



CZI
CONFEDERATION OF
ZIMBABWE INDUSTRIES

The Confederation of Zimbabwe Industries Business Confidence Index

Since 2015, CZI has assessed business condition in the manufacturing sector on quarterly basis. The quarterly survey aims to ascertain, at a given moment, the views of those in charge of manufacturing enterprises regarding their situation and expectation. It collects opinions from manufacturing establishment managers regarding the performance of their business activities between the reference quarter and the previous quarter, both quarter-on-quarter and year-on-year (quarterly basis) changes, as well as the same for their expectations in the next quarter. From this quarterly CZI survey that complement the CZI manufacturing survey as a monitoring tool, a system of qualitative short-term indicators and composite indexes as a business barometer, such as the business confidence index (BCI) and purchasing managers' index (PMI), are constructed.

The main objectives of the 2017 third quarter business condition survey were to:

- Assess views of those in charge of manufacturing enterprises regarding their situation and expectation in reference to the 2017 third quarter;
- Compute 2017 third quarter composite indexes (BCI and PMI) as barometers for manufacturing performance;
- Assess the views and construct the composite indexes in terms of enterprise location, size, sector and political changes attributes; and
- Generate and construct a regular and dependable data base on business condition that can be useful in time series and panel analysis.

Qualitative information obtained from business condition surveys is crucial for developing countries in monitoring the current business situation and forecasting short-term development. Such information does not only help in forecasting turning points of business cycles and providing short term qualitative indicators but they also provide useful support to quantitative surveys such as the manufacturing survey. The information also speaks to policy makers and business so that they can assess the impact of existing policies and check the relevance of any impending policy positions.

The 2017 third quarter survey was unique since it was carried out in an environment with a changing government set-up. The New Political Dispensation coincided with data collection. While very few businesses responded before the new dispensation, a majority of the enterprises responded after the new dispensation. It is against this background that in addition to the previously applied stratification variables (region of enterprise, enterprise size and main manufacturing activity), the sample for this quarter was also stratified using the political dispensation variable. Stratifying the responses using the change of government variable was unavoidable in order to account for heterogeneity in government environment created by the New Dispensation.

Businesses were asked to provide their opinions with regards to the performance of their business activities, manufacturing sector and the economy compared to the previous quarter (quarter on quarter situation) and previous year (year of year situation). In addition, they were asked to provide their opinions regarding the expected future performance of their business activities, manufacturing sector and the economy compared the current quarter (quarter on quarter and year on year expectation).

The Business Confidence Index (BCI)

The methodological approach of BCI used for this survey is based on the Japanese Tankan Sentiment index (Economic short-term company’s survey of Bank of Japan). BCI measures the amount of optimism or pessimism that business managers feel about the prospects of their companies or organizations. BCI is constructed by summing the following unweighted five indicators given equal weight.

- Economic situation of the establishment;
- About the manufacturing sector of the establishment;
- Economic situation of the country;
- Investment; and
- Profitability.

For these five indicators, respondents have three reply multiple choice options; 1 for better or increased, 0 for the same and -1 for worse or decreased. Diffusion index (DI) or the net balance is then computed by subtracting the unfavourable percentage of establishments from the favourable percentage, that is, the percentage of positives (favourable) less percentage of negatives (unfavourable).

BCI is therefore computed as the geometric average of the balances of the business Situation Diffusion Index (*SDI*) and the Expectations Diffusion Index (*EDI*) in the reference quarter *t* using a conveniently standardized geometric average as follows:

$$BCI_t = \sqrt{(SDI_t + 200) \times (EDI_t + 200)} - 200 \dots\dots\dots (1)$$

Where the Situation Diffusion Index (*SDI_t*) is the difference between the percentages of favourable and unfavourable responses in the reference quarter *t* regarding the previous quarter (*t* - 1) and the same quarter of the previous year and Expectation Diffusion Index (

EDI_t) is the difference between the percentages of favourable and unfavourable responses in the reference quarter t regarding the following quarter ($t + 1$) and the same quarter of the following year. If the SDI is positive, there are more favourable opinions regarding how the business performed and if the EDI is positive, the optimists exceed the pessimists with regard to how the business will perform in the future.

The BCI fluctuates between -100 and 100. A positive value of BCI indicates business optimism and a negative value indicates pessimism and a value of zero neutrality.

The Purchasing Managers' Index (PMI)

The PMI is based on the methodological approach developed by the Markit Group. It is a composite weighted average index formed by the following five indicators (weights in brackets):

- Production level (0.25);
- Employment (0.2);
- Orders book (0.3);
- Stocks of raw materials and supplies (0.1); and
- Delivery speed of suppliers (0.15).

Diffusion indexes are computed separately for each PMI indicator in the same way as in BCI (by subtracting the unfavourable percentage of establishments from the favourable percentage). Unlike the BCI, the PMI is constructed from the situation diffusion index (SDI) only.

SDI for each indicator is given as:

$$SDI_{jt} = (p_{1j_{t-1}} \times 1) + (p_{2j_{t-1}} \times 0.5) + (p_{3j_{t-1}} \times 0) \dots \dots \dots (2)$$

For j = production, employment, orders book, stocks of raw materials and supplies and delivery speed of suppliers. p_1 , p_2 and p_3 are percentage number of answers that reported an improvement, no change and a deterioration, respectively. The composite PMI is therefore computed as:

$$PMI_t = (SDI_{1t} \times 0.25) + (SDI_{2t} \times 0.2) + (SDI_{3t} \times 0.3) + (SDI_{4t} \times 0.1) + (SDI_{5t} \times 0.15)$$

A PMI of 50 means that the variable is unchanged, a number over 50 indicates an improvement, while below 50 suggests a decline and if it is less than 42, anticipates a downturn in the national economy.

This report provides a snapshot of the results. A detailed report explaining methodology and generated files accompanies this snapshot.

Summary of Results

The composite Business Confidence Index for the third quarter of 2017 stood at -29.6 for quarter-on-quarter and -9.9 for year-on-year. This indicates lack of confidence and pessimism of business leaders regarding the economic situation.

The Situation Diffusion Index (SDI) was -37.5 for quarter-on-quarter comparison and -45.5 for year-on-year comparison, indicating that respondents feel that the current situation is worse

off compared to the previous quarter and also compared to same quarter of 2016.

The Expectation Diffusion Index (EDI) was -21.4 for quarter-on-quarter and 34.4 year-on-year. The EDI results indicate that business managers are still pessimistic of the fourth quarter of 2017.

However an impressive result is the positive year- on –year Expectation Diffusion Index of 34.4 which indicates optimism for the business managers in the third quarter of 2018.

The results are also analysed as per each variable showing results of each component which contributes to the overall figures as depicted in the diagrams below. The graphs on the components of the BCI show a broader analysis, in percentage terms, with regards to each indicator and what percentage felt that the situation/expectation of each variable would be better/same/decreased.

The results also present an exciting index the Purchasing Managers Index (PMI). From the results, all Quarter-on-Quarter (Q-Q) variables were below 50. This indicates that the situation is worse than it was in the previous quarter. The overall Q-Q PMI is 46.9, an indication of a deteriorating economy.

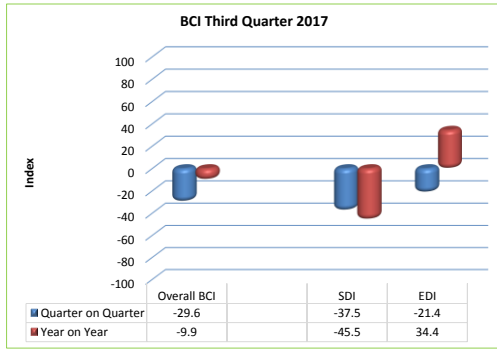
The results are also analysed by sector, size and region for each variable contributing to the overall PMI result as indicated later on in the document. Companies were asked whether conditions of the five PMI variables were the same, better or worse compared to the previous quarters. The results are shown as weighted and adjusted indices. For interpretation purposes, the magic number for the indices is 50; a PMI over 50 means that manufacturing is growing and expanding and a figure under 50 means that manufacturing is declining. The further away from 50.0 the index is, the stronger the change over the quarter.

NB: For the analysis by sector, 15=Food & Beverages; 17-18=Clothing & Textiles and Others=Remaining Sub-sectors

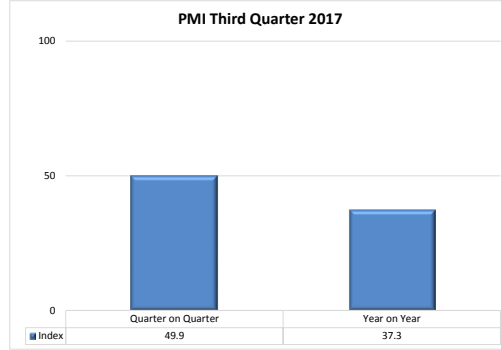
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A PMI of 50 means that the variable is unchanged, a number over 50 indicates an improvement, while below 50 suggests a decline and if it is less than 42, anticipates a downturn in the national economy.

Overall BCI

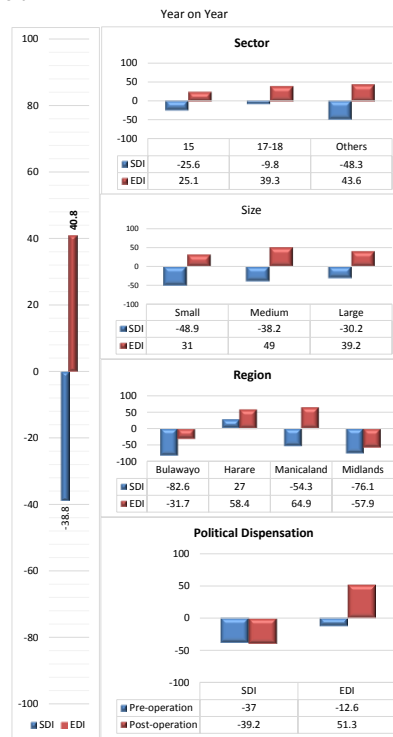
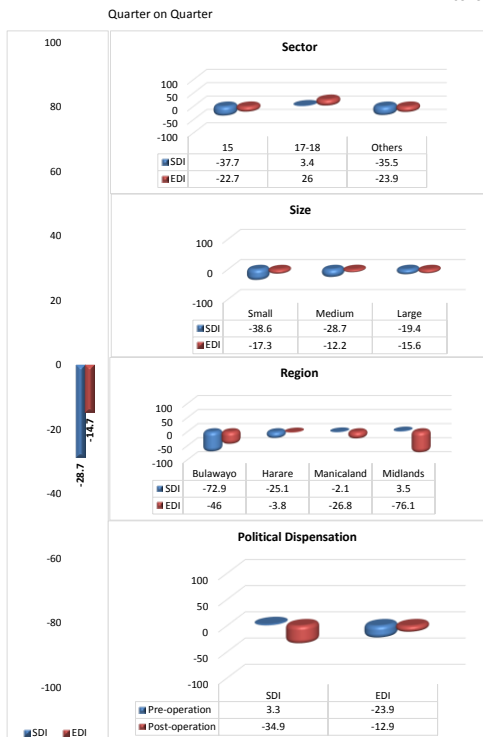


Overall PMI

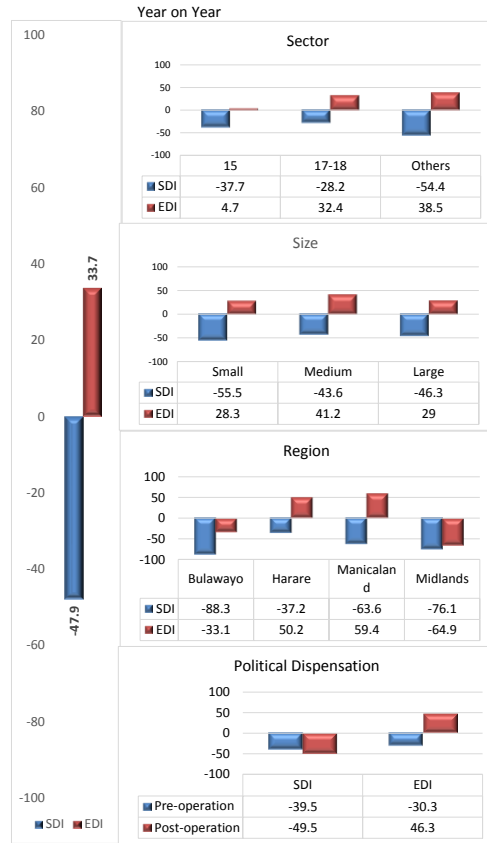
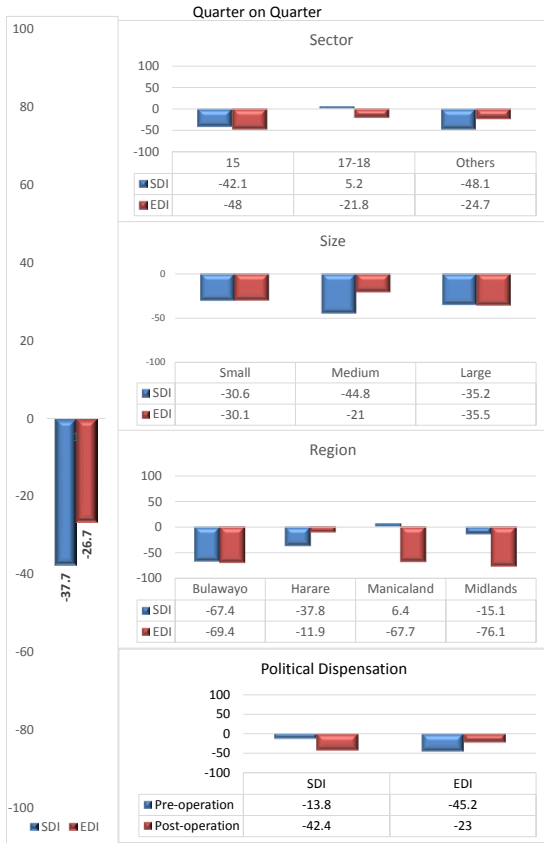


BCI COMPONENTS

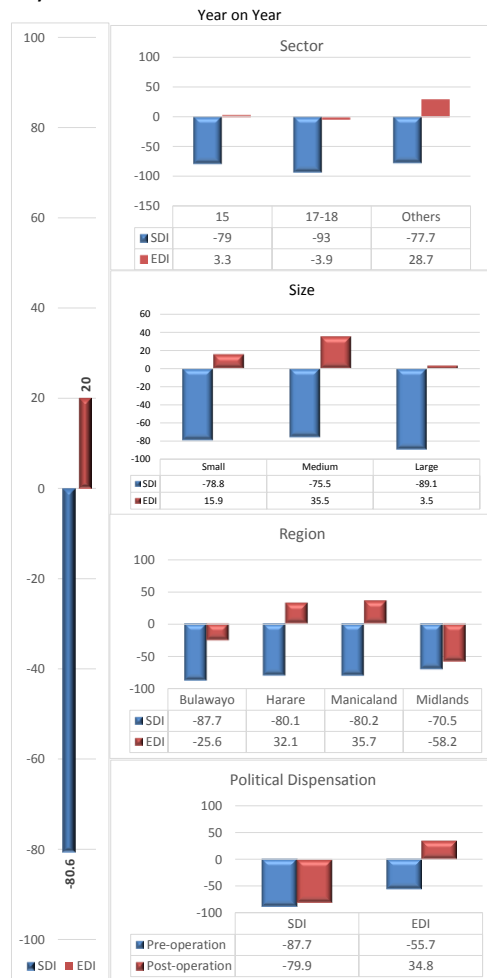
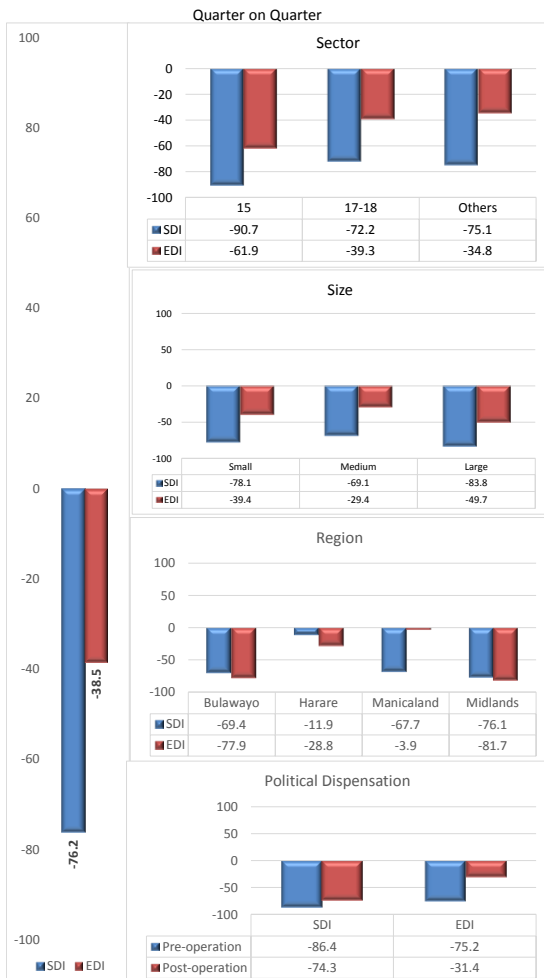
Economic situation of the Establishment



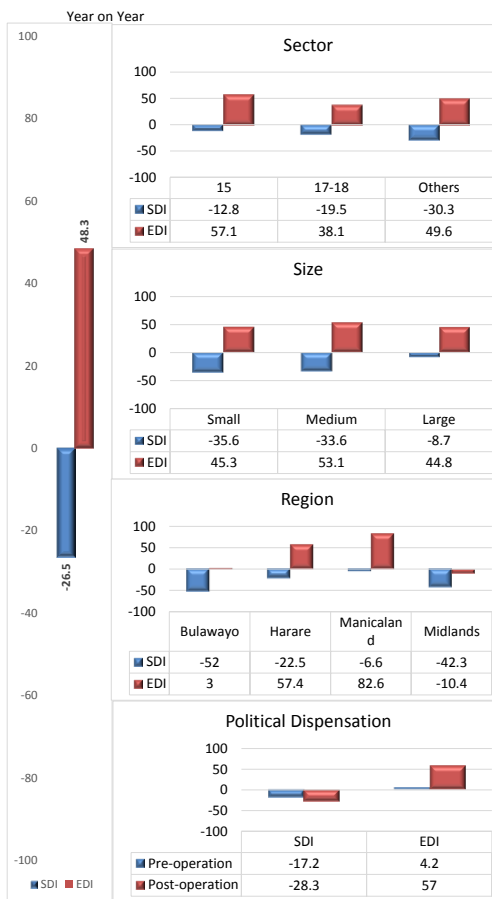
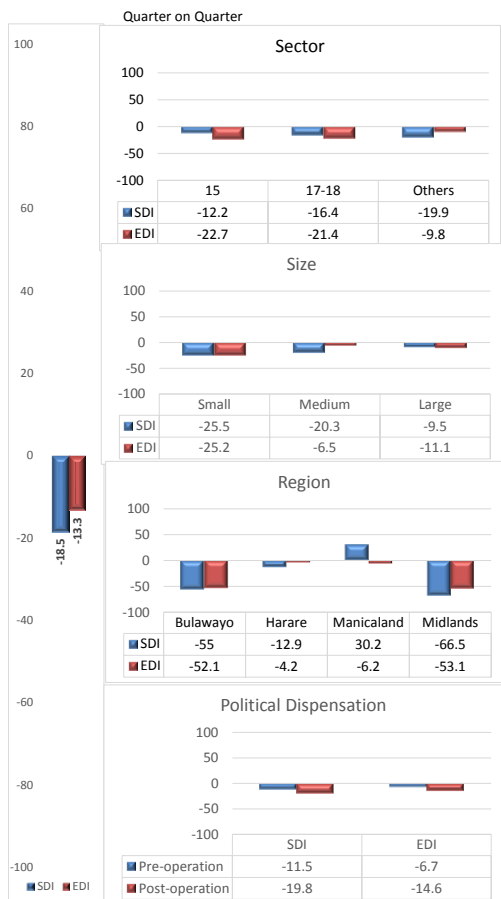
About the Manufacturing Sector of the Establishment



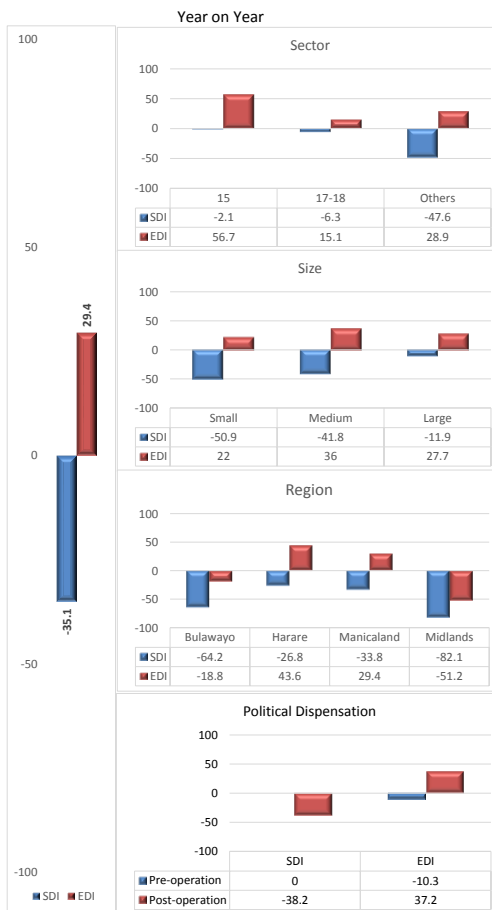
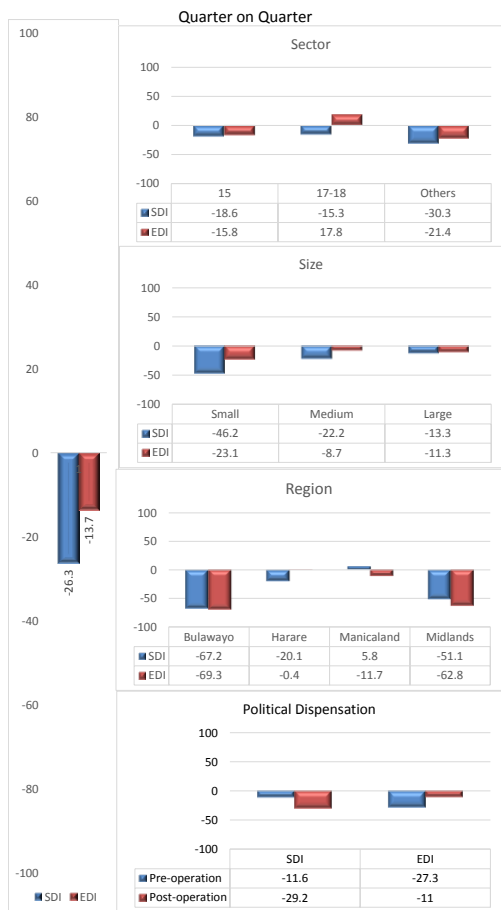
Economic Situation of the Country



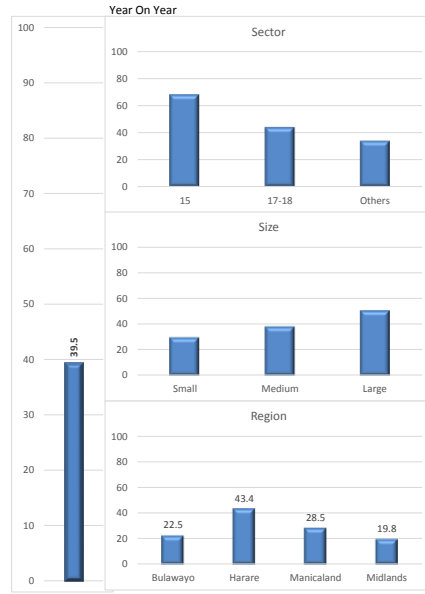
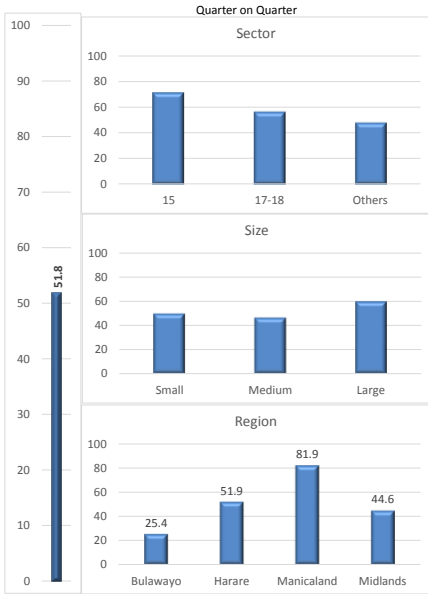
Investment



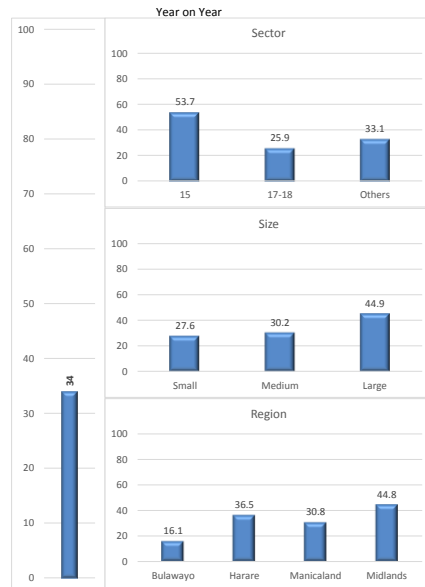
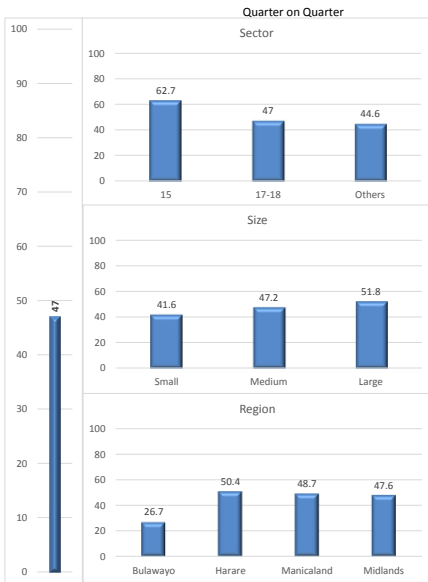
Profitability



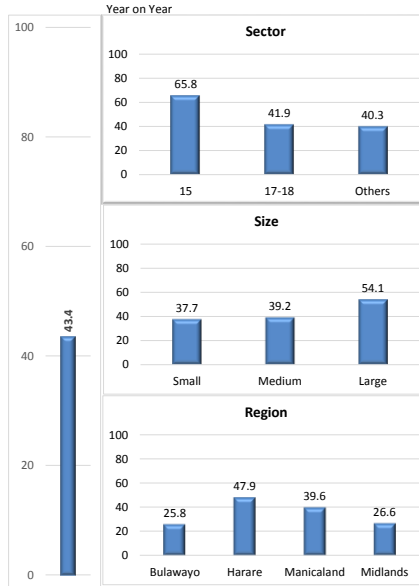
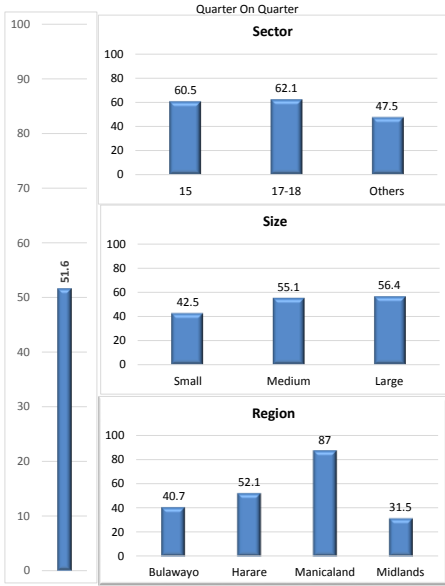
**PMI COMPONENTS
Production Volume**



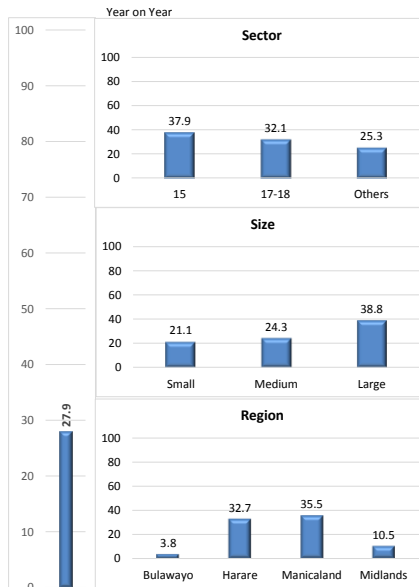
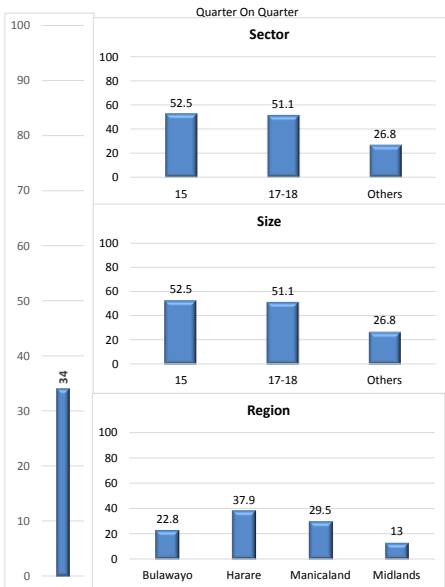
Employment



Order Books



Inventory



Supplier Deliveries

