Measuring Business and Consumer Confidence in South Africa

George Kershoff

Stellenbosch

December 2000
# Table of Contents

How does the BER measure business confidence? .................................................... 1

- What are business surveys? ................................................................. 1
- Measuring Business confidence .......................................................... 2
- Interpreting business confidence .......................................................... 3
  - What to look for and what it means? ............................................. 3
  - The BER Business confidence index, economic growth and the business cycle  5

How does the BER measure consumer confidence? ............................................. 6

- Measuring Consumer Confidence ......................................................... 6
- Interpreting consumer confidence .......................................................... 7
  - What to look out for and what it means? ........................................ 8
  - The relation between Consumer confidence and other economic variables  9
How does the BER measure business confidence?

The BER derives its confidence indices from the results of business surveys. Before we explain how we measure business confidence, it is necessary to give a brief description of business surveys.

What are business surveys?

The National Association of Purchasing Management introduced qualitative surveys in the USA in the 1930s. In the late 1940s, the Ifo Institute in Munich and INSEE in Paris developed a similar survey technique largely independently from the Americans. The BER employs similar techniques to those of the German-based Ifo Institute. South Africa was one of the first seven countries to start using this method when the BER conducted its first survey in March 1954.

Currently this technique is applied in 57 countries. Some of the best known surveys are those of the European Union and the Tankan in Japan. Research and progress made on the business survey technique are presented every 18 months at an international conference organised by Ciret (Centre for International Research on Economic Tendency Surveys.) Today, the business survey technique has a high standing amongst academics, business people and policy makers in South Africa and abroad.

The survey results are obtained from questionnaires completed by senior executives in the trade, manufacturing and building sector during the last month of every quarter. Questionnaires are sent to 1,400 business people in the building sectors, 1,400 in the trade sectors and 1,000 in manufacturing. The response rate is about 50%. The sample of executives remains the same from one survey to the next. A panel is in effect established. The sample is divided according to main sectoral categories. Each firm gets a weighting in relation to turnover or size of workforce to provide for widely differing sizes. Participants have to complete a “participant details form” every few years to ensure that they are correctly classified and to provide for changes in turnover. The list of participants is also reviewed every few years to ensure an agreeable representation of the universe.

The business survey questionnaire contains a small number of questions. These questions are qualitative in nature, e.g. “Compared to the same quarter a year ago, are the volume of sales up, the same or down?” No figures are requested.
Short-term planning is hampered as numeric (official) data is released with a time lag. Business survey results reveal what happened between the release of the last official figures and the current state of affairs. The results not only reveal beforehand the direction of sales, selling prices, employment etc. (for which official figures are published), but also provide unique information, such as business confidence, rating of business conditions and respondents’ expectations (or forecasts) for the next quarter for which no official figures exist. It is now widely recognised that these subjective individual expectations play a key role in economic developments. Furthermore, the survey results of successive quarters provide a means of tracking cyclical movements, pinpointing trend changes and establishing forecasts.

**Measuring Business Confidence**

The measurement of business confidence is important, as it reliably indicates the current and expected state of the economy. It is widely recognised that business people’s subjective individual expectations play a key role in economic developments.

The BER derives its business confidence index from the results of the quarterly business surveys. The business survey questionnaire contains questions on, amongst others, current and expected developments regarding sales, orders, employment, inventories, selling prices and constraints. All of the above obviously have an impact on business confidence. Poor sales, for instance, dampen confidence, as will a lack of orders received. In fact, research done in Europe has shown that orders received are an important determinant of manufacturers’ confidence. Research has also shown that the various determinants listed above do not always have a similar impact on confidence. This implies that the responses need to be weighted in order to obtain a reliable composite index. Subjectively one feels that these weights will not remain constant over the course of the business cycle. Furthermore, it is difficult to use conventional statistical measures to obtain a weighted index based on subjective inputs.

So, how did the BER overcome this constraint? Its expertise, acquired over more than half a century, combined with solid research enabled the BER to isolate one question on which it bases its composite business confidence index. The question involved is: “Do you find prevailing business conditions satisfactory or unsatisfactory?” The BER takes the percentage gross of respondents that rated prevailing conditions as satisfactory as indicator or proxy of business confidence. The composite business confidence index is the unweighted mean of the five sectoral indices, namely that of manufacturers, building contractors, retailers, wholesalers and new vehicle dealers.
The theory underlying the BER’s approach in measuring business confidence is rather straightforward. Firstly, it is plausible to assume that business people whose business conditions are to their satisfaction will have more confidence than their compatriots experiencing unsatisfactory business conditions. Secondly, people take a host of factors into consideration when they rate prevailing business conditions. In this manner the problem of weighting different determinants correctly is solved.

The BER’s composite business confidence index has proved to be a reliable leading business cycle indicator. The BER’s method essentially says that changes in confidence lead to changes in action.

The BER business confidence index goes back to 1975 and is published quarterly.

**INTERPRETING BUSINESS CONFIDENCE**

The BER measures business confidence on a scale of 0 to 100, where 0 indicates an extreme lack of confidence, 50 neutrality and 100 extreme confidence. For example, if the business confidence index amounts to 45 in a particular quarter, this indicates that 45% gross of the respondents rated prevailing business conditions as satisfactory. Business confidence is therefore relatively low. Not only is the index below 50, but an index number of 45 indicates that 55% gross (i.e. 100 less 45) of respondents rate prevailing business conditions as unsatisfactory.

The business confidence index reveals a rating of business conditions at a particular point in time. Respondents do not have to compare the current situation with that of a year ago.

**WHAT TO LOOK FOR AND WHAT IT MEANS?**

1. Is business confidence “up” or “down”?

   An increase in business confidence reveals that economic growth and private fixed and inventory investment could pick up in 9 to 12 months' time. The opposite applies if confidence declines. (Please see the next section for a more detailed discussion of the relation between the BER’s business confidence index on the one hand and economic growth and the SA Reserve Bank’s leading business cycle indicator.) Business confidence tends to rise when the increase in business activity matches or surpasses previous expectations and the
external environment (e.g. the political situation in South Africa, economic policy, the world economy) remains relatively stable.

2. Is business confidence “low” (i.e. below 50) or “high” (above 50)?

Business confidence could be “low”, because business people are uncertain about prospects and / or unhappy with current company performance. This may reflect uncertainty about the macro-environment within which the company operates and / or that business activity (e.g. sales, production and new contracts awarded) is low. In contrast to the business cycle indicators of the SA Reserve Bank and SACOB, the BER’s business confidence index allows for comparisons of confidence levels over time. The business cycle indicators only indicate if the trend is “up” or “down”. With the BER’s confidence index, the level of business confidence during the second quarter of 2000 can, for example, be compared to that of the third quarter of 1993. In this regard, it is noteworthy that the BER’s confidence index has a long-term downward trend. This downward trend is most visible when comparing the peaks (upper turning points) of the successive cycles since 1975. Each successive peak is lower than the previous one. This long-term downward trend corresponds with the declining average economic growth rates between 1975 and 2000.

3. Is the cyclical upward trend continuing or being reversed? Put differently, has the business confidence index reached a turning point? Business cycles imply that the business confidence index will move in the same direction for a number of quarters and then turn and start moving in the opposite direction. The business confidence index has to move in the opposite direction for a few quarters before one can identify a turning point. A single deviation does not necessarily reveal a turning point. A turning point can therefore generally only be identified with certainty after a year or two.

Identifying turning points assist decisions on fixed and inventory investment and what financial assets to invest in. For example, a trough (lower turning point) generally represents the appropriate time to start increasing inventories and accumulating equities.
The BER Business Confidence Index, Economic Growth and the Business Cycle

The BER business confidence index has proven itself historically both as a useful indicator of economic growth and as a very good leading indicator of the business cycle in South Africa.

The relationship between the BER business confidence index and the year-on-year growth rate of the overall GDP is illustrated in the graph above. This is particularly useful in view of the early availability of the index. The BER index for a particular quarter is available approximately two months before the official GDP estimates.

It should, however, be noted that the BER does not cover the whole of the economy. The sectors surveyed in the compilation of the index are manufacturing, construction and trade. These sectors make up more than 40% of total GDP. It is therefore not surprising that there is an even stronger relationship between the BER’s business confidence index and the year-on-year growth in these sectors (see graph). The correlation, as indicated by the correlation co-efficient for the period 1986Q1 to 1998Q4, is 0.75 for the overall GDP and 0.78 for the combined manufacturing, trade and construction sectors.

The relationship between the index and overall GDP growth thus depends on the deviations caused by the behaviour of the other sectors of the economy. In this regard, growth in the primary sectors is irregular (see graph) but that of transport, finance, community services and general government is relatively stable. Thus as long as growth in the primary sectors
does not deviate substantially from that of the manufacturing, construction and trade sectors, the BER confidence index may be expected to provide a good indication of overall GDP growth.

It also appears that the BER business confidence index is a very good leading indicator of the overall business cycle in South Africa. This is indicated by the graphs (see below) depicting its relationship with the level of the SA Reserve Bank composite co-incident business cycle indicator and its year-on-year percentage change. The correlation co-efficient of the latter relationship for the period 1975Q1 to 1998Q4 is 0.79.

![BER BCI vs SARB Coincident Indicator](image)

**How does the BER measure consumer confidence?**

Consumer surveys originated at the Survey Research Centre at the University of Michigan at Ann Arbor in the USA in 1946. Today these surveys are also carried out by other institutes in the USA (e.g. the Conference Board in New York), Europe and Japan.

Consumer surveys provide regular assessments of consumer attitudes and expectations and are used to evaluate economic trends and prospects. The surveys are designed to explore why changes in consumer expectations occur and how these changes influence consumer spending and saving decisions.

**Measuring Consumer Confidence**

Currently the BER is the only institute in South Africa that regularly conducts consumer surveys. The confidence index for whites goes back to 1975. Blacks were added to the sample in 1982 and the other racial groups in 1994. The index is published quarterly.
The consumer confidence results are derived from personal at-home interviews of an area-stratified probability sample of 2,500 households. AC Nielsen / MRA conducts the surveys on behalf of the BER. The surveys cover blacks and whites in metropolitan areas, cities, towns and villages throughout South Africa. Coloured and Indian coverage include the major metropolitan areas. The total coverage represents 92% of the urban adult population and 53% of the total adult population. A trained, experienced fieldworker uses a structured questionnaire and conducts the interview in the home language of the respondent. A minimum 20% validation check is carried out personally or telephonically on the work of each interviewer. The consumer confidence questions are always the first three questions of the questionnaire and only the head of the household (male or female) is interviewed.

The following questions are asked:

1. How do you expect the general economic position in South Africa to develop during the next 12 months? Will it improve considerably, improve slightly, deteriorate slightly, deteriorate considerably or don’t know?

2. How do you expect the financial position in your household to develop in the next 12 months? Will it improve considerably, improve slightly, deteriorate slightly, deteriorate considerably or don’t know?

3. What is your opinion of the suitability of the present time for the purchase of domestic appliances such as furniture, washing machines, refrigerators etc. Do you think that for people in general it is the right time, neither a good nor a bad time or the wrong time?

The BER's consumer survey is compared to the Michigan consumer confidence index. The BER's composite consumer confidence index consists of three questions whereas the Michigan one is made up of five. The BER does not ask questions on households' current financial position and how the economy is expected to perform over the next five years.

**INTERPRETING CONSUMER CONFIDENCE**

Consumer confidence is expressed as a net balance in contrast to business confidence, which is depicted as a percentage gross. The consumer confidence index therefore reveals the change in consumers’ expectations, whereas the business confidence index indicates what the situation is at a specific point in time. The net balance is derived as the percentage of respondents expecting an improvement less the percentage expecting a deterioration. The answers of the first and second question are weighted as follows: improve considerably (+10), improve slightly (+5), deteriorate slightly (-5) and deteriorate considerably (-10). The re-
responses of the third question are weighted in the following manner: right time to buy (+10)
and wrong time to buy (-10). The composite consumer confidence index is the average of the
results of the above three questions.

Theoretically this index can vary between –100 and 100, but has fluctuated between
–36 (indicating an extreme lack of confidence) and +13 (indicating extreme confidence) since
the BER started measuring consumer confidence comprehensively in 1982. Zero indicates
neutrality. For example, a negative index number such as –5, therefore, indicates that the ma-
jority of consumers expect conditions to deteriorate or put differently, that consumers are rela-
tively pessimistic.

WHAT TO LOOK OUT FOR AND WHAT IT MEANS?

1. Is confidence “low” (i.e. below zero) or “high” (above zero)?

Low confidence indicates that consumers are concerned about the future. They may be
worried about job security, pay rises and bonuses. With such a frame of mind, consumers
tend to cut spending to basic necessities (e.g. food and services) to free up income for
debt repayment. If confidence is high, consumers tend to incur debt (or reduce savings)
and increase spending on discretionary items, such as furniture, household equipment,
motor vehicles, clothing and footwear. Some of these items are often financed on credit.
Spending on these items decline when confidence is low, as households can generally
delay their purchase without experiencing a direct deterioration in living conditions.

2. Is consumer confidence “up” or “down”?

A rise in consumer confidence reflects an increased willingness of consumers to spend.
However, this willingness only translates into actual sales if consumers’ ability to spend im-
proves. Their ability to spend depends on their inflation adjusted after-tax income and the
availability of credit. A rise in consumer confidence could therefore result in an upturn in
household consumption spending in general and retail and motor vehicle sales in par-
ticular. The opposite applies when the level of consumer confidence declines. (Please see
the section on the relation between consumer confidence and other economic variables
below.)

A change in consumer confidence can be attributed to many reasons. One approach is to
analyse changes in the constituent parts of the index, namely how have consumers’ ex-
pectations regarding the economic performance, their own financial position and the rating of the present time to buy durables changed respectively. A second approach is to examine the confidence index per racial group, income group, province etc. A third method is to judge if external developments, such as a drop in share prices, unexpected price surges of important consumer goods (e.g. food and petrol), political developments or big changes in economic policy, may have impacted on consumer confidence.

THE RELATION BETWEEN CONSUMER CONFIDENCE AND OTHER ECONOMIC VARIABLES

The graph below indicates the close relation between consumer confidence and the percentage change in real household consumption expenditure. (The shaded areas in the following graphs indicate cyclical downturns.) A rise in consumer confidence results in a recovery of consumer spending and vice versa.

Consumers’ ability to spend (as measured by the percentage change in the real disposable income of households) is the most important determinant of private consumption expenditure in the long run. Deviations in the short run can often be attributed to consumer confidence. For example, high levels of consumer confidence between 1994 and 1997 largely explain why real private consumption expenditure increased at higher rates than real disposable income of households. (This is indicated with “A” in the graph above.)

The inverse relation between consumer confidence and the personal savings ratio is not surprising, as households tends to reduce their savings when they are more confident about the future. Similarly, there is a positive relation between consumer confidence and the household debt ratio. If consumer confidence increases, the household debt ratio also tends to rise. (Please see the graphs below.)
Households’ expectations about changes in their financial position used to correspond with changes in the real disposable income of households and real wage rate respectively. This relation broke down in 1994. Between 1994 and 1998, household consumption expenditure increased at a higher rate than available income, resulting in an increase in the household debt ratio. (Please see the graphs below.)
Consumers’ rating to buy durables is a good indicator of sales of durables. Similarly, consumers’ expectations about the economic performance correspond closely with the economic growth rate.