



Skills shortage - Urban Legend or Fact?

The 6th South African Employment report

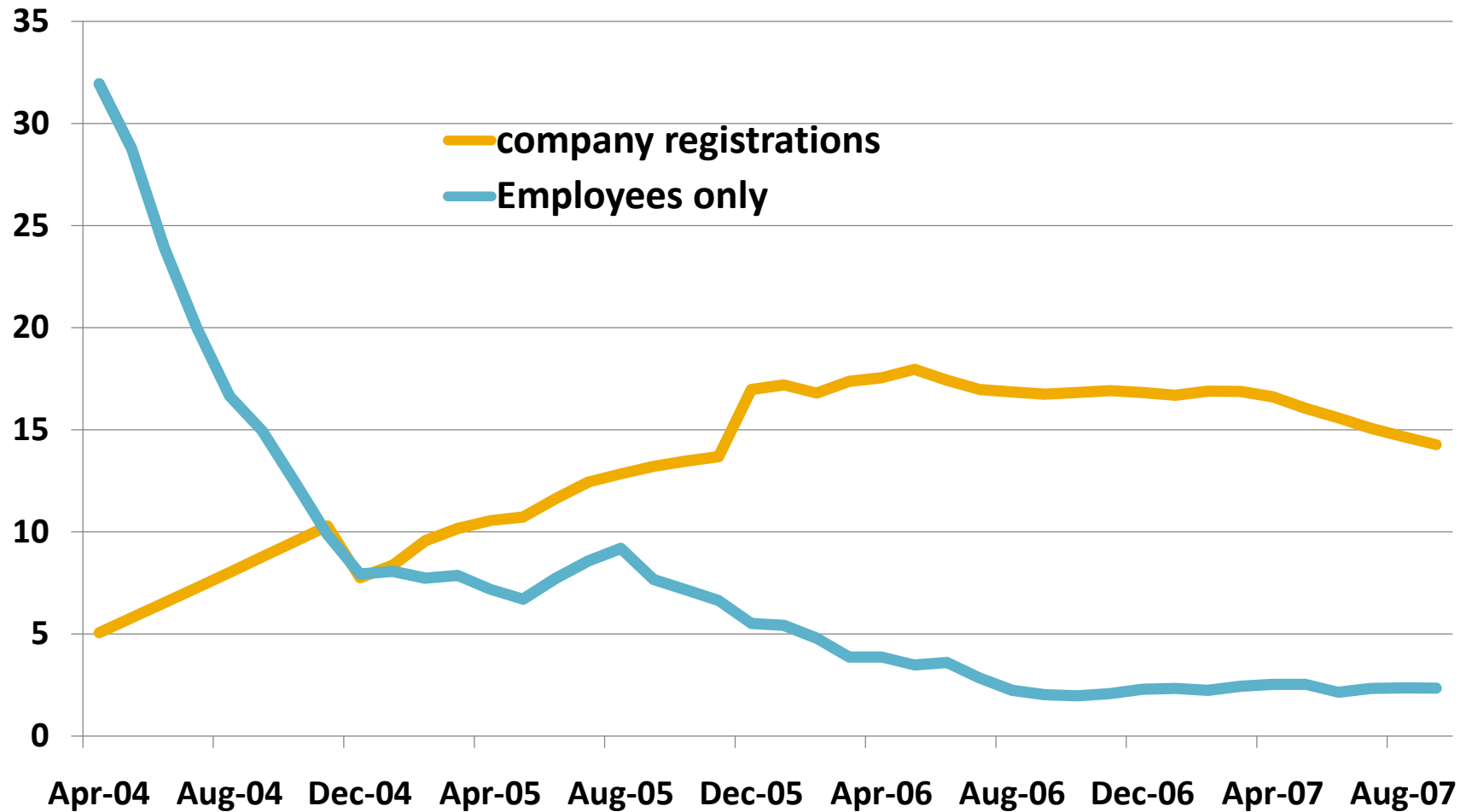
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Skills shortage – Urban legend or fact.



- The employment and salary numbers
- SA education in emerging market context.
- SA labour force skills an international comparison.
 - SA skills compared with developed and emerging markets.
 - Relative Pay compared of skilled and average workforce.

Growth rate in company registrations and employee growth.

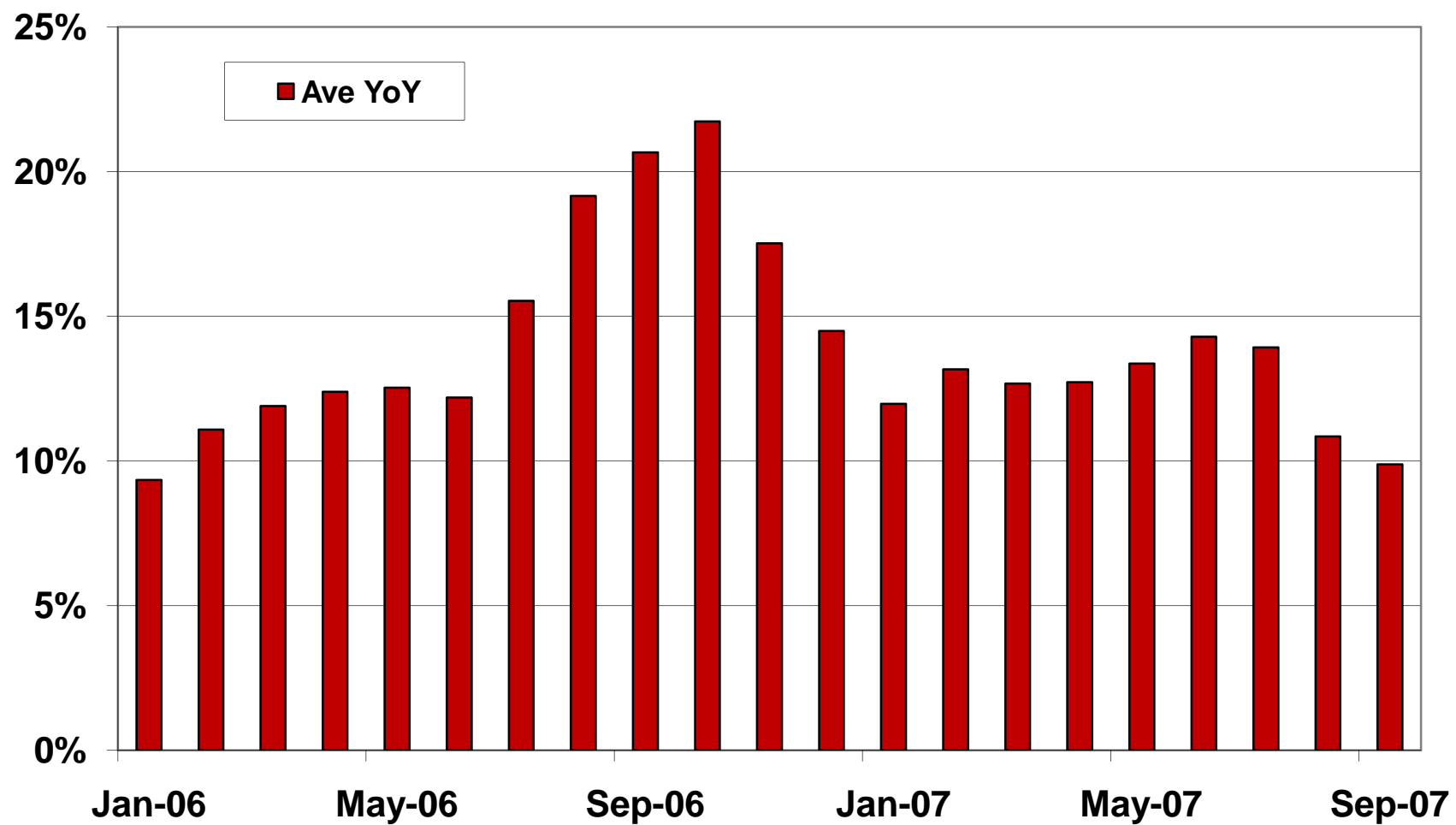


Growth rate of employment in formal sector.



- On average over the last year around 16 000 jobs are created per month down from around 30 000 in 2005.
- Around 21 000 new companies are registered every month over the year to June 2007.
 - Not all new companies are active though but indications are that self employment is once again becoming more important.
 - We expect job growth to slow even further and believe that it will grow with less than 10 000 formal jobs per month in the next year.

Growth in Average salaries



Salary growth

- While the UIF contribution were increased in 2005 and 2006 there was no increase in UIF contributions in 2007.
- UIF and National treasury data indicate that salaries grew close to 10% over the last few months.
 - So far our big companies survey also indicate a salary growth of around 11% this year.
 - Government salaries on average grew around the 9% mark.



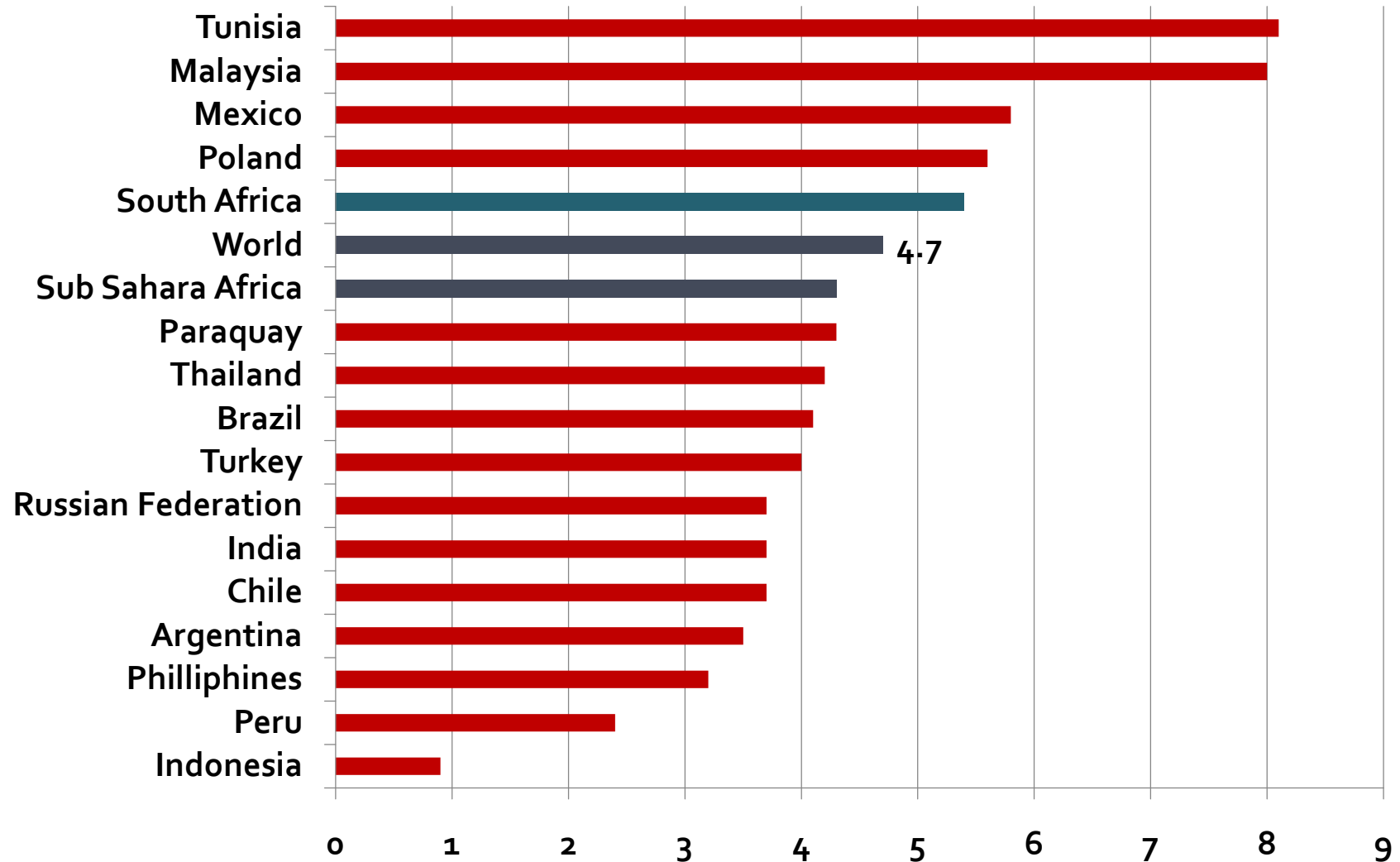
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Skills shortage or urban legend or fact?

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Education spending as % of GDP.

Selected countries 2005

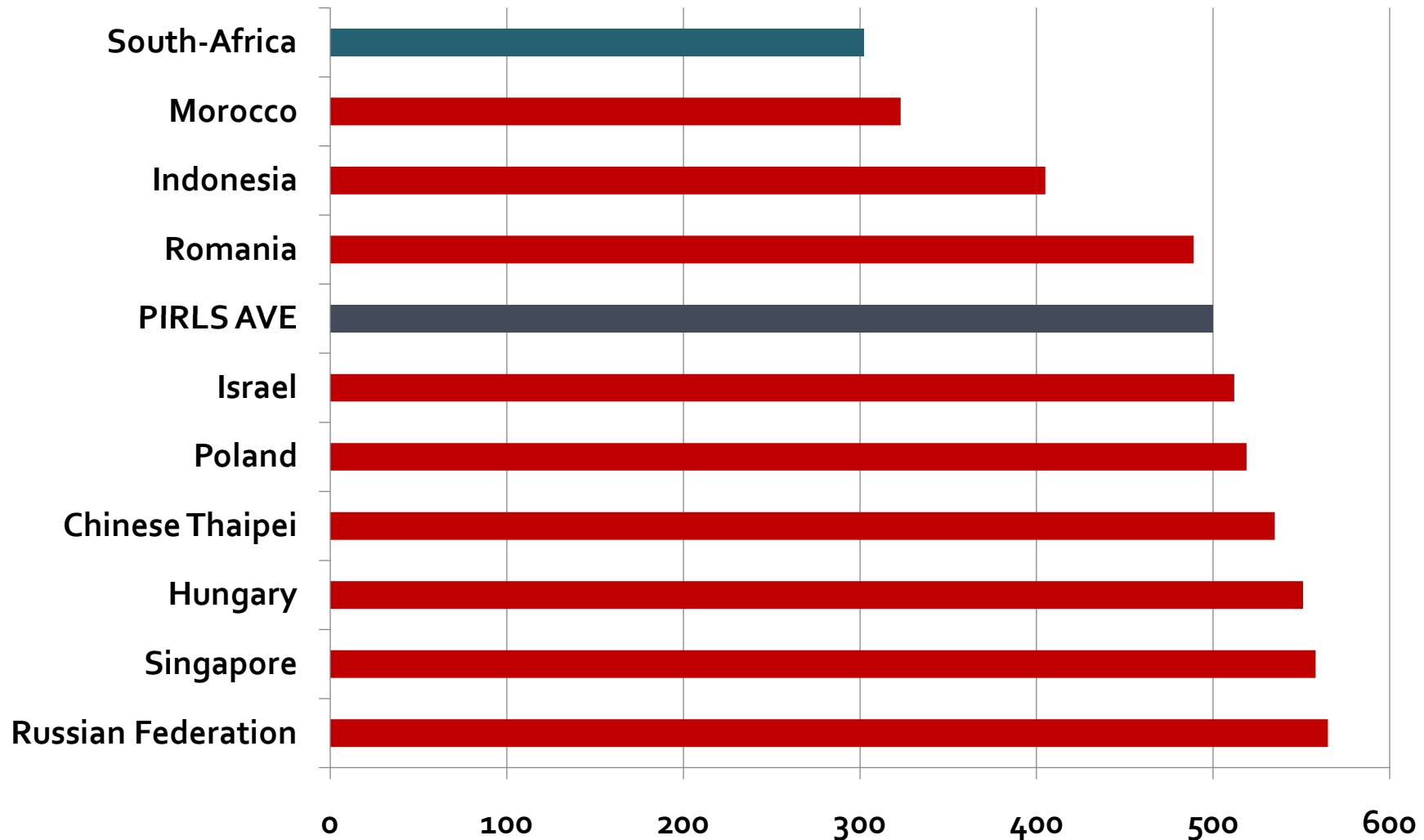


Education spending in South Africa.

- Public expenditure on education for 2005 was 5,4% of GDP higher than the world average of 4,7% and certainly higher than the sub Saharan African average of 4%.
- Private spending on education adds at least another 0,2% to SA education spend as does the world at large. Sub Saharan Africa private educational spend is not available at present.

PIRLS READING ACHIEVEMENT 2006

Selected emerging market countries.



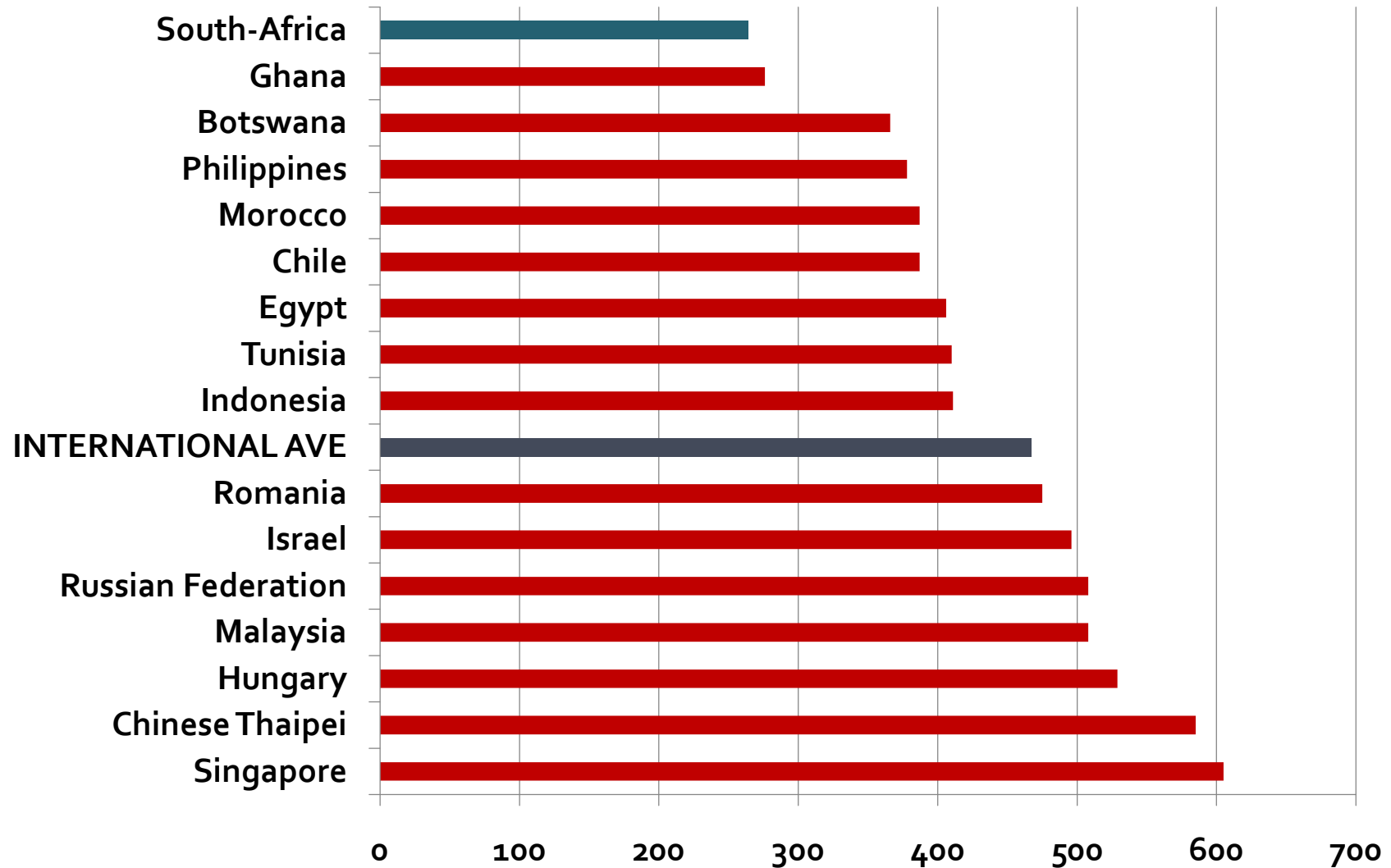
The latest international comparison paint a sober picture of the quality of SA education.



- Out of 40 countries that took part in the latest study in reading and literature South Africa came last.
- The average age of the South African Students was 1,9 years older than the average international student.
- Even testing SA students in their home language did not help.

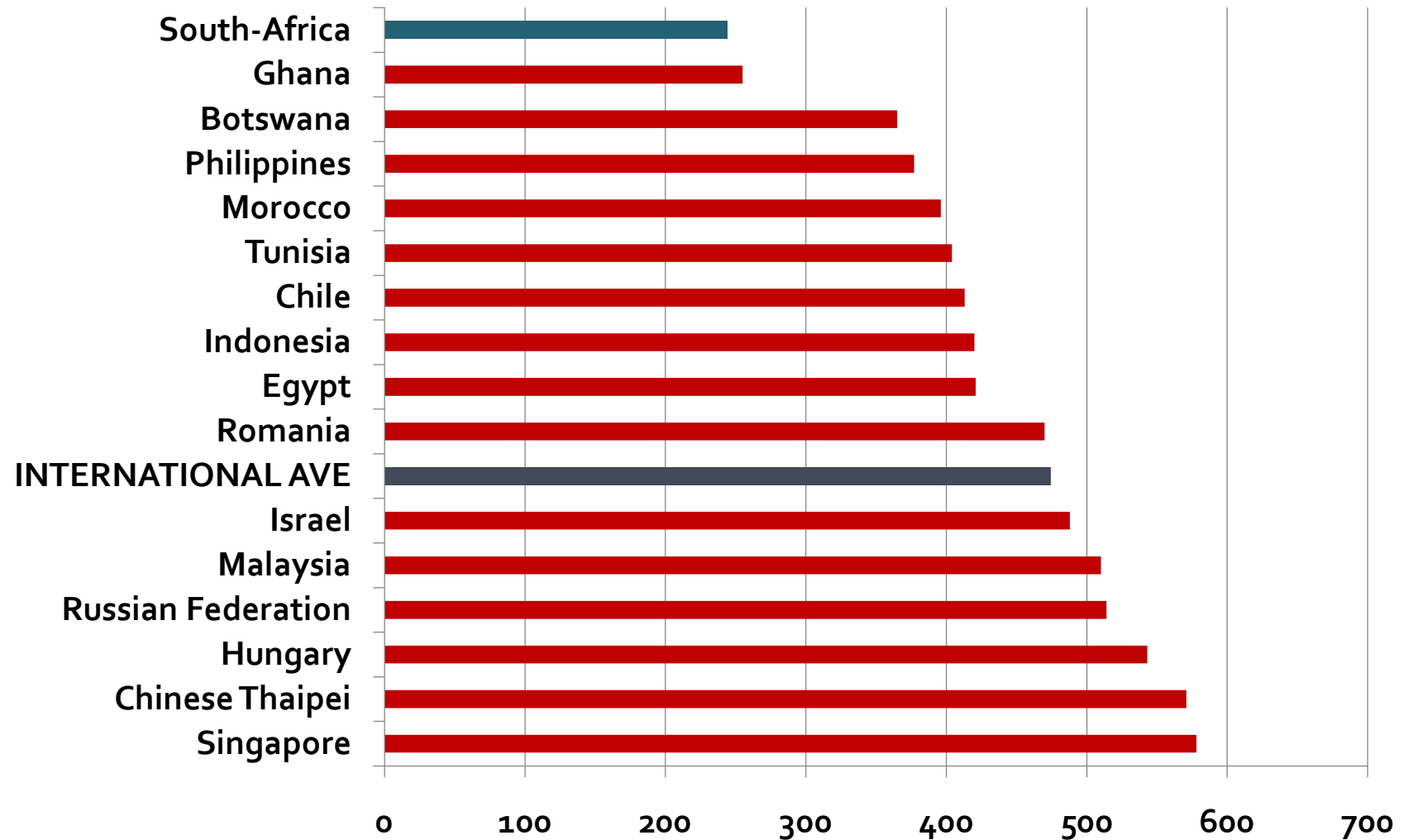
Mathematics scores in 2003

Selected emerging market countries



Science scores in 2003.

Selected emerging market countries.

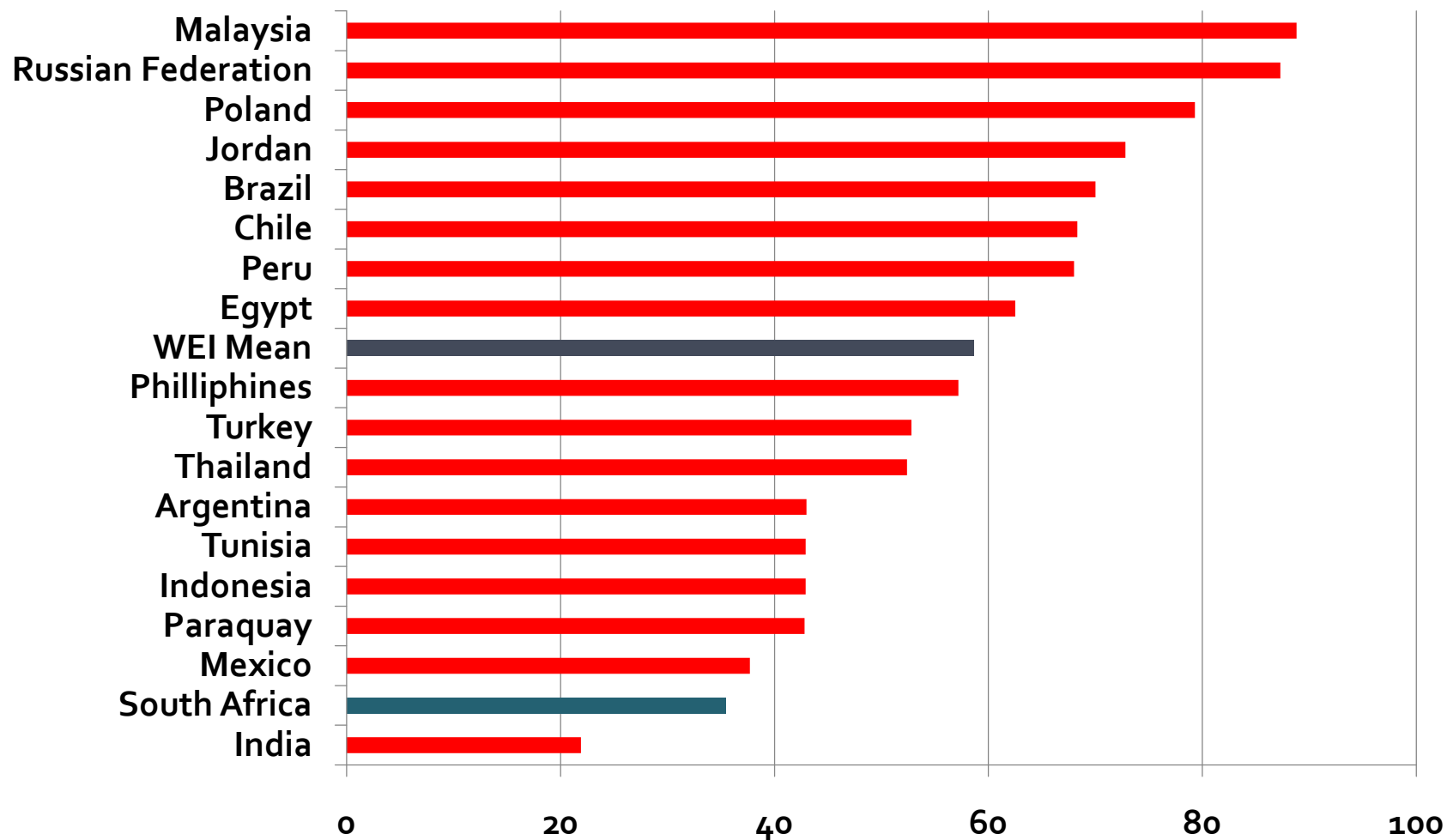


Education standards in context.

- In ALL international studies in which SA has participated in the last 12 years on a school level SA students have come last.
- South African education levels reflect that even when compared to other African countries South Africa does very poorly.
- SA does not participate in studies such as PISA and SITCE.

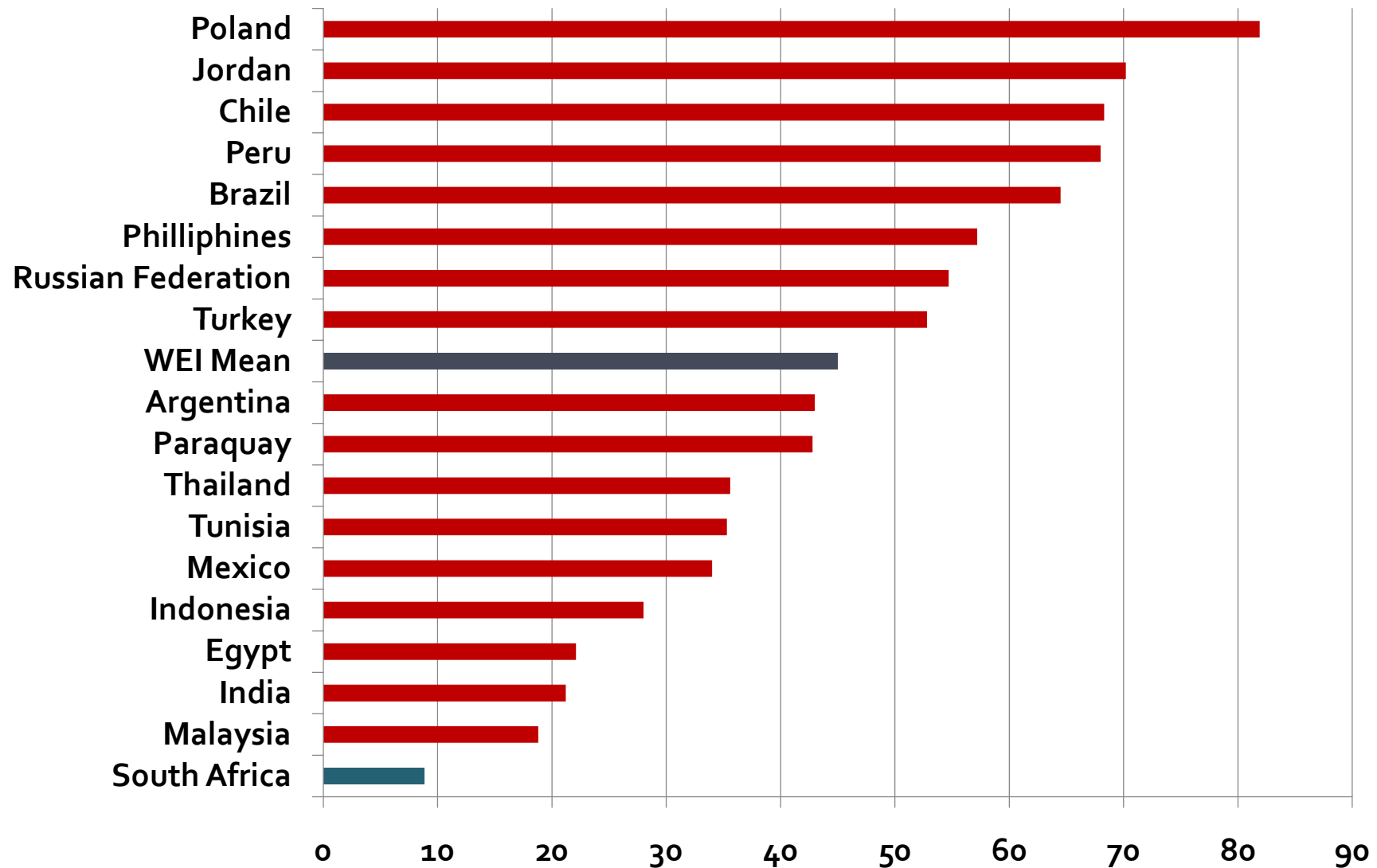
Ratio of age group completing high school.

Selected emerging market countries 2005.



Source: UNESCO and for SA Department of education and population from StatsSA 2005 Midyear estimates

University exemption ratio's of school leavers of relevant age group.



Education outcomes 2005.

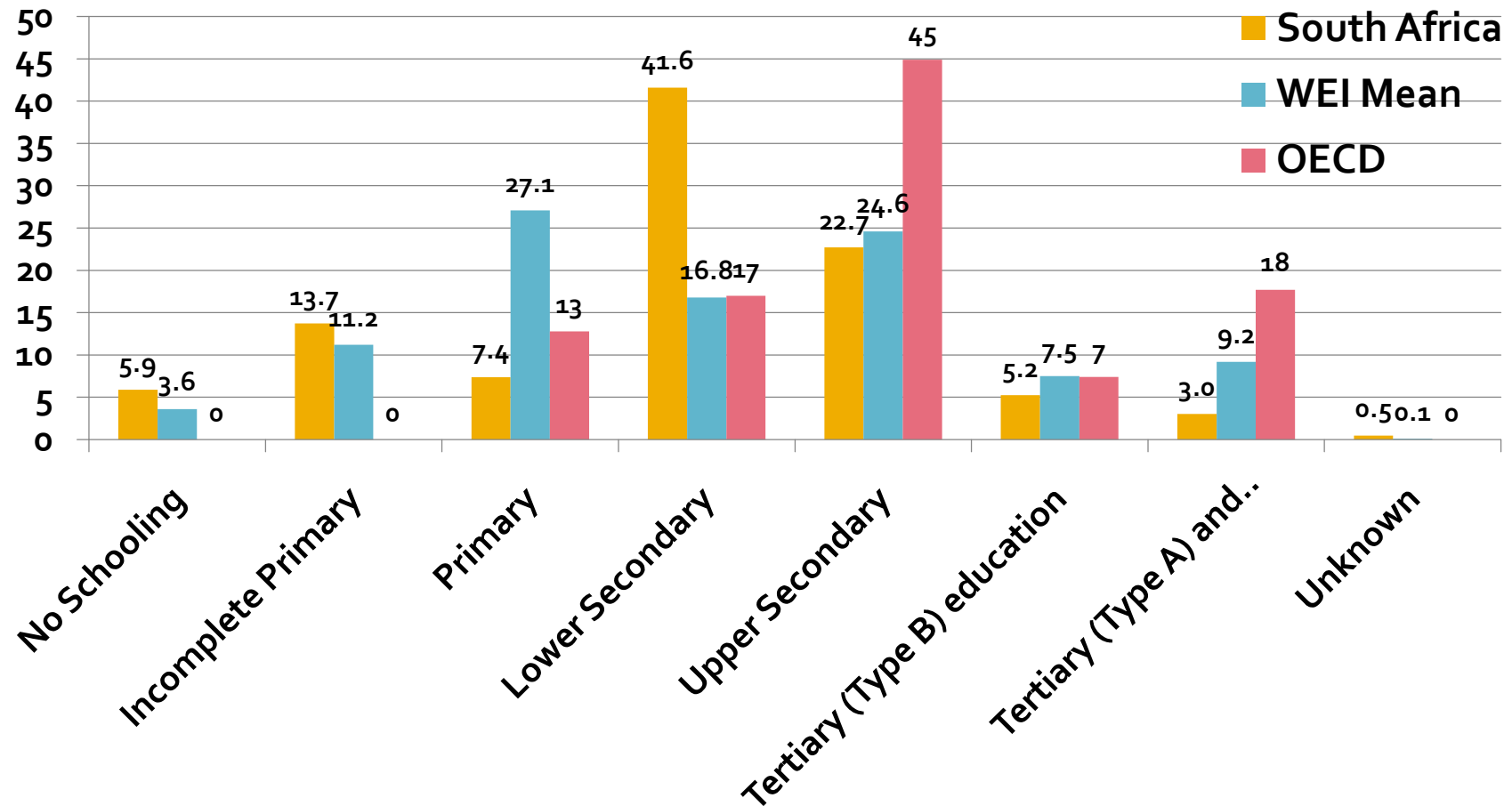
- Out of 19 emerging markets in the UNESCO study only India had a worse outcome of students completing high school.
- As for students that are able to enter university South Africa had the lowest ratio.
- While all education systems are different the fact remains that South African students did worse than the rest of the countries that one could measure in the UNESCO study.
- Many of the countries that did better than SA also had much lower incomes than South Africans.

**What type of education levels
does our workforce have.**



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Comparing labour forces across the world on education.



WEI stands for World Education Indicators and includes 19 emerging market countries

How our workforces education holds up.



- Only 30,9% of South African adults have finished high school or more while emerging markets on average have 41,3% of their workforce that have finished high school or more.
- In Developed countries the number of adults who at least completed high school stands at 69.8% or 125% the South African rate.

Workforces are becoming more educated.



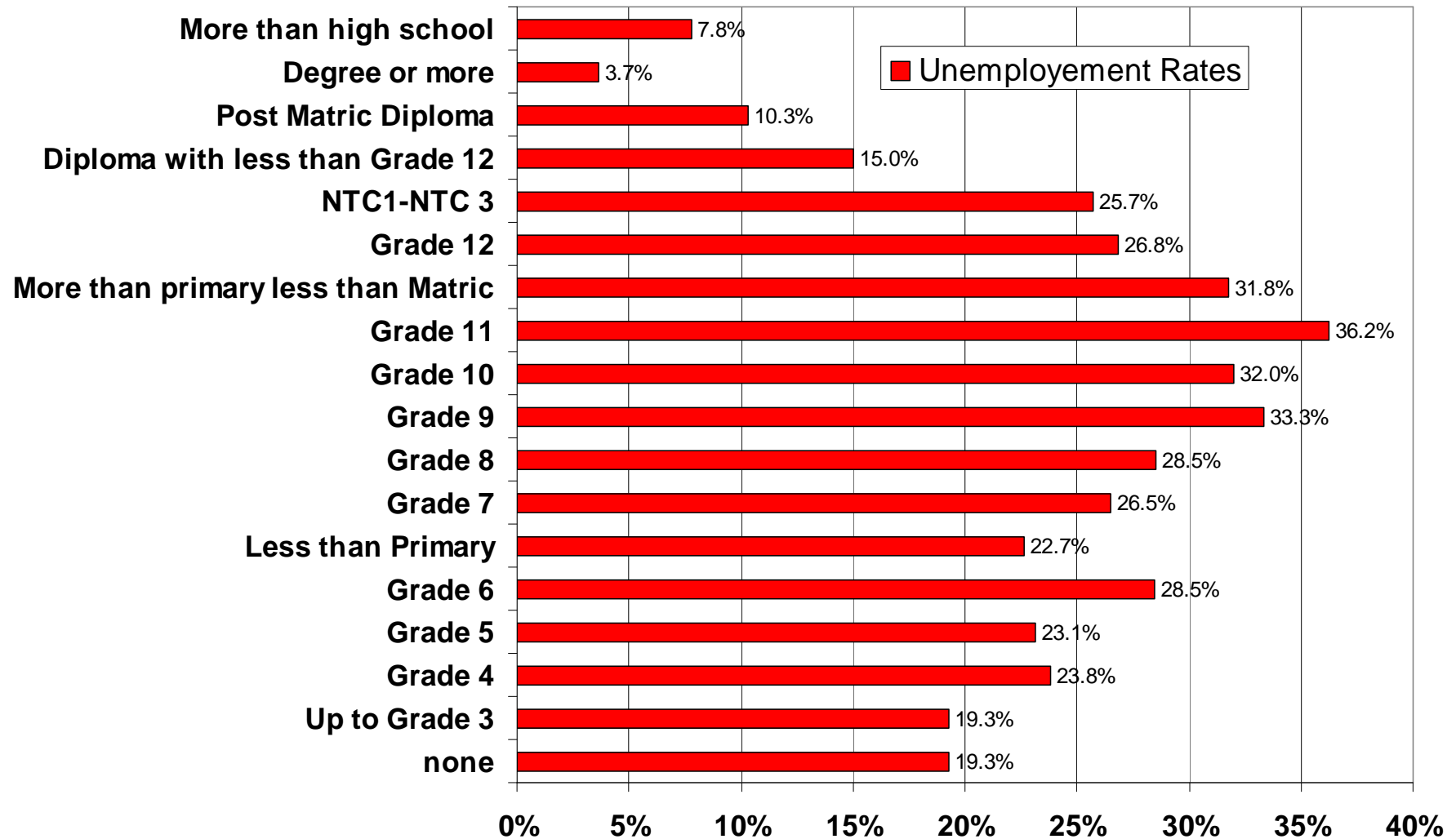
- In SA the growth rate of people completing high school since 1995 (up to 2006) is 2,1% per year, but the growth rate of university exemptions is less than 1% a year for the same period.
- In OECD countries the growth rate of students entering university education since 1995 (up to 2005) is over 7% while in developing countries as a whole between 1990 and 2001 it was 5,5% per year.

More education means a better chance of being employed.



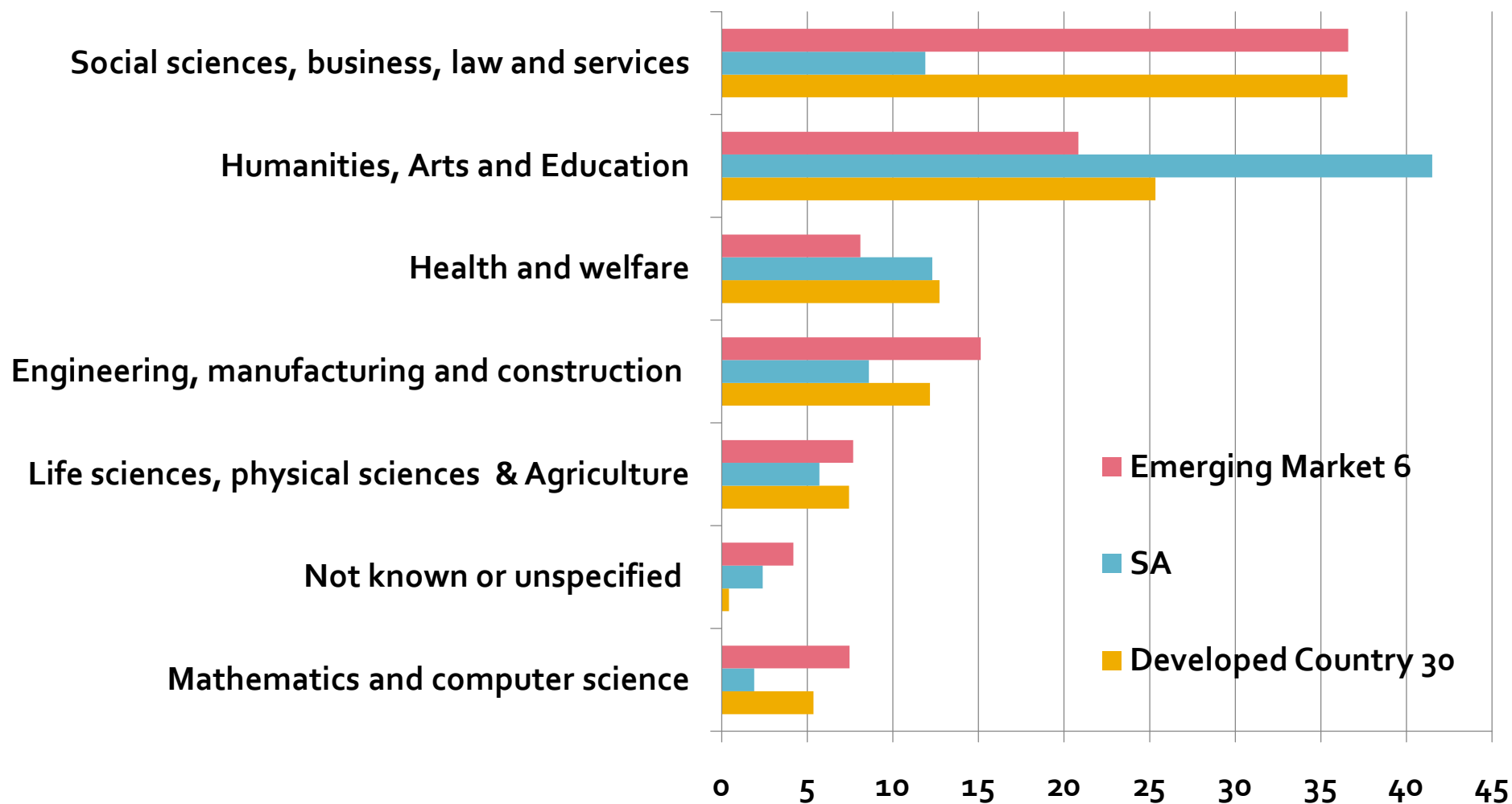
- Employment rates rise with educational attainment in most OECD countries. With few exceptions, the employment rate for graduates of tertiary education is markedly higher than that for upper secondary graduates.
- In 19 emerging market countries in the UNESCO study the same applies.
- In SA the unemployment rate for people with degrees has been less than 5% since 2002 with some surveys indicating unemployment at around 3% for people with degrees. This is the lowest unemployment rate of all in SA.

Unemployment rates by education.



Source: StatsSA LFS 2006

Field of study at degree or post degree level of workforce in selected countries.



Developed countries are OECD countries and include Mexico, Poland etc. Emerging 6 are Brazil, Chile, Slovenia, Russia, Estonia and Israel. Source: Education at a glance 2007 OECD.

Adult population: Technical subjects in SA are way behind.



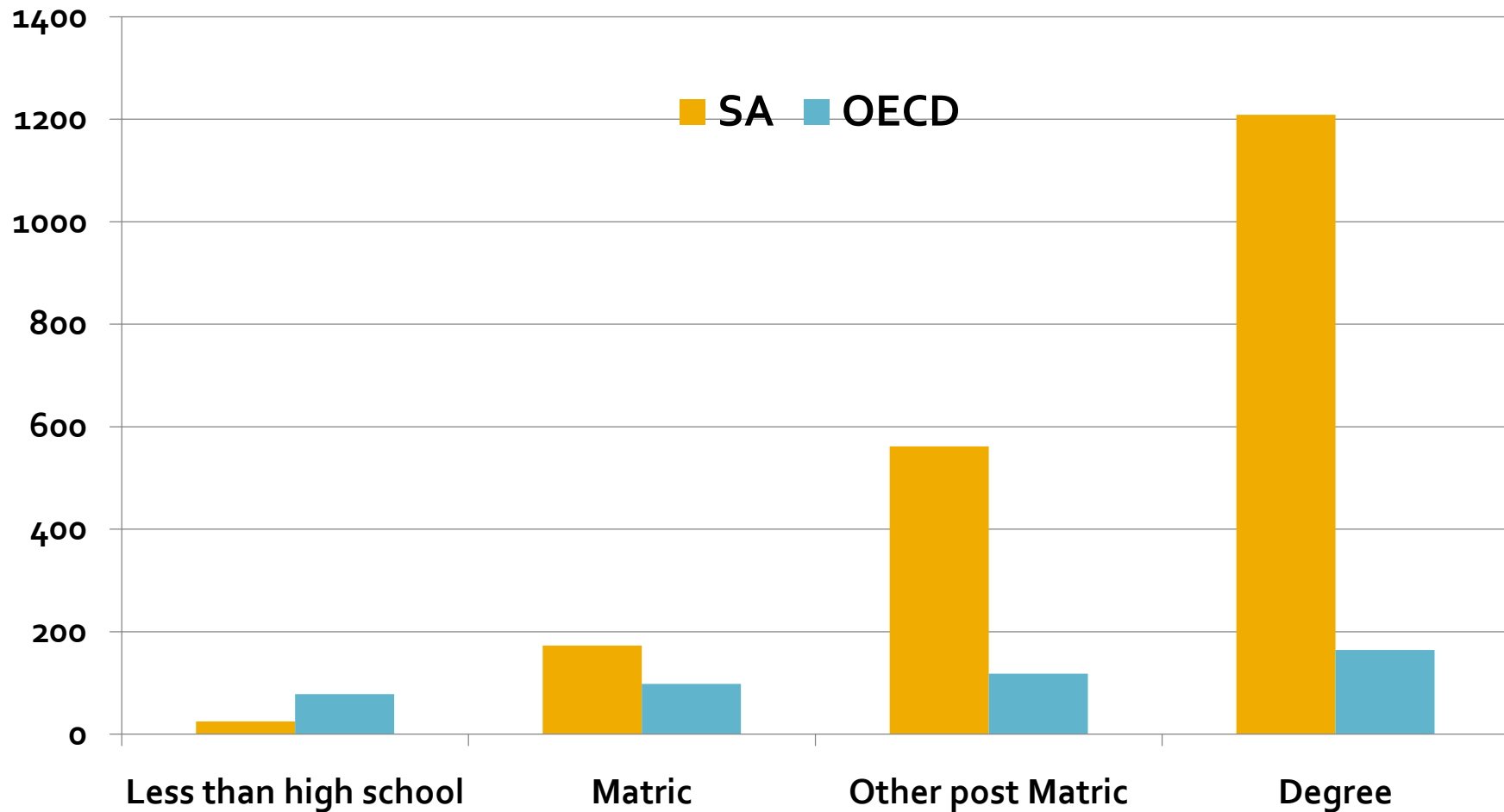
- The developed world average of technical subjects such as engineering, ICT sciences and physical sciences make up 25% of the Tertiary workforce.
- In the 6 emerging market countries mentioned in Education at a glance had 30,1% of the tertiary educated workforce with technical subjects.
- Only 16,2% of adults with a degree had a technical background.

But it is not just university that is important.



- With tertiary education other than degrees and advanced research degrees growing on a worldwide scale economists are looking at other post school attainments.
 - Type B degrees have been growing at around 4% in the OECD.
 - Artisan programs such as in the UK where 250 000 artisans are in training today (a doubling from the low of ten years ago) are planned to double to 500 000 by 2020.
 - In SA the total number of NTC 3 (base artisans) has declined with 15% since 2002 from 210 000 to 180 000!

Relative pay to average when average pay = 100



More education means better pay.

- Compared to the average worker a person with a degree in developed countries on average earns 64% more while a person who has not completed high school earns 22% less than the average.
- In SA that rises substantially.
 - Person with a degree earns 12 times or 1110% more than average!
 - Person with more than high school earns 461% more than the average.

Less people with a degree means more inequality!



- In countries like Mexico and South Africa where fewer adults have a tertiary education, those that do have earn substantially more.
 - Inequality in SA will remain as long as the country has so few workers with tertiary degrees.
- In countries such as France and Germany the difference in salaries is closer to 50% because they have many more people with degrees.

Conclusion.

- Most countries today talk about a skills shortage. If that is a world wide problem then in SA IT IS A CRISIS!!!!!!
- Looking at the facts and only the facts please notice that we have a skills crisis, not just a shortage.
- This is not an urban legend.

Thank You.

- Sources for data.
 - For workforce education - UNESCO.org
 - For Field of Study - OECD Education at a glance 2007.
 - For School tests - IEA.nl
 - For School spending - World bank.org
 - For SA Work force figures LFS March 2007 from StatsSA.gov.za micro data set.
 - For Type B degrees and Artisan various sources but UNESCO and OECD remain major source here too.
 - Employment data RBA and UIF, PSC.