Table 1: Possible Expectaion Errors

		$Q1A_{t+1}$		
		Better	Same	Poorer
	Better	0	-1	-2
$Q1P_t$	Same	1	0	-1
	Poorer	2	1	0

Table 2: My caption

		$Q1A_{t+1}$		
		Better	Same	Poorer
	E(Better)	0	-1	-2
$Q1P_t$	E(Same)	1	0	-1
	E(Poorer)	2	1	0

Sector				
Survey Question	Manufacturing	Construction	Trade	Services
Business Conditions	X	X	X	X
Activity	X	X	X	X
Employment	X	X	X	X
Profitability		X	X	X
Orders Placed	X		X	

Formally, one can define a k-period-ahead expectations measure of activity (C_t^k) at time t as: $C_t^k = E_t f(\Delta^h Y_{t+k})$, where Y_{t+k} is a measure of real activity (usually output) at time $t+k$ and $\Delta^h Y_{t+k} = Y_{t+k} - Y_{t+k-h}$. A common definition of $f(\Delta^h Y_{t+k})$ relies on an up, unchanged, or down classification (e.g. Q2A in the BER survey asks about better, the same, or poorer conditions):

$$f_t(\Delta^h Y_{t+k}) = \begin{cases} -1, & \text{if } \Delta^h Y_{t+k} < 0 \\ 0, & \text{if } \Delta^h Y_{t+k} = 0 \\ 1, & \text{if } \Delta^h Y_{t+k} > 0 \end{cases}$$

An alternative would be to use a binary classification (e.g. Q1 in the BER survey asks about satisfactory or unsatisfactory conditions):

$$f(\Delta^h Y_{t+k}) = \begin{cases} 1, & \text{if } \Delta^h Y_{t+k} \geq a \\ -1, & \text{if } \Delta^h Y_{t+k} < a \end{cases}$$

where a is determined by the preferences of the agent.

Table 3: My caption

		Q1At+1		
		Better	Same	Poorer
	E(Better)	0	-1	-2
Q1Pt	E(Same)	1	0	-1
	E(Poorer)	2	1	0

Table 4: Survey Questions used by Sector

Survey Question	Manufacturing	Construction	Trade	Services
Business Conditions	X	X	X	X
Activity	X	X	X	X
Employment	X	X	X	X
Profitability		X	X	X
Orders Placed	X		X	

Table 5: Survey Questions used by Sector

Survey Question	**Manufacturing**	**Construction**	**Trade**	**Services**
Business Conditions	X	X	X	X
Activity	X	X	X	X
Employment	X	X	X	X
Profitability		X	X	X
Orders Placed	X		X	

In this chapter, a distinction is made between indicators of current conditions C_t^k when $k = 0$, and indicators of expected conditions C_t^k when $k > 0$. The confidence measure for current conditions C_t^0 is referred to as 'activity', as it is reflects confidence about the current quarter (in the second month of the quarter). The confidence measure for expected conditions C_t^1 is referred to as 'confidence', as it is reflects confidence about the following quarter.

As discussed above, confidence indicators are almost always based on balance statistics. This presents a single summary figure of responses to each question [@Santero1996], which is the cross-sectional mean of survey responses if the standard quantification system is used: 'better' is quantified by +1, 'the same' by 0 and 'poorer by -1. Confidence relating to current conditions, or activity C_t^0, and confidence relating to expected conditions, or confidence C_t^1 may be defined as:

$$C_t^{CC} = \frac{1}{W_t} \sum_{i=1}^{N} w_{it} f_t(\Delta^4 Y_{i,t})$$

$$C_t^{EC} = \frac{1}{W_t} \sum_{i=1}^{N} w_{it} f_t(\Delta^4 Y_{i,t+1}),$$

where $Y_{i,t+k}$ is again a measure of real activity at time $t + k$ for firm $i = 1, ..., N$; $\Delta^h Y_{i,t+k} = Y_{i,t+k} - Y_{i,t+k-h}$ for firm i; w_i is the weighting that each firm receives; and $W = \sum_{i=1}^{N} w_i$ is the sum of all the weights.

In line with the @OECD recommendations, the weightings $w_i = f_i s_j / F_j$ is the product of a firm size weight f_i for firm i, i.e. the inner weight reflecting turnover or number of employees, and a subsector weight s_j for subsector j, i.e. the outer weight reflecting the percentage share of total income or value added, divided by the total firm/inner weight for subsector j, $F_j = \sum_{i=1}^{N} f_i$. For each question, the responses are weighted by firm and subsector size, and balances are calculated.[1]

These weightings are equivalent to an explicit 2-step weighting procedure, whereby weighted means (using firm size weights) are calculated for each subsector separately, and then aggregated with the

[1] The weights for the construction and services subsectors were unavailable and therefore receive an equal weighting.

Table 6: Concordance Statistics

	SARB Cycle				RGDP Growth cycle			
	Activity	Confidence	BER_BCI	SACCI_BCI	Activity	Confidence	BER_BCI	SACCI_BCI
lag=0	0.684**	0.653*	0.579	0.653*	0.768***	0.653**	0.663**	0.632**
lag=1	0.695**	0.705**	0.611*	0.684**	0.8***	0.684**	0.674**	0.558
lag=2	0.705***	0.716**	0.642*	0.716***	0.684***	0.674**	0.642**	0.505
lag=3	0.695**	0.705***	0.611*	0.695***	0.526	0.621*	0.568	0.463

subsector weightings. The BER uses similar weighting, except that the weighting equals the product of firm and subsector weights $w_i = f_i s_j$, but does not divide by the total firm/inner weight for the subsector F_j.

$$\mu_{it} = \frac{1}{W_t}\sum_{i=1}^{N} w_{it} f_t(\Delta^4 Y_{i,t})$$

$$D_t = \frac{\frac{1}{W_t}\sum_{i=1}^{N}(w_{it} f_t(\Delta^4 Y_{i,t+1}) - \mu_{t+1})^2}{\frac{1}{W_{t+1}}\sum_{i=1}^{N}(w_{it+1} f_{t+1}(\Delta^4 Y_{i,t+1}) - \mu_{t+1})^2}$$

$$D_t^{EC} = \frac{1}{W_t}\sum_{i=1}^{N}(w_{it} f_t(\Delta^4 Y_{i,t+1}) - \mu_{t+1})^2,$$

$$D_{t+1}^{CC} = \frac{1}{W_{t+1}}\sum_{i=1}^{N}(w_{it+1} f_{t+1}(\Delta^4 Y_{i,t+1}) - \mu_{t+1})^2$$

$$D_t = \frac{D_t^{EC}}{D_{t+1}^{CC}}$$

$$\epsilon_{it} = f_t(\Delta^4 Y_{i,t+1}) - f_{t+1}(\Delta^4 Y_{i,t+1}),$$

$$\bar{\epsilon}_{it} = \frac{1}{W_t}\sum_{i=1}^{N} w_{it}\epsilon_{it}$$

$$I_t = \frac{1}{W_t}\sum_{i=1}^{N}(w_{it}\epsilon_{it} - \bar{\epsilon}_t)^2$$

$$A_t = \bar{\epsilon}_{it}^2$$