

An aerial night view of a city, likely London, showing a dense urban landscape with numerous illuminated buildings and streets. The lights create a warm, golden glow against the dark night sky. The city's layout is visible, with roads and structures packed closely together.

ECONOMICS AND FINANCE OF PENSIONS

Lecture 9

**REDISTRIBUTION, RISK SHARING AND
REGULATION**

Dr David McCarthy



Today's lecture

- Redistribution
 - How to evaluate it?
 - DB pensions
 - State pensions
- Risk-sharing
 - Diversifiable and undiversifiable risks
 - Employer vs. employees
 - Optimal home of risks
- Regulation
 - Marketing, prudential & product design



Why is redistribution important?

- It affects the incentives of people in the plan and may therefore be an intended part of the design
 - So its important to measure if you are trying to achieve a specific objective in the plan
 - Remember that retention, recruitment, retirement, reward all depend to some extent on redistribution inside the plan
- May actually be unintentional, and systematically harming particular groups of workers without their knowledge
 - So its important to try to discover these if you want to eliminate them



Measuring redistribution

- It is not an easy task to measure the extent of redistribution in a pension system or plan
- Extent of *ex ante* redistribution depends on a number of factors
- First, there are the modelling choices
 - Unit of analysis (individual or household)
 - Time period of analysis (single year, decade or lifetime)
 - Discount rate (which affects the implicit weighting of redistribution now vs redistribution later)
 - Conditioning variables (which affects what you are calling *ex ante* and what *ex post*)
 - Utility-based or financially-based (what is the difference?)



Two types of redistribution

- Redistribution in the contributions / taxes
 - E.g. National Insurance contributions are apparently quite regressive, as are FICA taxes in the US
 - Typical DB pension fund contributions are regressive
- Redistribution in the benefits
 - Both the benefit formula and in the length of time that individuals are around to collect the benefit

Redistribution in Social Security

Baseline measures of distributions of own social security benefits and taxes for all age eligible respondents^a

	Annualized individual AIME deciles ^b										All
	\$0–1 K	1–4	4–7	7–11	11–16	16–21	21–26	26–31	31–38	38+	
Average lifetime taxes ^b	\$1 K	9	21	37	57	79	105	130	156	187	78
Average lifetime benefits ^b	1	15	36	48	59	72	86	97	106	113	63
Measures of redistribution percent by which benefits in decile are increased due to redistribution	3.2%	51.1	51.7	36.8	21.7	11.3	1.5	–8.8	–18.8	–33.2	–
Share of total benefits redistributed to the decile	0%	1.2%	2.9	2.8	2.0	1.3	0.2	–1.4	–3.2	–6.0	–
Rate of return percentiles:											
90%	4.5	6.2	6.0	5.0	4.3	3.8	3.6	3.0	2.6	2.0	4.8
75%		5.2	5.2	4.5	3.9	3.4	3.1	2.5	2.1	1.7	3.9
50%		4.5	4.6	3.9	3.4	2.9	2.4	2.1	1.9	1.5	2.6
25%		3.3	3.9	3.2	2.6	2.2	2.0	1.8	1.6	1.3	1.6
10%			2.8	2.4	1.7	1.6	1.6	1.6	1.4	1.1	0.4

^a The data are for respondents to the Health and Retirement Study, those born from 1931 to 1941. Earnings are imputed using the matched social security earnings records if available, and otherwise using the earnings history from the respondent interview. In addition, all earnings are projected until the individual's expected date of retirement. AIME values are indexed to 1992. Mortality tables reflect the relationship of mortality to household income, and the discount rates are based on the 10-year government bond rate prior to 1992 and the Social Security intermediate projection after 1992. Percent by Which Benefits in Decile Are Increased compares actual benefits of the group to the benefits that would have been received if benefits were pro-rated to taxes for the entire population. Share of Total Benefits Redistributed to the Decile expresses the net redistribution to the group as a percentage of the total benefits for all individuals.

^b In thousands of dollars.

Source: Gustman and Steinmeier (2001)

Redistribution in Social Security

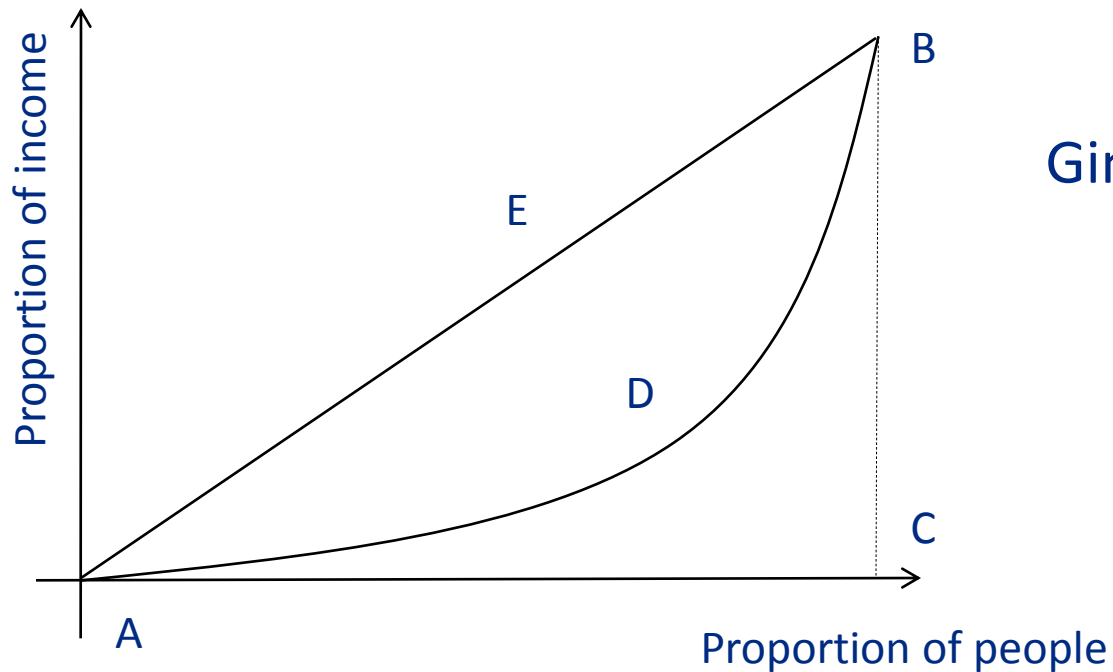
Share of total benefits redistributed to (from) the decile^{a,b}

	Annualized individual AIME deciles ^c										Fraction of total benefits redistributed
	\$0-1 K	1-4	4-7	7-11	11-16	16-21	21-26	26-31	31-38	38+	
Own benefits and taxes	0%	1.2	2.9	2.8	2.0	1.3	0.2	-1.4	-3.2	-6.0	10.6%
Including spouse and survivor benefits	0%	1.0	2.3	2.0	1.2	0.5	-0.2	-0.9	-2.1	-3.8	6.8
Annualized family AIME range ^c	Annualized family AIME deciles										
	\$0-6 K	6-13	13-20	20-26	26-31	31-36	36-41	41-46	46-53	53+	
Family benefits and taxes	1.4%	1.1	0.7	0.5	0.8	0.5	0.1	-0.5	-1.3	-3.2	5.0
Combined annual earnings range ^d	Combined family significant annual earnings deciles										
	\$0-13 K	13-21	21-29	29-35	35-41	41-46	46-53	53-62	62-79	79+	
Family benefits and taxes	1.5%	0.5	0.2	0.1	0.2	-0.2	-0.4	-0.5	-0.8	-0.6	2.5

- For individuals, social security is quite redistributive, but when the unit of analysis is families, US social security is much less redistributive
- Some people have low lifetime earnings because they don't work much (but their spouses do)

Coronado et al (1999)

- Use Gini co-efficients to calculate the redistribution implicit in US social security under different assumptions



Gini coefficient is:

$$\frac{\text{area ACBD}}{\text{area ACBE}}$$



Gini coefficients

- Measure Gini coefficients of income and of wealth
- A coefficient of 1 means that income/wealth is evenly distributed
- A coefficient of 0 means that the richest person has all the income / wealth
- Coronado et al (1999) calculate Gini coefficients before and after Social Security under various assumptions to test how social security changes the distribution of income

Coronado et al (1999)

	(1) Income Measure	(2) Type of Mortality	(3) Discount Rate	(4) Gini Index Before-Tax	(5) Gini Index After-Tax	(6) Effective Progression	(7) Overall
Case 1	Annual Capped Earnings	Standard	NA	0.6427	0.5450	1.2734	<i>Progressive</i>
Case 2	Lifetime Capped Earnings	Standard	2%	0.3987	0.3664	1.0537	<i>Less Progressive</i>
Case 3	Lifetime Uncapped Earnings	Standard	2%	0.4357	0.4076	1.0498	<i>Less Progressive</i>
Case 4	Individual Potential Income	Standard	2%	0.2664	0.2591	1.0100	<i>Less Progressive</i>
Case 5	Household Potential Income	Standard	2%	0.2142	0.2123	1.0024	<i>Less Progressive</i>
Case 6	Household Potential Income	Income-Differentiated	2%	0.2198	0.2192	1.0008	<i>Less Progressive</i>
Case 7	Household Potential Income	Income-Differentiated	4%	0.2181	0.2199	0.9977	<i>Regressive</i>



Redistribution in DB pensions

- This depends on the benefit & contribution formula of the DB plan, as well as on lifetime outcomes
- Clearly, DB pensions redistribute away from men and towards women in the annuity factors, because women live longer (but women also earn less)
- Furthermore, they distribute away from people with flat earnings profiles towards people with peaked earnings profiles (“low flyers” vs “high flyers”)
- They redistribute away from the poor and towards the rich (rich people live longer so get to collect more pensions)
- Finally, they distribute away from early leavers and towards long stayers at the company



Cocco and Lopes (2004)

- Examine the pension choices of UK workers (whether to contract out of SERPS or to buy a personal pension)
- Find that
 - Workers with higher expected income growth are more likely to choose to join final salary DB schemes
 - Workers with higher earnings volatility are less likely to choose final salary DB plans
 - Workers with more income are more likely to choose a pension of any type



Sutcliffe (2007)

- Examines the choice between final salary and career average DB pension schemes
 - Finds that career average schemes are less regressive than final salary schemes, both for men and women and high and low earners



Inter-generational redistribution

- DB pensions schemes (state and private) redistribute between generations as well as across generations
- In state schemes, this redistribution is towards the first generation (the one that set up the pension plan)
 - They get benefits that the next generation subsidises, because the contribution (tax) rate is set relative to an entire population, but benefits are disproportionately valuable to the older workers
 - Subsequent generations must either find a new generation to pass the debt to, or they must take lower benefits themselves in order to pay it off



Generational Accounting

- This is a way of understanding inter-generational transfers in government spending generally, but it is particularly useful in understanding transfers related to pension systems
- Generational accounts are calculated by taking the present value of future taxes paid by each generation and subtracting from these the present value of transfers from government
- They were first developed by Alan Auerbach and Larry Kotlikoff

Generational Accounting

- Generational accounts are calculated as:

$$N_t = \sum_{i=0}^D (1+r)^{-i} T_{t,i} - \sum_{i=0}^D (1+r)^{-i} B_{t,i}$$

Account of generation born at time t (red arrow pointing to N_t)

Taxes paid by generation t , i years from now (blue arrow pointing to $T_{t,i}$)

Benefits received by generation t , i years from now (green arrow pointing to $B_{t,i}$)

- They must satisfy the government's intertemporal budget constraint:

$$W_0 = - \sum_{t=0}^{\infty} N_t$$

Discounted present value of government income less outlay (purple arrow pointing to W_0)

Sum of all future generational accounts (yellow arrow pointing to N_t)

UK Generational Accounts (1997)

Table 2
Generational Accounts Under Baseline Policy (in 1997 £)

Age	GA	Taxes					Transfers					
		Income Tax	Capital Taxes	Taxes on Prod.	Social Security Contrib.	Other Revenues	Pensions	Health	Education	Youth/ Maternity	Social Insur.	Other Expend.
0	25,161	33,573	11,999	43,354	21,783	5,898	-5,404	-26,555	-24,404	-8,131	-16,218	-10,735
5	41,217	39,233	14,029	50,629	26,128	6,635	-6,392	-26,124	-25,311	-6,958	-19,132	-11,521
10	65,632	46,064	16,461	59,226	31,292	7,513	-7,629	-26,893	-20,069	-5,369	-22,535	-12,430
15	92,783	54,140	19,345	69,065	37,430	8,524	-9,161	-28,616	-14,412	-3,378	-26,690	-13,465
20	115,779	61,385	21,839	74,795	42,720	9,074	-10,844	-27,618	-9,730	-2,138	-29,615	-14,089
25	121,712	62,166	21,918	72,712	42,124	8,911	-12,730	-23,018	-6,089	-2,032	-28,677	-13,574
30	111,045	59,176	20,759	69,611	38,493	8,698	-15,453	-23,053	-5,030	-1,762	-27,435	-12,959
35	93,480	53,479	18,980	64,680	33,936	8,241	-18,711	-23,436	-4,069	-1,320	-26,100	-12,201
40	69,679	45,893	16,542	58,761	28,378	7,687	-22,815	-24,208	-3,304	-749	-25,108	-11,397
45	35,730	35,859	13,340	51,182	21,675	7,116	-30,079	-25,357	-2,353	-318	-24,701	-10,634
50	976	23,659	9,583	41,988	14,401	6,283	-35,365	-24,464	-1,565	-109	-23,936	-9,499
55	-39,095	13,282	6,449	34,496	7,592	5,643	-46,424	-26,937	-798	-30	-23,574	-8,793
60	-71,927	5,755	4,129	27,119	2,528	4,833	-58,199	-28,539	-269	-7	-21,478	-7,799
65	-87,703	2,258	3,151	20,362	408	3,929	-63,040	-29,737	-48	-1	-18,294	-6,689
70	-85,811	1,365	3,027	14,782	14	3,046	-55,147	-30,667	-1	0	-16,609	-5,621
75	-80,183	732	3,228	10,828	12	2,278	-44,448	-31,863	-1	0	-16,250	-4,699
80	-72,369	400	3,423	7,495	3	1,665	-33,840	-32,127	0	0	-15,529	-3,857
85	-67,877	271	3,633	5,241	0	1,292	-27,767	-31,802	0	0	-15,391	-3,353
90	-58,054	152	2,998	2,901	0	981	-22,633	-25,187	0	0	-14,442	-2,823
95	-46,003	4	2,162	1,412	0	745	-18,015	-17,654	0	0	-12,372	-2,285
FUT	35,159											



Generational imbalance

- If governments are scheduled to spend more on generations in the future than on generations today, then this will show up in the generational accounts
- We can call this a “generational imbalance”
- Measured as the proportional change in the taxation required on future generations if there is no change in current fiscal policy



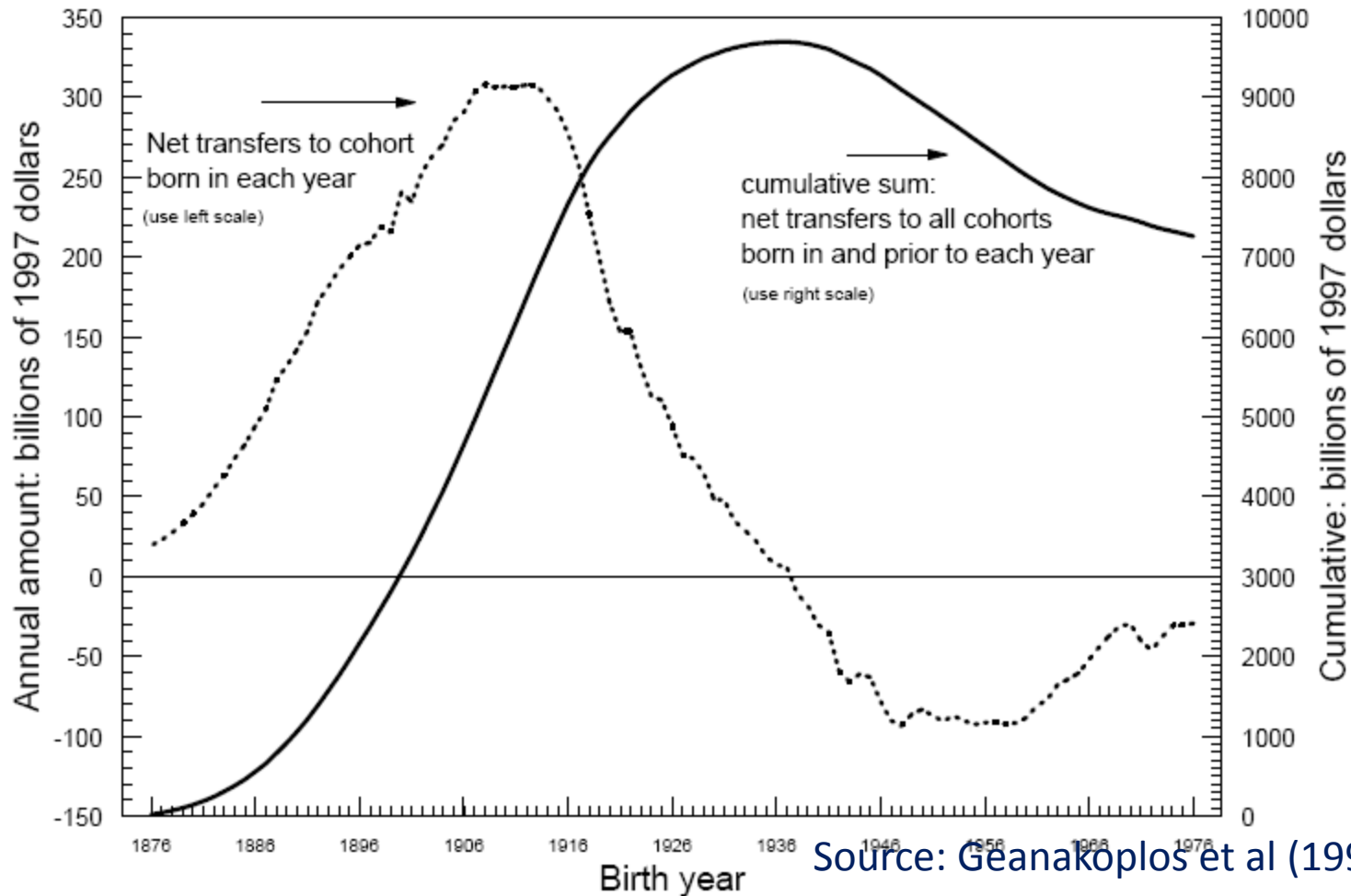
Generational accounts & pension systems

- Imagine that generational accounts are in balance and the government introduces a PAYG tax system

$$N_t = \sum_{i=0}^D (1+r)^{-i} T_{t,i} - \sum_{i=0}^D (1+r)^{-i} B_{t,i} = 0$$

- What will happen?
- The retired generations will receive transfer payments from the government, so their intergenerational accounts will fall
- Therefore, to preserve government balance, the intergenerational accounts of future generations must rise

US Soc Sec Generational Accounts (1997)



Source: Geanakoplos et al (1998)



Difficulties with Generational Accounting

- They don't include the taxes already paid by living generations (easy to fix)
- They ignore intra-generational transfers (large in social security systems)
- They ignore cohort effects
- They ignore non-governmental intra-generational transfers
- They assume that fiscal policy is fixed
- They rely on forecasts of the future which may be incorrect
- They don't reflect risk



Occupational DB pensions

- Simply viewed in terms of benefits and contributions, these are redistributive in exactly the same way
 - The first generation benefits
 - Subsequent generations must repay the debt, or pass it on to new generations
- But this depends on the age incidence of pension costs
 - If an older worker receives benefits worth 50% of salary, and a younger worker receives benefits worth 1% of salary, are their wages offset to reflect this?
- The difference between occupational DB plans and government plans is the presence of the employer, who theoretically at least, can honour the debt if the plan fails



Redistribution in DC pensions

- Many of the regressive elements of DB schemes are eliminated in DC schemes
 - No high vs low flyers
 - No male vs female annuitisation distortions
 - No long vs short stayers
 - Rich vs poor annuities are still there (unless the annuities providers begin to rate by lifestyle, which is possible)
 - Other hidden subsidies
 - Those who change portfolio often vs those who leave their portfolios unchanged



Brown (2003)

- Examines the financial transfers implicit in mandatory annuitisation
 - Uses both a financial-based measure and a utility-based measure so that the effect of insurance against risks is taken into account as well when measuring the redistribution



Annuity money's worth

- This is a measure of how expensive annuities actually are

$$AMW = \frac{EDPV(\text{Annuity Payments})}{\text{Annuity Price}}$$

- Given reasonable assumptions about the interest rate and expected lifespan of purchasers, how does the expected discounted present value of annuity payments compare with the price that is actually charged for the annuities?

Money's worth of annuities

- Brown (2003) analyses the money's worth of different types of unisex annuities for different subgroups of the population in the US with different types of annuities
- This was part of the social security privatisation debate there

Money's Worth of Annuities

	Real Annuity $r = 0.03$	Nominal Annuity $r = \pi = 0.03$	Real Annuity With 20-Year Period Certain
MEN			
All	0.920	0.938	0.972
All Whites	0.927	0.944	0.973
All Blacks	0.862	0.886	0.964
All Hispanics	0.988	0.998	0.980
Whites: College +	0.967	0.980	0.978
Whites: HS +	0.916	0.934	0.973
Whites: < HS	0.865	0.889	0.964
Blacks: College +	0.916	0.935	0.970
Blacks: HS +	0.857	0.881	0.964
Blacks: < HS	0.800	0.830	0.955
WOMEN			
All	1.076	1.059	1.026
All Whites	1.084	1.067	1.027
All Blacks	1.022	1.011	1.018
All Hispanics	1.123	1.097	1.042
Whites: College +	1.106	1.086	1.030
Whites: HS +	1.080	1.063	1.027
Whites: < HS	1.044	1.031	1.022
Blacks: College +	1.055	1.041	1.023
Blacks: HS +	1.022	1.011	1.018
Blacks: < HS	0.976	0.970	1.011

Annuity equivalent wealth

- We can estimate the ratio of unannuitised wealth to annuitised wealth which gives individuals the same level of lifetime satisfaction, called “annuity equivalent wealth”
- First we solve the equation for w

$$V_0(w, 0) = V_0(0, y)$$

Expected discounted lifetime utility of consumption if wealth is 0 and annuity income is y (need an economic model)

- And then examine the ratio

$$AEW = \frac{w}{\ddot{a}_0^r y}$$

Expected discounted lifetime utility of consumption if wealth is w and annuity income is 0 (using same economic model)

- If annuity income is more valuable than an equivalent amount of cash, then $AEW > 1$

Annuity equivalent wealth

- The AEW differences are much lower between different groups than the AMW's
- Why?

Annuity Equivalent Wealth Under Uniform Pricing

	CRRA = 1	CRRA = 2	CRRA = 3	CRRA = 4	CRRA = 5
MEN					
All	1.350	1.449	1.497	1.527	1.546
All Whites	1.352	1.450	1.498	1.528	1.546
All Blacks	1.328	1.437	1.488	1.522	1.542
All Hispanics	1.362	1.449	1.495	1.523	1.543
Whites: College +	1.361	1.452	1.498	1.527	1.546
Whites: HS +	1.351	1.451	1.499	1.529	1.548
Whites: < HS	1.325	1.434	1.486	1.520	1.540
Blacks: College +	1.343	1.443	1.492	1.523	1.542
Blacks: HS +	1.328	1.437	1.488	1.523	1.543
Blacks: < HS	1.296	1.415	1.472	1.511	1.534
WOMEN					
All	1.465	1.531	1.560	1.577	1.588
All Whites	1.465	1.531	1.560	1.577	1.588
All Blacks	1.459	1.529	1.560	1.577	1.588
All Hispanics	1.487	1.545	1.570	1.585	1.597
Whites: College +	1.466	1.530	1.559	1.576	1.588
Whites: HS +	1.465	1.531	1.561	1.577	1.588
Whites: < HS	1.463	1.531	1.562	1.578	1.589
Blacks: College +	1.462	1.530	1.560	1.577	1.588
Blacks: HS +	1.459	1.529	1.561	1.577	1.588
Blacks: < HS	1.453	1.526	1.560	1.577	1.587



AEW's vs AMW's

- AMW's take only into account the expected value of the payments that individuals receive under annuities relative to the price that is charged
 - So it is a measure of redistribution because for the entire population, the AMW must equal 1
- AEW's take into account the different risks that different subgroups are exposed to as well
 - Individuals with lower expected lifespans (e.g. men) have the same maximum lifespan as women, and so the variance of outcomes in terms of lifespan is greater
 - The AEW measure takes this insurance value into account



Types of Risks

- Diversifiable risks are risks that can be diversified by pooling them across large numbers of people and a small cushion of equity is sufficient to guarantee that the risk will be paid
 - E.g. idiosyncratic mortality, idiosyncratic wage risk
- Undiversifiable risks cannot be reduced by sharing them between different groups of people at the same point in time
 - E.g. inflation risk, investment return risk, political risk
- Inter-generational risk sharing has great potential, but is very difficult to implement successfully



Inter-generational risk sharing

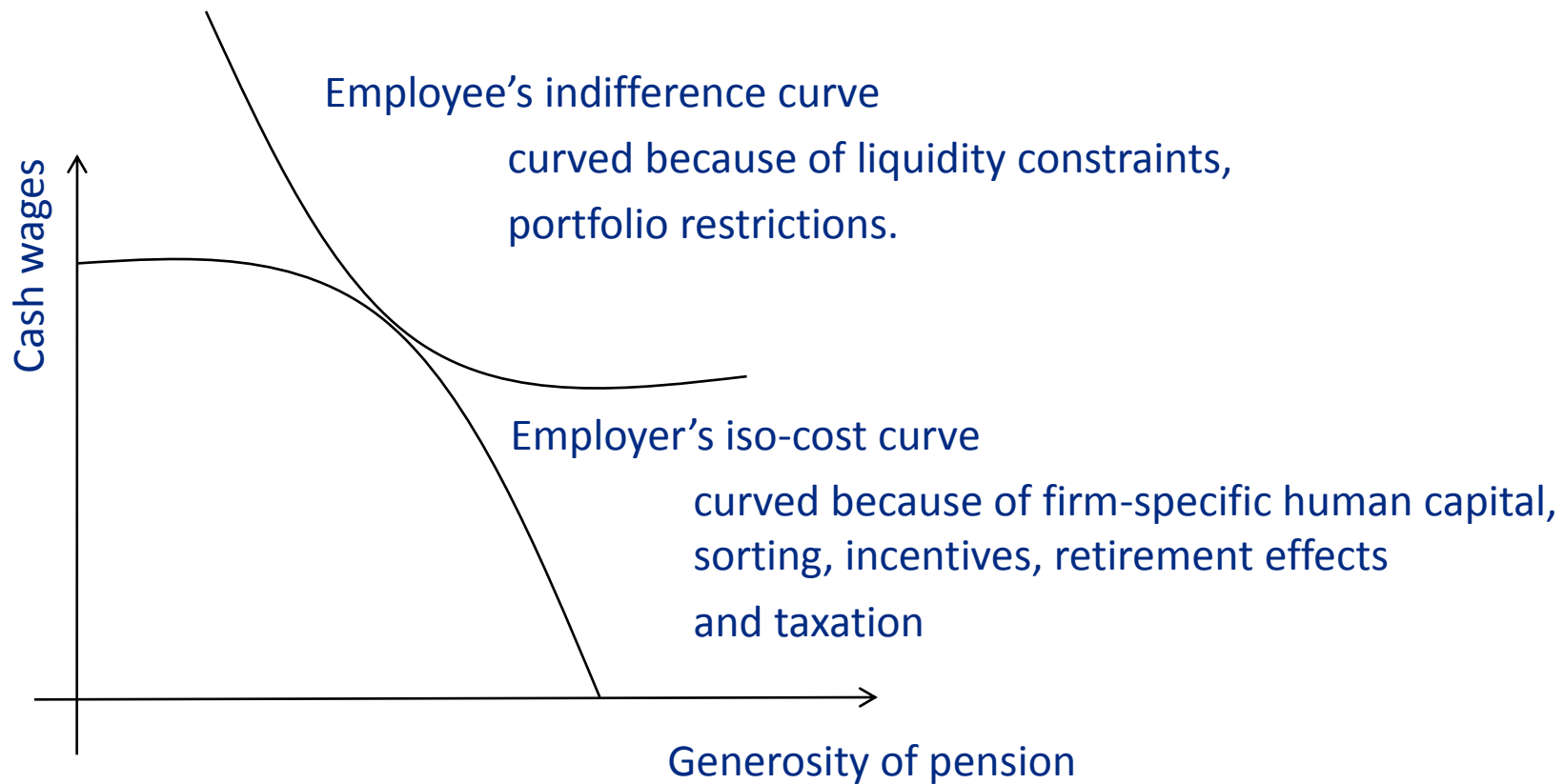
- Difficult because it requires assets to be built up when times are good (lending to future generations), and deficits when times are bad (borrowing from future generations)
- This means that individuals who see that a particular risk pool is in deficit have a strong incentive to leave the pool (and join one which is in surplus)
- Exit penalties are required, but politically difficult
- Temptation for current generations to pass risk onto future generations is difficult to resist
 - DB social security in the US
 - DB pension plans



Risk sharing between employers and employees

- DB pensions offer the possibility that risks can be shared between employers and employees
 - In theory, employers should be less risk-averse than employees and so undiversifiable risks are more optimally borne by them
 - (Employers write implicit insurance contracts to workers as part of employment contracts anyway, the pension plan just augments this, Azariadis (1975))
 - E.g. insurance against weak demand

A good way to think about this



From Blinder (1981), generalised by me (2005)



Governance-based contracts

- Some contracts specify entitlements
 - E.g. DC pension contracts, other forms of insurance contracts
- Others specify a method of governance, and leave entitlements vague
 - E.g. NHS, state pensions
- This allows risk-sharing between employers and employees and between generations against risks which may not have been anticipated and which cannot be quantified (“incomplete contracts”)
- Governance-based contracts are very uncommon outside state entitlements



DB pensions

- Historically, DB pensions were set up to allow this kind of risk sharing
- The job of the board of trustees is to decide on optimal risk sharing, depending on what has happened (ex post)
- But the fact that the claims were imprecise led to widespread belief on the part of employees that risk-sharing was ex-post “unfair” (employers were taking surpluses as contribution holidays/refunds and not giving employees pension increases)
- So government got involved and began to regulate the payoffs that could be given (e.g. indexation, spouse’s benefits etc)



Risks in pension schemes

- Investment risk
- Interest rate risk
- Longevity risk
 - Individual
 - Cohort
- Inflation risk
- Political risk
- Portability risk
- Demographic risk (new entrants)
- Employer insolvency risk



Risks in pension schemes

- Investment risk ←————
- Interest rate risk ←————
- Longevity risk
 - Individual ←————
 - Cohort ←————
- Inflation risk ←————
- Political risk ←————
- Portability risk
- Demographic risk (new entrants) ←————
- Employer insolvency risk ←————

These risks cannot be diversified across individuals in the same pension plan and can only be shared between employees and the employer, or diversified across different generations



Risks in pension schemes

- Investment risk ←—————
 - Interest rate risk ←—————
 - Longevity risk
 - Individual ←—————
 - Cohort ←—————
 - Inflation risk ←—————
 - Political risk ←—————
 - Portability risk ←—————
 - Demographic risk (new entrants) ←—————
 - Employer insolvency risk ←—————
- These risks cannot be diversified across individuals in the same pension plan and can only be shared between employees and the employer, or diversified across different generations**
- These risks can be diversified across individuals in the same pension plan and need only a small cushion of “equity” to ensure adequate protection for the whole group**



Potential sources of optimal risk sharing in pensions

- Untradable risks
 - Moral hazard
 - Adverse selection
 - Externalities
- Portfolio restrictions for employees
- Transactions costs for employees
- Taxation for employees
- Selection or sorting effects
- Intergenerational risk sharing



Why is the risk untradable?

- Why should the employer be prepared to assume a risk for its employees when third parties are not, at the same price?
 - The employer may be able to eliminate the effects of moral hazard (e.g. earnings insurance)
 - The employer may have more information about its employees
 - The employer may be able to economise on transactions costs
 - The employer may benefit in other ways from the insurance which a third party would not do (externalities)



Portfolio restrictions

- Individual employees may not be able to take on the optimal pension because they face portfolio restrictions which prevent them from reaching their optimal preferred asset allocation
 - Classic case is assets outside the pension plan versus assets inside the pension plan



Transactions costs

- Employers might be able to reduce the transactions costs faced by employees and therefore it may make economic sense to offer pension as part of employment contracts rather than outside them



Taxation

- There are tax benefits to having pensions as part of employment contracts
 - Employees would not be able to have the same tax benefits outside pension plans



Other benefits

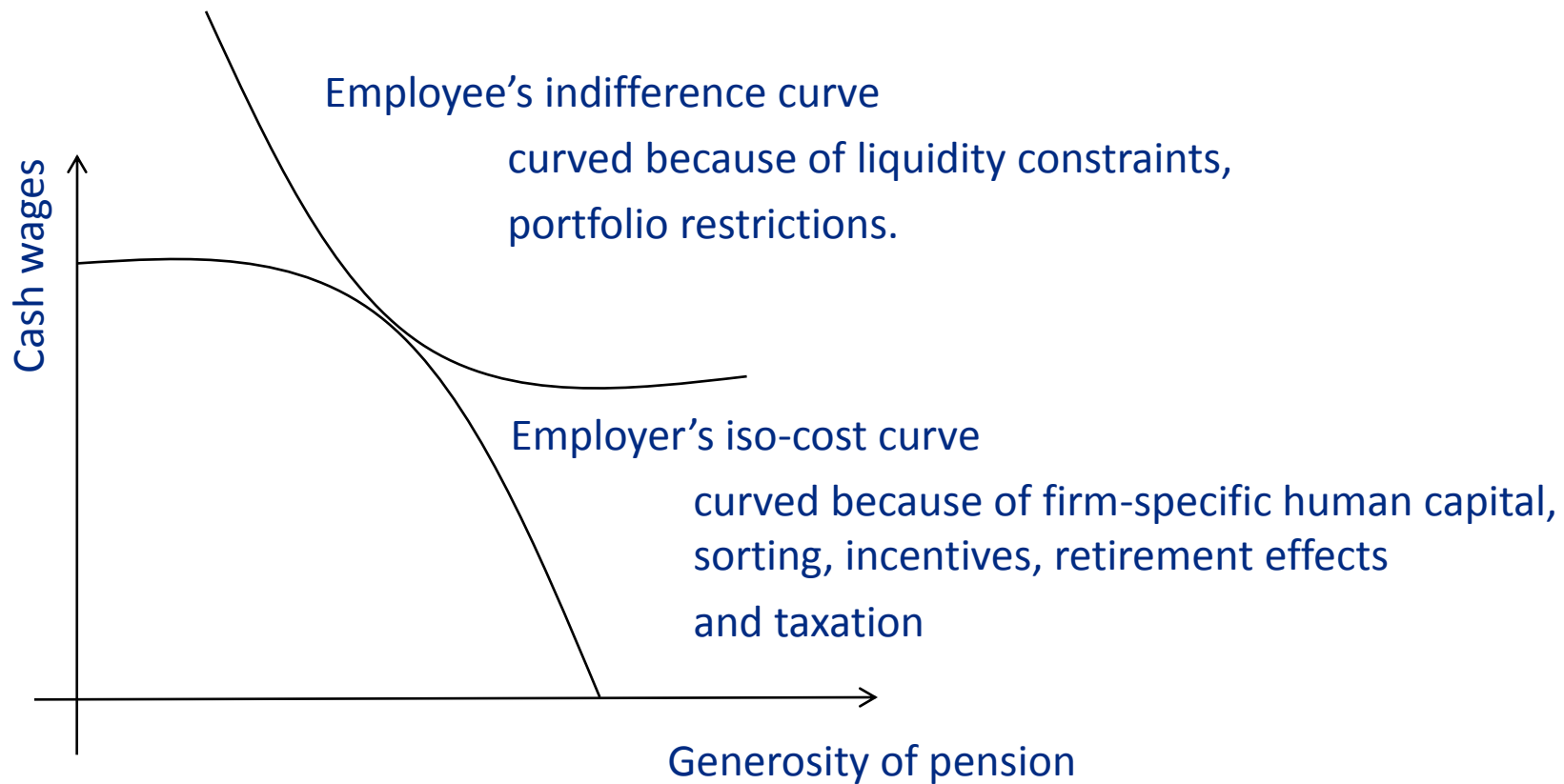
- Other benefits for employers offering risk protection inside employment contracts are
 - Externalities
 - Reputational effects
 - Retirement behaviour
 - Retention
 - Protection against the risks from a business point of view
 - Sorting effects



But always remember to ask:

- Why should the employer provide insurance to its employees if :
 - there *is* a third party who is willing to provide the insurance at an acceptable price, or:
 - there *is not* a third party who is willing to provide the insurance at an acceptable price?

A good way to think about this



From Blinder (1981), generalised by me (2005)



Regulation

- Three main areas of regulation
 - Information / marketing
 - Prudential
 - Product design



Information: Financial products

- Financial products in the UK (and in most places) are subject to quite onerous restrictions on marketing
 - FSA-regulated here
 - Principles-based regulation
 - “Customer’s interests”
 - “Communications with clients”
 - “Conflicts of interest”
 - “Customers: relationships of trust”
- Based on ensuring that the client is informed; that the product is suitable for the client
- Expensive to provide (so poor are excluded)



Information: Pensions

- Pensions are exempt from the FSA requirements of marketing
 - Employers have no (direct) financial interest in employees joining or not
 - Pensions must be in virtually everyone's interests to join in order for this to be OK
- But information provided must enable individuals to make sensible decisions with regard to consumption and savings
- So disclosure requirements are essential
 - Markets cannot function without information disclosure



Prudential regulation: financial products

- This ensures that promises made are kept
- Financial companies (e.g. insurance companies) more closely regulated than non-financial ones because of:
 - Cost of establishing value of contracts relative to size
 - Insurance company products held by retail investors
 - No market prices which would aggregate and convey information about solvency
 - Possibility an insurance company / other financial institution could be massively insolvent and not show signs of it, unlike other companies



Prudential regulation: pensions

- DB pensions are subject to a much lower standard of prudential regulation than other financial products
- Justification given is the presence of the employer covenant, and the lower quality of the pension promise (“promise” rather than “guarantee”)
- Difficult to justify from first principles of economics
 - Assets held only to protect against risk of employer default in the UK
 - Pension employer covenant is valueless at precisely the time it is required
 - Governance doesn’t give much protection
- DC pension regulation similar to financial products



Product regulation: financial products

- Little or none in the UK
- FSA does not wish to constrain innovation and product design
- Product regulation is potentially very inefficient, and can result in seriously unfavourable outcomes
 - E.g. products which are not profitable
 - E.g. products which no-one wants to buy
- Very difficult to change product design restrictions, but economic conditions change quickly, so they can quickly cause efficiency losses



Product regulation: pensions

- DB pensions subject to a lot of product regulation
 - Early leaver benefits
 - Spouse's benefits
 - Indexation of pensions in payment
- This is, I think, a response to the lack of firm ownership claims in DB pension plans
 - Governance was perceived as favouring employers over employees (how do you design a governance system which does not entirely reflect the will of the employer, who is paying?)
 - Individuals needed protection



Product regulation: pensions

- DC pensions have relatively few product design restrictions
 - Must purchase an annuity (public interest?)