Sustainability and adequacy of pensions in Europe

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Pensions - an exercise in sustainability

- **Classic questions**
  - Adequacy vs. sustainability
  - Demographics – or the turning of the pyramid
  - To fund or not to fund
  - Luxembourg – a Ponzi scheme?
- **New challenge**
  - Expectations from ESG investing

Origin of pension provision during the industrialisation

- **Old-age pension provision introduced 1889 by Bismarck in Germany**
  - Complementing health (1883) and occupational accident insurance (1884)
- **Main Objective: Immunise workers against the socialist movement**
  - Provision for infirmity and old-age as incidental benefit
- **Imposition of the “Corporatist” structure by the state**
  - Separate corporate body to manage pensions
  - Benefit entitlement based on compulsory contributions of workers
  - Pension age fixed at 70 - when life expectancy at birth was below 50
- **Similar “Corporatist” structure introduced 1911 in Luxembourg**

Retirement as a new idea

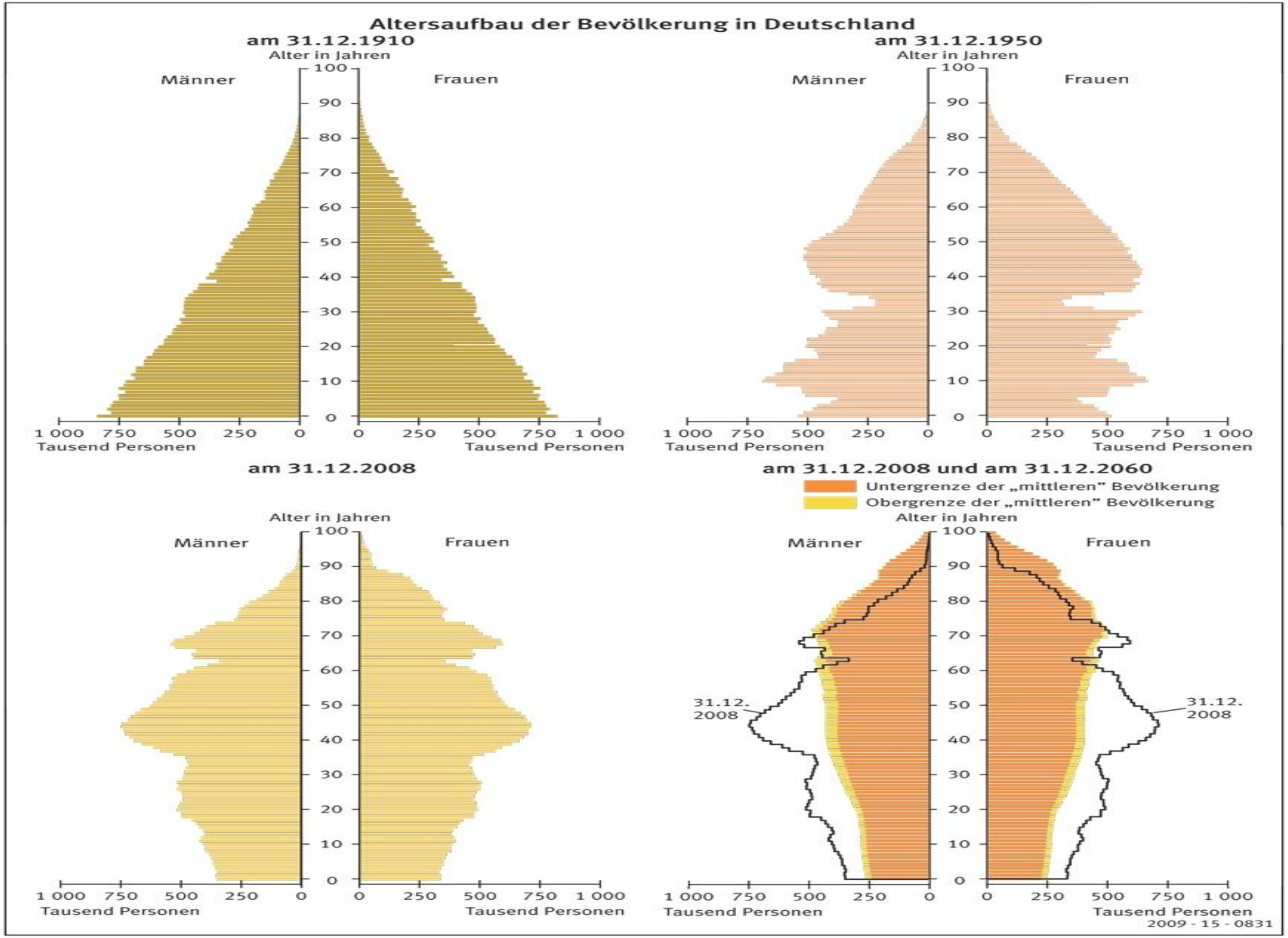
- **Old age in the late 19th century**
  - Industrialisation against backdrop of a subsistence economy for many
  - Bridge the gap between work and death, in the family or in almshouses
  - 1/3 of cohort may expect to reach pension age
  - Remaining life expectancy at 65: around 9 years
- **Retirement in the early 21st century**
  - Comprehensive welfare state
  - Retirement now 1/3 of adult life, with entitlement to a pension
  - 90% can expect to reach pension age
  - Remaining life expectancy at 65: around 22 years

Demographic trends

- **Decrease of infant and child mortality (example of Germany)**
  - Male born 1871: 25% died in first year, 60% reached age of 15
  - Male born 1931: 7% died in first year, 87% reached age 15
  - Male born 2001: 0,5% died in first year, 99% reach age 15
- **Falling fertility rates**
  - From the 1870's to 1930's: Industrialisation - fall from 5,0 to 1,8
  - After World War II: Baby boom – increase from 1,8 to 2,5
  - From 1965 to 1975: "Pillenknick" – fall from 2,5 to 1,4
- **Additional explanations:**
  - Changing role of women and children in society
  - Development of the welfare state

Demographics trends - Immigration

- **Importance of migration – the example of Germany after WW II**
  - 12m refugees immediately after the war
  - 4m foreign workers recruited in the 1960’s and early 1970’s
  - 3m Eastern Europeans of German origin resettled in the late 1980’s
  - Net increase of 9m over 50 years


Altersaufbau der Bevölkerung in Deutschland
am 31.12.1910
Alter in Jahren
Männer
Frauen
Tausend Personen
am 31.12.1950
am 31.12.2008
am 31.12.2008 und am 31.12.2060
Untergrenze der „mittleren" Bevölkerung
Obergrenze der „mittleren" Bevölkerung
31.12. 2008
1 000
750
500
250
0
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90
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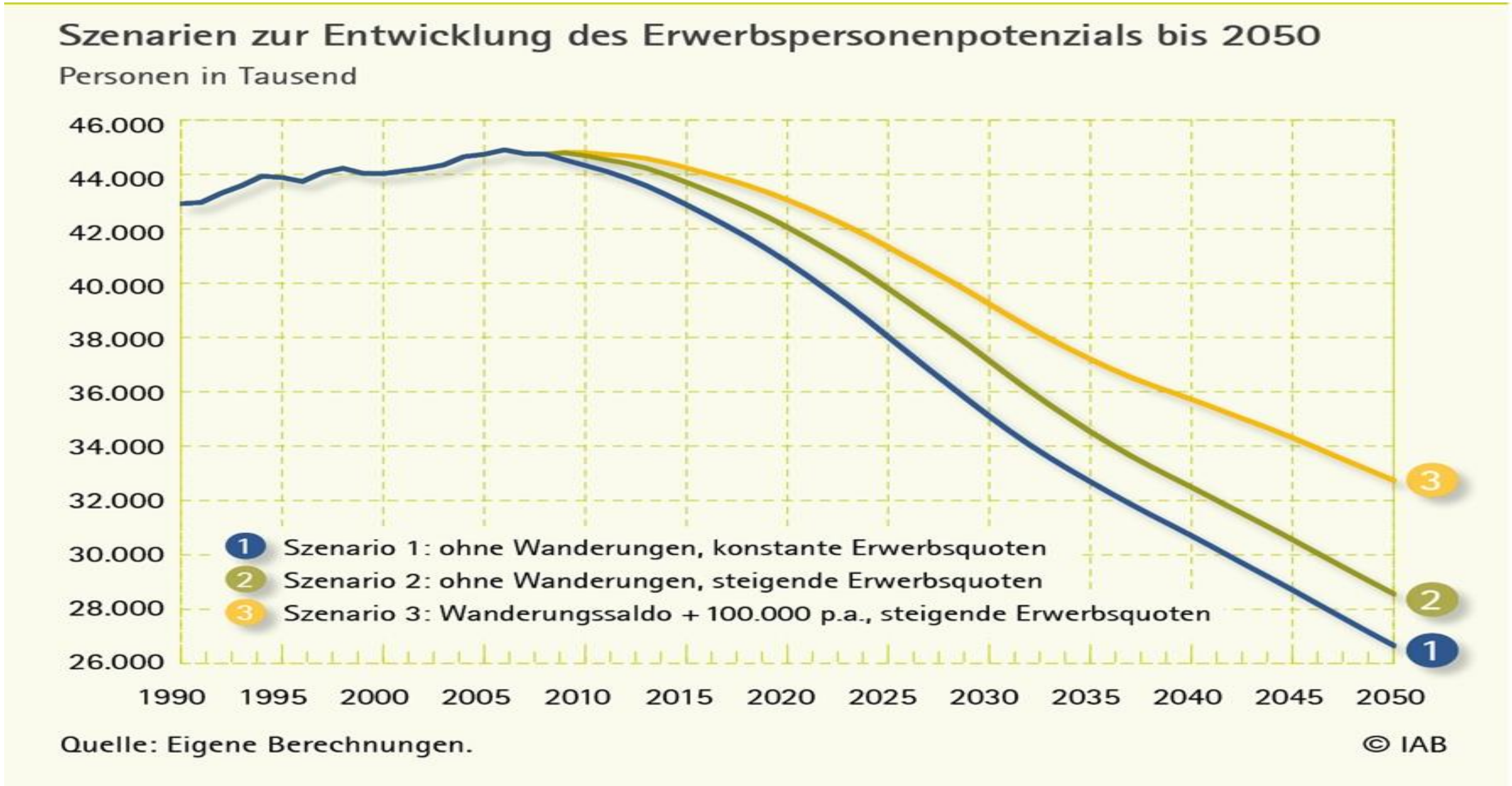
Declining number of workers paying contributions



Demographic "time bomb"

	Dependency ratio (number of >65's per 100 workers (age 20-64)		
Country	1960	2020	2080
EU	16,2	33,5	61,7
Belgium	20,3	33,1	56,8
France	20,8	37,3	62,2
Germany	19,1	36,5	59,5
Luxembourg	17,8	22,3	50,1

Financing pensions

- **Basic mathematical identity: ∑ contributions = ∑ benefit payments**
- **Two methods of financing pensions:**
  - Pay-as-you-go: current contributions of workers = current benefit payments
    - Current contributions depend on economic activity within each country
    - «Contract between generations»
  - Funded pensions: Contributions => Pension Funds => Benefits
    - Requires saving period: $\sum$ contributions t_1 + return t_1= $\sum$ benefit payments t_2
    - Returns in t_1 depend on economic activity in investment countries

Pension provision in the three pillars

- Pillar I: Social security pensions
  - Collective, unfunded, mandatory, defined benefit
- Pillar II: Occupational pensions
  - Individual or collective, funded, defined benefit => defined contribution
- Pillar III: Private pension arrangements
  - Individually, funded, defined contribution

Three pillars in theory

Pillar/ Welfare Model	State-run D, L, F, S	Corporate NL, CH	Liberal GB	Market
Pillar 1a – public, basic pension	30%	30%	30%	30%
Pillar 1b – public, salary-related	55%			
Pillar 2 – private mandatory, salary-related		70%	55%	
Pillar 3 – private voluntary	15%		15%	70%

Three pillars in practice

Gross replacement rate: Pensions as % of final earnings for an average earner (Source: OECD, PAG 2019)				
Country	Public sector mandatory	Private sector mandatory	Private sector voluntary	Total gross replacement rate
EU	45,5%	6,5%	3,4%	55,4%
Italy	79,5%			79,5%
Netherlands	29,0%	42%		71,0%
UK	21,7%		29,1%	50,9%
Luxembourg	78,8%			78,8%
Belgium	46,8%		14,2%	61,0%
France	60,1%			60,1%
Germany	38,7%		13,5%	52,2%

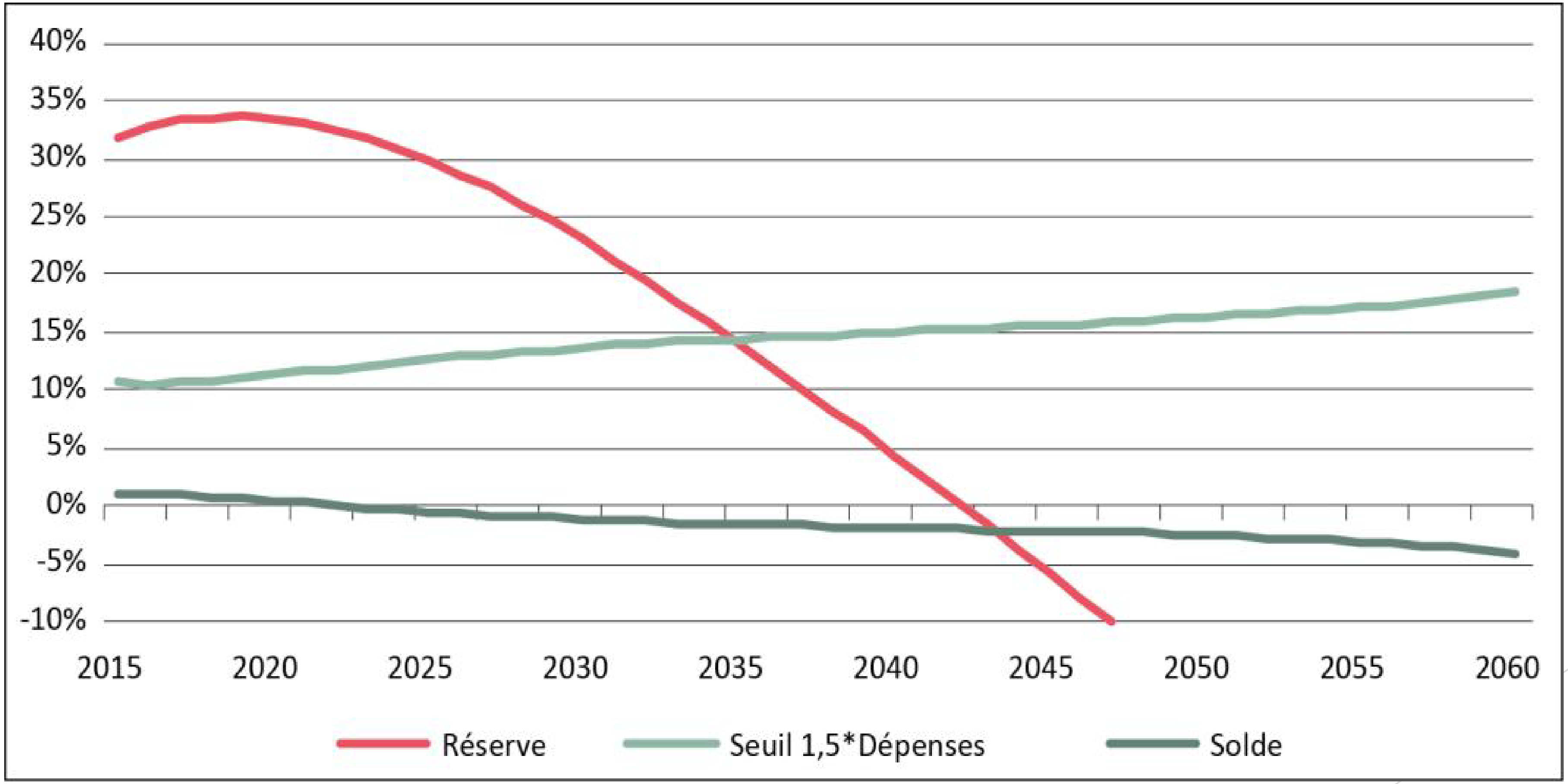
Pension provision in Europe

- **Observations**
  - Preponderance of social security pensions (> 80% of pension provision)
  - Only 8 out of 28 countries have significant 2nd and 3rd pillar provision
  - Only 7 out of 28 countries provide “adequate” pensions (> 70% of final earnings)
  - Funded pensions are no guarantee of adequacy, neither are unfunded pensions

Is there a Luxembourg exception?

- **Original sin: Value of pension entitlements >> Value of pension contributions**
  - Current pension contributions (as percentage of pensionable income) have remained stable since 1985: 8% (employee) – 8% (employer) – 8% (state) = 24 % of wages
  - Pension reforms from 1987 to 2002 have increased the entitlment to pension benefits (or the “constant premium for a population in steady state”) from 37,5% to 55% of wages
  - Pension reform of 2012 will reduce the value of benefits 44% in 2052 (!)
- **Current pensions are funded by high levels of foreign workers:**
  - Foreign workers represent nearly 70% of employment
  - Foreign workers create apparent pension surplus, which has led to increased benefits for current (largely indigenous) pensioners
  - Non-resident workers pay 45% of contributions, but only receive around 25% of pensions

Pension reserve in Luxembourg
(as % of GDP, source IGSS 2016)



Projections into the future

- **Foreign workers (both resident and non-resident) will expect the same level of future pension benefits**
- **Need ever more workers -**
  - Annual increase of 2,64% is required to sustain current regime
    - => 1,3m workers in 2060!
  - Actual increases were 2,1% in 2012-15 and 3,6% in 2017
  - Projected increase to 2060 stands at 1,25% p.a.
- **…or reduce benefits**
  - Reform of 2012 as a start

Burden of pensions increase (nearly) everywhere

	Dependency ratio (number of >65’s per 100 workers (age 20-64)			Public expenditure on pensions as % of GDP	
Country	1960	2020	2080	2020	2060
EU	16,2	33,5	61,7	10,0%	10,7%
Belgium	20,3	33,1	56,8	12,6%	14,8%
France	20,8	37,3	62,2	15,0%	12,5%
Germany	19,1	36,5	59,5	10,3%	12,5%
Luxembourg	17,8	22,3	50,1	9,0%	16,0%

Pension reform - what are the alternatives?

- Pessimists (and actuaries)
  - Solutions must be found from within the pension system
  - Population decline drives reduction in income and wealth
  - Contributions to increase and/or benefits to reduce
- Critics
  - Demographics are used to further the neoliberal agenda
  - Pensions are a moral entitlement
  - Therefore money to pay pensions must be found elsewhere in the economy…

Great expectations from an ESG investment approach

- ESG appears to combine «value for society» with «value for money»:
  - ESG can potentially enhance stockholder returns … (Geczy/ Guerard/ Samonov, Journal of Investing, January 2020)
  - Companies with higher (ESG) ratings are more competitive than their industry peers … (Elling-Lee, Wharton, March 2021)

Great expectations from ESG in pension investment, too:

- Fonds de Compensation « moves to more sustainable investments … amid pressure from parliament and environmental groups » (Delano News 12 Aug 2021)
- Long-term investment horizon and diversified portfolio structures (of pension funds) are two of the principal enablers of ESG … (Lachance & Stroehle, Wharton, March 2021)
- « Pension funds could be a formidable force getting companies to embrace ESG values... yet they must align those goals with their fiduciary duty…» (Knowledge@Wharton 25 May 2021)

The challenges of ESG in pensions:

- As ESG investing moves from concept to compliance, three questions remain in the area of pension funds:

1) *Is ESG investment compatible with the fiduciary purpose of pension funds?*
2) *What impact does ESG have on returns?*
3) *Is ESG a useful concept for investment?*

Fiduciary obligation of a pension fund

- Art. 6 (1) of EU directive 2016/2341: IORP means an institution, operating on a funded basis, for the purpose of providing retirement benefits (for) an occupational activity.
- Art. 5 §1 amended Law of 13 July 2005: Object of the SEPCAV is collection of funds and their investment to spread risks and optimise yield for members
- Idem for ASSEP (Art. 25 §1)
- Taking into account, amongst other things
  - ESG risks (art. 57-4 §2 g)
  - Impact of ESG on investment decisions (art. 78 §1 g)

The impact of ESG on investment returns

- **ESG implementation is a cost driver…** (Geszy et.al., The Review of Asset Pricing Studies, June 2021)
- **… even the best available data is not convincing the sceptics that ESG improves returns** (Henisz, ESG objectives and outcomes, Wharton May 2021)
- **Need proof that this works in the next 12 months, otherwise ESG might be thought of as a fad…** (Henisz, ibid.)

How useful is the concept of ESG investment for pensions?

- **Conflicts of means and objectives**
- **Aggregate Confusion?**
  - What taxonomy/(ies)?
  - What metrics and ratings?
  - Greenwashing
- **Conflicting goals?**
  - Risky investment vs. Financial stability
  - From expectation to enforcement – are we missing a step?

The future of pensions?

- Do we need to re-think the concept of retirement?
  - Pay-as-you-go: Financial sustainability wins over adequacy
  - Funded pensions: Demise of defined benefit pension provision
- How to find the balance between
  - the societal values of ESG on the one hand and
  - the value for money required from pension funds to fulfill their societal role on the other?

- Any questions?

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