Australian Excess Deaths: Moving the Goalposts

Dr Wilson Sy

The Matildas would be FIFA world champions if they were the only ones allowed to move the goalposts. The Australian Bureau of Statistics (ABS) in a recent article [1] was able to make many excess deaths disappear by changing baselines, which are the statistical equivalents of goalposts.

Excess deaths are not raw data, but are calculated data defined by the difference between actual death counts and a baseline, which is an expectation calculated standardly based on the moving average of the previous five years.

Definition of the baseline can change depending on the purpose for which the excess deaths are calculated. To measure the mortality impact of the COVID pandemic the best baseline is simply the average of 2015-19, five years immediately before the pandemic.

For its regular monthly publications of *Provisional Mortality Statistics* [2], for 2020 and 2021, the ABS started off with the standard definition:

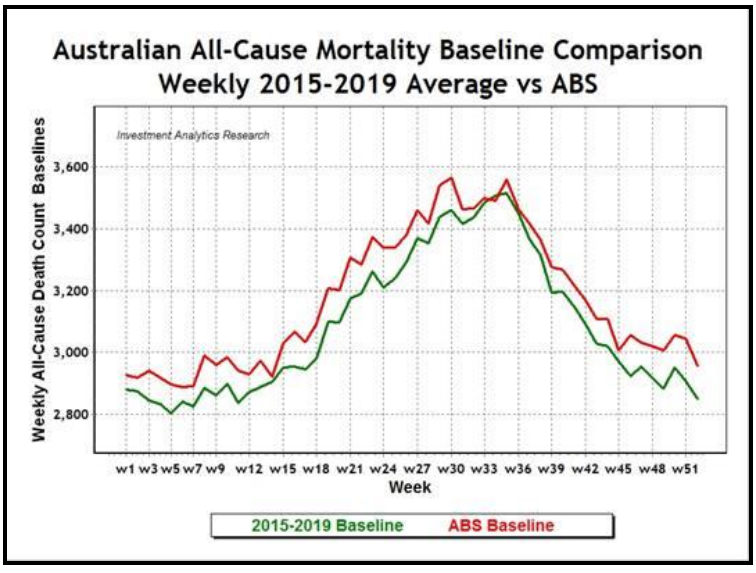
"*Throughout this report, counts of deaths for 2020 and 2021 are compared to an average number of deaths recorded over the previous 5 years (2015-2019).*"

However, the ABS has been shifting the goalposts during the Australian pandemic to reduce the calculated excess deaths. To calculate 2022 excess deaths, ABS stated [3]:

"*Data for 2022 is compared to a baseline comprising the years 2017-2019 and 2021. 2020 is not included in the baseline for 2022 data because it included periods where numbers of deaths were significantly lower than expected.*"

By excluding "*periods where numbers of deaths were significantly lower than expected*", the ABS has artificially and arbitrarily raised the baseline. This leads to a reduction in calculated excess deaths for 2022.

The weekly expected mortality calculated from the two different methods to calculate the baselines are shown in the chart below.



To calculate 2023 excess deaths, the ABS has ignored 2022 data for further changes, stating [4]:

"*There were 190,775 deaths which occurred in 2022. This is significantly higher than usual and is not considered to be a typical year for mortality in Australia. Therefore 2022 has not been included in the baseline average and is instead presented separately in graphs and tables. The baseline average presented in this report remains as the average of the years 2017-19 and 2021.*"

Understandably, the standard five-year moving average would be inappropriate during the pandemic, because it would be normalizing the pandemic as though the death rate will be permanently elevated. For example, using the five-year average of 2018-2022, would result in low 2023 excess deaths giving a misleading impression that the pandemic deaths are no longer relevant.

However, outside its regular data publications [2-4], the ABS has recently moved the goalposts again in a research article titled: "*Measuring Australia's excess mortality during the COVID-19 pandemic until the first quarter 2023*" [1].

This time, the ABS calculation for the baseline is based on a computer model [1]:

"*The ABS has adopted aspects of a methodology used by New South Wales (NSW) Health, applying a cyclical linear regression with a robust estimation procedure to produce both an expected number of deaths and a range of expected deaths to the first quarter 2023.*"

The method was developed originally to predict excess deaths from the seasonal influenza. Like most computer models, it is possible to get a great range of estimates, depending on assumptions and parameters chosen. They are often misused tools for predictions and their results are usually not transparent and are not replicable.

Computer models are good for testing ideas and scenarios, more of an art than a science. For example, fitting the model to a different dataset can change the predictions substantially, as the article acknowledges: "*Choosing the reference period (i.e. the number of years in the baseline) is important as it can change the expected number of deaths*." This is just one of many possible variabilities.

The chosen baseline has dramatic consequences to our understanding of the impact of the Australian COVID-19 pandemic on excess mortality. The consequences for 2022 excess deaths for the three different methods of calculating the baseline are shown in the table below.

Australian All-cause Excess Deaths 2022 with Different Baselines

All-cause deaths 2022	ABS (2015-19) [a]	ABS (ex 2020) [b]	ABS (Model) [c]
Expected (Baseline)	161,000	165,000	172,000
Actual[#]	191,000	191,000	190,000
Excess	30,000	26,000	18,000
% Excess	18.6	15.8	10.5

[#]The numbers are rounded for ease of reading. The actual 2022 all-cause deaths in the research article are inconsistent with those of regular ABS publications.

The original ABS method [a] is the most reasonable and straightforward, because it is the baseline from before the pandemic. The current ABS model [b], excluding 2020 data, has no reasonable scientific explanation. The research ABS model [c] represents guesswork and not data or facts which can be verified.

The original method [a], without data selection bias shows about 30,000 Australian excess deaths in 2022. By excluding 2020 data, method [b] shows fewer excess deaths at 26,000, while the modelling method [c] shows much lower excess deaths at 18,000. Therefore, computer modelling has made 12,000 excess deaths vanish.

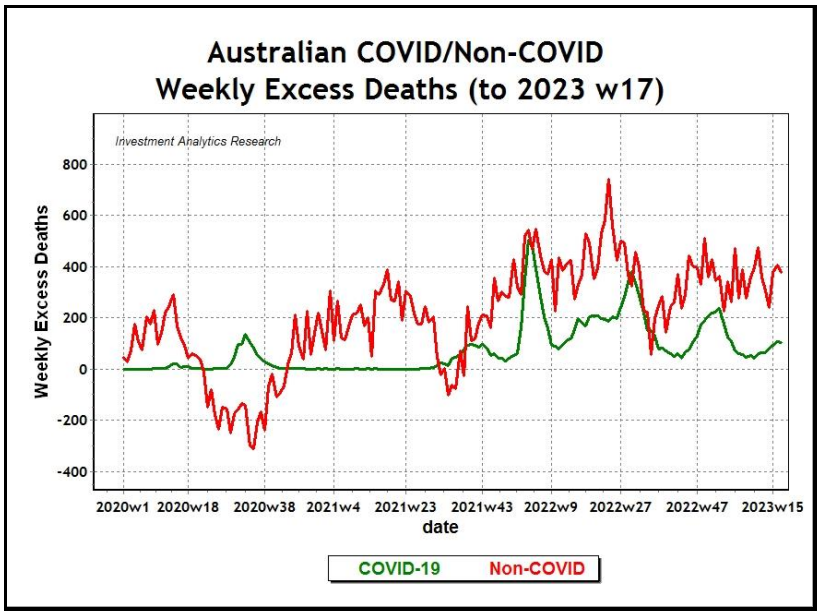
The consequence of computer modelling is to make 2022 excess deaths statistically marginally significant (about one sigma), rather than clearly significant (two sigma). There were 10,000 COVID-19 deaths in 2022 [5] and therefore there were about 8,000 non-COVID deaths or about 4.7 percent (about half a sigma) of non-COVID excess deaths.

This result was used by a Moderna executive, during a Parliamentary inquiry to dismiss the significance of excess deaths in 2022 [6, 7]:

"*The ABS did an additional analysis where they subtracted the number of COVID deaths from the total number of deaths and when they did that, the mortality rate was actually within the expected range. So it suggests very clearly that the excess mortality that we've been observing in 2022 was actually due to the virus.*"

Therefore, results of computer models have been accepted as facts by the public, who are misled and deceived because they cannot distinguish between exploratory research and raw data. It is the onus of the ABS to draw the distinction clearly and unambiguously.

What is the truth about non-COVID excess mortality in 2022, without moving the goalposts? Method [a] applied to Australian weekly all-cause mortality data during the COVID-19 pandemic to 2023 Week 17, is shown in the chart below.



For 2022, there were about 10,000 COVID-19 deaths and 20,000 non-COVID excess deaths. Because COVID-19 deaths are poorly defined scientifically by the PCR test, there are actually 30,000 excess deaths in 2022 alone needing explanation.

In conclusion, the public has been misled by ABS moving the goalposts to explore different methods of calculating the baselines. The latest low excess mortality numbers have been taken advantageously as facts by "vaccine" manufacturers and the health agencies [6, 7], when the numbers are only exploratory estimates.

The best method [a] of calculating the baseline gives 19 percent excess above Australian expected mortality for 2022. With mass "vaccination" since 2021, high excess deaths have been statistically significant which warrant official investigation by any responsible government.

References

[1] Australian Bureau of Statistics, *Measuring Australia's excess mortality during the COVID-19 pandemic until the first quarter 2023,* https://www.abs.gov.au/articles/measuring-australias-excess-mortality-during-covid-19-pandemic-until-first-quarter-2023

[2] Australian Bureau of Statistics, *Provisional Mortality Statistics*, Released 22/12/2021, https://www.abs.gov.au/statistics/health/causes-death/provisional-mortality-statistics/jan-2020-oct-2021

[3] Australian Bureau of Statistics, *Provisional Mortality Statistics*, Released 28/04/2022 https://www.abs.gov.au/statistics/health/causes-death/provisional-mortality-statistics/jan-2022

[4] Australian Bureau of Statistics, *Provisional Mortality Statistics*, Released 28/04/2023 https://www.abs.gov.au/statistics/health/causes-death/provisional-mortality-statistics/jan-2023

[5] Australian Bureau of Statistics, *Provisional Mortality Statistics*, Released 31/03/2023 https://www.abs.gov.au/statistics/health/causes-death/provisional-mortality-statistics/jan-dec-2022

[6] Bevege, A. *HEY PRESTO! The 2022 non-covid excess deaths have disappeared*, 12 Aug 2023, https://lettersfromaustralia.substack.com/p/hey-presto-the-2022-non-covid-excess

[7] Clarke, C. Senate Education and Employment Committee, *Official Recording of Senate Committee Proceedings from the Australian Parliament*, Reply to Senator Malcolm Roberts' question at 18:37:10, 03/08/2023 https://www.aph.gov.au/News_and_Events/Watch_Read_Listen/ParlView/video/1585181