makers and thinkers, our unique network of over 120 market-oriented think tanks in Europe and farther afield provides unparalleled access to the best European policy thinking, the opportunity to lead debates, to change the climate of ideas in Europe, and to meet the key players in shaping the policy debates of tomorrow.

Europe Needs Saving

Defusing the pensions time bomb

Matthew Bishop, Liam Halligan, Kamil Kajetanowicz,
Edward Palmer, Giuseppe Pennisi, Wilfried Prewo,
L. Jacobo Rodríguez, Ian Vásquez

Edited by Terence O'Dwyer

 STOCKHOLM NETWORK

First published in Great Britain in 2006 by
The Stockholm Network
35 Britannia Row
London N1 8QH
www.stockholm-network.org

in association with Profile Books Ltd

The Stockholm Network is Europe's leading pan-European think tank and market-oriented network

Copyright © The Stockholm Network 2006

The moral right of the authors has been asserted.

All rights reserved. Without limiting the rights under copyright reserved above, no part of this publication may be reproduced, stored or introduced into a retrieval system, or transmitted, in any form or by any means (electronic, mechanical, photocopying, recording or otherwise), without the prior written permission of both the copyright owner and the publisher of this book.

A CIP catalogue record for this book is available from the British Library.

ISBN-10: 0-9547663-7-7
ISBN-13: 978-0-9547663-7-5

Designed by Sue Lamble
Typeset in Stone Serif by MacGuru Ltd
info@macguru.org.uk

Printed and bound in Great Britain by Hobbs the Printers

Contents

| | |
|---|-----|
| About the contributors | vii |
| Introduction <i>Terence O'Dwyer</i> | 1 |
| 1 European pensions reform: an overview <i>Giuseppe Pennisi</i> | 9 |
| 2 The privatisation of pensions: good, bad or just ugly? <i>Liam Halligan</i> | 23 |
| 3 Defusing the time bomb with private pensions <i>Wilfried Prewo</i> | 33 |
| 4 The Chilean case: the success of private pensions <i>Ian Vásquez and L. Jacobo Rodríguez</i> | 43 |
| 5 The Swedish case: the success of NDC <i>Edward Palmer</i> | 57 |
| 6 The Polish case: a moderate success? <i>Kamil Kajetanowicz</i> | 67 |

7 Growth and growing old 77
Matthew Bishop

Notes 85

References 91

About the contributors

Matthew Bishop joined *The Economist* in 1991 as economics correspondent. In 1994 he switched to the Britain section as Britain correspondent. In 1997 he moved to New York to become American finance editor and in 2000 was appointed New York bureau chief. He returned to London in September 2002 as business editor. He is the author of *The Pocket Economist*, the official Economist guide to economics, and he appears frequently on TV and radio. In the summer of 2005 Matthew moved to New York to become *The Economist's* chief business writer in the USA.

Liam Halligan is economics correspondent at Channel 4 News, and a business section columnist on the *Sunday Telegraph*. He was previously political correspondent on the *Financial Times* and before that reported from Moscow for *The Economist*. Halligan holds degrees in economics from the universities of Warwick and Oxford and, prior to journalism, held research posts at the London School of Economics and the International Monetary Fund. His award-winning documentaries, *How Safe Is Your Pension?* and *Whose Pension Are You Paying?*, were recently broadcast on Channel Four.

Kamil Kajetanowicz is a fellow of the Adam Smith Research Centre in Poland and was responsible for developing the project to institute reform of the Polish tax system. Educated at the Warsaw School of Economics and the Norwegian School of Business Administration, Kamil holds an MSc in quantitative methods and in finance. Previously at McKinsey Consultants and Zurich Financial Services, Kamil is currently a consultant at Tefen Operations Management Consulting, specialising in strategy and operations of financial institutions.

Edward Palmer has a Ph.D. in economics from Stockholm University. Since 1987 he has been Professor of Social Insurance Economics, first at Gothenburg University and, from 1994, at Uppsala University. He is also director of research at the Swedish State Social Insurance Agency. He was an expert member of the Government Working Group that created the Swedish pension reform passed by Parliament in 1994. He has advised in the pension reforms of Estonia, Latvia, Lithuania, Poland and Russia and has contributed to pension reform discussions in a number of other countries, both independently and as a consultant for the World Bank and the OECD. He is presently an expert member of the OECD International Board of Insurance Regulators and is a member of the Supervisory Council of the Institute for Social Insurance Development in Russia. Professor Palmer has published a large number of books and papers within his area.

Giuseppe Pennisi is a professor of economics at the National Public Administration Institute. Pennisi worked for eighteen years at the World Bank (ten of them in a management

position) and was also a director general in the Italian Ministries of Budget & Planning and Labour & Social Affairs. He has been widely published in Italy, the USA, the UK and Germany on pension issues, labour economics and public investment.

Wilfried Prewo is Chief Executive of the Hannover Chamber of Industry & Commerce. Born in 1947, he was raised in Germany and, from 1969 to 1978, lived in the United States. He is an economist by training and holds a Ph.D. from Johns Hopkins University. He began his career teaching at the University of Texas at Austin in 1974 and returned to Germany in 1978 to work at a research institute and then in the private sector prior to assuming his current position in 1985. The Hannover Chamber is an active pro-market voice in Germany. To this end, Wilfried Prewo writes and speaks frequently on economic and social policy issues. He also has been a member of the board of the Centre for the New Europe in Brussels.

L. Jacobo Rodríguez is a former financial services analyst at the Cato Institute. His research interests include banking regulation and deposit insurance reform, monetary policy, and public pension privatisation. From January 1996 until August 2001, Rodríguez was the assistant director of Cato's Project on Global Economic Liberty. He has testified on pension reform before the Subcommittee on Social Security of the US House of Representatives Committee on Ways and Means, and the Special Committee on Aging of the US Senate. His articles have appeared in newspapers in the United States, Latin America, Europe, and Japan, in publications such as the *Wall Street Journal*, *Wall Street Journal Europe*, *Investor's Business Daily*, *Foreign Policy*,

and the *Journal of Commerce*. While at Cato, Rodríguez was the book review editor of the *Cato Journal*. He holds degrees in economics from the University of California at Berkeley and from Johns Hopkins University.

Ian Vásquez is the director of the Cato Institute's Project on Global Economic Liberty. His articles have appeared in newspapers throughout the United States and Latin America. Vásquez has appeared on CNBC, NBC, C-SPAN, Telemundo, Univisión, and Canadian Television as well as National Public Radio and Voice of America discussing foreign policy and development issues. He received his bachelor's degree from Northwestern University and his master's degree from the School of Advanced International Studies at Johns Hopkins University. He is the editor of *Global Fortune: The Stumble and Rise of World Capitalism* (2000) and co-editor of *Perpetuating Poverty: The World Bank, the IMF and the Developing World* (1994). Vásquez is a term member of the Council on Foreign Relations and a member of the Mont Pèlerin Society. Prior to joining the Cato Institute in 1992, he worked on inter-American issues at the Center for Strategic and International Studies and Caribbean/Latin American Action.

Introduction

Terence O'Dwyer

We are facing a demographic time bomb: by 2050, there will be two workers to every one retired person in most European countries. In Spain and Italy, the ratio is forecast to be 1:1. The harsh reality is that current pay-as-you-go (PAYG) pension systems are simply financially, economically and socially unsustainable. Policy-makers and citizens of Europe alike are awakening to the fact that unless the current PAYG pension systems are reformed rapidly, public liabilities in the near future will be astronomical. Without reform, pensioners will bankrupt the welfare state.

The Stockholm Network conference, 'Europe needs saving: defusing the pensions time bomb', held in Brussels in February 2006, brought together some of the world's leading experts on pensions and pension reform in an attempt to identify common problems, discuss different country experiences and search for ways to brighten the seemingly gloomy future for Europe's pensioners. The conference was attended by 60 politicians, policy-makers, journalists and industry and civil society representatives, and its success is what has led to the publication of their expert views here.

In a sense, the first hurdle has been cleared – politicians and usually sceptical publics do recognise the existence of a ‘pensions problem’. This publication, however, does not concern itself solely with the political challenges surrounding the process of reform. Acknowledging the existence of the problem, the authors in this book seek answers to the following questions: What are the alternatives to a pay-as-you-go system? Are Notional Defined Contribution schemes – such as the one applied in Sweden – the answer? Is a fully funded system – such as the one achieved in Chile – the ultimate solution, and if so, is it a realistic goal in Europe?

In addition to answering the questions above, the papers in this publication have three main aims. First, they seek to provide a brief analysis of the existing pension systems in Europe. Second, they seek to make sense of the pensions crisis through the prism of internationally recognised research. Third, and perhaps most interestingly, these papers propose a number of routes out of the pensions quagmire. This is done through an analysis of the obstacles to reform – and through a critical analysis of specific countries’ experience with reform. Each author reaches his own conclusions about the best way in which to defuse the pensions time bomb.

Several of the authors point to the value of Notional Defined Contribution (NDC) schemes, which are pay-as-you-go schemes – but with the crucial difference that there is a fixed contribution rate on individual earnings that are noted in an individual account. NDCs have played a critical role in Sweden – as Edward Palmer makes clear in his contribution – but their true value lies in the fact that they are an excellent intermediary step towards fully funded pensions. In this publication,

the papers of Giuseppe Pennisi and Edward Palmer provide excellent insights into the value of NDCs.

NDCs aside, other solutions, such as raising the retirement age, increasing taxes and stimulating savings, are all discussed. The authors have differing opinions on how to solve the same problem. Liam Halligan, for example, argues for the introduction of compulsory contributions, paid from an early age, while Wilfried Prewo argues for an increase in the weekly work time. Ian Vásquez extols the virtues of the fully funded pension system in Chile, and is optimistic that it can be applied elsewhere, but Kamil Kajetanowicz is less positive about the prospects of the market-oriented reform of Poland's pension system. All authors would agree, no doubt, with Matthew Bishop that countries need to pursue strategies that maximise economic growth so that they will be better able to support a relatively larger block of pensioners. Without strong economic growth, financing any radical change in the pension system will be incredibly difficult, to say the least.

Yet it takes enormous courage and mettle for a government to embark on a course of serious reform. After all, governments have strong incentives to avoid tackling the issue of pensions. It produces no short-term results, can be extremely costly (again, in the short term), and it is almost certain to compromise popularity with a powerful voting block. In such a difficult policy environment, it is crucial that there should be valuable intellectual ammunition for those with the courage to reform – something that this publication certainly provides.

There is no comprehensive solution to all countries' pension woes. The intricacies of domestic politics, the complexities

of pension reform and the huge potential for error make this impossible. There are clear indications, however, as to the kind of reform that is needed, and the authors in this book can identify at least one clear conclusion: undeniably the most effective way of defusing the pensions time bomb is to harness the power of market forces.

The structure of the book

The series of papers in this book opens with an overview of the reform of western European pension systems and a brief look at the NDC approach to tackling the time bomb. Giuseppe Pennisi, a professor of economics with eighteen years' experience at the World Bank, is uniquely placed to provide this overview. He approaches the issue by framing the pension reform debate – looking at potential accelerators of reform, parametric and structural reform, and the need to view pension reform as part of broader welfare reforms. Exploring the merits of pay-as-you-go systems versus fully funded systems with a critical eye, Pennisi examines the potential of NDCs to provide the intermediary step in what he views as the necessary transition from PAYG to fully funded systems.

Following on from Pennisi's introduction, Liam Halligan explores the value of private pensions through an analysis of the Turner Commission's recommendations on pensions in the United Kingdom. Halligan, economics correspondent for Channel 4 News in the UK, is in regular contact with the key shapers of policy, and has written extensively on the pensions crisis. His novel approach, suggesting that the solution is to introduce *compulsory* pension contributions, emphasises the

importance of private pensions as the key to resolving the demographic problem.

Wilfried Prewé, chief executive of the Hannover Chamber of Industry and Commerce and a prolific author on pensions policy, brings to the debate his expertise on European systems, and in particular the German system. He agrees with Pennisi and Halligan (and indeed with the other authors) that ultimately a move to a funded system is necessary. His method of achieving this differs, however, and he favours an approach that would increase the weekly work time to 42 hours, in combination with a decrease in sick leave payment and reform of unemployment insurance. Work effort would have to increase, he admits, but there need not be a sacrifice in disposable income.

Ian Vásquez, a director at the American think tank Cato, and his colleague L. Jacobo Rodríguez, provide us with an overview and analysis of the Chilean pension system and the reforms it underwent – explaining how Chile was able to move from a PAYG system that was going bankrupt to a functioning fully funded system which is a success story by any measure. In contrast to Pennisi and Palmer, Vásquez believes that Chile should be the model for rich and poor countries that are considering reforming their retirement systems. Vásquez tackles head-on the most common criticisms made of the Chilean system, such as high administration costs and lack of portfolio choice. He demonstrates not only that the criticisms are largely unjustified, but that where the system can be faulted it is usually the result of inefficient government regulation.

From Chile we move to Sweden, where Edward Palmer, a consultant for the World Bank and OECD, and an architect of the Swedish pension reform in 1994, provides an insight into

the Swedish pension system. Palmer, as has been noted, is an advocate of NDC pension schemes, and through an analysis of the successes (and failures) of pensions in Sweden, his reasons for this become obvious.

Sweden is not the only country to experiment with market-oriented reform, and Kamil Kajetanowicz introduces us to the Polish pension reforms that began in 1999. Kamil, a fellow at the Adam Smith Institute in Poland, analyses the effects of the introduction of a funded second pillar – pointing to its merits and defects – before describing the current situation. He highlights the need for the market-oriented reform to go farther, suggesting that at the moment the best that can be hoped for is a moderate success.

The book ends with a chapter by Matthew Bishop, chief business writer at *The Economist* newspaper. Bishop provides us with a lucid analysis of the key issues in the pensions debate. Emphasising the need to think of the pension crisis as a risk-management challenge rather than a problem with a risk-free solution, Bishop suggests a few ways to manage the risks better. These include raising the retirement age at a fast pace, and not having fixed retirement dates. Like Halligan, he is critical of the idea that companies should provide pensions. In his conclusion, he argues that for any pension reform to succeed in Europe, government must focus on strategies that maximise economic growth. Six years after the Lisbon Agenda, this serves as a timely reminder to European governments to reform.

The collection of papers in this book clearly demonstrates that the way out of the looming pensions crisis lies in the adoption of market-oriented reform. That lesson applies across

the spectrum of the welfare states in Europe – it is time that governments learnt to work with the market rather than battle against it.



1 European pensions reform: an overview

Giuseppe Pennisi

During the 1980s and 1990s ageing populations forced almost every western European country to change key elements of its pension system, which had been designed under assumptions of rapidly growing employment, young workforces and low dependency rates. While most western European countries have introduced parametric changes in their pension systems and encouraged varying degrees of privatisation, Sweden and Italy have maintained strong pay-as-you-go public pillars – but drastically revised them from ‘defined benefit’ to ‘Notional Defined Contribution’ (NDC) schemes. Such reforms are now being considered and/or introduced by many other countries around the world, especially by the new member countries of the EU and by those in the process of negotiating an accession agreement with the EU.

Privatisation of pension systems is a possible and feasible alternative for countries in transition from planned to market economies, especially if the previous pension systems have been swept away by high inflation and drastic curtailment of real-term benefits. It is a more difficult path in most western European countries, where pay-as-you-go state systems are

deeply ingrained. Even if most of these systems are not sustainable – neither financially, economically nor socially – transition to fully funded private pension mechanisms raises a major economic and social problem: who pays for the transition? Sooner or later, one or two generations will have to face a double pension burden – the obligation of paying for their own future pensions as well as for the current pensions of their fathers, mothers, uncles and aunts.

The transition issue was resolved in Chile's pension reform because the country's demographic profile was young, economic growth was strong, and public finance had reported a hefty budget surplus; thus, transition could be arranged through a special issue of government bonds (Gill et al., 2005). Other countries – for example, Bolivia – linked pension reform and privatisation to the denationalisation of state-owned enterprises (Hanke, 2006). Most European countries, however, report an ageing demographic profile and slow economic growth; furthermore, in several of them, by EU agreement, proceeds from denationalisation have been 'mortgaged' – for example, earmarked for the reduction of public debt stock. Within this context, the NDC approach, coupled with the progressive expansion of the funded pillar, could be a possible avenue to a transition to an increasingly privatised pension system. It is extremely flexible, and can be tailored to country conditions. In this chapter, I provide an overview of reform in the western European pension systems and an outline of the NDC approach. My colleague Ed Palmer will focus on the Swedish approach in his contribution to this book.

Western European pension systems: emergence, evolution, and reform

Pension systems were introduced in western Europe at the end of the nineteenth century and evolved over the twentieth century, generally as part of broader welfare systems. Their gradual development in the first half of the twentieth century gave way to rapid expansion after World War II, encompassing entire populations. All the systems had a similar goal: to provide insurance against the risk of becoming old – an initially unlikely prospect for most people because in many countries the retirement age was 70 and the probability of reaching it was extremely small.

In parallel, other parts of welfare systems provided insurance against risks of becoming unemployed, disabled, poor and the like. Philosophically these pension and welfare systems rested on social welfare theory, a consequence-based (or consequentialist) approach geared towards formulating and implementing corrective action to mitigate market failures and other societal imperfections. (Sen 1992, 2000, provides excellent treatments of these philosophical aspects of the pension and welfare debate.)

Each pension and welfare system is the result of a delicate balance of economic, social and political power. Worldwide, pension systems are broadly classified as based on defined contributions or defined benefits, funded or unfunded, and actuarial or non-actuarial (Lindbeck and Persson, 2003). A more specific taxonomy is used to depict the principal features of western European pension and welfare systems as they were originally designed:

- In terms of *eligibility* there are universal systems where, subject to certain criteria, all citizens (or residents) of a country are entitled to basic welfare and pension coverage, often based on a flat-rate element complemented by an earnings-related component, and specific, occupation-based systems where welfare and pension mechanisms are tied to recipients' status, normally their occupation.
- In terms of *financing* there are systems financed almost entirely by general taxation and there are those financed mostly by contributions from workers (as future retirees) and their employers. More importantly, some welfare systems are based on pay-as-you-go mechanisms where current benefits are paid out of current revenues (contributions) and the general exchequer, while others rely on funded mechanisms that pay benefits using proceeds from capital accumulation.
- In terms of *administration* some systems are centrally run by the public service and some are highly decentralised to other public or semi-public institutions, often operated as autonomous agencies under boards and management committees representing workers and employers (Flora and Heidenheimer 1983; Ferrera 1993, 1998; Esping Andersen 1996a, 1996b; Clark et al., 2003; Mitchell et al., 2003; Venditti, 2003).

Most western European welfare and pension systems have evolved into mixed systems with varying elements of all these features and of defined contribution and defined benefit, funded and unfunded, and actuarial and non-actuarial components. Pension reforms in Sweden and Italy show how a universal

Table 1 Four patterns of welfare and pension systems

| <i>Eligibility</i> | <i>Benefits</i> | <i>Financing</i> | <i>Administration</i> |
|--|------------------------------------|---------------------------|-----------------------|
| Scandinavian countries | | | |
| Universal | High | General taxation | Central government |
| Ireland, United Kingdom | | | |
| Universal | Low (but can be increased) | Taxation and contribution | Central government |
| Benelux, France, Germany, Italy | | | |
| Occupational | High | Payroll contribution | Intermediate bodies |
| Portugal and Spain | | | |
| Corporatist | High (only for certain categories) | Taxation and contribution | Intermediate bodies |

system (Sweden) and a specific, occupation-based system (Italy) have evolved into mixed systems and changed, nearly in parallel, their pay-as-you-go defined benefit pillars into partly funded actuarial and defined contribution pillars. Significant institutional differences across countries will probably remain important for the foreseeable future, but gradual reforms towards NDC coupled with a funded pillar could go a long way towards reducing these differences and even pave the way for a EU pension system with a growing private component (Holzmann et al., 2003) based on individual pension savings plans (Pinera, 2004). The main issues are described below.

The old age crisis

Over the next few decades the European Union in general and western Europe in particular will face a significant acceleration

Europe needs saving

Table 2 Old age dependency ratios in western Europe, 2000–50
(people aged 65 and older as a percentage of people aged 15–64)

| Country | 2000 | 2010 | 2020 | 2030 | 2040 | 2050 |
|----------------|------|------|------|------|------|------|
| Austria | 25.1 | 28.8 | 32.4 | 43.6 | 54.5 | 55.0 |
| Belgium | 28.1 | 29.4 | 35.6 | 45.8 | 51.3 | 49.7 |
| Denmark | 24.1 | 27.2 | 33.7 | 39.2 | 44.5 | 41.9 |
| Finland | 24.5 | 27.5 | 38.9 | 46.9 | 47.4 | 48.1 |
| France | 27.2 | 28.1 | 35.9 | 44.0 | 50.0 | 50.8 |
| Germany | 26.0 | 32.9 | 36.3 | 46.7 | 54.7 | 53.3 |
| Greece | 28.3 | 31.6 | 35.8 | 41.7 | 51.4 | 58.7 |
| Ireland | 19.4 | 19.1 | 24.5 | 30.3 | 36.0 | 44.2 |
| Italy | 28.8 | 33.8 | 39.7 | 49.2 | 63.9 | 66.8 |
| Luxembourg | 23.4 | 26.2 | 31.0 | 39.8 | 45.4 | 41.8 |
| Netherlands | 21.9 | 24.6 | 32.6 | 41.5 | 48.1 | 44.9 |
| Portugal | 25.1 | 26.7 | 30.3 | 35.0 | 43.1 | 48.7 |
| Spain | 27.7 | 28.9 | 33.1 | 41.7 | 55.7 | 65.7 |
| Sweden | 29.6 | 31.4 | 37.6 | 42.7 | 46.7 | 46.1 |
| United Kingdom | 26.4 | 26.9 | 32.0 | 40.2 | 47.0 | 46.1 |
| Average | 26.7 | 29.8 | 35.1 | 43.8 | 52.4 | 53.4 |

Source: Commission of the European Communities, 2003

in ageing owing to the baby-boom generation reaching retirement age, continued increases in life expectancy and decreases in fertility, especially since the early 1970s (Commission of the European Communities, 2003; European Central Bank, 2003; Lindbeck and Persson, 2003; CSIS, 2002; Jackson, 2002). Together the large cohort reaching retirement age and rising life expectancy will cause a doubling of western Europe's old age dependency ratio (defined here as the number of people aged 65

Table 3 Public spending on pensions in western Europe, 2000–50
(percentage of GDP)

| Country | 2000 | 2005 | 2010 | 2020 | 2030 | 2040 | 2050 |
|----------------|------|------|------|------|------|------|------|
| Austria | 14.5 | 14.4 | 14.8 | 15.7 | 17.6 | 17.0 | 15.1 |
| Belgium | 9.3 | 8.7 | 9.0 | 10.4 | 12.5 | 13.0 | 12.6 |
| Denmark | 10.2 | 11.3 | 12.7 | 14.0 | 14.7 | 13.9 | 13.2 |
| Finland | 11.3 | 10.9 | 11.6 | 14.0 | 15.7 | 16.0 | 16.0 |
| France | 12.1 | 12.2 | 13.1 | 15.0 | 16.0 | 15.8 | n.a. |
| Germany | 10.3 | 9.8 | 9.5 | 10.6 | 13.2 | 14.4 | 14.6 |
| Greece | 12.6 | 12.4 | 12.5 | 15.4 | 19.6 | 23.8 | 28.8 |
| Ireland | 4.6 | 4.5 | 5.0 | 6.7 | 7.6 | 8.3 | 9.0 |
| Italy | 14.2 | 14.1 | 14.3 | 14.9 | 15.9 | 15.7 | 13.9 |
| Luxembourg | 7.4 | 7.4 | 7.5 | 8.2 | 9.2 | 9.5 | 9.3 |
| Netherlands | 7.9 | 8,3 | 9.1 | 11.1 | 13.1 | 14.1 | 13.6 |
| Portugal | 9.8 | 10.8 | 12.0 | 14.4 | 16.0 | 15.8 | 14.2 |
| Spain | 9.4 | 9.2 | 9.3 | 10.2 | 12.9 | 16.3 | 17.7 |
| Sweden | 9.0 | 8.8 | 9.2 | 10.2 | 10.7 | 10.7 | 10.0 |
| United Kingdom | 5.1 | 4.9 | 4.7 | 4.4 | 4.7 | 4.4 | 3.9 |

Source: EU Economic Policy Committee, 2001

and older as a percentage of those aged 15–64). In 2000 this ratio was just over 25%; by 2050 it will be more than 50% (see Table 2). Even if the average fertility rate were to gradually increase, it would not be sufficient to counter a projected reduction in the EU population starting around 2020 (EU Economic Policy Committee, 2001). As a result, public spending on pensions is projected to increase considerably.

Until a few years ago, only demographers and economists were seriously concerned by these developments. But now

public perceptions of their implications for pension systems are widening and deepening. Because most existing systems are public pay-as-you-go schemes, a majority of western Europeans are taking pessimistic views of their future public pension entitlements and of the difficulties they will have in living on foreseeable retirement incomes.

An obvious policy response to rising life expectancy would be to raise the retirement age, which typically stands at 65 in western European countries. But few people stay in the labour market until the statutory age, with most retiring between the ages of 56 and 60. On average, western Europeans spend 20 years in retirement, up from thirteen years in the 1960s. Another obvious response to rising life expectancy would be to develop fully funded pension pillars, private or public (Feldstein, 1988; Gruber and Wise, 1999). But the heavy burden of employer and employee contributions to pay-as-you-go schemes leaves little room for the savings required for funding, especially during the transition phase. Over the past fifteen years, many western European countries have embarked on pension reform, and the related challenges have led to lively debate. (Commission of the European Communities, 2003, provides effective overall analysis and specific country annexes.) Recently a few governments – most importantly the German and the British governments – have indicated an intention to propose to Parliament a gradual increase in the statutory pension age from 65 to 67 years of age.

Changing conceptual basis

A common but rarely studied philosophical trend underlies the

shift from social welfare theory to the contractual approach (Roth, 1999).¹ Whereas the social welfare theory approach focuses on outcomes – the consequences of policies and programmes – the contractual approach seeks to get ‘institutions’ right through appropriate procedures² whereby, given ethical constraints, rights protection and fair rules of the game, individuals are free to pursue their own ends. In welfare and pension policies this implies an emphasis on greater freedom of choice about contribution levels and future benefits, retirement age, risk diversification between two or more pillars, and the coverage ratio of retirement benefits relative to income in the last few years of working life.³

The pension reform debate

This general background helps in understanding the pension reform debate in terms of the old age crisis in Western Europe. Certain features frame this debate.

Reforms and financial shocks

Although economic and financial shocks – such as those in the early 1990s involving European exchange rate agreements and later in the decade involving the path towards a common European currency – may forestall reforms, they can also accelerate them. Students of market-supporting institutions know that at times several large shocks are needed for change (Rajan and Zingales, 1998; Euseby, 2004). For policy-makers and politicians, periods of crisis can provide opportunities, at least in critical sectors, to undertake bold institutional reforms. In a seminal book, *Private Truths, Public Lies: The Social Consequences*

of Preference Falsification, Timor Kuran (1995) shows how crises can break through ‘public lies’ and ‘the process of preference falsification’ in reforming economic and social policies, especially in sensitive sectors such as pension and welfare systems.

More recently, Dani Rodrik (2000) shows how crises can forestall attempts by ‘political losers’ not to change obsolete institutions – and, if properly nurtured, can assist moves towards high-quality institutions. For example, in Denmark, Italy, Spain and other western European countries the 1992 foreign exchange and financial crisis and the later European Monetary Union (EMU) crisis led to a major change in unions’ outlooks, which in the past had often impeded pension, welfare and labour market reforms. The resulting shift was from a corporatist, conservative posture in favour of the ‘old’ institutions of the ‘old’ economy to a broader, more socially responsible attitude, intended to ease the transformation to a flexible, high-value-added production structure (Bertola et al., 2001; Boeri et al., 2001). As Professor Palmer outlines in his chapter, Sweden is an exception, in that reform advocates were at work well before the financial shocks of the early 1990s. International economic integration and, in particular, European economic integration undoubtedly influenced the growing perception of the need for reform and the consensual process that led to basic changes in the system (Holzmann and Palmer, 2006).

It is not easy to ‘nurture’ countries towards reform and towards stronger social policy institutions. Italy shows that reforms were feasible and were made in response to the foreign exchange and financial crisis (in 1992) and the threat of being denied access to the group of EMU founding fathers (in 1995–97). Since then the momentum in Italy has been gradually

lost. Despite the opportunity to design new and definitive reforms with a longer view and without an emergency policy framework, no substantive action has been taken.

Parametric and structural reforms

Since the late 1980s many western European countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Portugal, Spain) have introduced parametric pension reforms – that is, changing basic parameters of their systems, most notably the minimum retirement age and rules about investing, early retirement, contribution rates and levels, and benefit rates and levels. At the time of writing major new parametric reforms are going through Parliament, with many difficulties, in Austria and France. Rarely have such changes been introduced through a single comprehensive reform act. Rather, several pieces of legislation were required to adapt each country's system as social and political consensus was reached (see especially the case studies of the United Kingdom and the United States in the 1980s in Pierson, 1994, and Maré and Pennisi, 2004, 2003).

The United Kingdom carried out a more complete pension overhaul, going a long way towards a fully funded system, but is not yet out of the woods.⁴ Within western Europe, Italy and Sweden stand alone in having carried out structural reforms that maintained a pay-as-you-go scheme but introduced highly innovative NDC systems. This approach was later adopted by Poland and some Baltic countries, and is being introduced and/or considered, to varying degrees, in Austria, France, Germany and the Russian Federation. Here the main point is that both parametric and structural reforms imply changing from an unfunded, broadly non-actuarial, one-pillar public pay-as-you-

go system to a two- or three-pillar system with an increasing role for funded, actuarial schemes.

Pension reform and broader welfare reforms

Western Europe's experience shows that pension reforms easily come to a standstill if they are not part of broader welfare state and labour market institutional reforms. In Italy, in particular, a basic feature of the social welfare system is its concentration on pensions. For that reason pension reform became a visible, high-priority issue in the 1992 crisis and on the 1995–97 path towards the EMU. 'Less pensions, more welfare' is not merely a slogan but a call to broadly revamp social policies (Boeri and Perotti, 2001). Such a call must include labour market reform to increase flexibility and decentralised wage bargaining as well as to break down barriers between formal and informal employment (Pennisi, 1997). Only such broader social policy adjustments can prevent pension reforms from coming to a halt, in a loop with the other elements of the welfare state.

Important reforms of employment and non-employment welfare systems have been introduced in the Scandinavian countries, Italy, Germany, Spain and, more recently, France, along with changes in pension systems. In all countries where the retirement system is gradually transformed from a one-pillar pay-as-you-go system to a two- or three-pillar system with a growing fully funded arm, the emphasis should be on integrating the fully funded element with unemployment insurance through individual savings accounts (Stiglitz and Yun, 2001).

Pay-as-you-go and fully funded systems

The salient points as regards pay-as-you-go and fully funded

pension systems as discussed in the western Europe pension reform debate relate to three questions:

- ▶ *Can a funded system guarantee higher real returns?* A look at real yields of investments in financial markets over the past 30 years shows high real returns. For the United States, Siegel (1999) shows an annual real return of 6–7% for stocks and shares, while Jorion and Goetzmann (2000) and Sharpe (2002) find returns of 4–5%.⁵ The recent stock market bubble had a major adverse impact on pension funds and benefits (Gustman and Steinmeier, 2002). Still, pension funds with investments in financial markets for sufficiently long periods seem able to provide high real returns. When making a simple comparison of the returns between pay-as-you-go and fully funded pension systems, it is easy to conclude that funded systems show a clear advantage. But this is true only if the *pure returns* of the two systems are compared. The advantage tends to fade if *transition taxes* are also considered – that is, taking into account the tax burden that the generation making the transition to the new system has to bear to finance existing pensions.⁶
- ▶ *Does a new funded system improve the economic welfare of society as a whole?* Some authors have constructed models that generate efficiency gains from a transition to a funded system (Feldstein, 1998; Kotlikoff, 1998). Others have argued that a welfare-improving transition to a funded system is not possible (Diamond, 2001; Geanakoplos et al., 1999). Advantages for future generations tend to be somewhat offset by costs for present generations. But a more interesting question is whether funding increases the

national savings and stock of capital. If the pie becomes bigger, the distribution conflict between generations – which inevitably arises in the transition to a new pension scheme – can be alleviated. On the other hand, funding has significant equity and income distribution implications because it tends to favour higher-income groups (Casarico and Devillanova, 2003).

- *Does funding insulate from demographic shocks?* An ageing population tends to have an impact on funded schemes because, sooner or later, pension funds will have to sell their assets to a smaller economically active population – and if a given stock of assets is sold to a smaller number of buyers, the price of the assets can be negatively affected, with repercussions on the resources available for pensioners.⁷

Given these factors, in the western European debate on pension reform consensus is emerging that in the short and medium term funding should be seen as a complement, rather than an alternative, to pay-as-you-go, with the goal of diversifying political and financial risk. Political risk is inherent in pay-as-you-go systems, where overall net benefits can be changed by governments and parliaments if socio-economic conditions or the political compact change (Casamatta et al., 2003). In my view, this consensus is based on a limited vision; western Europe should strive towards full funding as a long-term objective and see NDC as an instrument for the transition towards this objective.

2 The privatisation of pensions: good, bad or just ugly?

Liam Halligan

I will address this subject in the light of pension policy in Britain, and particularly in the light of the recent Turner Commission on pensions – potentially the most important development in UK pension policy for a generation. I will explain in this chapter – in short – why I think Turner’s recommendations, many of which will soon be implemented, are politically clever, but technically wrong.

Now, consider this statement: ‘Nobody who really understands pensions understands the big political picture. And nobody who understands the big political picture really understands pensions.’

If this isn’t an old political maxim, then perhaps one day it will be. Because, from where I view the pensions debate – the realms of television and newspaper journalism – this statement, to my mind, captures one of the major problems we face.

That problem – without wishing to be rude – is the huge gap between those who actually understand pensions, and those who decide pension policies.

In my job as an economics and business correspondent, one minute I’m locked in a technical discussion with an actuary

about the intricacies and implications of a new accounting regulation, the next I am talking to a minister – an actual policy-maker – who, while mindful of – even obsessed with – the political big picture, has only a tentative grasp of the technical issues involved.

This unfortunate situation – this gap – is not unique to pensions. But it is made worse by the fact that, in the UK at least, the person in charge of pension policy keeps changing. We have now had no fewer than six pension secretaries – that is the pension ministers in the cabinet – within the last eight years. This is a complex and technical area. Changing the lead person all the time is not conducive to good policy-making – given the challenge we face.

Demography

And it is quite a challenge. As many readers will know, the issue really is ‘Demography, stupid’ – to reprocess an old cliché. Across the OECD countries, average life expectancy is now 77 years – having risen some ten years since 1970.

Over several generations, biotechnology will increase longevity even more – particularly in the West. So, by 2050, the proportion of over-80s in the OECD will have risen from around 2% today to almost 10%. Combined with falling fertility, we will end up – again by 2050 – with a near-doubling of the dependency ratio, with most of that rise occurring by 2030.¹

In fact, when you think about it, longevity could, over the next two to three decades, rise even faster than these widely cited projections. That, after all, has certainly been the case over the last 20 to 30 years.

All this is good news for humanity, of course, but terrible news for taxpayers and – in general – for the fiscal stability of Western countries. A recent analysis, by Standard and Poors, the highly respected ratings agency, is worth quoting from: ‘The message is unambiguous. Without strong and sustained reform, the high credit ratings on the countries under analysis – the UK, France, Germany, Italy and the US – could be lost due to demographic spending pressure starting in the 2010s.’²

So – it’s official. Demographic pressures could, within a decade, result in spiralling levels of public liabilities, liabilities so serious that the sovereign debt of Western countries would be reduced to sub-investment grade – or ‘junk’, as they say in the jargon.

And even if the taxes were raised in response – were that desirable or politically possible – that in itself could compromise future growth, so making the demographic problem even worse.

Private sector

What we don’t know is how the private sector should respond to this challenge. What we do know, meanwhile – or at least, what we’ve witnessed in the UK – is that private sector pension provision is in ‘significant underlying decline’.

That was the phrase used recently by Adair Turner, who has of course overseen the British government’s Turner Commission into the future of our pension system.

The UK, as is well known, has among the least generous state pension provisions in the Western world. For decades, that was fine – as we also had extensive private sector coverage. But now,

just as the state plans to become even less generous, private sector pensions are fast diminishing too.

The UK is seeing an ongoing closure of private 'final salary' pension schemes – once regarded as the 'gold standard' of pension provision. Over the last four years, up to 100,000 British workers have lost part or all of their future pension incomes, as the final-salary schemes they paid in to – often for decades – have collapsed.

Such pensions aren't guaranteed in the UK – despite a very common misperception that they were, a misperception actively promoted, over many years, by successive British governments. That fact, and the previously revered status of final-salary pensions among working people, means that the British public's faith in private pension saving has been badly dented.

For instance, a campaigning website called Pensionstheft.org is very popular these days – not only among those who've already lost their private final-salary pensions, but among some of the 5 million people still paying in to such schemes who think they might.

The Turner Review

Into this breach has stepped Lord Turner – with his review, the tenth separate pension review Labour has initiated since taking power in 1997. Other such reviews have sunk – almost without a trace – having served their purpose of allowing ministers to dodge difficult questions on the spurious grounds of not wanting to 'pre-judge the review'.

But – with its nearly three years of deliberation – the Turner

Commission is the Mother of all Reviews. And Lord Turner has certainly generated a sense that 'something needs to be done'.

He has bravely pointed out the reality that the state pension age needs to rise – a reality British ministers may yet choose to ignore, unlike their counterparts in the USA, Germany and elsewhere.

But when the Turner Commission reported back in November 2005, it also said, quite rightly, that raising pension ages alone is not enough. 'Increases in private savings are also needed,' Lord Turner stated, 'to meet the demographic challenge.'

That's why, in broad terms, his proposals, on first inspection, appear to be a good thing. The centrepiece of the recommendations – a National Pensions Saving Scheme, or NPSS – is designed, despite the name, to encourage a big increase in private pension saving.

The NPSS is supposed to help more British workers – particularly low- and middle-income workers – to directly finance their own funded pension, allowing them to benefit from compounded returns on investments, so lowering the burden on taxpayers. Considering the demography, that makes a lot of sense.

Now, the descriptive work in the Turner Report is world class – providing an unparalleled analysis of what, he admits, is 'the most complex pension system in the world'.

But to my mind, the prescriptive side falls short. The Pension Commission's recommendations will, in my view, inadvertently undermine private pension saving. That's because Lord Turner has proposed – and the government will soon adopt – something called 'soft compulsion'.

Under this model, workers will be 'opted in' to the purported

NPSS – that is, they will pay in to their own individual pension, publicly administered but privately invested – unless they choose to opt out. The idea is to take advantage of inertia by making pension saving the default option.

Those workers not opting out – Turner hopes the vast majority – pay in 4% of their wages towards their own, earmarked pension fund. The employers of such workers are then compelled to pay in another 3% of payroll. Note: there is no employer opt-out, if the worker joins the scheme. So, the compulsion element actually falls entirely on businesses.

What happens to the money then isn't yet clear – in terms of who manages the funds, and at what cost. Ministers, currently formulating their response to Turner, have yet to decide. But the payment side of Turner's NPSS – the soft compulsion bit – is a done deal and will soon be British pension law.

What don't I like about these proposals? Why is the British government's most serious attempt for decades to boost private pension saving unlikely to be successful?

One reason is that – in the real world – many employers will end up having a quiet word with their employees. Companies will attempt to encourage or cajole their workers to opt out of the NPSS – so they don't have to pay in either. Faced with such a request, backed up with the threat of – say – a 3% cut in pay, many workers will take their employer's hint.

This isn't only my view. Sir Steve Robson, the former Head of Pension Strategy at the UK Treasury, says that, under Turner's plans, firms will 'shepherd' their workers away from the NPSS. 'I suspect', he told me during a recent television interview, 'that in the current day and age, faced with massive competitive pressures from China and India, many companies will try and

keep their people out of this scheme. They're simply not going to want the three per cent contribution added to their costs.'

That sounds right to me. And I'd say low- and middle-income workers – those the NPSS is specifically trying to encourage to save – will be particularly prone to the 'shepherding' Robson predicts.

A further problem is that Turner's 3% contribution rate for firms will take on a life of its own. It will become a 'government-endorsed benchmark'. So the many good employers in the UK, who currently contribute way more than 3% of payroll into their companies' pension schemes, will come under pressure – not least from shareholders – to lower their contributions.

'Minimum Funding Requirements' – as we have seen elsewhere in the UK pension system – have the habit of becoming 'Maximum Funding Requirements'. And there is a real danger, under Turner, that many firms paying 10, 15 or even 20% in to private pension funds for their workers will soon cut their payments to the level of 3% – which will, after all, have been officially endorsed as being good enough.

No choice but compulsion

In Britain, and I would say across Europe, we need to be bolder. Carefully weighted policies like the NPSS and 'soft compulsion' are, in my view, an inadequate response to the demographic pressures we face.

From where we are now, the only hope we have of securing decent retirement incomes for the bulk of younger workers, and for our children and grandchildren, is to grasp the nettle

and introduce *compulsory* pension contributions, paid from an early age.

Private pension saving, the only way to avoid genuine fiscal instability, must simply be made to happen. This was a policy proposal that Tony Blair used to entertain – urging his ministers to ‘think the unthinkable’. But he has, as Lord Turner well knows, long since abandoned the idea.

That’s because compulsion is controversial and expensive. If workers can’t afford their contributions, current governments need to pay them instead. That costs money today. But the alternative – in particular the UK’s misguided fixation on means-tested old age benefits – is loading much greater liabilities on to future taxpayers, to be paid – given the changing shape of our demography – from an ever-dwindling tax base.

Ministers worry that compulsory pension contributions would be perceived as a tax – therefore a political non-starter. But such payments – if placed in ring-fenced individual accounts – could help rebuild trust in pensions. Most people under 40 assume anyway that state pensions will be worth next to nothing by the time they retire. So, given the degree of confusion – and fear – inspired by private pensions, compulsory contributions, combined with a guarantee that the vast bulk of your money will be there when you retire, could even turn out to be popular.

Crucially, compulsion shouldn’t fall on businesses – as it does under Turner’s scheme – but on individuals themselves. In our increasingly global, competitive world, the idea of a paternalistic employer for life is faintly ridiculous. Individuals need individual pension accounts, which they are forced to pay in

to, which are prudently invested, which they broadly understand and which stay put – wherever they work and however many times they move their jobs.

Is there a free market case for compulsory pension saving? Of course there is. If you drive a car without insurance, and you crash into me, I end up paying. So, in practically every modern market economy, drivers are forced to take out at least third-party insurance. The reason is that if they weren't forced to they wouldn't do it, and that harms everyone else. So driving a car with no third-party insurance carries what economists called a 'negative externality'.

The same holds true for pensions. If you can't work any more, and you don't have a decent pension – a situation set to become more and more common across the Western world – then I, as a taxpayer, have to pay for you. In fiscal terms, you are crashing into me. I take the fiscal hit.

So you should be forced throughout your working life to invest for – to insure – your future retirement. You should be forced to benefit – even if you at first don't understand why – from the accrual of investment returns over the decades during which you work, from what Maynard Keynes called 'the awesome power of compound interest'.³

Lord Turner possesses formidable intellectual qualities. He is well aware of the *realpolitik*, the gap between those – like him – who actually understand pensions, and those who eventually decide pension policy. In my view, his cautious recommendations fail to bridge that gap. His is a carefully calibrated policy, a political solution to today's pension conundrums.

What Britain and Europe need – and what our thinkers and leaders need the courage to formulate and implement – is a

Europe needs saving

realistic and technical solution to the pension conundrums of tomorrow.

So, if I may, I'll reflect, in conclusion, on the title of this chapter:

Private pensions good – oh yes. In fact they are the only choice in town.

Private pensions bad – that what's happening in the UK, and the current policy-making flurry could even make things worse.

Private pensions ugly – I fear that's the way we're headed, as the demography really kicks in, and more and more schemes close. That, I fear, will snuff out completely the public's dwindling faith in the notion of private pension saving.

That gap – between those who understand pensions and those who make the policies – is of very real significance. All of us have to do what we can to close it.

3 Defusing the time bomb with private pensions

Wilfried Prewo

For a demographically 'stable' population, we would need fertility rates of a little above 2.0. In the EU countries, the rate is 1.52.¹ Germany is at 1.37. Worldwide, and among 225 countries, Germany is number 197. On average, 30% of German women aged 35 are – and probably will remain – childless. (Even more worrisome is the fact that 43% of women with university degrees are childless.)²

Owing to low birth rates and higher life expectancy, Germany will, by the year 2030, have about 35 pensioners for every 50 people aged 20–60; if the labour force participation rate remains at today's 60%, this means that there will be roughly one pensioner for one active worker, with the consequence that the worker's pension payroll tax would, on average, equal the average pension. A pay-as-you-go pension system is unsustainable under such conditions (see Figure 1).³

Migration mitigates, but does not solve, the demographic problem. And it even creates new problems, because their skill level renders many immigrants unemployable at prevailing wages. European immigration policies, by and large, do not encourage the immigration of skilled people.

Europe needs saving

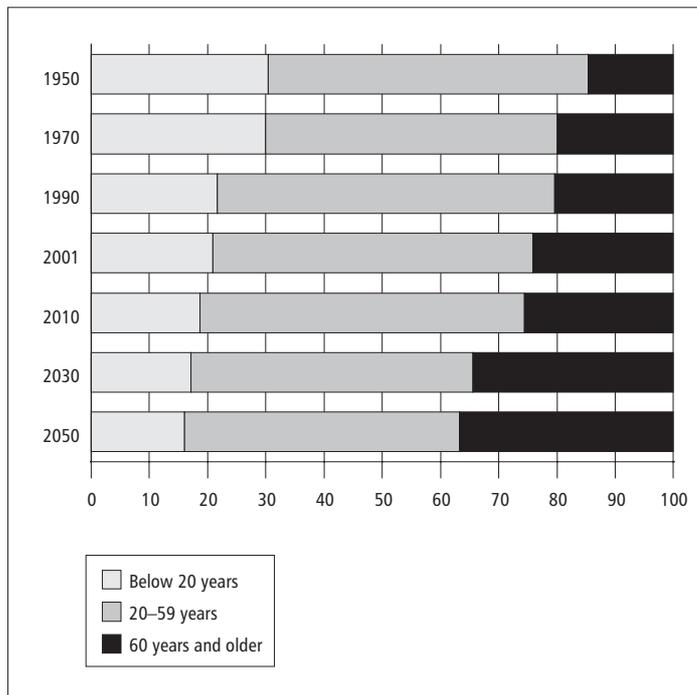


Figure 1 Demographic trends in Germany

Age groups as a percentage of the entire population

Source: Statistisches Bundesamt

Since the 1960s, unemployment in western Europe has been rocketing. Labour laws and regulations prevent employers from hiring in good times for fear of not being able to downsize in a recession, except at high costs for severance payments and labour disputes. Consequently, unemployment increased in recessions, whereas few jobs were added in upswings.

Despite a large pool of unemployed persons, there is no well-functioning low-wage sector in countries with a strong union influence, such as Germany, France or Italy; how many porters do you see at airports; how many restaurants with valet parking? Unions – and politicians beholden to them – have prevented a low-wage sector in order to avoid erosion of the artificially high union wages at the lower end of the wage scale.

The take-home pay of an industrial worker in Germany is about 17% lower than that of his counterpart in the United States; but the German's labour cost is 22% higher, the reason being costly benefits and, in particular, onerous payroll taxes for unemployment, health and pension insurance.⁴ Consider this comparison: a German plumber has to work five hours (at a net wage of €8–9 per hour) to hire a painter for one hour (at a cost of €40–45 per hour) and vice versa. Neither of them can afford that. The result is that more and more unemployed do not actually seek re-employment, instead supplementing their unemployment benefits with black market income and finding the combined to be higher than their previous net wage.

Until the meltdown of the Iron Curtain, labour cost gaps of up to 50%, such as that between Germany and Spain, could be neutralised by geographical factors or productivity advantages. But now the labour cost benchmark is being set by eastern Europe, which offers labour costs in the magnitude of one fifth to one tenth of western European labour costs. Given their productivity, geographic proximity and market potential, eastern European countries are attractive not only for large companies. Many mid-size firms invest there.

The increased competitive heat melts the financial pillars

of the welfare state. In a payroll-tax-financed system, higher unemployment and more pensioners imply that fewer and fewer actively employed people have to pay more and for more beneficiaries; in a vicious circle, this raises labour costs even further and adds more spin to the job-loss spiral. As a result, the welfare state is haemorrhaging money.

On the investment side, the welfare state's consumption spending drains resources needed for capital formation. In 1980, most European countries still had social expenditures below investment outlays; now, the typical picture is that social expenditures are one third higher than investment.

This leaves us with only the following policy choices:

- ▶ The labour market has to be deregulated and must be freed from the stranglehold of the unions. Conflict with the unions cannot and should not be avoided; and it is possible to win it, since there are issues where the public is not behind the unions, such as, in Germany's case, allowing the workers and management of a company to deviate from the union contract (i.e. the right to work).
- ▶ The pension system has to be transformed from pay-as-you-go to a funded system. There is no alternative. Pay-as-you-go is no longer an option now, since it requires children. A country that does not grow its human capital can procure for old age only by capital formation.
- ▶ And our other social insurance systems have to be reformed in two ways: (i) their finances have to be decoupled from labour income, thus making labour more competitive again and enticing job growth; and (ii) costs have to be (and can be) reduced by scrapping the top-down, one-size-fits-all

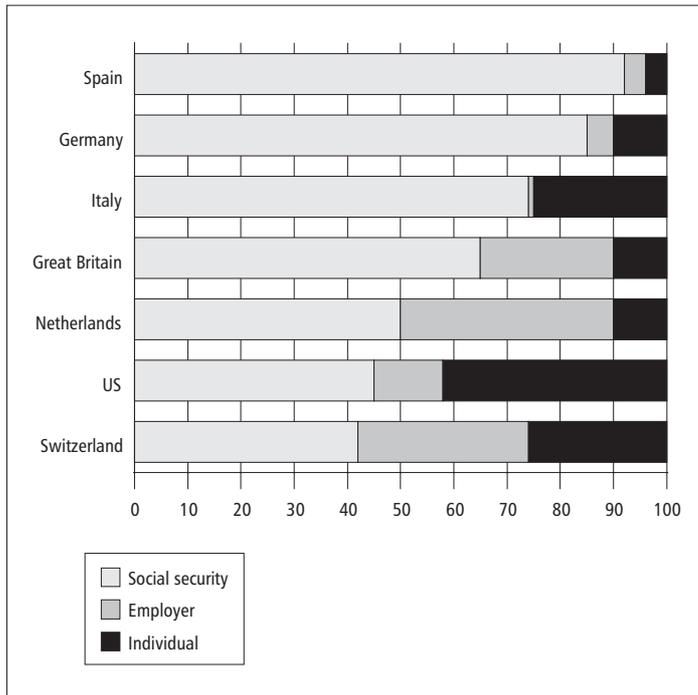


Figure 2 Retirement plans: government, employer and individual plans

Income structure of a two-person retired household, %

Source: DIA, 2005

benefits plans and replacing them with a consumer-driven model built on individual choice.

Switching from pay-as-you-go (PAYG) pension financing to a funded system is a challenge in countries such as Italy, Germany

Europe needs saving

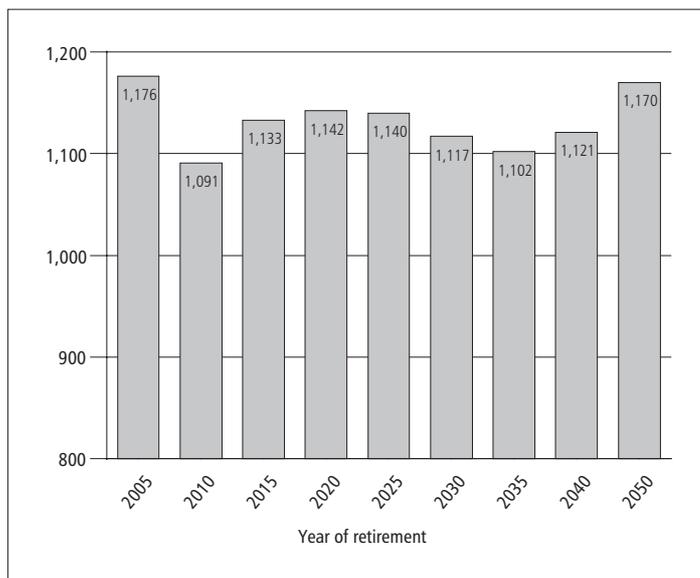


Figure 3 Expected development of PAYG pensions

Development of real PAYG pensions in Germany*, €

*45 working years with average income, retirement age 65, inflation rate 1.5%, real average income growth 0.65% up to 2025, 0.5% after 2025
Source: DIA, 2005

or Spain, where pay-as-you-go pensions amount to 74, 85, and 92%, respectively, of total pension incomes (see Figure 2).

In Germany, PAYG pensions for an 'average' pensioner, during the next four decades, are projected to fluctuate between about €1,100 and €1,170 a month (see Figure 3).

A switch to a funded system, if accomplished within one working generation (45 years), would mean that we have to build up a fund out of which a pension in that amount can

Table 4 Contributions to fully funded pensions under different conditions

| <i>Assumptions:</i> | | | |
|---|--|-----------|------------|
| Saving period: | 45 years | | |
| Pension period: | 16 years (age 68–83) | | |
| Monthly pension: | €1,170 (payment out of interest and capital stock) | | |
| Cases: | <i>I</i> | <i>II</i> | <i>III</i> |
| Real interest rate: | 1.5% | 2.0% | 3.0% |
| Necessary saving p.m.: | €260 | €221 | €159 |
| Relative to average income (€2,500 p.m.): | 10.4% | 8.8% | 6.4% |

be paid. The required contribution to the fund would depend on these variables: the retirement age (currently legally 65 and effectively 61, with the legal retirement age being slowly raised to 67), life expectancy (about 83), years employed (we assume 45), and the real rate of interest (1.5, 2 or 3%). Under these assumptions, an average income earner would have to save 6.4% in the optimistic scenario (3% real rate of interest). In the pessimistic scenario, with only a 1.5% real rate of interest, he would have to contribute 10.4% to his pension fund (see Table 4).

Others put the required savings at 12%, which may be more realistic because the average working life is currently less than 45 years.⁵ In any case, switching from PAYG to a funded system in one generation poses a severe cash-flow burden on the average income earner. At this time, political consensus on such pension savings rates of between 6 and 12%, coming

Europe needs saving

Table 5 Financing the transformation from PAYG to fully funded pensions (assuming a contribution of 12% of income)

Assuming a contribution of 12% of income

Financing plan:

| | |
|-------|---|
| 5% | Increase of working time from 40 to 42 hours per week |
| 0.72% | Reduction of sick leave payments* from 100% to 80% |
| 1.5% | Reform of unemployment insurance* |
| <hr/> | |
| >7% | Two-thirds can be fully funded without 'sacrificing' current income |

*For the 0.72% and 1.5% savings, see W. Prewo, *From Welfare State to Social State – Empowerment, Individual Responsibility and Effective Compassion*, Brussels, 2004

on top of the payroll tax for the current PAYG pension, is not conceivable. Society is not willing to take such a cut in disposable incomes.

Therefore, we have to find other, less painful ways of financing a funded system. In my opinion, the least painful approach would be an increase in the weekly work time to 42 hours. While anything but popular, an increase in the working week would be less unpopular than a commensurate cut in paid vacations by about ten days (from 25 to 30, 15 or 20 days). This increase in the working week would generate about 5% more income, which – if fully contributed to individual pension accounts – would, over the course of a generation, fund half or more of the PAYG pension level (see Table 5).⁶ Additional savings from the reform of other social systems (especially the introduction of co-payments and deductibles in the areas of sick leave and unemployment insurance) would increase the funded contribution to 8%. An 8% contribution will, over 45

years, fund at least two-thirds of the current PAYG pension level.

As pension funds are being built up, new retirees will draw their pension in part from the old, to-be-phased-out PAYG system and from the funded part, with the latter increasingly contributing a higher portion. This will allow successive reductions of the PAYG contribution rate long before the 45-year period is completed. This reduction will, in turn, make labour more competitive again. Alternatively, society could choose to pump the PAYG contribution cuts into a speedier build-up of the funded system.

I am not claiming that political consensus on such a policy can be reached as long as a major part of society does not yet recognise that our PAYG pension systems are unsustainable. These rough calculations serve to show, however, that transition to a funded system is possible. While it will require sacrifice in terms of more work effort, it does not require sacrificing disposable income. Furthermore, the longer we delay action, the worse the problem will get.



4 The Chilean case: the success of private pensions

Ian Vásquez and L. Jacobo Rodríguez

Chile has long been an innovator in pensions policy. In 1924 it was the first country in the hemisphere to implement a state-run retirement system. Sixty years on, in 1981, it became the first country in the world to replace its bankrupt pay-as-you-go pension system with an investment-based privately managed system of individual retirement accounts. The problems that are currently putting pressures on workers and public retirement programmes in so many countries also plagued Chile's government-run system, ultimately making it fiscally unviable: payroll taxes were high and undergoing large increases, the implicit debt of the public system was over 100% of GDP, the ratio of workers to retirees was in a significant and continuous decline, and the government was contributing to more than a third of the public pension system's revenues.¹

Chile's pioneering reform addressed the above problems by creating a fully funded system whose principal features are individual choice, clearly defined property rights and the private administration of accounts. By linking effort and reward, the reform offers proper investment and work

incentives, and has contributed to Chile's impressive growth rates.

Since the private pension system was implemented, labour force participation, pension fund assets and benefits have increased. Today, 95% of Chilean workers have joined the system; the pension funds have accumulated assets of some \$74.7 billion, amounting to more than 75% of Chilean GDP; and the average real rate of return on the pension funds has been 10%.²

The Chilean private pension system

Every month workers deposit 10% of the first \$22,000 of earned income in their own individual pension savings accounts, which are managed by the specialised pension fund administration company of their choice. (There are currently six competing pension fund companies in Chile.) Those companies invest workers' savings in a portfolio of bonds and stocks, subject to government regulations on the specific types of instruments and the overall mix of the portfolio. Fund managers can invest up to 30% of the portfolio overseas, a measure that allows workers to hedge against currency fluctuations and country risk. At retirement, workers use the funds accumulated in their accounts to purchase annuities from insurance companies. Alternatively, workers make programmed withdrawals from their accounts (the amount of those withdrawals depends on the worker's life expectancy and those of his dependents); or a worker can choose temporary programmed withdrawals with a deferred lifetime annuity.

The government provides a safety net for those workers who,

at retirement, do not have enough funds in their accounts to provide a minimum pension. But because the new system is much more efficient than the old government-run system, and because, to qualify for the minimum pension under the new system, a worker must have at least 20 years of contributions, the cost to the taxpayer of providing a minimum pension funded from general government revenues has so far been small – about 0.1% of GDP.³ (Of course, that cost is not new; the government also provided a safety net under the old programme.) Those who have not contributed for 20 years and have not accumulated sufficient funds to meet the minimum pension can apply for a lower welfare-type pension.

When the reform began, workers already in the labour force were given a choice between joining the new system and remaining in the old. Those who chose to switch to the private system were given ‘recognition bonds’ that reflected past contributions to the public pension programme and which are paid by the government upon a worker reaching the legal retirement age. New entrants into the labour force were required to join the new pension system, thus eventually ending the unsustainable pay-as-you-go system. The benefits of those already retired and receiving a pension at the time of the reform were not affected.

The transition to the private system was financed in a number of ways. It should be noted that the net economic costs of moving from an unfunded pay-as-you-go system to a fully funded system are zero. That is to say, the total funded and unfunded debt of a country does not change by moving from an unfunded system to a funded one. There is, however, a cash-flow problem when moving towards a fully funded

retirement system. In the case of Chile, transition costs can be broken down into three different parts. First, there is the cost of paying for the retirement benefits of those workers who were already retired when the reform was implemented and of those workers who chose to remain in the old system. That makes up by far the largest share of the transition costs at present. These costs will decline as time goes by. Second, there is the cost of paying for the recognition bonds given to those workers who moved from the old system to the new in acknowledgement of the contributions they had already made to the old system. Since these bonds will be redeemed when the recipients retire, this cost to the government will gradually increase as transition workers retire (but will eventually disappear). It is worth stressing that these are new expenditures *only* if we assume that the government would renege on its past promises. The third cost to the government is that of providing a safety net to the system, a cost that is not new in the sense that the government also provided a safety net under the old pay-as-you-go system.

To finance the transition, Chile used five methods. First, it issued new government bonds to acknowledge part of the unfunded liability of the old pay-as-you-go system. Second, it sold state-owned enterprises. Third, a fraction of the old payroll tax was maintained as a temporary transition tax. That tax had a sunset clause and is zero now. Fourth, it cut government expenditures. And, fifth, pension privatisation and other market reforms have contributed to high growth in Chile, which in turn has increased government revenues, especially those coming from the value added tax.

In sum, the transition to the new system has not been

an added burden on Chile because the country was already committed to paying retirement benefits. On the contrary, the transition has actually reduced the economic and fiscal burden of maintaining an unsustainable system.

Commonly heard criticisms of the Chilean system

Critics of the Chilean system, however, often point to high administrative costs, lack of portfolio choice and the high number of transfers from one fund to another as evidence that the system is inherently flawed and inappropriate for other countries, including the United States. Some of those criticisms are misinformed. For example, administrative costs are less than 1% of assets under management, a more favourable figure than management costs in the US mutual fund industry. Other criticisms are highly misleading. To the extent that the criticisms are valid, shortcomings in the private system typically result from excessive government regulation.

In Chile pension fund managers compete with each other for workers' savings by offering lower prices, products of a higher quality, better service or a combination of the three. The prices or commissions that workers pay the managers are heavily regulated by the government. For example, commissions must be a certain percentage of contributions regardless of a worker's income. As a result, fund managers are prevented from adjusting the quality of their service to the ability (or willingness) of each segment of the population to pay for that service. That rigidity also explains why the fund managers have an incentive to capture the accounts of high-income workers, since the profit margins on those accounts are much higher than on the accounts of low-income workers.

The product that the managers provide – that is, return on investment – is subject to a government-mandated minimum return guarantee (a fund's return cannot be more than 2 or 4 percentage points, depending on the type of fund, or 50% below the industry's average real return in the last 36 months). That regulation forces the funds to make similar investments and, consequently, have very similar portfolios and returns.

Thus, the easiest way for a pension fund company to differentiate itself from the competition is by offering better customer service, which explains why marketing costs and sales representatives are such an integral part of the fund managers' overall strategy and why workers often switch from one company to another.

In the following section, we take a closer look at some of the more frequently heard criticisms of Chile's private pension system.

'The administrative costs are too high'

Critics often claim that the commissions that workers pay to the pension funds are exorbitant. The often cited figure of 18–20% represents administrative costs as a percentage of current contributions, which is not how administrative costs are usually measured. This figure is usually obtained by dividing the commission fee, which is on average equivalent to 2.37% of taxable wages, by the total contribution (10% plus the commission). This calculation fails to take into account that the 2.37% includes the life and disability insurance premiums (about 0.95% of taxable wages on average)⁴ that workers pay, which are deducted from the variable commission, and thus overstates administrative costs as a percentage of total contributions.

The proper way to measure administrative costs is as a percentage of assets under management. In Chile, the administrative costs of the private pension system are 0.66% of assets managed.⁵ The Chilean pension fund administrators' association calculates that the commissions the industry charges are 0.63% of assets under management, far lower than such fees charged by other fund managers, including US mutual funds, which charge about 1.38%.⁶

Prior to the above findings, others have calculated similarly low administrative costs.⁷ When administrative costs are compared with the old government-run system, the criticism is even less convincing. Chilean economist Raúl Bustos Castillo has estimated the costs of the new system to be 42% lower than the average costs of the old system.⁸

To the extent that such administrative costs are still considered too high, that is the result of government regulations on the commissions the AFPs can charge and on the investments these companies can make. The existence of a 'return band' prevents investment product differentiation among the different AFPs. As a result, the way an individual AFP tries to differentiate itself from the competition is by offering better service to its customers. One way to provide better service would be to offer a discount on the commission fee to workers who fit a certain profile – for example, workers who have maintained their account for an extended period of time or who contribute a certain amount of money to their accounts; government regulations do not, however, allow that. Those regulations state that the AFPs may only charge a commission based on the worker's taxable income and expressed as a percentage of that income.

'The coverage under the new system is low'

Critics also say that some 30–40% of Chilean workers are not participating in the private system. Although the number of Chileans participating in the private system is actually greater than the workforce (some Chileans affiliated to the private system have left the workforce), only about 64% of those participating in the employed workforce regularly contribute to their private accounts. According to the Chilean pension fund regulatory agency, that method of calculation underestimates real coverage because it counts only workers who have contributed in a particular month, even though other workers who made contributions in previous months will also receive benefits from the system. Including workers who have contributed within the past year, coverage in the private system amounted to 69.7% of the workforce, which is greater than that of the previous public system in the four years prior to the reform. From 1976 to 1980, coverage under the old system 'averaged 67% of the workforce, with a clear downward trend'.⁹

Others have also found that coverage in the private system is greater than in the old system. Measuring coverage as those who contribute on a regular monthly basis, the percentage of the employed workforce covered in the private system (64%) is superior to that of the old system before reform (52% in 1980), and it has been increasing (see Figure 4 below).¹⁰

Several factors explain why coverage is not higher in Chile. The self-employed, who represent about 30% of the workforce, are not required to participate in the private system. Only about 6% of the self-employed contribute on a regular basis. Workers who are unemployed also do not contribute to the system (the unemployment rate has been between 8 and 10%

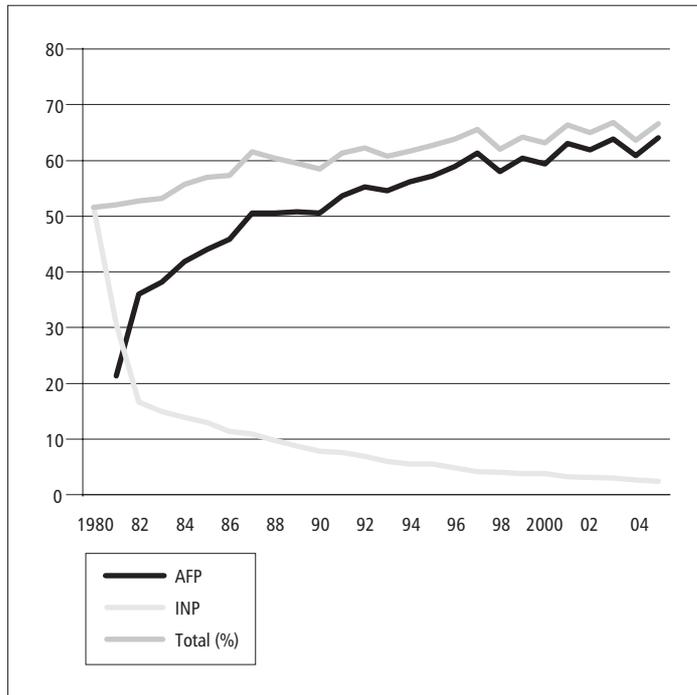


Figure 4 Evolution of pension coverage

% contributors in December; employed workforce October–December

Source: Asociación de AFP

in Chile in the past five years). Moreover, of the 3.4 million people affiliated with the private pension system, 1.44 million – including students or women who have stopped working to care for children, for example – are not currently in the workforce.¹¹ There is also a large informal economy, which is typical of developing countries. Lastly, the evidence suggests

Europe needs saving

Table 6 Civil social security deficit forecast

Reduction of fiscal spending on pensions: –0.83% of GDP

| Year | Public pensions | Recognition bonds | Welfare pensions | Minimum AFP pensions | Total |
|------------|-----------------|-------------------|------------------|----------------------|-----------|
| 2002 | 3% GDP | 1.2% GDP | 0.4% GDP | 0.1% GDP | 4.7% GDP |
| 2010 | 2% GDP | 1.2% GDP | 0.4% GDP | 0.27% GDP | 3.87% GDP |
| Difference | –1% GDP | 0% GDP | 0% GDP | 0.17% GDP | –0.83 GDP |

Source: Ministry of Finance, Budget Department, *Macroeconomic Aspects of the Draft Law for the Public Sector, 2002*; and Asociación AFP

a strong relationship between economic development and the level of coverage around the world (higher per capita incomes correlate with higher coverage).¹²

In short, the level of coverage under the system does not reflect negatively on the private pension system itself. To the extent that coverage could improve, factors not inherent to the private system, such as rigidities in the labour market and the size of the informal economy, would have to be addressed by other public policies. In addition, it is only fair to compare the private system with the old system beginning around the year 2025, when the first generation of workers who have contributed during their entire working lives begins to retire.

'Too many workers will depend on the minimum pension and the system will impose large costs'

The Chilean finance ministry estimated the average number of minimum pensions that it would be supplementing per month

in 2005 at 65,000. The costs of doing so are minimal and currently stand at 0.1% of GDP. Part of the reason that the cost is low is that the government does not provide the full amount of the minimum pension when a worker has some assets in his/her account. On average, the government provides 20–30% of the capital needed to finance the minimum pension. Indeed, the public cost of financing pensions, most of which is made up of meeting the obligations of the old system, is projected to continue falling (see Table 6).¹³

It is estimated that the percentage of members affiliated to the private pension system who will receive government supplements for the minimum pension (only those who have contributed for 20 years are eligible) will vary between 1.9 and 10.5%, depending on the rates of return.¹⁴

'Workers change pension fund administration companies too frequently'

Because of investment regulations and rules on fees and commissions, product differentiation is low. Thus companies compete by offering gifts or other incentives for workers to switch to their companies. Switch-overs increased dramatically from 1988, the year when the requirement to request in person the change from one AFP to another was eliminated, until 1997, when the government reintroduced some restrictions to make it more difficult for workers to transfer from one AFP to another. The number of transfers in 1998–2000 decreased to less than 700,000 from an all-time high of almost 1.6 million in 1997. Transfers have since fallen to about 228,000 per year.

Liberalising Chile's private pension system

It is clear that some of the regulations mentioned above have become outdated and may negatively affect the future performance of the system. Fortunately, Chilean authorities have taken some important steps in addressing the challenges of a more mature system.

The most important structural reform in recent years has been the introduction of multiple investment funds. Chilean authorities finally adopted this reform in early 2002, when they instituted a rule that mandated AFPs to offer five different funds that range from very low risk to high risk. One advantage of having several funds administered by the same company is that it could reduce administrative costs if workers were allowed to invest in more than one fund within the same company. This adjustment also allows workers to make prudent changes to the risk profile of their portfolios as they get older.

The introduction of a family of funds is an important step, and consumers are behaving as one would expect – that is, by diversifying their investments across the menu of funds. Other steps that have been taken in the recent past include the lengthening of the investment period over which the minimum return guarantee is computed and the widening of the band for some types of funds; the further liberalisation of the investment rules, so that workers with different tolerances for risk can choose funds that are optimal for them; and the expansion of consumer choice with the signature of a bilateral accord with Peru that allows workers from those two countries to choose the pension system with which they want to be affiliated.

Other specific steps that Chilean regulators should take to

ensure the continuing success of the private pension system include: liberalising the commission structure to allow fund managers to offer discounts and different combinations of price and quality of service (which would introduce greater price competition and possibly reduce administrative costs to the benefit of all workers); letting other financial institutions, such as banks or regular mutual funds, enter the industry;¹⁵ giving workers the option of personally managing their accounts through the World Wide Web; and reducing the moral hazard created by the government safety net by linking the minimum pension to the number of years (or months) for which workers contribute.

Those adjustments would be consistent with the spirit of the reform, which has been to adapt the regulatory structure as the system has matured and as the fund managers have gained experience. In summary, the Chilean private pension system, despite minor shortcomings, is a success story by any measure and deservedly continues to be the model for rich and poor countries that are considering reforming their retirement systems.



5 The Swedish case: the success of NDC

Edward Palmer¹

In 1994 the Swedish parliament passed pension legislation that replaced its two-tier defined benefit scheme with a new two-tier earnings-related scheme – consisting of a notional defined contribution (NDC) and a financial defined contribution (FDC) component – supplemented by a guaranteed pension level at the bottom.² Sweden's public expenditures on pensions are projected to be among the lowest in Europe in the coming half-century, levelling off to around 10–11% of GDP, compared with around 9% today. The explanation behind this stability, despite an ageing population to the same extent as in other countries, is Sweden's new pension system, which by design is robust in the face of economic and demographic changes.

The stability of the new system stems primarily from its defined contribution design. The earnings-related component of the new system consists of an NDC component, financed by a 16% contribution rate, and an FDC component, financed by a 2.5% contribution rate. Both are individual account schemes where benefits are calculated as life annuities based on the sum of contributions, including a rate of return, and cohort

life expectancy at retirement. Unlike in the old Swedish system and systems generally throughout the world, the old age component of the public pension system was separated from disability and survivor benefits. The latter two were moved to the general budget, to be financed by general revenues.

An overview of the new Swedish pension system

Both the FDC component of the new mandatory pension system and the non-financial defined contribution component (NDC) can be viewed as individual pension insurance schemes.³ Contributions to accounts are defined in terms of a *fixed* contribution rate on individual earnings below a ceiling (of about 1.5 times the average full-time wage for men), with a 16% contribution rate for NDC individual accounts and a 2.5% rate for FDC individual accounts. The aim of the reform was to split contributions 50-50 between employees and employers, but to date employer contributions are still slightly higher. Note that earnings from self-employment are covered by the entire contribution rate.

Individuals pay contributions during the accumulation phase – prior to retirement – and receive an annuity at retirement. The NDC and FDC schemes are both *individual* account schemes. In the NDC scheme, however, contributions go towards paying the benefits of contemporaneous pensioners, as in any pay-as-you-go scheme. In the FDC scheme individuals have command over their own financial accounts and make their own financial investment decisions. At retirement, the individual is entitled to an annuity from each of these. The annuity is based on the

retiree's account balance and the life expectancy of the retiree's birth cohort at the age of retirement.

Benefits from unemployment insurance, sickness and disability insurance and parental leave are treated as income; contributions on these incomes are paid into the individual's account. These contributions are financed from the respective insurance budgets, i.e. from the central government budget. Also, non-contributory credits are given for military service, higher education and raising children. These, too, are financed from the central government budget.

The NDC benefit is a yearly payment until death determined by dividing the pension wealth with a so-called annuity divisor, which is determined by life expectancy at the time of retirement and an imputed real rate of return during the expected life of the annuity of 1.6%. Benefits are price-indexed and adjusted further for deviations (positive and negative) in the real rate of growth of the average covered wage from the 1.6% real rate of growth assumed in the calculation of the annuity.

The NDC annuity divisor makes the pension system (almost) robust with regard to increases in longevity (see below), which was one of the reasons for the old system's lack of sustainability. It also means that the higher the life expectancy, the lower the pension benefit, *ceteris paribus*. This can of course be compensated for by working longer. Table 7 shows how much the individual has to postpone retirement to avoid a lower yearly benefit.

NDC is financially stable. In a financially defined contribution scheme liabilities cannot exceed assets. This must also hold for NDC. In order to attain this, an automatic balancing mechanism (ABM) is applied which, when necessary (when

Europe needs saving

Table 7 Average life expectancy, age of retirement and effect on pension benefits

| <i>Cohort born in</i> | <i>Reaches 65 in</i> | <i>Projected annuity divisor at 65</i> | <i>Effect of life expectancy on pension at 65</i> | <i>Retirement age to neutralise life-expectancy effect on pensions</i> | <i>... implying an expected length of retirement of</i> |
|-----------------------|----------------------|--|---|--|---|
| 1940 | 2005 | 15.7 | – | 65 | 18 years, 6 months |
| 1950 | 2015 | 16.4 | –4% | 65, 8 months | 18 years, 7 months |
| 1960 | 2025 | 17.0 | –8% | 66, 2 months | 19 years, 1 months |
| 1970 | 2035 | 17.5 | –10% | 66, 7 months | 19 years, 4 months |
| 1980 | 2045 | 17.9 | –12% | 67 | 19 years, 6 months |
| 1990 | 2055 | 18.1 | –14% | 67, 2 months | 19 years, 10 months |

Source: Swedish Social Insurance Agency (2005)

liabilities are greater than assets), adjusts account values of workers and benefits of pensioners with an index based on the deviation of liabilities from assets (Settergren, 2001). The balancing mechanism steers the system in the right direction to achieve balance. What can give rise to the need for balancing? First, the index chosen for the Swedish system, based on the growth of average covered earnings, which does not reflect changes in the number of covered persons. Specifically, a declining labour force constitutes a potential source of imbalance, which, if it occurs and affects the balance between

assets and liabilities so as to give a negative balance, would be rectified by the ABM. Second, it is likely that life expectancy will be greater than the value used to compute annuities, which is based on existing cross-sectional data at retirement, rather than a cohort projection. Third, changes in the stream of contributions and payments can affect the outcome (see Settergren and Mikula, 2006). Finally, there will always be small technical problems arising owing to the need to base indices on historical average data. The Swedish ABM is triggered when one or more of these lead to a situation where system assets fall short of liabilities.

Institutional overview of the FDC scheme⁴

In order to provide a broad scope of investment at a minimum cost, a publicly managed clearing house – the PPM (Premiumpensionsmyndigheten, or Premium Pension Authority) – was established to manage the financial account scheme. The PPM is the clearing house for fund transactions, keeps individual accounts, collects and makes available (daily) information on participating funds, provides other information services to participants and is the monopoly annuity provider.

Contributions

Contributions are collected together with all other social insurance contributions (and taxes in general) by the National Tax Authority. New contributions are transferred to individual accounts annually, after income tax reconciliation, and on average about one and a half years after initial payment. In the interim, contributions of all participants are held in a blocked

Europe needs saving

account at the National Debt Office, where they earn a bond rate of return.

Fund investment services, information services and account keeping

The PPM is a monopoly provider of fund investment services, information services and account keeping. The PPM acts as a broker between participants and the participating investment funds. Fund shares purchased with new payments of contributions, choices for new entrants and general requests from participants already in the system to buy and sell fund shares (so-called switches) are grouped together and executed jointly on each transaction day by the staff of the PPM. Information on investment and cost performance is gathered, organised and published by the PPM. Fund values are also noted daily in major newspapers and can be accessed over the Internet from the PPM website.

Participating fund managers

All companies licensed to operate in Sweden and/or the European Union are allowed to participate in the PPM system. Fund managers are required to follow the rules and regulations set out by the Swedish Financial Supervisory Agency (FSA). To be in the PPM system fund providers must sign an agreement with the PPM. In addition to the requirements of the FSA, signing the agreement means agreeing to provide information to the PPM upon request, agreeing not to charge withdrawal fees and to provide a periodic report of administration costs charged. Companies are required to compute fund share values and report them electronically to the PPM on a daily basis.

A company registered to do business in the PPM system can provide one or more funds. There are over 75 domestic and foreign companies managing close to 700 funds registered to operate in the PPM system.

Part of the agreement concluded with the PPM involves accepting a system of rebates. What this means in practice is that a fund can levy its normal charge minus a rebate that depends on the balance of PPM assets held. Since there are economies of scale in large holdings of PPM assets, the size of the rebate increases and the allowable administration charge thus decreases with the scale of PPM assets managed by the fund. The exact construction of the rebate is discussed in Palmer (2000).

Participants

New entrants have the option not to make a fund choice as a first choice. Funds of individuals who choose not to choose are allocated to a fund for non-choosers. Around a third of all participants have made a passive choice. Over 75% of total funds of participants are in equities, including money pure equity and mixed equity–bond funds. This is also the approximate portfolio composition of the non-chooser fund.

A brief discussion of the accomplishments of the reform

The Swedish pension reform has been successful in meeting a number of objectives. First, the overall system has come much closer to inter-generational fairness in the sense that the contribution rates paid by successive generations are the same. Second, the system demonstrates intra-generational fairness in

the sense that the value of a crown contributed in a given year by two individual workers will give the same pension right in the future to both participants – irrespective of the shape of their earnings careers or the number of years of participation. Third, the system is financially stable. Fourth, the transition from defined benefit to defined contribution has not meant the downfall of social policy. Instead, it has led, first, to an increase in the transparency of the distributional components of the overall system, and contemporaneous financing. The cost of granting special rights is accompanied by a price tag and a payment at the same time that Parliament votes on the special rights. These distributional components are funded – put into the NDC fund or the FDC individual accounts, respectively – when they are granted. Fifth, the system has become neutral in terms of influencing labour market decisions of older workers – at least in the income range above the guarantee level. Sixth, DC schemes do not have the potential lock-in effects of defined benefit schemes. Accounts are always there and accumulate a normal rate of return, even when the worker moves between sectors, regions, employers and occupations. In other words, NDC and FDC do not impede labour market mobility. Seventh, technically the participant can claim either or both of the NDC and FDC components, at the same or different times, at any age after passing the minimum age. In addition, any portion of a claimed benefit can be combined with continued work, full or part time. New contributions are registered on accounts, and enhance a recalculated benefit.

Finally, the public FDC scheme creates saving, which in the absence of offsetting private effects is new net saving. A spin-off effect of the reform of the public system was that three of the

four major occupational supplementary schemes (covering all blue-collar workers, all municipal and local employees and all employees of the state) were also converted to FDC schemes, for benefit supplements to the public scheme based on earnings under the ceiling for the public scheme. The contribution rate for these fluctuates, but on average is about 3.5%. Together with the 2.5% contribution rate for the financial component in the public scheme, this means that the typical Swede has an overall contribution rate of 6% directed towards financial account schemes.



6 The Polish case: a moderate success?

Kamil Kajetanowicz

The old and the new pension system – a short history

January 1 1999 was Day One of the pension system reform in Poland. Until that day, pensions had generally been managed by three types of entities:

- 1 Various governmental bodies, covering ‘the uniformed’: those who served in the police, the armed forces, etc.
- 2 The Agricultural Social Insurance Fund (KRUS), covering farmers.
- 3 The Social Security Institution (ZUS), covering all the other professions.

Those covered by a pension scheme are referred to as ‘insured’, which is admittedly misleading given that the ‘insurance’ is mandatory, and failure to pay a ‘premium’ is punishable under law, as is tax evasion.

The reform focused on the third group (13 million insured) and did not affect those insured under schemes 1 and 2 (0.5 million and 2 million, respectively). The total relative burden

Europe needs saving

of contributions related to social security remained unchanged at 45% of gross salary (net salary + personal income tax), payable by the employer until the reform was introduced. These contributions include not only old age pensions but also disability pensions, sickness insurance, etc. As part of the reform, however, roughly half of the contributions amount (23% of gross salary) is now paid by the employee (insured). In order to make it conspicuous, gross salaries were automatically increased by this amount, while the portion of contributions incurred by the employer was diminished by the same figure. Thus, from the employee's point of view, the redefined gross salary comprises the old gross salary plus the following weightings:

- 12% for old age pensions
- 8% for disability pensions
- 3% sickness insurance,

The first two are also paid by the employer, who is additionally charged with some other social security contributions. One thing that did change is that old age and disability pension contributions are no longer charged once the earnings during a fiscal year exceed thirty average salaries.

These are obviously minor changes. What did make a significant difference was a new approach to managing the total old age pension contributions. Before the reform, the proceeds were entirely used to finance benefits paid out to current pensioners (pay-as-you-go). The key part of the reform is the introduction of the second 'pillar', namely private pension funds. Depending on age, the insured were either:

- banned from entering the new system (those over 50); or
- given a choice between entering the new system or remaining in the old system (those between 30 and 50); or
- forced to enter the new system (those below 30).

Also, a third pillar was created, participation in which is completely voluntary. So far, this has not proved popular – probably because the tax relief it offers is limited and only moderately attractive, and there are plenty of alternative ways to invest spare cash.

The second pillar – high hopes, difficult beginnings

Open pension funds, managed by so-called general pension societies, receive just under 40% of old-pension contributions while the rest goes to the state-managed ZUS (first pillar). This solution is supposed to ensure the contributors a safer financial future (diversification) while creating opportunities for higher pensions. The second pillar was presented as a very promising, if compulsory, long-term investment, likely to yield an above-average rate of return, as opposed to the run-of-the-mill state-managed first pillar, which – by and of its nature – does not invest at all.

Expectations were set high by the marketing campaigns of the many newly created open pension funds. A typical TV commercial showed an elderly couple enjoying their retirement on some exotic island (because, of course, they had chosen the right pension fund). These marketing efforts turned out to be quite successful, as they attracted an unexpectedly high share

of those aged between 30 and 50, who could but did not have to switch to the new system. As a side effect, there was a sharp rise in the deficit of ZUS, whose revenues were affected more than had been estimated.

There was another problem ZUS faced. The institution was (and still is) responsible for collecting all social security contributions (including, but not limited to, old age pension contributions) and transferring the appropriate portion of them to appropriate pension funds. Since the reform is based on the assumption that the second-pillar component of pensions is individualised (every member has their own unique account), ZUS is also obliged to identify the contributor when transferring money to a pension fund. Today this remains a major unresolved issue – there are still a high number of errors in the process: wrong amounts, incorrect or incomplete data, and so-called dead accounts, which have never been credited with a single contribution.

Part of the mess is due to the fraudulent activity or unprofessional approach of some sales representatives, who reported sales that never took place or made typos when entering customer data. Hundreds of thousands of representatives were employed, usually on a temporary basis, when general pension societies began the struggle for market share. Another reason is the (somewhat expensive) second-pillar-dedicated IT system ZUS was provided with, which proved to be spectacularly inadequate and full of bugs, and despite unending upgrades and countless patches it remains far from perfect.

Both ZUS and general pension societies have been clearing their respective databases, but nonetheless there remain over 700,000 dead accounts. In addition, ZUS had been notoriously

late in transferring the contributions to pension funds. Whereas the problem was partly due to the above-mentioned faulty IT system, there was another reason. ZUS had, and still has, a permanent deficit, and used some of the second-pillar contributions to finance its current liabilities. As a result, it became increasingly indebted to pension funds. The situation was so serious that a proportion of the liabilities have been settled by the Ministry of Finance – the pension funds have received (and are still receiving) Treasury bonds as compensation. Thus, there will be two consequences – the budget deficit will increase and pension funds will be forced to ‘invest’ in a financial instrument that has been created especially for them.

Market evolution and key performance drivers

In the first years of the reform, the number of open pension funds exceeded twenty. Today, in the wake of a number of mergers and acquisitions, it is down to fifteen, and will soon decrease to thirteen. Analysts estimate that there is room for eight to ten funds in the long run. The market is split unevenly – the combined market share of the top three funds is 56% in terms of members and 64% in terms of assets.

Given their long-term investment horizon, pension funds could reasonably be expected to achieve a net rate of return (after fees) at least similar to that of investment funds. They do not, however. There are at least three reasons:

- 1 Fees. There are significant fees that members are charged by pension funds:
 - A monthly management fee, basically equal to 0.045% of

net assets. The fee can be higher if a fund's performance meets a certain benchmark but it can never be lower, regardless of how poor investment results are.

- ▶ An up-front fee, charged every time a contribution is made (typically, each month). After the fee is charged, the remaining part of the contribution is converted to so-called accounting units. The rates vary but usually, for the first two years of membership, they were close to 10% of the contribution when the reform started. This is a much higher rate than is charged by any investment fund and was a subject of heated debate. As a result, a law has been passed whereby the upper limit is set at 7% until 2010, and at 3.5% from 2014 on.

2 Investment limits. In order to 'protect' the financial future of pension fund members, Polish law imposes investment limits on pension funds whereby, among other things, a fund may invest up to:

- ▶ 40% of its assets in shares and similar equities (e.g. corporate bonds) listed on the Warsaw Stock Exchange.
- ▶ 60% of its assets in shares, investment fund units, investment certificates, and depository receipts traded in Poland.

In addition, the upper limit for investments abroad is set at 5%, and there are a number of other detailed limits. At the same time, there are no limits on investments in Treasury bills and bonds. Attempts were made in 2005 to give pension funds some more leeway by allowing them to invest in futures, options and swaps, but the Ministry of Finance quickly abandoned the idea. As a result, the average pension fund portfolio comprises

roughly 30% shares, 60% Treasury bills and bonds, and 10% other financial assets. This situation is absurd – the allegedly private second pillar uses most of its members' contributions to help the government finance budget deficit. In other words, as much as 60% of the 'investments' in pension funds portfolios is in fact guaranteed by the state! Needless to say, this money is not spent productively, and it does not help create added value. At the same time, there is a group of intermediaries (pension funds) which charge a princely rate for their mostly worthless services.

- 3 Minimum rate of return requirement. Again, in order to ensure the 'safety' of future pensioners, the law stipulates that the rate of return of a pension fund (measured every 36 months) must not be more than 50% less¹ than the weighted² market average. If it is, the fund is obliged to cover the difference (for example, with its equity capital). Besides, current investment results of pension funds are published quarterly, and widely commented on in the press. Therefore, a failure to meet the minimum rate of return level is considered, first and foremost, a serious PR setback. As a consequence, fund managers (quite rationally – their jobs are at stake) tend to focus on short- and medium-term performance. They steer clear of investments that they would have made otherwise, had they not been incentivised to be overly risk-averse for purely 'political' reasons. Therefore, the assets are managed in a sub-optimal way, which – while not immediately visible – hurts the long-term interests of pension fund members much more than the possible short-term losses that would normally have been incurred from time to time. The market

concentration mentioned above has another behavioural effect on fund managers. The biggest funds have – by definition – the biggest weights in the weighted average. It is therefore a safe strategy for managers of the smaller funds to copy the investment portfolio structures of the largest players. Even if such a portfolio does not yield a spectacular rate of return, it will certainly be within the legally required minimum. It is also reasonable to assume that managers of the top funds might find it worth their while to have at least a generally agreed common approach to investment strategy. Again, they would be acting in their own interests – but while such a collusion would be unethical (and illegal), it would not be irrational. Even if it is not happening today (no one has been caught red-handed, in any event), it may well happen in the future.

The current situation

The Polish stock market has boomed for the last two years, which is reflected in pension funds' results. The average value of the accounting unit saw double-digit growth in 2004 and 2005. As of 30 December 2005, the total value of pension funds' assets amounted to over PLN 86 billion (€22 billion). As mentioned above, approximately 30% was investments in shares, and 60% in Treasury bills and bonds. To put these figures in perspective:

- ▶ the value of pension funds' assets came close to 9% of Poland's gross domestic product (GDP);
- ▶ pension funds own 6%³ of equities listed on the Warsaw

Stock Exchange and have a controlling stake in a growing number of companies;

- ▶ the portfolio of Treasury bills and bonds owned by pension funds accounted for 22% of Poland's domestic debt.

It is noteworthy that several private companies are gaining an increasingly greater control of the Polish economy, using what is de facto public money – the contributions-based pension funds are mandatory, yet have almost no responsibility.

Open issues

It has not yet been decided how monthly payments will be made once there is a wave of second-pillar pensioners, which will be as soon as 2009. The payments could be handled by pension funds themselves, new companies set up especially for this purpose, or existing insurance companies. What is perhaps even more disturbing is that the rate of the fee to be charged on these payments is also undetermined. Initial discussions with general pension societies revealed that they would expect these rates to be 7%, which is an outrageous figure by any standard.

It also remains unclear whether the pension will be calculated according to average mortality tables or whether separate tables will be used for men and women. *Ceteris paribus*, the average woman's pension will be lower anyway (owing to maternity leaves and lower average salary), but if the latter solution is chosen, the gap will become dramatic, as women's life expectancy is significantly greater than men's.

Conclusions

In a best-case scenario, the pension reform in Poland might turn out to be moderately successful: hypothetical profits resulting from a hoped-for long-term stock market growth will enable open pension funds to achieve a fair rate of return for their members despite having most of their assets invested in low-yield Treasury bills and bonds. The stock market will only boom, however, if there is sustained, high GDP growth. This, in turn, will not be possible without a radical increase in employment, both today and in future. The unemployment rate in Poland has been close to 20% in the last several years. The main, if not the only, culprit is the very high level of fiscal and social security burden imposed on wages. All these mandatory contributions make up as much as 83% of net salary, of which 24% goes directly to the first and second pillars of the pension system. In addition, the demographic situation is deteriorating rapidly. Having children is a luxury when it is so easy to lose a job, especially for women. Other things being equal, even if the pension funds do somehow succeed in their investments, the pension cheques will be worth little more than the paper they have been printed on – low GDP accompanied by a growing population of ‘wealthy’ pensioners will eventually result in inflation.

7 Growth and growing old

Matthew Bishop

Not so long ago, *The Economist* ran a cover story on the crisis facing European pensions. The cover picture was of a woman, probably in her mid-thirties, looking so miserable that she could easily have been mistaken for the subject in Munch's great painting *The Scream*. The caption with the picture? 'Work longer, have more babies'.

If that tongue-in-cheek suggestion is too simplistic, it certainly captures the mood of desperation that descends at the mention of Europe's pension crisis. (And, of course, the crisis is not just European: it is global, including rich countries such as America and Japan, as well as rapidly ageing, yet still relatively poor, China.)

That said, in one crucial respect this is a good crisis to have. One of the main causes of it is a dramatic, unexpected rise in longevity. The fact is, most of us can expect to live for far longer than any generation before us. That is surely something to celebrate.

Back in 1889, when Otto von Bismarck introduced the world's first state pension, it was paid at the retirement age of 70. The average life expectancy in Germany in 1889 was 48

years. Now, depending on whether we retire in our mid-sixties or late fifties (or if you are a state worker in Italy, maybe your early thirties), we can look forward to several decades of retirement, with some sort of pension to live on.

Of course, much of this greater longevity is the result of dramatic improvements in medical technology and healthcare. Indeed, that is why there is also a growing healthcare spending crisis that is in many ways inseparable from the pension crisis – except that it may be even harder to solve.

The medical advances now taking place – particularly coming out of the genome project – could extend lifespans significantly, perhaps beyond anything that now seems possible. That could make the pension and healthcare time bombs even bigger – but if it does, is that really a reason to complain?

There are two other causes of Europe's pension crisis worth thinking about.

One is the decline in fertility. On current trends – which, of course, will not necessarily continue – the population of the 27 countries due to be in the EU in 2007 will fall by 6% by 2050, from 482 million to 454 million. In Italy, the population will drop from 57.5 million to 45 million, in Spain from 40 million to 37 million. Germany's population is on course to drop from 80 million to 25 million by 2100 – or so some forecaster thinks.

Combined with people living longer, the falling supply of babies increases the 'dependency ratio' of retired people to workers. That is a particular problem in the 'pay-as-you-go' pension systems favoured by the state in much of Europe. Under pay-as-you-go, today's pensions are paid out of taxes collected from today's workers, who, under a sort of unwritten

inter-generational contract, in turn expect their pensions to be paid by taxing future workers.

The alternative to pay-as-you-go is a funded pension, in which a worker puts money aside to pay for his or her own pension. The rising ratio of retirees to workers also poses some threat to funded pensions, a fact that is often ignored by those who argue that private, funded pensions are the silver-bullet solution to the pension time bomb. The retired in any given year, whether relying on pay-as-you-go or funded pensions, will have to live off the economic output generated by the then workers, who may well try to make the slice of the cake going to pensioners as small as possible, and may as easily do so by raiding private pensions (say, through taxes) as by cutting the value of a state pay-as-you-go pension.

In Europe today there are 35 people of pensionable age for every 100 of working age. By 2050, there are forecast to be 75 pensioners to every 100 workers. In Spain and Italy, the ratio is forecast to be 1:1. If this problem is not addressed well in advance, there are certain to be big problems as workers try to reduce the burden on them and pensioners – an increasingly powerful chunk of the electorate – try to protect what they think is theirs by right. The politics could get very nasty.

A third cause of today's crisis is the short-termism of politicians. It is all too easy for politicians to promise big pensions in future without making the painful financial commitments necessary to pay for them. After all, by the time most of the voters retire, the politicians will be long gone.

And it is all too easy for politicians to do nothing about the pension time bomb, even if they are certain it will happen – after all, it is a crisis in the future. Where is the political upside

for them in tackling it now, rather than leaving it to a future generation of politicians? Equally, if by some miracle money has been set aside by past politicians to pay for future pensions, today's politicians may be tempted to dip into it – knowing that by the time it is noticed (after all, how many voters, or even journalists, understand pension accounting?) they won't be there to carry the can.

The short-termist bias of politicians is one of the main, strong arguments for the sort of long-term financial commitments involved in pensions being made in the private sector, involving pension providers that have a longer-term vision than the next opinion poll or election.

That said, private, funded pension money is not necessarily safe from political meddling, as followers of Gordon Brown's raids on Britain's pension funds know all too well. And if they are not as ephemeral as politicians, most of the people who run private sector pension organisations are likely to be gone before many of their current investors receive their pensions, so they too face short-term conflicts of interest that may turn out badly for pensioners. No one who has followed the fate of Britain's Equitable Life will underestimate this risk.

Solving this crisis is clearly not going to be easy, especially when you bear in mind the enormous uncertainties there are about demographics, the performance of financial markets and economies, geopolitics, and so on.

In fact, I don't think we can solve this crisis entirely, at least in a way that makes us completely confident about the future. This is a risky world. To borrow from Donald Rumsfeld, 'known unknowns' abound. You are unlikely to find out whether you have made the wrong call regarding your pension until you

are old and don't have time to put things right. This makes the uncertainty particularly troubling.

The best way to think about the pension crisis is as a risk management challenge, rather than a problem with a risk-free solution. The key question for policy-makers is how to prepare for retirement in a world where many of the main influences on the pension are subject to huge uncertainties.

Any ideal solution would involve long-term pension planning, in which the roles of both the state and the private sector are clear and fixed. Yet, in reality, there will always be constant short-term pressure to re-evaluate whatever arrangements are in place in the light of events. Inevitably, that pressure will be hard to resist – and in some cases probably shouldn't be resisted.

So what can be done to manage the risks better?

The first thing is to raise the retirement age at which the state pays pensions. And, of course, this is happening already in many places. The trouble is that a higher retirement age is being phased in slowly, when it would actually have a much larger effect if it were implemented quickly and applied even to people who are not many years away from retirement. By phasing in a higher retirement age over a couple of decades or so, millions of Europeans perfectly able to work will have far longer retirements than they or any politician could have expected when they were starting their working lives.

I understand why such people are reluctant to work longer than they now expect, and why politicians don't want to upset the formidable political lobby they have become, but it is wrong, even so. These folk – the soon-to-retire baby boomers – are the big winners in the increased longevity jackpot, and they

should share some of their winnings with those of us who are younger by spending at least some of their bonus years at work rather than living off their children and grandchildren.

Second, having a fixed retirement age for all is a mistake. Why encourage able and willing workers to leave the workforce before they are ready? Ideally, the financial incentives currently in the pension system in most countries which encourage people to retire at a particular age should be removed, so that if someone works beyond the age at which a pension is first available they get an appropriately bigger pension.

Even raising the retirement age and pushing pension provision more into the private sector may not guarantee adequate pensions for everyone. Many of the mistakes in past pension policy have been the result of underestimating the riskiness of retirement planning, and of life in general.

Take company pensions. In my opinion, companies should not be in the business of providing pensions, however sensible that once seemed in the era of lifetime employment with a single paternalistic employer. Now people change jobs often, and firms find it hard enough to succeed without having to worry about the profit and balance-sheet risks of a pension fund. Of course, firms should be free to contribute to an employee's personal pension fund, provided by an independent investment firm – but that is a very different matter from paying into a company pension fund.

More fundamentally, left to themselves, most people don't put enough aside for retirement. That is why the idea of creating compulsory funded pensions is increasingly popular among policy-makers. I'm not entirely comfortable with that, as I'd rather the state interfered as little as possible in

people's decisions about what they do with their money.

A better approach may be the 'soft paternalism' advocated by behavioural economists such as Richard Thaler – automatically opting people into funded pensions, but giving them the right to opt out (the opposite of the normal approach, whereby people have to actively opt in), or getting them to commit a bigger proportion of future pay rises to retirement savings (something that people seem to find less painful than giving up more of their existing income).

What about having more babies, then? Clearly, that would help reduce the strain on Europe's future working population. But again, I don't think it is right to try to socially engineer people – that is, women – into having more children just because it may help my pension. Moreover, I don't think we yet know enough about why fertility rates have fallen so fast in Europe to start trying to reverse the trend. Different theories point in different policy directions. Perhaps women would have more babies if there were better workplace childcare and support – but perhaps they simply don't want large families any more. Perhaps they are having fewer babies because they want to devote more resources to maximising the human capital of those they do have. Indeed, if so, perhaps a smaller future workforce will also be a much more productive one, and thus more able to cope with a rising dependency ratio of retirees to workers.

If there is not another baby boom, what else might be done about the grey-heavy future population in Europe? Leaving well alone wild ideas such as popularising voluntary euthanasia, two options leap out.

One is to allow greater immigration from the developing

world, where there is an abundance of younger people. At the very least, this buys time – though these younger people will one day retire too, and will need pensions.

The other – most easily done through private funded pension schemes – is to invest in those younger people where they are by buying shares in firms that have operations in those countries. Of course, whether these countries will be content to see huge amounts of money cross their borders to the old folks' homes of Europe remains to be seen – and, if they so wished, their politicians might not find it hard to do something about it.

All of which underlines the importance of Europe maximising its economic growth. Growth, it appears, is the answer to growing old. The bigger the economic cake, the easier it will be for Europe's relatively smaller workforce to support its relatively larger block of pensioners. To minimise the risk to retirement incomes, it is crucial that Europe's politicians do the right things on economic policy, along the lines of the Lisbon Agenda. Alas, given my earlier comments about the short-termism of politicians, who can be confident that even the pensions time bomb will be enough to achieve that happy result?

Notes

Chapter 1 European pensions reform: an overview

1. The contractual approach is philosophically based on Rawls (1971, 1993, 2001). For a sample of interesting and recent applications to welfare and pension systems, see Barbie et al. (2002), Lindert (2002), Schultz (2002), Brugiavini et al. (2003), Shavell (2003), Shiller (2003) and Wigger (2002).
2. Thus it is often also called the procedural approach.
3. For a recent critique of welfarism and consequentialism in pay-as-you-go pension systems, see Khotemburger and Poutvaara (2002).
4. This appears to have partly accounted for the country's good performance in the 1980s and 1990s (Disney et al., 2003). For a summary of the difficulties, see 'When the spinning stops', *The Economist*, 28 January 2006.
5. This figure does not include dividends. Goetzmann and Jorion (1997) show that between 1870 and 1995 the return was 8.8% for the Netherlands, 6.4% for the United Kingdom, 5.5% for Germany and 4.45% for France.

6. The same applies if the payment of existing pension rights is financed with the issue of public debt. In fact, someone has to shoulder the burden of interest related to this debt (the debt service), and this is equally true for new taxes.
7. Or, if the elderly people in the goods market demand a higher amount of goods than those currently produced by active people – that is, pensioners' desired consumption exceeds workers' desired savings – it will cause price inflation, reducing the purchasing power of pensioners' annuities.

Chapter 2 The privatisation of pensions: good, bad or just ugly?

1. Ratio of those aged 65-plus to those between 20 and 64; Turner Commission, November 2004.
2. 'In the long run we are all debt', Standard and Poors, 2004.
3. John Maynard Keynes, 'Economic possibilities for our grandchildren', 1928.

Chapter 3 Defusing the time bomb with private pensions

1. This rate holds for 2004 and the fifteen EU countries (EU-15) prior to the 2004 enlargement to 25 EU countries.
2. K.-J. Duschek and H. Wirth, 'Kinderlosigkeit von Frauen im Spiegel des Mikrozensus', *Wirtschaft und Statistik*, August 2005.

3. '10th coordinated population projection', *Statistisches Bundesamt*, Wiesbaden, 2003.
4. In Germany, payroll taxes in 2006 amount to 19.5% of gross wages for pension insurance, an average of 13.3% for health, 1.7% for nursing care and 6.5% for unemployment insurance: a total of over 40% of gross wages, half paid by employers. Additionally, employees pay a supplement of 0.25% for nursing care if they do not have children, and a 0.9% supplementary health insurance contribution.
5. The reason for assuming a working life of 45 years in our calculations was that this time span is also assumed by the German PAYG system's average case. If 45 years of working life is not to become the norm again, the PAYG system will also not be able to sustain pensions of €1,100 or more.
6. For details see W. Prewo, *From Welfare State to Social State – Empowerment, Individual Responsibility and Effective Compassion*, Brussels, 2004.

Chapter 4 The Chilean case: the success of private pensions

1. Jacobo Rodríguez, 'Chile's private pension system at 18: its current and future challenges', Cato Institute Social Security paper no. 17, 1999, p. 3.
2. For detailed statistics of the Chilean pension system, see the website of the Superintendencia de AFPs, the Chilean government regulator of the private pension system, www.safp.cl.
3. Ministry of Finance, Chile.

4. R. Castro, 'Seguro de invalidez y sobrevivencia: qué es y qué le está pasando', Working Paper no. 5, Superintendencia de AFP, May 2005, p.12.
5. Superintendencia de AFP, *The Chilean Pension System*, Santiago, 2003, p. 154.
6. Asociación AFP, 'The AFPs charge lower commissions than other institutions, both local and foreign', Research Series paper no. 42, June 2004, available at www.afp-ag.cl.
7. See S. Valdés, 'Las comisiones de las AFPs ¿caras o baratas?', *Estudios Públicos*, 73: 255–91; and Congressional Budget Office, *Social Security Privatization: Experiences Abroad*, 2: 7.
8. R. Bustos Castillo, 'Reforma a los sistemas de pensiones: peligros de los programas opcionales en América Latina', in S. Baeza and F. Margozzini (eds), *Quince Años Después: Una Mirada al Sistema Privado de Pensiones*, Centro de Estudios Públicos, Santiago, 1995, pp. 230–31. Comparing the administrative costs of the old system with those of the new one is, however, inappropriate, because the underlying assumption when making that comparison is that the quality of the product (or the product itself) being provided is similar under both systems, which is certainly not the case in Chile.
9. Superintendencia de AFP, *The Chilean Pension System*, pp. 120–23.
10. Asociación AFP.
11. Ibid.
12. R. Holzmann, T. Packard and J. Cuesta, 'Extending coverage in multipillar pension systems: constraints and hypotheses, preliminary evidence and future research agenda', in R. Holzmann and J. E. Stiglitz (eds), *New Ideas about Old Age*

Security, World Bank, Washington, DC, 2001, p. 454; and Asociación AFP.

13. Ministry of Finance and Asociación AFP, 'The AFP system: myths and realities', August 2004, available at www.afp-ag.cl.
14. Asociación AFP; the rates of return assumed are 3%, 5% and 7%.
15. If financial institutions were allowed to establish one-stop financial supermarkets, where consumers could obtain all their financial services if they so chose, the duplication of commercial and operational infrastructure could be eliminated and administrative costs could be reduced.

Chapter 5 The Swedish case: the success of NDC

1. Uppsala University and the Swedish State Insurance Agency.
2. The Swedish reform, including a discussion of many of the options among which Swedish politicians chose in constructing the final design, is outlined and discussed in detail in Palmer (2000). The reform is also presented and discussed in a number of other publications, e.g. Palmer (2002), Sundén (2004) and Könberg et al. (2006). Also, the *Swedish Pension System Annual Report* contains valuable information for the reader interested in a more detailed picture of the financial accounting in the new framework.
3. NDC is developed and discussed in detail in Palmer (2006), and Holzmann and Palmer (2006) is an anthology of the current state of the art of NDC.

Europe needs saving

4. See also Palmer (2000, 2004) and Sundén (2004) for a lengthier presentation, discussion and analysis.

Chapter 6 The Polish case: a moderate success?

1. Or 4 percentage points, whichever is smaller.
2. With the weight limitation of 15% per fund, even if its market share is greater.
3. In terms of value (capitalisation).

References

Chapter 1 European pensions reform: an overview

Barbie, M., M. Hagerdon and A. Kaul (2002), 'Fostering within-family human capital investment: an intragenerational insurance perspective of social security', Discussion Paper 678, Bonn: Iza.

Bertola, G., T. Boeri and G. Nicoletti (2001), *Welfare and Employment in a United Europe*, Cambridge, MA: MIT Press.

Boeri, T. (2000), *Uno stato asociale: perché è fallito il welfare in Italia*, Bari: Laterza.

Boeri, T. and R. Perotti (2001), 'Less pensions, more welfare', Paper presented at the Igiar-Rodolfo DeBenedetti (RDB) conference 'Pensioni: davvero una verifica?', 28 September, Rome.

Boeri, T., A. Brugiavini and L. Calmfors (2001), *The Role of the Unions in the 21st Century*, London: Oxford University Press.

Bowles, S. and H. Gintis (2002), 'Social capital and community governance', *Economic Journal*, 112.

Brugiavini, A., F. Peracchi and D. Wise (2003), *Pensions and Retirement Incentives: a Tale of Three Countries, Italy, Spain and the USA*, Ceis Tor Vergata Research Paper no. 6, Rome.

- Casamatta, G., H. Cremer and P. Pestieau (2003), 'Voting on pensions with endogenous retirement age', Discussion Paper 3778, Turin: Centre for European Pension Reform (CEPR).
- Casarico, A. and C. Devillanova (2003), 'Capital-skill complementarity and the redistributive effects of social security reform', Discussion Paper 3773, Turin: Centre for European Pension Reform (CEPR).
- Clark, R. L., L. A. Craig and J. Wilson (2003), *A History of Public Pensions in the United States*, Philadelphia: University of Pennsylvania Press.
- Commission of the European Communities (2003), 'Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions, draft report: joint report by the Commission and the Council on adequate and sustainable pensions', Brussels: European Commission.
- CSIS (Center for Strategic and International Studies) (2002), 'Meeting the challenge of global ageing: a report to world leaders from the CSIS Commission on Global Ageing', Washington, DC: CSIS.
- Daykin, C. (2003), 'Contracting out in the UK: a partnership between public and private sector', London: Government Actuary's Department.
- Diamond, P. (2001), 'Towards an optimal social security design', Working Paper 4, Turin: Centre for European Pension Reform (CERP).
- Disney, R. (2003), 'Are the British saving enough for their retirement?', London: Institute of Fiscal Studies.
- Disney, R., C. Emmerson and S. Smith (2003), 'Pension reform and economic performance in Britain in the 1980s and 1990s', Cambridge, MA: National Bureau of Economic Research.

- Esping Andersen, G. (1996a), *Welfare States at the End of the Century: the Impact of Labour Market, Family and Demographic Change*, Paris: Organisation for Economic Cooperation and Development.
- Esping Andersen, G. (1996b), *Welfare States in Transition*, London: Sage.
- EU Economic Policy Committee (2001), 'Budgetary challenges posed by ageing population', Brussels.
- European Central Bank (2003), *Annual Report*, Frankfurt: ECB.
- Euseby, C. (2004), 'Rethinking social security in the European Union: extending fundamental universal rights', *International Social Security Review*, 57(1).
- Feldstein, M. (1998), *Privatizing Social Security*, Chicago, IL: University of Chicago Press.
- Ferrera, M. (1993), *Modelli di solidarietà: politica e riforme sociali nelle democrazie*, Bologna: Il Mulino.
- Ferrera, M. (1998), *Le trappole del welfare*, Bologna: Il Mulino.
- Flora, P. and A. J. Heidenheimer (eds) (1983), *Lo sviluppo del welfare state in Europa e in America*, Bologna: Il Mulino.
- Fondazione Ideazione (2001), *Pensioni: guida ad una riforma*, Rome: Ideazione Editrice.
- Geanakopulos, J., O. Mitchell and S. Zeldes (1999), 'Social security money's worth', in O. Mitchell, R. Myers and H. Young (eds), *Prospects for Social Security Reform*, Philadelphia: University of Pennsylvania Press.
- Gelauff, G. M. M. and J. J. Graafland (1994), *Modelling Welfare States Reform*, Amsterdam: North Holland.
- Gill, I., T. Packard, T. Pugatch and J. Yermo (2005), 'Rethinking social security in Latin America', *International Social Security Review*, 58(2–3).
- Gleaser, H., D. Liabson and B. Sacerdote (2002), 'An economic approach to social capital', *Economic Journal*, 112.

- Goetzmann, W. and P. Jorion (1997), 'A century of global stock market', NBER Working Paper 5901, Cambridge, MA: National Bureau of Economic Research.
- Gray, P. (2003), *The UK Pension Context*, London: Department for Work and Pensions.
- Gruber, J. and D. Wise (eds) (1999), *Social Security and Retirement around the World*, Chicago, IL: University of Chicago Press.
- Gruber, J. and D. Wise (2002), 'Social security programs and retirement around the world: micro estimation', Cambridge, MA: National Bureau of Economic Research.
- Gustman, A. and T. Steinmeier (2002), 'Retirement and the stock market bubble', Cambridge, MA: National Bureau of Economic Research.
- Hanke, S. H. (2006), 'Privatizziamo alla cilena', *Ideazione*, 6.
- Holzmann R., M. Orenstein and M. Rutkowski (2003), *Pension Reform in Europe: Process and Progress*, Washington, DC: World Bank.
- Holzmann, R. and E. Palmer (eds) (2006), *Issues and Prospects for Non-financial Defined Contribution Schemes*, Washington, DC: World Bank.
- Hurd, M. and S. Rohwedder (2003), 'The retirement-consumption puzzle: anticipated and actual declines in spending and retirement', Cambridge, MA: National Bureau of Economic Research.
- Illmarinen, J. (1999), *Ageing Workers in the European Union*, Helsinki: Finnish Institute of Occupation and Health.
- Jackson, R. (2002), 'The global retirement crisis', *Geneva Papers*, 26.
- Jorion, P. and W. Goetzmann (2000), 'Global stock markets in the twentieth century', NBER Working Paper 7565, Cambridge, MA: National Bureau of Economic Research.

- Khotemburger, M. and P. Poutvaara (2002), 'Social security reform and intergenerational trade: is there a scope for a Pareto-improvement?', Working Paper 975, Munich: Cesifo.
- Kotlikoff, L. (1998), 'Simulating the privatization of social security in general equilibrium', in M. Feldstein (ed.), *Privatizing Social Security*, Chicago, IL: University of Chicago Press.
- Kuran, T. (1995), *Private Truths, Public Lies: The Social Consequences of Preference Falsification*, Cambridge, MA: Cambridge University Press.
- Lindbeck, A. and M. Persson (2003), 'The gains from pension reform', *Journal of Economic Literature*, March.
- Lindert, P. (2002), 'Why the welfare state looks like a free lunch', Working Paper 02-7, University of California at Davis, Economics Department.
- Maré, M. and G. Pennisi (2003), 'Italy's pension reform process: where financial and political realities meet', in K. Marshall and O. Butzbach (eds), *New Social Policy Agendas for Europe and Asia: Challenges, Experiences and Lessons*, Washington, DC: World Bank.
- Maré, M. and G. Pennisi (2004), 'Financial constraints and policy options: pension reform process in Italy and its relevance to transition European economies', in R. Whiteford (ed.), *Reforming Public Pensions: Sharing Experiences of Transition and OECD Countries*, Paris: Organisation for Economic Cooperation and Development.
- Mitchell, O. S., R. J. Myers and H. Young (2003), *Prospects for Social Security Reform*, Philadelphia: University of Pennsylvania Press.
- Oksaken, H. (2003), 'Population ageing and public finance targets', EC Economic Paper no. 196, Brussels: European Commission.
- Palacios, R. (2003), *The Reformed Pension Systems in Latin America*, Washington, DC: World Bank.

- Pennisi, G. (1997), *La Guerra dei trentenni – Italia e nuove generazioni*, Rome: Ideazione Editrice.
- Pennisi, G. (2005), 'Recent pension reform in Sweden and Italy: the Notional Defined Contribution approach', in P. Desmon Brunton and P. Masci, *Workable Pension Systems*, Washington, DC: Inter-American Development Bank.
- Pierson, P. (1994), *Dismantling the Welfare State? Reagan, Thatcher and the Policy of Retrenchment*, Cambridge: Cambridge University Press.
- Pinera, J. (2004), *Pensioni una riforma per sopravvivere*, Soneria Mannelly.
- Rajan, R. and L. Zingales (1998), 'Financial development and growth', *American Economic Review*, 88(3).
- Rawls, J. (1971), *A Theory of Justice*, Cambridge, MA: Harvard University Press.
- Rawls, J. (1993), *Political Liberalism*, Cambridge, MA: Harvard University Press.
- Rawls, J. (2001), *Justice as Fairness: A Restatement*, Cambridge, MA: Harvard University Press.
- Rodrik, D. (2000), 'Institutions for high quality growth: what they are and how to acquire them', NBER Working Paper 7540, Cambridge, MA: National Bureau of Economic Research.
- Roth, T. R. (1999), *Ethics, Economics and Freedom: The Failure of Consequentialist Social Welfare Theory*, Brookfield, VT: Ashgate.
- Schultz, J. (2002), 'The evolving concept of "retirement": looking forward to the year 2050', *International Social Security Review*, 55.
- Sen, A. (1992), *Inequality Re-examined*, Oxford: Oxford University Press.
- Sen, A. (2000), *Social Exclusion: Concept, Application and Scrutiny*, Manila: Asian Development Bank.
- Sharpe, W. F. (2002), 'Budgeting and monitoring pension fund risk', *Financial Analysts Journal*, 5.

- Shavell, S. (2003), 'Economic analysis of welfare economics, morality and the law', Cambridge, MA: National Bureau of Economic Research.
- Shiller, R. (2003), *The New Financial Order in the XXI Century*, Princeton, NJ: Princeton University Press.
- Siegel, J. (1999), 'The shrinking equity premium: historical facts and future forecasts', *Journal of Portfolio Management*, autumn.
- Stiglitz, J. and J. Yun (2001), 'Integrating of unemployment insurance with pension through individual savings accounts', Columbia University Economics Department Working Paper no. 32078, New York.
- Venditti, A. (2003), 'Altruism and determinacy of equilibria in overlapping generations models with externalities', *Japanese Economic Review*, 54: 179–202.
- Vitaletti, G. (2000), 'Problemi e potenzialità della riforma pensionistica del 1995 in un confronto tra modelli previdenziali stilizzati', *Economia Pubblica*, 4.
- Wigger, B. U. (2002), 'Social security and growth in an altruistic economy', *German Economic Review*, 3.

Chapter 5 The Swedish case: the success of NDC

- Holzmann, R. and E. Palmer (2006), *Pension Reform – Issues and Prospects for Non-financial Defined Contribution (NDC) Schemes*, Washington, DC: World Bank.
- Könberg, B., E. Palmer and A. Sundén (2006), 'The NDC reform in Sweden: the 1994 legislation to the present', in R. Holzmann and E. Palmer, *Pension Reform – Issues and Prospects for Non-*

- financial Defined Contribution (NDC) Schemes*, Washington, DC: World Bank.
- Palmer, E. (2000), 'The Swedish pension reform – framework and issues', *World Bank Pension Primer*, Washington, DC: World Bank.
- Palmer, E. (2002), 'Swedish pension reform – how did it evolve and what does it mean for the future?', in M. Feldstein and H. Siebert (eds), *Coping with the Pension Crisis: Where Does Europe Stand?*, Chicago, IL: University of Chicago Press.
- Palmer, E. (2004), 'Sweden's new FDC pension system', Paper presented at the seminar 'Desafios del Sistema Chileno de Pensiones Competencia', Centro de Extensión Universidad Católica, Santiago de Chile, 11/12 November (forthcoming World Bank publication).
- Palmer, E. (2006), 'What is NDC?', in R. Holzmann and E. Palmer, *Pension Reform – Issues and Prospects for Non-financial Defined Contribution (NDC) Schemes*, Washington, DC: World Bank.
- Settergren, O. (2001), 'The automatic balance mechanism of the Swedish P pension system – a non-technical introduction', *Wirtschaftspolitische Blätter*, 4: 399–449.
- Settergren, O. and B. Mikula (2006), 'The rate of return of pay-as-you-go pension systems – a more exact consumption-loan model of interest', in R. Holzmann and E. Palmer, *Pension Reform – Issues and Prospects for Non-financial Defined Contribution (NDC) Schemes*, Washington, DC: World Bank.
- Sundén, A. (2004), 'The future of retirement in Sweden', in O. Mitchell and R. Clark (eds), *Reinventing the Retirement Paradigm*, Oxford: Oxford University Press.



Joining the Stockholm Network

Would you or your organisation like to join the Stockholm Network? We have varying levels of membership, depending on your needs and interests. For further information, please contact our Director of Development, Tim Evans (tim@stockholm-network.org).

Subscribe to the mailing list

Fancy getting a taste of what we do and what think tanks are doing right across Europe? The Stockholm Network's weekly e-newsletter rounds up the latest activities of Europe's leading think tanks and thinkers and provides a valuable summary of current policy trends across the EU. To sign up, contact Sacha James Kumaria (sacha@stockholm-network.org), or visit our website: www.stockholm-network.org.

Independence

The Stockholm Network is funded by subscriptions from companies, think tanks and individuals. Its subscribers span a range of sectors including the software industry, energy companies, the pharmaceutical sector, healthcare providers, public affairs, venture capital, individuals and US-based foundations. Sponsors do not have a veto over the outcome of our research or any editorial control over research or publications.

Other titles recently published by the Stockholm Network
are listed on the following pages



Impatient for Change

European attitudes to healthcare reform

Helen Disney, Karen Horn, Pavel Hrobon, Johan Hjertqvist, Alastair Kilmarnock, Andreas Mihm, Alberto Mingardi, Cécile Philippe, David Smith, Eline van den Broek, Gerrold Verhoeks

Do Europe's politicians really understand what voters want from their healthcare systems? How can they square the circle of rising demand, rising costs and shrinking tax funding?

To find out, the Stockholm Network and Populus commissioned a major study of the European public's attitudes on the state of their health systems now and what they expect from them in future. Leading healthcare experts from across Europe analyse the data, putting it into its national and pan-European context.

The results are startling. Europeans are becoming ever more concerned about what will happen to their health provision in future if reform is not carried out urgently. They demonstrate a large gap between what patients want and what their political elite is delivering. And they suggest that information and gaining the support of the medical profession are crucial to securing the reform that Europe's ailing health systems need. Europe's health consumers are already waiting and impatient for change.

Published in association with Populus
ISBN: 0-9547663-0-X
£12.00

An Apology for Capitalism?

Matthew Bishop, Vincent Cable, Clive Crook, Howard Davies, Bill Durodié, Stephen Godfrey-Isaacs, Julia Hailes, David Henderson, Steve Hilton, Benjamin Hunt, John Kay, Philippe Legrain, Johan Norberg, Neil Sherlock, Stephen Tindale

Edited by Helen Disney

Should companies be cheerleaders for capitalism or is the growth of corporate and social responsibility evidence of a new way of doing business and doing it better? Is it time for policy-makers and business leaders to be more aggressive in dealing with business failure?

A backlash is emerging too among those who think companies are becoming too timid and apologetic. Too much of this risk aversion could be damaging not just to profits but to faith in capitalism itself. With books critical of global corporations topping best-seller lists across the world, how can corporations answer their critics – and should they even try?

An Apology for Capitalism? assembles leading thinkers and policy experts to debate the limits of corporate and social responsibility. It questions whether corporations deserve the flak and asks if it is now time for them to embrace the business of saying sorry.

ISBN: 0-9547663-1-8
£10.00

A Sick Business

Counterfeit medicines and organised crime

Graham Satchwell

Foreword by Lord Mackenzie of Framwellgate

Conducted by a former policeman, this investigation into the trade in fake medicines and its links with organised crime uncovers a horrifying story. Across Europe, counterfeiters have discovered a range of easy routes for selling fake and sub-standard products into the legitimate distribution chain.

A Sick Business shows how, to the uninitiated eye, this crime is invisible. Most patients and consumers are unaware of just how many public safety problems counterfeit medicines may cause. It reveals that this illegal business is conducted by unscrupulous people whose actions have already cost thousands of lives and may even be linked to terrorist activity – yet almost nothing is being done to stop it.

It should be read by anyone with an interest in keeping Europe safe.

ISBN 0-9547663-2-6
£10.00

Poles Apart?

Eastern European attitudes to healthcare reform

Helen Disney, David Hill, Pavel Hrobon, Adam Kruszewski, Henrieta Madarová, Rick Nye, Martin Stefunko

Edited by Helen Disney

How have eastern European countries fared since the fall of the Berlin Wall, and what do their attitudes tell us about the prospects for healthcare reform today?

Poles Apart? sets out to examine whether the perception of a superior western European healthcare system is really true by asking the opinions of 3,000 central and eastern Europeans and comparing them with their counterparts in the rest of the EU.

Despite differences in access to care, due to significantly lower levels of funding, and a sometimes unfounded admiration of western Europe, the challenges facing healthcare systems and the way people view them are remarkably similar across the board. More striking still, the new Europe's attitude suggests that the east is on the cusp of providing valuable inspiration and experience for reformers in western Europe in shaping the modern health systems of tomorrow.

Published in association with Populus
ISBN: 0-9547663-3-4
£10.00

Does the West Know Best?

Martin Bruncko, Gabriel Calzada, Christofer Fjellner, Andrei Grecu,
Johan Hjertqvist, Pavel Hrobon, Philippe Manière, Miroslav Mikolasik,
Dan Mitchell, Johnny Munkhammar, Stephen O'Connor, Matus
Petrik, Ugnius Trumpa

Edited by Terence O'Dwyer

Accession of the central and eastern European states has provided impetus for a fundamental re-evaluation of Europe's economic and social model. New member states have challenged the orthodoxy of western European systems. With the west now facing the impending crises of an aging population and unsustainable healthcare systems, and the prospect of sustained weak economic growth, the questions are: Should the new member states be emulating western Europe? Or should 'old Europe' mimic the reforms of its newest partners? Indeed, does 'old Europe' have any choice but to reform?

Does the West Know Best? assembles leading European thinkers to examine social and economic reform, such as flat taxation, the privatisation of social security and moves towards more market-oriented health systems. It questions the sustainability of the European economic and social model, while seeking solutions to its endemic problems.

ISBN: 0-9547663-4-2

£8.00

Intellectual Property Frontiers

Expanding the borders of discussion

Edited by Dr Meir Pugatch and Anne K. Jensen

The first book to be published by the Stockholm Network's Intellectual Property and Competition programme, *Intellectual Property Frontiers* draws on the expertise of eighteen distinguished scholars, policymakers and practitioners. It aims to familiarise readers with the diversity of themes and debates currently taking place in the field of IP.

The publication is divided into four sections:

- The role of intellectual property in the business arena;
- Intellectual property dilemmas;
- Global issues;
- The European perspective.

£8.00