



# GFIP road-user cost benefit analysis- *some reflections*

Dr Roelof Botha

# Fiscal constraint perspective

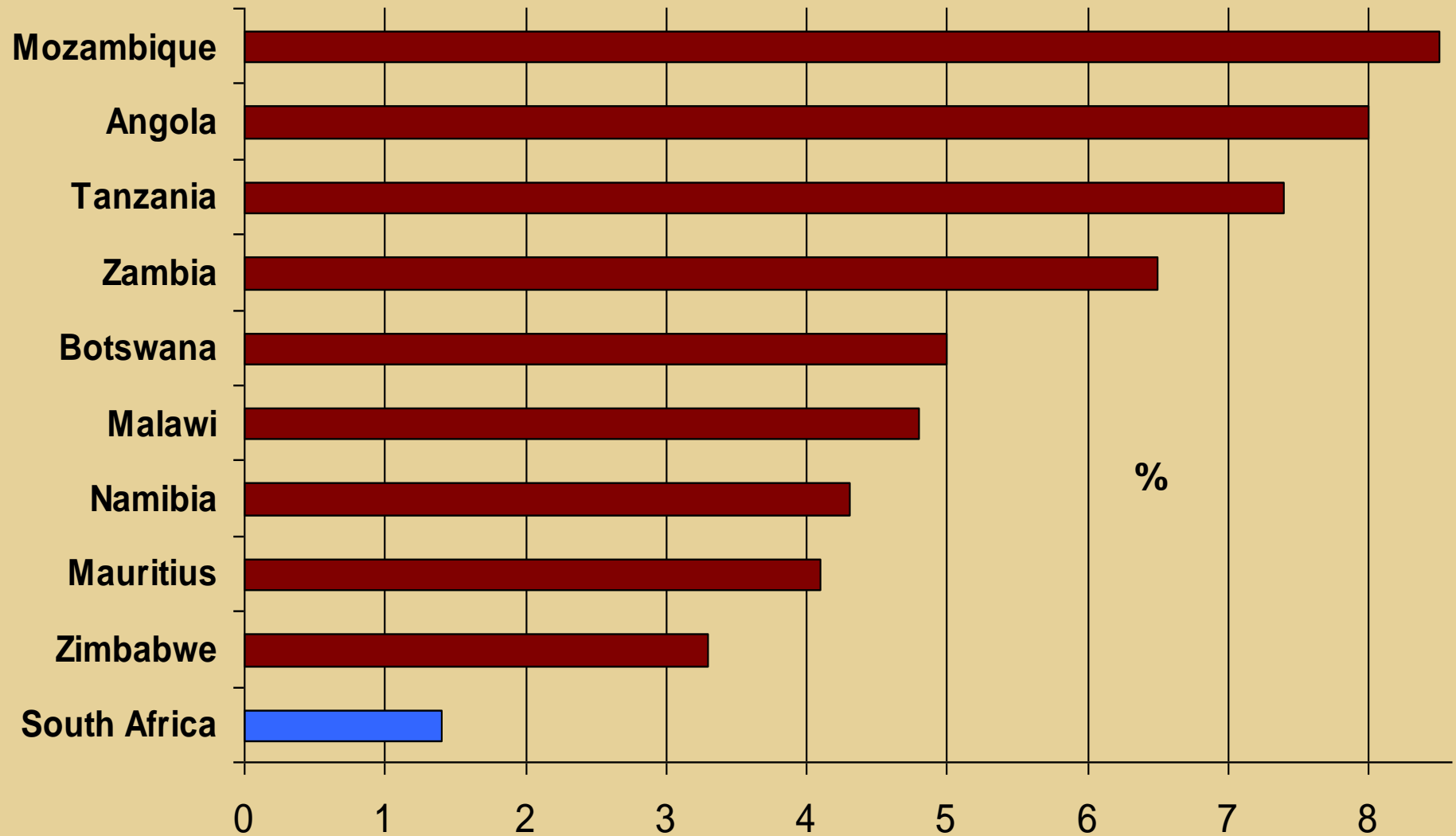


# Reasons (direct & indirect) for the lowering of the outlook on South Africa's credit rating

- Violent & lengthy strikes
- Socio-political unrest
- High levels of public sector wage increases
- Increase in public sector salaries as % of government expenditure
- Inefficiency in public service delivery
- High levels of unemployment
- Declining long-term trend in foreign direct investment
- Increase in the budget deficit/GDP ratio
- Lowering of official GDP growth forecasts for 2014

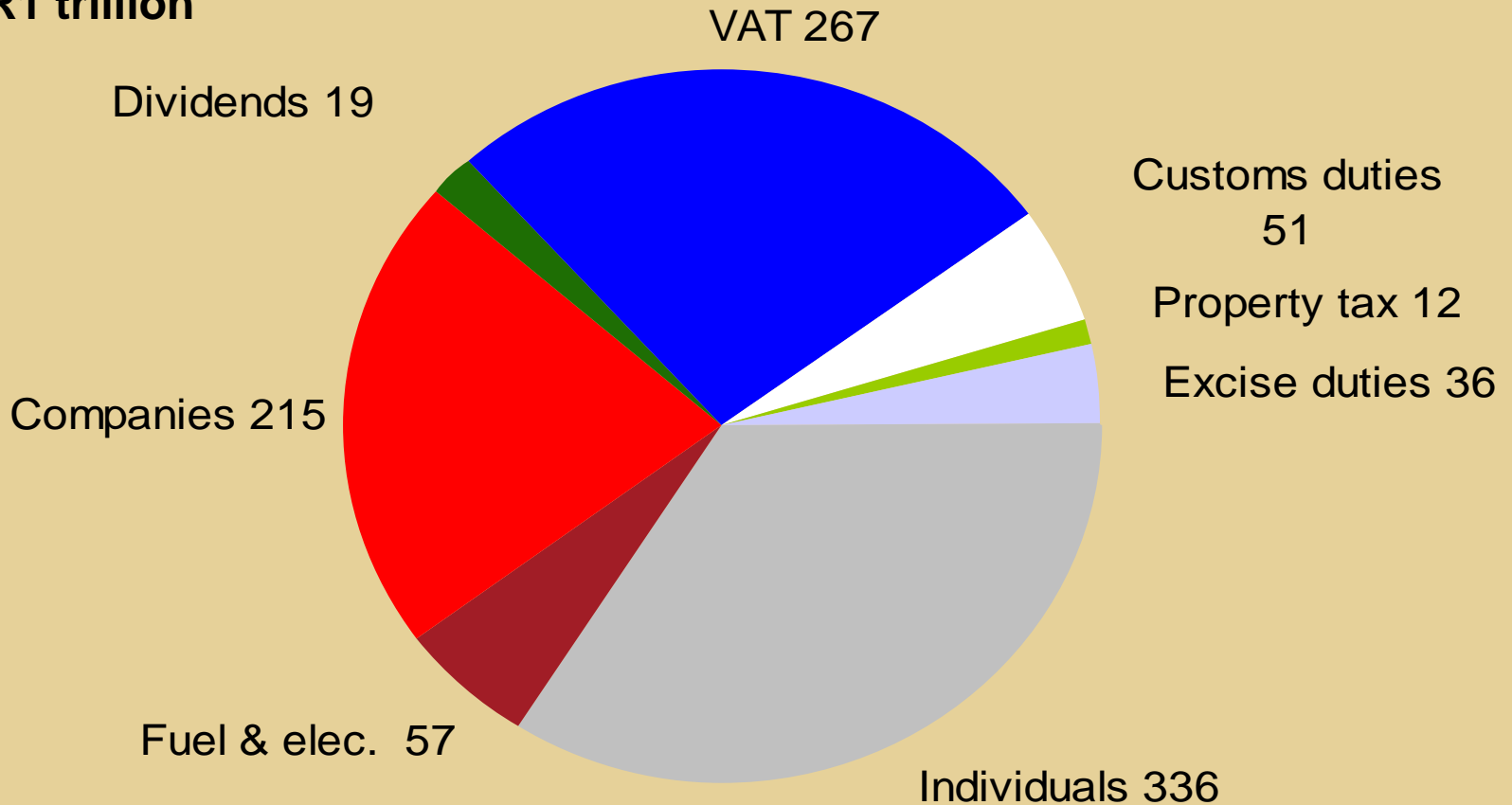
# GDP growth forecasts for 2014 – selected SADC countries

(Source: World Bank)



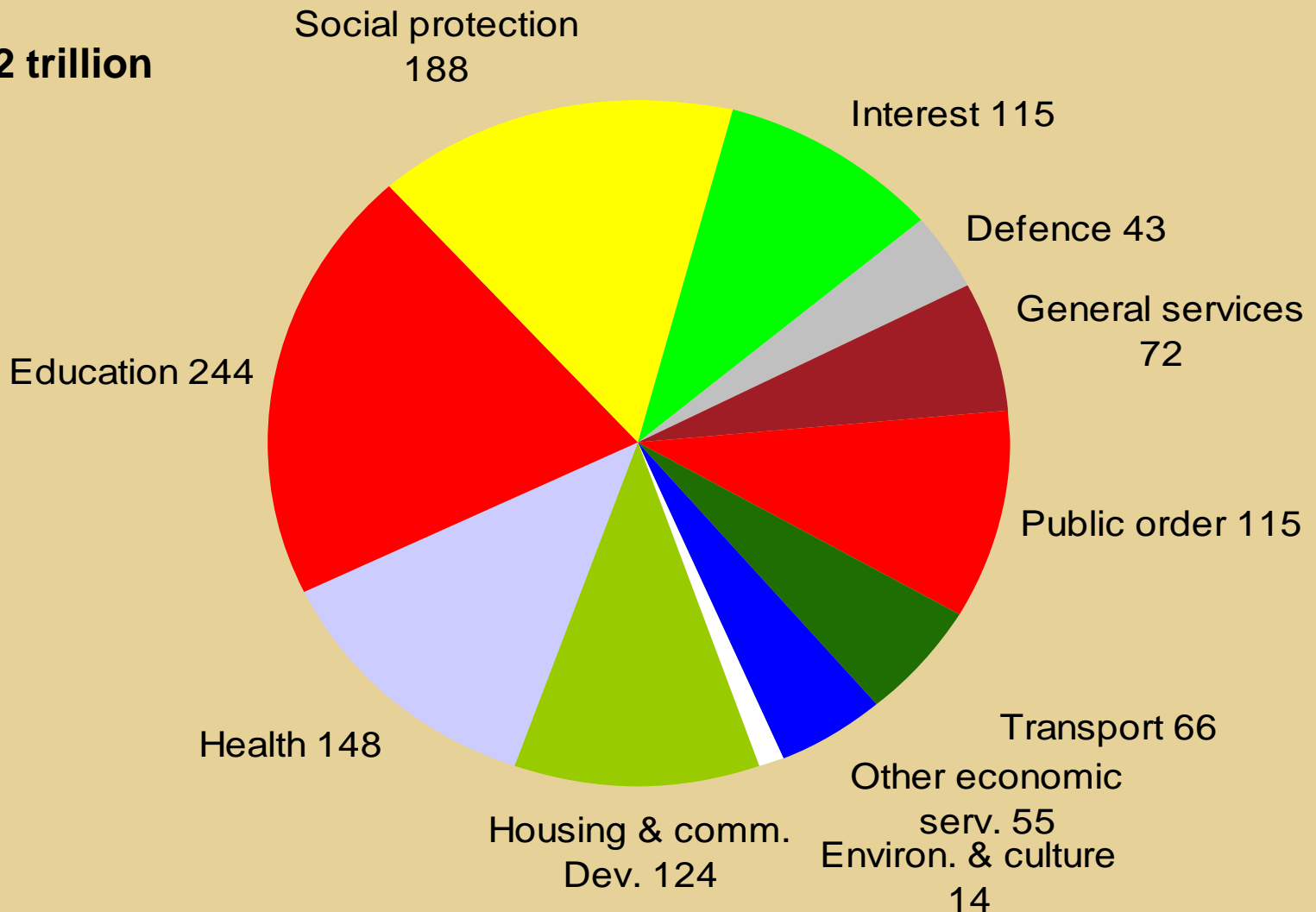
# Composition of government revenue 2014/15

**Total R1 trillion**



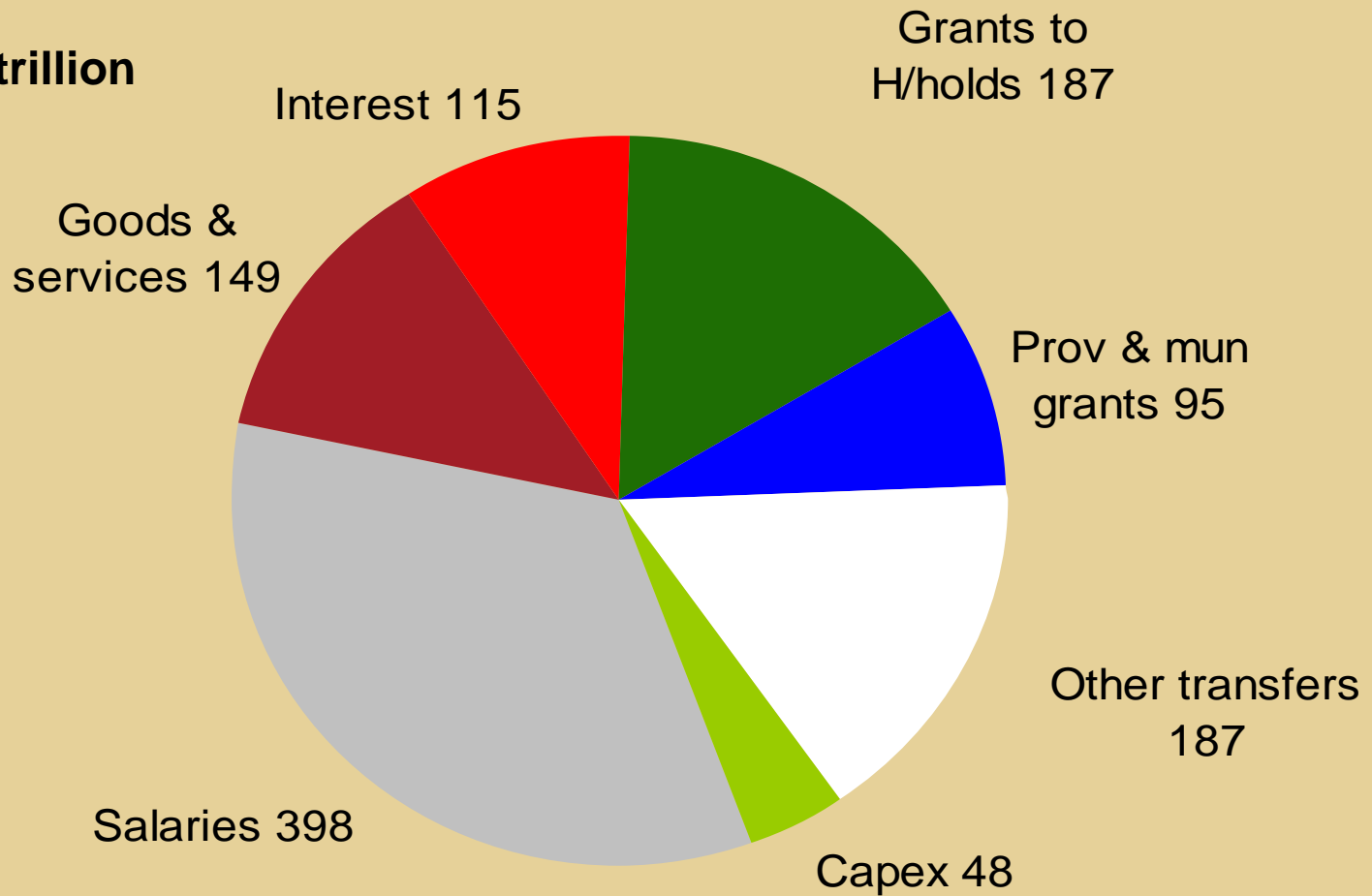
# Functional classification of government expenditure 2014/15

**Total R1.2 trillion**

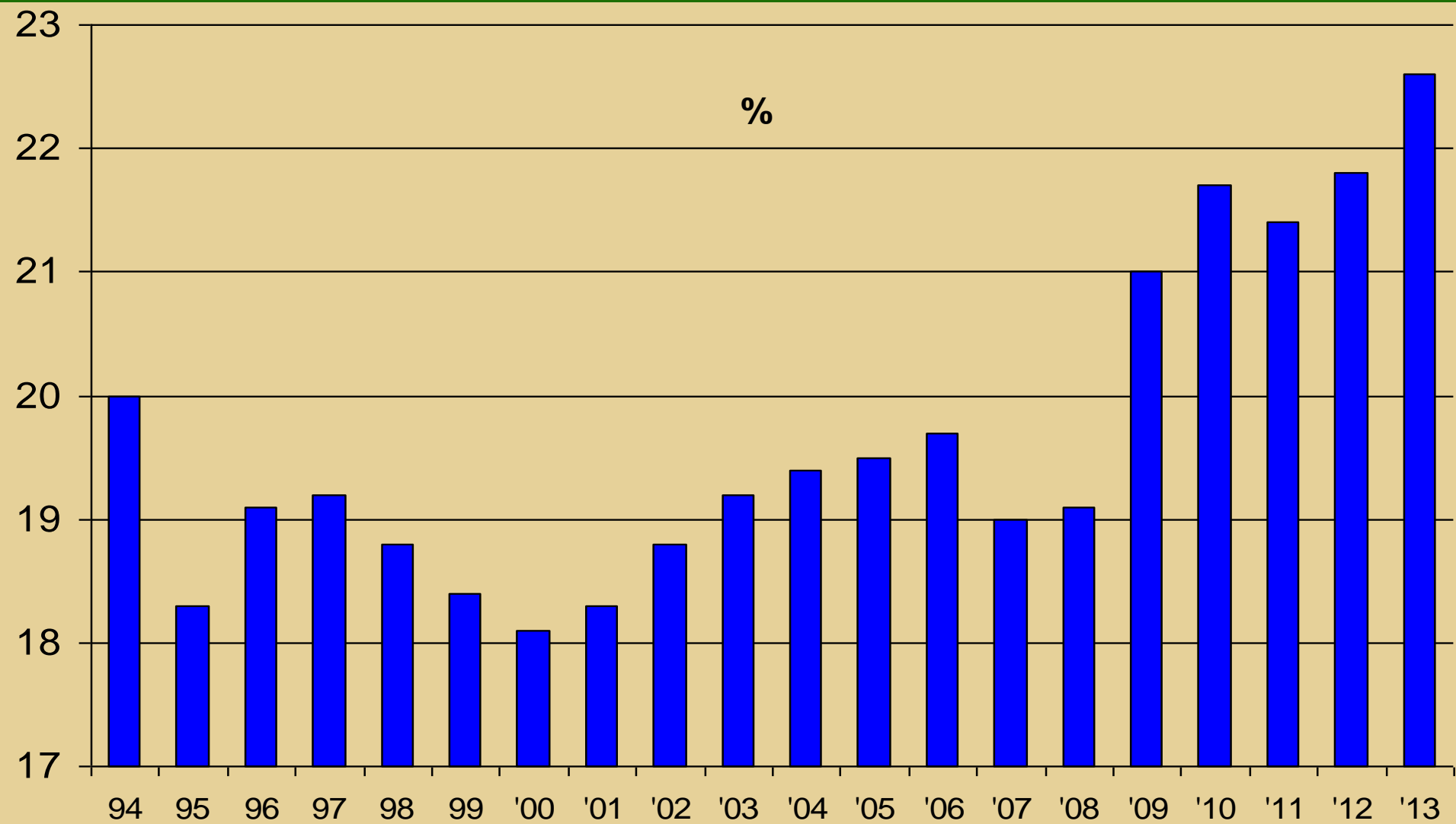


# Economic classification of government expenditure – 2014/15

**Total R1.2 trillion**

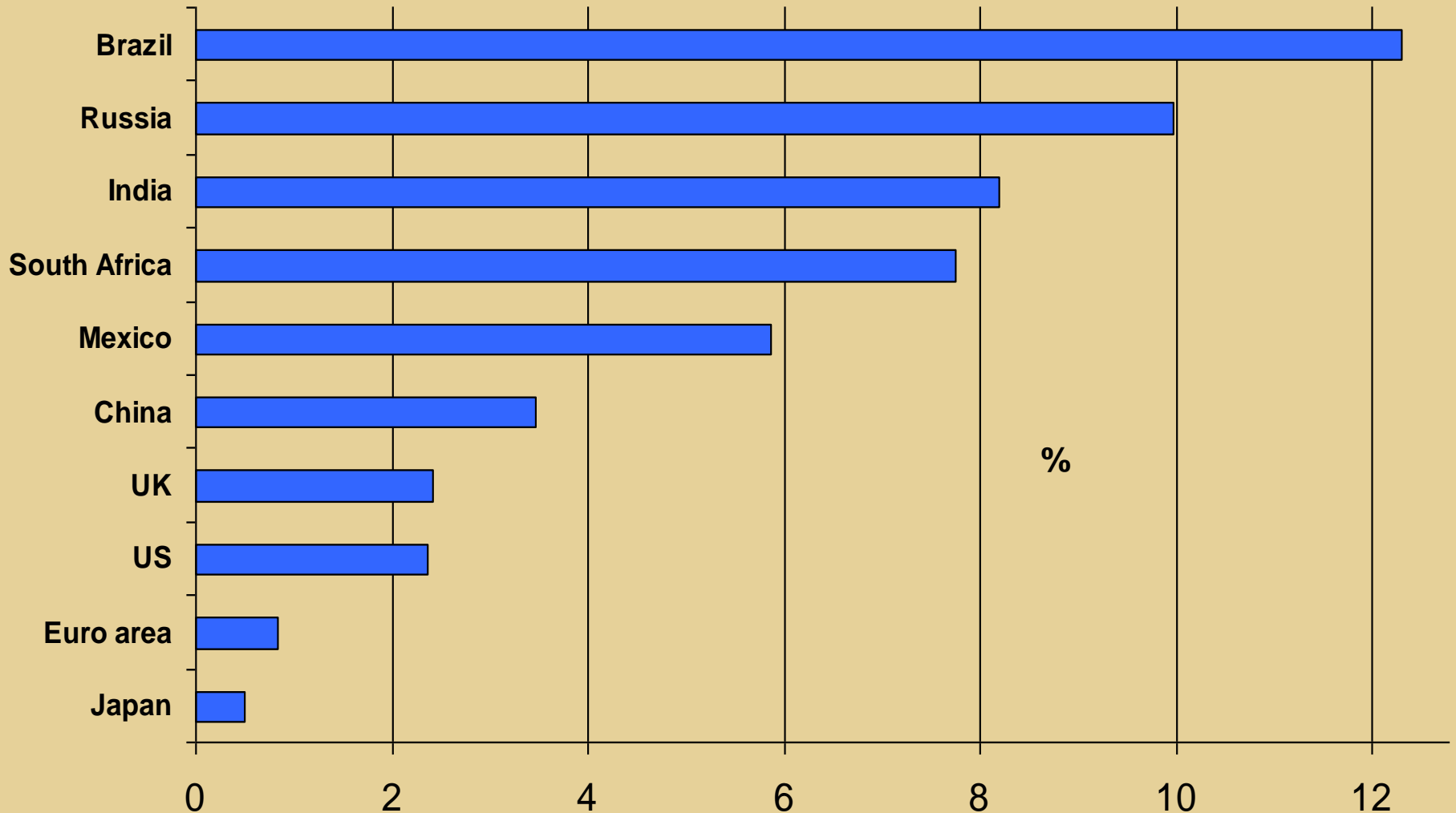


# Current government expenditure as % of GDP

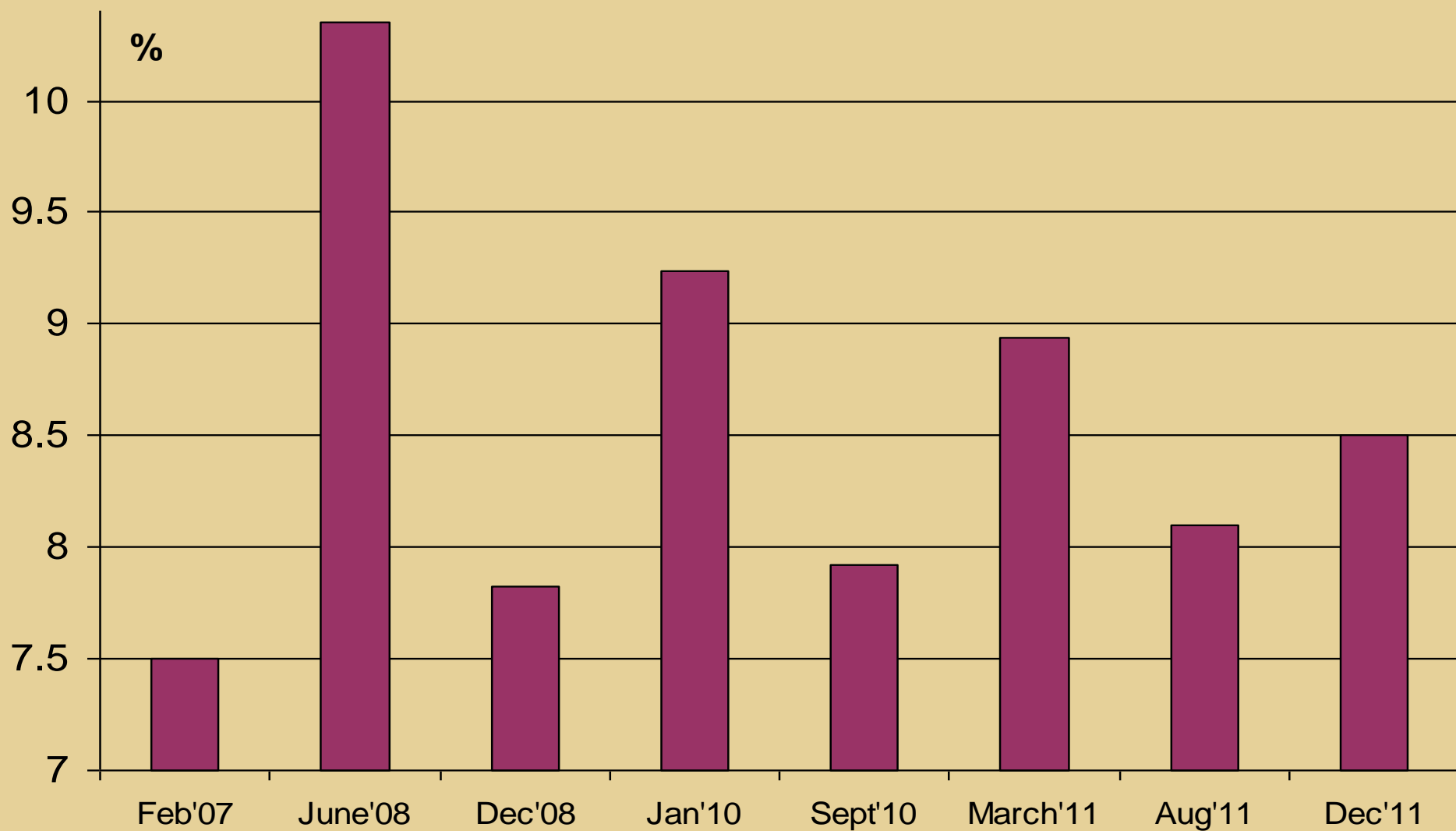


# 10-year government bond yields – November 2014

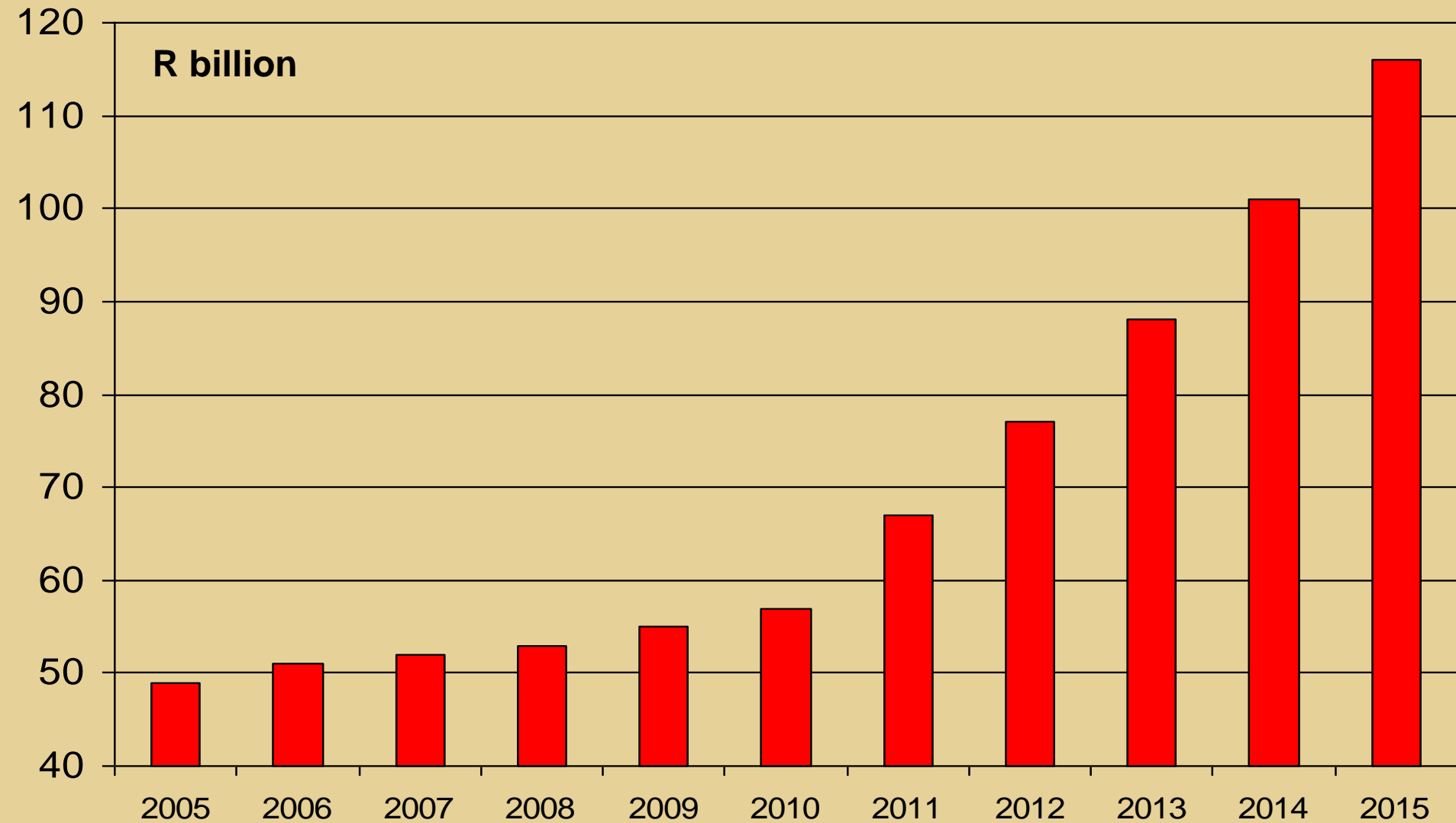
(Source: EIU)



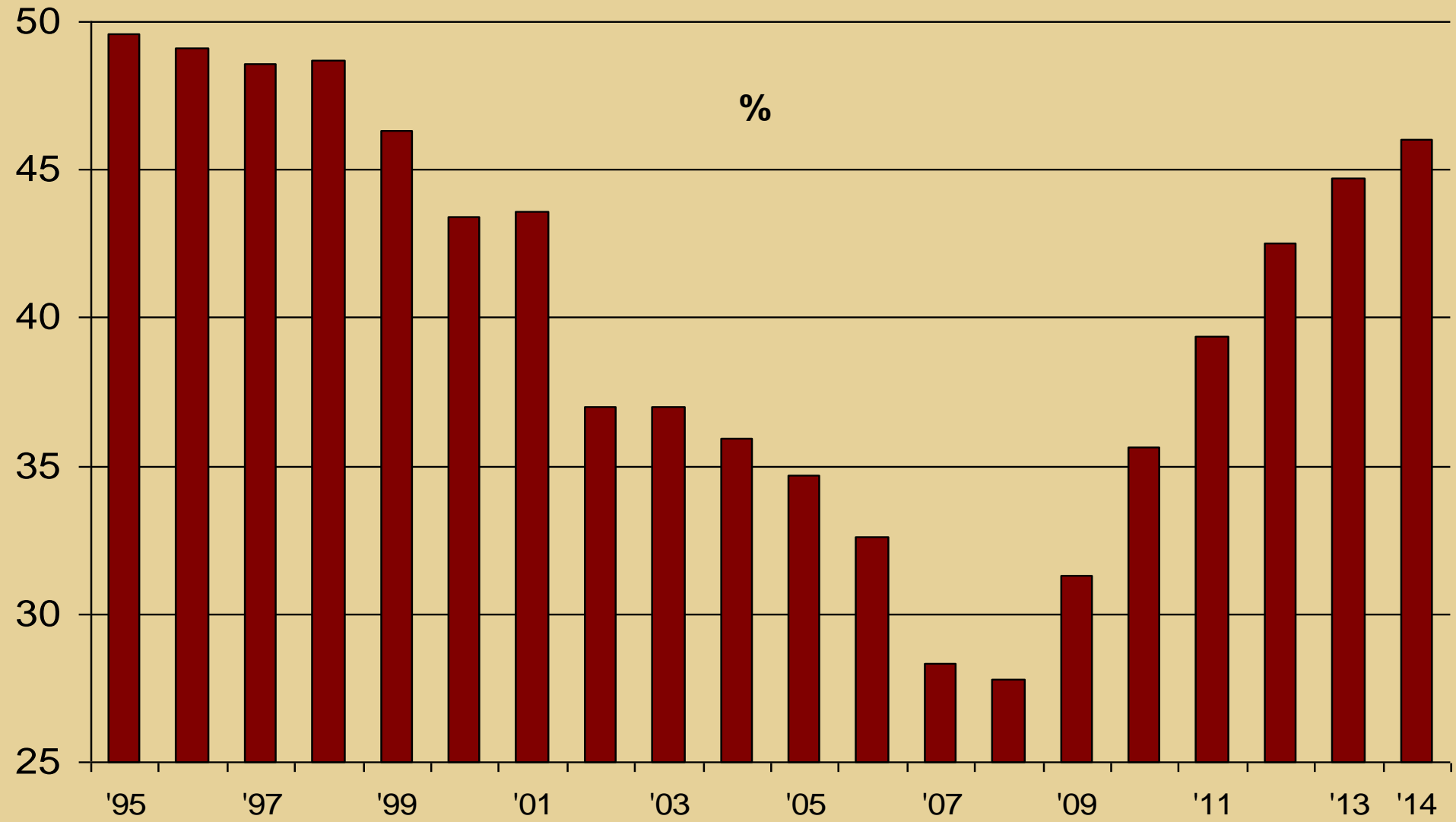
# South African long-term bond yield volatility since 2007




# Interest on public debt



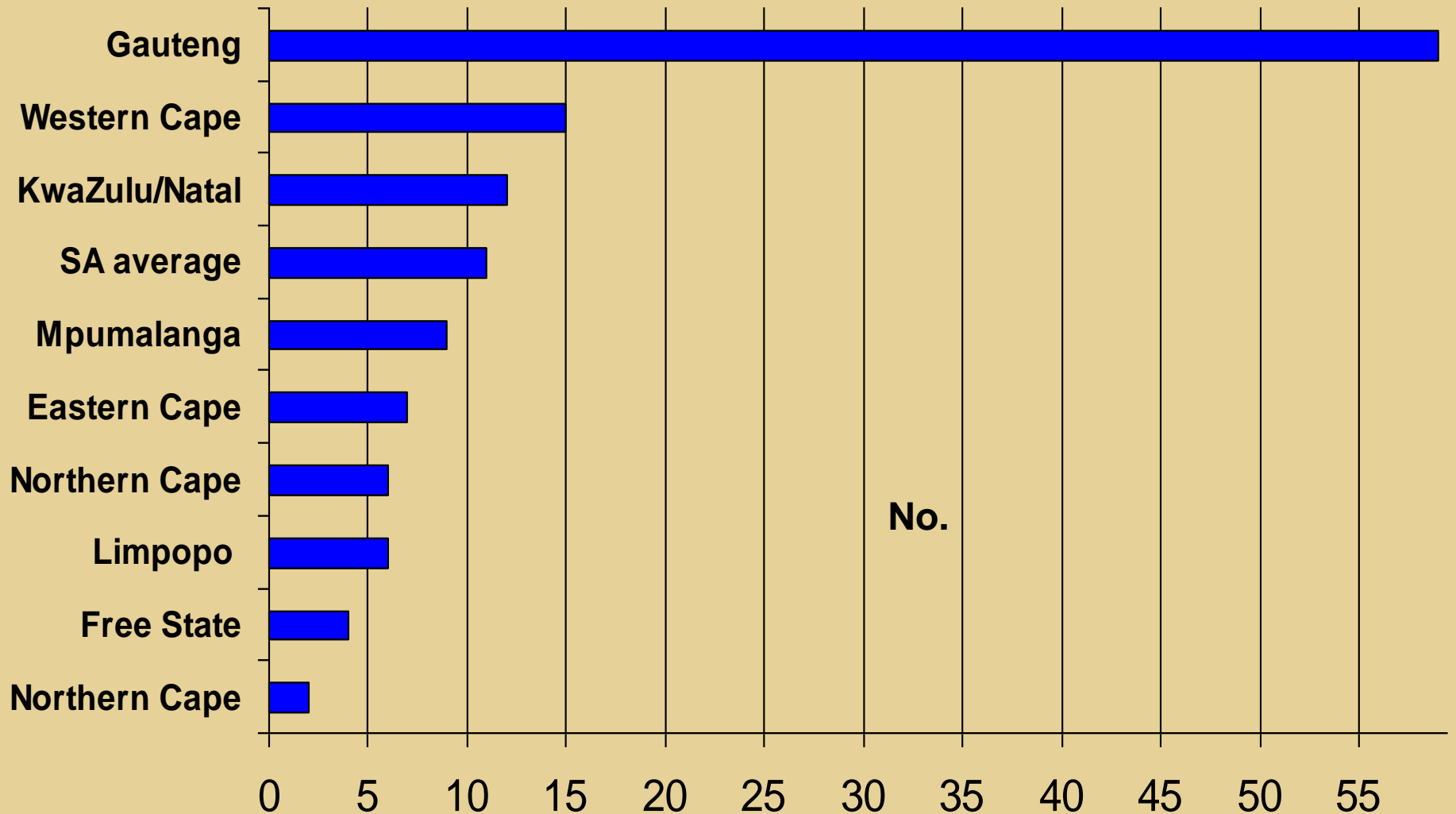
# Gross SA public loan debt as % of GDP



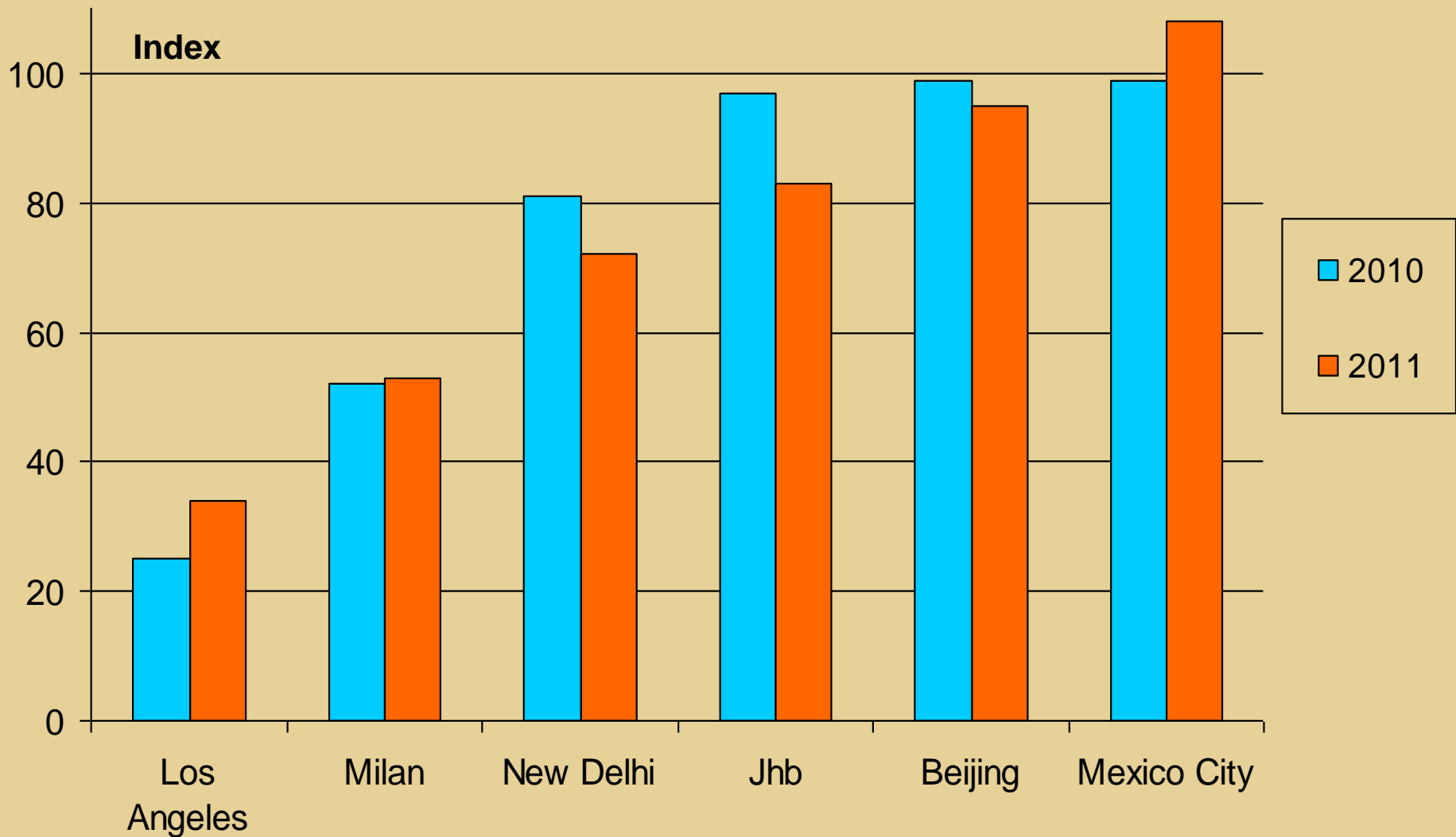
A photograph of a waterfall cascading down a reddish-brown rock face. The water is white and frothy as it falls. A small green plant is growing in a crevice near the base of the waterfall. The text "GFIP – advantages outweigh costs by a huge margin" is overlaid on the right side of the image in white, italicized font.

GFIP – *advantages  
outweigh costs by a  
huge margin*

# Number of registered vehicles per 1km of road by province *(Source: Sanral)*

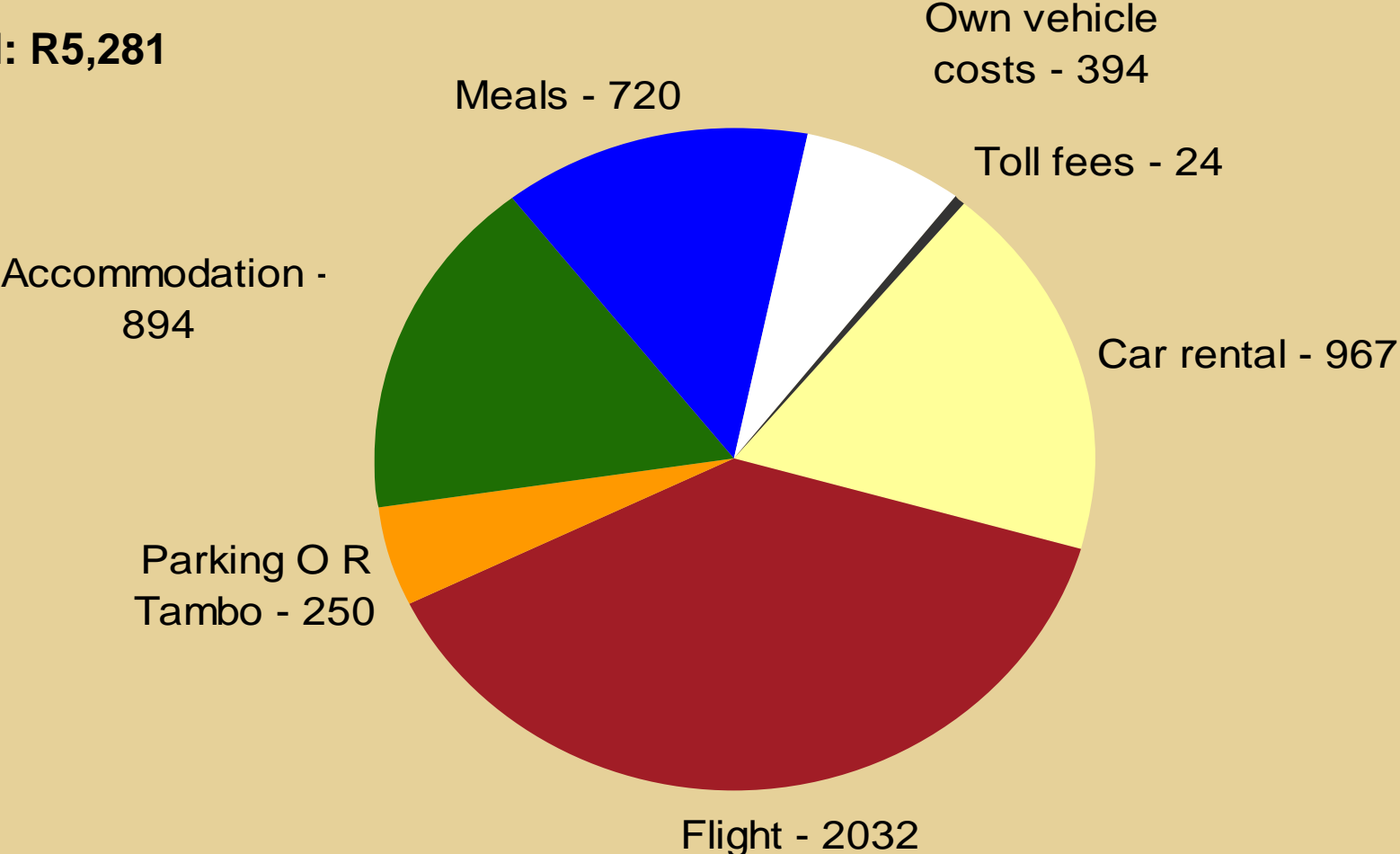


# IBM road commuter pain index trends – early benefits of lower congestion on GFIP



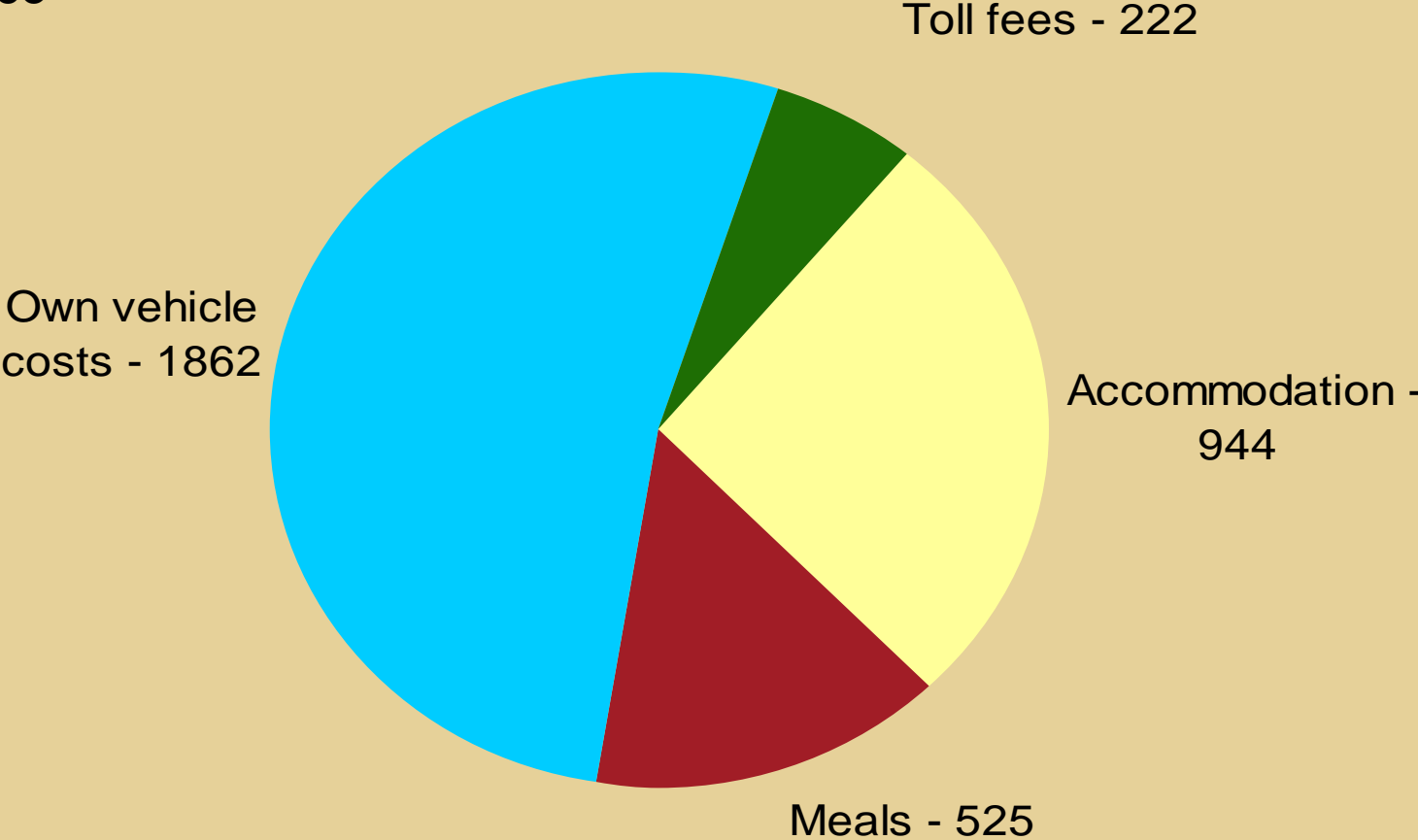
# Costing of a two-day business trip to Cape Town with travel on the R21 (from Pta to OR Tambo airport)

**Total: R5,281**

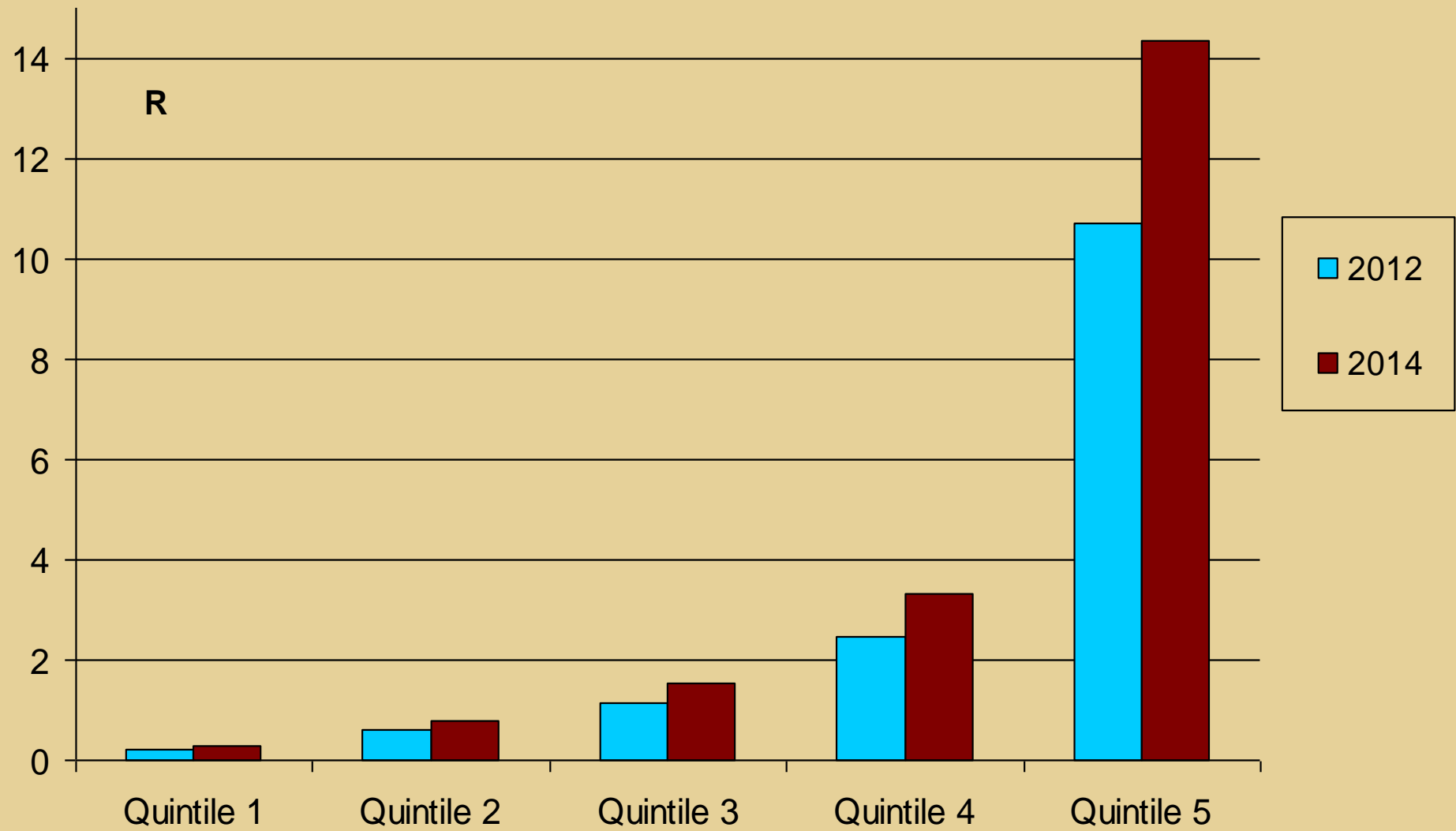


# Costing of a two-day business trip to Polokwane with travel on the N1 (from Pta)

**Total: R3,553**



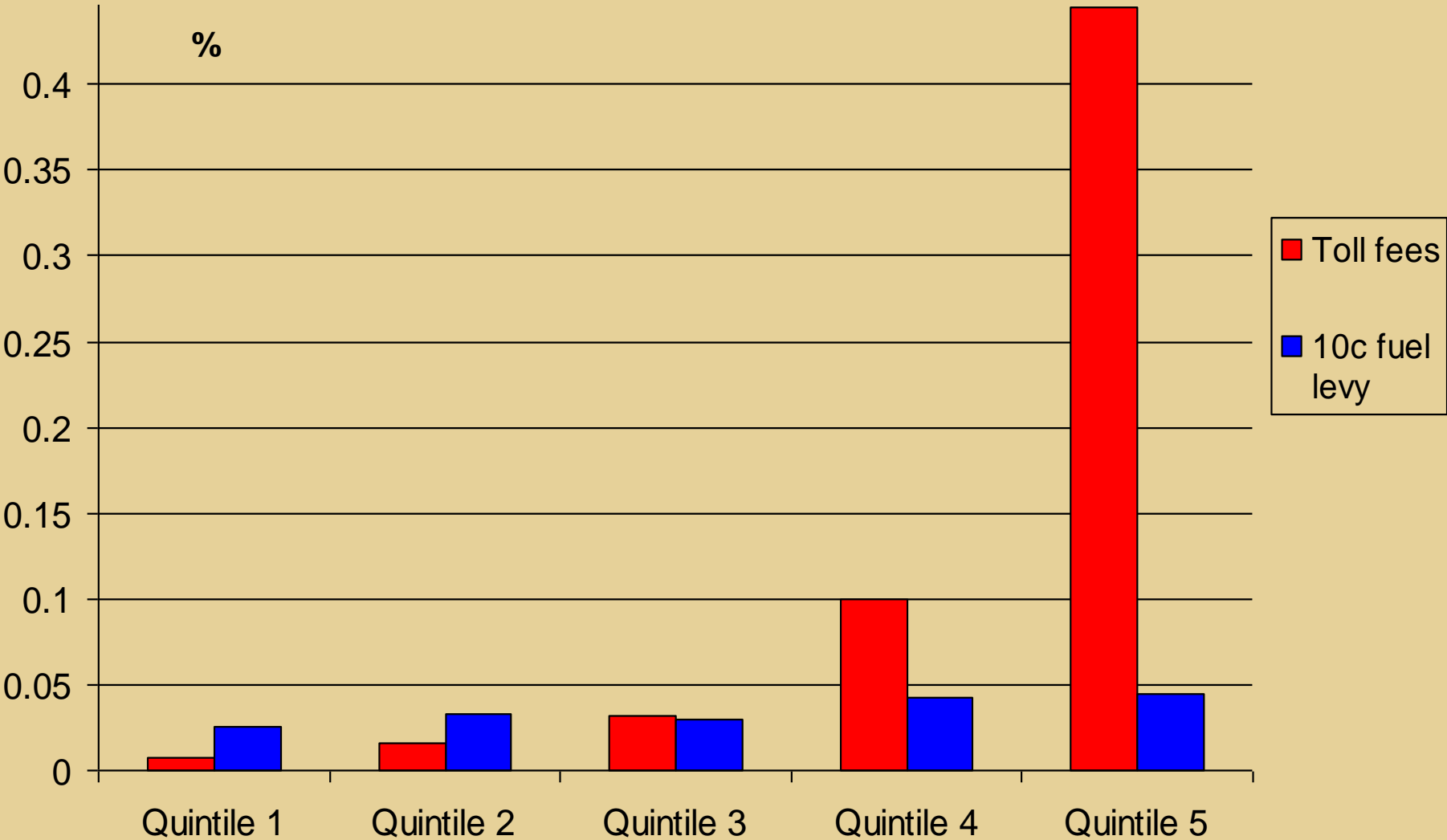
# Benefit to costs for light vehicle road users on the GFIP by income quintile



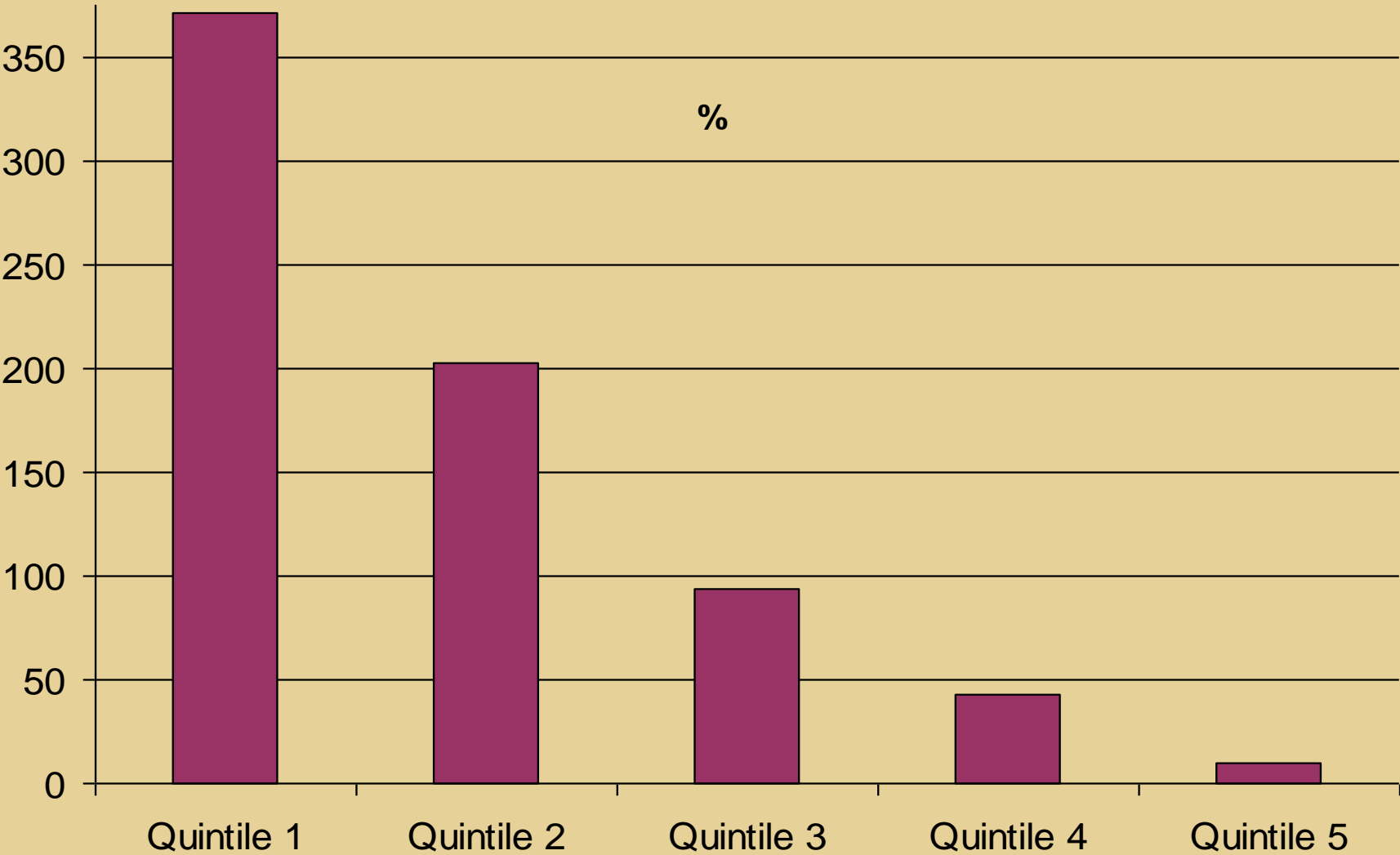



Equity – fuel levy will exert  
37-fold larger impact on poor

# CPI incidence effect of toll fees vs a 10c fuel levy increase



# Ratio of CPI incidence effect of a 10c fuel levy to toll fees



An aerial photograph of a lighthouse perched on a rocky, forested cliff overlooking the ocean. The sky is filled with soft, colorful clouds, suggesting a sunset or sunrise. The ocean is a deep blue, and several large rock formations are visible in the water. The lighthouse is a small, white, cylindrical structure with a dark top.

Conclusion –  
*benefits of GFIP & its funding model*

# Benefits of funding GFIP via user charges

- 1. Primary benefit:** Allowed SANRAL to secure an international credit rating and to raise loans to engage in private/public partnerships. Result: Timely completion of a mega-infrastructure project. Achievements under difficult traffic conditions:
  - 585km of additional lanes were constructed
  - 34 interchanges were upgraded
  - four new flyovers were built
  - 47 new bridges were constructed
  - 134 existing bridge structures were widened.
  - lighting was provided for 186 km
  - concrete median barriers for 127 km were provided

# Benefits of funding GFIP via user charges (continued)

## **2. Based on sound fiscal principle of user charges**

- Broadening of the tax base
- Adherence to the ability to pay principle
- Adherence to the benefit principle
- Relieves pressure on the fiscus
- Prevents undue upward pressure on the long-term bond yield
- Protects the SA government's global credit rating
- Avoids cross-subsidisation by other provinces
- Allows for fiscal leeway to fund future road upgrading projects

# Benefits of funding GFIP via user charges (continued)

## **3. Progressive revenue impact**

- Incidence falls mainly on highest income quintile
- Poorer groups will be worse off with a fuel levy increase
- Highest income quintile to pay 94% of fees for passenger cars
- Public transport exempted

# Benefits of funding GFIP via user charges (continued)

## **4. Cost savings**

- Improved fuel efficiencies
- Lower vehicle maintenance costs
- Significantly lower levels of congestion
- Substantial time savings for motorists & passengers
- Lower opportunity costs of travelling
- Prevents a substantial increase in the fuel price

# Benefits of funding GFIP via user charges (continued)

## **5. Value of time saved due to lower levels of traffic congestion**

- Higher value added in the economy
- Social benefits via more family time
- Opportunity to participate in sport & engage in exercise
- More study time for students & scholars
- Enhanced effectiveness of emergency medical transport
- Lower stress levels

# Benefits of funding GFIP via user charges (continued)

## **6. Modernisation of freeway management via the intelligent transport system (ITS)**

- Collection of real-time traffic information
- Conveying of traffic flow data to road users at multiple points
- Enhanced safety of motorists
- Contribution to crime prevention
- Assistance with incidence management
- Higher degree of certainty with travel conditions