Employment and the Development Path

Employment Indicators

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Overview

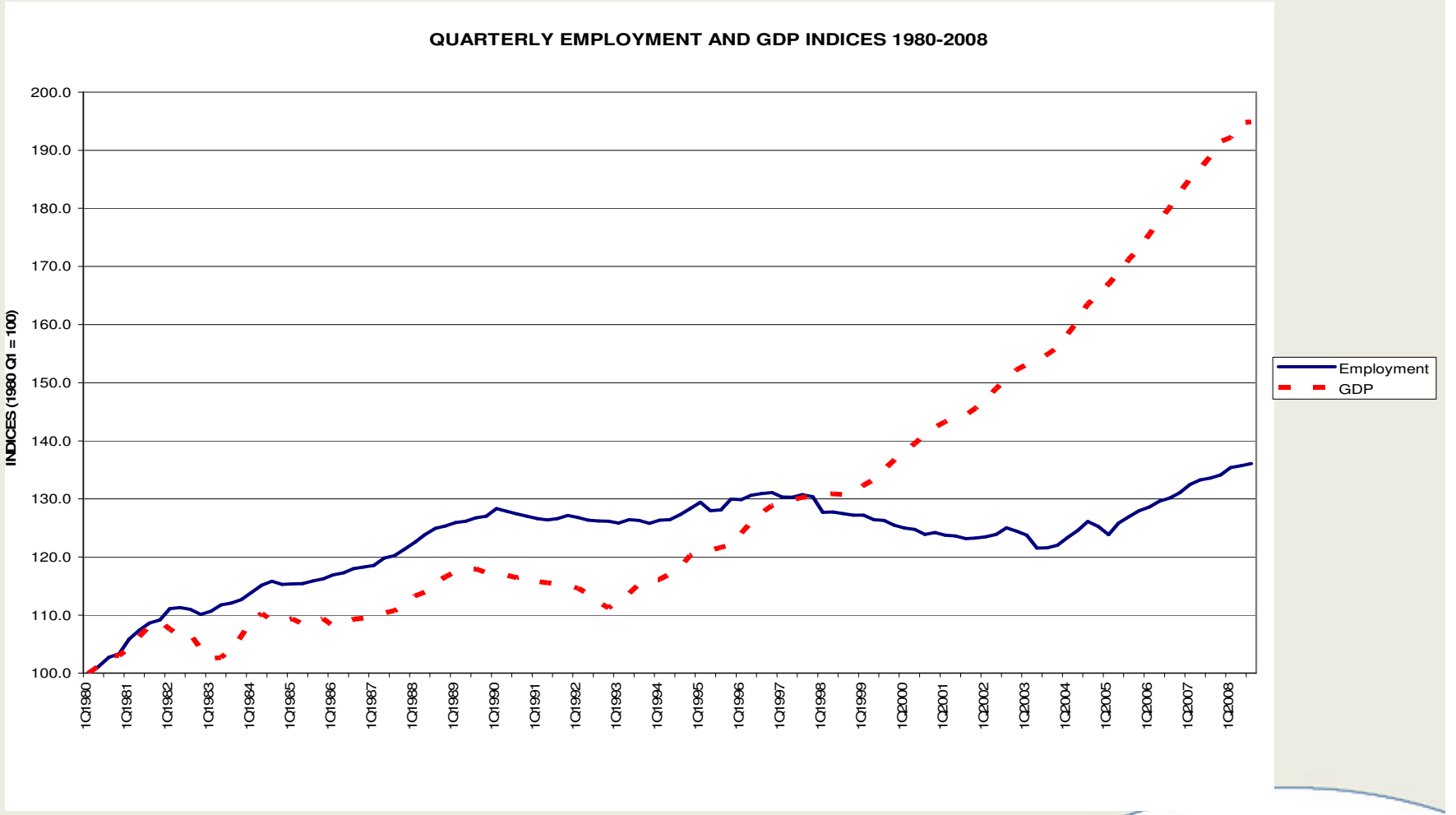
- Leading Indicator of Employment for SA (LIESA)
- Structural Path Analysis

Lead Indicator of Employment

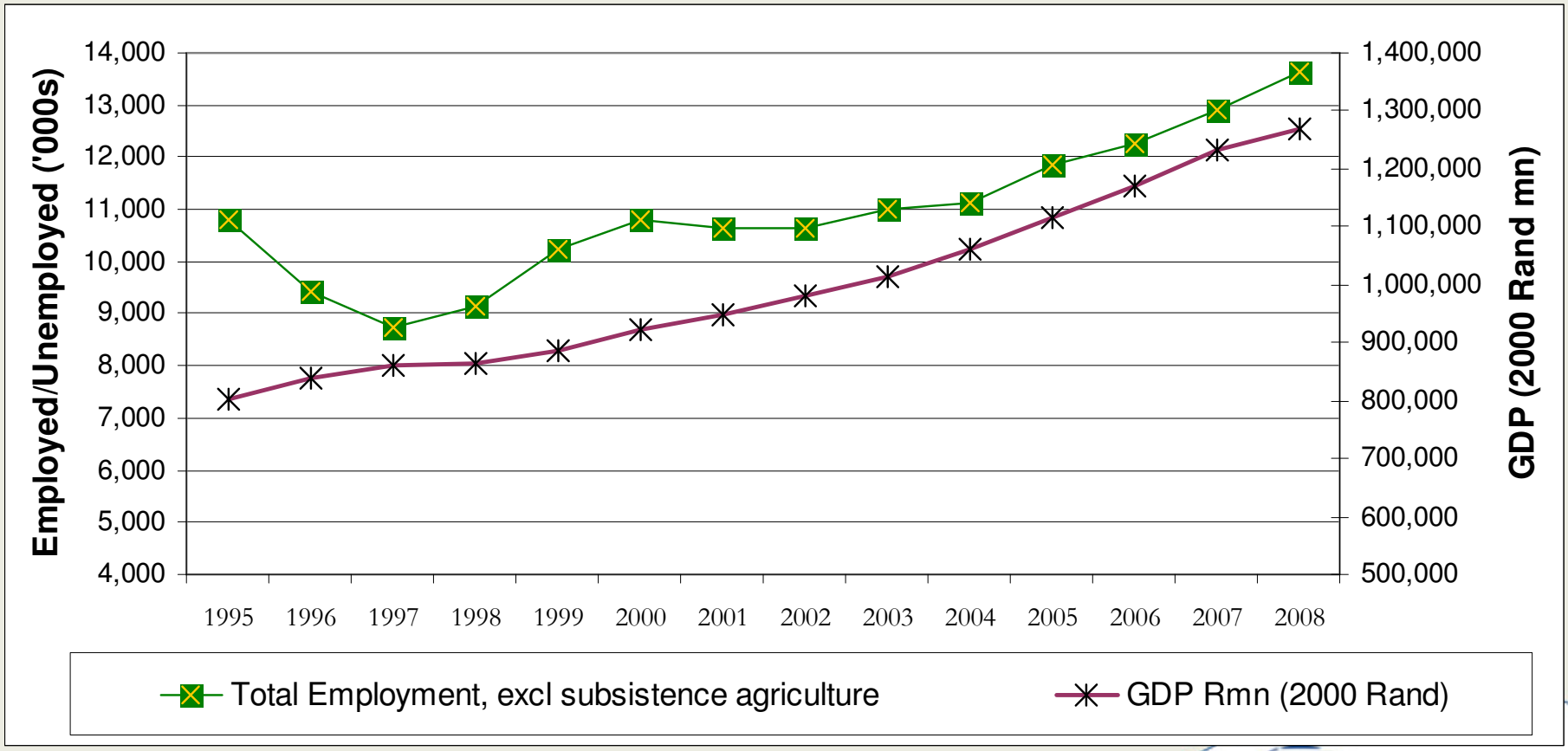
Purpose of a lead indicator

- Types of indicators:
- Lagging - indicators that change after the overall economy has changed; examples include the unemployment rate, the prime rate, outstanding bank loans etc
- Coincident – these are indicators that vary directly with, and at the same time as, the related economic trend, thereby providing information about the current state of the economy.
- Leading – indicators that change before the economy has changed. Examples of leading indicators include building permits, money supply, inventory changes, and stock prices.
- Medium term – e.g. view of the next 6 months
- LIESA is an indicator that anticipates changes in employment before they occur.

Employment and GDP in South Africa, 1980–2008 (Levels)

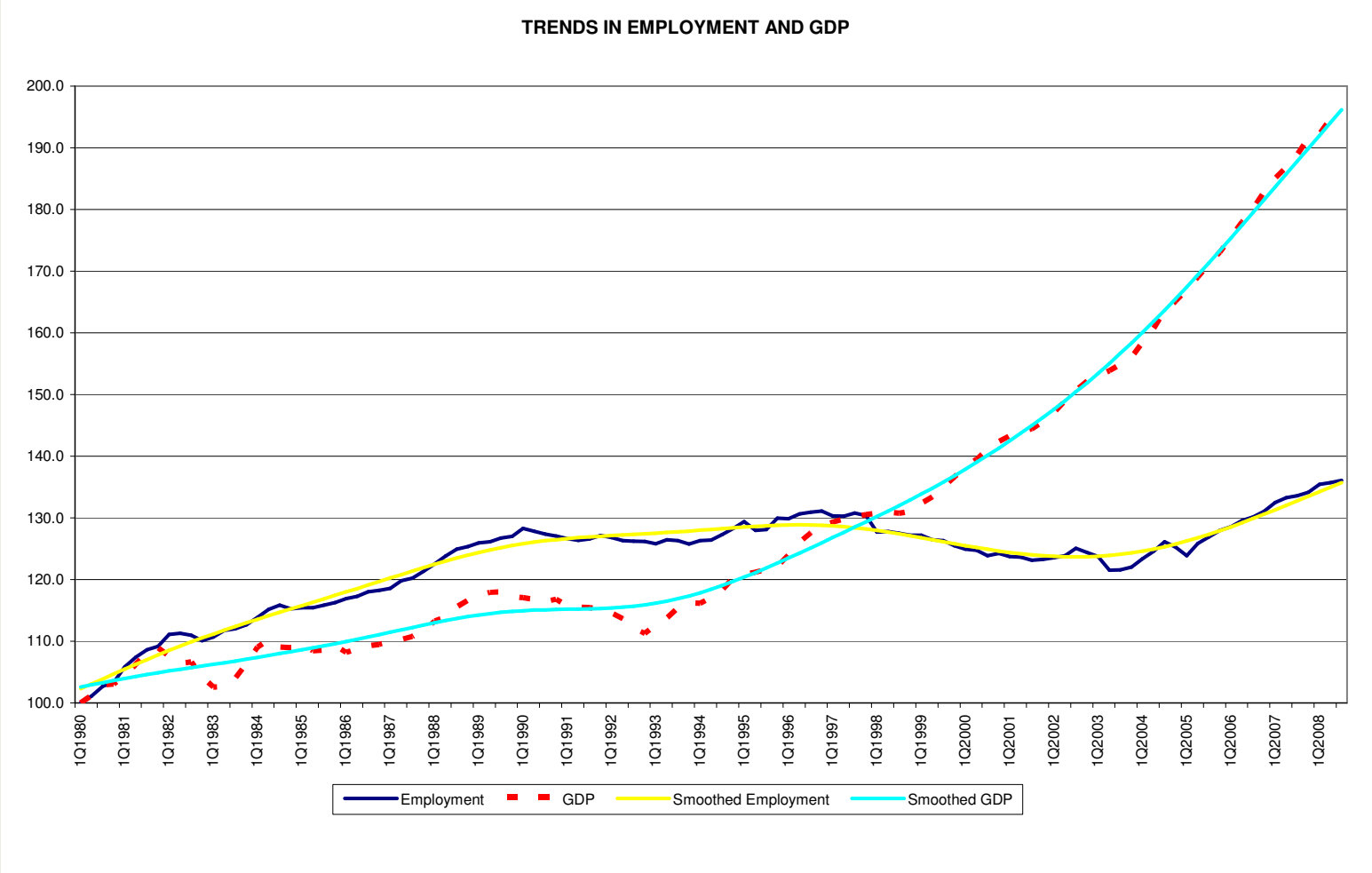


Employment & growth in SA over past decade according to LFS

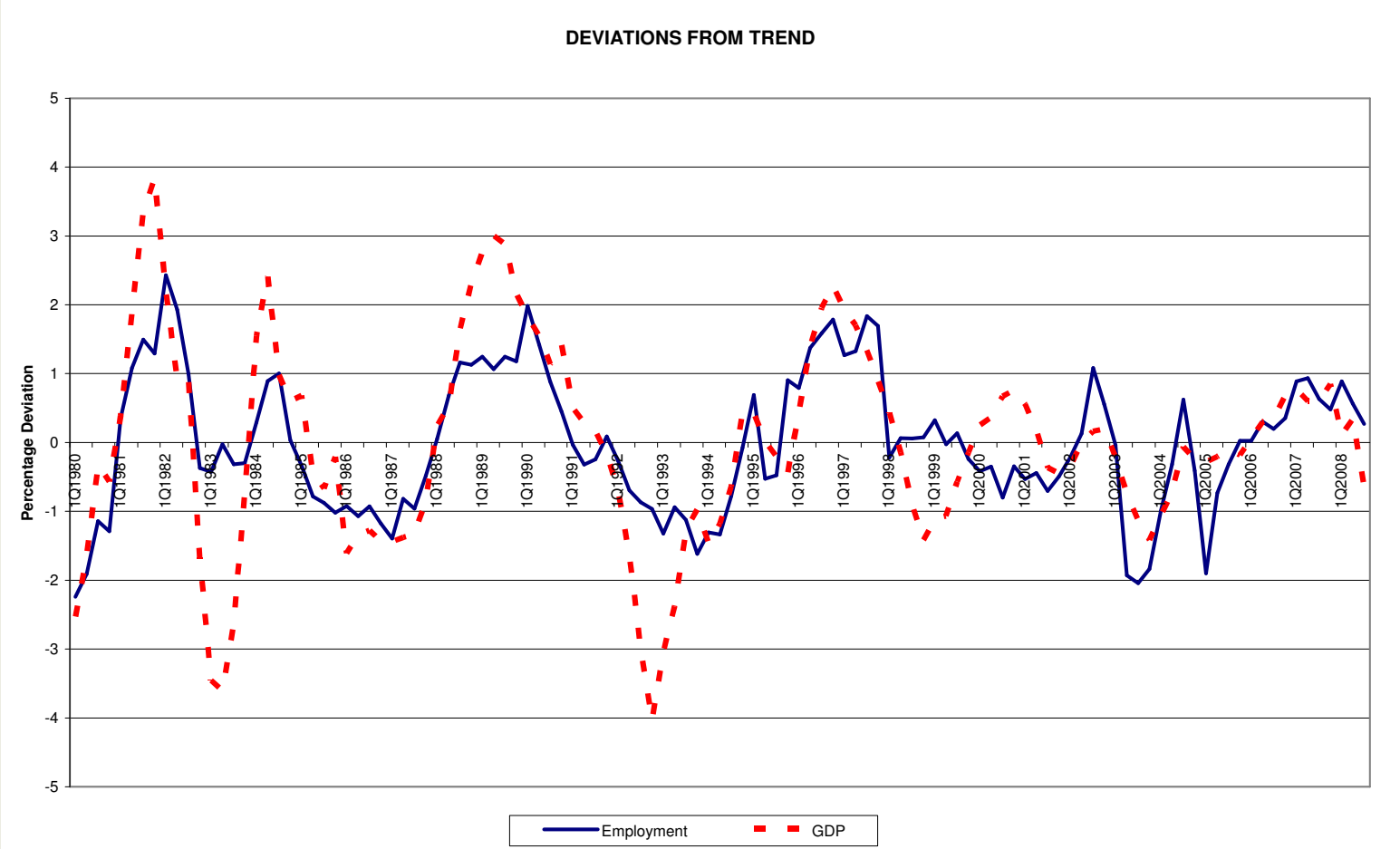


Note that the SARB has still not updated its employment figures to take account of revised trends

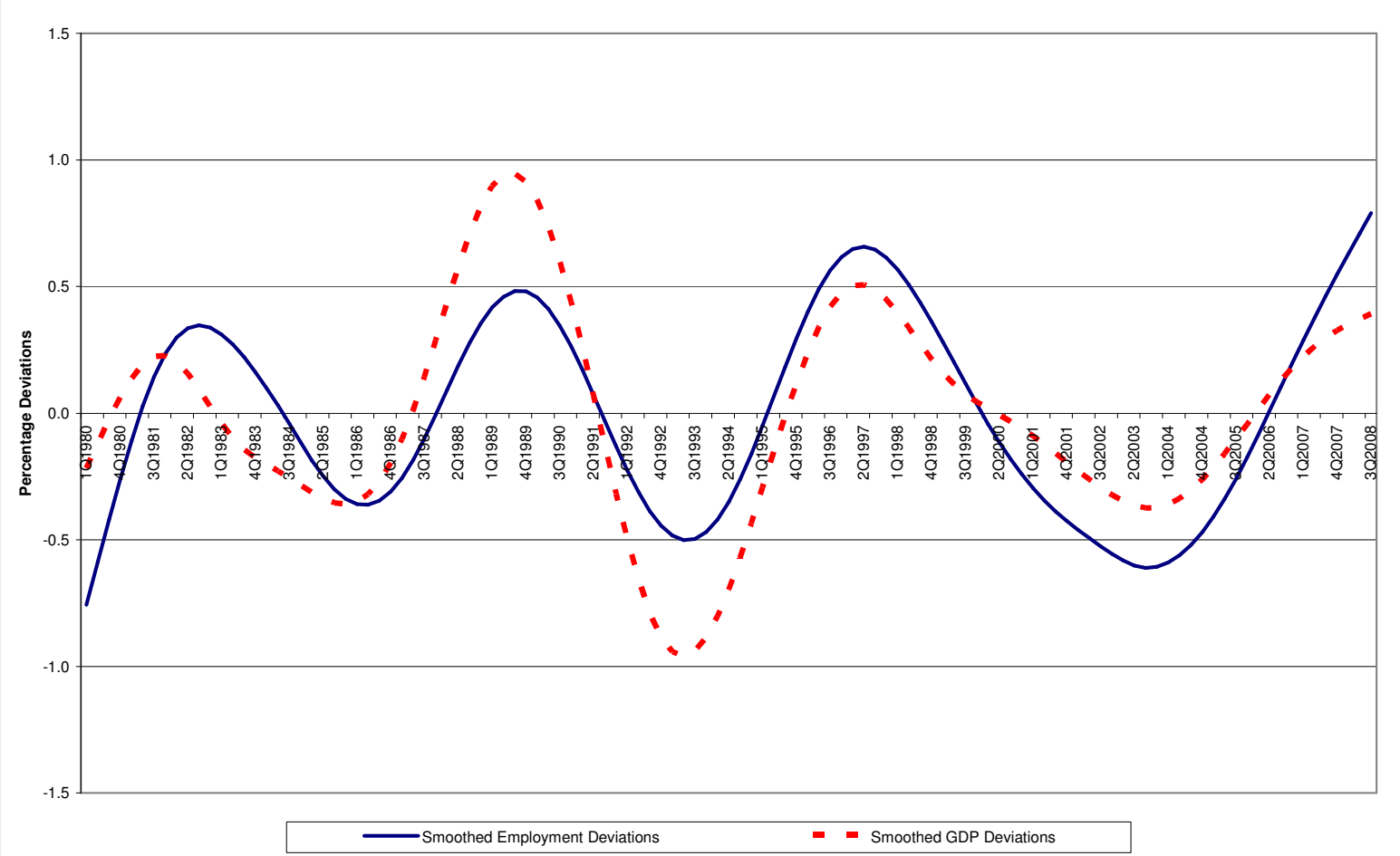
Employment and GDP 1980–2008 – smoothed trends



Employment and GDP 1980–2008 – deviations from smoothed trends



Employment and GDP, 1980–2008 - Smoothed deviations from trend



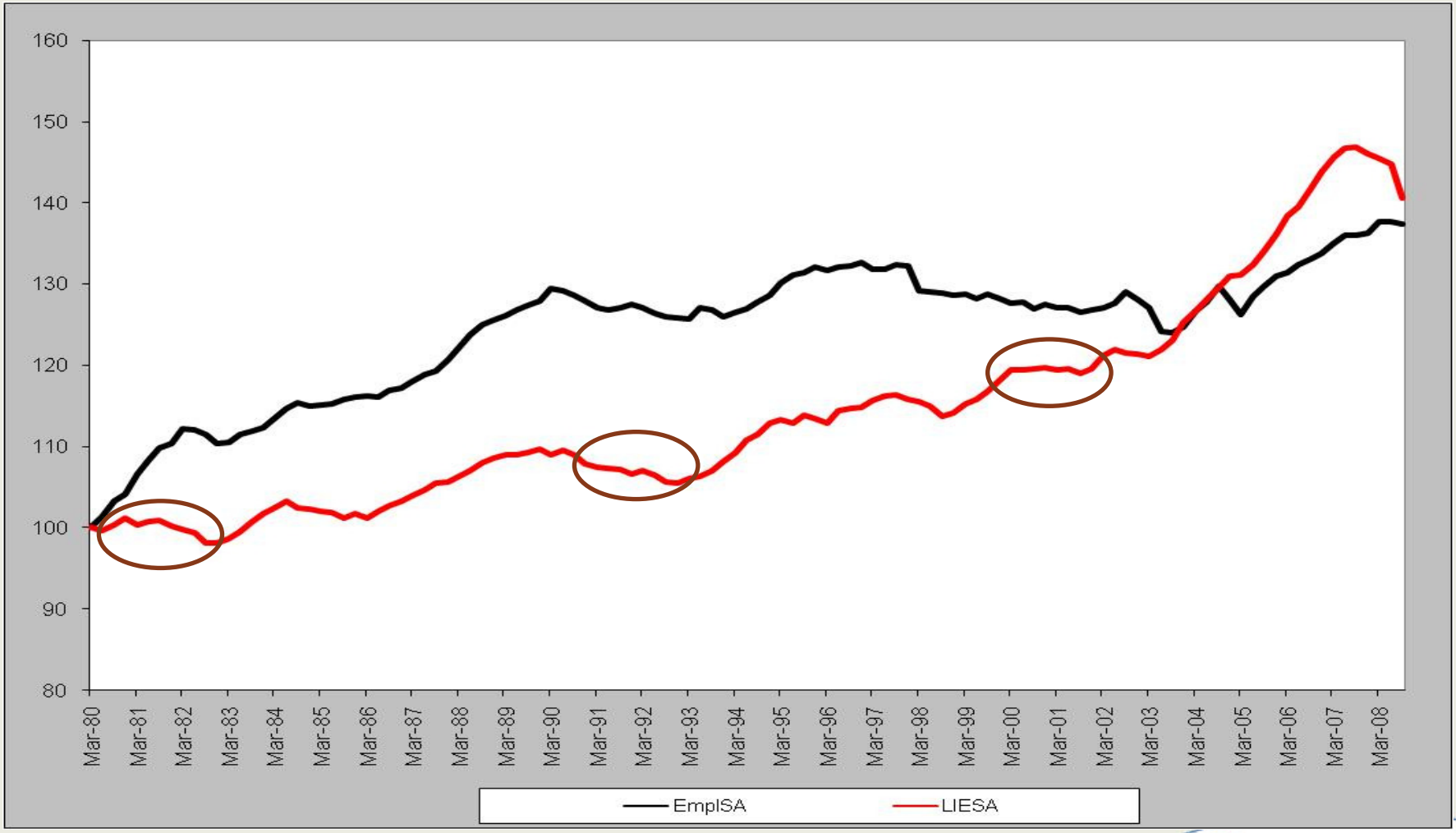
An employment series for the lead indicator

- Creating a Lead Indicator of Employment for South Africa (LIESA).
- Type of employment: private or public, total or sector?
- Sources of employment data
- Frequency of the series
- SARB data series
- Analyzing SARB's work on business cycles
- GDP and employment cycles are coincident
- Candidates for leading indicators of the employment cycle; Continuous Commodity Price Index, Retail sales, Number of factory workers (manufacturing) and Trading-Partner countries

Performance

- The Leading Indicator of Employment in South Africa (LIESA) has correctly given advance warning of an employment downturn on a number of occasions;
  - early 1980s and early 2000s
  - in the second part of the downturn in the early 1990s
- Incorrect warnings were given in the mid-1990s, while the long slump in the late 1990s was missed this is probably because this decline can be associated with none cyclical behaviour (structural changes: trade lib and fiscal and monetary reform)
- The downturn in the preliminary LIE at the end of the period of observation suggests that considerable weakness in employment can be expected in the near term.

A preliminary Leading Indicator of Employment in South Africa



Structural Path analysis

Objectives of SPA

- Method that is easy to use and relatively quick to apply to policy questions
- Goes beyond the “Big Impacts” (multipliers) in a way that allows us to identify the various channels along which expenditure will travel throughout the economy by revealing the specific production sectors, factors and households which carry the economic influence of an injection in one sector to another.
- Conventional multiplier decomposition and CGE models

An application

- Lead sectors are chosen on the basis of large multipliers
- The ability of the targeted sector to stimulate the rest of the economy also depends on the number of linkages that it has with other sectors (measure of dispersion)
- We also need a method that shows us the exact sectors that are being stimulated when an intervention occurs.
- From the multipliers, sectors that benefit the most from a given intervention can be identified. But there are instances where it is necessary to not only know the final beneficiaries of the intervention. It might also be important to identify the sectors that play an intermediate role in mediating the transfer of benefits from the target sector to the sectors that ultimately benefit.
- The significance of the latter can be seen in the context of the current global crisis where it might be important to not only target a sector with the largest multiplier and index of dispersion. We might want to choose industries that will also stimulate sectors that are more vulnerable to the crisis, especially those that do not have large multipliers themselves and as such might not make good candidates for intervention in a stimulus package.

Contd.

- Using SPA we can measure the percentage of the initial intervention that is transmitted by each path thus giving us a better sense of the important channels that carry the economic influence.
- Once the paths have been ranked, the top industries that are stimulated by an injection into the targeted sector can be identified.
- This gives us a much better and more accurate sense of dispersion since a sector that appears the highest number of times in the top paths an important transmitter of economic influence from the targeted to the destination sectors.
- Given the scarcity of resources in the current crisis any stimulus package is likely going to be restricted to sectors that will have the greatest stimulatory impact on the economy.

Choosing between two interventions

- Construction vs. Motor vehicle industry in a stimulus package
- A simple look at their multipliers does not give us a substantive answer as to which sector to choose. Their multipliers are both relatively large and in the absence of a measure of dispersion it would be difficult to say with confidence which sector should be chosen.
- Restricting our analysis to the impact of an intervention in construction and the motor vehicle industry on five productive sectors (This can be done on all sectors)
- By considering the top ten paths in the two cases the economic influence of the intervention in construction to the five sectors is transmitted through a total of 18 sectors versus 10 in the case of the motor vehicle industry.
- This means that construction recruits more sectors to deliver its impact on the economy relative to the MVI. Furthermore the sectors which transmit its influence include production industries, all three household groups and labour whilst that of the motor vehicle industry is confined to productive industries.

Conclusions

- Take the LIESA forward
- Structural Path Analysis