#### TOWARDS A LEADING INDICATOR OF EMPLOYMENT IN SOUTH AFRICA

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- Development Path Indicators were concerned with short term indicators of which long term path the economy is on
- Want to come back to our concern with employment
- Explore possibility of an indicator that anticipates employment cycles
- LIESA
- Could be ambiguity between movements along cycles and transitions to new paths



# **Transitional Ambiguity**





### Approach to Leading Indicators

- Does employment correlate with GDP?
- If it does, leading indicators of GDP will also be leading indicators of employment
- Draw on extensive business cycle work done at SARB
- Thanks to laan Venter for assistance with data
- Also draw on ideas by Claus for DoL in New Zealand
- Relatively informal exploration at this stage



#### GDP and Employment Levels, 1980-2008

#### QUARTERLY EMPLOYMENT AND GDP INDICES 1980-2008



- Divergence between GDP and employment trends after 1998
  - Poor data?
  - Using SARB data
- No obvious cyclicity, so look at deviations from trends



# Employment and GDP: smoothed deviations from trend



- GDP initially leads employment, but co-incident from about 1990 onwards
- Therefore might use leading indicators of Business Cycle to find LIESA
- Remember trend dominates cycle



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### Constructing a Leading Indicator Series

- Identify the variable whose cycles we want to anticipate – 'target series'
- Look for various series that have cycles that precede those in the target series – 'candidate series'
- Construct an index that is composite of candidate series



# **Target Series**

- Need quarterly employment data
- No continuous quarterly series over long period
- We used SARB "Private Sector Employment in Non-Agricultural Sectors (7008Q)"
- Some obvious problems
  - Structural breaks
  - Service employment
- Need further work to construct more consistent series



# **Candidate Series**

- Did not explore all SARB leading indicators
- Used the following in different combinations:
  - Commodity Price Index
  - Retail sales
  - Number of manufacturing factory workers
  - Trading partner leading indicator series
  - Motor vehicle sales
  - Building plans completed
  - Sunday Times job advertising space



## **A Preliminary LIESA**



- Correctly anticipated some employment downturns
- But some incorrect or missed
- Downturn at end of series?

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# Conclusion

- Not entirely implausible to construct LIESA
- Future work needs to:
  - Create better and longer time series of high frequency employment data
  - Use more sophisticated econometrics
- If this is to be done, need to think of institutional framework for supporting it

