Financial statistics of private sector -

Overview of:
Economic activity survey 2005 (Annual)
• Quarterly Financial Statistics

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Structure of the presentation
1. EAS 2005
   Background
   Improvements
   Key findings
   Data confrontation
   Relative standard errors
   Reasons for variances
   Specific variables
   Implications for users
   Limitations
   Time series

2. QFS

EAS HISTORY

<table>
<thead>
<tr>
<th>YEAR</th>
<th>PUBLICATION</th>
<th>IMPROVED/REVISED</th>
<th>PUBLISHED OR</th>
<th>TIMELINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998:1999</td>
<td>Sample size: 60833 (Q4RI)</td>
<td>PILOT TESTING</td>
<td>NA</td>
<td>10 months</td>
</tr>
<tr>
<td>2000</td>
<td>Sample size: 6351 (Q4RI)</td>
<td>PILOT TESTING</td>
<td>NA</td>
<td>10 months</td>
</tr>
<tr>
<td>2001:2002</td>
<td>Sample size: 2001:10879 (EAF)</td>
<td></td>
<td></td>
<td>18 months</td>
</tr>
<tr>
<td></td>
<td>Sample size: 2002:17932 (EAF)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>Sample size: 13371 More detailed SIC</td>
<td>Published draft</td>
<td>21/10/2004</td>
<td>18 months</td>
</tr>
<tr>
<td>2004</td>
<td>Sample size: 12282 More detailed SIC</td>
<td>Published final</td>
<td>21/12/2005</td>
<td>12 months</td>
</tr>
<tr>
<td>2005</td>
<td>Sample size: 10372 More detailed SIC</td>
<td>EAS in S/S + 9 additional variables; GSS 12; R2; Additional tables</td>
<td>21/10/2006</td>
<td>18 months</td>
</tr>
</tbody>
</table>

Optimal period for sample size [117 000] and 45% response rate for S1 & Annual National Area

Preface supplied of quality statistics
Background

Additional industries covered in EAS 2005

- Forestry and fishing (SIC 12, 13)
- Activities auxiliary to financial intermediation (SIC 81)

Improvements

Improvements to 2005 publication

- Six new variables were added:
  a. containers and packaging material;
  b. losses from redemption, liquidation or revaluation of liabilities;
  c. property tax;
  d. regional service council levies;
  e. profit from redemption, liquidation or revaluation of liabilities; and
  f. Profit from the sale or realisation for cash or revaluation of assets

- Fixed asset schedule per industry.

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Background

EAS 2005 INCLUDES

- forestry and fishing;
- mining and quarrying;
- manufacturing;
- electricity, gas and water;
- construction;
- trade;
- transport, storage and communication;
- real estate and other business services; and
- community, social and personal services

EAS 2005 EXCLUDES

- agricultural, hunting and related services;
- government;
- financial intermediation; and
- insurance and pension funding

The above industries are covered elsewhere in Stats SA

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Improvements

Improvements to 2005 publication

- Seven additional ratios were added:
  a. Dividends paid and turnover;
  b. Turnover and closing value of inventories;
  c. Net profit before tax and fixed assets;
  d. Net profit after tax and fixed assets;
  e. Tax and net profit before tax;
  f. Capital expenditure on new assets and fixed assets;
  g. Total capital expenditure on new assets and fixed assets

- Graphs illustrating selected variables
Planned Improvements to EAS 2006 publication

- Balance sheet items (2005 and 2006)
- Comparative figures for forestry and fishing
- Breakdown of inventories
- Response rate documents
- Added variable in questionnaire:
  - Subcontracting/outsourcing

Planned improvements to 2007 questionnaire

- Improve EAS questionnaire according to IFRS requirements by adding the variable amortisation
- Consider sample profile (slide 39)

Improvements to 2005 checklist

- Comparison with USI codes of EAS 2004, 2005 and 2006
- Using ratios to check quality of data
- Supplied reasons for percentage changes above 5% for all variables (was 10%)
- Media clippings and websites
- Annual reports of companies

EAS response for 2006

<table>
<thead>
<tr>
<th>Improved performance for EAS 2006</th>
<th>Challenges for EAS 2006</th>
</tr>
</thead>
</table>
| Overall response rate of 64%     | Insufficient response rate breakdown e.g.  
| Size group 1 response rate is 5% | Size group 2 60% - 90% by sector  
| Size group 3 45% - 90% by sector | Size group 4 > 85% - 90% by sector |

- Collected all enterprises above R1 billion
- 99% turnover contribution is 99% for size group 1
Key findings

- The total turnover of all industries for 2005 was estimated at R2,934,622 million, an increase of 7.8% compared with 2004 (R2,731,974 million)

Data confrontation

The following additional information was used to verify or confront data:

- Annual company reports
- Revised financial statements for 2004
- Data discrepancies queried
- Respondents visited (368 in 2006)
- Internet websites
- Media reports

Data confrontation

The following surveys were used to verify or confront data:

- Confrontation with Quarterly Financial Statistics (QFS) data
- Confrontation with Quarterly Employment Statistics (QES)
- Confrontation with monthly surveys

Major reasons for differences between EAS 2004 and 2005

- Difference in sampling methodology and sample size
- Difference in weights
- Reclassification approved by UISF in 2005 and 2006
- IFRS e.g. Woolworths indicated profit on assets due to fair value adjustment affecting profit with millions of rand
- Telkom Ltd reviewed their remaining useful lives of property, plant and equipment resulting in a possible R3 billion difference in asset value
**Data confrontation**

**Major reasons for differences in QES and EAS 2004 and 2005**

- Sample of EAS differ with that of QES
- Difference in reference period
- EAS is annually and QES not

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**Relative standard errors (RSE's)**

**Difference in RSE’s**

- The higher response rates per size group resulted in smaller variances
- Dead units identified before samples were drawn contributed to a decrease in variances and improvement in RSE’s
- Sample size for 2005 increased from about 12 000 to 17 000
- Reclassification

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**Data confrontation**

**Major reasons for differences between monthly surveys and EAS 2004 and 2005**

- Monthly surveys only collects sales and services from activities relating to the specific surveys, whereas the EAS collects data based on the main activity of the enterprise
- Differences in reference period
- Monthly surveys cover establishments whereas EAS covers the enterprise according to the main activity

<table>
<thead>
<tr>
<th>Activity</th>
<th>EAS 2004</th>
<th>EAS 2005</th>
<th>% change</th>
<th>Monthly 2004</th>
<th>Monthly 2005</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>808 705</td>
<td>804 654</td>
<td>0.5</td>
<td>754 441</td>
<td>697 097</td>
<td>8.5</td>
</tr>
<tr>
<td>Trade</td>
<td>684 752</td>
<td>1 107 501</td>
<td>60.6</td>
<td>780 331</td>
<td>1 110 520</td>
<td>30.8</td>
</tr>
</tbody>
</table>

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**Reasons for variances**

1. Different sampling frames were used
2. Change in structure of enterprises
3. Classification differences occurred between 2004 and 2005
4. Difference in accounting policies and practices adopted (IFRS)
5. Reclassifications done by System of Registers in 2005
6. Change in financial reporting standards
7. Design weights differ from EAS 2004 to EAS 2005 due to different sample sizes and different population sizes between surveys per size group (slide 29)
8. Difference in response rate between EAS 2004 and 2005
Implications for users

1. National accounts annual estimates
2. Serves as basis for:
   1. Structure / profile of businesses in South Africa; and
   2. Quarterly and monthly surveys comparisons
3. It is financial estimates of units in the economy broken down by industry
4. LSD and EAS co-operation
5. Cost saving device

Limitations

Sampling frame issues

1. Sample structure containing a large number of size group 4 units
2. Unit Status Indicator (USI) codes
3. Weighting influence
4. Units with large weights affecting significantly certain industries lead to consultation with Methodology and Standards
5. Recommendation from methodologist was applied

Limitations of the EAS

1. Not covering the whole economy
2. Not activity based but industry based
3. No provincial data available
4. Structure of enterprises can differ from year to year
5. Difference in sampling methodology
6. Accounting reference period of enterprises differ
7. BSS duplication of units and classification differences
8. LSD represents a snapshot of an industry every 3 years whereas EAS is ongoing
9. Sampling frame issues

Time series analysis

1. This EAS publication is the fourth in the series
2. In 2003, the first EAS publication contained only financial ratios for the 2001 and 2002 years
3. The second EAS publication, in 2004, covered the 2001, 2002 and 2003 financial years, provided actual financial values
5. SEE EAS HISTORY FOR MORE DETAIL
Media expectations

- Article Inside Stats SA – after publication
- Pamphlet
- User groups: sent to – Respondents
  - Attendees of AC meeting
  - National accounts
  - Reserve Bank
  - Economists
  - Researchers
  - Government departments (NT, DTL etc)

Quality dimensions

Data on EAS is generally considered to be of good quality due to:

- Data confrontation with other internal survey
  - Quarterly Financial Statistics (QFS)
  - Quarterly Employment Statistics (QES)
  - Monthly surveys
- Supplementary verification
  - IFRS
  - Visit respondents

Data on EAS is generally considered to be of good quality due to:

- No other source to verify actual EAS data – however SF turnover compared with EAS 2005 (> 92%).
- Additional check measures
  b. Use ratios to check quality
  c. Media clippings
  d. Websites
  e. Annual reports of companies

Quarterly Financial Statistics

1. Sample size: 5000
2. Published with a quarter lag
3. Less detailed than the EAS / AFS
4. Provides information for determining trends, not estimates
5. Main internal user – national accounts; various other users
Data confrontation

Major reasons for differences between monthly surveys and QFS March 2007

- Monthly surveys collect sales and services from establishments relating to specific activities, whereas the QFS collects data based on the main activity of the enterprise namely manufacturing and mining.
- Administrative information on mining sales received from Department of Minerals and Energy wherein the QFS collects data from enterprises.

Comparison of results with monthly surveys—R million

<table>
<thead>
<tr>
<th>Industry</th>
<th>QFS December 2006</th>
<th>QFS March 2007</th>
<th>% change</th>
<th>Monthly = December quarter 2006</th>
<th>Monthly = March quarter 2007</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining and quarrying</td>
<td>015 341</td>
<td>015 574</td>
<td>-1.8</td>
<td>54 862</td>
<td>53 626</td>
<td>-2.3</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>367 686</td>
<td>371 235</td>
<td>-1.1</td>
<td>306 535</td>
<td>304 366</td>
<td>-0.7</td>
</tr>
<tr>
<td>Textile (excluding rayon and synthetic)</td>
<td>376 084</td>
<td>371 023</td>
<td>0.1</td>
<td>358 035</td>
<td>356 366</td>
<td>-0.8</td>
</tr>
</tbody>
</table>

Redefined supply of quality statistics 29

Financial Statistics

Questions & Discussion?