Business Sentiment in South Africa

Confidence and Uncertainty

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Business Sentiment

Business Sentiment

Confidence:

- Agents' perceptions of the current and expected future business climate.
- Degree of sentiment towards risk-taking by business for whatever reason.

Uncertainty:

- Agents' inability to forecast the probability of future events occurring.
- Lack of knowledge of the set of possible outcomes and the probability of each occurring.

Global financial crisis & Great Recession

- associated with low confidence and heightened uncertainty

Confidence

Measurement:

- Qualitative surveys
- Current vs. forward-looking (or combination)

Relationship:

- Animal spirits view vs. information/news view
- Useful as coincident/leading indicators
- Useful for now-casting and forecasting

Uncertainty

Measurement:

- Volatility in the stock market, bond yields or exchange rates
- Dispersion of professional forecasts
- References to "uncertainty" in the media
- Dispersion of responses from qualitative surveys

Relationship:

- Wait-and-see effect
- Other channels
- Usually anti-cyclical relationship

Data

BER Business Tendency Surveys

Qualitative surveys

- Questionnaires completed by senior executives
- *Up*, *The Same*, or *Down*
- 1,000 firms in manufacturing & services sectors
- 1,400 firms in construction & trade sectors (retail, wholesale & motor vehicles)
- Panel sample: partly fixed & partly rotating

Advantages:

- Ask the relevant agents
- Available long before official stats
- Limited revision (little seasonality)

BER Surveys Data
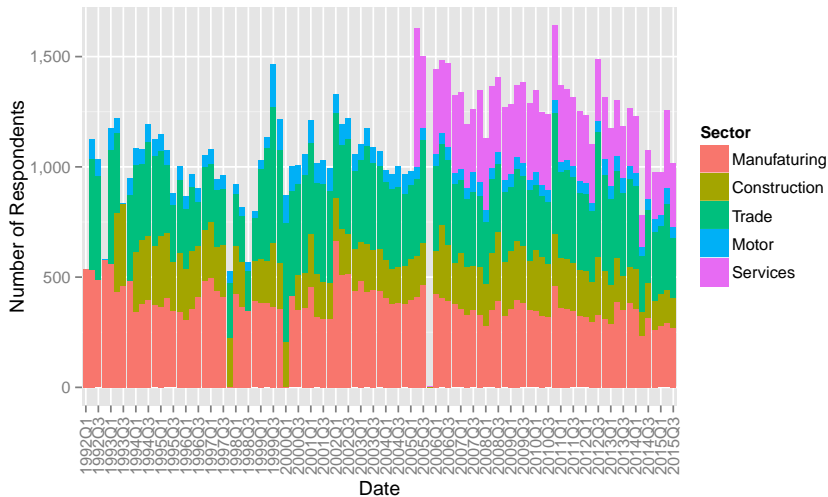
Indicators

RMB/BER Business Confidence Index

Component of SARB's official composite leading indicator

Constructed from a question present in all surveys:

- (Q1): *"Are prevailing business conditions: Satisfactory, Unsatisfactory?"*
- Weighted percentage of respondents that responded *"Satisfactory"*
- Index of Current conditions or "Activity"

Weightings:

- Weighted by firm size and subsector weight
- Simple average of sectoral indicators
  - Sectoral indicators weighted by GDP share

Confidence Indicators

Confidence Current1 — RMB/BER Business Confidence
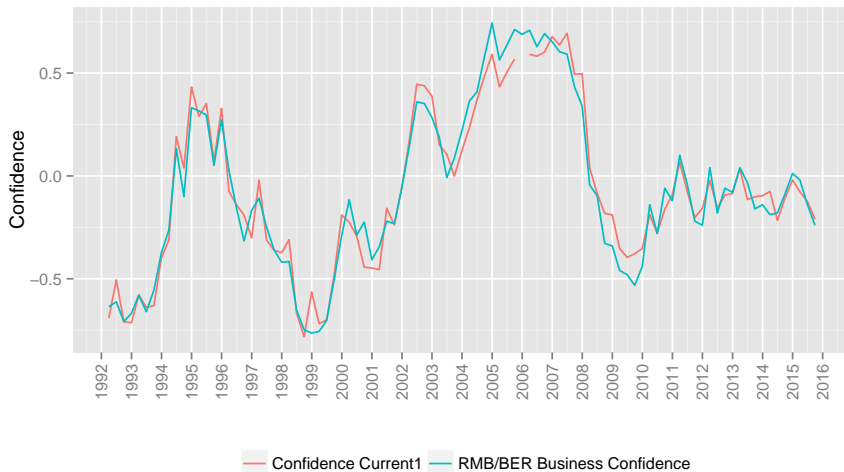
Confidence Indicators

Derived from questions present in all surveys:

- (Q2A): *"[Development in current quarter] Compared with the same quarter of a year ago, are General Business Conditions: Better, the Same, or Poorer?"*
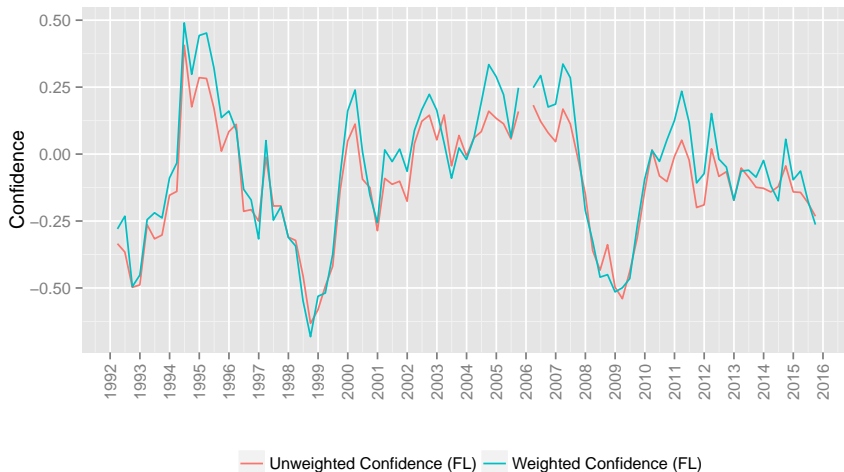- (Q2P): *"[Development in next quarter] Compared with the same quarter of a year ago, will General Business Conditions be: Better, the Same, or Poorer?"*

Cross sectional average of survey responses:

$$CC.Confidence_t = Frac_t(Up) - Frac_t(Down)$$

$$FL.Confidence_t = Frac_{t+1}(Up) - Frac_{t+1}(Down)$$

Confidence Indicators

Confidence Indicators
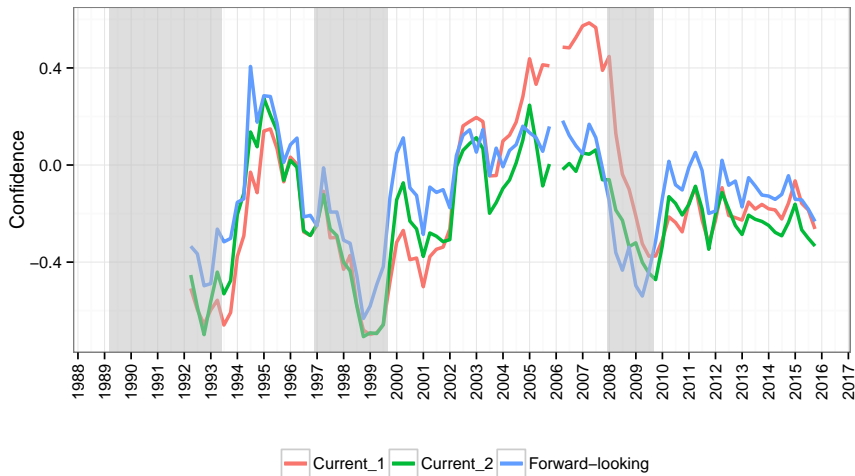
Uncertainty Indicators

Two measures capture a low level of predictability:

1. Cross-sectional dispersion of forward-looking responses

(Q2P): *"[Development in next quarter] Compared with the same quarter of a year ago, will General Business Conditions be: Better, the Same, or Poorer?"*

$$U_t = \sqrt{(Frac_t(Up) + Frac_t(Down) - [Frac_t(Up) - Frac_t(Down)]^2)}$$

Uncertainty Indicators

Unweighted Uncertainty (FL) — Weighted Uncertainty (FL)
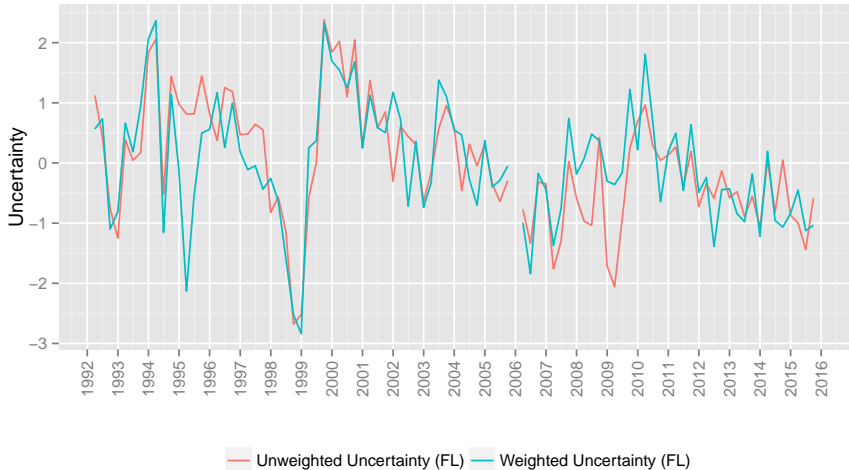
Uncertainty Indicators

Potential problems:

Dispersion in survey responses might simply be due to:

1. Different firms reacting differently to aggregate shocks (even with constant uncertainty).

   - heatwave (ice cream vs. heaters)

2. Time variation in the heterogeneity of expectations (even with constant uncertainty).

   - periods when things are going well with Jaco but not with me

Uncertainty Indicators

② Cross-sectional dispersion in individual firm's expectation errors

Survey at time t used to extract expectations for $t+1$ (relative to $t-3$).

Survey at time $t+1$ used to extract realisations (relative to $t-3$).

		Better	Same	Poorer
			$Q2A_{t+1}$	
$Q2P_t$	E(Better)	0	-1	-2
	E(Same)	1	0	-1
	E(Poorer)	2	1	0

Cross-sectional standard deviation of expectation errors:

$$U_t = STD(Error_{t+1})$$

Uncertainty Indicators

Unweighted Uncertainty (EE) — Weighted Uncertainty (EE)
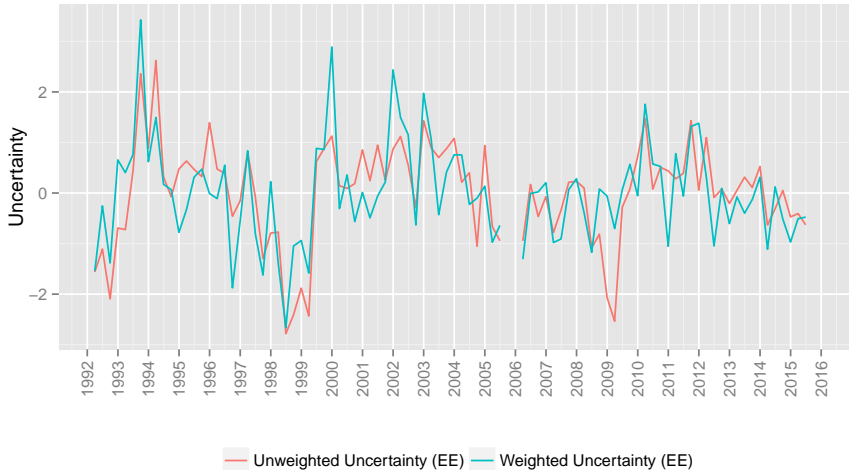
Uncertainty Indicators

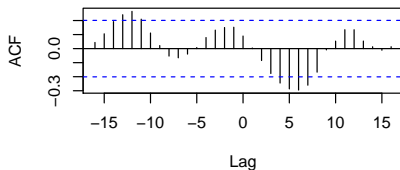# Cyclical Analysis and Comovement

Comovement
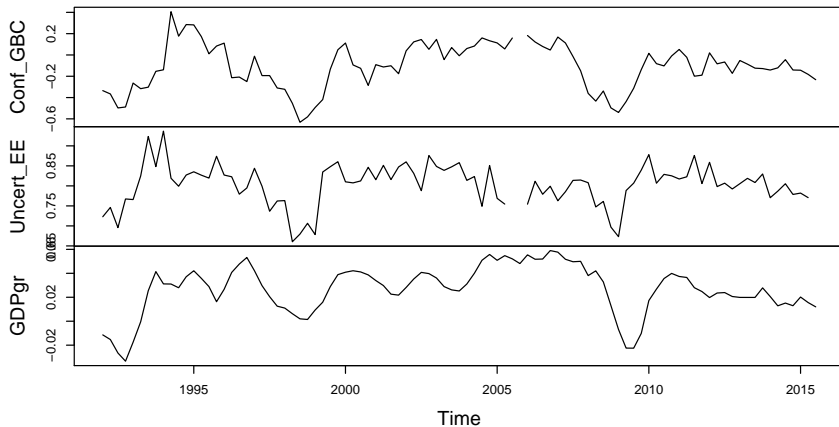
Comovement
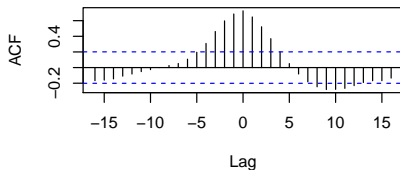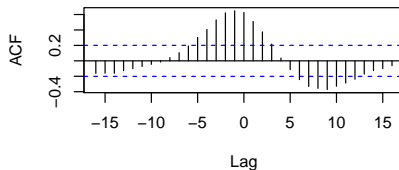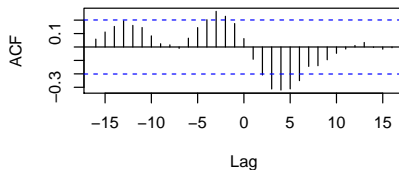
VAR Analysis

Bivariate VARs:

$$y_t = \beta_{10} - \beta_{12}z_t + \gamma_{11}y_{t-1} + \gamma_{12}z_{t-1} + \epsilon_{yt}$$

$$z_t = \beta_{20} - \beta_{21}y_t + \gamma_{21}y_{t-1} + \gamma_{22}z_{t-1} + \epsilon_{zt}$$

Granger causality tests

Table 1: Granger causality tests

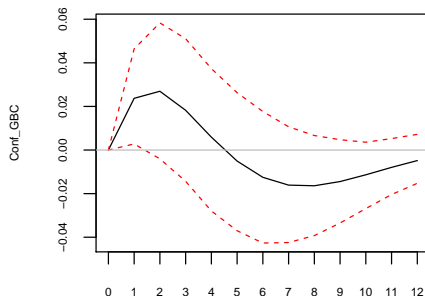| Granger causality H0:	statistic	p-value
Conf_CC do not Granger-cause RGDPGrowth	3.939**	0.02
RGDPGrowth do not Granger-cause Conf_CC	3.563**	0.03
Act_GBC do not Granger-cause RGDPGrowth	2.351*	0.10
RGDPGrowth do not Granger-cause Act_GBC	2.95*	0.06
Conf_GBC do not Granger-cause RGDPGrowth	4.316**	0.01
RGDPGrowth do not Granger-cause Conf_GBC	2.645*	0.07
Uncert_fl do not Granger-cause RGDPGrowth	0.605	0.55
RGDPGrowth do not Granger-cause Uncert_fl	1.375	0.26
Uncert_ee do not Granger-cause RGDPGrowth	0.552	0.58
RGDPGrowth do not Granger-cause Uncert_ee	2.908*	0.06
unw.Uncert_ee do not Granger-cause RGDPGrowth	3.004*	0.05
RGDPGrowth do not Granger-cause unw.Uncert_ee	3.341**	0.04

Confidence IRFs

Orthogonal Impulse Response from Conf_GBC
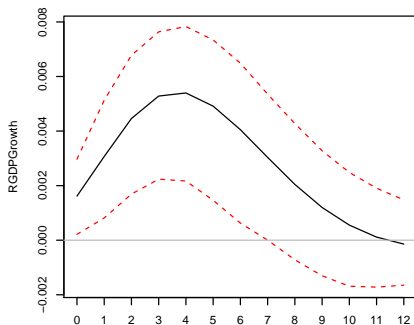
95 % Bootstrap CI, 1000 runs

Orthogonal Impulse Response from RGDPGrowth
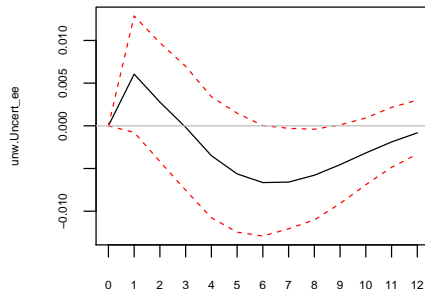
95 % Bootstrap CI, 1000 runs
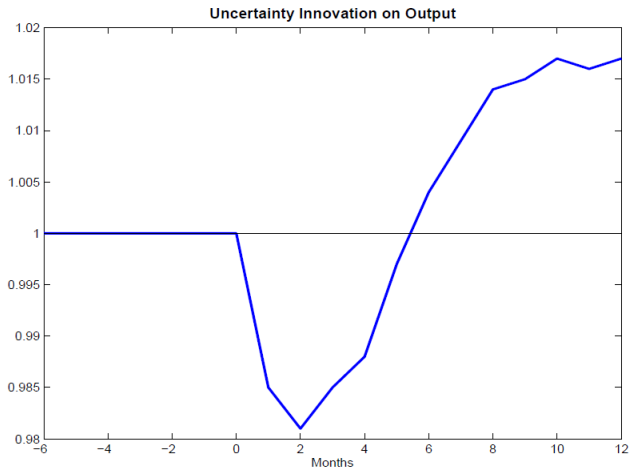
Further analysis

Confidence:

- Are they useful as leading/coincident indicators of the business cycle (more than BER BCI)
- Are they useful for now-casting and forecasting (even after fundamentals)
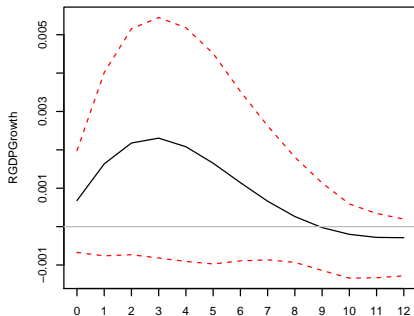- Estimate in levels (LT impact)
- Non-linear and asymmetric effects

Wait-and-See Effect
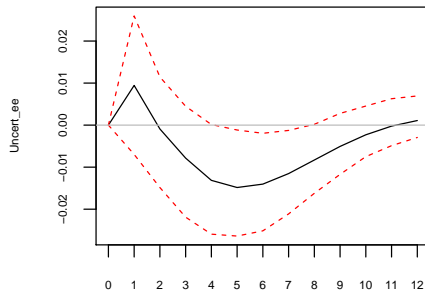
Figure 2: Replication of Wait-and-See in Bloom (2009)

Uncertainty IRFs

Uncertainty (unweighted) IRFs

Further analysis

Puzzle: Why is the timing different?

- Misspecified VAR
    - larger system & estimate in levels
- Noisy Indicators, or non-linear and asymmetric effects
    - dummies, smooth or unforecastable component
    - aggregate data differently
- Errors in survey data
- Low frequency data
- SA different
    - other uncertainty measures

Conclusion

Conclusion

Split?

Sukkel sukkel. . .