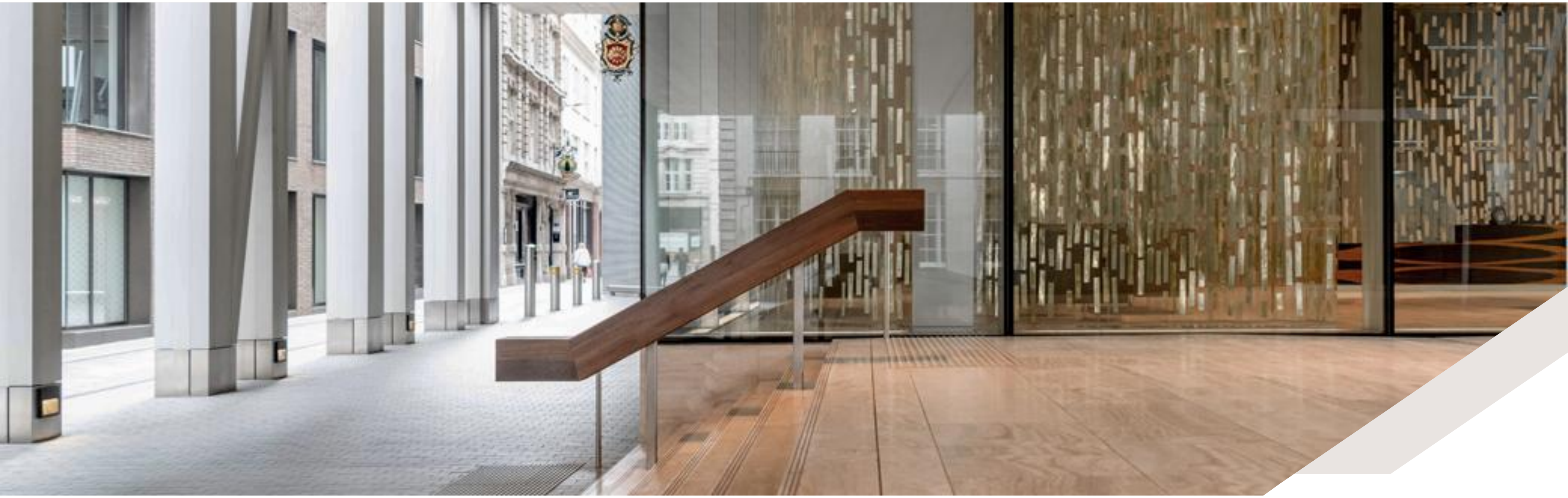

Rothschild & Co Wealth Management

Demography, pensions and portfolios: an asset allocator's perspective

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Personal opinions of the speaker, not for attribution to Rothschild & Co

Rothschild & Co

“The costs of global ageing will be far beyond the means of even the world’s wealthiest nations – unless retirement benefit systems are radically reformed.

Failure to do so, to prepare early and boldly enough, will spark economics crises that will dwarf the recent meltdowns... ”

Peter G Peterson, 1999

“I keep thinking there is bound to be something else. I could hear it sometimes, but I couldn’t play it.”

Charlie Parker, 1920-1955

Outline

1

Pensions: resourcing

Paying for pensions

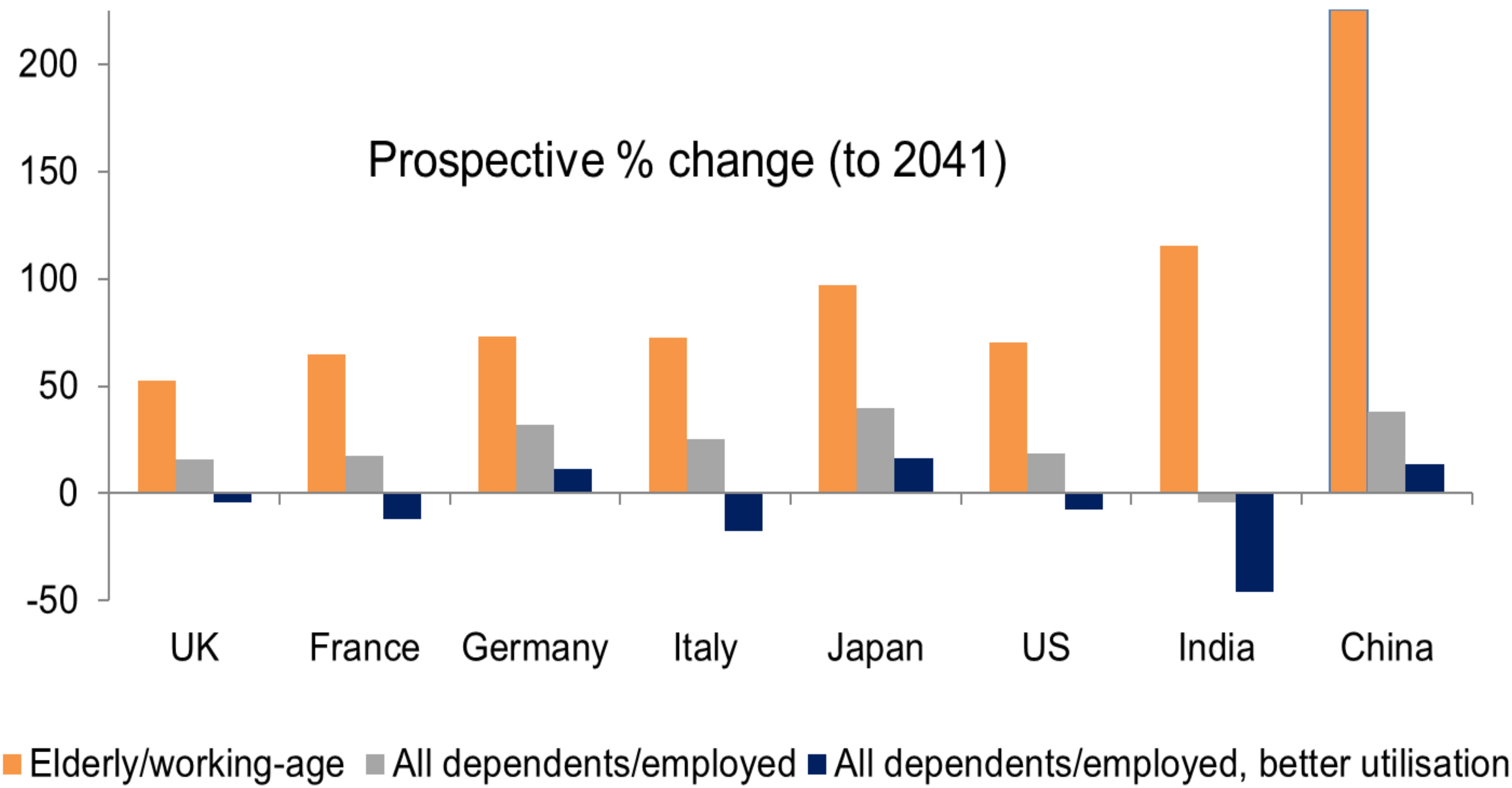
- Collectively, pensions are pay-as-you-go…
- … ie they are not stored ("saved") provisions, but transfers
- They are resourced from contemporaneous output
- Output = f (inputs, productivity)
- Transfers = f (dependency) = f (demography, *labour utilisation)*

Demography		Dependency
$\dfrac{\text{Old}}{\text{Not old}}$	$\neq$	$\dfrac{\text{Not working}}{\text{Working}}$

Dependency and labour utilisation

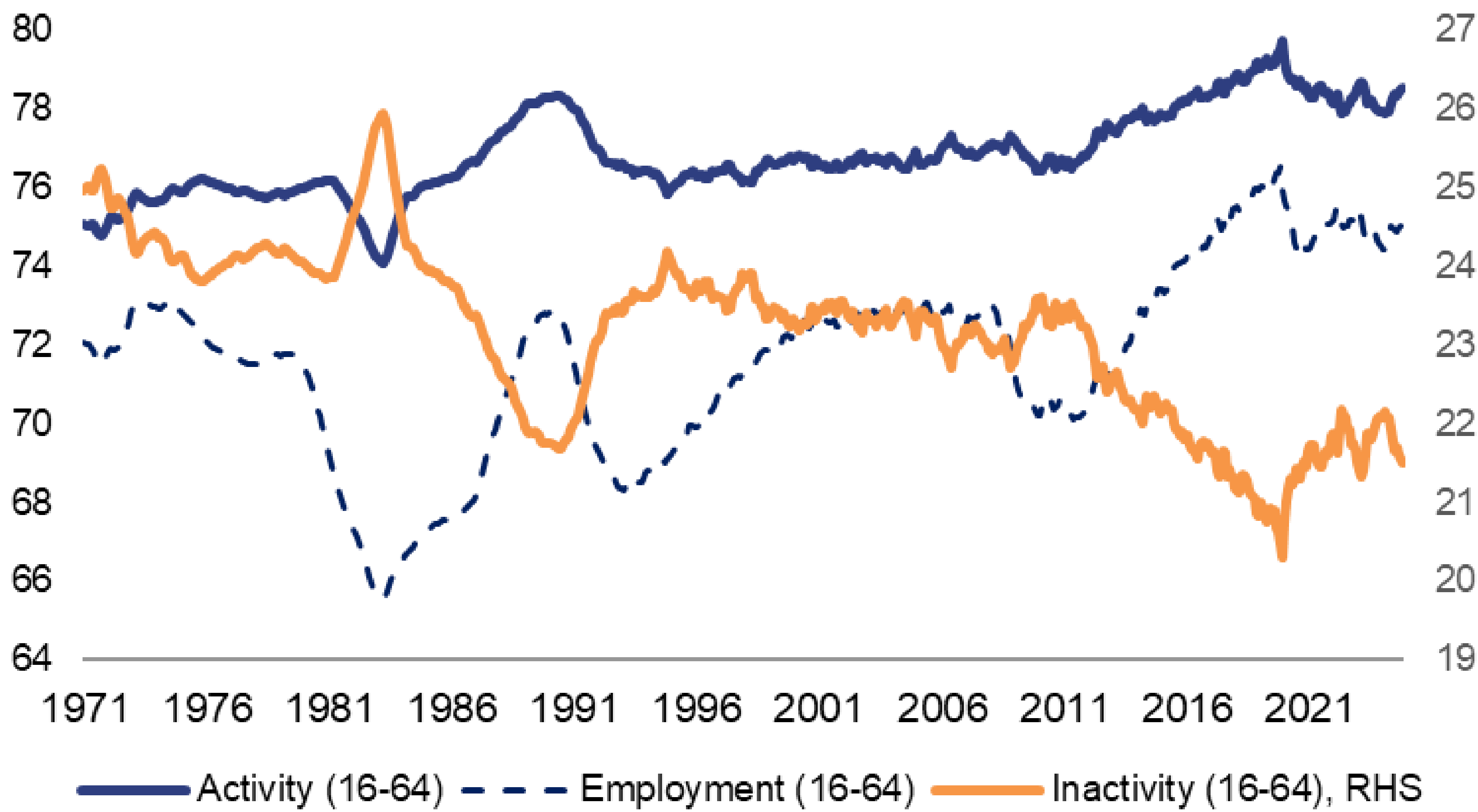
- Not working/Working = (Retired + Inactive + Unemp. + Children) / Employed
- Demography understates *level* (Not working > old, working < not old)…
- … but overstates *change* (rise in Not working < rise in Old)
- Non-participation into work: numerator to denominator
- Unemployment into work: numerator to denominator
- Retirement age: 1 year = 2% working life.
- Workweek: 1 hr = 3%

Demographic timebomb defused (viewpoint: 2012)



Source: "Making Sense of Markets", 2015: US Bureau of Census International Database, author's calculations

UK participation and employment rates (%)



Source: ONS, Datastream, author’s calculations

Some UK perspective

Dependency in 1981 had been higher than it was projected (in 1999, at unchanged utilisation rates) to be in 2031. Inactivity today: 9m. Inactivity in 1983: 9mn.

Since I last looked at the arithmetic…

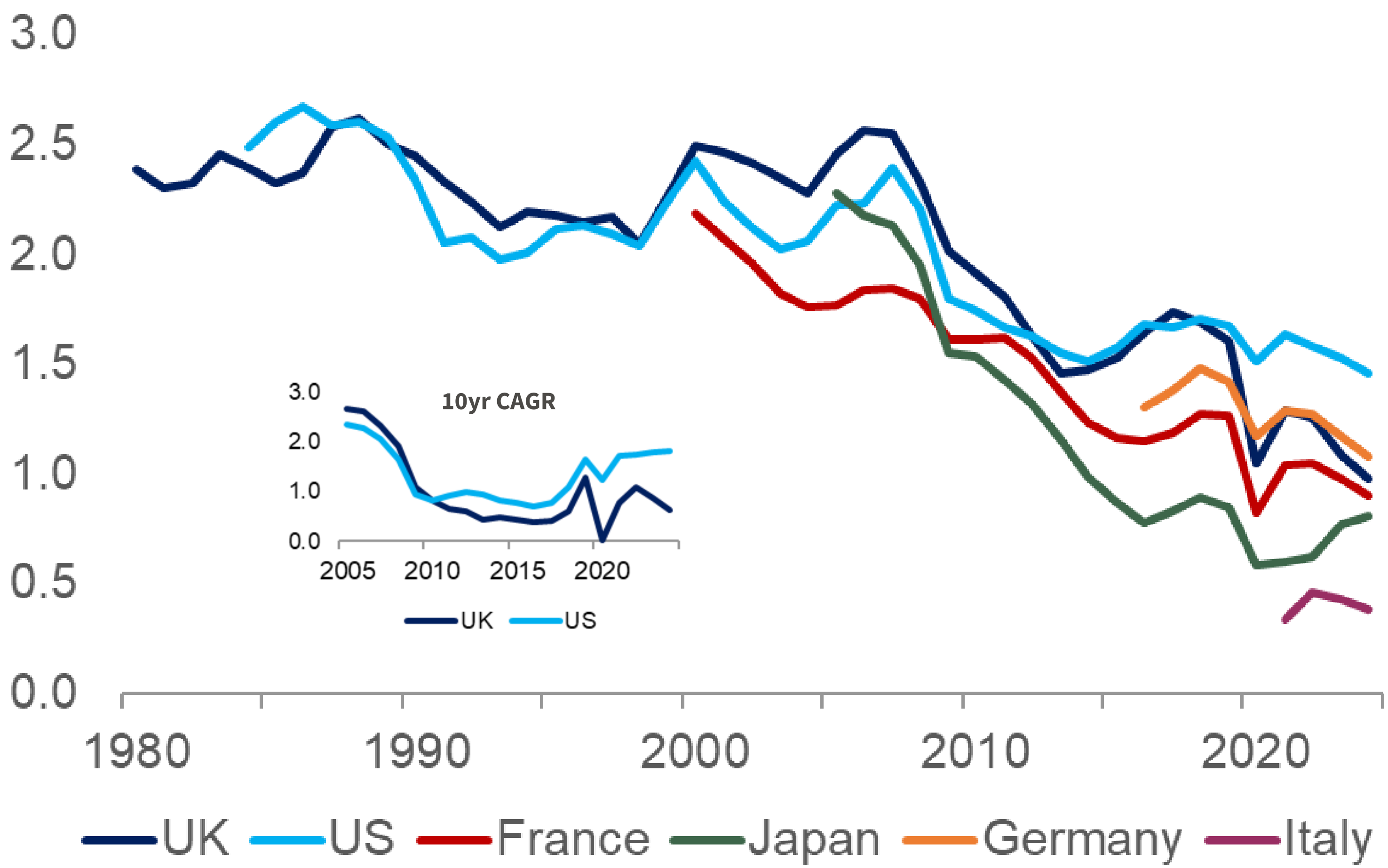
- UK population in 2041: +2 million (3%)
- Participation rate + 3pp (to 79%);
- Employment +5pp (to 75%);
- Unemployment -4pp (to 4%)

Since 2010, higher retirement ages add 6% to working life – which is still perhaps a fifth shorter, proportionally, than in *Hard Times*

These changes mean less room for manouevre now, but there is still some flexibility left (hours, retirement age, *productivity*) – and we have been coping

Measured growth has slowed, not stopped

GDP per capita, %, 25yr CAGR



Source: Rothschild, DataStream Data to 2024
Past performance is not a reliable indicator of future results

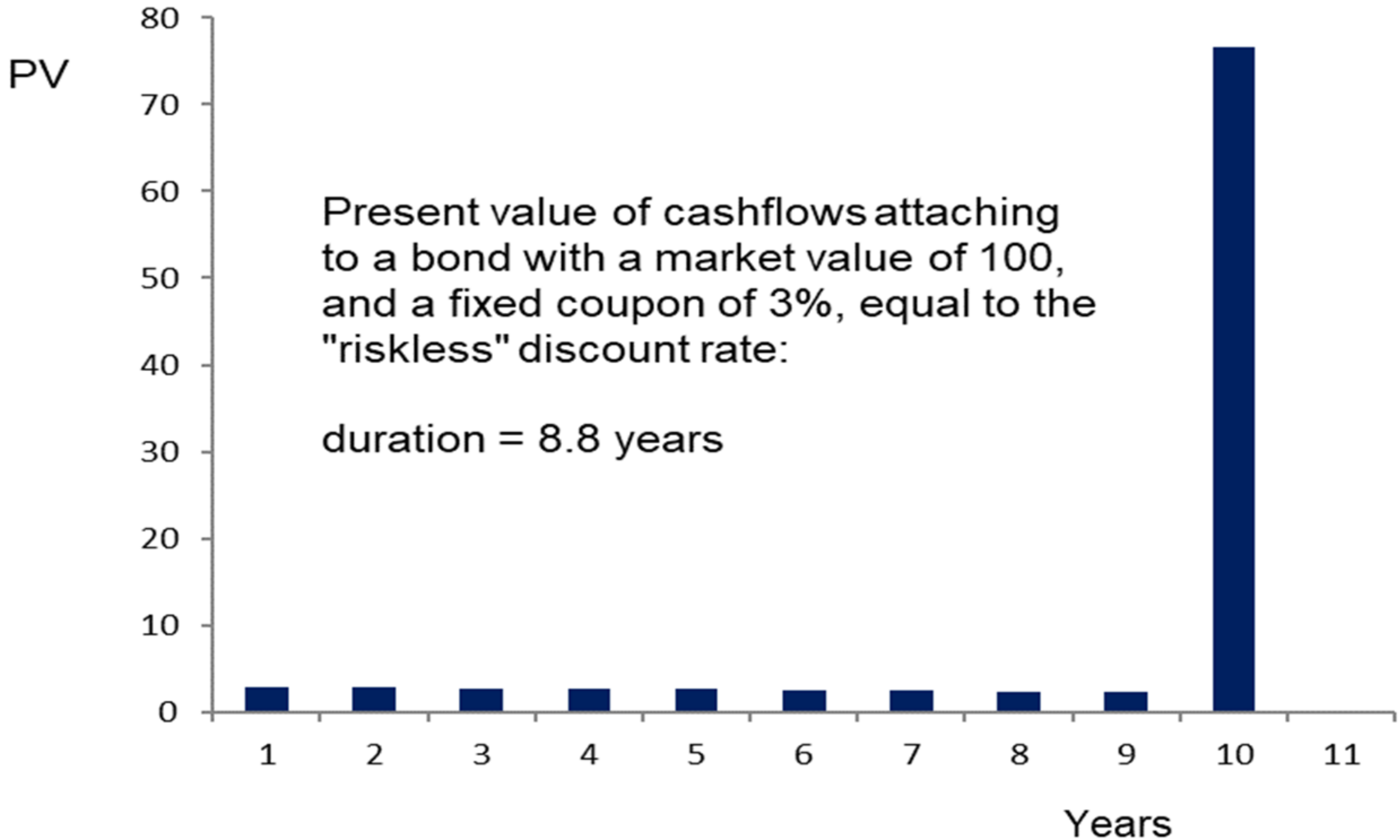
2

Pensions: administration

Pensions: administration

- Public or/and private
- If public: notional "funding" or unadorned transfers?
- If "funded", DB or DC – whose risk? If DB, how to "match"?
- The road to DC: Maxwell, dotcom bubble, FRS17
- Does pension administration affect economic growth?
  (Strong prior belief: for big countries, no)

Duration: bond

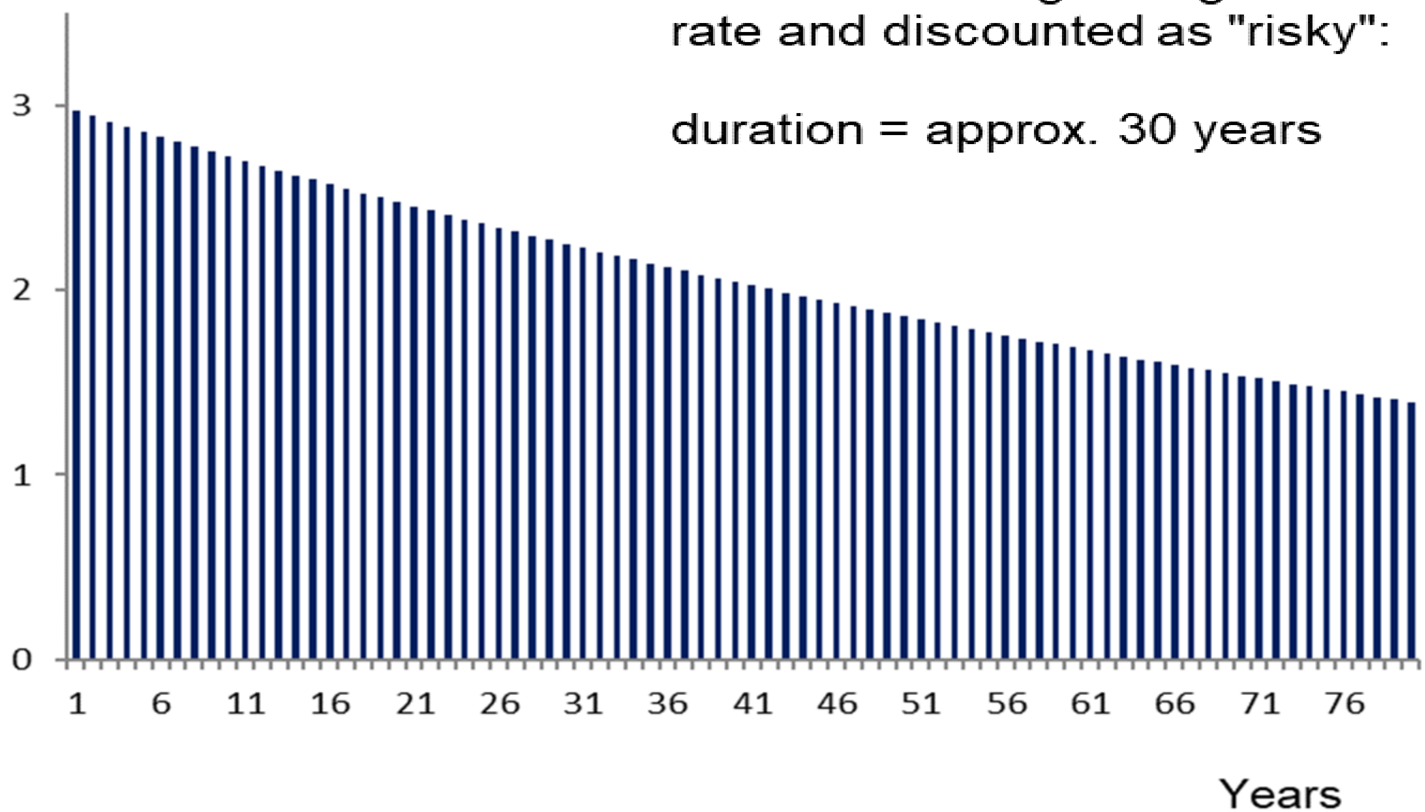


Source: Author’s calculations

Duration: stock

Present value of cashflows attaching to a stock with a market value of 100, and a starting dividend of 3% growing at a fixed rate and discounted as "risky":

duration = approx. 30 years



Source: Author's calculations

Relative return: equities/gilts

Source: Rothschild & Co, MSCI, Datastream

3

Securities markets

How might demography affect security values?

Do long-term valuations and returns reflect flows or “fundamentals”?

Link between flows & demography – **unclear**

Link between fundamentals & demography (I): growth, profitability – **unclear**

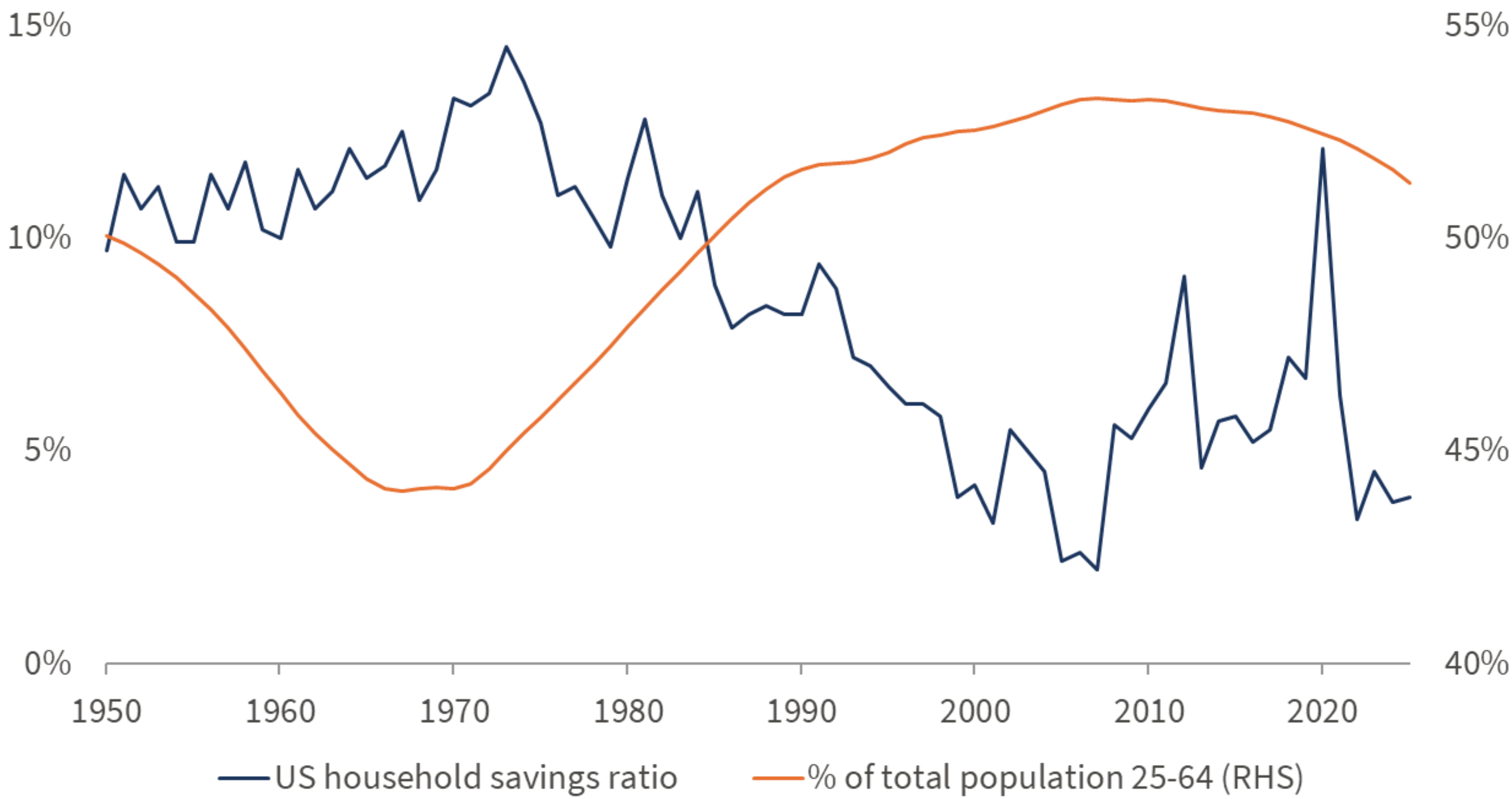
Link between fundamentals & demography (II): discount rates – **unclear**

Re: discount rates, what can we say about *time preference* (impatience, future generations, living standards), and the *production frontier* (return on capital)?

Conclusion?

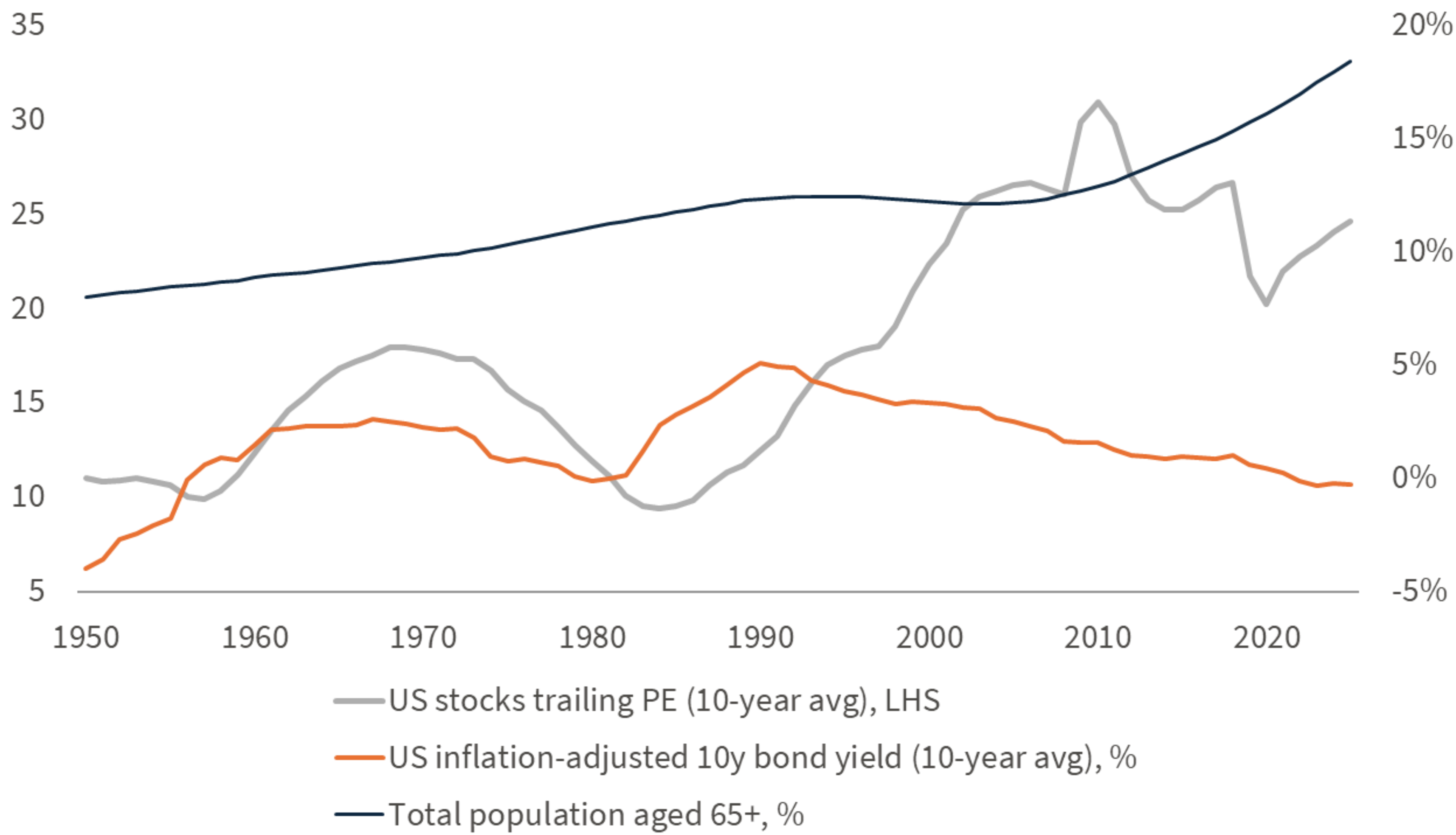
Too many moving parts to say

US savers (% population) and aggregate savings (% disp inc)



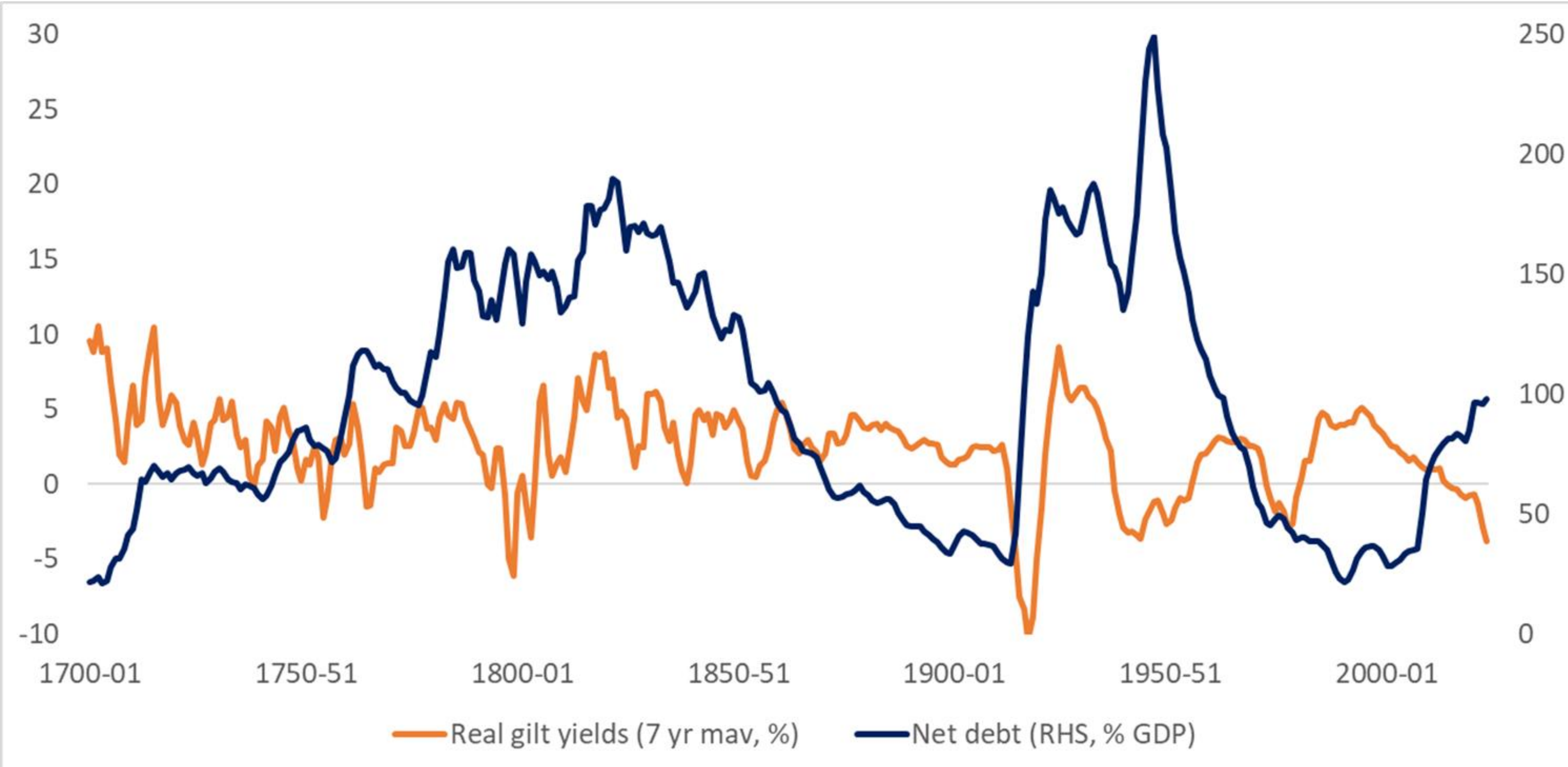
Source: Rothschild & Co, Datastream, UN Population Division Data Portal

US elderly, real bond yields and stock valuations



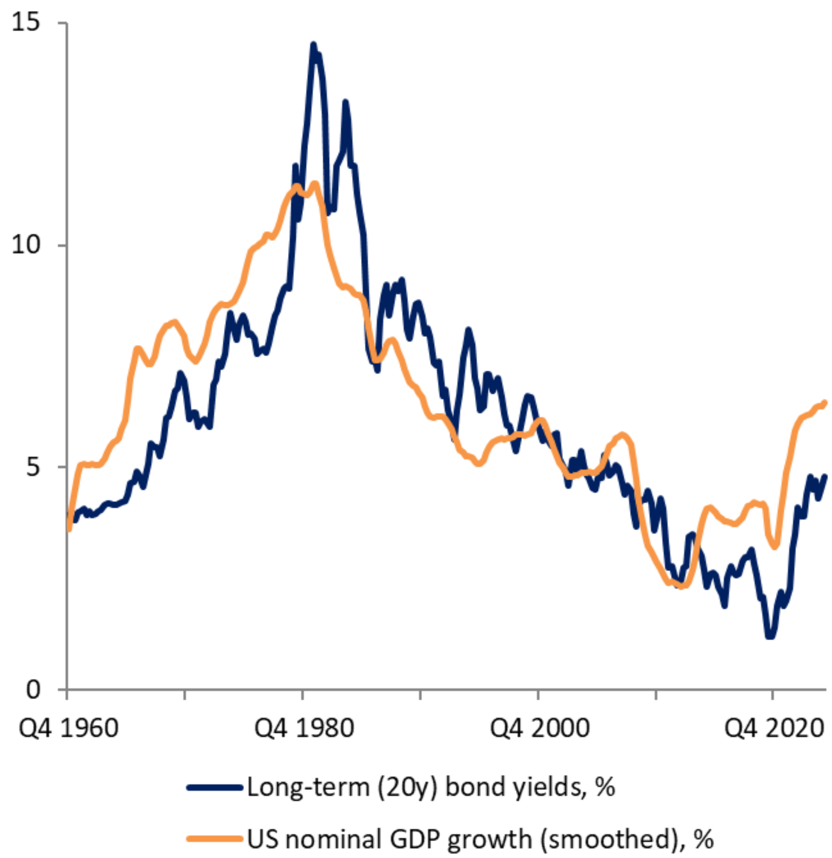
Source: Rothschild & Co, Robert Shiller, Datastream, UN Population Division Data Portal

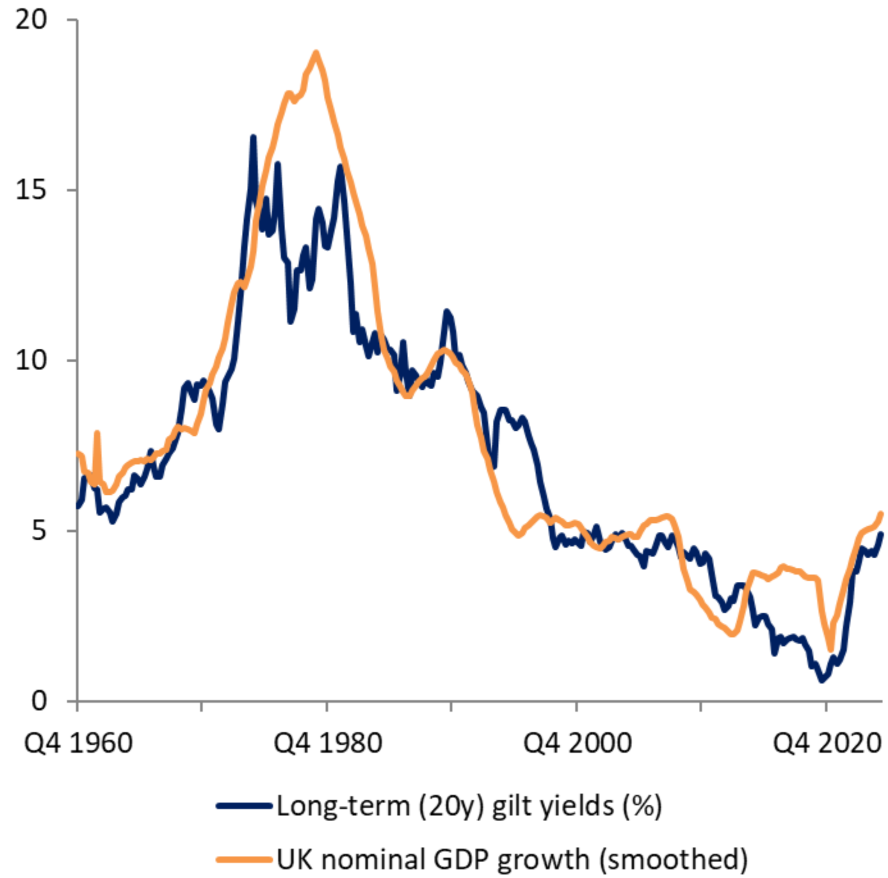
UK government debt and gilt yields: a long view



Source: Rothschild & Co, Bank of England

Bond yields and trend GDP growth: US (LHS) and UK (RHS), %

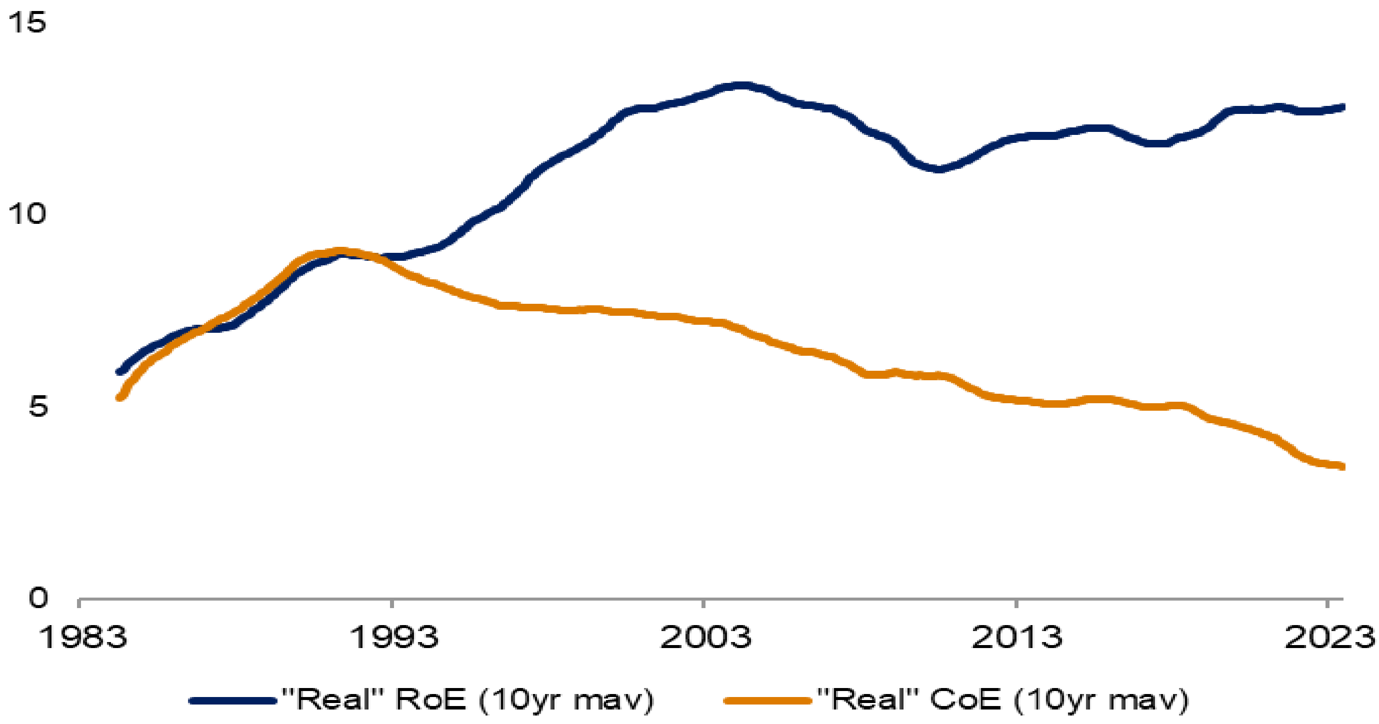




Source: Rothschild & Co, MSCI, Datastream

Stock “fundamentals” (US): is this why PEs went up?

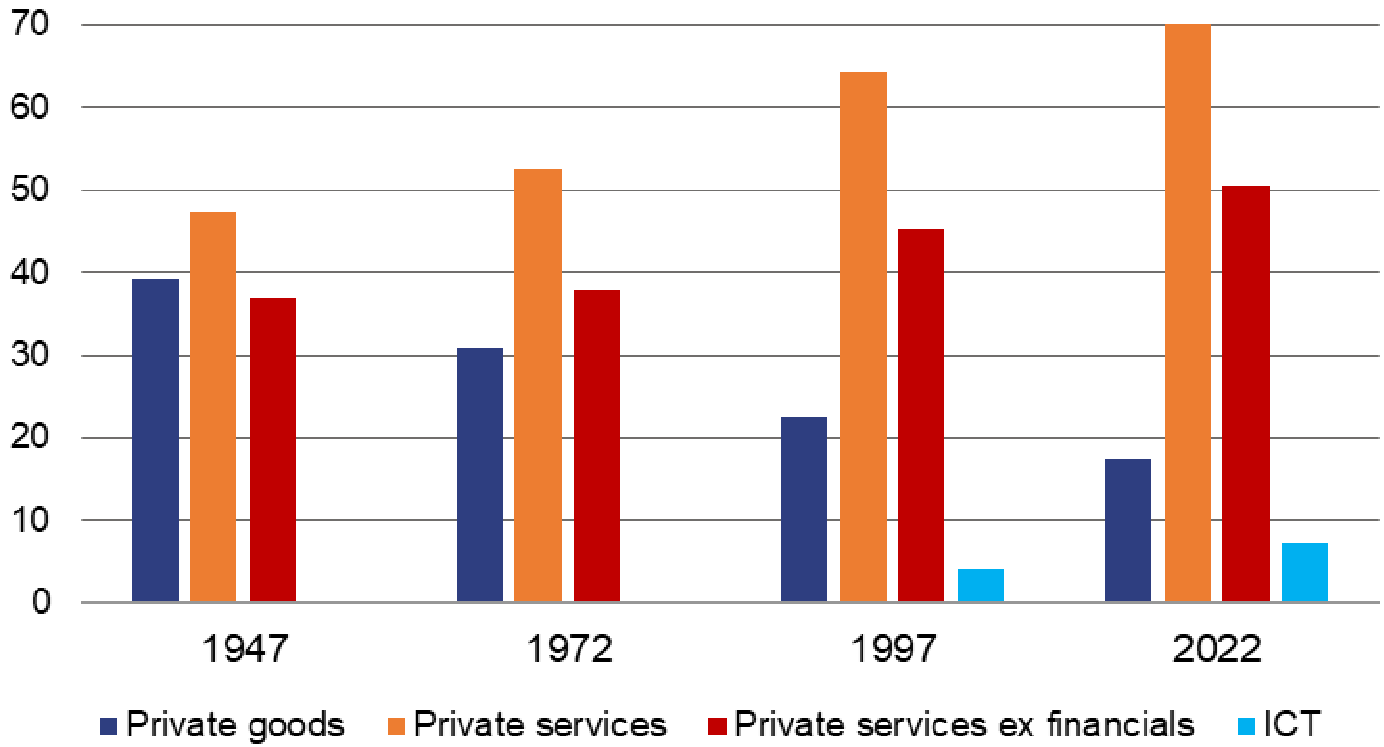
US return on equity (RoE) and proxied cost of equity (CoE), net of inflation: 10-year moving averages, %



Source: Rothschild & Co, MSCI, Datastream

What we make and consume: the changing nature of output

% of US GDP accounted for by:



Intangible output is more elastic, harder to measure, less capital intensive

Source: Rothschild & Co, BEA

Stock and bond returns

At "fair value":

- Expected stock return: starting dividend yield plus growth, DY + G

- Expected bond return: starting yield matches growth, BY = G

=> Equity return less bond return: (DY + G) – G = DY

If dividends grow into perpetuity, stock returns exceed bond returns by an amount equivalent to the starting yield

Is this a "risk premium"? Is (DY + G) "riskier" than G?

4

Postscript

“The biggest big business in America is not steel, automobiles, or television. It is the manufacture, refinement and distribution of anxiety.”

- Eric Savareid, 1964

“The serious problem for humanity is that the left hemisphere is prone to see the world this way and to ‘go it alone’. Not knowing what it is it doesn’t know, it tends to be overconfident it is right.”

- Iain McGilchrist (“The Matter With Things”, 2021)

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