When 'old' and 'inactive' are not the same

The first key conclusion of the Pensions Commission Second Report starts with:

"Life expectancy is increasing rapidly and will continue to do so. This is good news. But combined with a forecast low birth rate this will produce a near doubling in the percentage of the population aged 65 years and over between now and 2050, with further increase thereafter.

The baby boom has delayed the effect of underlying long-term trends, but will now produce 30 years of very rapid increase in the * dependency ratio. We must now make adjustments to public policy and/or individual behaviour which ideally should have been started in the last 20-30 years.

Faced with the increasing proportion of the population aged over 65, society and individuals must choose between four options ..."

This first key conclusion leaps from 'over 65' to 'dependency' at * and, thereafter, takes us on a misleading journey. Why?

In its first statement, it asks us to lock in to the presumption that, when we get to 65, something changes that turns us from a provider into a problem. Why?

The report asks both an employee contemplating winding down to enjoy the fruits of a productive life and an employer keen to retain the skills of older workers, to believe that an event 65 years ago – one's birth – is a relevant factor in the decision. Why?

To say that children should not drink before 18 or drive a car before 17 may bear some relation to responsibility. But making people feel 'dependent' (aka 'unwanted') from 65 engenders a crass waste of productive talent. Why?

This article exposes the misuse of the statistics of the dependency ratio or its inverse, the support ratio, to create an aura of crisis. This is understandable for the agenda of tabloids but is inexcusable in informed debate. Let's explore how the same numbers can look very different when you see them from side to side from when you see them up and down.

The spread of each 1000 of the population in 2003 was:

2003	Under 15	15 to 64	65+	Total
Working				Total Working
	Nil	471	8	479
Inactive				Total Inactive
	183	186	152	521
Total	Total under 15	Total 15 to 64	Total 65+	Total
	183	657	160	1000

Note the 8 Working Oldies and the 186 Inactive '15 to 64's.

The projected spread of each 1000 of the population in 2041 is:

2041	Under 15	15 to 64	65+	Total
Working				Total Working
	Nil	432	14	446
Inactive				Total Inactive
	154	162	238	554
Total	Total under 15	Total 15 to 64	Total 65+	Total
	154	594	252	1000

Note the increase in Working Oldies to 14 and the reduction of Inactive '15 to 64's to 162 (partly influenced by the increase in state pension age for women from 60 to 65 between 2001 and 2020).

A 'support ratio' is the number of people doing the supporting divided by the number of people being supported. In tabloid-speak, it's a sort of number of overburdened workers, earning their honest crust, caring for their home and children and available to be taxed into the ground to provide the cash to throw at just one ne'er do well, feckless sponger who can't be bothered to lift a finger to earn their own crust.

The lower the support ratio the fewer workers there are to support each nonworker, so the more the worker gets taxed. So, to create headlines to sell newspapers, editors need to find a support ratio that plummets just as you, the honest worker, thought you might want to get a bit feckless yourself. You pay now and there won't be enough people around to pay you later. Crisis!

So, in the search for the plummeting support ratio to create the crisis, look no further than the old bogey: old age. Let's pretend all the over 65's are the spongers and all the '15 to 64's are the workers. In 2003, the 'old age support ratio' is: 657 workers ÷ 160 oldies = 4.11. That's just over 4 people to tax per oldie. You can 'see' that sort of ratio working – like an extended family size – comfortable and affordable.

Now jump to 2041. The 'old age support ratio' is: $594 \div 252 = 2.36$, down from 4.11. Crisis! In less than forty years, I, the oldie, have lost nearly 2 supporters. I've been robbed; or I will be; it's so UNFAIR. But it sells newspapers; it sells Pension Commission reports; it keeps down the pension cost to the Exchequer – we can't afford pensions. Crisis! The 'old age support ratio' has fallen by 43%.

But, soft, what blinding revelation through yonder tabloid breaks? "Children need supporting too." What? Really? You mean, it takes money to put food in front of a child, too? Well, yes.

So, what does 2003 look like now? Including children in the ratio, the 'total age support ratio' is: 657 workers ÷ (160 oldies + 183 children) = 1.92. Because, in 2003, there are more children than oldies hungry for your largesse, together, the supported only get under 2 supporters each instead of over 4.

Dare we look at 2041? The 'total age support ratio' is: $594 \div (252 + 154) = 1.46$, down from 1.92. Lots more oldies, yes, but fewer children. The 'total age support ratio' has fallen only 24%. Not such a crisis? Indeed, but it doesn't sell as many newspapers – or Pension Commission reports – or provide as much ammunition for the Exchequer!

But, softer ... No, not another blinding revelation? Well, how about: "Some oldies work and some '15 to 64's don't." Gosh! You mean, if people are 'old', and don't have money, they go and look for it – by working? And, and, you mean, if people should be working 'cos they're 'young', but don't feel like it, they don't? Wow!

So, what does 2003 look like now? Taking the workers as those doing the supporting and the inactives as those needing support, the 'economic support ratio' is $479 \div 521 = 0.92$. That's kind'a neat – nearly one worker for each one needing support.

And 2041? It's $446 \div 554 = 0.81$, down from 0.92, a drop of a mere 12%! In nearly 40 years! No prob.

Hey, we're on a roll here! Time to be clever. Did you know, a worker has to support him(or her)self as well as the inactives? Like, a worker needs food too? Put that in the proverbial pipe and the 'total economic support ratio' falls from 0.48 to 0.45 – an even merer drop of 7%. Tabloids, eat your heart out. GOOD NEWS – BRITAIN CAN AFFORD ITSELF

To summarise, choose your ratio to make the point you want to make:

			Change:
Ratio	2003	2041	2003 to 2041
Old age support ratio:			
'15 to 64's to one Oldie	4.11	2.36	-43%
Total age support ratio			
'15 to 64's to one Oldie or Child	1.92	1.46	-24%
Economic support ratio			
Workers to one Inactive	0.92	0.81	-12%
Total economic support ratio			
Workers to one Person	0.48	0.45	-7%

So, where have all the people gone? How have they moved their deckchairs around UK Titanic and kept it afloat? See what's happened between 2003 and 2041.

The change in each 1000 of population (just by taking away each number in the 2003 box above from the corresponding number in the 2041 box) is:

2003 to 2041	Under 15	15 to 64	65+	Total
Working				Total Working
	Nil	-39	+6	-33
Inactive				Total Inactive
	-29	-24	+86	+33
Total	Total under 15	Total 15 to 64	Total 65+	Total
	-29	-63	+92	Nil

So, what do we see? The headline writers will see that the Total Oldies have gone up by 92 – all those new hungry old mouths to feed. The economists will see that the Total Inactives have gone up by 33 - not good but not so bad - and affordable over the nearly 40 years. The key is that the number of children has declined by 29 and, whilst the number of '15 to 64's has declined, 24 were already inactive in 2003. Knock off the 6 brave new Working Oldies and you square the circle. 92 - 29 - 24 - 6 = 33.

So, what to do? Of course, the headline writers love to pick the statistic that you can't change – getting old – so they can do some more hand-wringing and sell doom. They might offer you the 'lifebelt' of more immigration to provide more taxable workers to alleviate your poverty in old age – even more newspaper sales.

The 'what to do?' is, of course, to increase the number of workers, both Working Oldies and the Working '15 to 64's. And, lo and behold, it's happening. See the Economist of 18 February 2006 for companies adapting their workplaces for older workers to retain the essential experience of the baby boomers rather let them retire just because of an event 65 years ago that is hardly relevant to their productive capacity now.

In 2041, for each 1000 of population, there are many amongst the 238 Inactive Oldies ready and willing to join the 14 Working Oldies and there are 162 of '15 to 64's who are inactive. As someone said "On yer bike!" As someone else might have said "And provide a bike-rack."

Population projections, 2003-based, are from ONS, Government Actuary's Department; activity/employment rates are from DfEE estimates/projections in Update of the Quinquennial Review of the NI Fund as at April 2000, GAD, 23 December 2004.

Jeremy Goford 21 March 2006