

FAQ

Question:

Looking at the below table, we see between the June 2015 and June 2016 dataset – quite a bit of change within the age breaks as well as noteworthy increase in the Age 25-34 age break.

	June 2015	June 2016	Diff
Age 15-24	9,504,334	9,541,458	0.4%
Age 25-34	9,369,432	10,915,647	16.5%
Age 35-49	9,436,500	9,895,724	4.9%
Age 50+	9,943,896	9,120,069	-8.3%
Total	38,254,162	39,472,898	

Answer:

For the later year, we have an extra year of demographic data, which was not available when June 2015 was released. This included the results from the CS-2016 survey from StatsSA (once every 10 years) - but also a lot of other research.

For example, three bigger revisions came through in 2015:

- Revised / higher levels of working age in-migration. These people are typically your younger workers.
- Revised Life Expectancy numbers - the HIV/AIDS deaths were revised down quite a bit, which also affects the young sexually active age category to a large degree. This is due to improved ARV treatments, etc.
- IHS also upgraded their demographic model in line with the latest academic research, better calibrated parameters, etc.

Question:

We've looked at C-S 16, but there the increase was largely for the 15-24 age band, rather than the 25-34 age band:

South Africa	IHS Jun'15		IHS Jun'16		C-S'16	
	000s	%	000s	%	000s	%
15-24	9,504	25%	9,541	24%	10,407	27%
25-34	9,369	24%	10,916	28%	9,735	25%
35-49	9,437	25%	9,896	25%	9,891	25%
50+	9,944	26%	9,120	23%	8,834	23%
Total	38,254	100%	39,473	100%	38,868	100%

We understand that IHS have used multiple sources in your Universe Update, not just C-S'16. Our main concern is the reaction from the Industry when we release the figures, as there are large age shifts on a provincial level. For example, in Limpopo, there's been a 44% increase in age group 25-34 (and, interestingly, a few stations who cater for this age group in Limpopo have been querying their low weighted figures thus far):

Limpopo	IHS Jun'15		IHS Jun'16		C-S'16	
	000s	%	000s	%	000s	%
15-24	1,157	32%	1,172	31%	1,272	33%
25-34	772	21%	1,109	29%	974	25%
35-49	747	21%	751	20%	820	21%
50+	942	26%	783	21%	806	21%
Total	3,617	100%	3,815	100%	3,872	100%

There are similar large shifts for age 25-34 across most other provinces, most notably Eastern Cape (+31% or 300k) and KwaZulu-Natal (21% or 380k). We're just alerting you that this will be queried by the industry as the impact on their listenership figures are likely to be large.

Answer:

Below are a couple of points - in no particular order of importance:

1. The absolute values from the CS-2016 needs to be handled with care, as this was all balanced to external input. Although the CS2016-survey was initially designed to be a self-weighting survey, StatsSA in the end had to balance this to external estimates from a cohort-component model, because the numbers were simply not good enough. Another warning signal in CS-2016 is the fact that some of the data was withheld, because of the big differences between the CS2016 results and other StatsSA surveys (Employment data vs QES and QLFS, Income data compared to LCS). The CS-2016 data falls in the “handle-with-care” category.
2. You can avoid some of these problems by looking at various ratio’s from the CS-2016 dataset, rather than the levels. They tend to be better. They don’t suffer from the levels-problem.
3. A lot of the demographic inputs that we use are expressed in rates: fertility rates, mortality rates, migration rates, etc. These are used in the IHS modelling.
4. As mentioned in a previous query, the one big adjustment that IHS made was that of in-migration which was significantly higher that our previous estimates (IHS Jun'15 vs. IHS Jun'16).
5. A lot of them are working-age individuals coming from our Northern neighboring countries: Zimbabwe, Malawi, etc. And they settle pretty much across the entire country.
6. The CS-2016 does indeed have the age-dump 10 years younger, and much less pronounced than our estimates. On a national level, which pretty much affects all provinces.
7. The IHS concern is that this hump is not fully explained by the migration data in the CS-2016 itself. The migration data age distribution shows a slightly older in-migration profile.
8. The resulting age-distribution from CS-2016 is also inconsistent with that of Census2011, when you take that age distribution and move it five years forward.
9. The Census2011 had a very pronounced “dip” in the 10-14 year olds, which almost disappears from the CS-2016 where we expect this to be the 15-19 year olds.
10. In terms of data quality, the Census2011 was far from perfect, but at least an order of magnitude better than CS-2016.
11. Pretty much all demographers agree with the fact that fertility is declining. Some argue quicker rates of decline than others, but in general they all at least agree with the trend.
12. But with the CS-2016 age distribution, you are forced to assume an increase in fertility with the lower levels of parent-aged population, and an even faster number of babies born.
13. Now a final concluding remark or maybe more a question: How much room do we have to deviate from the StatsSA numbers in your industry / environment ?
14. Historically we had some room, but we (as IHSMarkit) also deal a lot with government which is very sensitive to this topic.
15. Currently the 2016MY estimates are what we regards as the most realistic scenario.
16. But we are open to adopting a somewhat blended option if a lot of people in industry are sensitive towards using government numbers.

Question:

Please provide more input regarding the decline, (in absolute numbers) for age 50+ (decline of 820k). It seems counter-intuitive from the general trend that people are living longer/lower mortality rates? It would be understandable if age 50+ as a proportion declined – this query is regarding the absolute numbers' decline.

Answer:

You are right, life expectancy is indeed rising slowly.

The difference between the population aged 50 and up between the two updates is explained by the following factors:

1. The modeling methodology that measures the impact of the HIV/AIDS virus has been updated, to reflect the latest research, trends and modelling best practice.
2. Where the mortality profile previously impacted more heavily on the younger sexually active ages, the 2016 update had a more widespread impact, which impacted the older ages a lot.
3. To justify this change we looked in detail at the age-profile of the observed deaths, which is now also much more in line with the numbers reported in the Causes of Deaths publication from StatsSA.
4. This was essentially an upgrade in the way HIV/AIDS is modeled, where the model now incorporates the effectiveness of various ARV treatments in much more detail.
5. The HIV/AIDS is also deeply integrated into the life-expectancy and mortality assumptions, which also played a role here.
6. The previous update (2015) had an older aged in-migration profile, which resulted in higher number of older people migrating into South Africa.
7. More recent data (including the CS-2016) suggests that we received immigrants which are slightly younger than previously estimated.

Remember that Life Expectancy is (somewhat) theoretical concept, and does not always imply more older people in absolute numbers.

Only under the condition of a closed and stable population you can expect that, of which both is not very true for South Africa:

- * HIV/AIDS did and does have a significant impact, especially in the earlier years before the ARV treatments.
- * The South African population has also seen lots of in-migration in the past decade.