## Technical Notes for Business Sentiment Index (BSI)

## **Definition**

The Business Sentiment Index (BSI) is designed to measure the level of sentiment/confidence of businesses in Brunei Darussalam. The index serves as an indicator to assess the current business climate of the private sector as a whole as well as within sectors. Thus, the index can be a leading macroeconomic indicator of economic growth.

#### **Data Sources**

The BSI is compiled using surveys which are distributed to a sample of businesses. Survey interviewers will be assigned to interview businesses on a monthly basis.

# Methodology

The selected businesses are grouped into eleven sectors (Table 1). A sample of 663 businesses was drawn using a mixture of random and non-random sampling, to achieve a 5-10% sampling error. In case of non-usable responses, no replacements are drawn to retain the sample size. Non-random sampling was used for Oil & Gas, Wholesale & Retail, Finance & Insurance, Transport & Communication, Hotels & Restaurants, and Health & Education where the larger businesses were selected to represent these sectors. For the remaining sectors, random sampling was carried out. The oil and gas related sectors include Manufacture of LNG and other petrochemical products and Water Transport, as these activities are highly correlated with the performance of the core Oil & Gas sector.

Table 1

Sectors	Subsectors
Oil & Gas	Oil and gas mining
	Manufacture of liquefied natural gas and other
	petroleum and chemical products
	Water Transport
Manufacturing	Manufacture of wearing apparel & textiles
	Manufacture of food and beverage products
	Other manufacturing
	Electricity and water
Construction	Construction
Wholesale & Retail	Wholesale & Retail
	Land transport
Transport &	Air transport
Communication	Other transport services
	Communication
	Vegetables, fruits & other agriculture
Agriculture, Forestry,	Livestock and poultry
Fisheries & Livestock	Forestry
	Fishery
Finance & Insurance	Finance & Insurance
Real estate &	
ownership of	Real estate & ownership of dwellings
dwellings	
Hotels & Restaurants	Hotels
	Restaurants
Health & Education	Health services
services	Education services
Other private services	Business services
	Domestic services
	Other private services

There are four parts to the questionnaire: [1] Business conditions, [2] Investment expenditure, [3] Employment of workers and [4] Cost of doing business. The questions cover businesses' own assessments on current conditions as well as their future outlooks on the aforementioned categories. Responses to the questions are of qualitative nature only [for example: better, worse, same or no change]. Businesses are encouraged to provide any supporting reasons for their answers to each question so that a more comprehensive analysis can be conducted. All responses will be kept confidential.

The survey data is processed to compute diffusion indices for each sector as well as the overall private sector. The process involves: (a) assigning numerical values to answers for questions (+1 for positive responses, 0 for "no change" responses and -1 for negative responses); (b) scaling each business's answers by its size as proxied by their number of employees as of the end of the year; and (c) taking a simple weighted sum of scaled responses.

The annual number of employees will be asked during the first month of the rollout of the survey and repeated annually to assess if there are sufficient structural changes to warrant a reweighting of the responses. The threshold to reweight is when a business's share of the sector increases/decreases by over 50%, e.g. 10.0% share increased to 15.1%. Historical published data will not be adjusted to reflect a reweighting.

The overall diffusion index across all sectors is generated by scaling each sector's diffusion index with the sector's average gross value added (GVA) in constant prices. The GVA for 2016-2018 will be used for the initial BSI and will be assessed annually for reweighting based on a rolling 3-year period. The threshold to reweight is when a sector's share of the economy increases/decreases by over 50%, e.g. 10.0% share increased to 15.1%.

From the survey data, several diffusion indices are generated. The headline Business Sentiment Index [BSI] is based on businesses' perceptions of current business conditions, scaled by businesses' sizes and sectoral sizes. Other diffusion indices generated are [1] businesses' expectations of future business conditions; [2] businesses' current investment expenditure; [3] businesses' expectations of future investment expenditure; [4] businesses' current employment changes; [5] businesses' expectations of future employment changes; [6] businesses' perceptions of current costs of doing business; and [7] businesses expectations of future costs of doing business.

# Survey questions

See Appendix 1

## **Periodicity**

The index is compiled and published on a monthly basis.

#### **Publication**

Figure and analysis for the headline BSI will be published on BDCB's website and social media platform (@centralbank.brunei). Other diffusion indices may be accessible via a subscription to BSI reports.

## **APPENDIX 1**

# **BDCB Survey of Business Sentiment in Brunei Darussalam**

### Keadaan Perniagaan/Business Conditions

1. Secara amnya, adakah keadaan perniagaan awda bagi bulan ini lebih baik, telah merosot ataupun hampir sama berbanding dengan bulan lepas?

Is the general performance of your business this month better, worse or about the same compared to last month?

- a. Lebih baik/Better
- b. Merosot/Worse
- c. Hampir sama/About the same

Sila nyatakan sebab, jika ada/Please specify reasons, if any:

- 2. Pada bulan hadapan, adakah awda menjangka keadaan perniagaan awda akan lebih baik, merosot ataupun hampir sama? Next month, do you think the general performance of your business will be better, worse or about the same?
  - a. Lebih baik/Better
  - b. Merosot/Worse
  - c. Hampir sama/About the same

Sila nyatakan sebab, jika ada/Please specify reasons, if any:

#### Pelaburan/Investment

- 3. Adakah tahap pelaburan bagi bulan ini telah meningkat, menurun ataupun hampir sama berbanding dengan bulan lepas? Is the level of your investment more, less or about the same for this month compared to last month?
  - a. Meningkat/More
  - b. Menurun/Less
  - c. Hampir sama/About the same

Sila nyatakan sebab, jika ada/Please specify reasons, if any:

- 4. Pada bulan hadapan, adakah awda menjangka tahap pelaburan awda akan meningkat, menurun ataupun hampir sama? Next month, do you expect the level of your investment to be more, less or about the same?
  - a. Meningkat/More
  - b. Menurun/Less
  - c. Hampir sama/About the same

Sila nyatakan sebab, jika ada/Please specify reasons, if any:

- 5. Tiga bulan dari sekarang, adakah awda menjangka tahap pelaburan awda akan meningkat, menurun ataupun hampir sama? Three months from now, do you expect the level of your investment to be more, less or about the same?
  - a. Meningkat/More
  - b. Menurun/Less
  - c. Hampir sama/About the same

Sila nyatakan sebab, jika ada/Please specify reasons, if any:

6. Adakah awda akan menambah, mengurangkan atau mengekalkan jumlah pekerja pada bulan ini berbanding dengan bulan lepas?

Are you hiring more, reducing or maintaining the number of employees this month compared to last month?

- a. Menambah jumlah pekerja/Hiring more employees
- b. Mengurangkan pekerja/Reducing number of employees
- c. Mengekalkan jumlah pekerja/Maintaining the number of employees

Sila nyatakan sebab, jika ada/Please specify reasons, if any:

7. Pada bulan hadapan, adakah awda akan menambah, mengurangkan atau mengekalkan jumlah pekerja pada bulan ini berbanding dengan bulan lepas?

Next month, do you expect to hire more, reduce or maintain the same number of employees?

- a. Menambah jumlah pekerja/Hiring more employees
- b. Mengurangkan pekerja/Reducing number of employees
- c. Mengekalkan jumlah pekerja/Maintaining the number of employees

Sila nyatakan sebab, termasuk jangkaan tambahan/pengurangan jumlah pekerja, jika ada/ Please specify reasons, including the expected additional/reduction in headcount number, if any:

## Kos Perniagaan/Costs of Business

- 8. Adakah kos perniagaan awda bagi bulan ini meningkat, menurun ataupun hampir sama berbanding dengan bulan lepas? Are the costs of running your business higher, lower or about the same this month compared to last month?
  - a. Meningkat/Higher
  - b. Menurun/Lower
  - c. Hampir sama/About the same

Sila nyatakan sebab, jika ada/Please specify reasons, if any:

9. Pada bulan hadapan, adakah awda menjangka kos perniagaan awda akan meningkat, menurun ataupun hampir sama berbanding dengan bulan ini?

Next month, do you expect the costs of running your business to be higher, lower or about the same?

- a. Meningkat/Higher
- b. Menurun/Lower
- c. Hampir sama/About the same

Sila nyatakan sebab, jika ada/Please specify reasons, if any:

## Soalan Tambahan/Additional Questions (every October)

### Saiz Perniagaan/Business Size

10. Berapakah keramaian pekerja dalam perniagaan awda pada hujung bulan lepas? How many employees did your business have at the end of last month?

#### Glosari/Glossary

### Pelaburan/Investments

Perbelanjaan / pembelian yang bertujuan untuk meningkatkan pengeluaran atau kecekapan pada masa akan datang. Contoh:

- Perbelanjaan yang memerlukan modal yang banyak (tertakluk kepada saiz perniagaan) bagi pembelian peralatan atau mesin jentera seperti peti sejuk, mesin juru wang, lori, traktor dan mesin-mesin kilang
- Pembesaran ruang untuk menjalani pernjagaan sama ada melalui pembelian atau penyewaan

Expenditure/purchase aimed to increase production or efficiency in the future.

#### Examples:

- Substantial purchase of equipment or machinery (depending on business size), e.g. refrigerator, cashier machine, lorry, tractor, manufacturing machinery
- Expansion of space either by purchase or rental

### Pekerja/Employees

Individu yang dibayar gaji untuk menjalankan tugas untuk perniagaan, termasuk pekerja sambilan dan sepenuh masa.

Individuals who are paid salaries to conduct duties for the business, which includes both part time and full time workers.

#### Keadaan Perniagaan/Business Conditions

Keadaan umum perniagaan, yang berkaitan dengan keuntungan.

General state of the business, relating to profitability and prosperity.

## Kos perniagaan/Costs of running business

Kos yang ditanggung untuk menjalankan operasi perniagaan.

#### Contoh:

- Sewa
- Gaji
- Iklan
- Bahan-bahan
- Elektrik
- Air
- Penyelenggaraan

Costs incurred to carry out operations of business.

## Examples:

- Rent
- Salary
- Advertising
- Materials
- Electricity
- Water
- Maintenance