

Limpopo Province

Oct 2023

Educator Demand Projections 2021-2030



Introduction (1)



- The proportion of educators that are 50 years or older has steadily risen between 2012 to 2021 in South Africa.
 - ⇒ Nationally a **wave of educator retirements is expected** as older educators reach the standard retirement age of between 60 and 65.

Implications:

- **Many more appointments:** The retirement wave will open up both teaching & school management & leadership positions & other office-based education specialists.
- **Compensation of educators:** Since older teachers earn more, when retiring, they are replaced with younger (less costly) teachers, although this overall benefit is offset by shift to 1.5% annual notch progression.

Introduction (2)



- Planning will be required to ensure that provinces are ready for the sustained increase in appointments.
- As retirements increase, the number of **new appointments will need to increase** to ensure that total educator numbers (at a minimum) stay at current levels or are sufficient to **meet learner enrolment growth**.
- If these positions are not filled, this could result in a further **deterioration in the learner-educator ratio** and lead to further increases in already **large class sizes**.

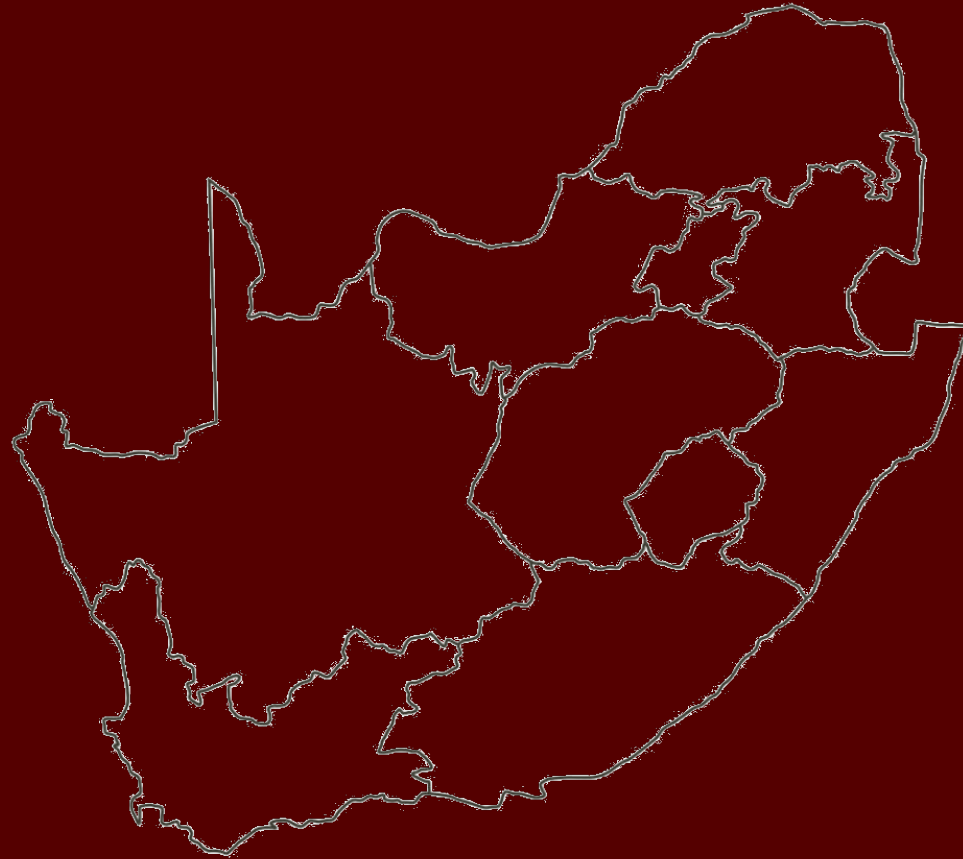
Objective

In each province, there are differences in the age profile of teachers, the expected growth of the school-going population and expected teacher attrition (resignations and retirements).

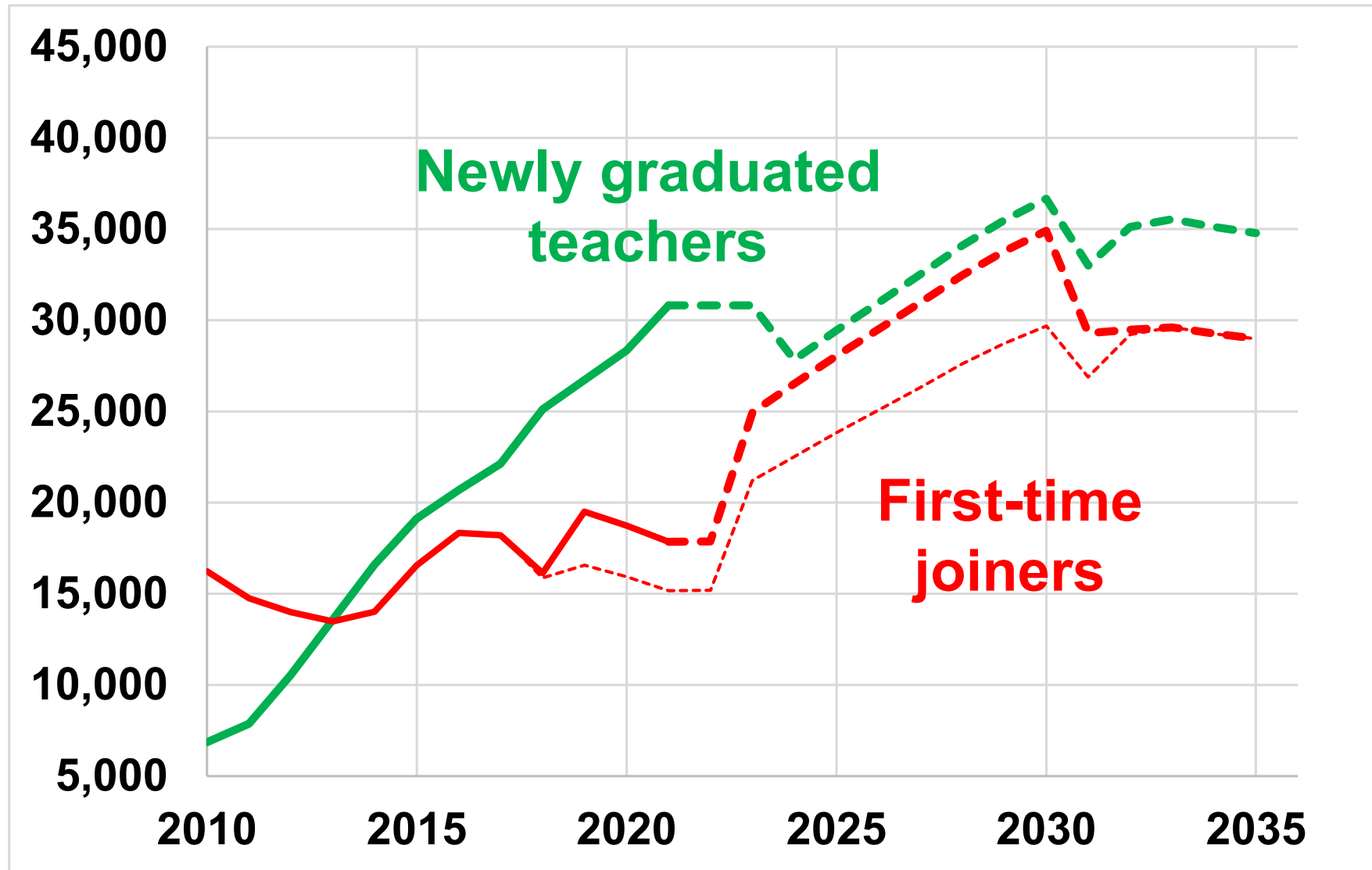
In this presentation, we will....

- Outline the National picture
- Highlight aspects of the situation in Limpopo

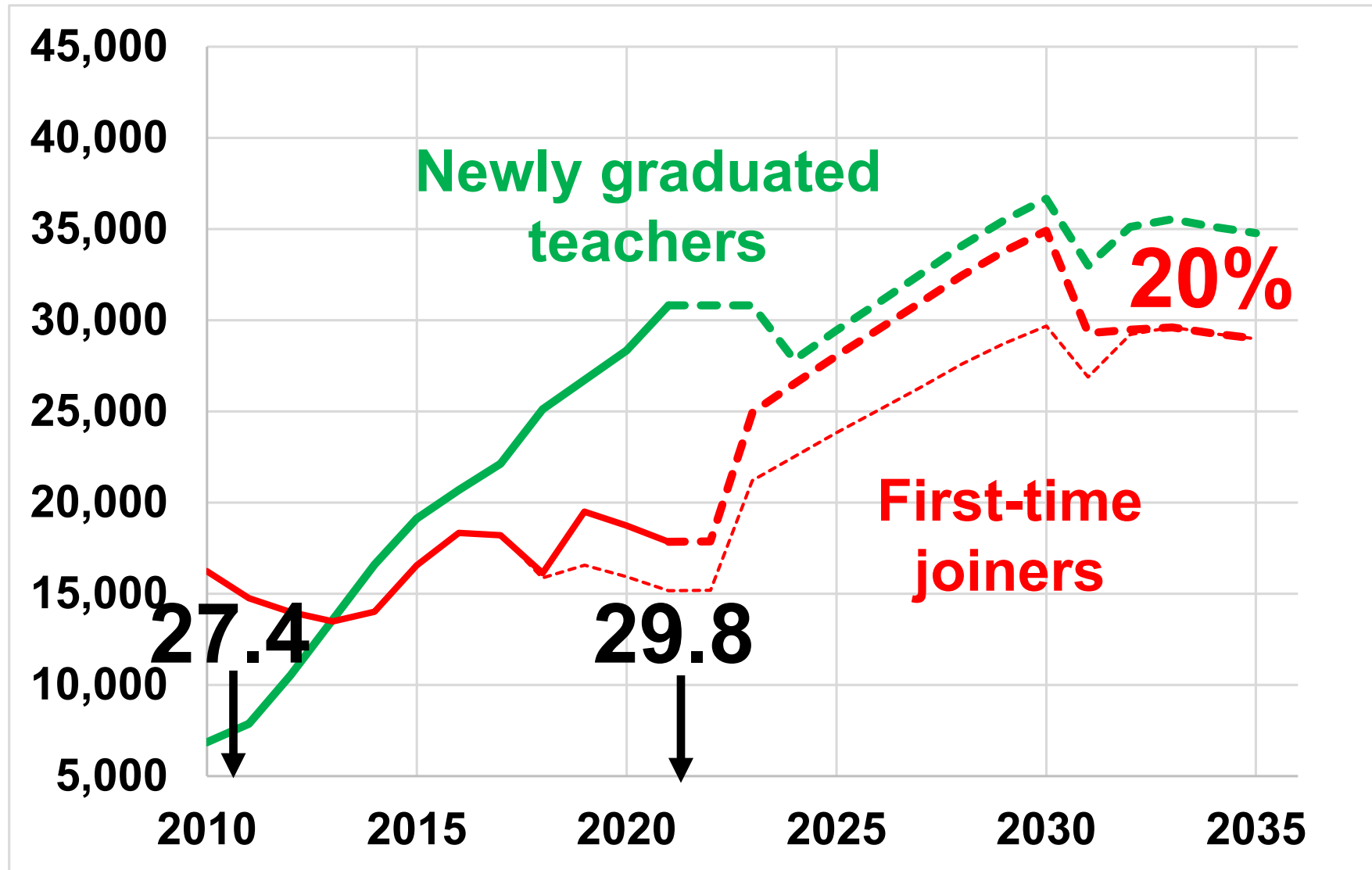
National Background



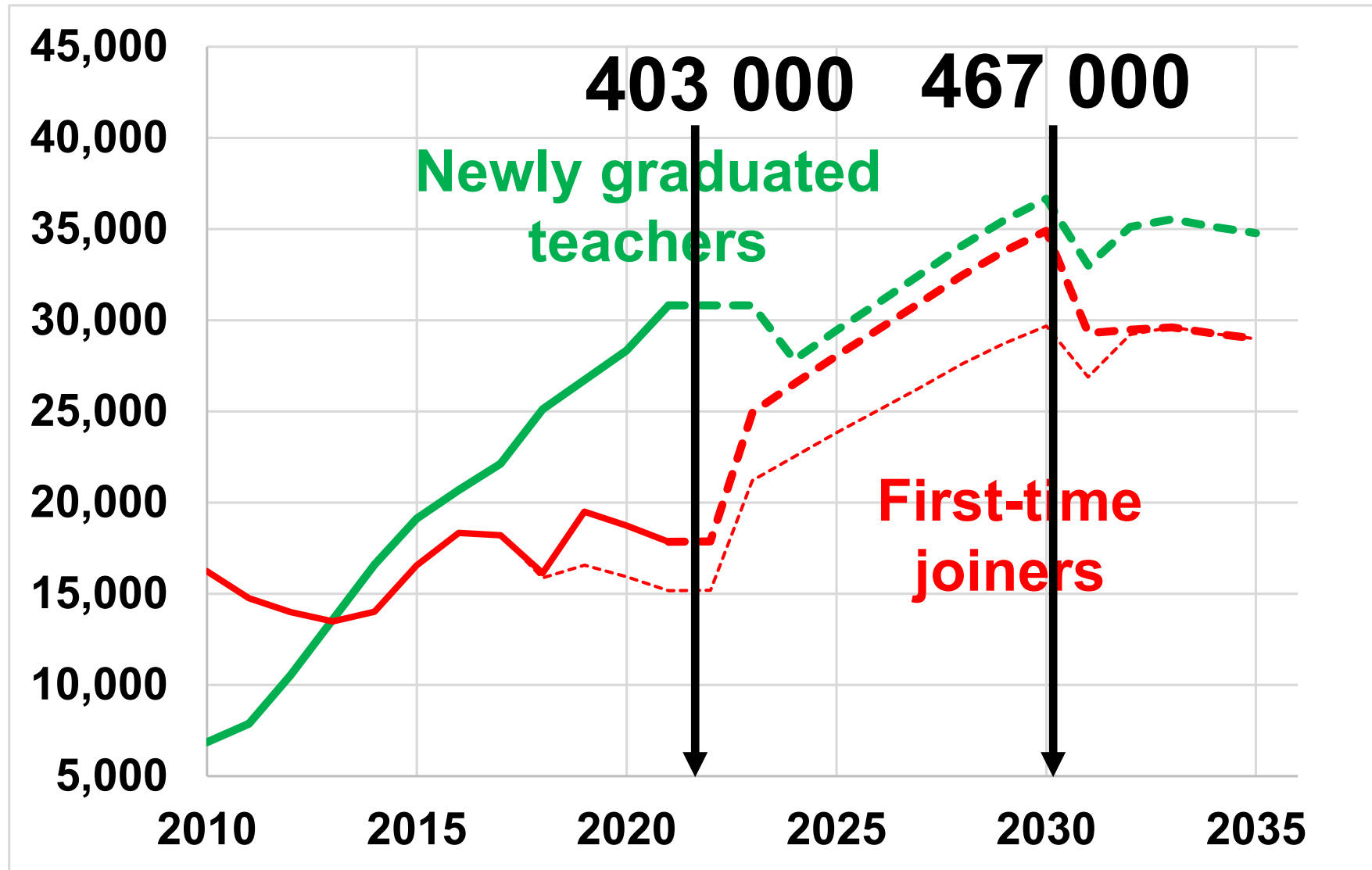
The 'main graph': Focus on the LE ratio



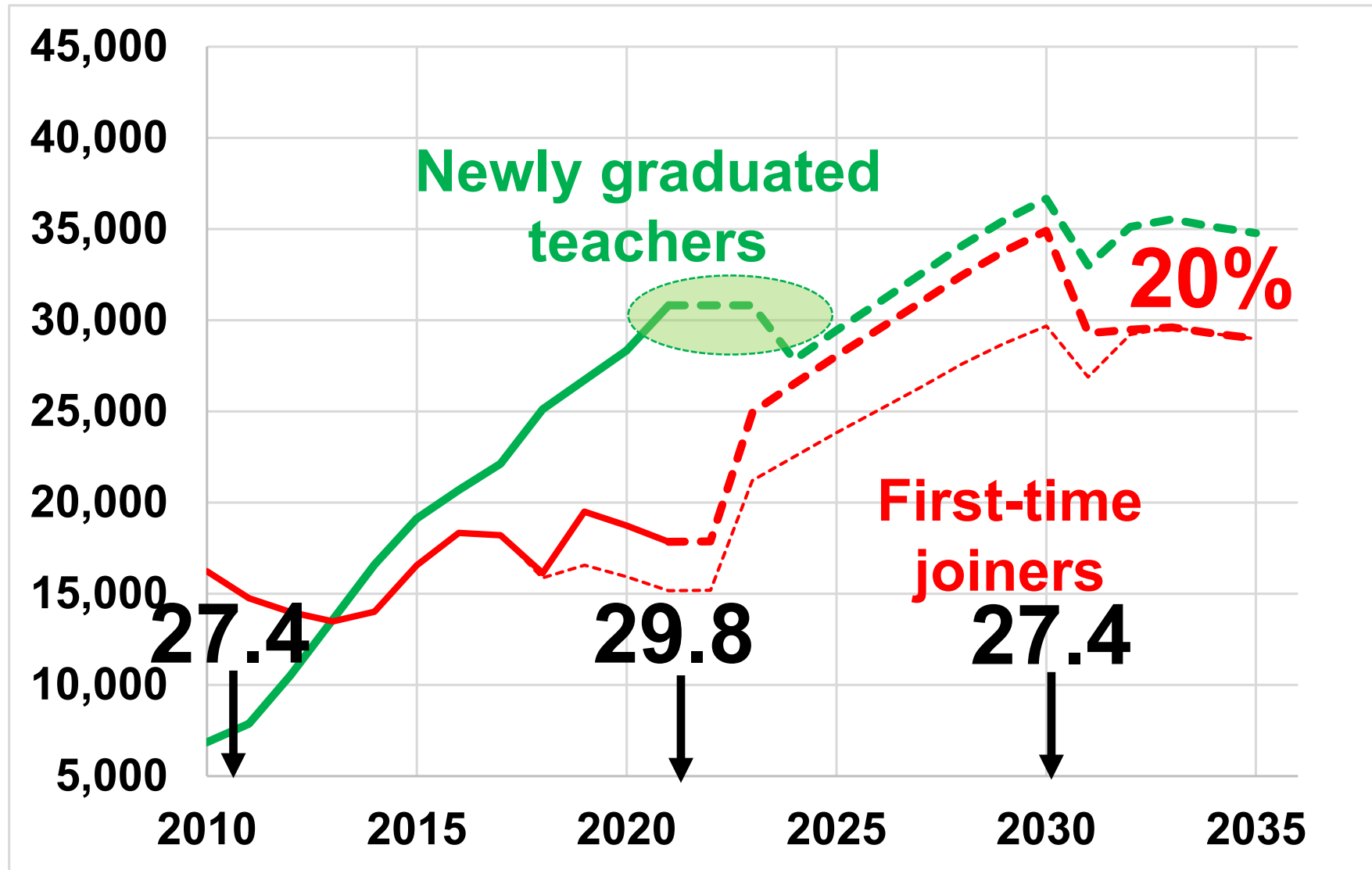
The 'main graph': Focus on the LE ratio



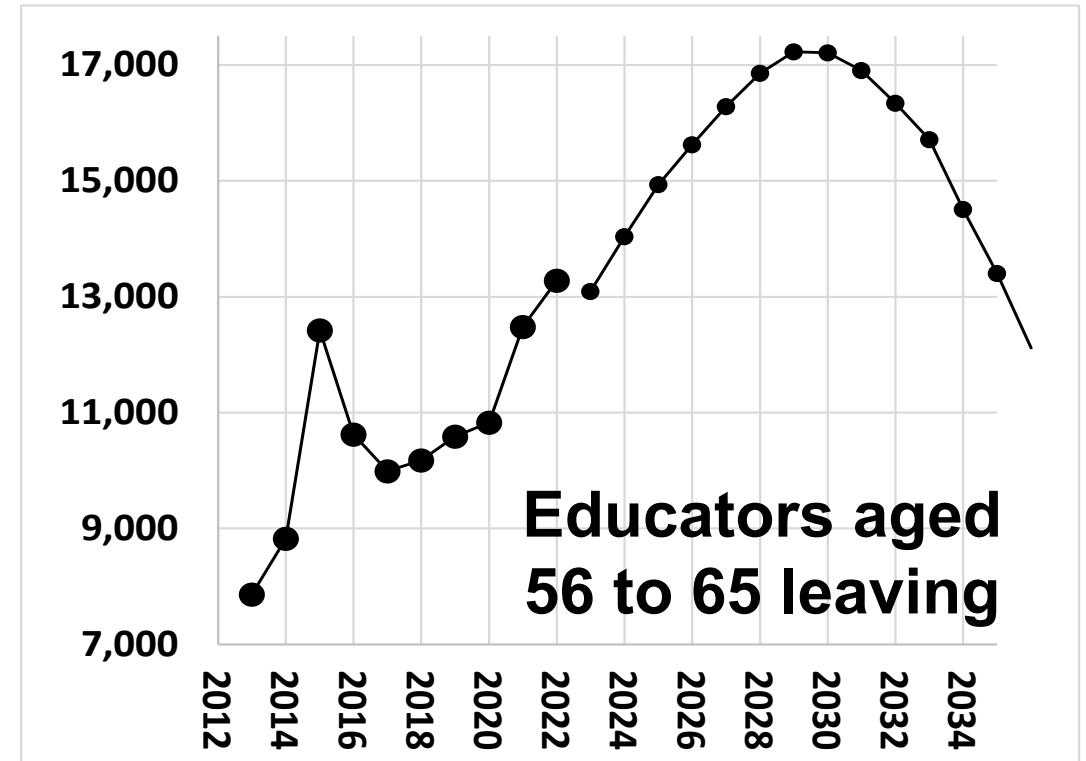
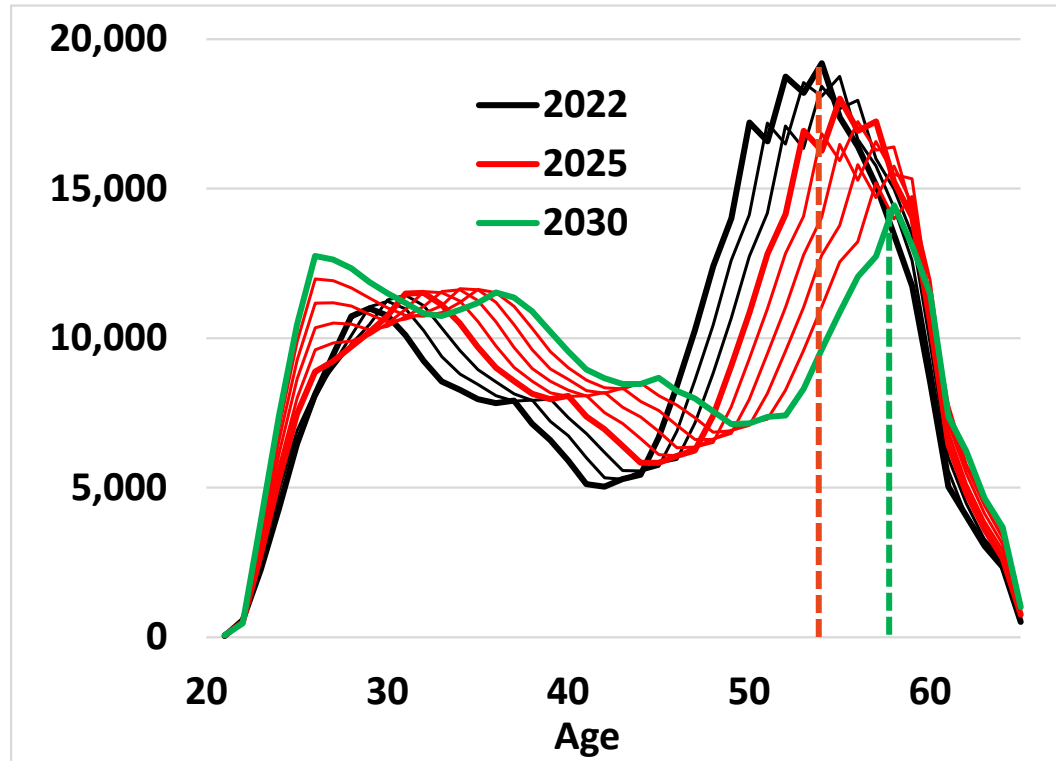
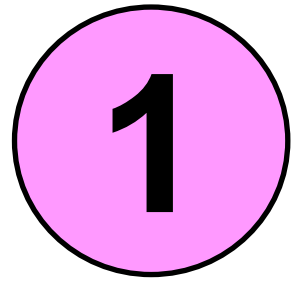
The 'main graph': Focus on the LE ratio



The 'main graph': Focus on the LE ratio



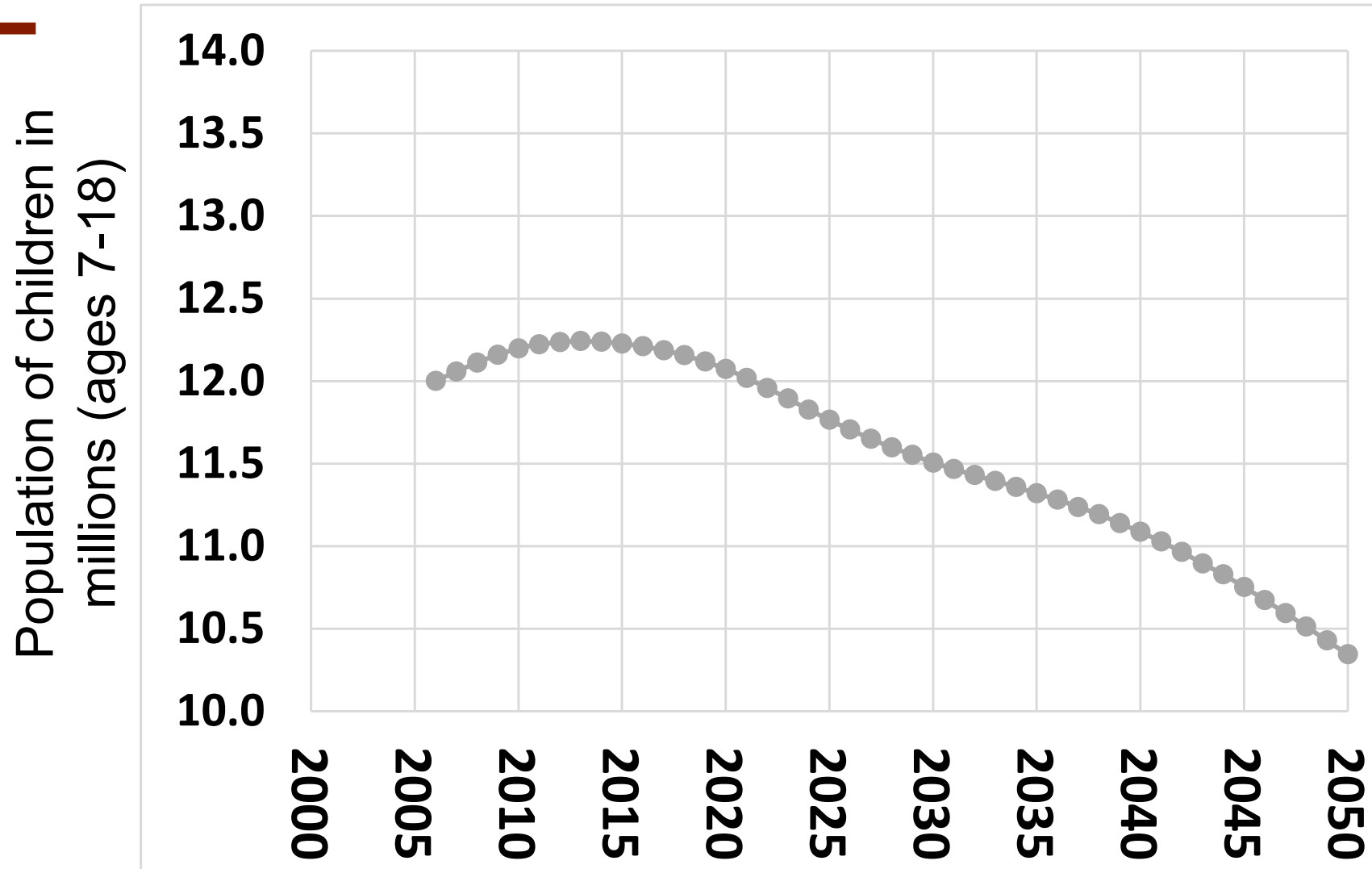
More educators retiring in the coming years



By 2030, **35%** would have left due to age
By 2035, **53%**

Many more school-age children than we expected

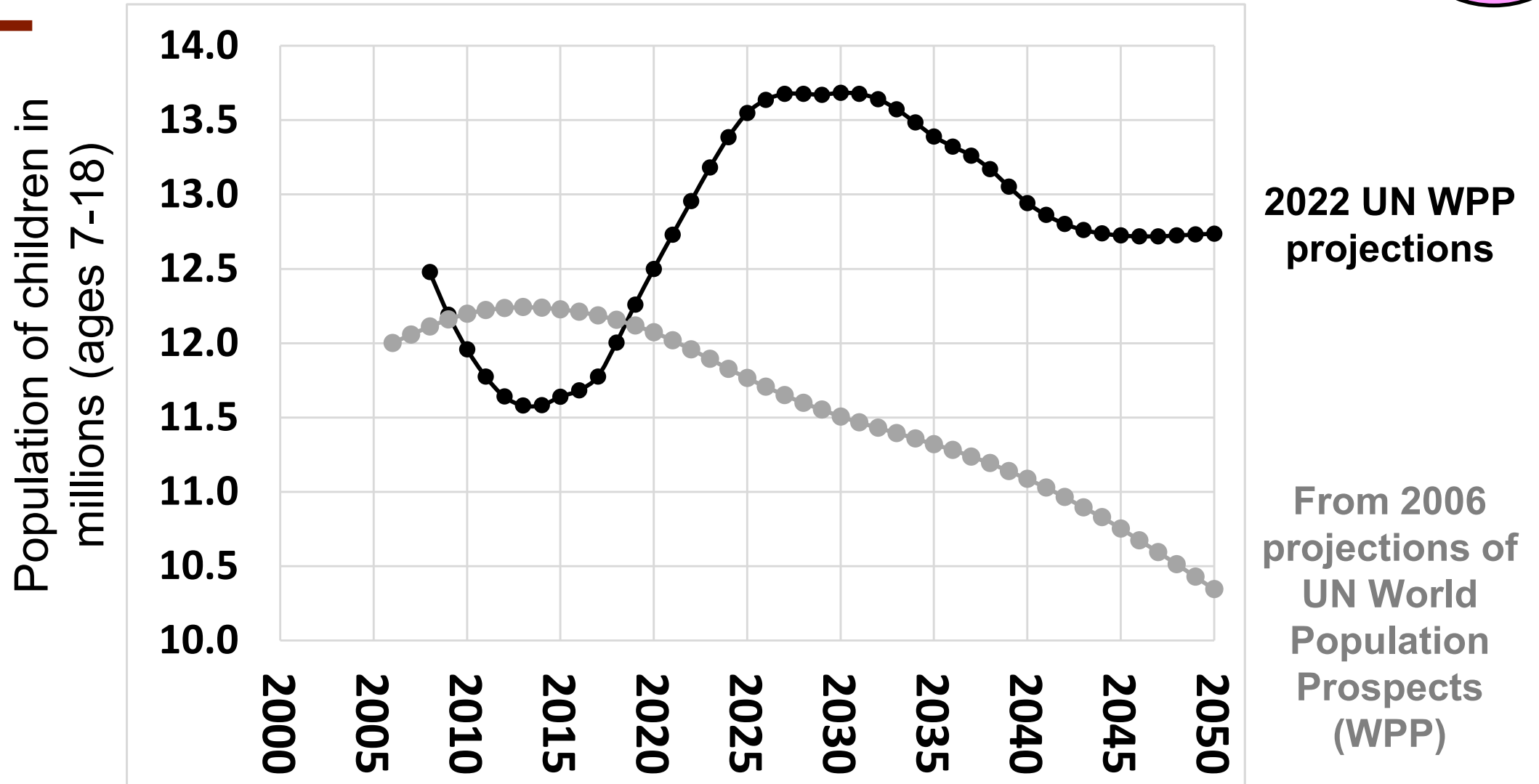
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From 2006 projections of UN World Population Prospects (WPP)

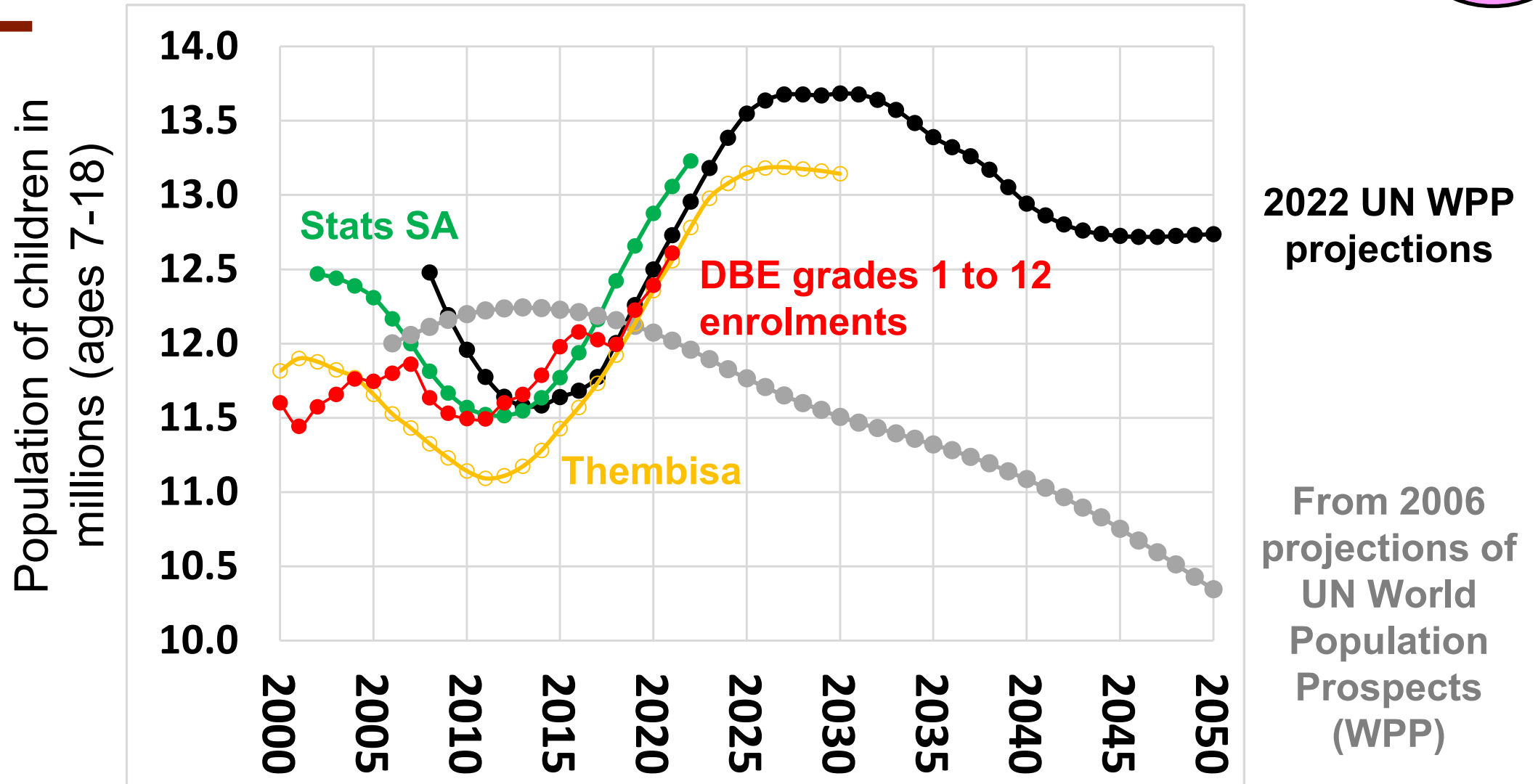
Many more school-age children than we expected

2

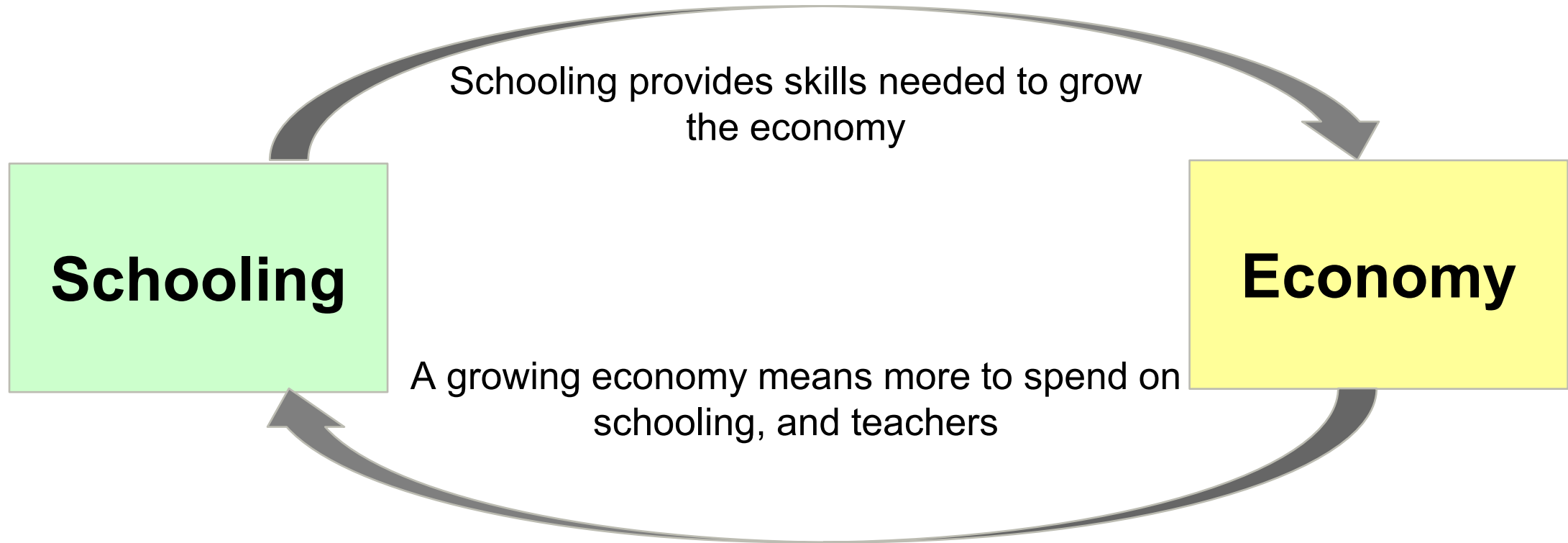


Many more school-age children than we expected

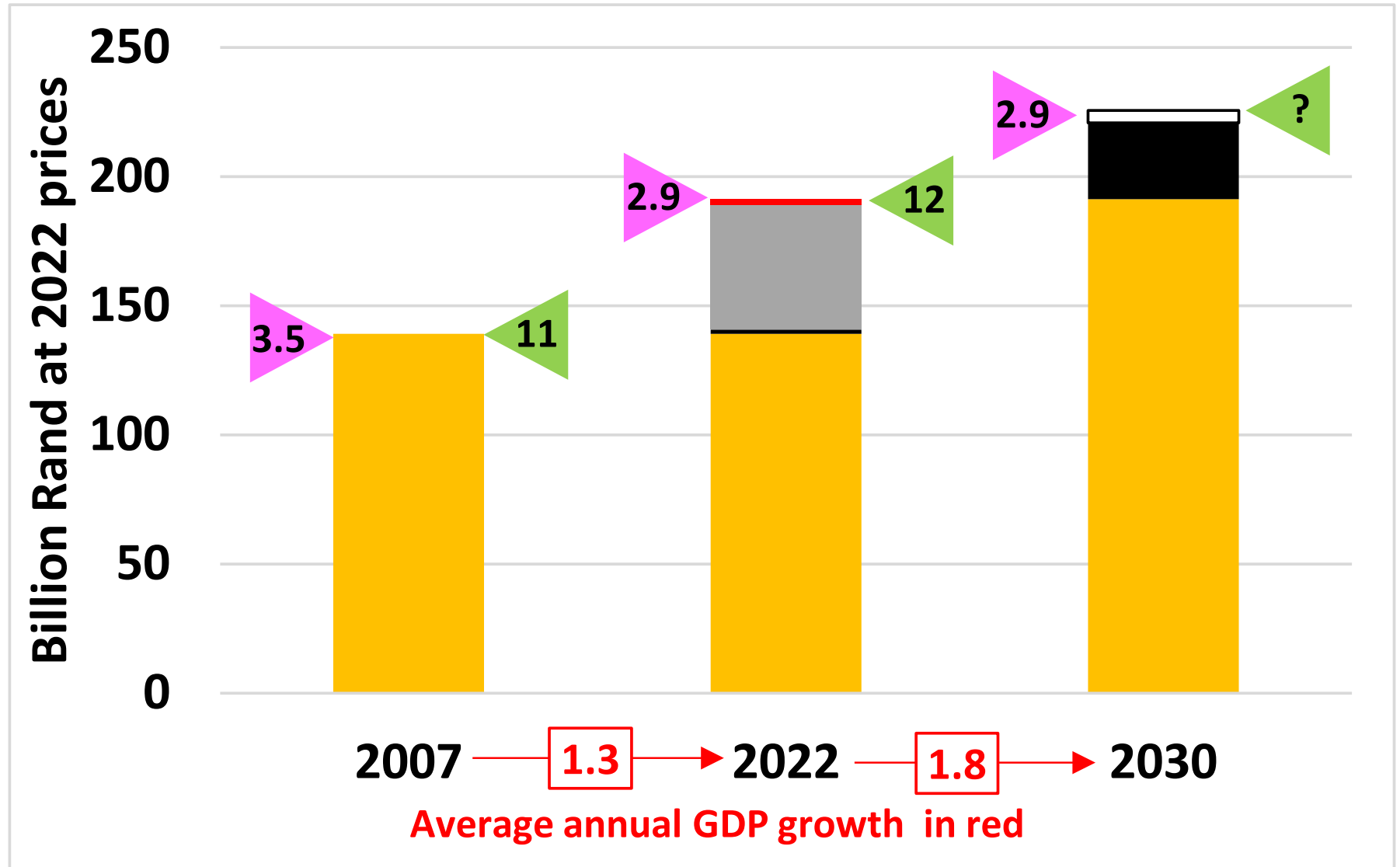
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How much will we be able to spend on educators in future?



Spending on educators, GDP and government non-interest spending

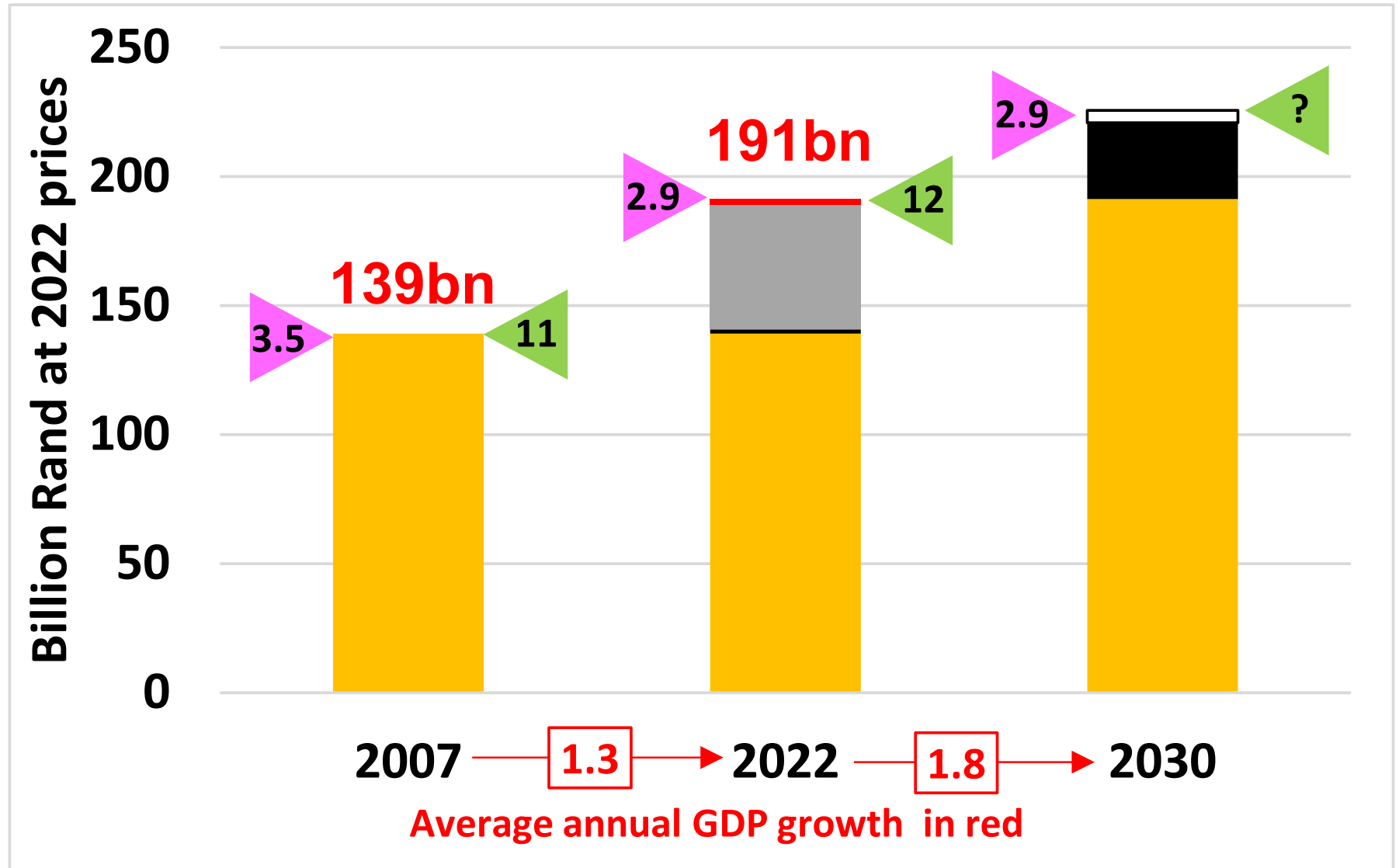


Spending on educators over GDP

Spending on educators over government non-interest spending

Average annual GDP growth in red

Spending on educators, GDP and government non-interest spending

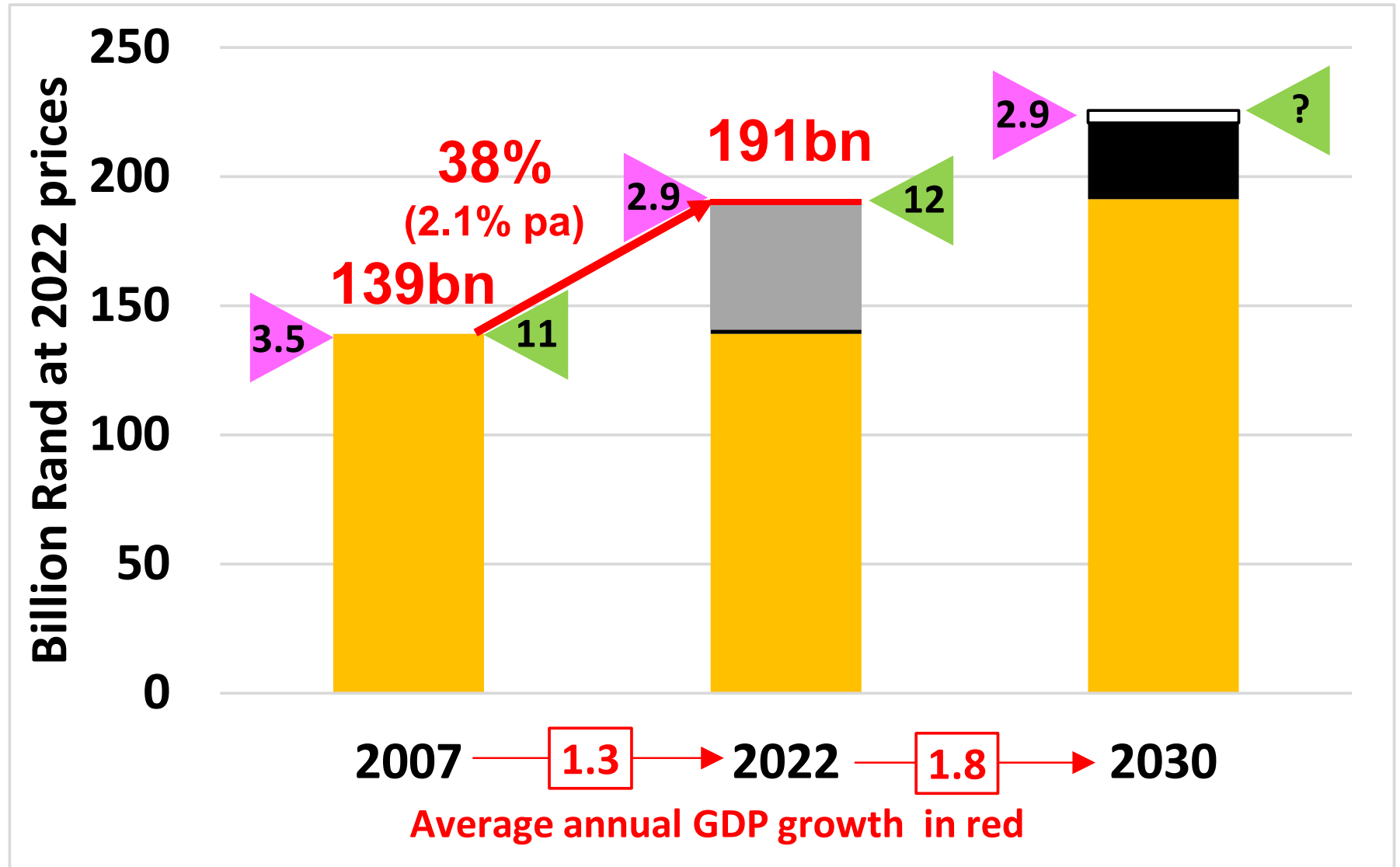


Spending on educators over GDP

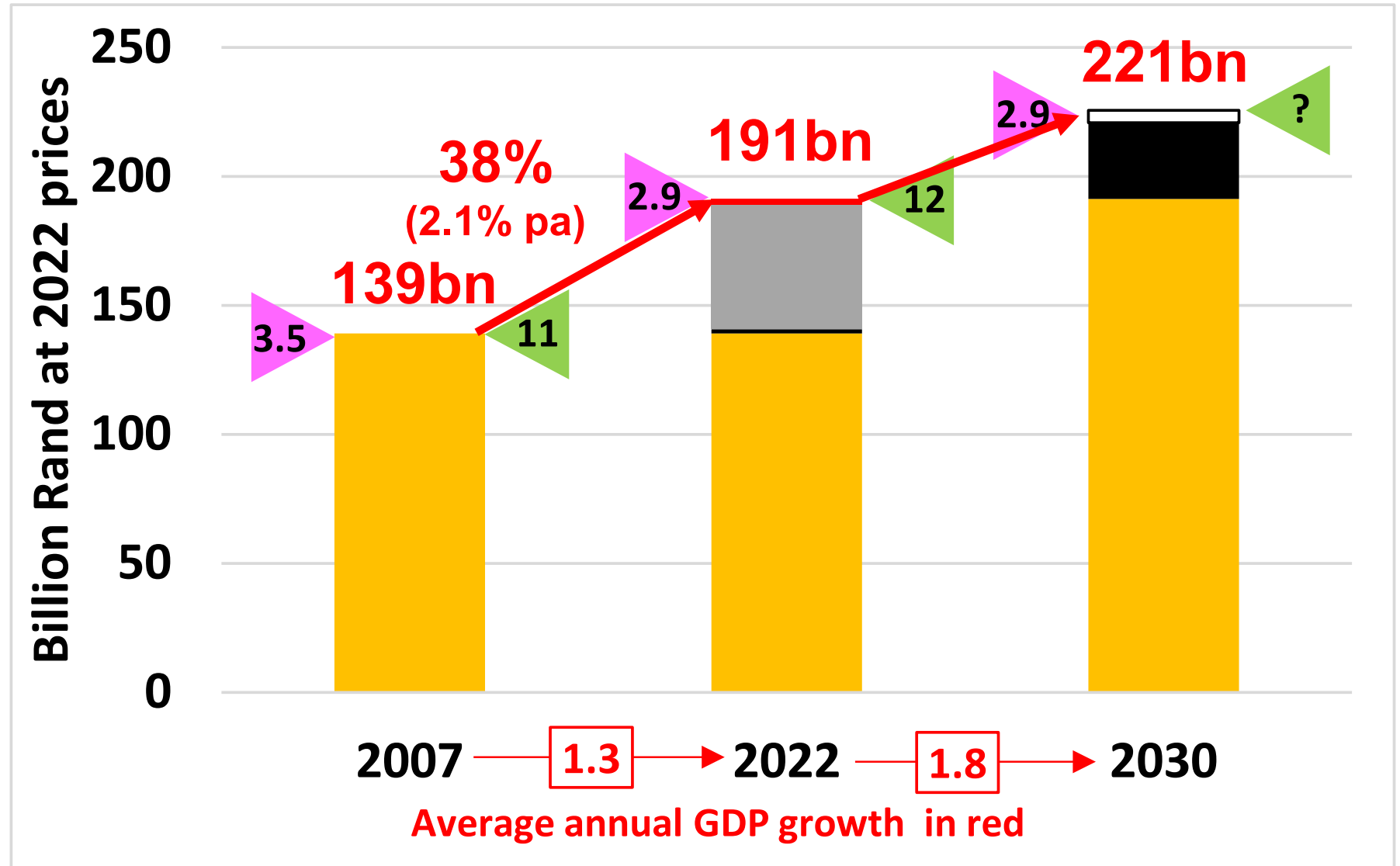
Spending on educators over government non-interest spending

Average annual GDP growth in red

Spending on educators, GDP and government non-interest spending



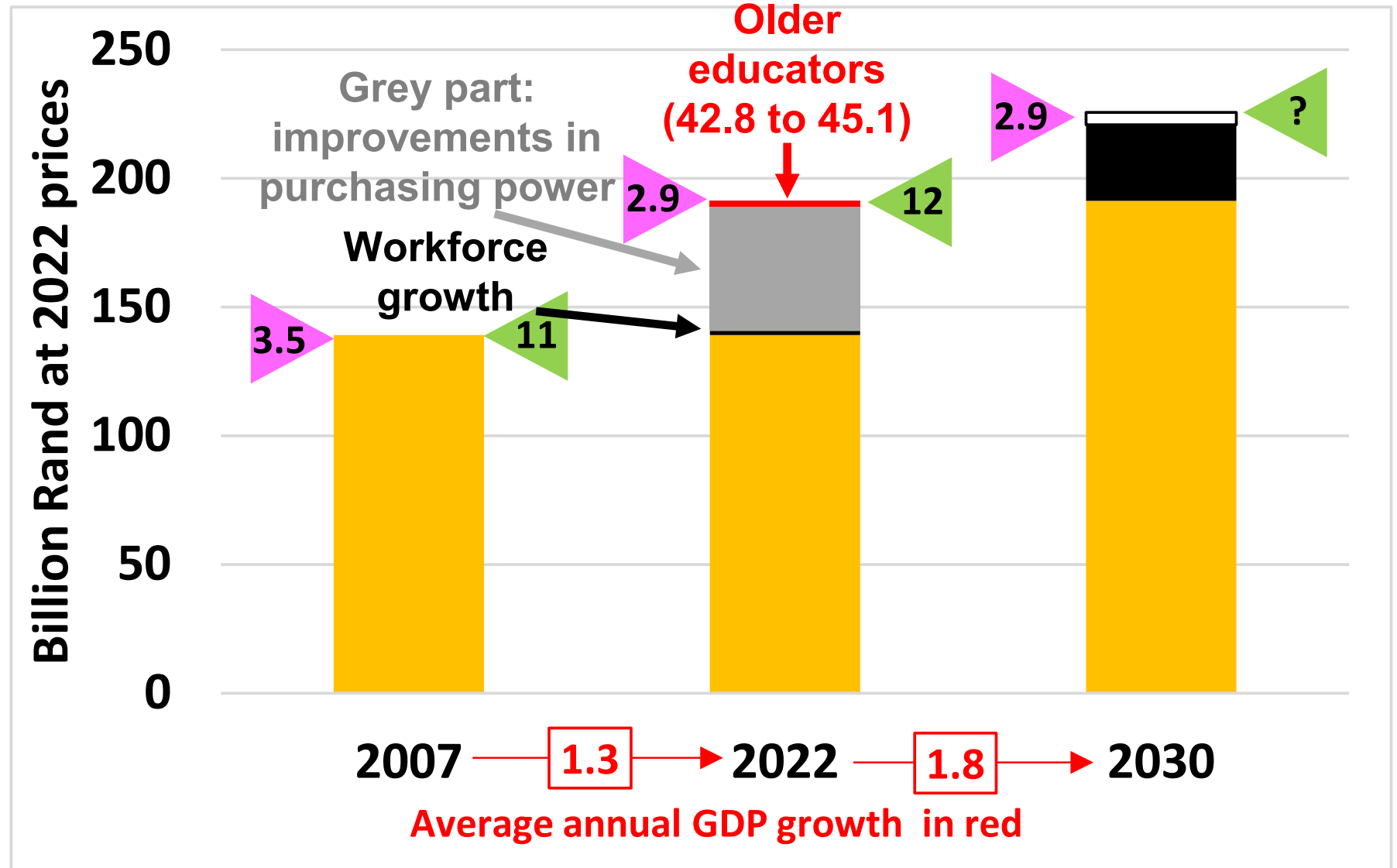
Spending on educators, GDP and government non-interest spending



Spending on educators over GDP

Spending on educators over government non-interest spending

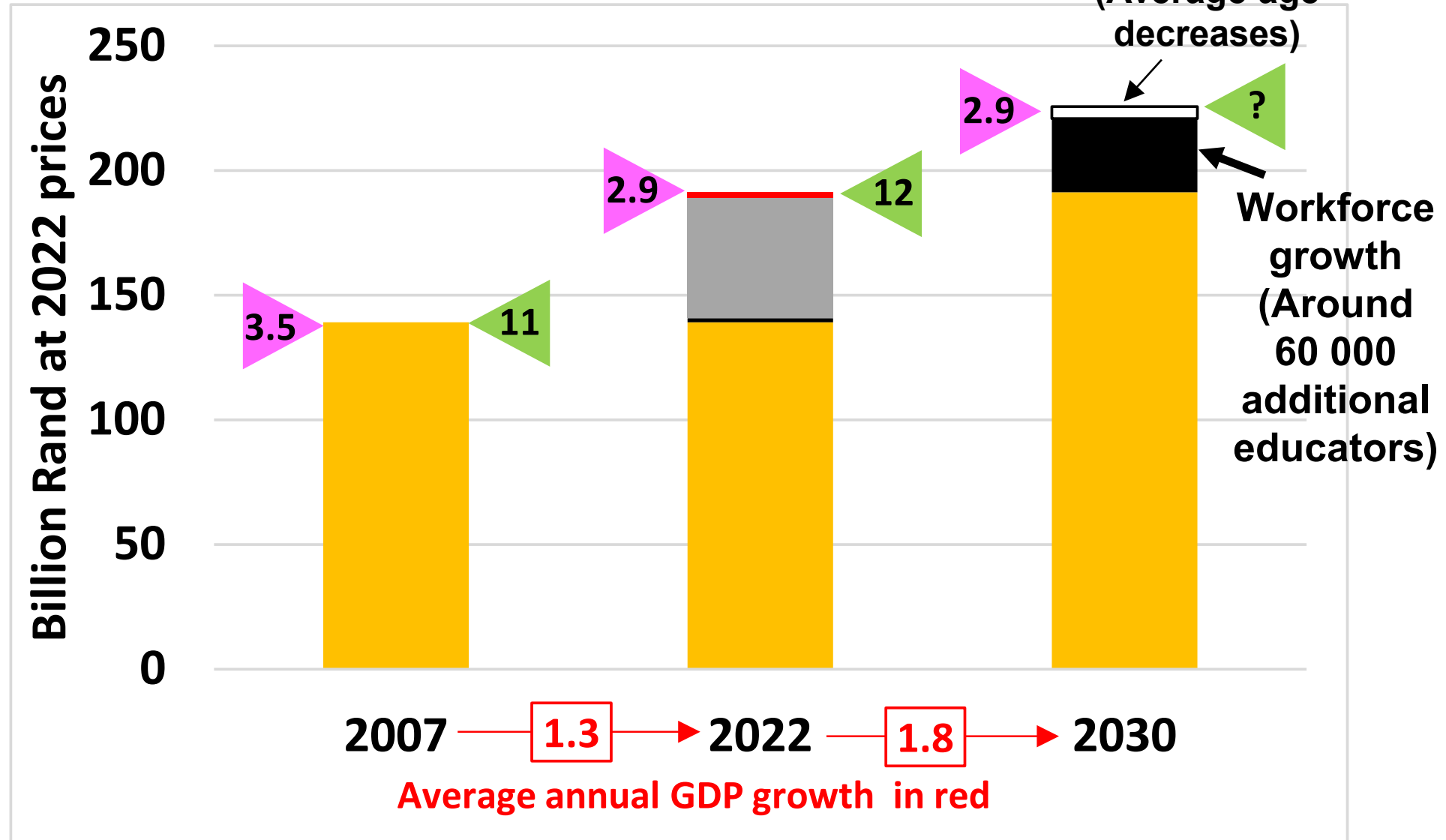
Spending on educators, GDP and government non-interest spending



Spending on educators over GDP

Spending on educators over government non-interest spending

Spending on educators, GDP and government non-interest spending



Spending on educators over GDP

Spending on educators over government non-interest spending

What an LE ratio increase of 1.0 means



Based on analysis of 2015 to 2018 grades 1 to 3 trends

Average class size	Goes up by 1.2
% of learners in classes over 40	Rises e.g. from 49% to 55%, so 6 percentage points , pushing some 200,000 grades 1 to 3 learners over the threshold
% of learners in classes over 50	Rises from e.g. 20% to 23%, so 3 percentage points

Overview

- 1 Age distributions
- 2 Projected retirements & resignations
- 3 Provincial population and enrolment trends
- 4 Public and independent school growth
- 5 Educator growth: Teachers and SMT positions
- 6 The implications for appointments and class sizes
- 7 Expected financial implications to 2030
- 8 Movement of educators: Between and within provinces
- 9 Gender imbalance in school management
- 10 Discussion

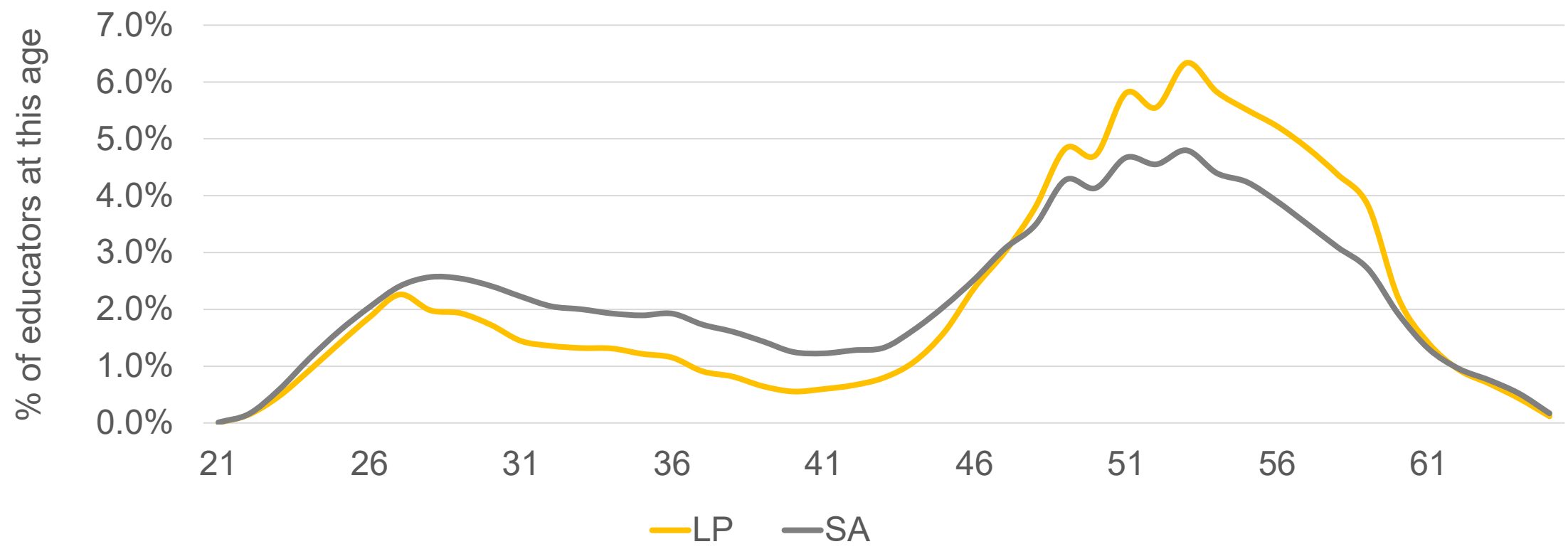
Limpopo educator demand summary

- **Age distribution:** The age distribution in Limpopo has a high peak at around 53 years of age
- **Projected resignations and retirements:** Age-related retirement in Limpopo is expected to peak between 2026 and 2031 (between 2 700 – 2900 leavers a year, 67% of all 2021 educators)
- **Enrolment and population growth:** Enrolment in Limpopo grew by 5% from 2012-2021 (~85K learners), the school-aged population is forecast to grow by a further 7% (~100K learners) to 2030
- **School and educator growth:** Over this same period, the educator number has fallen (-8%), and the number of schools has decreased (-5%), driving up the LE ratio and class sizes.
- **Senior educator changes:** In Limpopo, there has been a substantial decline in the number of HODs and Deputy Principals between 2012 and 2021 (38% of HODs and 50% of Deputy Principals), which puts the province well below the national average of management vs teacher numbers
- **Appointments and LE Ratio:** Significant increases in appointments are needed, otherwise, the LE ratio is in danger of increasing further (dropped from 26.7 to 30.4 from 2012 to 2021)
- **Projected educator cost trends:** Limpopo will experience a small decrease in the average cost of educators (especially for senior educators). This decline in average educator cost should free up some budget to replace and grow the educator workforce or increase the promotion rates
- **Educator movements:** Low movements out of Limpopo, but many educators (~7% annually) appear to move between schools from year-to-year



Age distributions and projected retirements and resignations

Educator age distribution (2021)

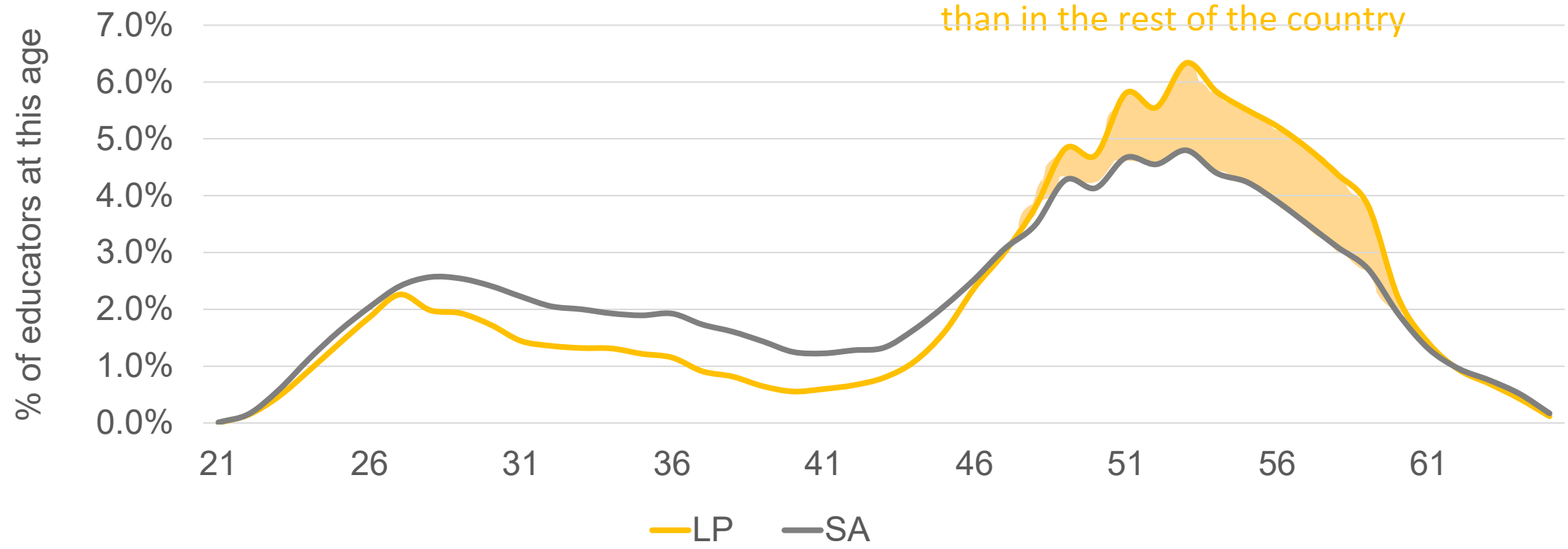


Source: Anonymised PERSAL data from 2021, only 405 431 educators (Rank 60 000 – 69 999) are considered. ECD practitioners, TVET lecturers and ABET teachers were removed.

Educator age distribution (2021)



A higher proportion of educators are over 50 years old in Limpopo than in the rest of the country

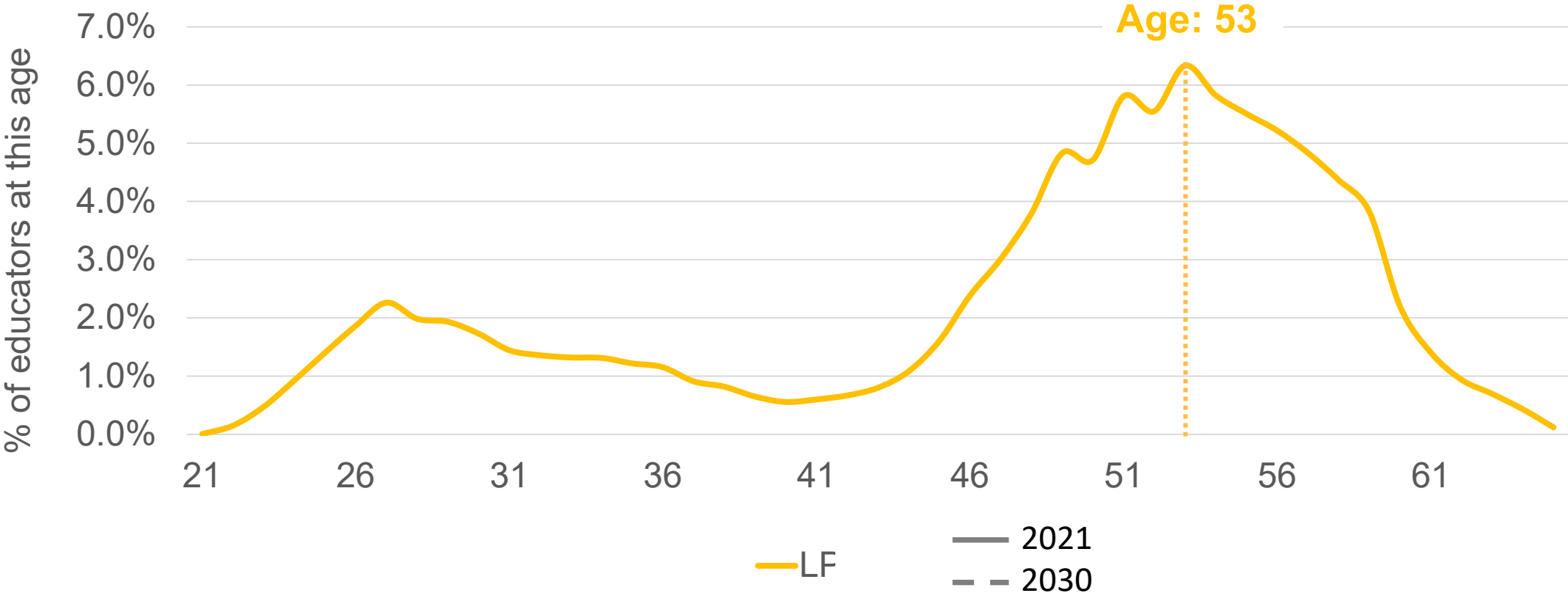


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Educator age distribution in 2021 & 2030



Assume constant 2021 educator numbers

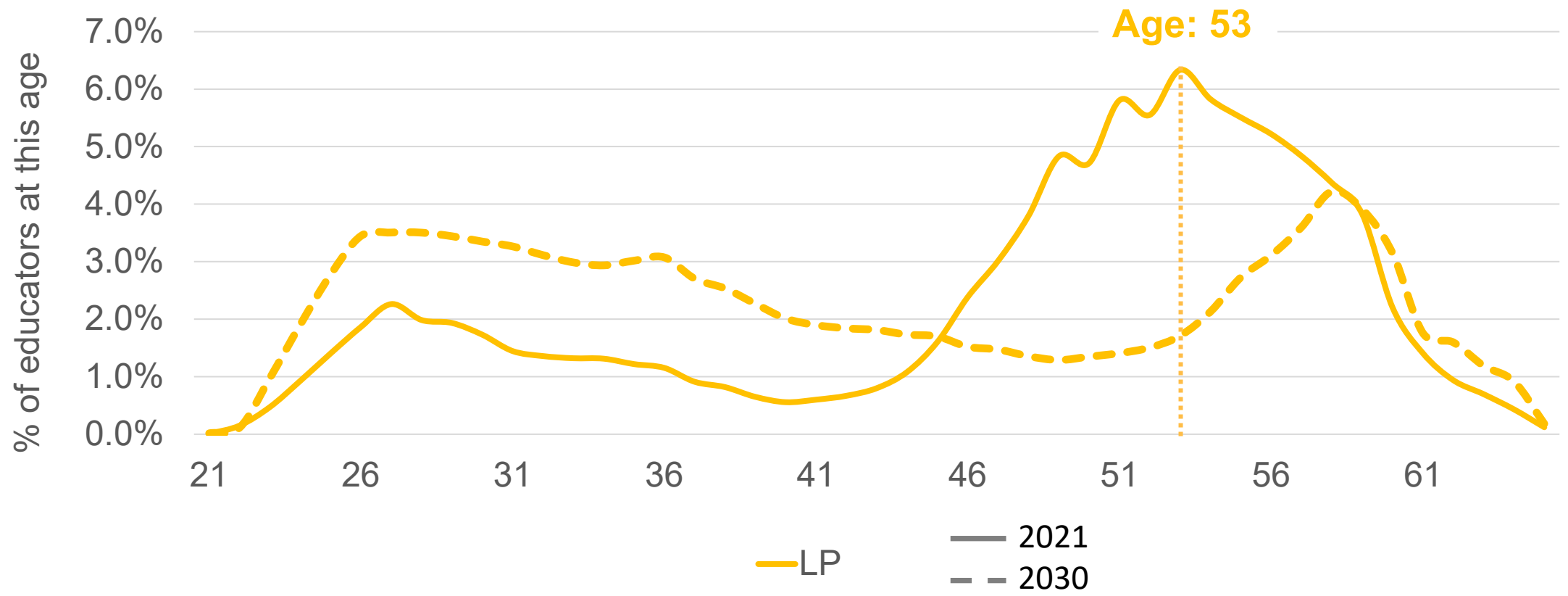


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Educator age distribution in 2021 & 2030



Assume constant 2021 educator numbers

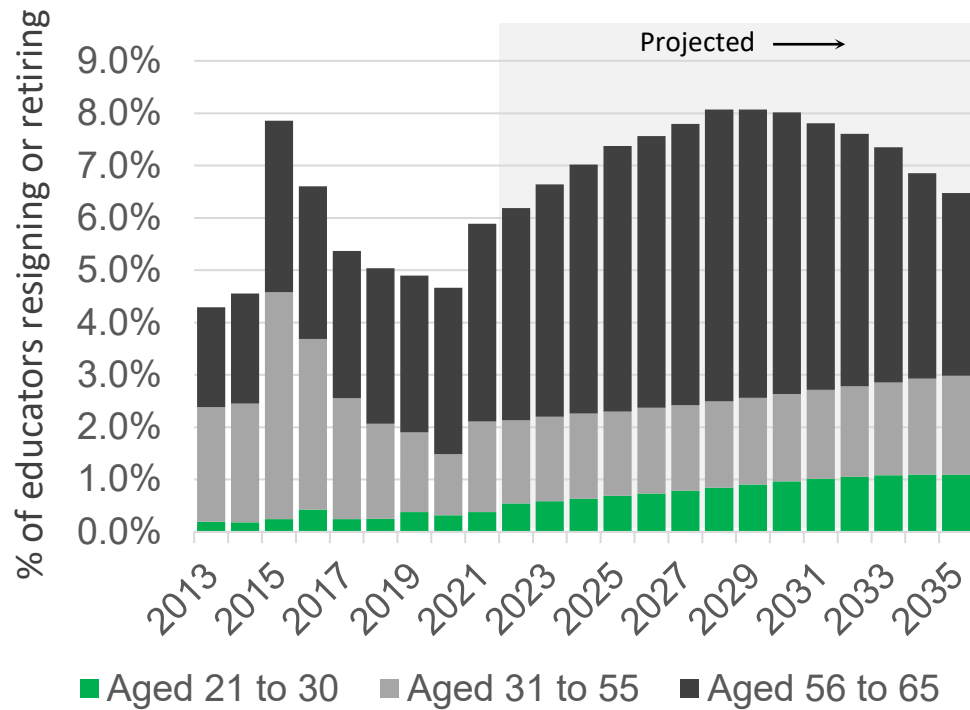


Source: Anonymised PERSAL data from 2021, only 405 431 educators (Rank 60 000 – 69 999) are considered. ECD practitioners, TVET lecturers and ABET teachers were removed.

Projected resignation & retirements (LP)

Assume constant 2021 educator numbers

Proportion of Educators



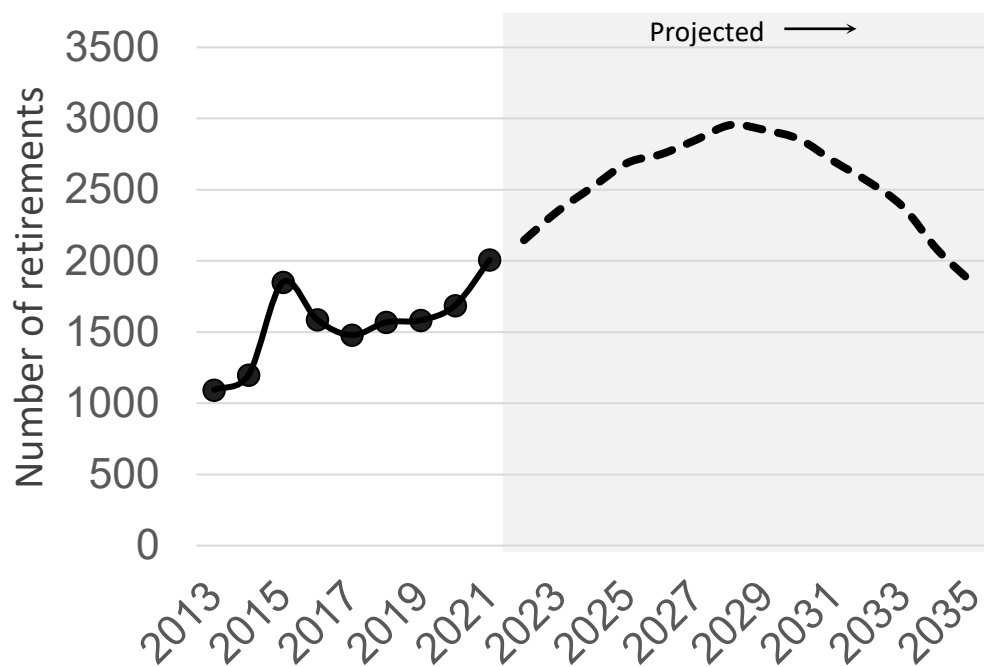
- The majority of educators that exit PERSAL in Limpopo are retirees (ages 56 to 65)
- The resignation rate in Limpopo is low. Very few educators opt to leave teaching before retirement
- The number of young teachers (ages 21-30) resigning is projected to increase as the number of newly hired young teachers increases.

Source: Anonymised PERSAL data from 2021, only 405 431 educators (Rank 60 000 – 69 999) are considered. ECD practitioners, TVET lecturers and ABET teachers were removed. Estimates to 2035 derived from the National and provincial teacher supply and demand models – assumption of no growth in educator numbers. Note: Retirements refer to all educators, aged 56 to 65, that leave PERSAL in Limpopo, whilst resignations refer to all educators aged 55 and below that leave PERSAL (as educators in Limpopo) for any reason.

Projected resignation & retirements (LP)

Assume constant 2021 educator numbers

Retirement headcount



- The number of retirements is projected to increase, peaking in ~2028 and then declining again
- The number of retirements is projected to increase from about 2,000 in 2022 to about 3,000 in 2028, an increase of about 1,000 retirements annually

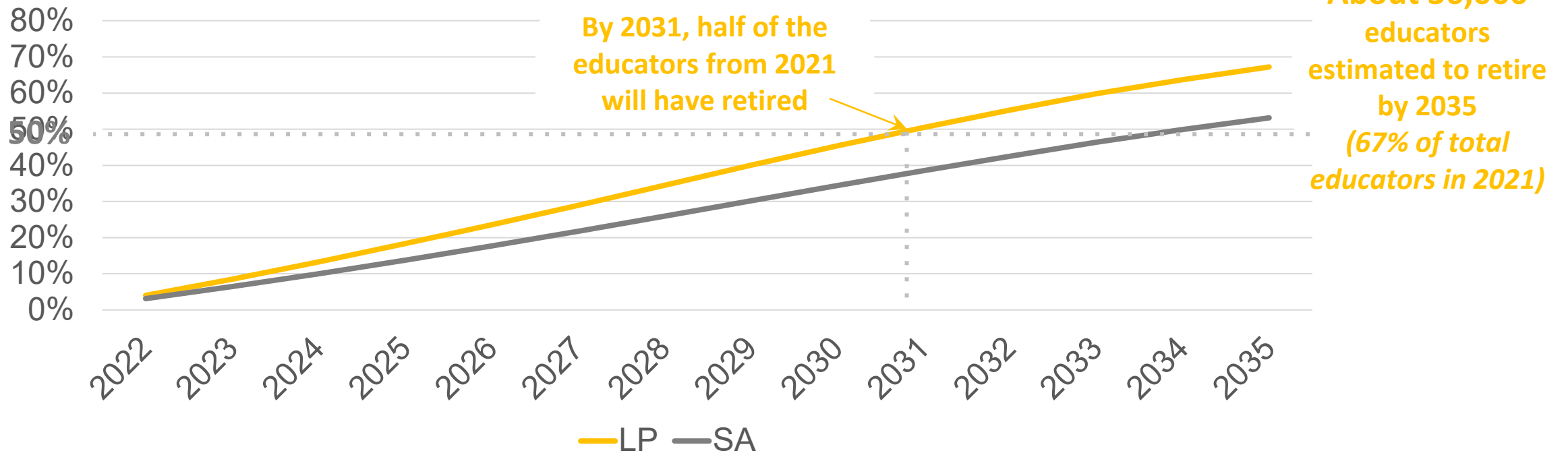
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Older leaver trend estimates to 2035



Assume constant 2021 educator numbers

Cumulative proportion of estimated leavers aged 56-65 as a proportion of total educators in 2022

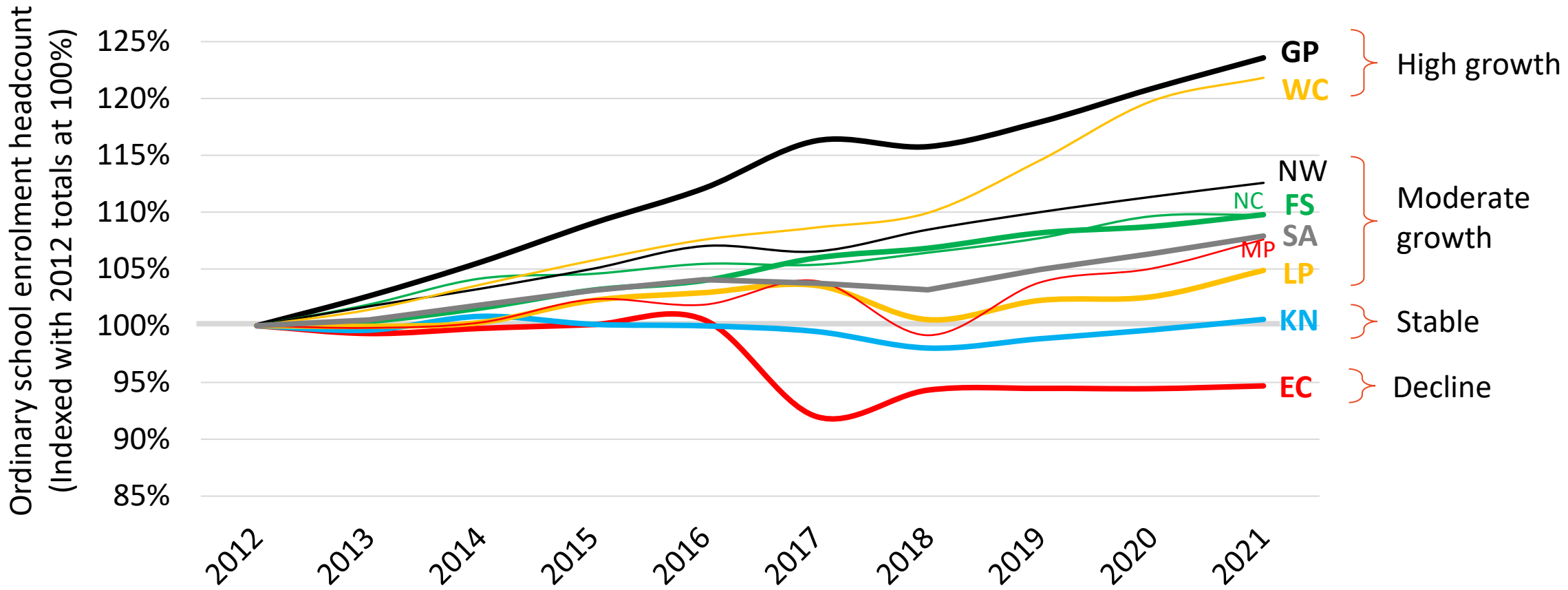


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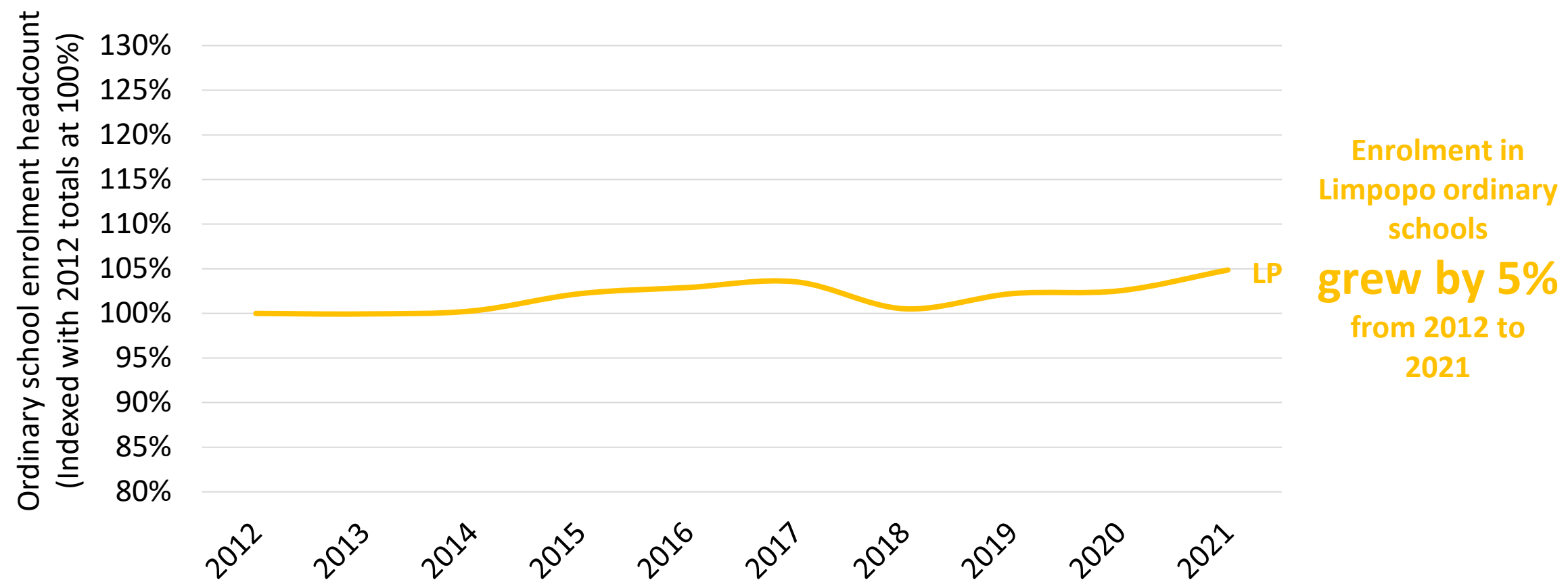
Provincial population and enrolment trends

Provincial enrolment trends (2012-2021)



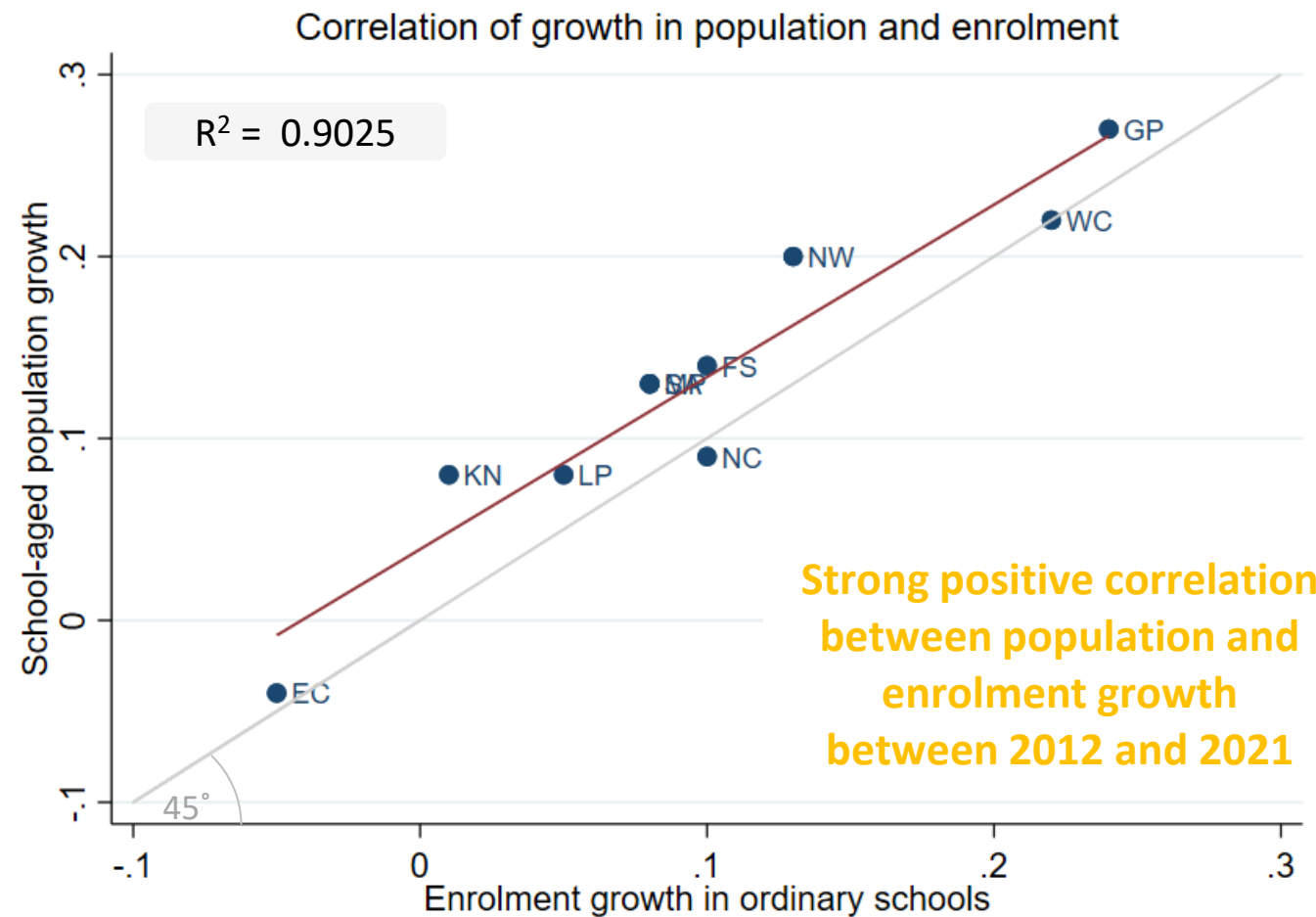
Source: Enrolment numbers taken from School Realities-EMIS (2012 – 2021) released by the DBE, using total numbers for ordinary public and independent schools.

Provincial enrolment trends (2012-2021)



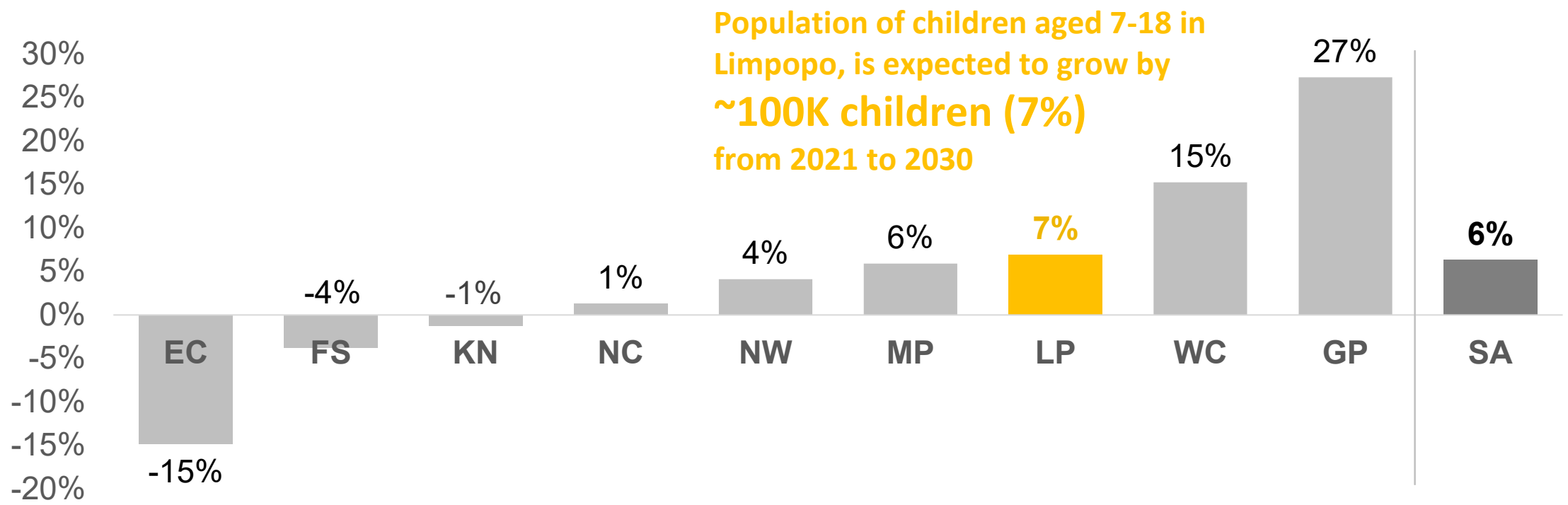
Source: Enrolment numbers taken from School Realities-EMIS (2012 – 2021) released by the DBE, using total numbers for ordinary public and independent schools.

Correlation between population and enrolment growth (2012-2021)



Source: Thembisa age specific data V4.5 for school-aged population (Ages 7-18) estimates and enrolment taken from School Realities-EMIS (2012 – 2021) released by the DBE, for numbers on ordinary public and independent schools (Statistical Publications (education.gov.za))

Projected growth in school-aged population

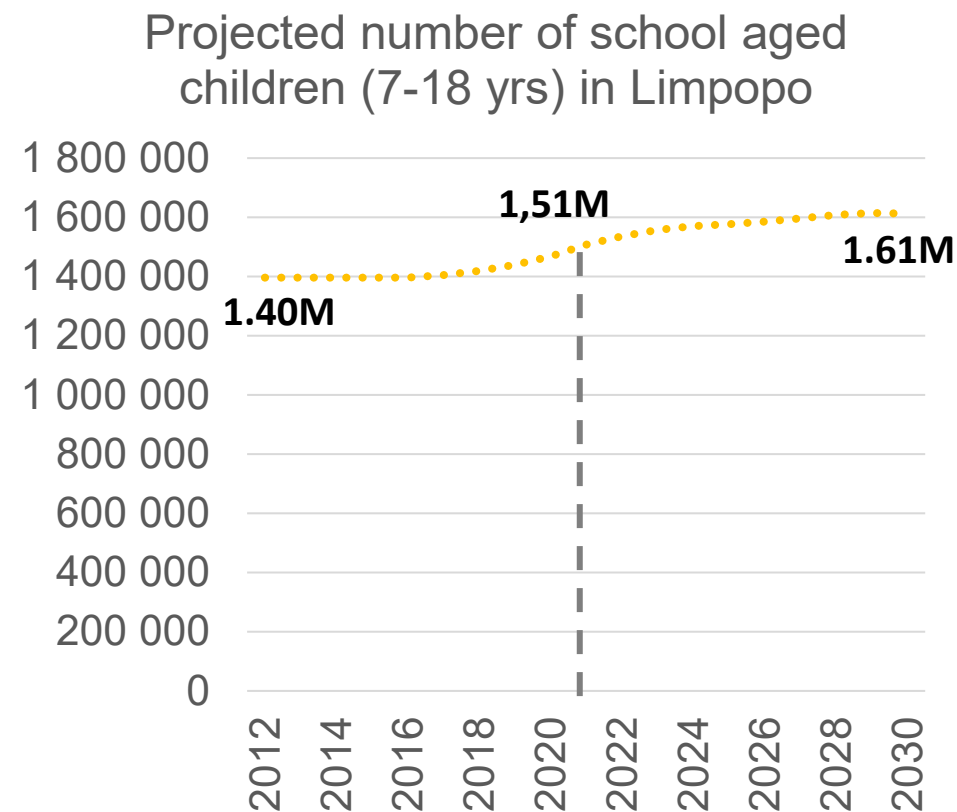


Note: Period 2021 – 2030 is the same timeframe, nine years, as 2012 – 2021.

Source: Thembisa age-specific estimates from the model V4.5 for children aged 7-18 by province

School aged-population estimates to 2030

Province	Number of children Aged 7-18			Growth '12-21	Growth '21-30
	2012	2021	2030E		
EC	1 657 202	1 598 475	1 361 637	-4%	-15%
FS	592 445	676 489	650 820	14%	-4%
GP	1 962 793	2 498 533	3 180 884	27%	27%
KN	2 485 822	2 690 378	2 657 716	8%	-1%
LP	1 395 864	1 507 386	1 612 125	8%	7%
MP	977 749	1 100 594	1 165 728	13%	6%
NC	254 075	277 560	281 208	9%	1%
NW	742 943	893 530	930 323	20%	4%
WC	1 068 009	1 298 801	1 496 731	22%	15%
Total	11 136 902	12 541 746	13 337 172	13%	6%



Note: Period 2021 – 2030 is the same timeframe, nine years, as 2012 – 2021.

Source: Thembisa age-specific estimates from the model V4.5 for children aged 7-18 by province



Public and independent school growth

Educator, school and enrolment growth



Province	% growth from 2012 - 2021					
	Number of educators	Number of teachers	Number of public ordinary schools	Enrolment in public ordinary schools	Enrolment in ordinary schools	Est. school-aged population
EC	-17%	-20%	-8%	-6%	-5%	-4%
FS	-13%	-13%	-27%	9%	10%	14%
GP	21%	28%	1%	20%	24%	27%
KN	-5%	-3%	-3%	1%	1%	8%
LP	-8%	-2%	-7%	4%	5%	8%
MP	3%	7%	-8%	7%	8%	13%
NC	6%	9%	-3%	9%	10%	9%
NW	2%	4%	-9%	12%	13%	20%
WC	12%	22%	0%	21%	22%	22%
SA	-1%	2%	-6%	7%	8%	13%

Source: Educator numbers from anonymised PERSAL data from 2012 and 2021, only 405 431 educators (Rank 60 000 – 69 999) are considered. Thembisa age specific data V4.5 for school-aged population (Ages 7-18) estimates and enrolment and school numbers taken from School Realities-EMIS (2012 – 2021) released by the DBE, for numbers on ordinary public and independent schools ([Statistical Publications \(education.gov.za\)](https://www.education.gov.za))

Educator, school and enrolment growth

% growth from 2012 - 2021

Province	Number of educators	Number of teachers	Number of public ordinary schools	Enrolment in public ordinary schools	Enrolment in ordinary schools	Est. school-aged population
EC	-17%	-20%	-8%	-6%	-5%	-4%
LP	-8%	-2%	-7%	4%	5%	8%
MP	3%	7%				
NC	6%	9%				
NW	2%	4%				
WC	12%	22%	0%	21%	22%	22%
SA	-1%	2%	-6%	7%	8%	13%

Total number of educators in Limpopo public schools decreased from 2012 to 2021....

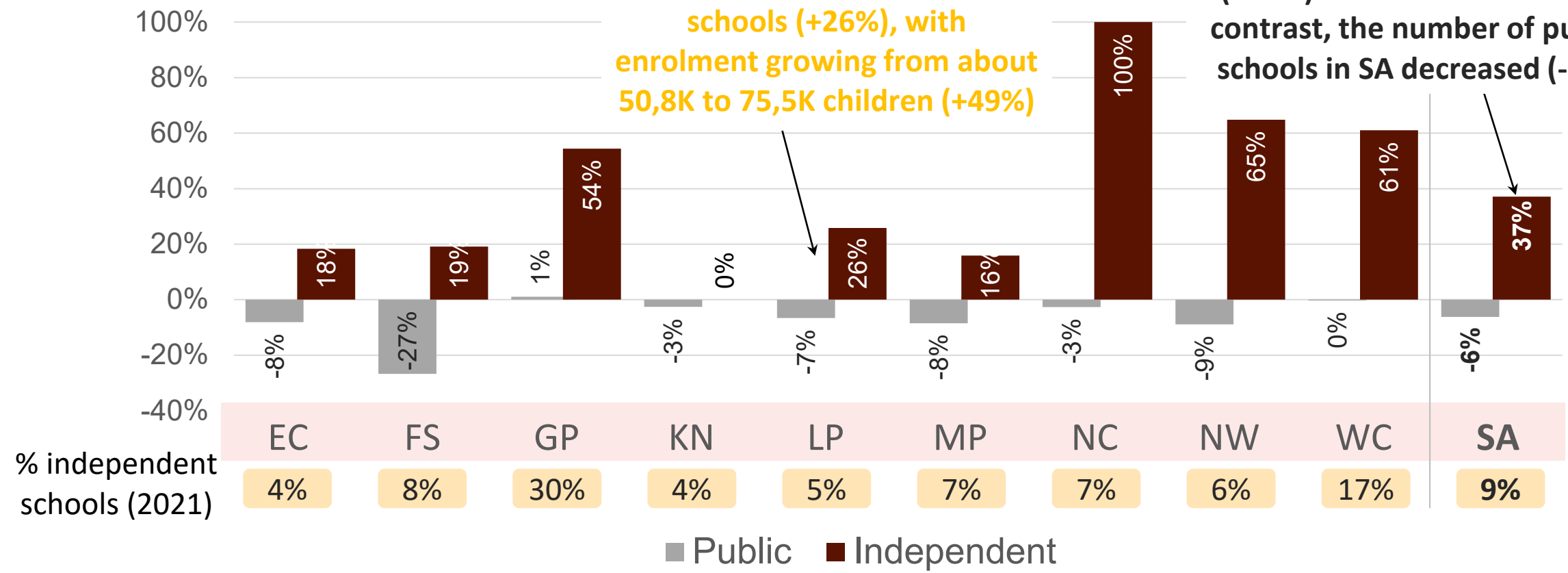
....despite a growing population and enrolment.

School growth from 2012 to 2021



The number of independent schools increased by 37 schools (+26%), with enrolment growing from about 50,8K to 75,5K children (+49%)

School growth was driven by independent school growth (+37%) from 2012 to 2021. In contrast, the number of public schools in SA decreased (-6%)



Source: School numbers taken from School Realities-EMIS (2012 – 2021) released by the DBE, for numbers on ordinary public and independent schools ([Statistical Publications \(education.gov.za\)](http://www.education.gov.za))



Educator growth by teachers and SMT positions

Changes in teacher and SMT numbers

Province	Teacher				HOD				Deputy-Principal				Principal			
	2012	2021	Diff	% change	2012	2021	Diff	% change	2012	2021	Diff	% change	2012	2021	Diff	% change
EC	50 295	40 115	-10 180	-20%	5 870	6 196	326	6%	1 342	1 453	111	8%	5 294	4 755	- 539	-10%
FS	20 148	17 561	-2 587	-13%	2 685	2 470	- 215	-8%	852	768	- 84	-10%	1 224	892	- 332	-27%
GP	47 233	60 677	13 444	28%	8 708	9 209	501	6%	2 565	2 850	285	11%	2 162	1 959	- 203	-9%
KN	73 050	71 000	-2 050	-3%	11 289	10 330	- 959	-8%	2 642	2 342	- 300	-11%	5 584	5 055	- 529	-9%
LP	44 998	44 317	- 681	-2%	6 090	3 762	-2 328	-38%	1 562	778	- 784	-50%	3 510	3 316	- 194	-6%
MP	26 127	27 857	1 730	7%	4 047	4 055	8	0%	1 108	1 114	6	1%	1 790	1 450	- 340	-19%
NC	7 257	7 929	672	9%	1 034	1 094	60	6%	294	365	71	24%	587	488	- 99	-17%
NW	21 305	22 261	956	4%	2 994	3 023	29	1%	902	1 041	139	15%	1 698	1 338	- 360	-21%
WC	23 579	28 665	5 086	22%	4 065	3 700	- 365	-9%	1 334	1 297	- 37	-3%	1 531	1 339	- 192	-13%
SA	313 992	320 382	6 390	2%	46 782	43 839	-2 943	-6%	12 601	12 008	- 593	-5%	23 380	20 592	-2 788	-12%

Source: Anonymised PERSAL data from 2012 and 2021, only 405 431 educators (Rank 60 000 – 69 999) are considered. ECD practitioners, TVET lecturers, and ABET teachers were removed. The 2021 rankclass file was expanded to include ranks found only in years prior to 2021.

Changes in teacher and SMT numbers

Province	Teacher				HOD				Deputy-Principal				Principal			
	2012	2021	Diff	% change	2012	2021	Diff	% change	2012	2021	Diff	% change	2012	2021	Diff	% change
EC	50 295	40 115	-10 180	-20%	5 870	6 196	326	6%	1 342	1 453	111	8%	5 294	4 755	-539	-10%
FS	20 148	17 561	-2 587	-13%	2 685	2 476	-209	-8%	1 052	708	-344	-33%	1 224	892	-332	-27%
GP	47 233	60 677	13 444	28%	8 708	9 255	547	6%	1 562	1 708	146	9%	1 959	2 058	99	5%
KN	73 050	71 000	-2 050	-3%	11 289	10 330	-959	-8%	2 642	2 342	-300	-11%	5 584	5 055	-529	-9%
LP	44 998	44 317	-681	-2%	6 090	3 762	-2 328	-38%	1 562	778	-784	-50%	3 510	3 316	-194	-6%
MP	26 127	27 857	1 730	7%	4 047	4 055	8	0%	1 108	1 114	6	1%	1 790	1 450	-340	-19%
NC	7 257	7 929	672	9%	1 034	1 094	60	6%	294	365	71	24%	587	488	-99	-17%
NW	21 305	22 261	956	4%	2 994	3 023	29	1%	1 050	1 050	0	0%	1 350	1 350	0	0%
WC	23 579	28 665	5 086	22%	4 065	3 700	-365	-9%	1 334	1 297	-37	-3%	1 531	1 339	-192	-13%
SA	313 992	320 382	6 390	2%	46 782	43 839	-2 943	-6%	12 601	12 008	-593	-5%	23 380	20 592	-2 788	-12%

Large decline in deputy principal and HOD numbers between 2012 and 2021

Principal number declined roughly in line with the decrease in public schools (-7%)

Proportional split by educator rank

	All Educators		Teacher		HOD		Dep.-Principal		Principal		Other	
	2012	2021	2012	2021	2012	2021	2012	2021	2012	2021	2012	2021
EC	100%	100%	78% ↓	75%	9% ↑	12%	2.1% ↑	2.7%	8.2%	8.8%	2.5%	2.4%
FS	100%	100%	78%	78%	10%	11%	3.3%	3.4%	4.7%	4.0%	3.7%	3.3%
GP	100%	100%	74% ↑	79%	14%	12%	4.0%	3.7%	3.4% ↓	2.6%	4.4%	2.7%
KN	100%	100%	77%	79%	12%	11%	2.8%	2.6%	5.9%	5.6%	2.1%	1.3%
LP	100%	100%	78% ↑	84%	11% ↓	7%	2.7% ↓	1.5%	6.1%	6.3%	2.1%	1.5%
MP	100%	100%	76% ↑	79%	12%	12%	3.2%	3.2%	5.2% ↓	4.1%	3.2%	1.8%
NC	100%	100%	75%	77%	11%	11%	3.0% ↑	3.6%	6.1% ↓	4.8%	5.1%	3.9%
NW	100%	100%	76%	78%	11%	11%	3.2%	3.7%	6.1% ↓	4.7%	3.7%	2.6%
WC	100%	100%	74% ↑	80%	13% ↓	10%	4.2% ↓	3.6%	4.8% ↓	3.7%	4.1%	2.1%
SA	100%	100%	77%	79%	11%	11%	3.1%	3.0%	5.7%	5.1%	3.1%	2.1%

Source: Anonymised PERSAL data from 2012 and 2021, only educators (Rank 60 000 – 69 999) are considered. ECD practitioners TVET lecturers and ABET teachers were removed. The 2021 rankclass file was expanded to include ranks found only in years prior to 2021. The percentage within each rank is calculated taking the total number of educator in that year for that rank over the total number of educators in that year.

Proportional split by educator rank



	All Educators		Teacher		HOD		Dep.-Principal		Principal		Other	
	2012	2021	2012	2021	2012	2021	2012	2021	2012	2021	2012	2021
EC	100%	100%	77%	75%	12%	11%	2.0%	2.0%	5.0%	5.6%	2.5%	2.4%
FS	100%	100%	77%	75%	12%	11%	2.0%	2.0%	5.0%	5.6%	3.7%	3.3%
GP	100%	100%	77%	75%	12%	11%	2.0%	2.0%	5.0%	5.6%	4.4%	2.7%
KN	100%	100%	77%	75%	12%	11%	2.0%	2.0%	5.0%	5.6%	2.1%	1.3%
LP	100%	100%	78%	84%	11%	7%	2.7%	1.5%	6.1%	6.3%	2.1%	1.5%
MP	100%	100%	76%	79%	12%	12%	3.2%	3.2%	5.2%	4.1%	3.2%	1.8%
NC	100%	100%	75%	77%	11%	11%	3.0%	3.6%	6.1%	4.8%	5.1%	3.9%
NW	100%	100%	76%	78%	11%	11%	3.2%	3.7%	6.1%	4.7%	3.7%	2.6%
WC	100%	100%	74%	80%	13%	10%	4.2%	3.6%	4.8%	3.7%	4.1%	2.1%
SA	100%	100%	77%	79%	11%	11%	3.1%	3.0%	5.7%	5.1%	3.1%	2.1%

Large increase in the proportion of teachers (78% to 84%) to well above the national average (79%)

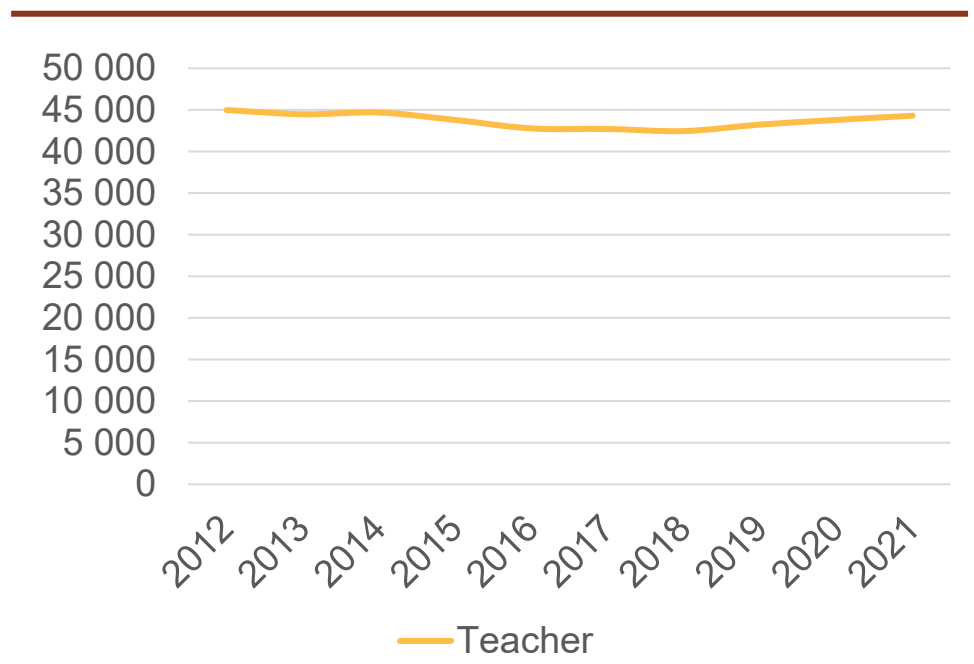
Large decrease in the proportion of HODs and deputy principals to well below the national averages

Source: Anonymised PERSAL data from 2012 and 2021, only educators (Rank 60 000 – 69 999) are considered. ECD practitioners TVET lecturers and ABET teachers were removed. The 2021 rankclass file was expanded to include ranks found only in years prior to 2021. The percentage within each rank is calculated taking the total number of educator in that year for that rank over the total number of educators in that year.

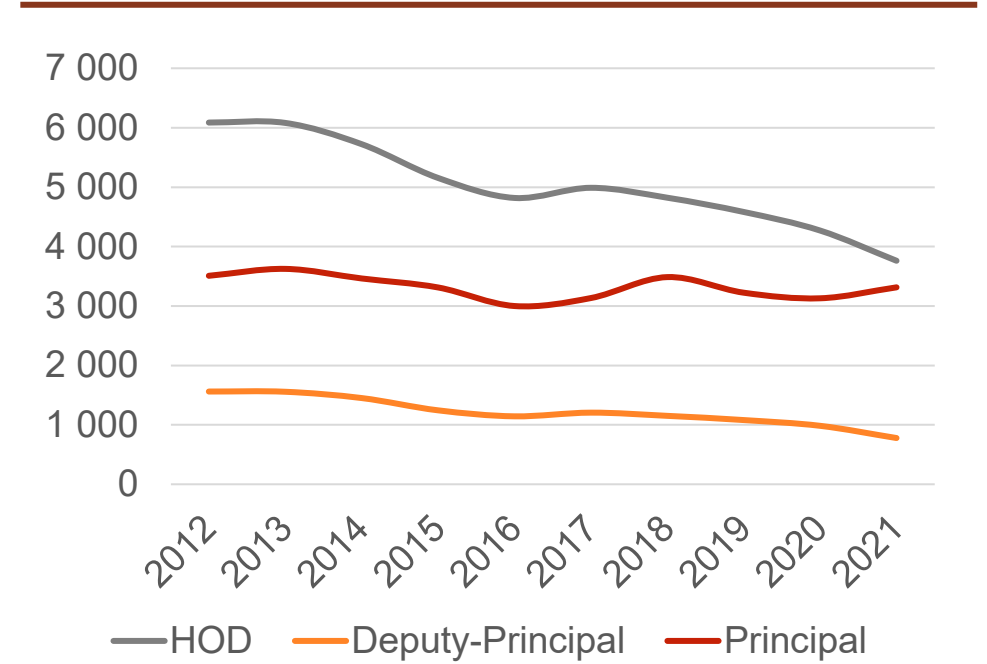
Trends in educator numbers (2021-2021)



Number of teachers (Level 1 teachers)



Number of senior educators (HODs, Deputy's, Principals & Other)



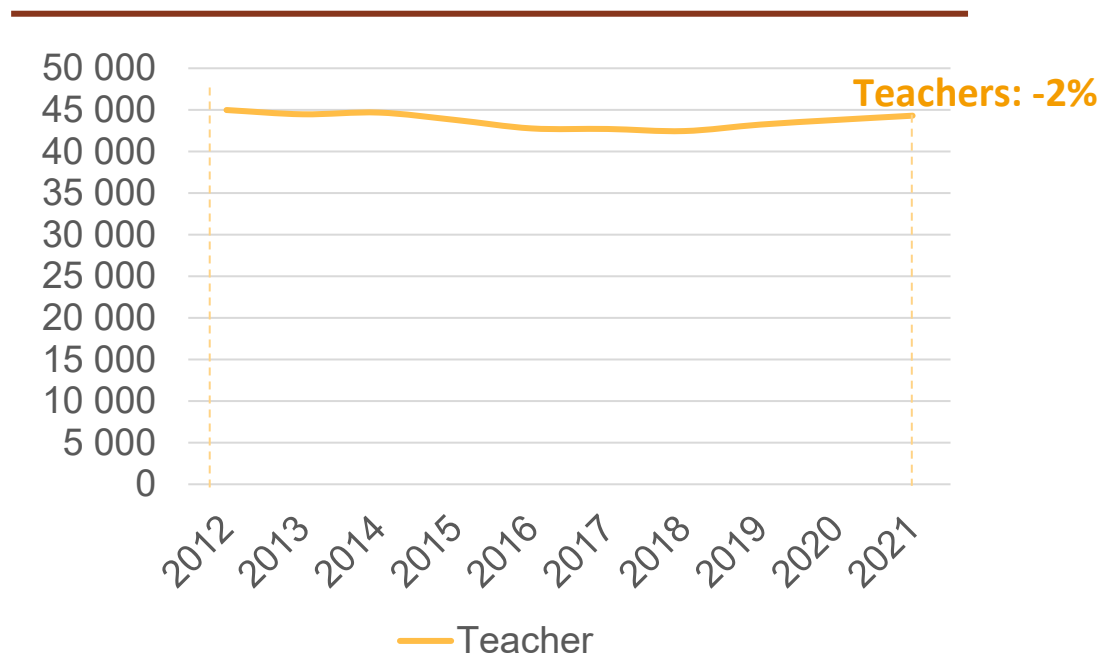
Source: Anonymised PERSAL data from 2012 and 2021, only 405 431 educators (Rank 60 000 – 69 999) are considered. ECD practitioners, TVET lecturers, and ABET teachers were removed. The 2021 rankclass file was expanded to include ranks found only in years prior to 2021.

Trends in educator numbers (2021-2021)

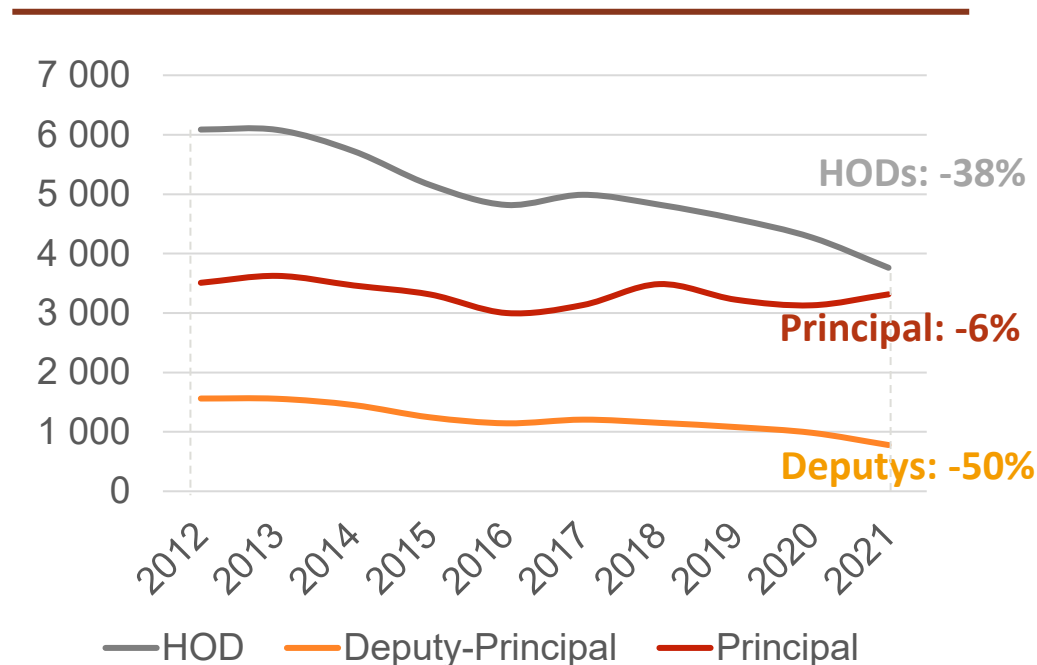


% Headcount growth from 2012 to 2021

Number of teachers (Level 1 teachers)



Number of senior educators (HODs, Deputy's, Principals & Other)



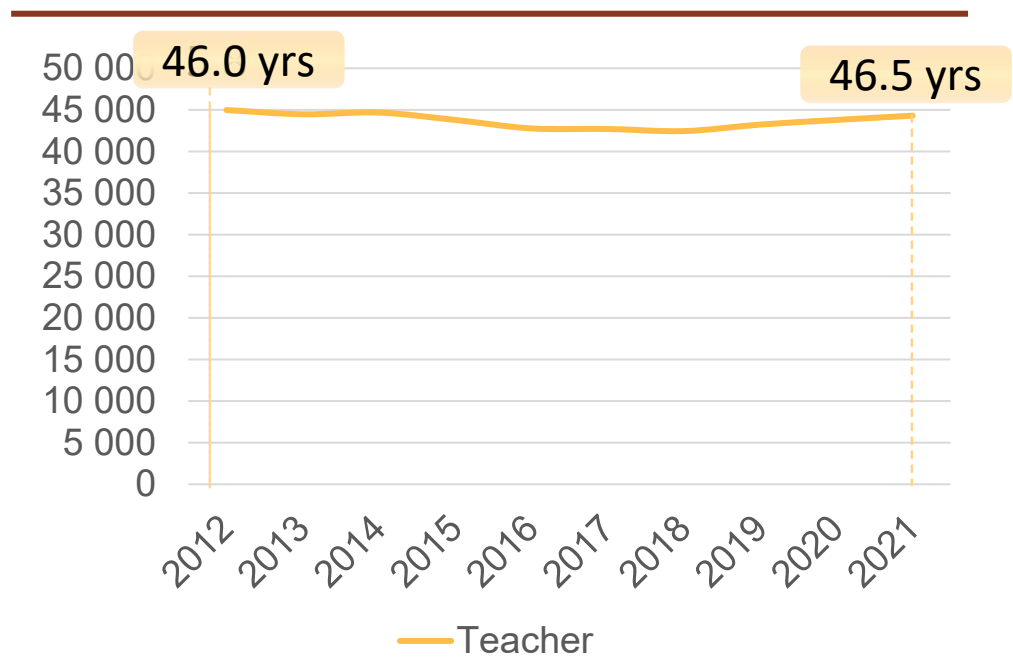
Source: Anonymised PERSAL data from 2012 and 2021, only 405 431 educators (Rank 60 000 – 69 999) are considered. ECD practitioners, TVET lecturers, and ABET teachers were removed. The 2021 rankclass file was expanded to include ranks found only in years prior to 2021.

Trends in educator numbers (2021-2021)

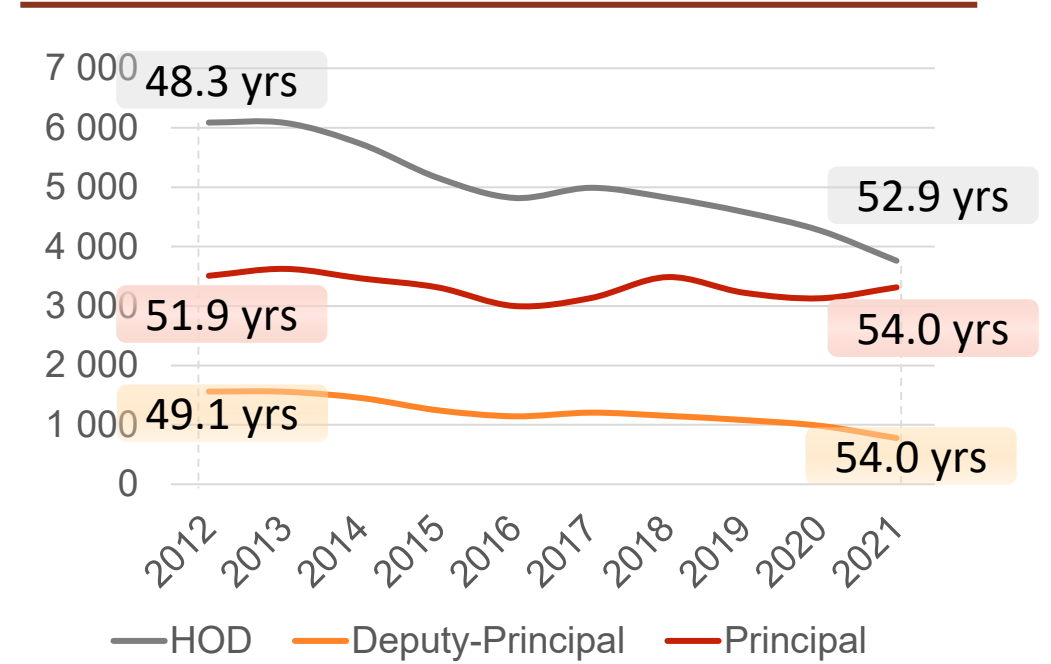


Mean educator age

Number of teachers (Level 1 teachers)

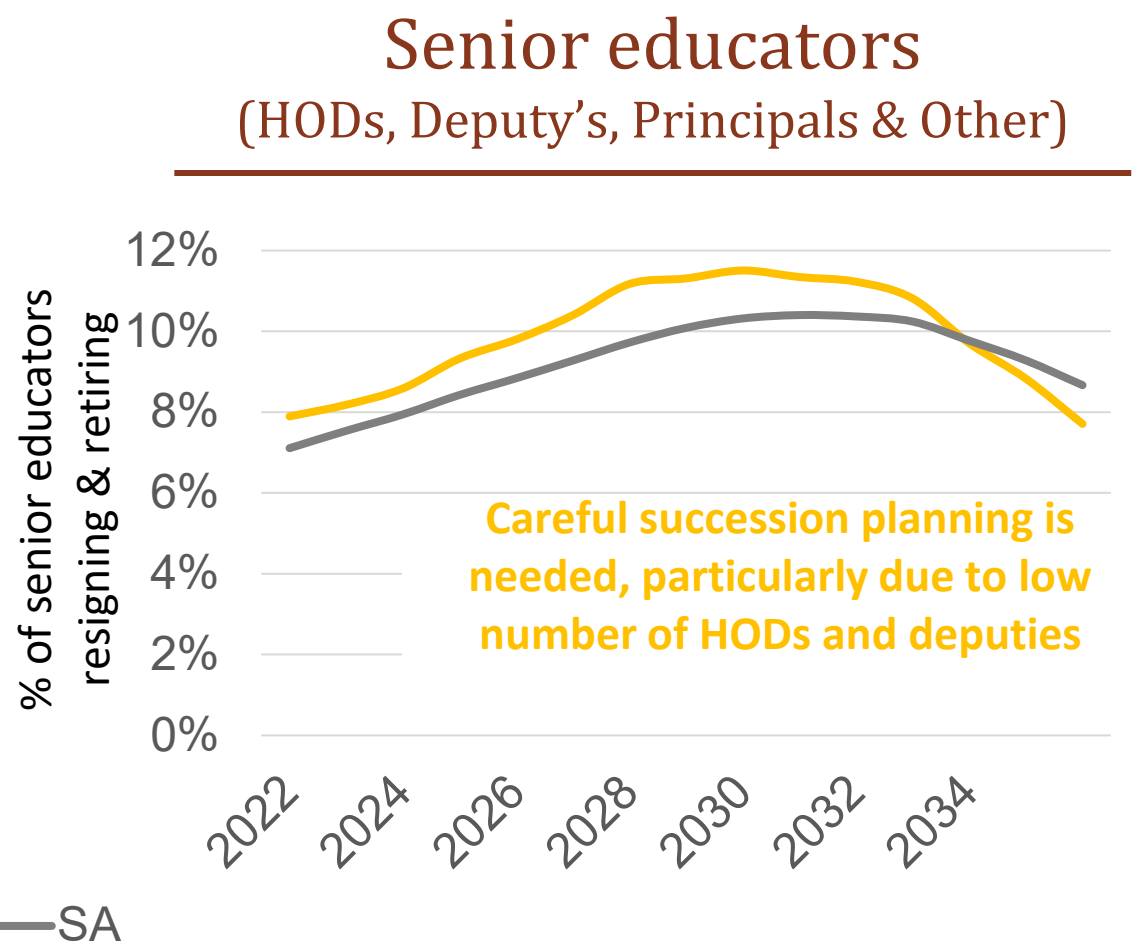
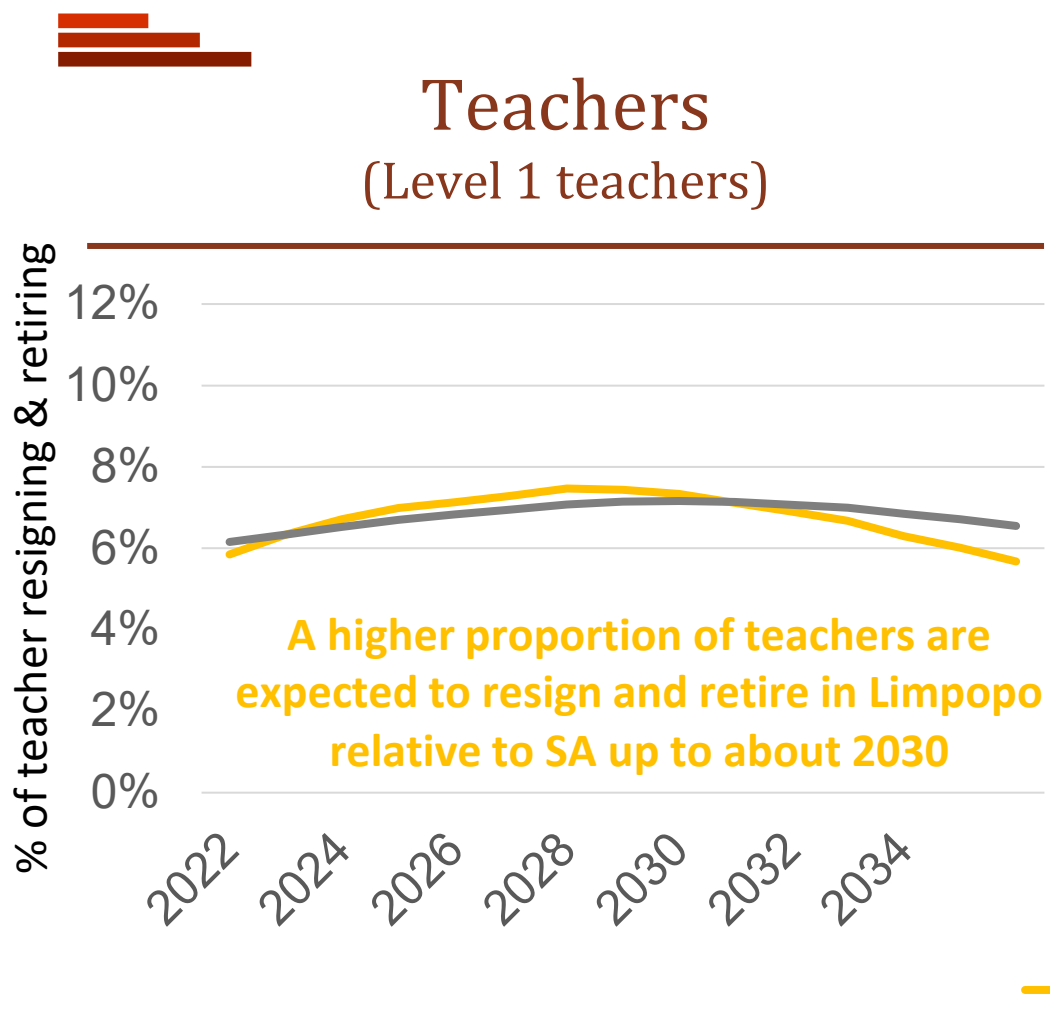


Number of senior educators (HODs, Deputy's, Principals & Other)



Source: Anonymised PERSAL data from 2012 and 2021, only 405 431 educators (Rank 60 000 – 69 999) are considered. ECD practitioners, TVET lecturers, and ABET teachers were removed. The 2021 rankclass file was expanded to include ranks found only in years prior to 2021.

Projected educators leaving

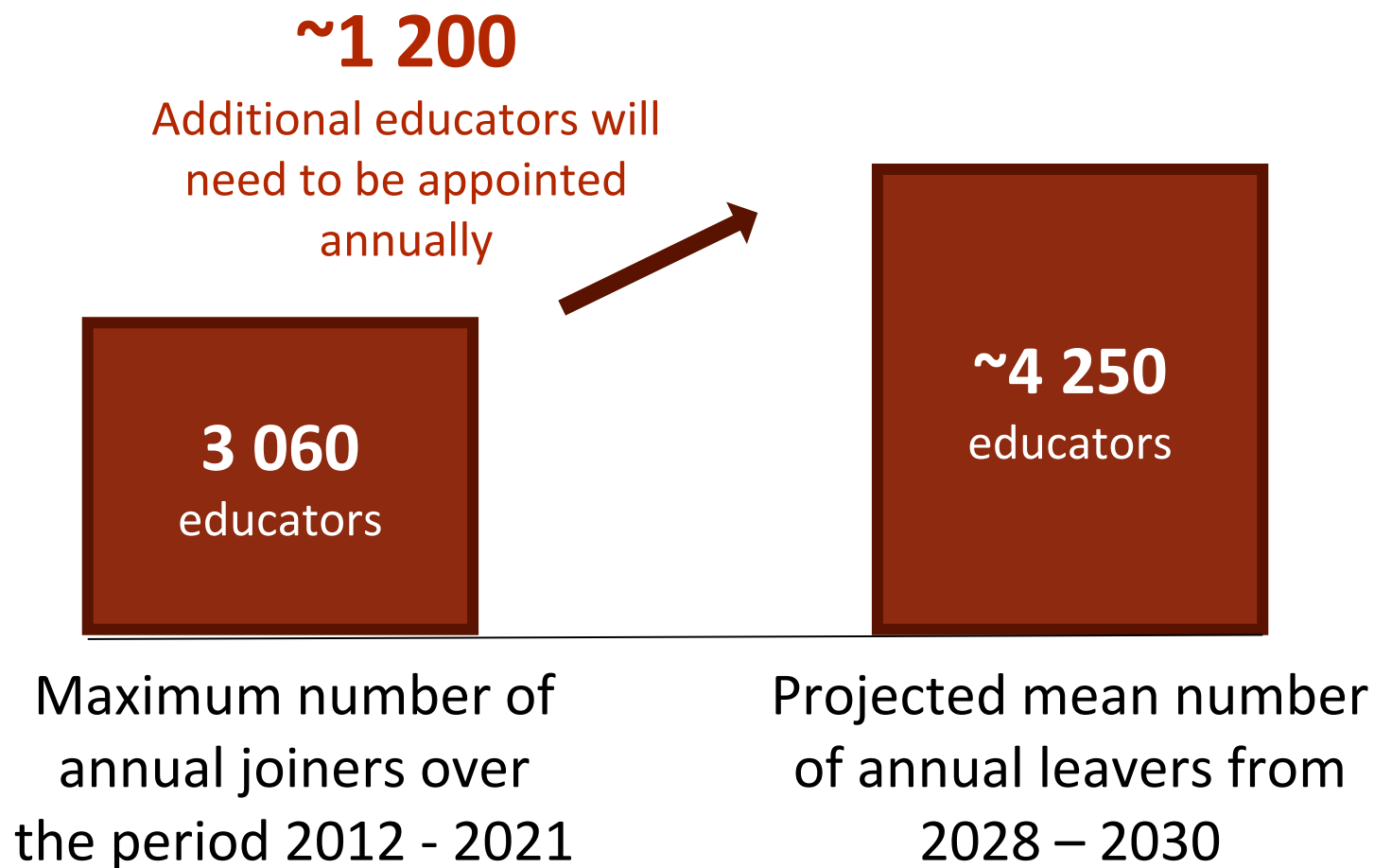


Source: Anonymised 2021 PERSAL data, only 405 431 educators (Rank 60 000 – 69 999) are considered. ECD practitioners, TVET lecturers and ABET teachers were removed. Estimates to 2035 derived from the National and provincial models – assumption of no growth in educator numbers.



Implications on appointments and class sizes

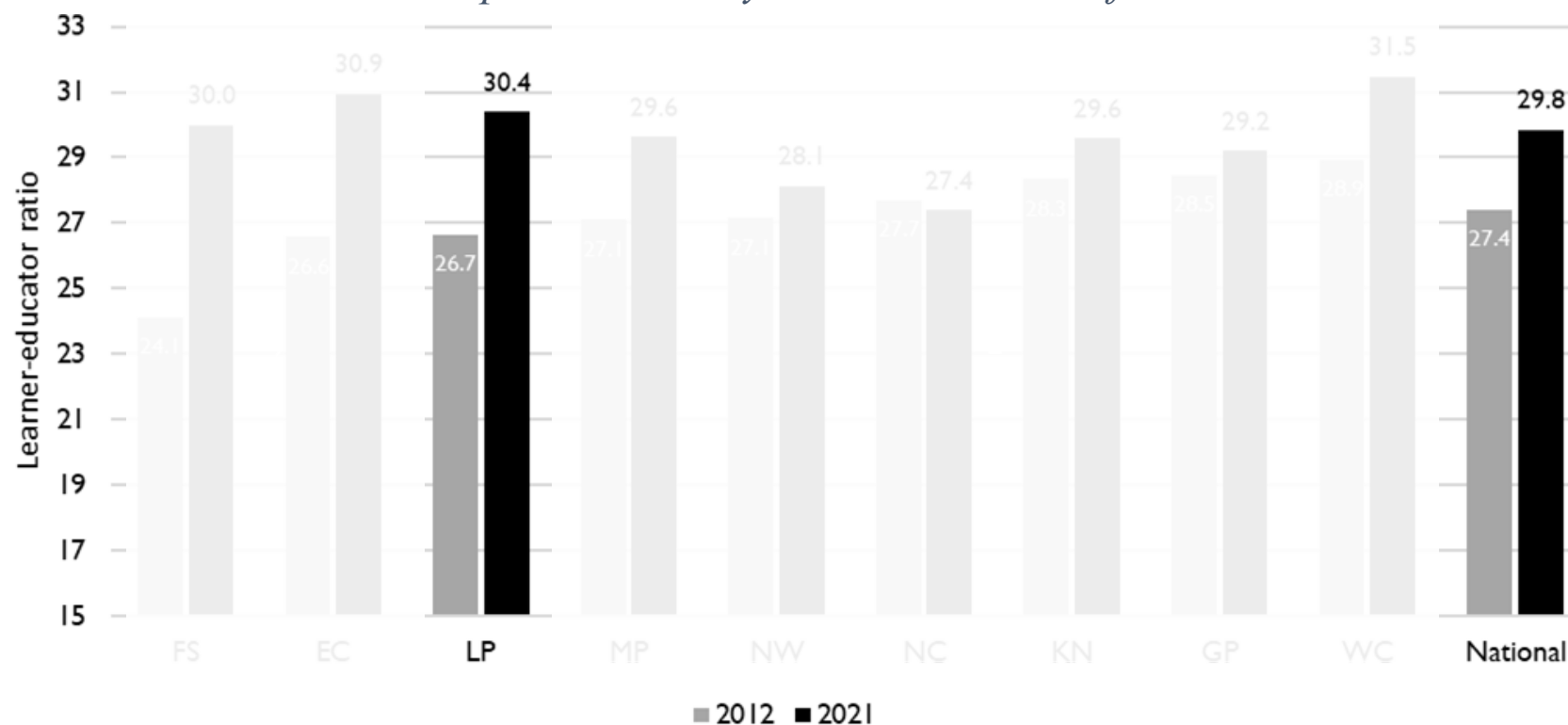
Projected increase in appointments



- Large and sustained increase in expected annual appointments over the period of ~2026 - 2031
- Sourcing and appointment processes will need strengthening
- Alternative sources of teacher supply may need to be considered eg. teachers that would traditionally have sought work in other provinces

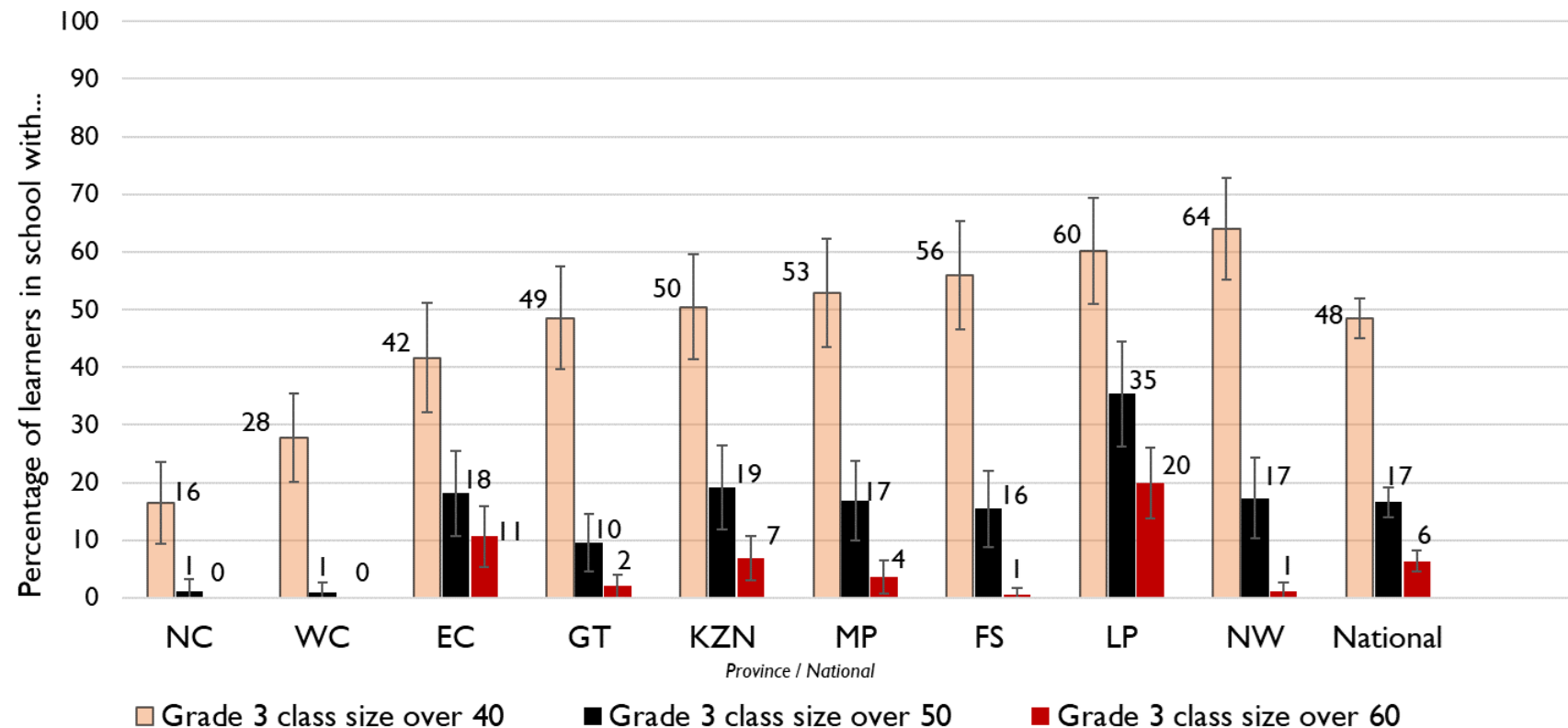
Lerner-public educator ratios ('12 & '21)

National and provincial learner-to-public-educator ratios in 2012 and 2021, grades 1 to 12 in public ordinary schools in South Africa



- LE ratio rose from 26.7 learners per educator to 30.4 learners per educator in Limpopo, more than the national average

Grade 3 class sizes (2017/18 School Monitoring Survey)



Data source: SMS 2017/18. Learner weights applied. Educator responses averaged at school level. Technically estimates should be interpreted in relation to grade 6 learners. FS = Free State, EC = Eastern Cape, LP = Limpopo Province, MP = Mpumalanga Province, NC = Northern Cape, KN = KwaZulu-Natal, GP = Gauteng, WC = Western Cape.

Post provisioning guidelines - Class sizes should not exceed 35 in Grade 3.

% of learners in grade 3 classes > 40:
48% in SA, 60% in LP

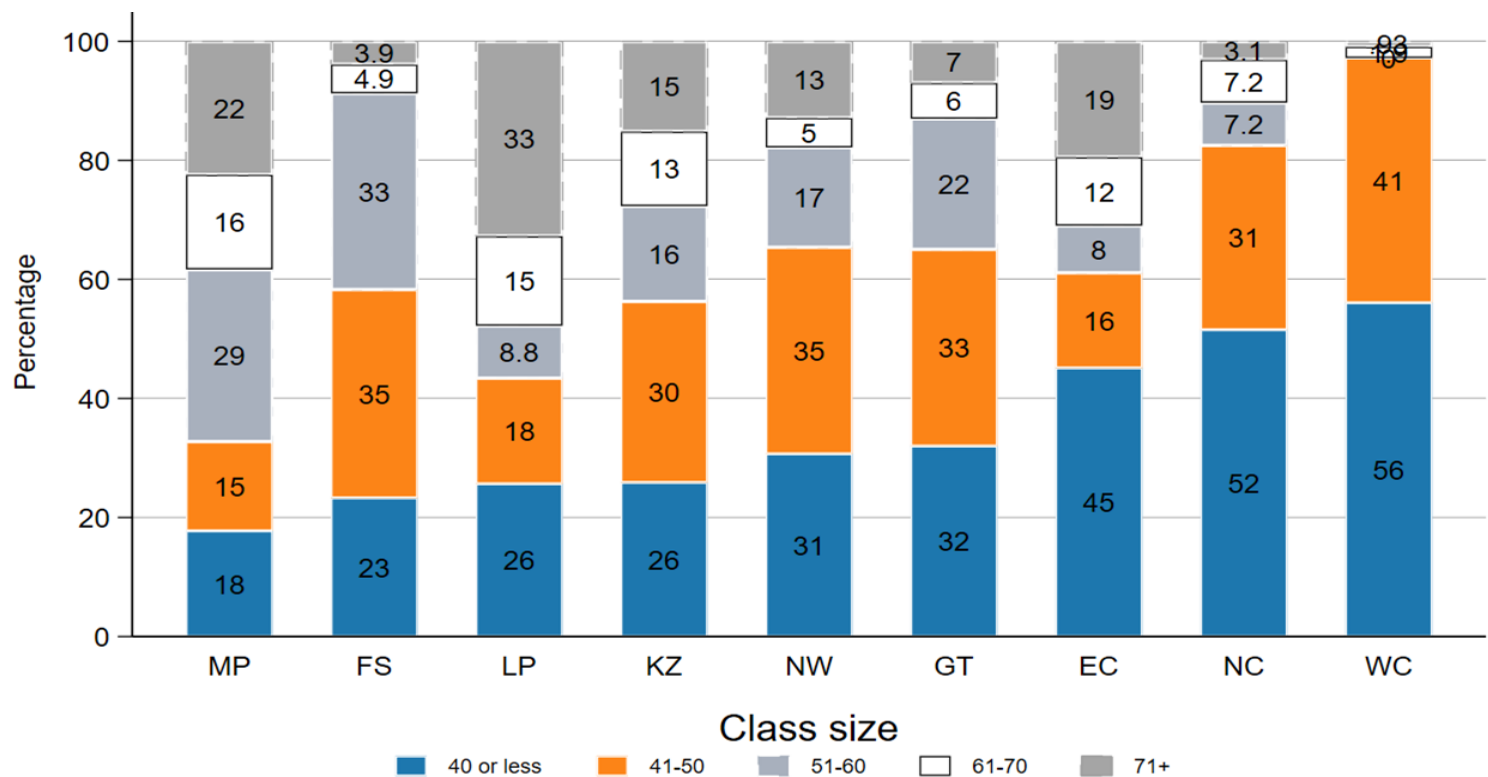
% of learners in grade 3 classes > 50:
17% in SA, 35% in LP

% of learners in grade 3 classes > 60:
6% in SA, 20% in LP

Note: Nationally, grade 3 enrolment numbers had been rising from about 2011 and peaked in 2017 before starting to decline slightly, stabilising at about 1,1 million in 2021 (Gustafsson 2022a, p10-11). Holding other things constant, grade 3 class sizes will be similar or slightly smaller in 2022 than what is seen in these 2017/18 SMS estimates.

Largest classes - School Monitoring Survey 2017/18

Percentage of grade 6 learners in schools with an educator reporting that their **largest** class is in the following class size category, disaggregated by province (SMS 2017/18)



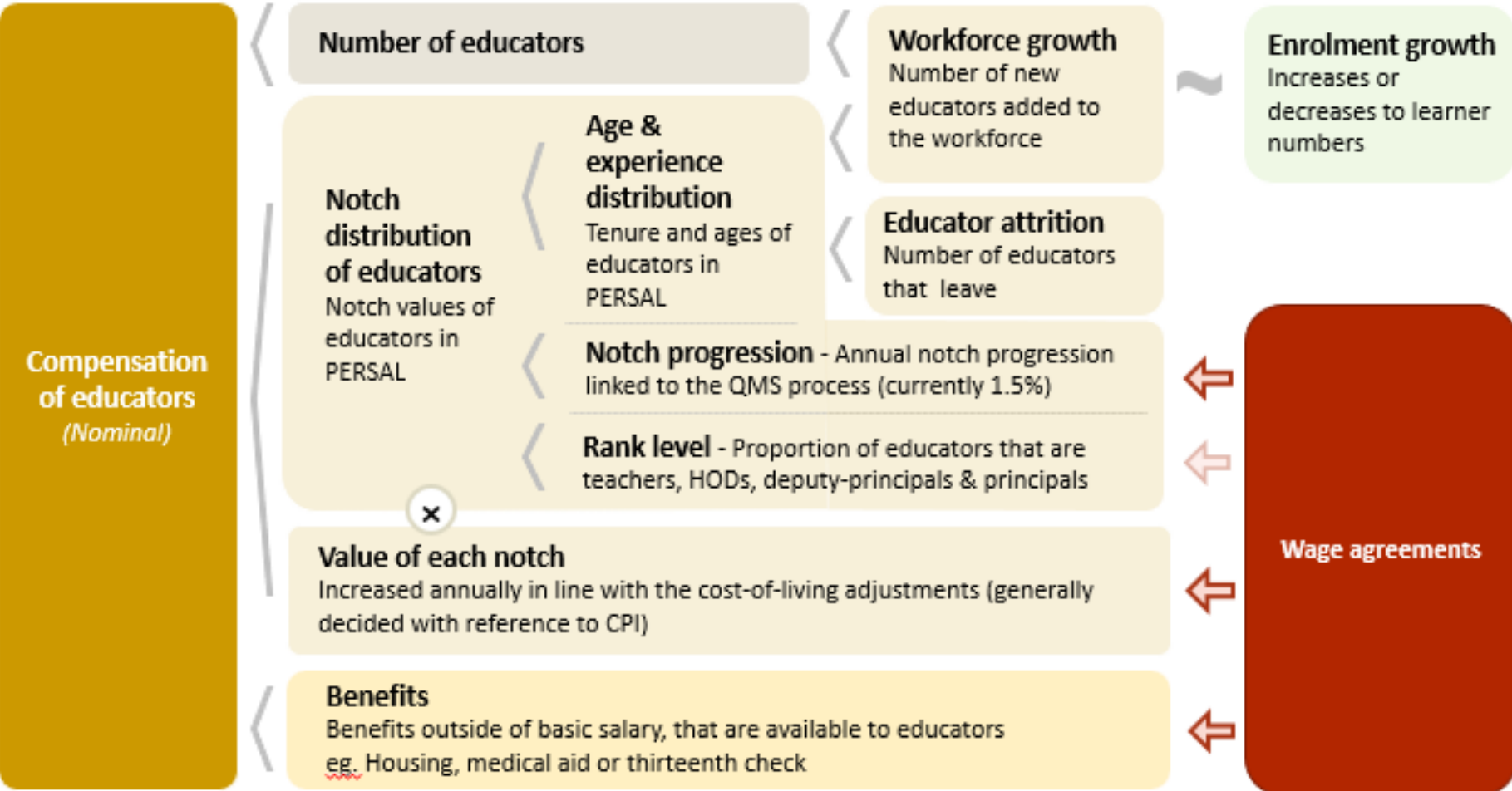
Source: Figure 1 in *South African teacher shortages as revealed through class sizes and learner-educator ratios: An exploratory analysis* by Gabrielle Wills (2023) using School Monitoring Survey 2017/18 (953 schools, learner weighted).

- In 2017/18, Limpopo was the province with the highest percentage of **large** classes with more than 60 learners
- A further deterioration of the LE ratio will drive up class size and the number of excessively large classes, negatively impacting quality and teacher motivation



Expected financial implications to 2030

Unit cost drivers



Real and nominal costs

*A real increase in wages takes place when wages increase **above** the rate of inflation*

*Changes to real wages are an indicator of **purchasing power***

7

Examples:

In 2022 CPI was **7.2%**

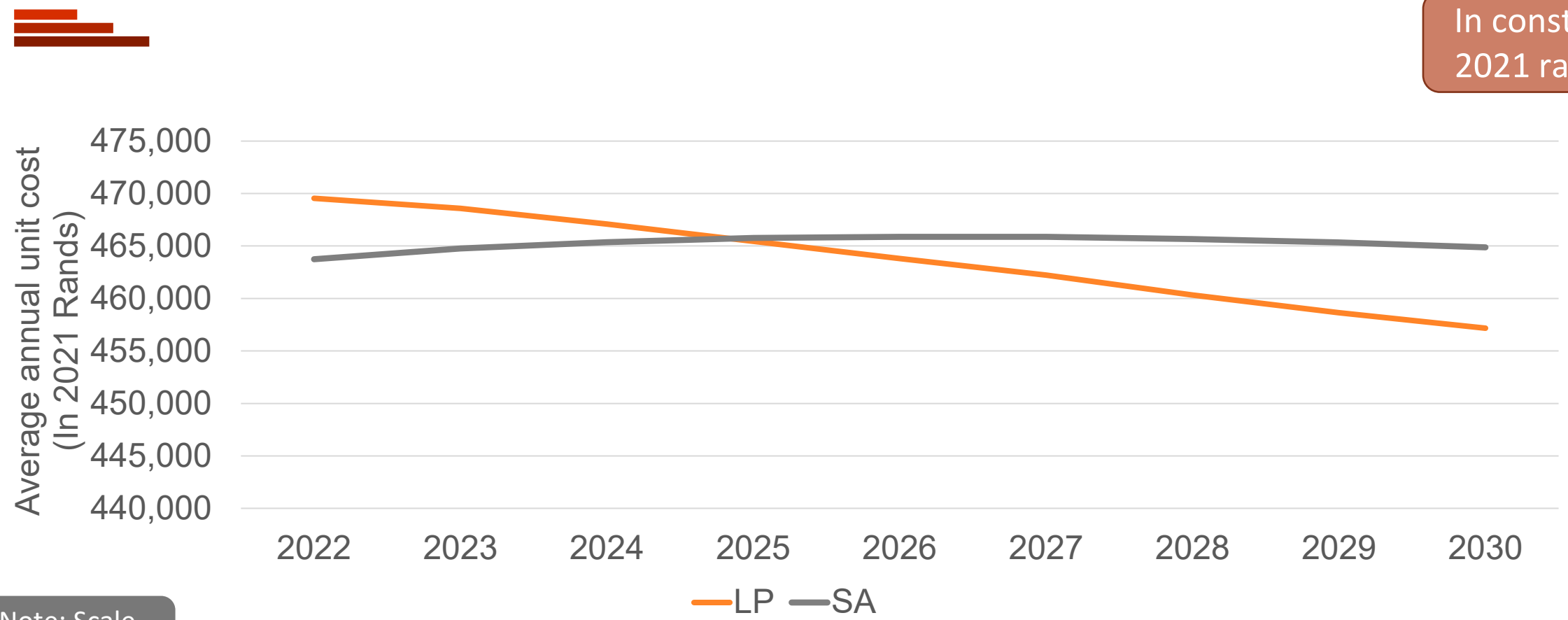
If **nominal wages** increase by **7.2%**, then **real wages** increase by **0%**

If **nominal wages** increase by **9%**, then **real wages** increase by **1.8%**

If **nominal wages** increase by **5%**, then real wages decrease by **2.2%**

Projected unit costs trends| All educators

In constant 2021 rands

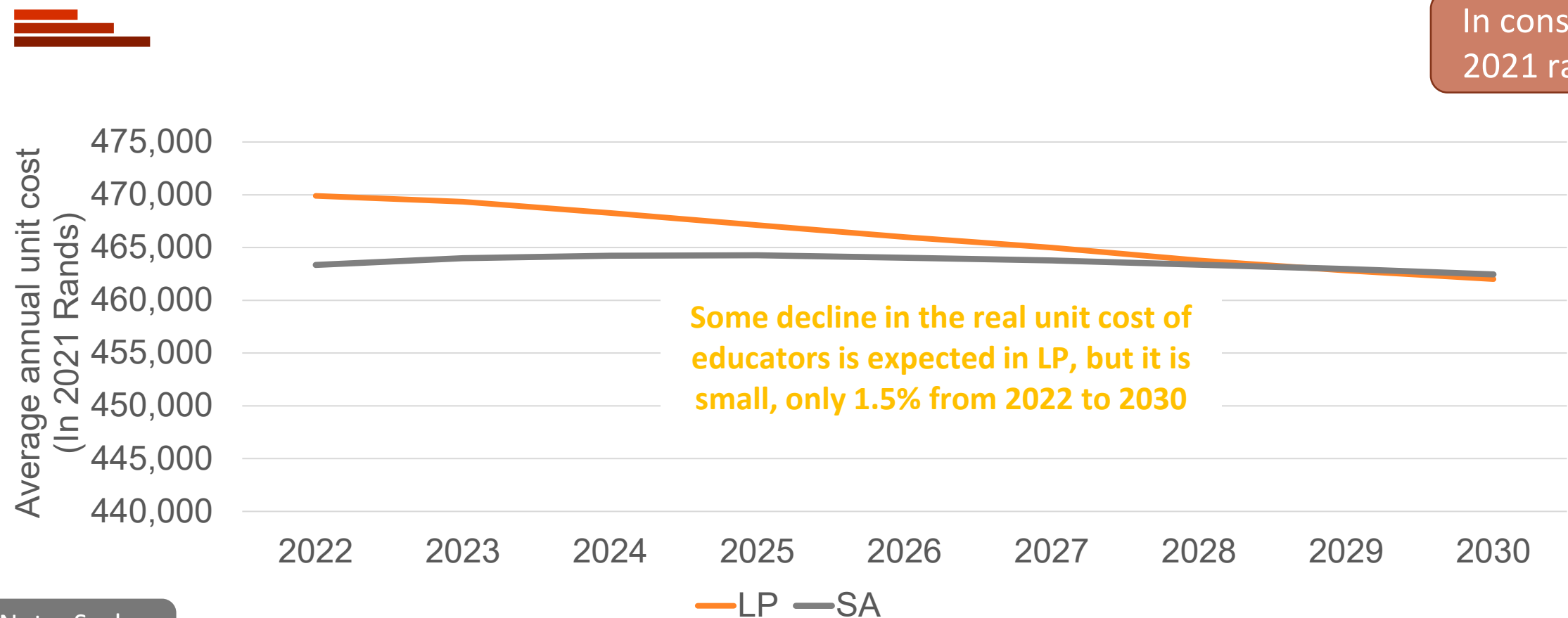


Note: Scale not from zero

Source: Own calculations, using the anonymised PERSAL data from 2021, only educators are considered. ECD practitioners and examination reviewers removed. Estimates to 2030 derived from the national and provincial TSD models. Assumption of no growth in educator numbers.

Projected unit costs trends| All educators

In constant 2021 rands



Note: Scale not from zero

LP ranks adjusted

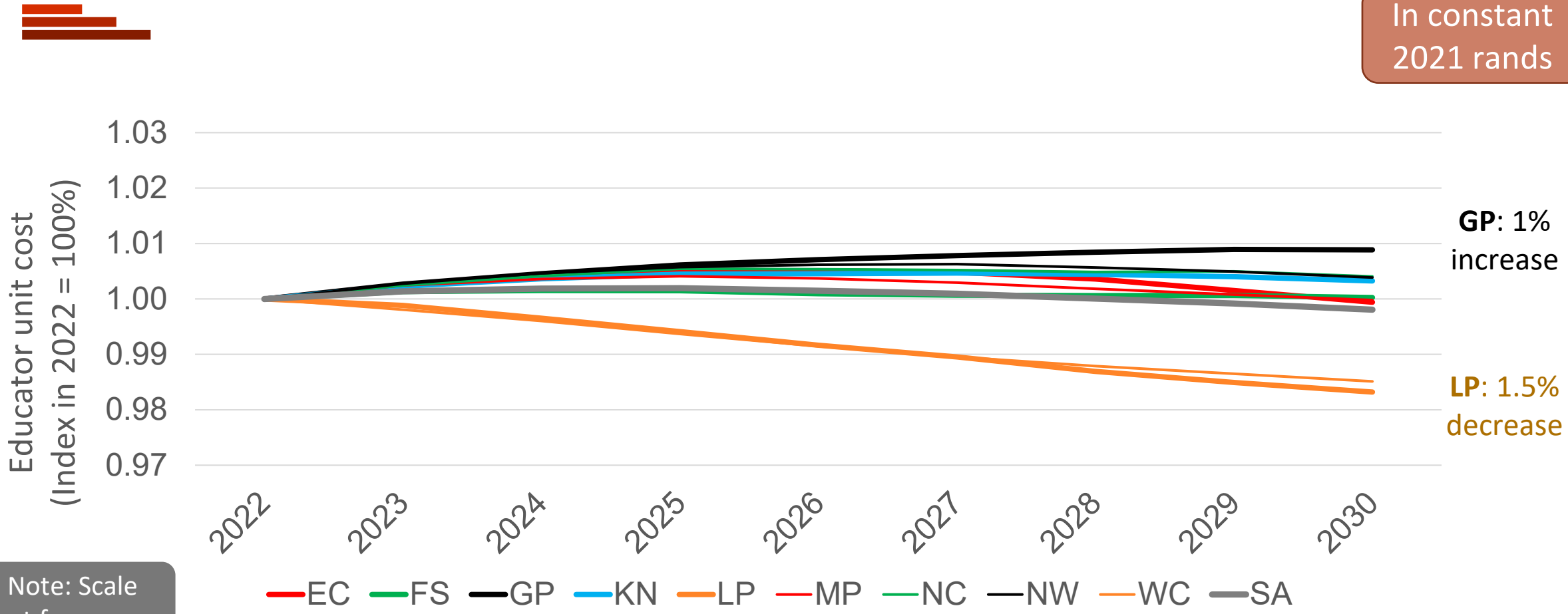
Adjusted the proportion of teachers to total educators from 2021

- Assume the teacher proportion of educators returns to 79% by 2030

Source: Own calculations, using the anonymised PERSAL data from 2021, only educators are considered. ECD practitioners and examination reviewers removed. Estimates to 2030 derived from the national and provincial TSD models. Assumption of no growth in educator numbers for FS, KN, LP, MP, NC, NW and SA. Assume 20% educator growth for GP, 10% for WC and a decline in 10% of educators in the EC. In LP assume that the proportion of senior educators grows from 16% in 2021 to 21% in 2030.

Indexed unit costs trends | All educators

In constant 2021 rands



Note: Scale not from zero

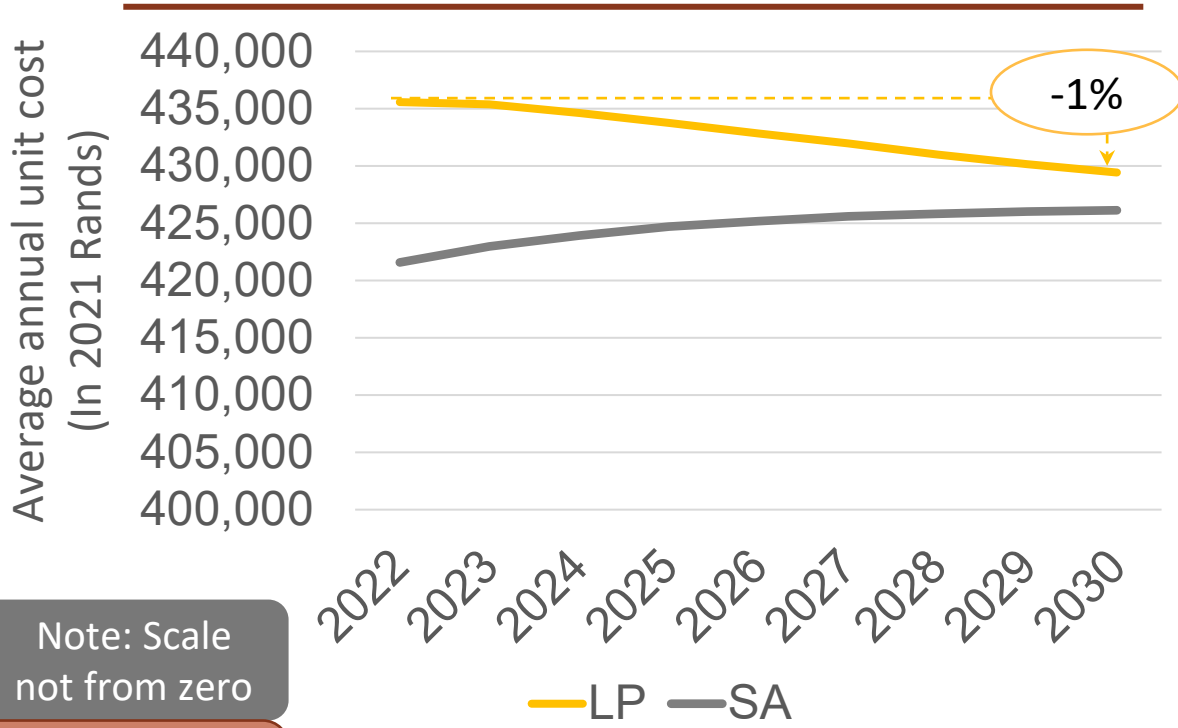
LP ranks adjusted

Source: Own calculations, using the anonymised PERSAL data from 2021, only educators are considered. ECD practitioners and examination reviewers removed. Estimates to 2030 derived from the national and provincial TSD models. Assumption of no growth in educator numbers for FS, KN, LP, MP, NC, NW and SA. Assume 20% educator growth for GP, 10% for WC and a decline in 10% of educators in the EC. In LP assume that the proportion of senior educators grows from 16% in 2021 to 21% in 2030.

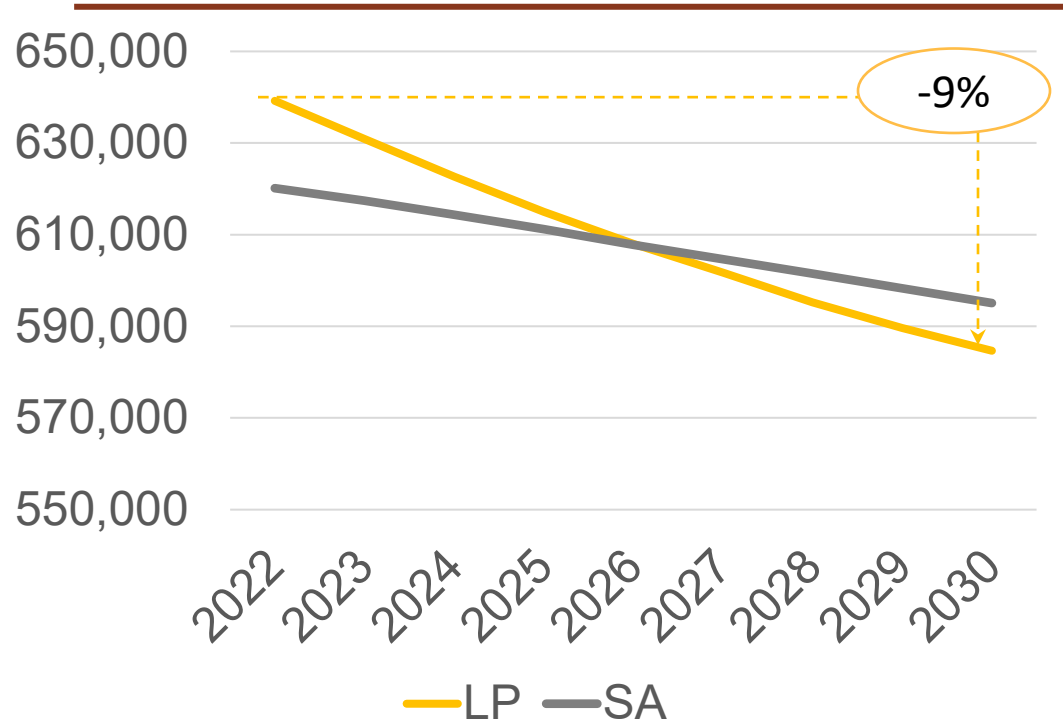
Projected unit costs trends| All educators

In constant 2021 rands

Teachers (Level 1 teachers)



Senior educators (HODs, Deputy's, Principals & Other)



Note: Scale not from zero

LP ranks adjusted

Source: Own calculations, using the anonymised PERSAL data from 2021, only educators are considered. ECD practitioners and examination reviewers removed. Estimates to 2030 derived from the national and provincial TSD models. Assumption of no growth in educator numbers for FS, KN, LP, MP, NC, NW and SA. Assume 20% educator growth for GP, 10% for WC and a decline in 10% of educators in the EC. In LP assume that the proportion of senior educators grows from 16% in 2021 to 21% in 2030.



Between and within province movement

Inter-provincial educator movement (7-yr)



		Province in 2019									Total	Movement out of province
		EC	FS	GP	KN	LP	MP	NC	NW	WC		
Province in 2012	EC	97.79	0.10	0.86	0.22	0.01	0.04	0.11	0.19	0.70	100	2.23%
	FS	0.35	94.25	2.76	0.10	0.07	0.23	0.41	1.56	0.26	100	5.74%
	GP	0.15	0.26	96.86	0.27	0.81	0.42	0.05	0.93	0.24	100	3.13%
	KN	0.22	0.10	1.14	97.95	0.10	0.37	0.01	0.06	0.04	100	2.04%
	LP	0.02	0.02	1.72	0.02	96.80	0.80	0.05	0.56	0.02	100	3.21%
	MP	0.03	0.14	2.48	0.37	1.54	94.86	0.03	0.49	0.07	100	5.15%
	NC	0.47	0.50	0.47	0.06	0.59	0.03	94.35	2.37	1.15	100	5.64%
	NW	0.06	0.59	3.84	0.03	0.65	0.34	0.75	93.60	0.14	100	6.40%
	WC	0.72	0.03	0.17	0.05	0.00	0.02	0.35	0.03	98.61	100	1.37%

- Low level of movement between provinces – only 3.21% of Limpopo teachers in 2012 are teaching in a different province in 2019
- Educators from Limpopo are most likely to move to Gauteng or Mpumalanaga

Inter-provincial educator movement (7-yr)



		Province in 2019								
		EC	FS	GP	KN	LP	MP	NC	NW	WC
Provincial movement in 2012	EC	42 645	42	373	95	5	16	46	82	304
	FS	57	15 267	447	17	11	38	67	252	42
	GP	67	117	42 770	121	356	187	20	409	108
	KN	146	67	755	64 723	64	247	9	37	26
	LP	10	10	709	7	39 899	328	20	230	7
	MP	7	34	618	94	385	23 644	7	121	17
	NC	31	33	31	4	39	2	6 214	156	76
	NW	12	111	726	5	123	65	141	17 690	27
	WC	152	7	37	11	0	5	75	6	20 858
	Total 2019		43 127	15 688	46 466	65 077	40 882	24 532	6 599	18 983
Movement into province		482	421	3 696	354	983	888	385	1 293	607
% movement into province		1.1%	2.7%	8.0%	0.5%	2.4%	3.6%	5.8%	6.8%	2.8%

- Few educators moved to LP (2.4% of educators in 2019 had come from another province), the largest numbers came from GP and MP
- Neighboring provinces were the most likely source of experienced hires traditionally. (Application process requirements eg. physical CVs)

Inter-provincial educator movement (7-yr)



		Province in 2019								
		EC	FS	GP	KN	LP	MP	NC	NW	WC
Provincial in 2012	EC	42 645	42	373	95	5	16	46	82	304
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% movement into province		1.1%	2.7%	8.0%	0.5%	2.4%	3.6%	5.8%	6.8%	2.8%

- Movement takes place between provinces – may be near borders. Movement to GP from LP outweighs movement to LP from GP

Source: PERSAL 10-year anonymised dataset, only educators that were in the dataset for 2012 and 2019 are considered here

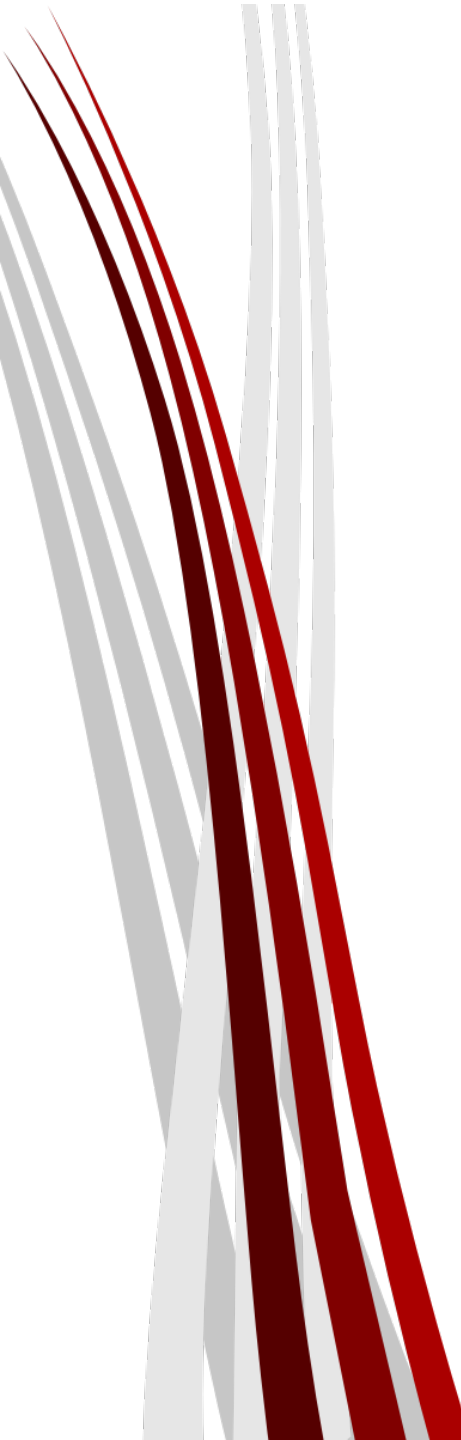
Educator movement between schools



Province	Pay point in 2019 (Ordinary schools only)			Total (%)
	Same as in 2018 (%)	Different to 2018 (%)	None - left system (%)	
EC	93.25	4.61	2.14	100
FS	90.54	5.54	3.93	100
GP	91.08	3.95	4.97	100
KN	91.99	4.31	3.70	100
LP	91.04	6.95	2.00	100
MP	92.02	4.66	3.32	100
NC	85.44	8.39	6.18	100
NW	89.42	6.30	4.28	100
WC	87.27	6.09	6.64	100
Total	91.11	5.05	3.83	100

- About 7% of educators in Limpopo (only 5% nationally) move to a different pay point but stay within PERSAL from 2018-2019
- Educators below 50 years in Limpopo are three times more likely to move to a different school than leave the system

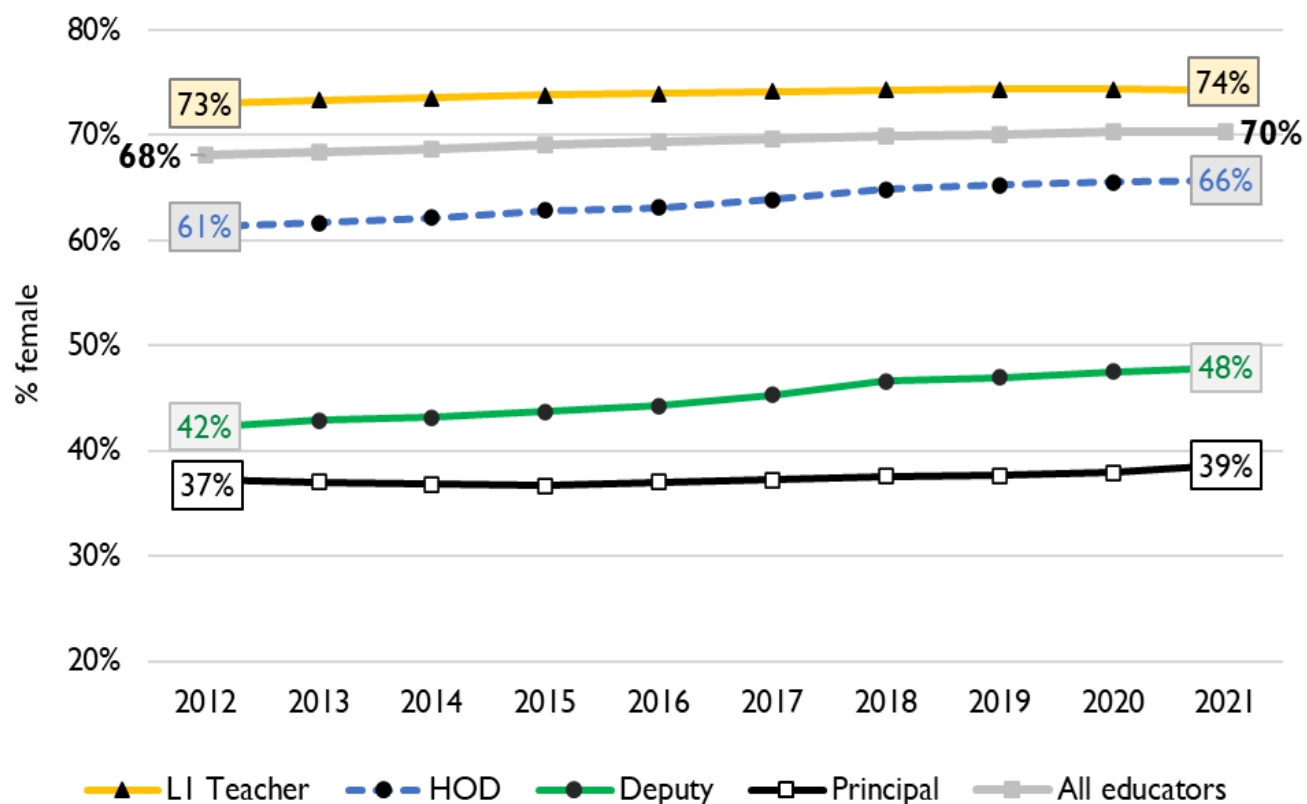
Source: PERSAL 10-year anonymised dataset. Only included educators aged 50 years and below, that were in ordinary schools in 2018 (Primary, Secondary, Combined and Intermediate)—excluded all paypoints that did not appear in both years after identifying 103 paypoints where the paypoint number changed.



Gender imbalances in management

Percentage of educators that are female

Percentage of public educators in South Africa that are female, PERSAL (2012-2021)

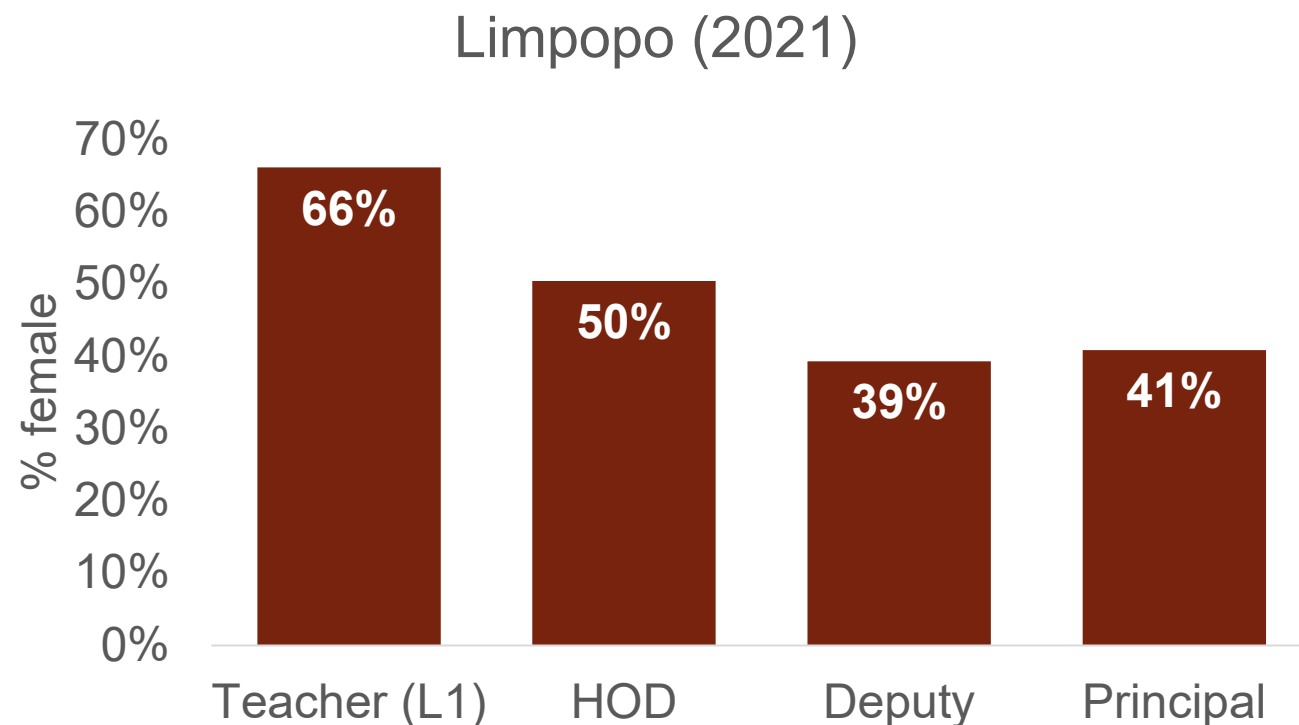


Nationally, there has been very little transformation in senior school leadership in terms of gender since 2012 and even since 2004 (just 34% of principals were female).

There is better representation at middle-management (HOD) level.

Source: Using anonymised 10-year PERSAL data from 2012 to 2021, only educators of the ranks: level 1 teacher, HOD, deputy principal and principal are considered.

Percentage of educators that are female



In Limpopo in 2021, 63% of all educators were women.

Women were underrepresented at all levels of management with 50% of HODs being women. And, only 39% of deputy principals and 41% of principals.

General questions and discussion

- What are constraints to filling positions?
 - What are the highest need subjects and phases?
 - Is there a list of the positions requested by principals or positions filled? Or of educators that have left?
 - Is there a mismatch of skills between unemployed educators' skills and those needed? Are these documented?
- How are the number of positions in the basket determined?
- What is the process for principals and senior educator selection, induction and mentorship?
- Has gender equity in school management been a concern for LP province? What prevents women from applying/being selected for senior management?

Conclusion

- Limpopo will face an increase in demand for educators at least until 2035
- Due to predicted population growth, educator numbers need to rise to keep pace with the demand for schooling, if the sector does not expand, class sizes will likely rise even further
 - Increased class sizes will hurt teacher morale and worsen learner outcomes
- Due to the expected shift in age distribution, the cost structure will improve, which should give the province some space in the budget
 - Hire more teachers
 - Consider addressing the imbalance in management vs teacher numbers
- Average appointments per year are likely to rise, sourcing new teachers (incl. graduates) and ensuring retention will become more important