Voluntary Retirement Savings:
Motivations, Incentives and Design

wbkamexemail@aexp.com,

Richard Hinz

March 4, 2014

Organization

- Why are complementary pension systems important?
- What kinds of systems are in place?
- What are the incentives and other design issues to make these work?

Motivation for Complementary and Funded Pension Systems

Primary

- Supplement Coverage and Benefits from Public schemes
  - Informal Sector
  - High Income Groups
- Diversify pension asset portfolio – complement wage based benefits with benefits linked to financial markets
- Enhance public acceptance of reforms to public system – provide additional benefits with low fiscal exposure
- Alter labor market incentives and behavior – Sorting and retention of workers

Secondary

- Increase national savings and possibly growth
- Catalyst for savings/financial market participation
- Support capital market development

Enabling Conditions for Implementation and Sustainability

- **Pension specific legal framework** that addresses:
  - Contribution flows, investment management, governance of funds
  - Members rights and dispute resolution (consumer protections)
  - Auditing, valuation and reporting on assets
  - Performance measurement and benefit projections
  - Regulation and supervision
- **Institutional**
  - Reliable custodian and asset management institutions
  - Trading, pricing and payment systems
  - Accounting standards and independent auditing
  - Accessible and credible adjudication of disputes

Models of Complementary Pension Systems

Retail Funds	→	Public Interface Hybrid	↔	Private Interface Hybrid	←	Employer Sponsored & Managed

Commercial Asset management

Direct Marketing and Management within Regulatory Framework

Linked to Mandatory System

Use of Clearinghouse To Lower Costs and Risks

Employer Organized

Private Administration And Asset Management

Traditional Employee Benefit Program

DB and DC

Specialized or Sanctioned Retail Funds

- **IRAs (Individual Retirement Accounts) in the United States**
  - Simple registration of existing financial institutions with tax authority to enter market
  - Essentially no limitation on investment profile or fees
  - Tax exemption with low limitations
  - Exclusion from tax preference based on income level and participation in employer sponsored tax subsidize arrangement
- **Voluntary Pension System in Pakistan**
  - Initiated in late 2004
  - Low Public System Benefits - No relevance to top quartile of earners
  - Initiated by Securities and Exchange Commission in conjunction with effort to expand investment markets
  - Existing Asset manager and Insurance Companies Authorized to Accept Funds

Public Interface Hybrid

- **Voluntary Tier of Mandatory Pillars (Latin America, Central & Eastern Europe**)
  - Additional contribution to specialized "pension companies"
  - Utilize same regulatory and transfer structure
- **Swedish Premium Pensions**
  - Allocation of portion of social insurance tax
  - Central public clearinghouse
  - Asset management open to all registered vendors
  - Vendor blind to retail customer
- **NPS in India**
  - Centralized record keeping
  - "Points of Presence" distribution
  - Limited set of licensed investment options

Private Interface Hybrid

- **Majority of US 401(k) plans (Participant Directed)**
  - Employment based platform with payroll deductions and contribution sharing
  - Tax preference with specific limits
  - Employer selects suite of options – worker directs investment
  - Financial firms bundle record keeping and investment services on fee basis
- **Lithuanian, Slovenia Voluntary Funds**
  - Closely controlled licensing of funds (Based on EU UCIT framework
  - Employer or Union brings group of workers to funds
  - Asset allocation, fees and other elements closely controlled

Firm or Vocational Group

- **Former British Empire (UK, US, Australia, Kenya, Tanzania, India, South Africa, etc)**
  - Employer managed trusts with minimal limitations
  - Both DB and DC
  - Defined benefits forms an endangered species, DC moving towards hybrid forms
  - Risk exposure of employer inefficient cash wage deferred benefit trade-offs driving change
- **Netherlands**
  - Quasi voluntary nature produces high coverage (>90%)
  - Collective management insulates employers from some risks
  - Risk management / Benefit tradeoffs imposing challenges as system moves to risk based supervision
- **Enterprise Annuities in China**
  - Alternative hybrid with employer sponsorship but licensed intermediation (Trustee, Asset managers)
  - Effectively DC in current form

Enabling Conditions

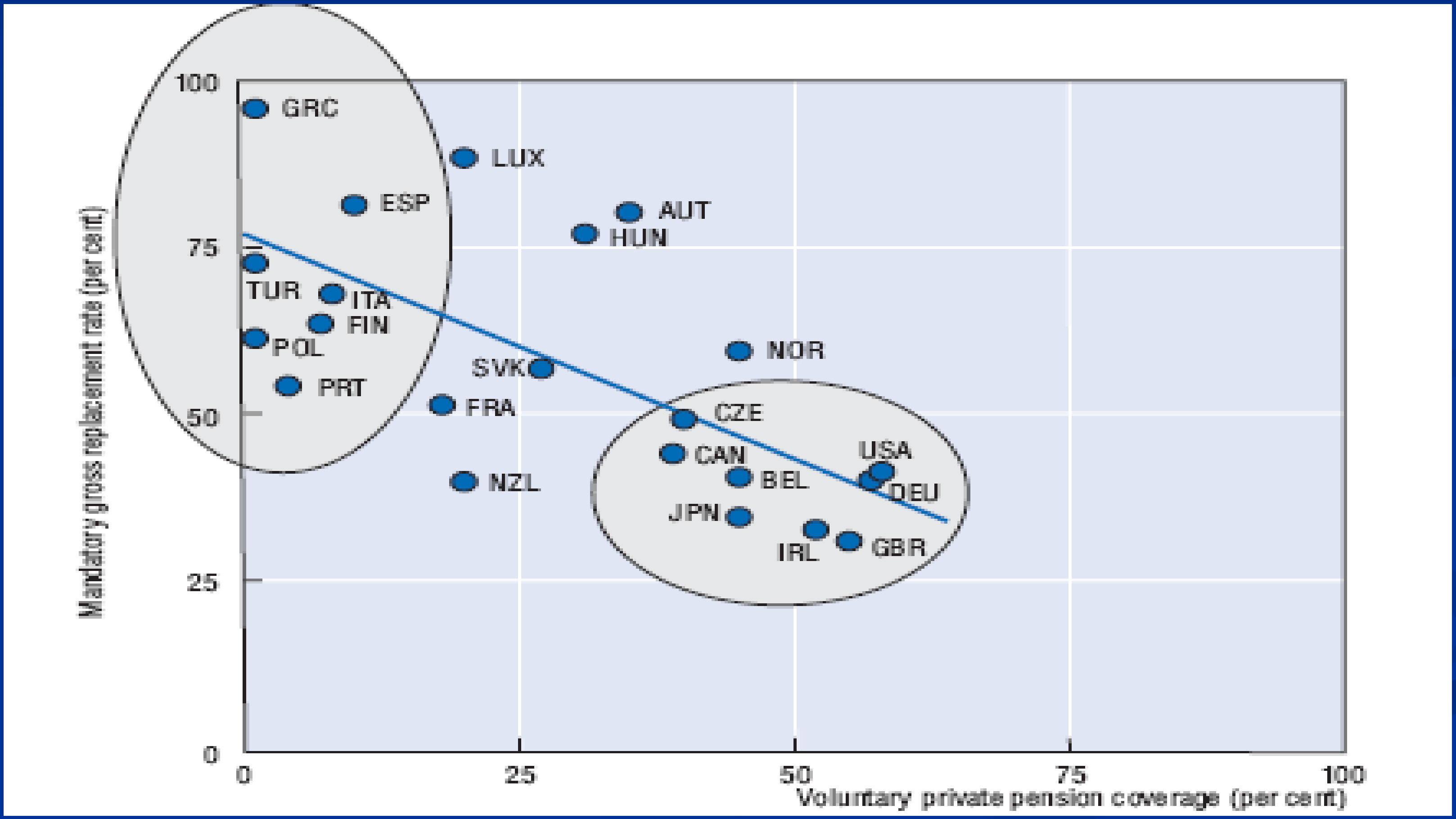
- Commercial/Retail Products
  - ***Developed and Reliable Financial Institutions*** – well regulated and supervised
  - ***Long Term Savings Instruments*** - capacity to manage/diversify risks
  - ***Financial literacy*** within relevant populations
  - ***Consumer protections*** and systems for dispute resolution
  - ***Ability to establish long term character of savings*** and distinguish from other private savings – typically through tax treatment or other subsidy
- Employment Based Systems
  - ***Labor Market Efficiency*** – Wage Benefit Tradeoffs
  - ***System of Prudential/ Fiduciary Laws***
  - ***Compliance Enforcement of Agency Hazards*** (contribution flows, self investment)

Incentives and Other Design Issues

- Economic Motivations
  - Limitations of Public System
  - Tax subsidies
  - Start up or matching provisions
- Behavioral Issues
  - Defaults: Auto enrollment and active decision
  - Programmed Deferrals
  - Financial Literacy and Trust
  - Marketing and Information

Generosity of the Mandatory Sytems is the Strongest Incentive:

Income Replacement Rates and Voluntary Coverage in OECD



Source: OECD, Pensions at a Glance, 2007

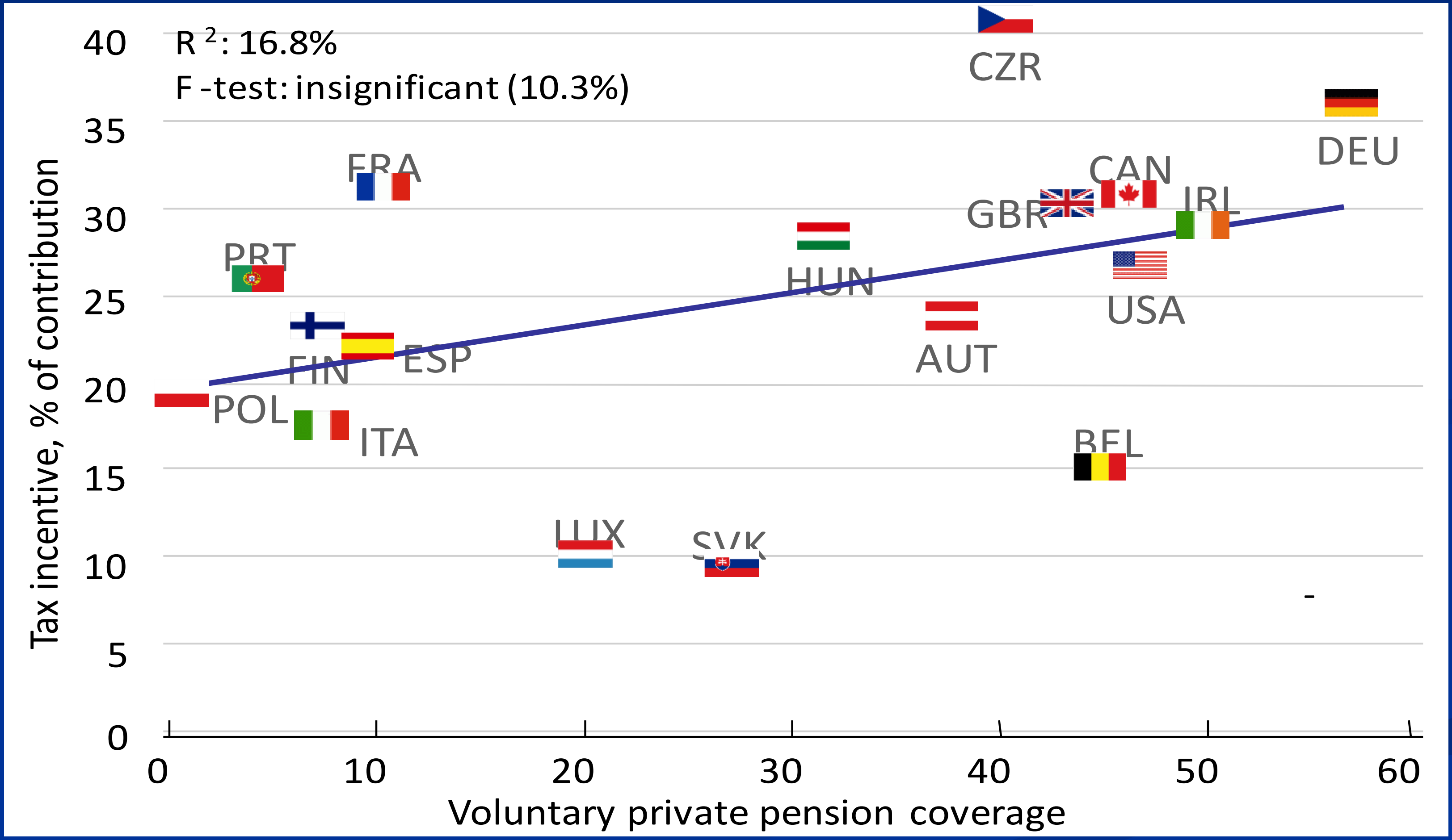
Tax Preferences Can Also Have Indirect Objective

- Availability of preferential tax treatment can be linked to minimum standards or design of pension system
- Common approach in Anglo Saxon countries with occupational systems – limit minimum value, terms and distribution of pension benefits to prescribed standards to receive tax treatment.
- Principle is to link interests of higher income workers and/or owners to moderate or low income - create incentive to extend complementary coverage.

Some Key Policy Question for Tax Incentives

- Do they create high levels of coverage?
- Does it expand the pension system to produce net additions to retirement savings?
- Does it add to overall national savings levels?
- What is the distirbution of tax benefits?

Value of Tax Incentives Does Not Predict Coverage of System in OECD



Source: Whitehouse and Antolin, OECD, 2007

How fair is the distribution: The Case of the United States

Distribution of Value of IRA and DC Plan Tax Subsidies

Income Quintile	*% or Units*	*Share of total*	*Average Value*
Lowest	2.0	0.2	$6
Second	12.7	2.9	$78
Middle	25.0	8.2	$218
Fourth	43.0	19.3	$513
Highest	61.0	69.3	$1,838
Total	28.7	100.0	$531

Source: Urban Institute-Brookings Tax Policy Center, 2004

Does it create new savings: "crowd out" or "crowd in"?

- **Studies of the 401(k) system in the US are contradictory**
  - Some find very high substitution through both decreased private savings and leverage suggesting tax arbitrage and substitution
  - Other find conclude net positive additions but at moderate levels – Some estimates (Engen and Gale 2000) estimate that at best 30% represent net additions to savings
- **Many other more complex issues arise from secondary effects (eg form of assets, how government finances tax subsidies)**
- **Preliminary analysis of developing countries and mandatory systems find some net additions**
- **Key factor may be level of development of financial markets – suggests higher potential for substitution in US and Europe**

Coverage in Voluntary Systems

- Factors Associated with Coverage within systems
  - Income of workers – Strongest predictor in nearly all settings
  - Age of worker – signficant increases at about age 35 - 50
  - Size of Firm has similar effect – very low participation in firms below 25 and informal sector
  - Job Tenure
- All of the factors however interact to create more complex puzzle
- Mitigated by presence of union, employee organization and industry wide funds
- Association of factors with coverage is only moderate – many workers with high expected participation do not – others with low expected probability participate. This suggests many other influences
- Limits of "rational economic" model to explain patterns of coverage and participation have led to increased inerest in behavioral issue

Design and Behavioral Issues

- Start up or Matching Provisions
- Defaults: Auto enrollment and active decision
- Programmed Deferrals
- Financial Literacy and Trust
- Marketing and Information

Start Up Incentives and Matching Contributions

- Likely the most direct and easily understood incentive – immediate high percentage rate of return
- Common practice in U.S. 401(k) plans – contribution matching of ½ of employee contributions up to 6% of pay
- Studies of effects however are mixed:
  - Show range of effects from very small to 25% increase in contributions
  - Seem to be related to composition of the group
- More effective at getting workers to join and for low income workers than increasing longer term savings
- Some contradictory effects – may actually reduce worker contribution levels through substitution or providing reference point.
- Key issue is interaction with other factors – Initial evidence is that effects are small when combined with other factors

Behavioral Incentives
"Escape From Freedom"

- **Automatic enrollment** – Series of studies of US and UK show that requiring workers to "opt out" or make active decision within specified time frame increases participation by up to 60% in first year and 15 to 30% over longer terms
  - Several studies conclude that automatic enrollment has greater overall effect than matching contributions over longer term
  - McDonalds achieved 93% participation – but many were small accounts that were not cost effective or sustained
  - Strongest effect among younger and low wage (Nessmith, Utkus and Young, 2007)
- **Default investment choices** – When these provided have strong effect on initial choices with significant persistence – Workers seems to view as implicit investment advice
- **Deferred Savings Decisions –** Evaluation of program in which savings is taken from future salary increase (Benartzi and Thaler, 2003) finds much higher long term savings rates

Financial Literacy, Trust and Information

- Recent study (Agnew et al, 2007) concludes that degree of financial literacy has effect on participation in retirement savings that is equivalent to financial incentives
- Consistent with earlier findings (Munnel et al 2001) report that planning horizon of individual is significant factor in participation in employer sponsored retirement savings
- Experiment with provision of tax credit in US (Duflo et al 2005) indicates that use of incentive increases greatly with explanation and advice – Provider of advice found to be significant factor
- Trust in financial institutions is important – Person expressing lack of trust did not respond to economic incentives even with efforts to explain immediate value of savings
- Provision of information has some effects -in Swedish Premium Pension system majority made active choices when information program was in place – 60% chose default in later period
- Lusardi (2004) found greater effect of seminars for less educated

Two Paradoxes: Choice and Liquidity

- **Choice increases participation ..But too much choice lowers rates of participation and Investment decisions**
  - One study (Papke 2004) finds that ability to choose investments raises participation in savings and amounts saved by 3 to 8%
  - Another (Iyengar et al) finds that and additional 10 investment choices decreases participation rates by 1.5 -2%
- **Availability of loans increase participation but ability to cash out dissipates retirement savings**
  - One study (Munnel et al 2001) finds that loans increase savings by 1% of earnings – another (GAO 1997) find increases savings rates by a third
  - Experience over 20 years indicates that half of workers take cash out when changing jobs – although now about 80%of the money is ultimately saved for retirement purposes
  - The greater the amount of the fund balances the less is cashed out.

Suggested Explanations for Observed Behavior

- Reluctance to make decisions in the face of uncertainly – Seeking reference points – Safety of the crowd
- Present Orientation – "Hyperbolic Discounting"
- Inertia and Procrastination
- Nominal Loss Aversion – fear of loss greater than desire for gain
- Information Overload – Inability to make decision with too many choices
- Signaling and Framing Effects – Choices interpreted as providing advice -Employer or Government perceived as endorsing choices

Some Interesting Innovations

- Group Savings Arrangements – ROSCAs
- Highly asymmetric return patterns – integration with lottery structure – South Africa program begun in 2005
- Reister Pensions in Germany –
  - Tax exemption and fixed subsidy with additional subsidies for number of children
  - No withdrawals until age 60
- U.S. Pension Protection Act 401(k) revisions
  - Auto enrollment, default options and investment advice
- The Kiwi-Saver system in New Zealand

KiwiSaver – Rules Based Solutions

- **Attempt to incorporate lessons learned from existing forms**
- **Design Principles**
  - All new workers enrolled – can then opt out within specified time period
  - Five year or retirement age lock in
  - Employer can contribute – also substitute scheme
  - $1,000 government start up contribution
  - Public clearinghouse of contributions
  - Limited investment options
  - Individual choice with defaults

Kiwi-Saver Refinements

- Short opt out window - 2 to 8 weeks only
- 3 month holding period to facilitate choice
- Minimum balance before transfer to control fees in relation to balance
- Optional contributions holiday – but only after one year – 5 year maximum but renewable
- Hardship exceptions
- One half of contribution can be directed to qualified mortgage
- Providers established though government tender process – Multiple funds but one default with long term orientation

Some General Conclusions

- Size and perception of public system matters a lot
- Tax incentives are effective but not sufficient condition – greatest effect on higher income groups creates distributional hazards
- Evidence is that “rational economic” model only partially explains outcomes
- Behavior issues are very important – Inertia, financial literacy, loss aversion, information and trust – especially for lower income groups
- How and by whom choices are presented is very important