

出國報告（類別：國際會議）

出席日內瓦保險學會舉辦之「四大支柱- 社會安全、保險及退休之研究」會議

機關及姓名：金融監督管理委員會保險局 張玉輝副局長

派赴國家：瑞士日內瓦

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一、前言

日內瓦學會(The Geneva Association)的正式名稱為國際保險經濟學研究學會(International Association for the Study of Insurance Economics)，成立於1973年，總部設在瑞士日內瓦，是一個專門從事風險與保險管理的非營利學術研究機構，以風險與保險經濟(risk and insurance economics)為重點，持續藉由主持研究計畫、召開國際會議、發行期刊與出版品等方式提出保險相關重要議題。該學會的會員為90位全球大型保險或再保險業之執行長，學會經費來源係由會員提供。

依據醫學界之研究，人類生理年齡之極限為120歲。近年來由於人類壽命延長，但人們希望退休的年齡卻提早，造成許多國家的退休金制度面臨破產壓力，除嚴重影響經濟穩定之外，易造成人民對退休制度之信心危機，使全球被迫面對此一嚴重問題，改革相關制度成為不可避免的課題。日內瓦學會早在1987年即已開始重視此一議題，開始推動一項稱為「四大支柱」(“Four Pillars Programme”)的研究計畫，迄今已長達25年，其宗旨在於研究如何整合四大支柱之功能以建構一個理想的退休環境。目前該計畫改稱為生命與退休金計畫(Life and Pensions Programme)。

所謂的四大支柱，係指維持退休生活的四大經濟來源，除了傳統

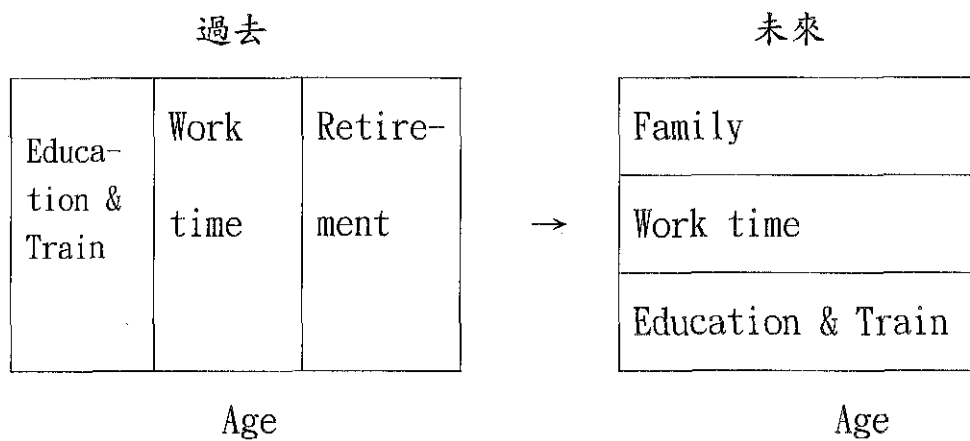
關中的第一支柱—社會年金、第二支柱—企業年金、第三支柱—商業年金保險之外，該計畫將銀髮族的再就業視為退休生活經濟來源的第四支柱。

本次會議於 101 年 12 月 3 日至 4 日假日內瓦洲際飯店舉行，會議以「四大支柱—下一個 25 年」為題，主要宗旨在藉由來自各國的學者專家之討論，探討在歐洲主權債信危機之後，四大支柱未來的發展與改革方向（會議議程詳附件一）。參加者主要為來自歐洲各國及國際組織的學者、專家、官員與保險業人士，共計近 70 人（參加人員名單詳附件二），謹就本次會議之重要內容摘要報告如後（會議資料詳附件三）。

二、四大支柱概說

人類壽命的延長及生育率的降低是世界上的普遍趨勢，先進國家相對而言發生得，更早且趨勢更明顯。此一趨勢可稱為年齡革命(age revolution)，而年齡革命的主要現象包括：

1. 平均餘命增加；
2. 保健程度提升；
3. 老年生活延後開始；
4. 退休與真正離開工作的差距延長；
5. 退休生活期間延長；
6. 生命週期改變：



為因應年齡革命，政府、勞工與企業都應該採行適當策略，其關鍵策略包括：

1. 政府方面：退休金制度改革與就業政策改革
2. 勞工方面：規劃新的生命週期

3. 企業方面：採行年齡管理

在此一趨勢下，過去 10 年來人們已經願意在退休之後繼續從事其他工作，例如：據統計，在荷蘭退休後開始自己經營事業的人數增加了 10 倍。維持退休人力繼續工作的最重要因素有二：一是退休人口繼續擁有工作能力；二是工作環境與條件（例如工作時間、工作地點、工時長度等）應具有適當的彈性以吸引退休人力投入。

有關就業政策，雖然歐元區國家普遍面臨高失業率的問題，但其實很多開發程度較低的國家例如巴西、印尼等，則仍有極多的工作機會，即使是美國也還有 380 萬個工作職缺未填滿，其問題出在各國的勞工政策與移民政策，這顯示退休人力再投入職場未必會使失業率惡化。

三、專題演講(一)

義大利勞工社會政策及平權部長 Professor Elsa Formero 應邀於本研討會中以「退休金制度的適當性與永續之性間是否存在 tradeoff」為題發表演講。她指出義大利由於人口高齡化與經濟低成長之雙重因素，迫使政府必須採取行動改革退休金制度。早在 1992 年義大利就已經採行一波退休金制度改革，以緩慢漸進的方式逐步調整，緩衝要到 2030 年才會結束，該項改革措施尚不足以解決制度永續性的問題，再加上近 2 年的整體政府財政情形惡化，顯示進一步的改革有其迫切性，故今(2012)年起又採行新的改革以進一步減少支出。新內閣在上任後 20 天內就提出改革方案以解決迫在眉睫的財政困境，主要內容包括取消實施中的緩衝期，自 2012 年 1 月起立即全面實施確定提撥制(defined contribution)，以及延後退休金給付年齡，將申請資格之計算基準一律由工作年資改為年齡。新內閣期望藉由此次改革立即有效且大幅地減少退休基金的支出並延緩與降低未來的支付高峰，以改善其永續性問題。

有關企業年金部分，F 部長認為其問題在於制度之永續性有賴於年輕工作者的持續貢獻，但因義大利的失業率長期居高不下，近年情形更加惡化，很多年輕人失業或未能完全就業，導致企業年金的永續性面臨嚴重考驗，此有賴經濟成長與失業率降低來改善。

退休金制度的適當性必須從四大支柱整體來衡量，其改革也必須整體規劃考量才能有效。目前義大利政府雖已經將金融監理權整合於義大利銀行(Bank of Italy)之下，但對於各種退休金之管理權卻因為政治因素而未能整合，仍維持分屬不同之機關主管，造成改革之步調難以齊一，此恐將降低改革的效率。整個歐盟的改革也有類似問題，由於各國的社會年金制度係由各國政府自行管理，其制度差異性很大，面臨的問題也迥異，故難有齊一步調的改革。

四、第一支柱

什麼樣的退休金制度叫作適當？一個國家應該要有什麼樣的退休金制度？這須視社會的普遍認知與期待為何。認知與期待的內容範圍很廣，包括退休之定義及時間、社會應提供與保證之程度，以及社會團結程度(degree of solidarity)等。退休金制度可以視為一種社會契約(social contracts)，當社會對於該契約適當性的認知有所改變，就會導致社會契約的改變。

社會年金制度除了因收入成長低於支出成長導致的永續性問題之外，其實適當性亦為一重要課題。據統計全球只有三成人口有參與任何一種形式的退休金制度，退休人口中只有二成領有退休金，顯示獲得適當退休金保障的口比例過低，這就是一個適當性問題。

然而退休金制度的適當性與永續性必須一起考量，一個退休金制度必須要適當才能永續，同樣地也必須能永續才能算是適當。一個社會「需要」什麼程度的保障？「應該」提供什麼程度的保障？又「能夠」提供什麼程度的保障？是最低生活水準還是平均生活水準？這是社會面臨的抉擇。歐洲許多國家過去因為忽略了二者的關連，以致於退休制度面臨財務危機，在採行改革降低保障之後，支出成長已有效減緩，有些國家甚至有下降之情形，這代表當永續性面臨危機時，社會對於適當性的看法已有所調整，所以願意透過改革來提升永續性。

當然，改革一定有副作用，通常退休金制度的改革會降低低收入者及工作時間短的勞工之保障，導致所得分配的惡化，這必須要靠其他社會福利制度來減輕衝擊。

五、長壽風險(longevity risk)

何謂「長壽風險」？簡單地說就是因為活得超過預期壽命所產生的財務風險。目前世界各國民間對於退休金所所做的儲蓄普遍不足，所以更無力處理長壽風險，而必須仰賴政府承擔，進一步造成政府潛在負債壓力提高。政府與民間應該共同正視長壽風險並尋求解決方案，以避免成為未來更沉重的財務負擔，而且要解決長壽風險宜現在立即採取行動，因為拖延愈久問題愈難解決。解決之道主要在於延後退休年齡，無論是採自願性或是強制性。

歐洲由於長年來的低出生率、平均餘命穩定延長，再加上人口移出之影響，人口老化情形嚴重，長壽風險更形嚴重。據估計如欲維持老年扶養比不變，則到 2050 年時各國開始請領退休年金的年齡必須延後至 71 至 76 歲，顯示長壽風險的嚴重性。

德國保險公會的首席經濟學家 Dr. Michael Wolgast 分享該國退休金制度改革之經驗，認為財務認知度(financial literacy)的提升是改革的重要基石，德國人民已普遍認知改革的必要性，故 2013 年的大選各政黨均將退休制度改革納入政策之中。

六、第二支柱

長久以來長壽風險被嚴重低估，其風險模型之研究發展程度亦遠不及於天然災害。為因應長壽風險日益嚴重的趨勢，退休基金應就長壽風險進行避險，未來此一市場的需求將十分龐大。目前市場上提供長壽風險避險商品的供給者主要為再保險業，商品的設計大致有損害填補型與指數型兩種。資本市場因為投資者偏好期間確定、資料充足且風險可精確評估的商品，故難以提供長壽風險避險商品。

企業年金基金避險的方式可以從兩方面思考，第一種稱為「買進」(buy-in)，與再保險之觀念類似，也就是由風險承擔者承諾在退休給付義務發生時支付足夠資產給退休基金；第二種稱為「買出」(buy-out)，就是將退休給付義務完全轉嫁給風險承擔者，由承擔者負責勞工退休福利的給付。退休基金購買避險商品最早是在 2006 年由英國首創，嗣後美洲市場逐漸興起，至 2012 年時美國市場規模已超越英國，2013 年加拿大亦將出現此類交易，荷蘭亦可能在 2014 年開始。

藉由購買長壽保險(longevity insurance)來轉移長壽風險應該是維持退休基金永續性的一種解決方案。長壽保險的概念就是透過支付固定的保險費與費用換取浮動的退休福利給付，讓退休基金得以支應未來不確定的給付義務。但並非所有退休基金都能藉由長壽保險移

轉其長壽風險，其必要條件包括規模夠大、固定收益資產比重高、財務支持度(funded status)高與部分風險自留等。

許多國家的退休金制度已逐漸捨棄確定給付制而改採確定提撥制，影響所及，人們在退休時往往選取一次提領而不選擇年金化給付。要如何誘導民眾選擇年金化給付？英國發展強化年金(Enhanced Annuity)的經驗是一個值得參考的例子。強化年金又稱弱體年金(Impaired Annuity)，是指藉由核保機制，對於體況不同之年金計畫參與者提供差異性給付條件的改良式年金，勞工在退休時，將其確定提撥制帳戶中的資產（亦可再加上其他儲蓄）向強化年金提供者購買其商品，參加時須填寫簡單問卷提供一些基本資料，例如職業、生活習慣(如吸菸與否)、甚至郵遞區號，由年金提供者之核保人依據其狀況報價(每期可領年金金額)。

強化年金的發展有賴於民眾的認知與政府法規的引導。英國自1995年起出現此一商品，迄今已有相當顯著的發展，其年成長率達22%，是傳統型年金的2倍，一些傳統年金提供者也紛紛投入此一市場。以65歲男性退休者為例，若以其退休金帳戶內所累積的5萬英鎊購買強化年金，則一般正常體每月可領310英鎊，吸煙者可多領10%也就是340英鎊，肝硬化或酗酒者可多領19%也就是370英鎊，而曾經多次因心臟病住院的人則可以多領53%也就是475英鎊。增額

年金在英國得以成功發展之因素包括：

1. 多數人在退休時累積了足夠的資產，包括確定提撥帳戶及私人儲蓄；
2. 稅法引導民眾選擇年金而非一次性提領；
3. 英國獨立財務顧問協會(IFA)要求立即報價；
4. 在當前的投資環境下，終身年金對於民眾更有吸引力。

七、專題演講(二)

瑞士人壽(Swiss Life)執行長 Mr. Bruno Pfister 就第二支柱的永續性所面臨之挑戰發表演說，他說明瑞士是全國的企業年金基金總資產合計達國民生產淨額的 1.35 倍，但由於高齡化趨勢亦面臨永續性問題。依據瑞士聯邦社會保險局(BSV)估算欲改善第二支柱財務的槓桿指標如下：

1. 須增加提撥額 10%至 30%；
2. 如以退休年齡在 67 至 70 歲之間計算，須延長提撥年數 2 至 4.4 年；
3. 須減少退休給付 19%至 26%。

而根據安盛集團所做的研究調查顯示，約半數民眾支持增加提撥額，僅三分之一支持延後退休年齡（但有三分之二的民眾贊成從 25 歲以前就開始提撥），而僅二成贊成減少退休給付。近年來瑞士政府對於企業年金的規範愈來愈多，且愈來愈嚴格，企業年金資產必須與企業本身之資產完全分離，以確保其清償能力。

八、第三支柱

過去保險業提供的年金商品往往讓人詬病太昂貴，但真的是如此嗎？第一支柱與第二支柱提供勞工簡單易懂且與工作所得有關的退休福利保證，但因其存在與運作通常係基於法律規定，並未經過市場供需的定價，故往往過於便宜，亦即提撥率過低，而導致民眾過度倚賴此二支柱，並形成惡性循環，進一步加重其財務負擔，許多退休基金瀕臨破產甚或已經破產，而有削減給付的壓力。這種情形提醒我們尋求四大支柱間的平衡是十分重要的。依據一項民意調查顯示，義大利民眾未購買私人年金的原因，41.4%是因為太貴，28.4%是因為不信任保險公司，19.1%是因為覺得自己還年輕所以不考慮，而有4%的人更認為第一支柱與第二支柱的保障已經足夠，這證明教育民眾有其必要性。民眾多不瞭解，以1987年的利率及死亡率計算，65歲退休人員如果有100萬元可以買到8萬元的年金，但若以2011年的資料計算，則只能買到3萬。荷蘭政府已經建立一個網路平台，整合四大支柱的當日狀況供民眾隨時查詢。

高齡化情形嚴重的國家最需要第三支柱，因為這些國家的第一支柱與第二支柱面臨的財務壓力特別大，削減支出的壓力最大。以德國為例，目前的退休金61%來自第一支柱，19%來自第二支柱，20%來自第三支柱。近十年來由於高齡化及低利率問題，政府不斷檢討第一支

柱的福利，使得第三支柱有較顯著成長，但近幾年又受低利率環境以及監理法規(例如 solvency 2)的變革而受到阻礙。除了年金保障之外，第三支柱在醫療照護保障上亦十分重要，德國保險業相關支出有四成用在 70 至 79 歲的老年人，三成用在 80 歲以上的老年人。

九、第四支柱

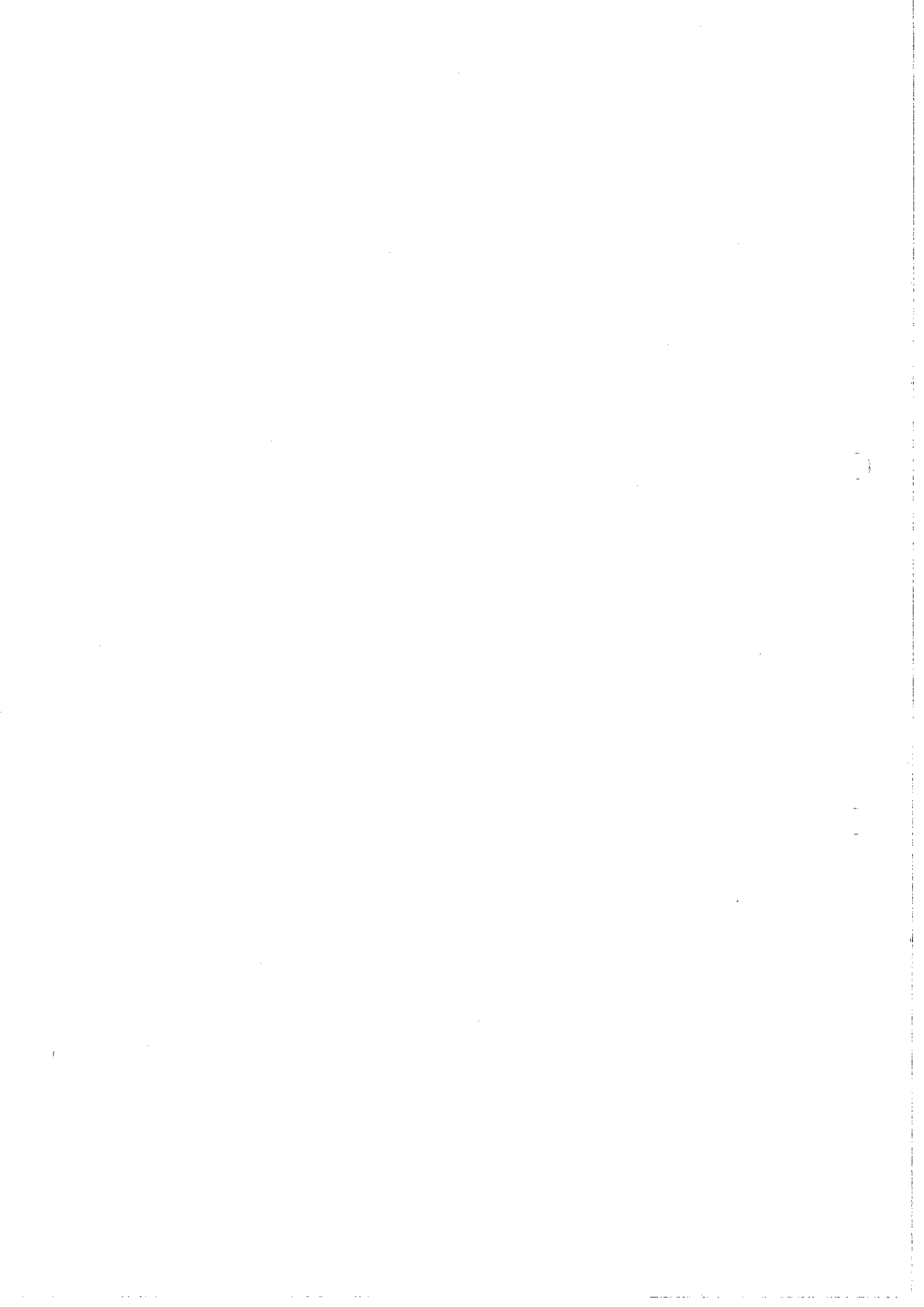
第四支柱的概念早在 1981 年即被提出，當時的想法是將資源再利用的概念也推廣用在人力資源方面。以整體經濟觀點而言，年輕的失業人口與未就業的銀髮族都是經濟價值的嚴重浪費。就銀髮族而言，其過去所學習累積的技能與經驗，如經過一段時間未再利用，價值就會急速下降，所以如果保持銀髮族在生理狀況許可的條件下繼續在就業市場貢獻其技能與經驗，對整體經濟的產值將有很大的貢獻。此外，醫學研究已證實，持續工作可以防止阿茲罕默症，所以維持銀髮族持續工作還可以進一步減少社會的醫療資源的消耗。

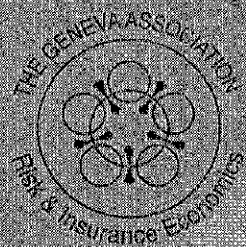
國際勞工組織(ILO)研究發現，60 歲以上的銀髮族中，三分之二的人想工作，但只有三分之一的人有工作；53%的銀髮族難以自行支付其生活所需；55 歲以後的平均收入急速下降，而且年齡愈大面臨的貧窮與失能風險愈高，這些發現顯示社會應重視並鼓勵高齡者的再就業。至於如何鼓勵銀髮族再就業？美國旅行者(Traveller)保險公司的作法頗值參考。該公司將退休人員資料建檔，當現職人員請假時，則請具相關經驗與技能之退休人員擔任臨時工作以填補空缺。退休人員再就業通常重視工作時間與地點之彈性，工作時數亦不宜過長。如雇主能設計適合的工作機會，應可有效吸引銀髮族重回就業市場。

十、心得與建議

- 一、高齡化是全球性議題，我國人口老化速度快，相較之下所面臨的時間壓力更大，社會各界與政府均應正視此一問題，尋求途徑積極強化四大支柱，以儘速儲備高齡者之經濟來源，避免成為整體經濟之負擔。
- 二、退休金制度的永續性是高齡化社會亟需解決之課題，制度之檢討改革勢在必行，但從歐洲的經驗得知，民眾對於改革之必要性固有共識，但多數傾向提高提撥率或延長提撥期間，但反對削減福利。我國亦正研議退休金制度的改革，除了應讓民眾充分了解問題之外，其改革方向與內容宜廣泛徵詢民眾意見並充分溝通，尋求社會最大共識。
- 三、為鼓勵民眾為自己儲備老年經濟生活之所需，減輕政府財政負擔，政策上宜加強推動第三支柱與第四支柱，鼓勵民眾年輕時多購買商業保險以及退休後踴躍再投入就業市場。至於作法上，第三支柱應以提供足夠的租稅誘因為較可行有效的作法，第四支柱則可在法令及稅法上鼓勵雇主提供較彈性的工作條件吸引退休勞工重新投入就業市場。
- 四、由於近年來政府的加強宣導以及輿論的廣泛討論，民眾對於老年經濟生活的關切度日益提高，此意味著高齡化保險商品的商機龐

大，政策上可鼓勵保險業者發展更多樣化的相關保險商品，例如
強化年金、實物給付型長期照護險等，以滿足民眾的需求。





The Four Pillars

Research on Insurance, Retirement and Social Security

(as of 22 Oct. 2012)

The Four Pillars: The Next 25 Years

3-4 December, 2012

Hôtel Intercontinental, Room Paris-Méditerranée, Chemin du Petit-Saconnex 7-9, CH-1211 Geneva

Day 1: Monday 3 December 2012

- 08:00-08:30 Registration and coffee
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- 08:35-10:00 **The Four Pillars, 1987-2012 and the next 25 years**
Chairman: **Orio Giarini**, Trustee, World Academy of Art and Science, and former Secretary General, The Geneva Association
Topic: Birth of the Four Pillars Programme
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Topic: Vision of the next 25 years
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Topic: Sustainability and Adequacy of Social Security in the Next Quarter Century
Chris Daykin, International Actuarial Association, also Chairman, Social Security Subcommittee, Groupe Consultatif Actuariel Européen
Topic: Can First Pillar Pensions be Made More Sustainable?
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Topic: Using Participant Data to Improve Defined Contribution Default Portfolio Allocations
Torben Thomsen, Chief Pricing Officer, Life & Health, Swiss Re,
Topic: Managing Longevity Risk in Private Pension Systems
Amy Kessler, Senior VP, Head of Longevity Reinsurance, Prudential Financial Inc.
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Bruno Pfister, CEO, Swiss Life
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Day 2: Tuesday 4 December 2012

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08:30-10:00 Session on Third Pillar

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Topic: The Role of Price Signals from the Insurance Industry for the Four Pillars

Kurt Karl, Chief Economist, Swiss Re

Topic: Insurance Industry—Anchor of Stability for Global Retirement Systems

Lorenzo Savorelli, Head of Research Department, Generali Group

Topic: Are Future Retirees Systemically Important?

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Topic: Global Demographics and its Impact on the Third Pillar

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10:30-12:00 Session on Fourth Pillar

Chairman: **Walter Stahel**, Vice Secretary General and Head of Risk Management, The Geneva Association

Topic: Circular Economy as a Key to Sustainability of Retirement Systems and the Role of the Fourth Pillar

Chris Ball, Chief Executive, The Age & Employment Network

Topic: Effective Employment Policies for the Silver Workers and the Role the Insurance Industry Can Play

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Daria Kachakhidze, Head of Research & Development, Centre on Longevity and Mortality Insurance, SCOR

Topic: World Life Expectancy and Future Longevity Scenarios

Johannes Lörper, Member of the Executive Board, ERGO; Chairman of the German Actuarial Society

Topic: Pay-as-you-go and funded retirement system – a German view.

Paul L.C. Hilbers, Division Director, Division Director of De Nederlandsche Bank, and Member of the Joint Forum Working Group on Risk Assessment and Capital

Topic: The Unique Nature of Longevity Risk

Makoto Okubo, General Manager International Affairs, Nippon Life Insurance

Topic: Demographic Challenges and Opportunities for Japanese Life Insurers

In association with Prudential Financial Inc.





Four Pillars Conference

The Next 25 Years

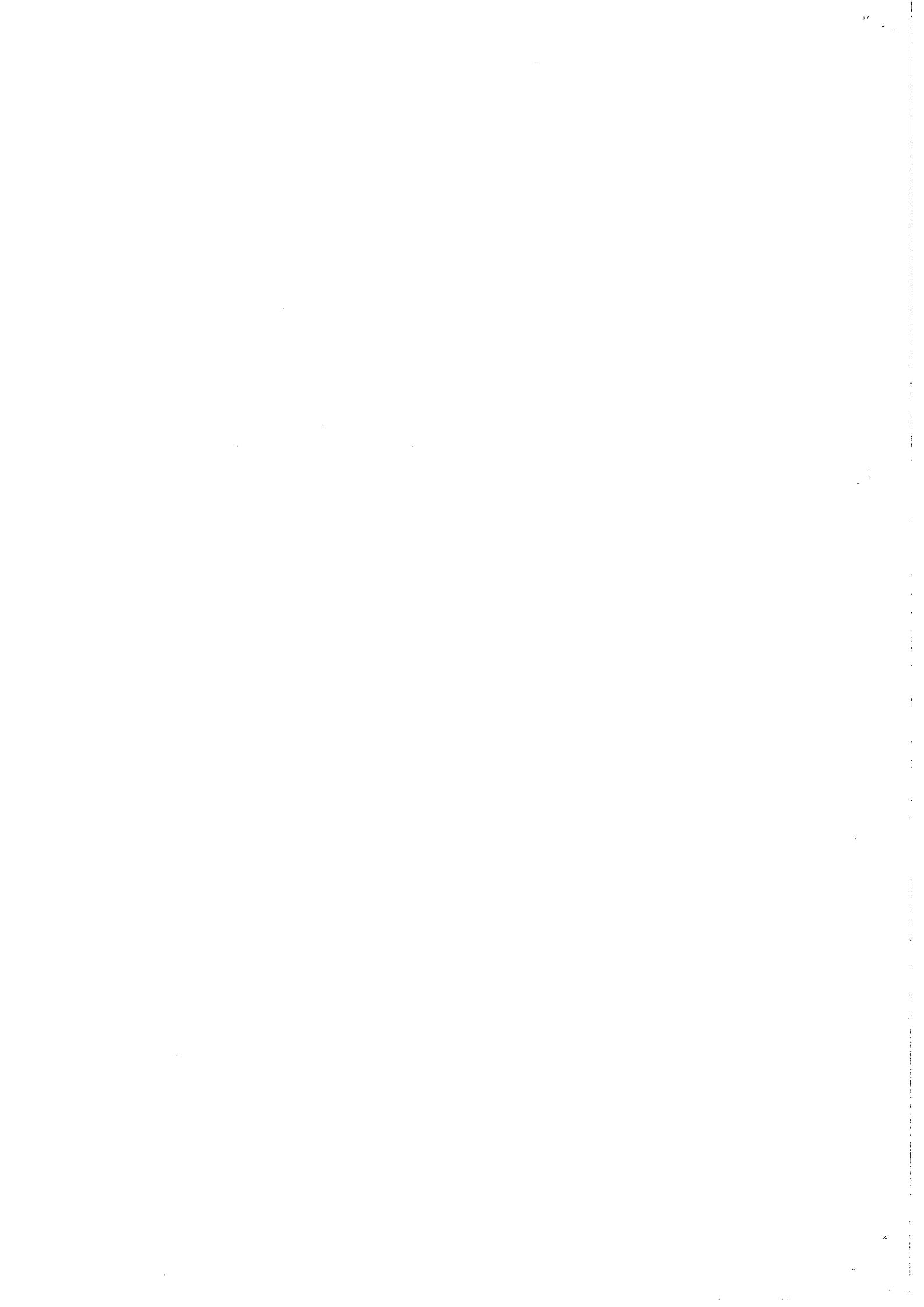
3-4 December 2012

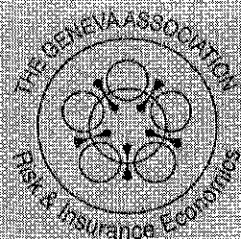
LIST OF SPEAKERS AND PARTICIPANTS

Title	Family Name	First Name	Company	Position
Mr	Arkadiusz	Bandosz	RGA International	Managing Director
Dr	Ball	Chris	TAEN	Chief Executive
Mr	Barbaro	Antonello	The Global Fund	Portfolio Manager
Mr	Benmosche	Robert H.	AIG, Inc.	President and CEO
Ms	Botterill	Barbara	The Geneva Association	Conference Coordinator
Mr	Cosh	Graeme	Liberty Mutual Group Asset Management Inc.	Director of Accounting Policy
Dr	Courbage	Christophe	The Geneva Association	Research Director
Mr	Daykin	Christopher	International Actuarial Association	Chairman
Prof.	Deller	Jürgen	Leuphana University	Professor Business Psychology
Prof. Dr	Deville	Volker	Allianz SE	Executive Vice President
Mr	Dreyer	Christian	J.P. Morgan (Schweiz) AG	Executive Director, Institutionals CH & FL
Ms	Drouin	Anne	International Labour Office	Chief of the International Finance and Actuarial Service
Mr	Finnis	David	International Association of Insurance Supervisors	Principal
Mr	Fitzpatrick	John	The Geneva Association	Secretary General
Prof.	Fornero	Elsa	Centre for Research on Pensions	
Dr	Gaille	Sévérine	University of Lausanne	Assistant Professor
Dr	Garcia-Gonzalez	Ana	Universidad de Valladolid	Assistant Professor
Dr	Giarini	Orio	The Geneva Association	Trustee, World Academy of Art and Science, fmr Secretary Gen
Mr	Hagemeyer	Krzysztof	ILO	Chief
Ms	Hiessl	Christina	University of Economics and Business Vienna	Research and Teaching Assistant
Prof	Hilbers	P.L.C.	de Nederlandsche Bank	Division Director
Ms	Hollmann	Gabriele	SCOR Global Life SE, Zurich Branch	Managing Director
Mr	Hott	Christian	Zurich Insurance Group	Senior Economist Government and Industry Affairs
Ms	Kachakhidze	Daria	Head of Research and Dev. Center	SCOR
Dr	Karl	Kurt	Swiss Re	Managing Director, Chief Economist, Head Eco. Research & Co.
Ms	Kessler	Amy	Prudential Financial Inc.	Senior Vice President
Ms	Kim	Jina	Prudential Financial	Transaction Specialist
Mr	Koch	Roger	AEGON N.V.	Senior EU Legal Analyst

Ms	Kohmo	Minna	Tapiola Group	Director
Prof	Li	Johnny	University of Waterloo	Fairfax Chair in Risk Management
Dr	Lörper	Johannes	Ergo Versicherung	Member of the Executive Board
Mr	Martin Boti	Alvar	Vidacaixa, S.A.	Corporate Development Manager
Ms	Martinez	Véronique	The Geneva Association	Information Manager
Mr	Meier	Andreas	World Demographic & Ageing Forum	Director
Mr	Mentele	Arthur	SwissLife	Senior Vice President-Group Human Resources
Prof.	Miani	Stefano	University of Udine	Full Professor of Banking and Insurance Mgt.
Dr	Miller	Klaus	Hannover Re	Member of the Executive Board
Ms	Moorad	Bilkiss	Absa Life Botswana	Managing Director
Mr	Okubo	Makoto	Nippon Life Insurance Company	General Manager International Affairs
Dr	Oppers	S. Erik	International Monetary Fund	Deputy Division Chief, Global Financial Stability Division
Prof.	Ostaszewski	Krzysztof	The Geneva Association	Research Director, Life and Pensions
Ms	Peeters	Birgit	Aquincum	Founder
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Mr	Rear	Andrew	Munich Re	Chief Executive, Africa, Asia-Pacific, UK and Ireland Life
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Dr	Regenauer	Achim	Munich Re	Chief Medical Director
Ms	Richter-Hablicsekne	Maria	Central Administration of National Pension Ins.	Actuary
Mr	Rios	Ernesto	SVS (The Chilean Insurance Authority)	Head of Insurance Regulation Division
Ms	Sarfati	Hedva	-	ISSA Consultant
Dr	Savorelli	Lorenzo	Generali Group	Head of Research Department
Dr	Scheil-Adlung	Xenia	Social Security Policy and Development Branch	Health Policy Coordinator
Mr	Spoor	Lou	Achmea Holding N.V.	Corporate Strategist
Dr h.c.	Stahel	Walter R.	The Geneva Association	Vice Secretary General and Head of Risk Management
Mr	Sundquist	Phillip	-	Investment Advisor
Mr	Thomsen	Torben	Swiss Re	Chief Pricing Officer, Life & Health
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Ms	Valente	Salomé	Portuguese Association of Insurers	Technical Department
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Ms	Wodsak	Veronika	International Labour Organization	Social Security Extension Officer

Dr	Wolgast	Michael	German Insurance Association	Head of Economics Department
Mr	Yu-Hui	Chang	Insurance Bureau Commission	Deputy Director General
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The Four Pillars

Research on Insurance, Retirement and Social Security

The Four Pillars: The Next 25 Years

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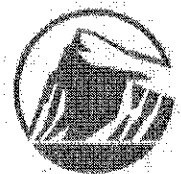
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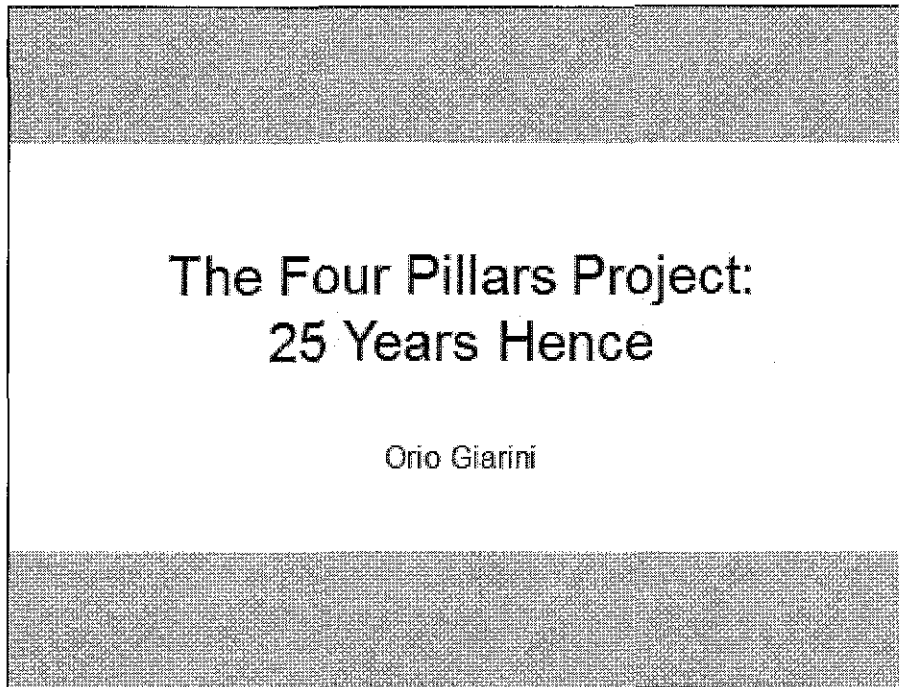
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Dr	Garcia-Gonzalez	Ana	Universidad de Valladolid	Assistant Professor

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Note on:

THE FOUR PILLARS PROJECT: 25 YEARS HENCE

by Orio Giarini⁺

In its search to identify key issues for the future of the Insurance industry and its impact on business and society, the Geneva Association started, a quarter of a century ago, to promote an important programme on the "Four Pillars", which is now becoming also a key issue around the world. It was based on the following considerations:

- a recent study of the United Nations confirms that in the year 2050, the world population will include almost two billion people over 60 years of age, corresponding to about 22% of the total population. The majority will live in those countries we define today as developing.
- Keeping this figure in mind, it is obvious that the lengthening of the life cycle is a unique revolutionary phenomenon, having a profound impact on contemporary and future societies. It concerns the social, political and economic institutions in a far deeper sense than it is still commonly perceived.
- People in older age, over 60, 70 and 80 have always existed. But they were special cases representing a minute minority. Now the lengthening of the life cycle concerns the majority of the population. It is a mass phenomenon. An analogy can be found in the economic history of the industrialized countries: from the beginning of the twentieth century, the poor (and the illiterate) have become a minority after having been for centuries a majority.
- The lengthening of the life cycle is a world wide phenomenon. From the "older" industrialized countries it is extending to the large majority of communities, everywhere. The contribution from the developing and industrializing countries to the "over 60" population in the world will be determinant and overwhelming.
- The lengthening of the life cycle is often presented (wrongly) as the problem of "ageing of population", and as such as an indication of decay of the industrialized world: in fact, the "older" countries have the great advantage to both offer a longer (and better) life to their citizens and to

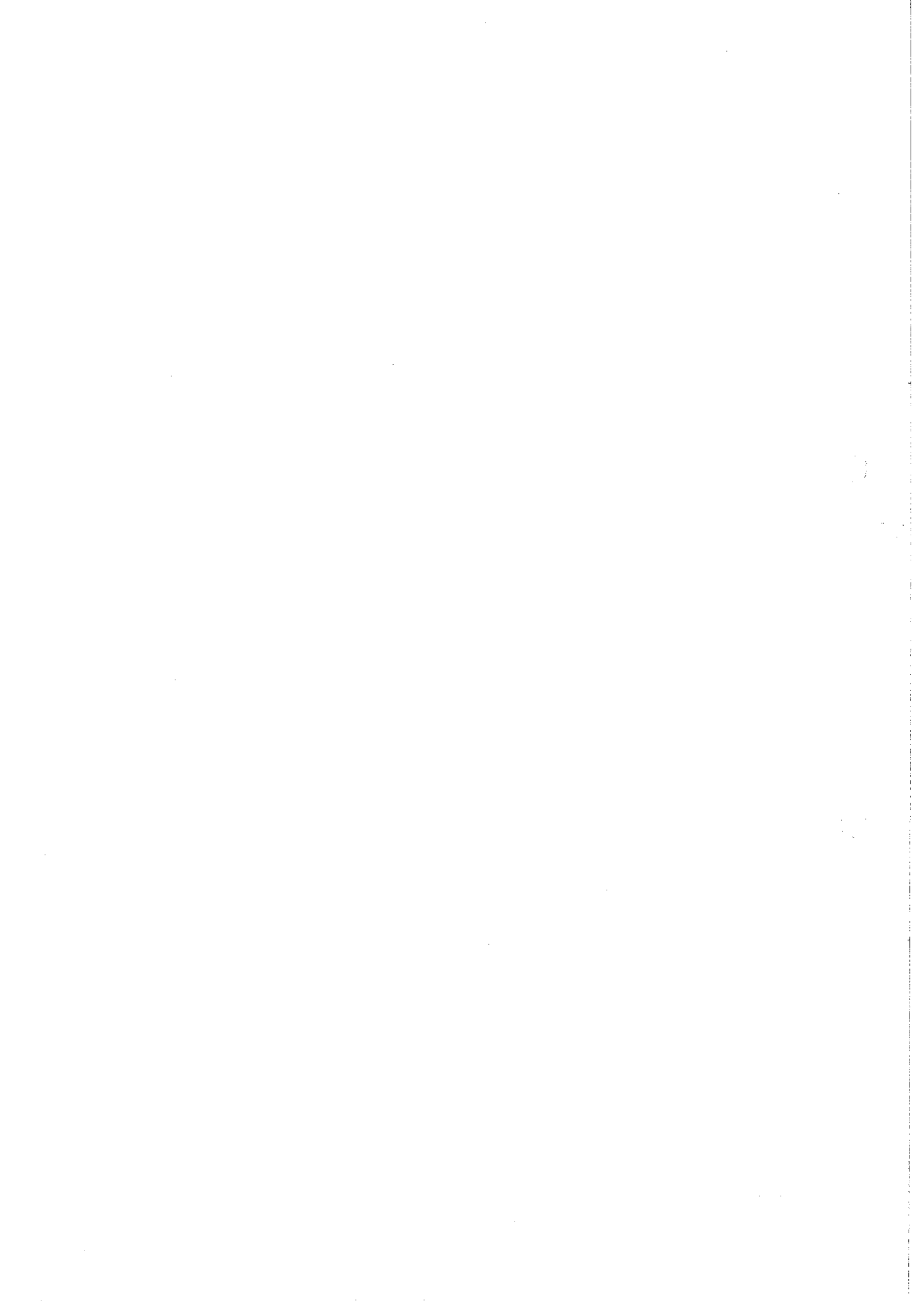
⁺ Trustee, World Academy of Art and Science.

advance in the delicate social, economic and political adaptations required by the new demographic reality. Such problems and experiences will concern more and more the rest of the world.

- What is really ageing is the notion of older age itself. Taking into consideration the ability of each individual to be autonomous (in physical and/or mental terms) , many studies and surveys indicate that in the average a 60 or even a 80 years old person of today, correspond to a person about 15/20 years younger living one century and more ago. Statistics based not on age but on capacity to perform, indicate in fact that in many countries, the population is not "ageing" but "rejuvenating". In fact we live in a "Counter-ageing society".
- The lengthening of the life cycle is clearly the result of economic and social advances strictly linked to the scientific and technological advances : biology, medicine, health control, nano technologies, nuclear applications, communication, instrumentations etc. are all producing now almost every year significant advances for the human body and mind maintenance.
- The lengthening of the life cycle, in all its aspects, is then clearly the fundamental issue to keep in mind discussing social policies.
- The lengthening of the life cycle implies of course to redefine the period of the ACTIVE life: many studies and statistics of the WHO (World Health Organization), among others, are devoted to this issue.
- Active life should be considered in two different categories: remunerated work on one side and unpaid or benevolent activities on the other. In fact the two are complementary, and this more and more in the post-industrial Service Economy.
- Concerning remunerated work and employment, the lengthening of the life cycle implies the open possibility (and in many instances the necessity) for extending the retirement age. At the time of the first provisions for retirement, these were fixed at the average age of death. Today, at the age of retirement, in many countries, life expectancy tends to reach 15 to 20 years.
- Satisfactory employment, based on adequate formation and education systems (including preparing to change type of jobs according to age conditions), is in a majority of cases the condition to have a healthier life.
- In any case work and active life should be understood as an advantage or even a privilege and finally a right for all human beings. The idea of considering for instance work as a kind of "punishment" for the older age is fundamentally wrong and counter-productive for all individuals. Education and experience should help everybody to prepare for being active and productive in new "lighter" sectors after 50 or 60.
- At the basis of this: enhance the HUMAN CAPITAL at all ages. Marginalisation must be limited as far as possible, and the promotion of active ageing must become a priority.
- It is very important to consider and promote part-time employment as a basic element for a well balanced social security system: among others, it is an important issue for all those working over 60 and 65. As it happens in some northern European countries, part time pensions will be more and more coupled with partial work. Important are also the gradual retirement plans and the perspective of the "four pillars system" (see on this www.genevaassociation.org), based on the three pillars of the Swiss system plus the fourth pillar referred to the partial employment.
- Health improvements are necessarily based on a great increase in costs: one could die almost for free in a not so long past, and one has to pay for the possibility to control, eliminate or reduce the effects of all sorts of illnesses or accidents. We spend already a lot of money to buy and use an automobile which allows us to move (sometimes) faster: we will probably one day spend even more for our health maintenance, which allows us to live and move. We are in fact richer also because we can spend more on health (as we do for cars)!
- From an economic point of view, retirement and health costs, imply the building of financial capabilities, under the form of redistribution (de facto: fiscal systems) and under the form of private and collective savings (or reserves). We have here to do with nothing less than a new definition of the notion of Capital (its building and utilisation) in the post-industrial Service Economy.

- In this context there is a greater and greater role to play for the public and the private institutions: the point is not to oppose the one to the other, but to optimise their necessary complementarity. The contribution of the insurance industry is here essential and its social and economic value in managing the human uncertainties and vulnerabilities is more and more a key for the present and the future of the "Wealth of Nations". In our days, Adam Smith, instead of putting the insurance business at the margin of the Industrial Revolution as he did over two centuries ago, would surely put it today at the centre of the new Service Economy.*

* See also: "The European Papers on the New Welfare" (www.newwelfare.org) and "Cadmus" (www.cadmusjournal.org).



The Four Pillars Programme What Have We Been Able to Achieve?

Geneviève Reday-Mulvey



The Geneva Association

* Publications

- o more than 10 special issues on Pensions/Four Pillars of *The Geneva Papers*
- o 50 issues of the research newsletter *The Four Pillars*
- o 3 books and over 10 chapters of books
- o over 20 *Etudes et dossiers*

* Conferences and seminars

- o 50 seminars and conferences organised by The Geneva Association
- o contribution in over 150 seminars/conferences

* Research

- o network of researchers
- o links with the European Commission/ OECD/ ISSA/national organisations and universities in UK/FR/DE/NL/SE/FI/NO/IT/CH/USA/JP/CA, etc.



New approach of Orio Giarini “counter ageing”

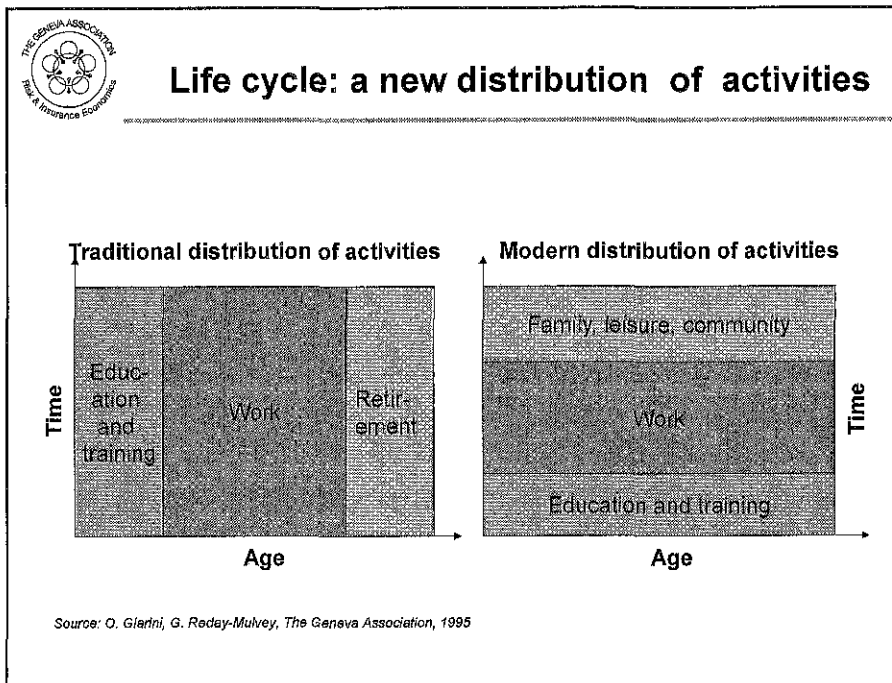
1. Living longer—the age revolution
2. Living longer—How?
 - Reforming pensions
3. Living longer—How?
 - Working longer
 - Policies and practice in Europe



Age revolution

- * Life expectancy increase – a + phenomenon extension of mature years and of old age
- * Health expectancy increase
- * Old age starts later
- * Increasing gap between retirement age and age of exit from work
- * A new life cycle
- * A long retirement expectancy

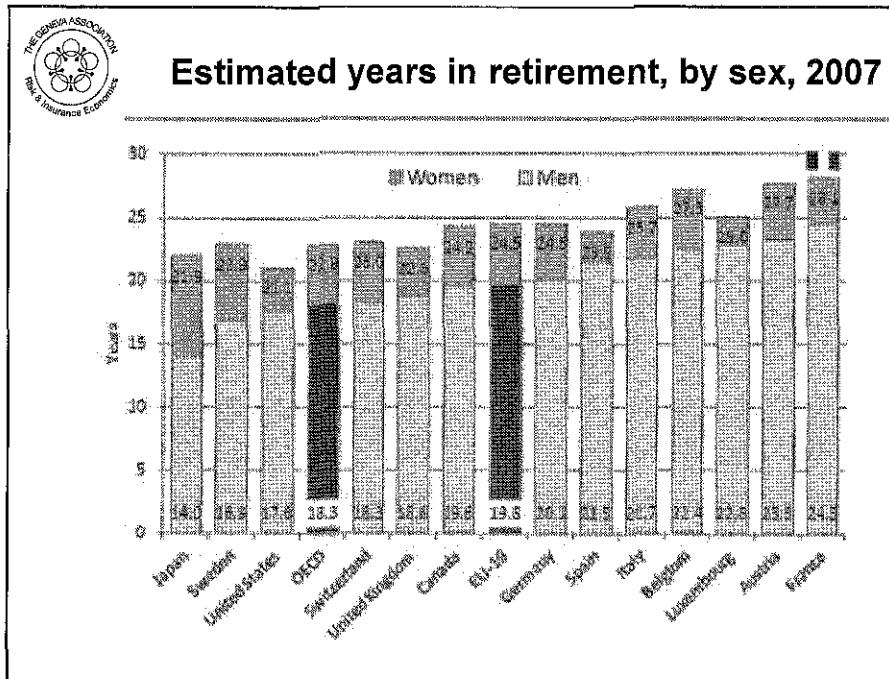
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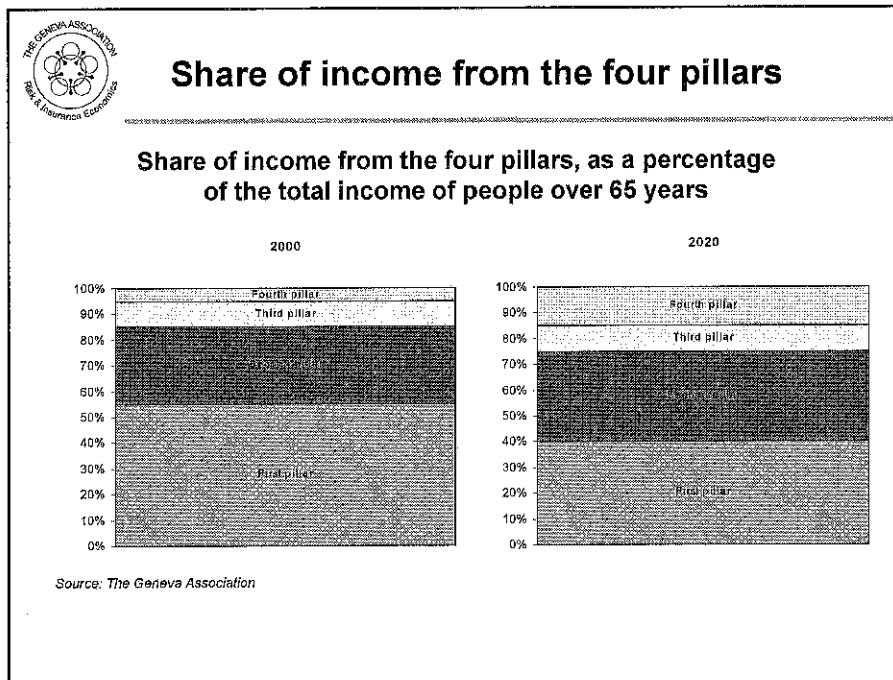
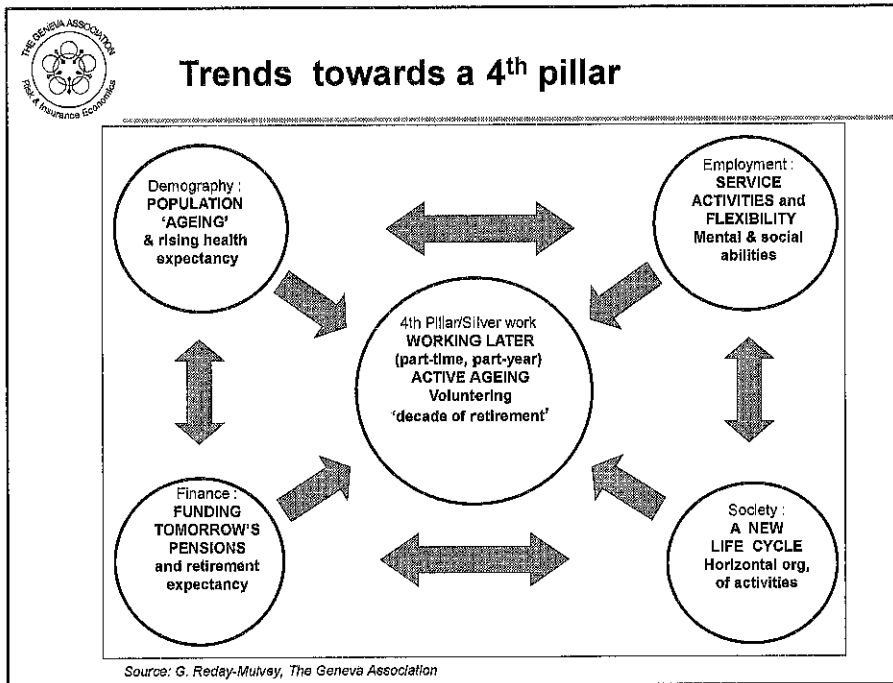
Retirement expectancy


	Average age of exit from work		Life expectancy at 65		Retirement expectancy	
	Men	Women	Men	Wom.	Men	Women
Denmark	62.1	60.8	16.2	19.1	19.1	23.3
France	59.1	58.9	18.2	22.6	23.1	28.7
Germany	62.1	60.5	17.2	20.5	20.1	25.0
Italy	60.2	59.6	18.8	21.8	23.6	26.2
Netherlands	63.1	61.8	16.8	20.6	18.7	23.8
Sweden	63.7	63.3	17.7	20.9	18.1	22.8
UK	62.9	62.1	17.3	19.6	19.4	22.5

Source : Eurostats 2008, and own calculations



-
- Living longer—How?**
- **Reforming pensions**
 - public/state 1st pillar pensions
 - private/occupational 2nd pillar pensions
 - private/insurance 3rd pillar pensions
 - a new 4th pillar/employment





Key policies

1. SOCIAL POLICY—Pension reforms


<p>Restrictive measures</p> <ul style="list-style-type: none"> • increasing the number of contribution years • reducing benefits slightly • devising new modes of financing • ... 	<p>↓</p>	<p>Incentives</p> <ul style="list-style-type: none"> • developing 2nd pillar pensions • encouraging personal pensions (3rd pillar) • strengthening the link between pensions and contribution years • fostering flexible, à la carte retirement • allowing a cumulation of the pension with earnings from work, etc. ...
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WORKING LONGER & ACTIVE AGEING in THE ECONOMY and SOCIETY

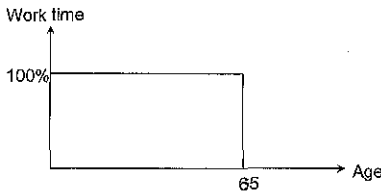
<p>Restrictive measures</p> <ul style="list-style-type: none"> • raising the labour-exit age • reducing early retirement access • reducing disability benefit access • reducing unemployment benefit access • ... 	<p>↑</p>	<p>Incentives</p> <ul style="list-style-type: none"> • reintegrate workers aged 55 years and more • increasing the participation of women • adjusting work conditions at the end of career: continuing training, part-time work, ... • making labour exit more flexible • providing incentives in the form of subsidies • enacting anti-discrimination laws • fostering good practice (codes, etc.) ...
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2. ECONOMIC POLICY—Employment reforms

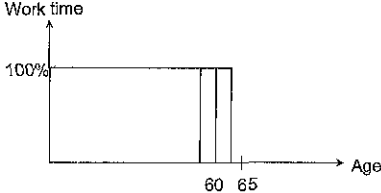
Increase participation of +55-65 year olds



Retirement models

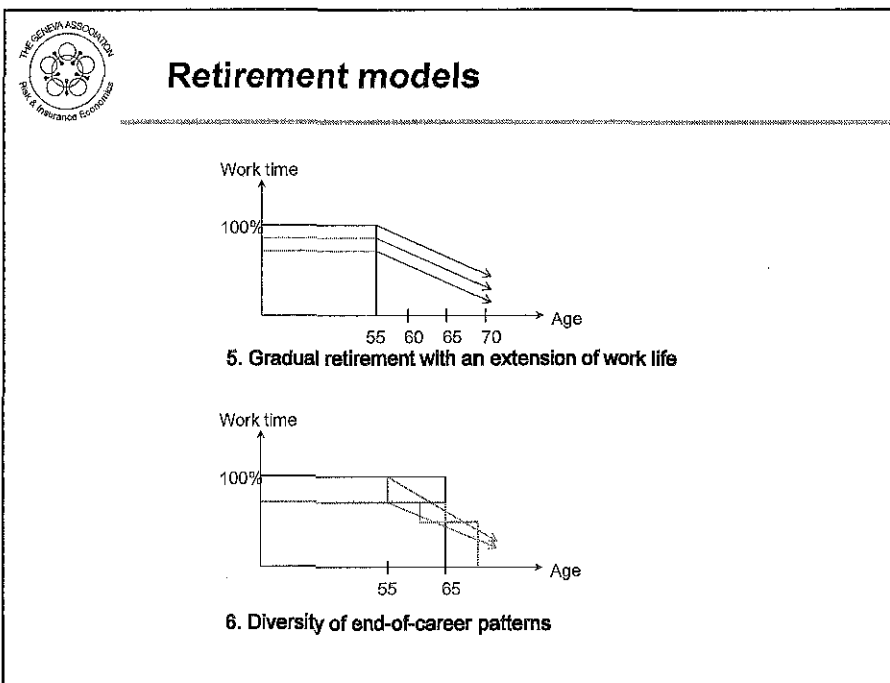
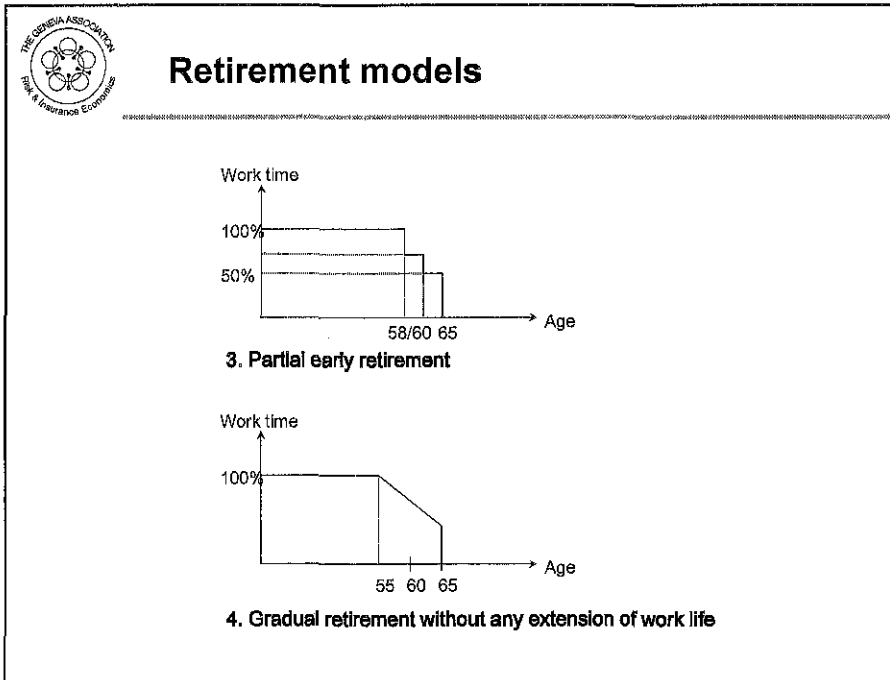


1. The traditional model: over-night retirement




2. Early retirement

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Benefits of part-time work at end of career




*** For the employer:**

- reduces cost of 'older' workers (everywhere)
- reduces absenteeism (e.g. Sweden, France)
- retains skills and experience (transition, *tutorat*)
- better age management
- matches customer/employee age and needs (e.g. U.K.)
- etc.

*** For the employee:**

- provides a transition 'flexible retirement' (e.g. U.K.)
- adapts to changing abilities (e.g. NL)
- reduces stress and increases recuperation time
- increases choice and satisfaction (eg. NL, FR, SE, DE)

The timing of retirement



1975-1990/95	From 1990/95-2000	From 2005-2010
EARLY RETIREMENT The old consensus	FLEXIBLE, GRADUAL & LATER RETIREMENT An emerging consensus	OLDER WORKERS INCREASING PART OF CAREER An accepted consensus
<ul style="list-style-type: none"> • The State: high unemployment • Enterprises <ul style="list-style-type: none"> - reduce workforce - increase productivity • Trade Unions / Workers <ul style="list-style-type: none"> - reduce extra years of retirement - good health 	<ul style="list-style-type: none"> • The State: reform of pensions • Enterprises and trade unions: <ul style="list-style-type: none"> - age management - work conditions at end of career • Enterprises and trade unions: <ul style="list-style-type: none"> - unions new awareness of future challenges (age discrimination) 	<ul style="list-style-type: none"> • Enterprises and trade unions: <ul style="list-style-type: none"> - age management - work conditions at end of career
<div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; border-radius: 15px; padding: 5px; background-color: #e0e0e0;">Labour market</div> <div style="border: 1px solid black; border-radius: 15px; padding: 5px; background-color: #e0e0e0;">Social policies</div> </div>		



Key practices for working longer

Age management in companies

- ♦ Reduction of work time, PTW, gradual retirement
- ♦ Career planning
- ♦ Continuing vocational training and lifelong education
- ♦ Ergonomics
- ♦ Reduction of the importance of seniority wages
- ♦ Adapt pension regulations
- ♦ Anti-age discrimination: EU 15 Member States
- ♦ Codes of practice and diversity
- ♦ ...



Key policies

Comparative country synthesis with strong factors + and needed improvements --

1. Countries with *global* policies

Finland

- ++ Information and age awareness campaigns of all actors *Experience, a national treasury*
- ++ Models and practice in firms of improved health at work and work ability/capacity
- + Pension reform linked to life expectancy and including partial pensions
- Develop more part-time work and transitions to retirement

Denmark

- ++ Reduction of exit roads, in particular disability (*now working capacity*)
- + Adaptation of working time and conditions, e.g. *soft jobs*
- + Incentives to employers and employees

The United Kingdom

- ++ Campaigns to convince employers, e.g. *Age Diversity, Age positive*
- + Flexible retirement and working time
- + Incentives to employees (employment credit)
- Improve state pension benefits

The Netherlands

- ++ Reduction of exit roads, in particular early retirement (public) and disability
- ++ Promotion of part-time and atypical work
- + Legislation against age discrimination
- Encourage more full-time work



Key policies

2. Countries with *partial* policies

Germany

- + Pension reform will reduce 1st pillar and extend 2nd pillar
- ++ Studies on age management and experimental firm practice
- + Ergonomics, continuing training, esp. in large firms
- Insufficient practice

France

- Pension reform will extend work life
- + Improvements in career planning, training and part-time work, esp. in large firms
- Early exit still in practice
- Insufficient debate and age awareness campaigns

Italy

- ++ Drastic pension reform
- Early retirement still the norm
- Insufficient debate and age awareness campaigns

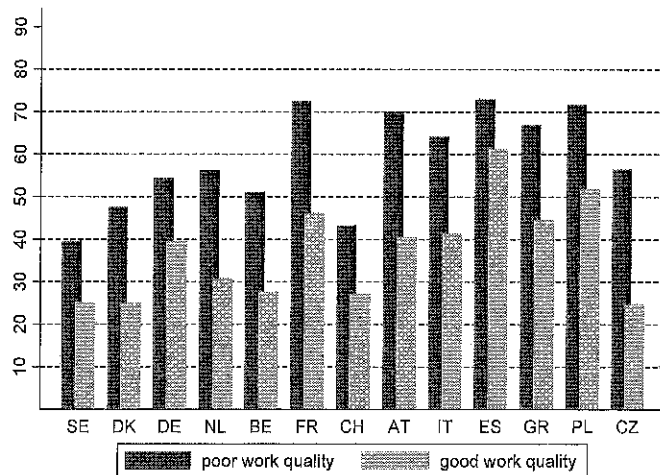
Switzerland

- ++ High level of employment and continuing training
- + Part-time work common, in part, women
- Early retirement still being currently developed
- Lack of policies and of incentives, insufficient flexibility

Source: Work beyond 60, 2005, and 2009 up-dates

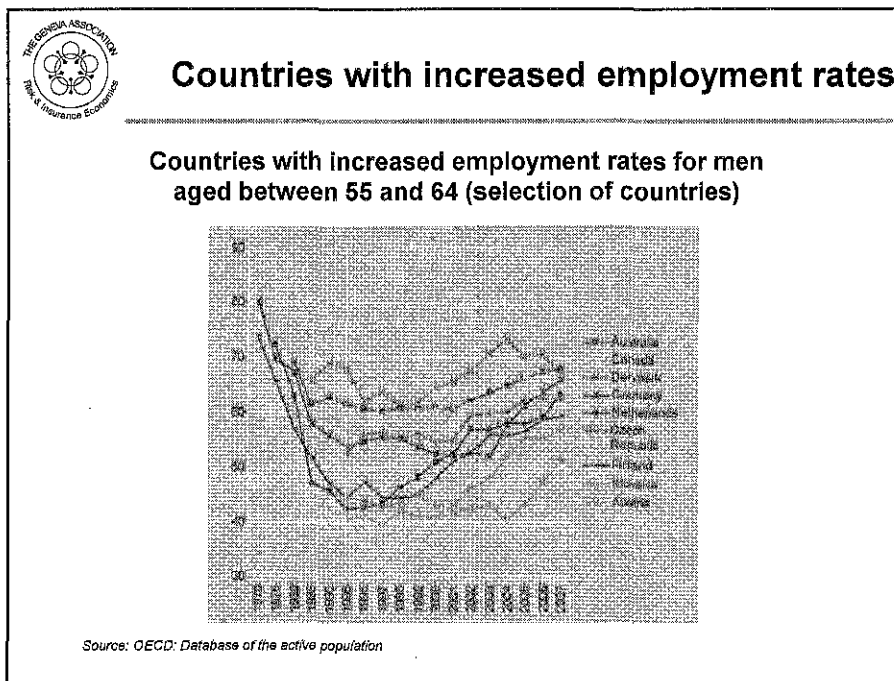


Intended early retirement by quality of work



Source: SHARE, 2009

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Conclusions

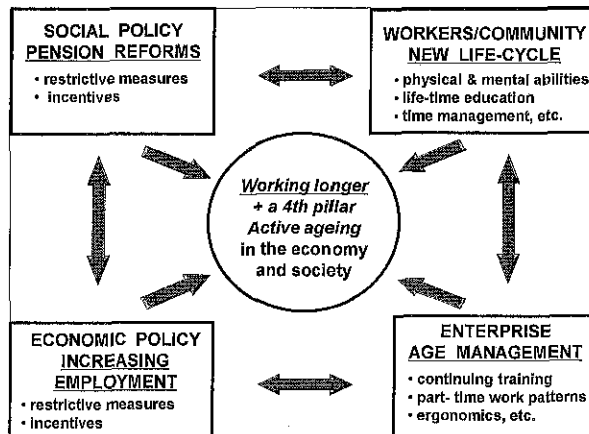
The need to rethink pensions and work together in a counter-ageing society

Key policy recommendations for a long-term holistic approach:

1. The need for better **coordination** of social and economic policies (and partnership public/private)
2. The need for **diversity** and **flexibility** of ends of career
3. The need for a well-informed **debate** and **communication** (employers, employees, authorities, media, general public)
4. The need for **additional policies** (family policies, controlled immigration, improved quality of work, etc.)



The 4th pillar



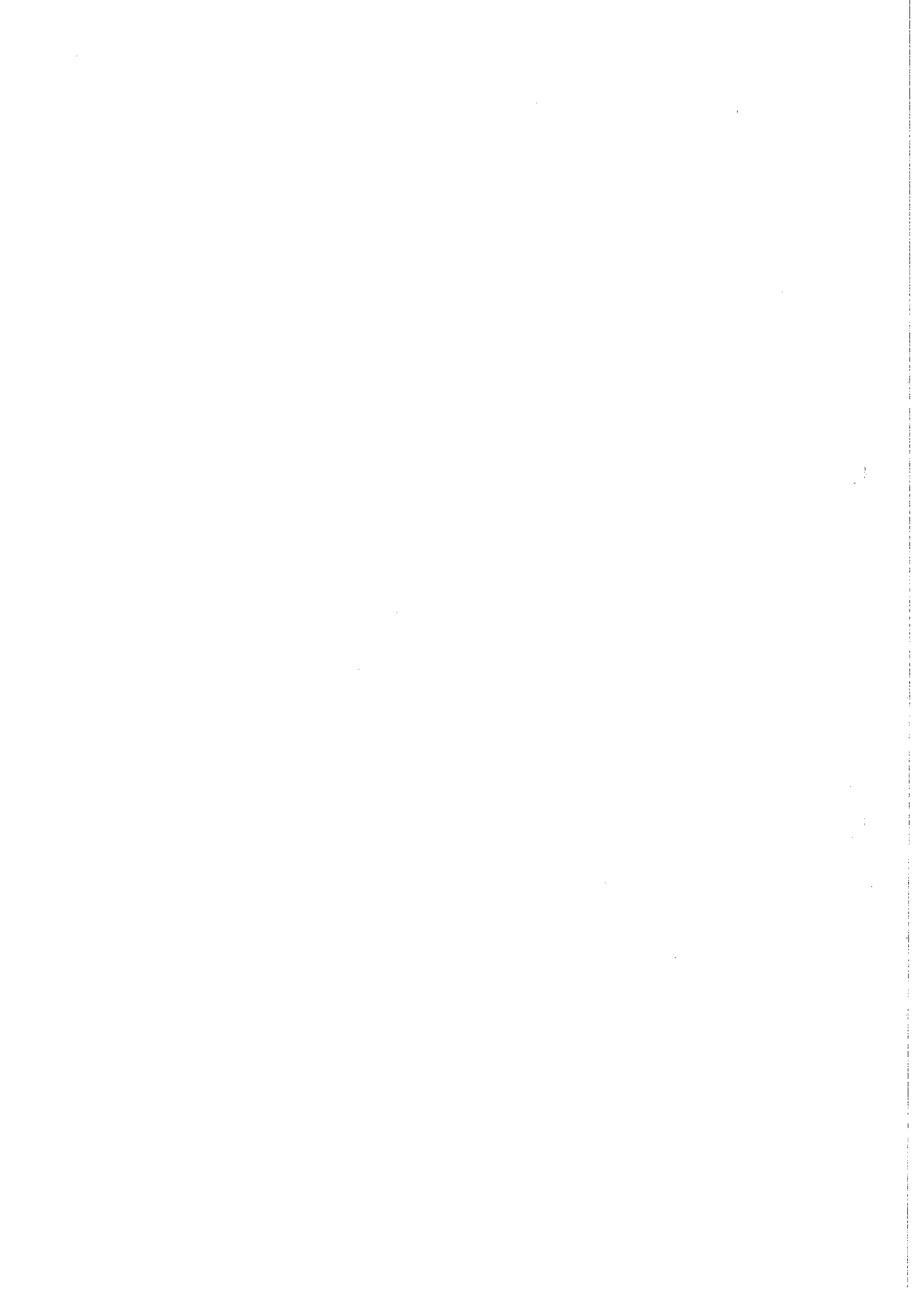
Source: G. Reday-Mulvey, The Geneva Association and Avenir Suisse, 2004



Bibliography

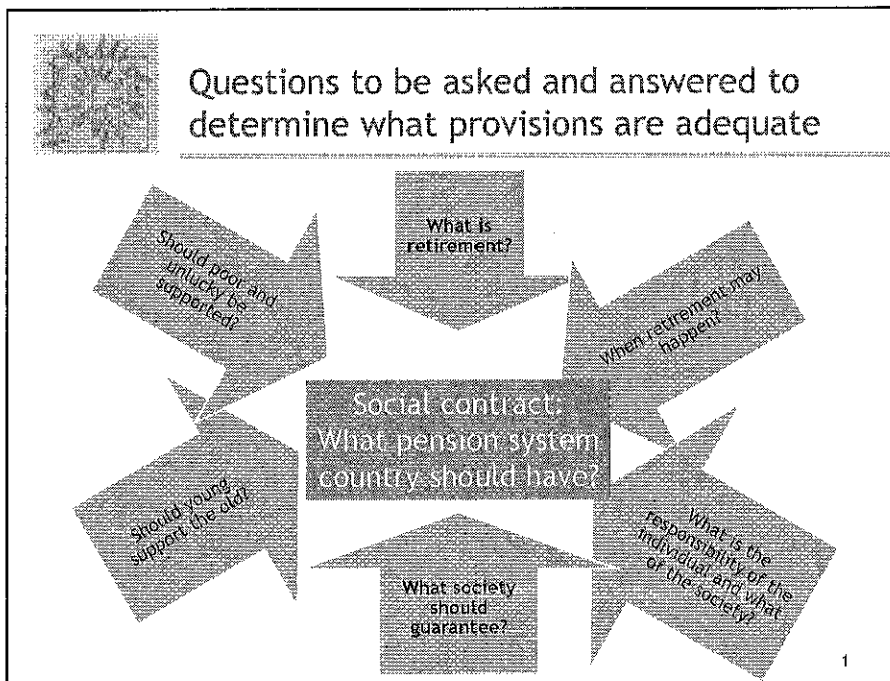
- * *Le Temps devant soi. Chronologie d'une transition du travail à la retraite*, 2012
- * *Working beyond 60—Key Policies and Practices in Europe*, Palgrave Macmillan, 2005

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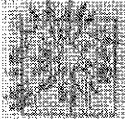


Sustainability and Adequacy of Social Security in the Next Quarter Century: Balancing Future Pensions' Adequacy and Sustainability while Facing Demographic Change

Krzysztof Hagemejer




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Changing perceptions what is adequate may lead to changes in explicit and implicit social contracts

Definition and timing of retirement	<ul style="list-style-type: none"> • Happens only when person is not able to work anymore? • Is a well deserved period of rest after working life?
Level of societal guarantees	<ul style="list-style-type: none"> • Guarantee aims only at alleviating poverty for those unable to support themselves? • Guarantees every resident a minimum income at old-age? • Guarantees also certain proportion of pre-retirement income (replacement rates)?
Degree of solidarity	<ul style="list-style-type: none"> • People should save for themselves • Those unable to contribute/save should be supported • Younger should support old generation

2

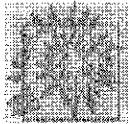


Changing social contracts determine changes in financial and institutional solutions

<p style="text-align: center;">Social contract behind pensions</p> <div style="background-color: #333; color: white; padding: 5px; border-radius: 5px; text-align: center; margin-bottom: 5px;">What is retirement?</div> <div style="background-color: #333; color: white; padding: 5px; border-radius: 5px; text-align: center; margin-bottom: 5px;">What is guaranteed by the society?</div> <div style="background-color: #333; color: white; padding: 5px; border-radius: 5px; text-align: center;">How much solidarity and redistribution towards the poorer?</div>	<p style="text-align: center;">Financial and institutional alternatives</p> <div style="background-color: #333; color: white; padding: 5px; border-radius: 5px; text-align: center; margin-bottom: 5px;">Mandatory versus voluntary</div> <div style="background-color: #333; color: white; padding: 5px; border-radius: 5px; text-align: center; margin-bottom: 5px;">Defined benefit versus defined contribution</div> <div style="background-color: #333; color: white; padding: 5px; border-radius: 5px; text-align: center; margin-bottom: 5px;">PAYG versus advanced funding</div> <div style="background-color: #333; color: white; padding: 5px; border-radius: 5px; text-align: center;">Public versus private provision</div>
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3

4



Greatest challenge in the ageing world: coverage gap

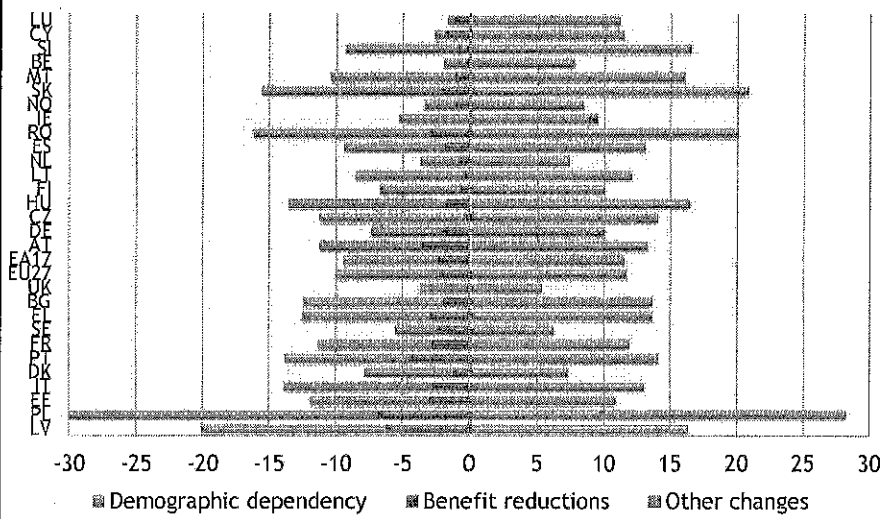
- Only minority of the world's working population contributes to any pension scheme (30%)
- Only small minority of the world's older persons receives any pension (20% in low-income countries)
- Now already 61% of the world's elderly live in less developed regions with lowest pension coverage. This percentage will increase to 83% in 2100

Provide at least basic income security to uncovered majority of the elderly is a priority

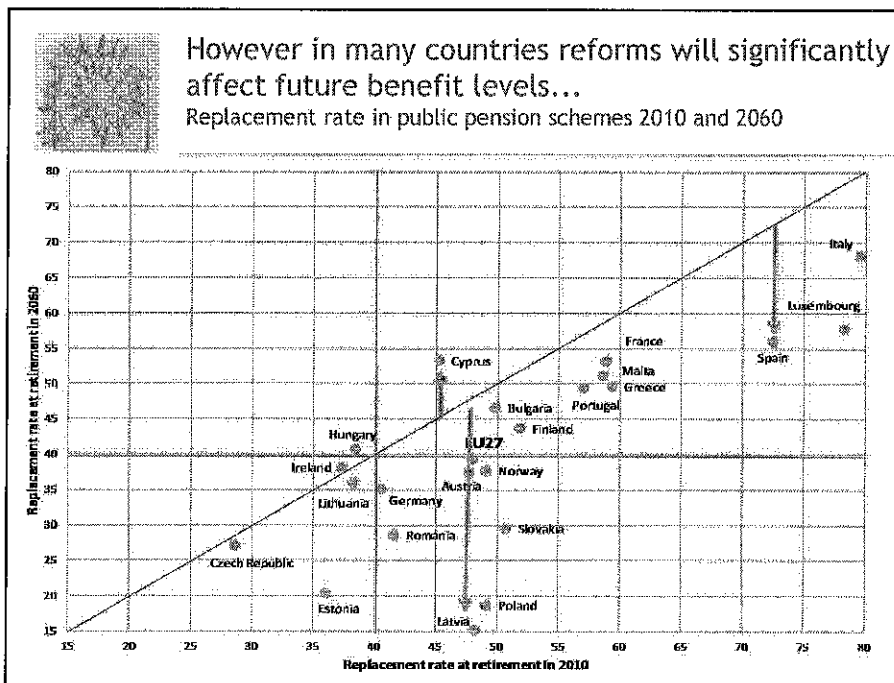
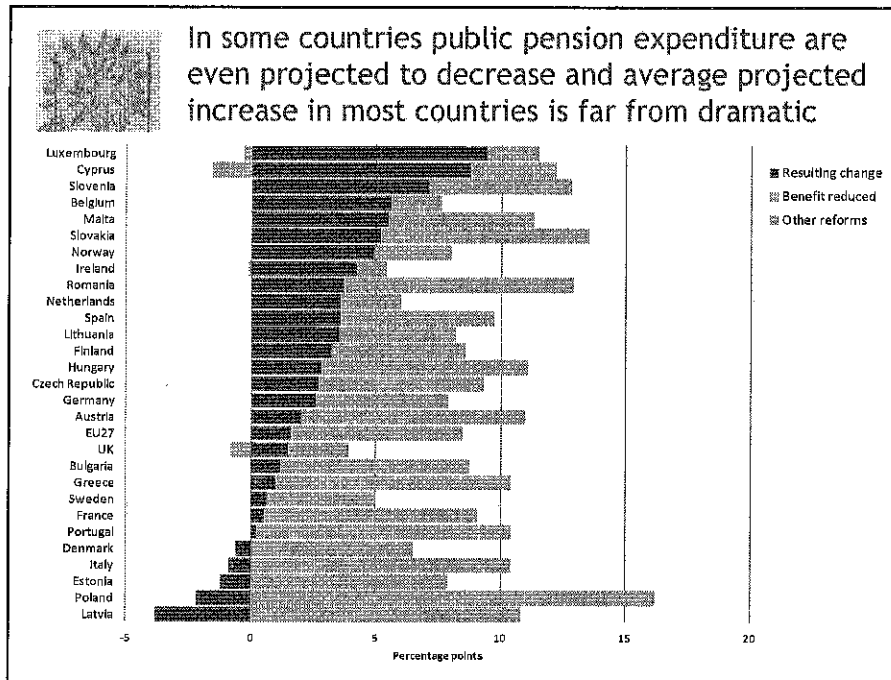
Recommendation no 202 (2012) concerning national floors of social protection




In many European countries already introduced pension reforms may successfully counterbalance financial impact of demographic change (Projected change of public pension expenditure due to different factors in GDP percentage points between 2010 and 2060)



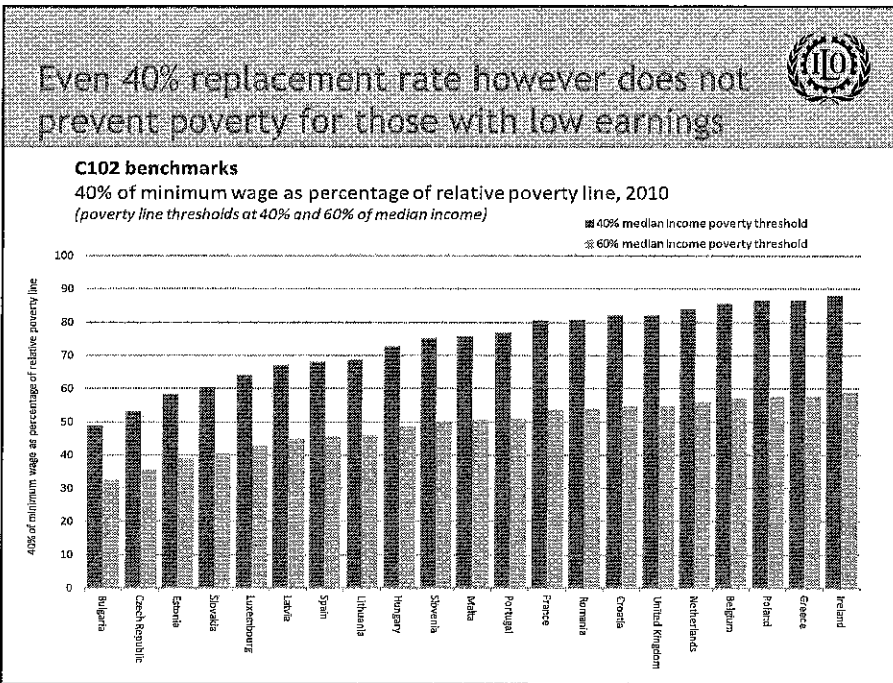
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Defining pension adequacy

- Adequacy and sustainability are joint and interlinked objectives of social policy
- Adequacy is defined nationally as part of the broader implicit or explicit social contract which sets the design of the pension system
- There are also accepted internationally benchmarks and standards (like ILO Convention no 102 or Recommendation no 202)
- EU OMC: Adequate old-age pension systems should prevent poverty in the old age but also provide income replacement after retirement preventing sharp decline in living standards



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Protection of those with broken careers and lower life-time incomes weakened by reforms



- Many new reformed pension schemes are not just translating differentiation of earnings at the labour market into differentiation of pensions: these differences may actually be amplified
- Reforms often removed from benefit formulas redistributive components aimed to protect against poverty those with lower earnings and shorter careers
- For a time being this changes has not yet been everywhere adequately compensated by increased role of various non-contributory provisions like basic minimum pensions or subsidies to contributions of those caring for children or sick and elderly, unemployed, persons with disabilities etc.

How to prevent from poverty those with lower incomes and those having no possibility to have long unbroken careers?



- Either one should preserve or restore in one way or another the redistributive defined benefit formulas in first pillars, or
- Secure that in the overall pension system there are much stronger than before non-contributory income guarantees (like basic state pension, universal or means-tested) as well as contribution subsidies compensating adequately some non-contributory periods
- To secure sustainability, conditions have to be created to effectively extend duration of working lives and delay retirements

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Automatic mechanisms will not replace good policy making in social dialogue



- Many reforms introduce various automatic mechanisms to ensure long-run financial sustainability of pensions
- There are no similar mechanisms to guarantee adequacy...
- ...other than good policy making through well informed social dialogue based on agreed adequacy targets, balancing shorter and longer term needs as well as benefit adequacy with financial sustainability

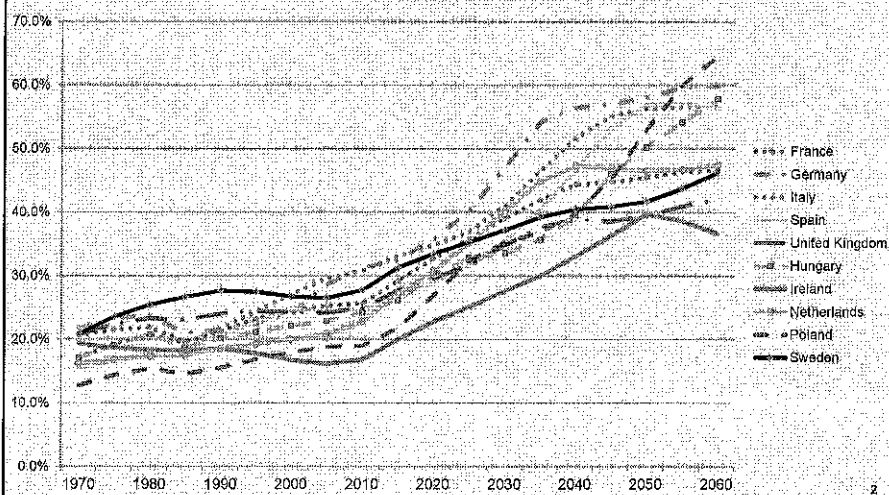


Can first Pillar Pensions Be Made More Sustainable?

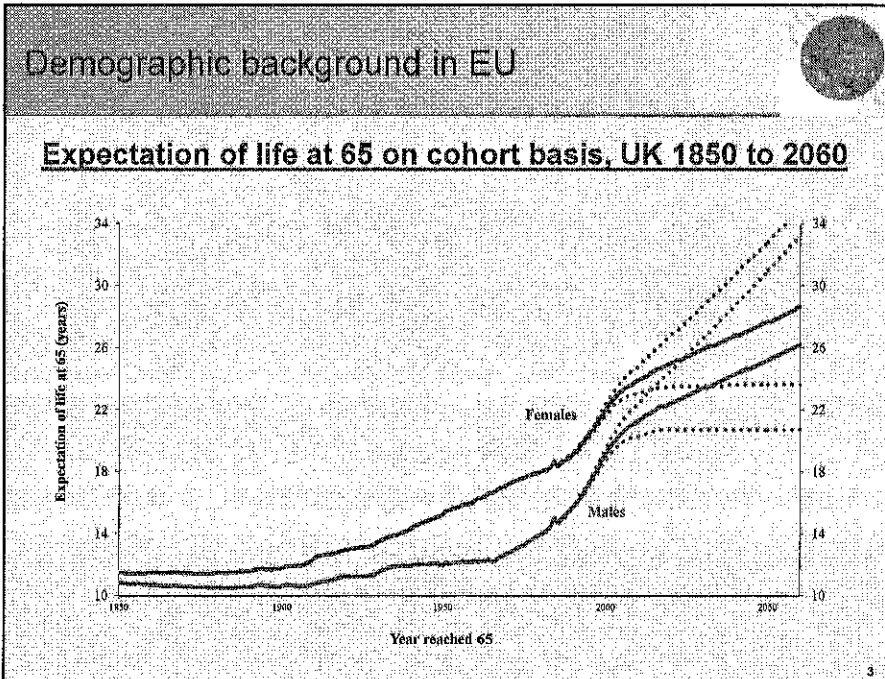
Chris Daykin

Demographic background in EU

Old-age dependency ratios in selected countries to 2060



59



- Demographic background in EU
- Ageing population all over Europe**
- low fertility (although may be rising a little)
 - steadily rising expectation of life
 - especially at ages over 65
 - inwards migration may help but only for a few countries
 - outwards migration may make matters worse
 - also reflects historical developments, e.g. baby boom

 - are policies relating to births and migration possible?
- 4

Political background in EU

- first pillar pension policy rests with member states
- historically little involvement by Commission
- fiscal agenda has changed this
- Ageing Reports in 2006, 2009, 2012
- basis for recommendations to member states
- European Semester Process
- forcing pace of first pillar reform

5

Recommendations for reform

- raise retirement age
- promote longer and healthier working lives
- diversification to mix of funded and PAYG
- other measures as necessary

6

The 2012 Ageing Report

Public pension expenditures in 2010 and 2060, % of GDP

Country	2010	2060
Luxembourg	9.2	18.6
Cyprus	7.6	16.4
Slovenia	11.2	18.3
Belgium	11.0	16.6
Germany	10.8	13.4
United Kingdom	7.7	9.2
Sweden	9.6	10.2
Italy	15.3	14.4

Robustness of projections

- some assumptions coordinated (but not all)
- disparate projection methodologies
- migration effects not taken into account
- allowance for mortality improvement may not be sufficient
- impact of reforms seems optimistic

Demographic background in EU

Pension age in 2050 to maintain dependency ratio

Country	Pension Age
United Kingdom	71.7
Hungary	72.1
France	72.8
Germany	73.9
Italy	74.7
Netherlands	75.5
Spain	76.0

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Demographic background in EU

Pension age to maintain cohort expectation of life (E&W)

Year	Expectation of 21 for males	Expectation of 24 for females
2010	65.1	64.8
2020	66.6	66.1
2030	68.0	67.3
2040	69.2	68.4
2050	70.5	69.6
2060	71.8	70.7
Over 50 yrs	1.3 per decade	1.2 per decade

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What is sustainability?

How broadly is sustainability to be assessed?

- sustainable level of expenditure (contributions, etc)
- sustainable equilibrium of pension system
- politically sustainable?
- sustainability only possible if pensions are adequate

11

What is adequacy?

How important is the assessment of adequacy?

- replacement ratios
- adequacy in relation to career income
- avoidance of poverty in old age
- protection of poor or adequacy across the spectrum?
- does adequacy mean a bare minimum...
- ...or a comfortable standard of living?
- 2nd pillar diversification usually increases inequality
- ...and also increases volatility of outcomes
- should fairness between cohorts also be a criterion

12

Some general lessons for reform

Importance of raising effective age of retirement

1. Raise formal retirement age
2. Reduce incentives to early retirement
3. Incentivise late retirement
4. Perhaps index retirement age to expectation of life
5. Improve employment prospects at later ages
6. Improve flexibility for continuing to work

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Some general lessons for reform

Sharing longevity risk

1. target lump sum at retirement...
 - ...and convert to pension using current annuity value
 - ...NDC or cash balance (or funded individual accounts)
2. overall adjustment mechanism such as
 - life expectancy coefficient
 - automatic balancing mechanism
 - sustainability index
3. risk-sharing between contributors and pensioners
 - can pensioners be insulated?

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Some general lessons

Reducing benefit cost

1. Reduce benefit accrual for the future
2. Average salary over whole career
3. Change to Notional Defined Contribution
4. Enhance flat-rate element of pension calculation

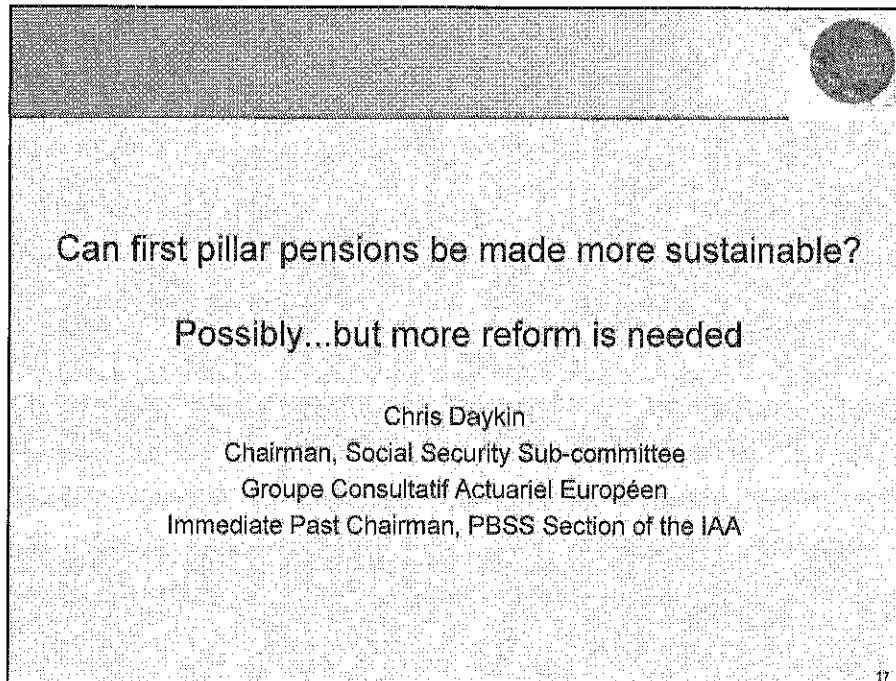
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Some conclusions

Basic flat-rate pensions

- > perhaps more sustainable than fully earnings-related
- > citizen pension approach provides strong basis
- > more focussed on protection of poor pensioners
- > often financed out of general revenue (no contributions)
- > avoids means-tested benefits
- > provides a solid platform for complementary schemes

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Can first pillar pensions be made more sustainable?

Possibly...but more reform is needed

Chris Daykin
Chairman, Social Security Sub-committee
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The Financial Impact of Longevity Risk and Potential Costs for Governments

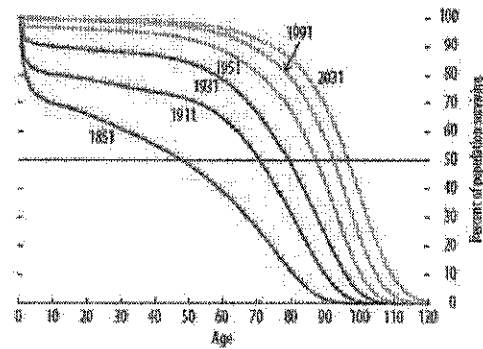
S. Erik Oppers

What is longevity risk?

- Longevity risk is the risk associated with people living longer than expected
- Longer lives are typically a good thing, but...
- Living longer than expected has a financial risk of running out of retirement funds
- Also a financial risk for pension funds, insurance companies, governments

• **People are living longer...**

Figure 4.1.2. Life Curves for the United Kingdom, by Year of Birth, 1851–2031

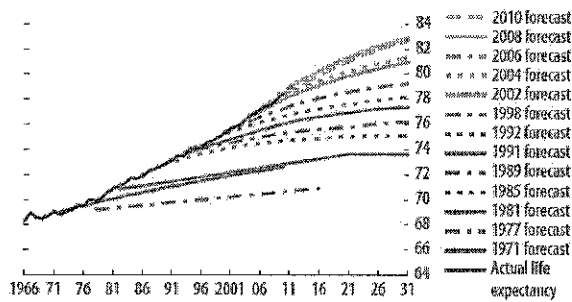


Source: Office of National Statistics.
 Note: Proportion of persons born in a given year surviving to successive ages.
 For example, of people born in 1851, 50 percent survived to about age 47.

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• **...but longevity has been consistently underestimated, implying significant longevity risk**

Figure 4.1. United Kingdom: Projected Life Expectancy at Birth, for Males, 1966–2031 (In years)



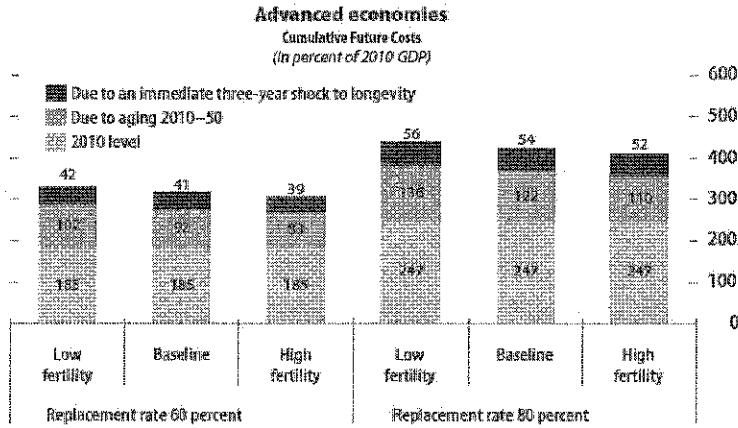
Source: Office of National Statistics.

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• On a global scale, longevity risk is large...

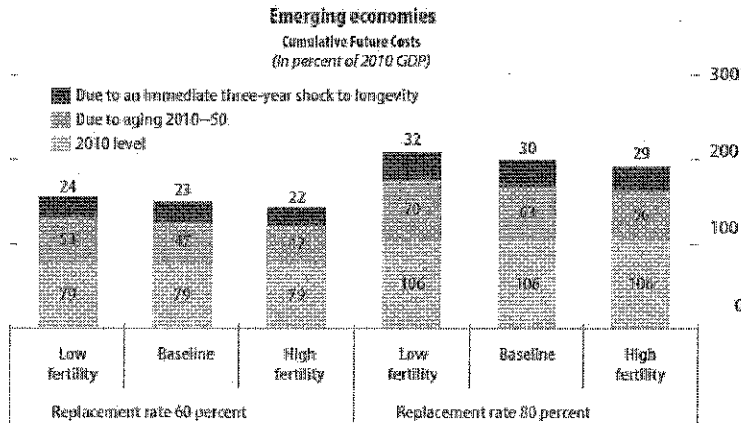
Figure 4.2. Increases in Costs of Maintaining Retirement Living Standards due to Aging and to Longevity Shock



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• ...including for emerging economies...

Figure 4.2. Increases in Costs of Maintaining Retirement Living Standards due to Aging and to Longevity Shock



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...and the effect on public sector balance sheets is potentially very large:

- The private sector is not saving enough for retirement as it is
- Private sector can therefore likely not handle additional costs of unexpected longevity
- If those costs fall on the government, this adds significant strain on already weakened public balance sheets

Table 4.2. Longevity Risk and Fiscal Challenges in Selected Countries
(in percent of 2010 nominal GDP)

	(1)	(2)	(3)	(4)
	Household Total Financial Assets (2010) ¹	Net Present Values of Needed Retirement Income	General Government Gross Debt (2010)	Increase in Net Present Values Given Three-Year Increase in Longevity
United States	339	272 - 383	54	40 - 53
Japan	309	499 - 685	220	65 - 87
United Kingdom	286	293 - 391	76	44 - 59
Canada	268	205 - 303	84	32 - 50
Italy	234	242 - 322	119	34 - 45
France	197	235 - 309	82	40 - 54
Australia	190	263 - 330	21	36 - 49
Germany	189	375 - 500	84	55 - 74
Korea	186	267 - 357	33	39 - 52
China	173	197 - 263	34	34 - 45
Spain	165	277 - 370	60	39 - 52
Hungary	108	190 - 254	80	34 - 45
Czech Republic	89	216 - 289	39	36 - 48
Poland	88	160 - 213	55	27 - 39
Lithuania	80	189 - 232	39	34 - 45

¹ Source: Ministry of Finance, Statistics Canada, IMF, OECD, and IMF and others.
² This figure of assets is assumed to cover 20 years of retirement needs at 60 percent of pre-retirement income, at age 65, on a 3 percent real return rate for assets aged 65 or more to retirement (assumed to be 2010-2030 years).
³ See CIAA, 2007.

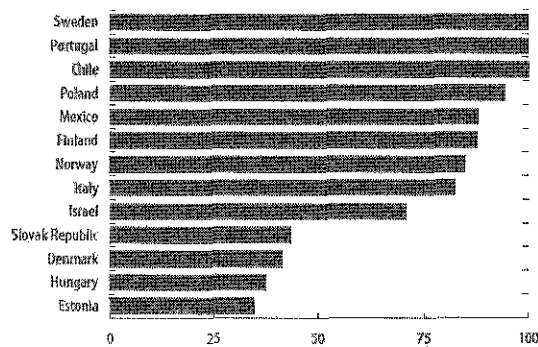
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Policy recommendations:

- **Governments need to recognize their exposure and take measure to ensure longevity risk does not add vulnerabilities to public balance sheets**
- **Longevity risk needs to be shared across sectors**
- **One major reform is to link the retirement age to expected longevity, mandated or voluntary**
- **Market-based transfer of longevity risk could help**

Some countries have started to link the retirement age to longevity...

Figure 4.5. Share of Pension Entitlements Linked to Life Expectancy in Selected Countries
(In percent)



Source: OECD pension models.

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Why now? Are there not more pressing problems?

- **As with other pension issues, the longer one waits, the more difficult the solutions become**
- **Also, markets could respond to vulnerabilities**
- **The good news is that if tackled now, effective measures could avoid hardship and disruption**
- **Much more difficult measures would be needed in the future**

Global Financial Stability Report



International Monetary Fund
Monetary and Capital Markets Department

The German Pension Reform After One Decade: Implications for the Global Discussion on Pension Reform

Michael Wolgast

Geamverband der Deutschen Versicherungswirtschaften e. V.

Agenda

1. Traditional system of old age security in Germany
2. Riester pension reform of 2001 and further reform measures
3. Impact of pension reforms so far
4. Germany: The current debate on pensions
5. Conclusions and lessons to be learnt

