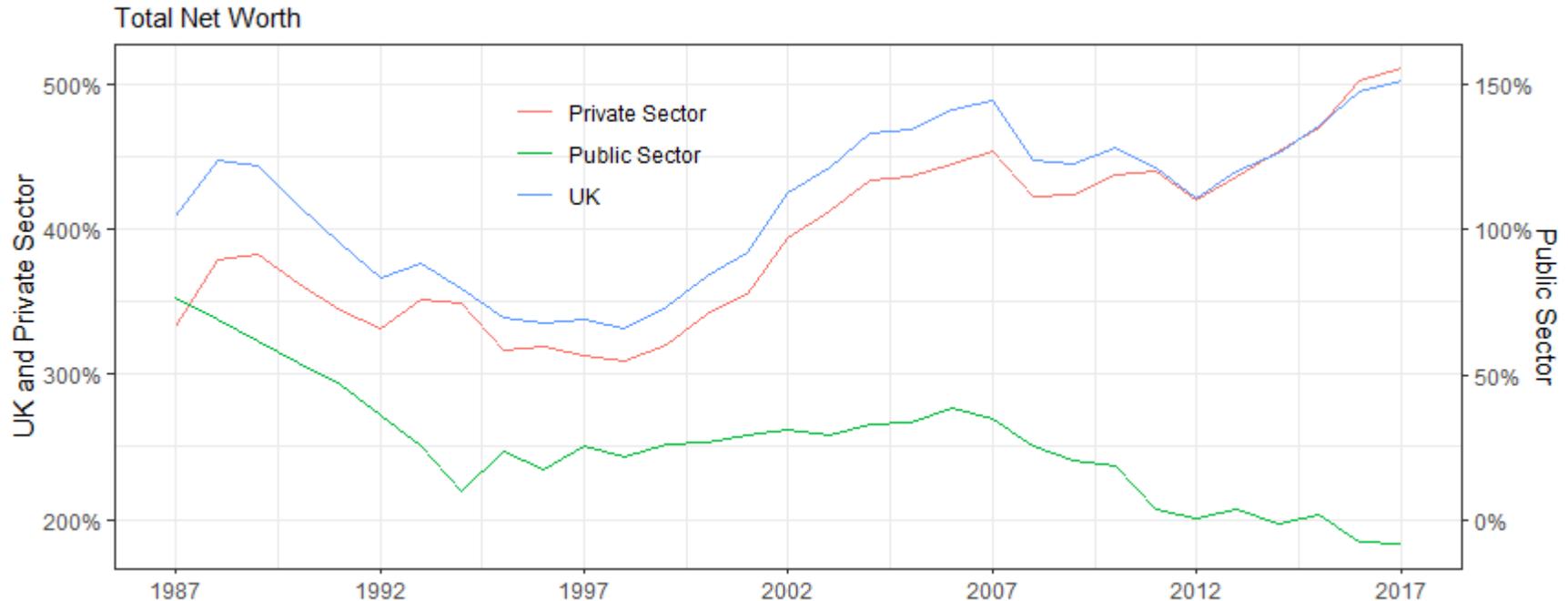


GWA: did public and private inter-generational transfers offset each other over the financial crisis?

Dr David McCarthy
Prof James Sefton
Prof Ron Lee
Dr Joze Sambt

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Motivation



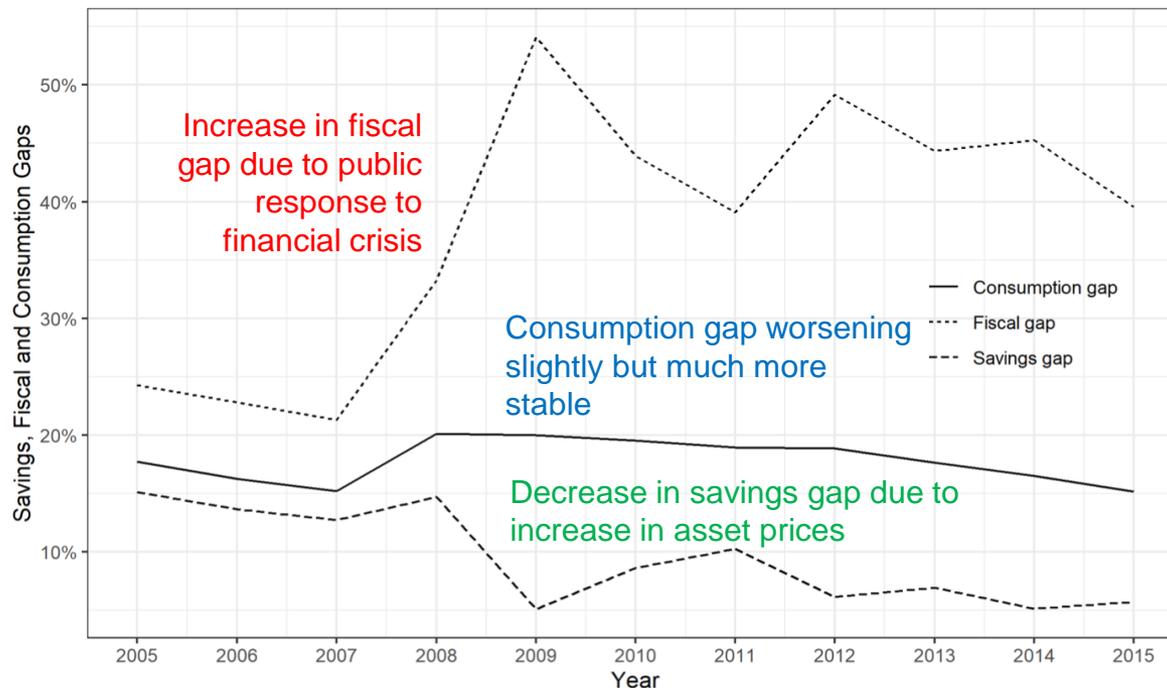
- Private sector net worth increased between 2005 and 2015; public sector net worth decreased over the same period; aggregate net worth increased
- The first advantages the old (who own most assets); the second disadvantages the young (who will bear the costs of the government debt)
- You might think that the financial crisis therefore disadvantaged the young, but we show that increases in capital transfers largely protected them
- Shows the importance of capital transfers!

GWA

- Capitalises NTA profiles, creating estimates of transfer & human capital wealth which we combine with measures of financial wealth & estimates of future lifetime consumption, producing comprehensive lifetime balance sheets for each generation
- Inter-temporal and inter-generational budget constraints allow construction of implied capital surpluses and deficits for each generation
- Older generations have capital surpluses; these must be passed down & used to (partly?) finance the capital deficits of the young
- Aggregates of these can be regarded as a measure of consumption sustainability & (under mild assumptions) inter-generational equity
- Private sector: Savings Gap; Public Sector: Fiscal Gap; Overall economy: Consumption Gap
- We calculate these GWA's for the UK annually from 2005-2015, use them to examine changes in the inter-generational economy over the period
- See https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3052381 for details

Sustainability/equity: GWA's confirm offsetting nature of public and private transfers in aggregate

FIGURE 2: Savings, Fiscal and Consumption Gaps 2005-2015 (% of relevant consumption)



NOTE: For each year 2005-2015, the GWA are calculated from profiles estimated for that year. The chart plots the savings, fiscal and consumption indicators for each year, expressed as a proportion of consumption. The fiscal gap is expressed as a percentage of public consumption, the savings gap as a percentage of private consumption and the consumption gap as a percentage of total consumption.

But it's complicated: public transfers

TABLE 3: Productivity adjusted changes in per capita Generational Wealth Accounts 2015-2005 (2015 GBP '000')

Age	Private generational account									Public generational account			
	Account Total	Of Which						Assets	Capital (surplus)/deficit*	Account Total	Of Which		
		Life-Cycle Wealth			Transfer Wealth						Public Cons.	Net Cash Public Trans. Paid	
		Total L-C Wlth	Labor income	Private cons†	Public cons†	Total Trans Wlth	Net Pvte. Trans. Rcvd						Net Public Trans. Rcvd
90+	(6)	(2)	0	(2)	0	(4)	(1)	(3)	55	(49)	3	0	3
80-89	(13)	(10)	0	(8)	(3)	(3)	(2)	(1)	55	(42)	1	(3)	3
70-79	(25)	(22)	0	(16)	(7)	(3)	(4)	1	32	(7)	(1)	(7)	6
60-69	(45)	(42)	2	(31)	(13)	(2)	(5)	3	59	(15)	(3)	(13)	10
50-59	(45)	(43)	6	(39)	(11)	(2)	(0)	(2)	131	(86)	2	(11)	12
40-49	(26)	(7)	37	(37)	(7)	(19)	(1)	(18)	60	(34)	18	(7)	25
30-39	8	5	22	(14)	(3)	3	3	0	19	(27)	(0)	(3)	3
20-29	30	22	14	6	2	8	4	4	(2)	(28)	(4)	2	(6)
10-19	52	22	(29)	42	8	30	8	22	(1)	(51)	(22)	8	(30)
0-9	42	20	(25)	33	12	22	2	20	(0)	(42)	(20)	12	(32)
Unborn	25	22	(14)	19	17	3	(1)	4	0	(25)	(4)	17	(21)

NOTE: The table shows the difference between 2015 and 2005 per capita generational accounts, where the 2005 accounts have been adjusted for productivity changes by multiplying by the increase in real wage over this period. † Negative numbers indicate an increase in the present value of consumption between 2005 and 2015 (after adjusting for productivity and price changes) * Negative numbers indicate an increase in a surplus (or a decrease in deficits) between 2005 and 2015 (after adjusting for productivity and price changes). See the text and Table 2 for further clarification.

Elderly pay higher taxes but receive lower transfers
 Young pay fewer taxes and receive slightly higher transfers

But it's complicated: life-cycle wealth

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		Total L-C Wlth	Life-Cycle Wealth			Transfer Wealth					Public Cons.	Net Cash Public Trans. Paid	
			Labor income	Private cons†	Public cons†	Total Trans Wlth	Net Pvte. Trans. Rcvd						Net Public Trans. Rcvd
90+	(6)	(2)	0	(2)	0	(4)	(1)	(3)	55	(49)	3	0	3
80-89	(13)	(10)	0	(8)	(3)	(3)	(2)	(1)	55	(42)	1	(3)	3
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Private and public consumption of the elderly increases, as does their labour income

Private and public consumption of the young worsens, as does their labour income

But it's complicated: private transfers

TABLE 3: Productivity adjusted changes in per capita Generational Wealth Accounts 2015-2005 (2015 GBP '000')

Age	Private generational account										Public generational account			
	Account Total	Of Which					Total Trans Wlth	Transfer Wealth		Assets	Capital (surplus)/deficit*	Account Total	Of Which	
		Life-Cycle Wealth			Public cons†	Net Public Trans. Rcvd		Net Pvte. Trans. Rcvd	Public Cons.				Net Cash Public Trans. Paid	
		Total L-C Wlth	Labor income	Private cons†										
90+	(6)	(2)	0	(2)	0	(4)	(1)	(3)	55	(49)	3	0	3	
80-89	(13)	(10)	0	(8)	(3)	(3)	(2)	(1)	55	(42)	1	(3)	3	
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Private transfers remain broadly unchanged

But it's complicated: changes in wealth

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Assets of elderly increase in value, but by more than their consumption increases

But it's complicated: implied capital transfers

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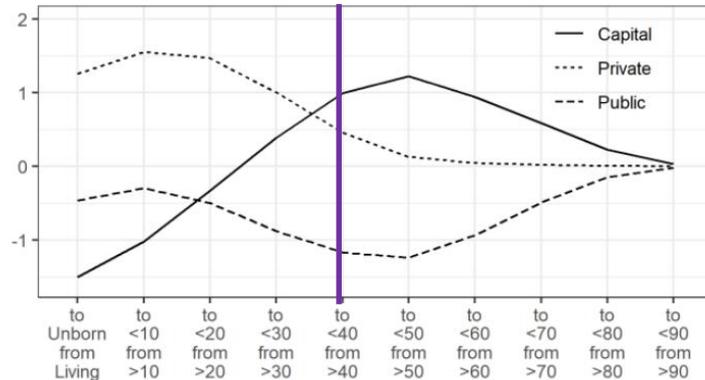
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Implied capital surpluses
increase across the board

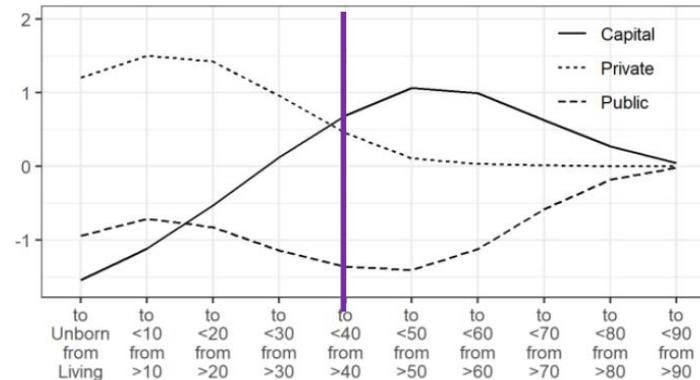
Overall: private capital transfers between the generations offset worsening public sector finances

FIGURE 3: Modes of wealth transfer down the generations 2005-2015

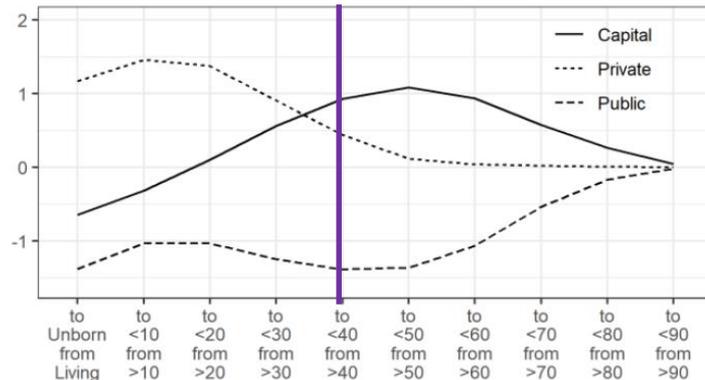
A Value of Wealth Transfers: 2005



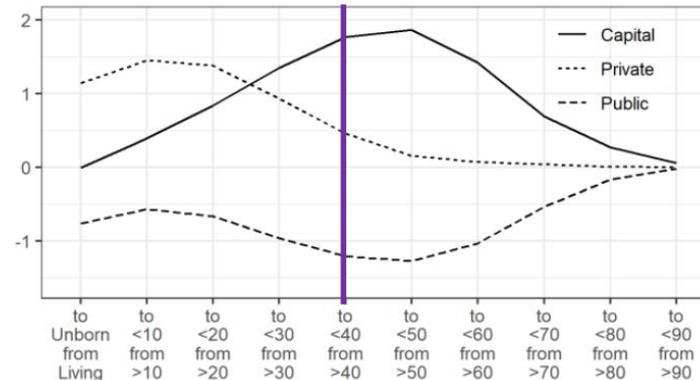
B 2008



C 2010



D 2015



Private inter-vivos transfers broadly unchanged over the period

Public borrowing from the unborn significantly worsens

Private capital transfers to the unborn improve significantly

NOTE: Wealth transfers are calculated using the GWA for each year. Values are scaled to GDP in that year. A negative value indicates a transfer from the young to the old. 'Public' represents the public transfer system; 'private' the private *inter vivos* transfer system and 'capital' private transfers of a capital nature, including bequests. These figures are derived using analogues of equation (4) in the text.

Conclusion

- An accurate picture of inter-generational well-being requires:
 - Integrating the public and the private sectors (up to this point economists have tended to focus on individual elements of inter-generational transfers, but not examined the entire picture)
 - Including capital as well as current transfers
- Current transfers are dominant in the public sector, but in the private sector capital transfers are extremely important determinants of inter-generational wellbeing
- We estimate that around 40% of the increase in private-sector wealth over the financial crisis will likely be passed down the generations, enough to largely offset the higher public sector debt (but distributional issues are not yet examined!)