

## NOTA TEKNIKAL

### Latar Belakang

Survei Kecenderungan Perniagaan dilaksanakan oleh Jabatan Perangkaan Malaysia setiap suku tahunan bermula pada tahun 2004. Survei ini mengumpul pandangan pihak pengurusan kanan terhadap prestasi perniagaan daripada pertubuhan yang mewakili pelbagai sektor ekonomi di Malaysia. Ciri utama survei ini adalah untuk mengumpul maklumat tentang arah perubahan bagi variabel ekonomi penting. Jawapan yang diberi adalah berdasarkan tiga jenis skala seperti meningkat / tiada perubahan / merosot; atau baik / memuaskan / kurang baik. Bagaimanapun ia tidak mencerminkan magnitud perubahan. Perlu diberi perhatian bahawa pandangan dalam survei ini adalah dipengaruhi oleh peristiwa yang berlaku pada waktu penghitungan.

### Objektif Survei

Survei Kecenderungan Perniagaan mengumpul maklumat kualitatif daripada pengurus perniagaan tentang penilaian mereka terhadap prestasi perniagaan bagi tiga bulan yang lalu dan jangkaan bagi tiga dan enam bulan akan datang. Maklumat ini berguna bagi memantau keadaan ekonomi semasa.

Survei ini juga memberikan keputusan petunjuk kualitatif yang cepat, situasi semasa dan jangkaan bagi variabel ekonomi yang penting, ketika maklumat kuantitatif masih belum diperoleh. Pelaksanaan yang cepat dan pemprosesan hasil yang mudah dapat memberikan amaran awal terhadap titik perubahan dalam aktiviti ekonomi secara keseluruhan.

### Skop dan Liputan

Survei ini meliputi empat sektor utama di Malaysia iaitu perindustrian, pembinaan, perdagangan borong & runcit dan perkhidmatan. Sektor industri meliputi pertanian, perlombongan, pembuatan dan elektrik & air manakala sektor perkhidmatan pula terdiri daripada penginapan, pengangkutan dan penyimpanan, komunikasi, kewangan, insurans, harta tanah dan teknologi maklumat & komunikasi. Bermula suku tahun pertama 2020, liputan bagi sektor perkhidmatan diperluaskan termasuk makanan & minuman, pendidikan, pentadbiran & khidmat sokongan, profesional dan perkhidmatan lain. Sampel dipilih berdasarkan senarai syarikat yang diperoleh daripada Banci Ekonomi yang dijalankan pada tahun 2016 untuk tahun rujukan 2015.

Komunikasi merujuk kepada aktiviti telekomunikasi dan aktiviti perkhidmatan yang berkaitan, seperti transmisi suara, data, teks, bunyi dan video. Kemudahan transmisi ini mungkin berasaskan satu teknologi atau kombinasi bagi teknologi tersebut.

Teknologi maklumat & komunikasi merujuk kepada aktiviti penyediaan kepakaran di dalam bidang teknologi maklumat seperti penulisan, pengubahsuaian, percubaan dan perisian sokongan bagi memenuhi kehendak pelanggan tertentu; merancang dan mereka bentuk sistem komputer dengan mengintegrasikan teknologi perkakasan, perisian komputer dan komunikasi, pengurusan di lapangan dan operasi sistem komputer pelanggan dan / atau kemudahan memproses; menyediakan infrastruktur untuk *hosting* atau perkhidmatan prosesan data, dan aktiviti perkhidmatan profesional dan teknikal yang berkaitan dengan komputer.

## Soal Selidik Survei

Soal selidik yang mudah dibentuk untuk dijawab oleh responden. Responden diminta untuk menjawab sama ada meningkat, tiada perubahan atau merosot mengikut variabel ekonomi penting. Oleh kerana jawapan yang diperlukan adalah arah atau saiz relatif variabel akan dilaporkan, maka soal selidik dapat dilengkapkan dengan cepat. Soalan yang dikemukakan meliputi kedua-dua hasil daripada bulan-bulan terkini dan jangkaan bagi tempoh tiga dan enam bulan akan datang. Bilangan soalan dalam Survei Kecenderungan Perniagaan suku tahunan adalah kurang berbanding dengan survei lain.

Soalan-soalan ini terhad kepada variabel ekonomi penting untuk menjimatkan masa yang diambil bagi melengkapkan soal selidik seterusnya mempercepatkan pungutan dan pemprosesan data survei.

### Variabel dan tempoh liputan

Soalan	Variabel	Tiga Bulan Sebelum	Keadaan Semasa	Tiga Bulan Seterusnya
1.	Keadaan perniagaan			Enam bulan ke hadapan ✓
2.	Keadaan perniagaan		✓	
3a.	Hasil kasar	✓	✓	
3b.	Bilangan pekerja	✓	✓	
3c.	Jumlah pengeluaran / permintaan / tempahan	✓	✓	
3d.	Purata harga jualan / pasaran eksport / pasaran domestik	✓	✓	
3e.	Aktiviti pembinaan	✓	✓	
3f.	Kapasiti teknikal	✓	✓	
3g.	Deposit	✓	✓	
3h.	Pinjaman dan pendahuluan	✓	✓	
3i.	Stok barang siap	✓	✓	
3j.	Persaingan dalam aktiviti jualan borong/runcit	✓	✓	
4.	Keadaan kewangan semasa		✓	
5.	Perolehan kredit semasa		✓	
6.	Faktor kekangan kepada syarikat		✓	

## **Pungutan Data**

Borang soal selidik diemel kepada semua syarikat yang terpilih. *Computer Assisted Telephone Interview (CATI)* digunakan untuk mendapatkan maklum balas daripada responden yang belum mengemukakan respons menerusi emel. Syarikat diminta memberi maklumat kualitatif tentang prestasi perniagaan dan jangkaan seperti yang dinyatakan dalam soal selidik.

## **Hasil Survei**

Hasil survei pada umumnya dipersembahkan dalam bentuk **imbangan bersih** yang merupakan perbezaan di antara peratus responden yang memberi jawapan menggalakkan dan kurang menggalakkan. Ringkasan keputusan diperoleh dengan menggabungkan arah perubahan dan hanya imbalan bersih ditunjukkan.

Imbalan bersih dengan tanda yang sesuai, menunjukkan arah aliran perniagaan yang mana tanda positif menunjukkan kemungkinan besar aliran yang meningkat, sementara tanda negatif menunjukkan kemungkinan besar aliran yang menurun. Bagaimanapun, magnitud imbalan bersih hanya mencerminkan banyak berlakunya persepsi yang optimistik atau pesimistik bagi tempoh perbandingan dan bukan menggambarkan perubahan magnitud variabel berkenaan memandangkan maklumat tersebut tidak dipungut dalam survei ini.

## **Pengiraan Petunjuk Keyakinan**

Untuk mendapatkan satu petunjuk keseluruhan, pemilihan satu set variabel survei digabungkan menjadi satu petunjuk komposit. Petunjuk tersebut dinamakan “petunjuk keyakinan” kerana ia merumuskan penilaian dan jangkaan keadaan perniagaan yang diberikan oleh responden. Petunjuk keyakinan terhasil daripada purata jumlah imbalan bersih bagi variabel yang terpilih.

Petunjuk keyakinan bagi kesemua industri dikira dengan menggunakan data dalam jadual berkenaan kecuali sektor perdagangan borong & runcit dan perkhidmatan yang dikira berdasarkan jadual berkenaan serta Jadual 6.2.

**Petunjuk Keyakinan Pertanian (ACI)**

ACI = (OB + EF)/3

OB = kecenderungan masa kini (jumlah tempahan bagi pasaran tempatan dan pasaran eksport)

EF = kecenderungan masa depan (bilangan pekerja)

**Petunjuk Keyakinan Perlombongan (MNCI)**

MNCI = (OB + EF)/2

OB = kecenderungan masa kini (jumlah tempahan)

EF = kecenderungan masa depan (bilangan pekerja)

**Petunjuk Keyakinan Pembuatan (MCI)**

MCI = (PF + OB - SF)/4

PF = kecenderungan masa depan (jumlah pengeluaran)

OB = kecenderungan masa kini (jumlah tempahan bagi pasaran tempatan dan pasaran eksport)

SF = kecenderungan masa kini (stok barang siap (songsang)

**Petunjuk Keyakinan Elektrik dan Air (ECI)**

ECI = (OB + EF)/2

OB = kecenderungan masa kini (jumlah tempahan)

EF = kecenderungan masa depan (bilangan pekerja)

**Petunjuk Keyakinan Pembinaan (CCI)**

CCI = (OB + EF)/2

OB = kecenderungan masa kini (jumlah tempahan) (kontrak)

EF = kecenderungan masa depan (bilangan pekerja)

**Petunjuk Keyakinan Kewangan (FCI)**

FCI = (BS + CD + ED)/3

BS = keadaan perniagaan semasa

CD = kecenderungan masa kini (jumlah permintaan)

ED = kecenderungan masa depan (jumlah permintaan)

**Petunjuk Keyakinan Perdagangan Borong (WCI)**

WCI = (BS - S + BF)/3

BS = keadaan perniagaan semasa

S = kecenderungan masa kini (stok barang siap (songsang)

BF = kecenderungan masa depan (perniagaan)

**Petunjuk Keyakinan Perdagangan Runcit (RCI)**

RCI = (BS - S + BF)/3

BS = keadaan perniagaan semasa

S = kecenderungan masa kini (stok barang siap (songsang)

BF = kecenderungan masa depan (perniagaan)

**Petunjuk Keyakinan Penginapan (ACCI)**

ACCI = (BS + CD + ED)/3

BS = keadaan perniagaan semasa

CD = kecenderungan masa kini (jumlah permintaan)

ED = kecenderungan masa depan (jumlah permintaan)

**Petunjuk Keyakinan Pengangkutan dan Penyimpanan (TCI)**

TCI = (BS + CD + ED)/3

BS = keadaan perniagaan semasa

CD = kecenderungan masa kini (jumlah permintaan)

ED = kecenderungan masa depan (jumlah permintaan)

**Petunjuk Keyakinan Komunikasi (CMCI)**

CMCI = (BS + CD + ED)/3

BS = keadaan perniagaan semasa

CD = kecenderungan masa kini (jumlah permintaan)

ED = kecenderungan masa depan (jumlah permintaan)

**Petunjuk Pentadbiran dan Khidmat Sokongan (ASCI)**

ASCI = (BS + CD + ED)/3

BS = keadaan perniagaan semasa

CD = kecenderungan masa kini (jumlah permintaan)

ED = kecenderungan masa depan (jumlah permintaan)

**Petunjuk Keyakinan Insurans (INCI)**

INCI = (BS + CD + ED)/3

BS = keadaan perniagaan semasa

CD = kecenderungan masa kini (jumlah permintaan)

ED = kecenderungan masa depan (jumlah permintaan)

**Petunjuk Keyakinan Profesional (PCI)**

PCI = (BS + CD + ED)/3

BS = keadaan perniagaan semasa

CD = kecenderungan masa kini (jumlah permintaan)

ED = kecenderungan masa depan (jumlah permintaan)

**Petunjuk Keyakinan Hartanah (RECI)**

RECI = (BS + CD + ED)/3

BS = keadaan perniagaan semasa

CD = kecenderungan masa kini (jumlah permintaan)

ED = kecenderungan masa depan (jumlah permintaan)

**Petunjuk Keyakinan Kesihatan (HCl)**

HCl = (BS + CD + ED)/3

BS = keadaan perniagaan semasa

CD = kecenderungan masa kini (jumlah permintaan)

ED = kecenderungan masa depan (jumlah permintaan)

**Petunjuk Keyakinan Teknologi Maklumat dan Komunikasi (ICTCI)**

ICTCI = (BS + CD + ED)/3

BS = keadaan perniagaan semasa

CD = kecenderungan masa kini (jumlah permintaan)

ED = kecenderungan masa depan (jumlah permintaan)

**Petunjuk Keyakinan Pendidikan (EDUCI)**

EDUCI = (BS + CD + ED)/3

BS = keadaan perniagaan semasa

CD = kecenderungan masa kini (jumlah permintaan)

ED = kecenderungan masa depan (jumlah permintaan)

**Petunjuk Keyakinan Makanan dan Minuman (FBCI)**

FBCI = (BS + CD + ED)/3

BS = keadaan perniagaan semasa

CD = kecenderungan masa kini (jumlah permintaan)

ED = kecenderungan masa depan (jumlah permintaan)

**Petunjuk Keyakinan Perkhidmatan Lain (OSCI)**

OSCI = (BS + CD + ED)/3

BS = keadaan perniagaan semasa

CD = kecenderungan masa kini (jumlah permintaan)

ED = kecenderungan masa depan (jumlah permintaan)

**Keperluan Kerahsiaan**

Survei ini dilaksanakan di bawah peruntukan Akta Perangkaan 1965 (Disemak 1989) yang menjelaskan bahawa kandungan penyata individu adalah sulit dan tidak akan dihebahkan kepada orang lain.

**Pembundaran**

Hasil tambah imbalan bersih di peringkat sektor mungkin berbeza kerana pembundaran.

## TECHNICAL NOTES

### Background

The Business Tendency Survey has been conducted at quarterly basis by the Department of Statistics, Malaysia since 2004. The survey gathers views on business performance from the senior management of establishments in various economic sectors in Malaysia. The main characteristic of this survey is to collect information regarding the direction of change for key economic variables. The answers given are based on a three-point scale type e.g. Better / same / worse; or good / satisfactory / bad. However, they do not reflect the magnitude of change. It has to be noted that the views in this survey are affected by the events occurring during the time of enumeration.

### Objective of the Survey

The Business Tendency Survey collects qualitative information from business managers on their assessment of the business performance for the past three months and the expectations for the next three and six months. The information is useful for monitoring the current economic situation.

The survey also provides rapid qualitative indicators of the outcome, the current situation and expectation for important economic variables, where quantitative information is not yet available. The rapid execution and easy processing of results provide early warning of turning points in the overall economic activity.

### Scope and Coverage

The survey covers four major sectors in Malaysia namely industry, construction, wholesale & retail trade and services. The industrial sector covers agriculture, mining, manufacturing and electricity & water whereas the services sector consists of accommodation, transportation and storage, communications, finance, insurance, real estate and information & communications technology. Starting first quarter of 2020, the coverage of services sector is expanded to include food & beverage, education, administrative & support services, professional, health and other services. The sample is obtained from the Economic Census conducted in 2016 for reference year 2015.

Communication refers to telecommunications and related service activities, i.e. transmitting voice, data, text, sound and video. The transmission facilities that carry out these activities may be based on a single technology or a combination of technologies.

Information and communication technology refers to activities providing expertise in the field of information technologies such as writing, modifying, testing and supporting software to meet the needs of a particular customer; planning and designing computer systems that integrate computer hardware, software and communication technologies; on-site management and operation of clients' computer systems and / or data processing facilities; providing infrastructure for hosting or data processing services; and other professional and technical computer-related activities.

## **Survey Questionnaire**

A simple questionnaire is designed for the respondents to answer. The respondents are required to answer either higher, same or lower according to important economic variables. As the answer only requires the direction or relative size of the variable to be reported, the questionnaire can be completed relatively faster. The questions asked cover both outcomes for recent months and expectations for the coming three and six months. The number of questions in the quarterly Business Tendency Survey is considerably less than other surveys.

These questions are confined to key economic variables to reduce the time taken to fill in the questionnaire as well as to speed up collection and processing of survey data.

### **Variables and periods covered**

<b>Question</b>	<b>Variable</b>	<b>Last Three Months</b>	<b>Current Situation</b>	<b>Next Three Months</b>
1.	<i>Business situation</i>		Six Months Ahead	<input checked="" type="checkbox"/>
2.	<i>Business situation</i>		<input checked="" type="checkbox"/>	
3a.	<i>Gross revenue</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3b.	<i>Number of employees</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3c.	<i>Volume of production / demand / order</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3d.	<i>Average selling price / export market /</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3e.	<i>Construction activity</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3f.	<i>Technical capacity</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3g.	<i>Deposits</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3h.	<i>Loans and advances</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3i.	<i>Stock of finished goods</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3j.	<i>Competition in wholesale/retail activity</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
4.	<i>Current financial situation</i>		<input checked="" type="checkbox"/>	
5.	<i>Current access to credit</i>		<input checked="" type="checkbox"/>	
6.	<i>Limitation factors to company</i>		<input checked="" type="checkbox"/>	

## **Data Collection**

Questionnaires are e-mailed directly to all selected companies. Mode of Computer Assisted Telephone Interview (CATI) is used to obtain feedback from respondent who did not provide response to the questionnaires via e-mail. Companies are requested to provide qualitative information on their business performances and expectations as stipulated in the questionnaires.

## **Survey Results**

The results of this survey are generally presented in the form of **net balance**, which is the difference between the percentage of respondents with favourable and unfavourable answers. The summary results are obtained by combining the direction of change and only the net balance is shown.

The net balance with its appropriate sign indicates the direction of the business trends, where a positive sign indicates a likely upward trend, while a negative sign indicates a likely downward trend. However, the magnitude of the net balance reflects only the prevalence of optimism or pessimism for the comparative period but does not reflect the magnitude of change of the variable concerned as the information is not collected in the survey.

## **Calculation of Confidence Indicator**

In order to have an overall indicator, a selection of a set of survey variables is combined into a single composite indicator. These indicators are called “confidence indicators” because they summarise the assessments and expectations of the business situation provided by the respondents. The confidence indicators are derived from the average aggregated net balances of the selected variables.

The confidence indicator for all the industries are calculated based on the data of the respective table except for the wholesale & retail trade and services sectors which are calculated based on the respective table and Table 6.2.

**Agriculture Confidence Indicator (ACI)**

$$ACI = (OB + EF)/3$$

*OB = present tendency (total volume of orders for domestic market and export market)*

*EF = future tendency (number of employees)*

**Retail Trade Confidence Indicator (RCI)**

$$RCI = (BS - S + BF)/3$$

*BS = current business situation*

*S = present tendency (stocks of finished goods) (inverted)*

*BF = future tendency (business situation)*

**Mining Confidence Indicator (MNCI)**

$$MNCI = (OB + EF)/2$$

*OB = present tendency (volume of orders)*

*EF = future tendency (number of employees)*

**Accommodation Confidence Indicator (ACCI)**

$$ACCI = (BS + CD + ED)/3$$

*BS = current business situation*

*CD = present tendency (volume of demand)*

*ED = future tendency (volume of demand)*

**Manufacturing Confidence Indicator (MCI)**

$$MCI = (PF + OB - SF)/4$$

*PF = future tendency (volume of production)*

*OB = present tendency (total volume of orders for domestic market and export market)*

*SF = present tendency (stocks of finished goods) (inverted)*

**Transportation and Storage Confidence Indicator (TCI)**

$$TCI = (BS + CD + ED)/3$$

*BS = current business situation*

*CD = present tendency (volume of demand)*

*ED = future tendency (volume of demand)*

**Electricity and Water Confidence Indicator (ECI)**

$$ECI = (OB + EF)/2$$

*OB = present tendency (volume of orders)*

*EF = future tendency (number of employees)*

**Communications Confidence Indicator (CMCI)**

$$CMCI = (BS + CD + ED)/3$$

*BS = current business situation*

*CD = present tendency (volume of demand)*

*ED = future tendency (volume of demand)*

**Construction Confidence Indicator (CCI)**

$$CCI = (OB + EF)/2$$

*OB = present tendency (volume of orders) (contracts)*

*EF = future tendency (number of employees)*

**Finance Confidence Indicator (FCI)**

$$FCI = (BS + CD + ED)/3$$

*BS = current business situation*

*CD = present tendency (volume of demand)*

*ED = future tendency (volume of demand)*

**Wholesale Trade Confidence Indicator (WCI)**

$$WCI = (BS - S + BF)/3$$

*BS = current business situation*

*S = present tendency (stocks of finished goods) (inverted)*

*BF = future tendency (business situation)*

**Insurance Confidence Indicator (INCI)**

$$INCI = (BS + CD + ED)/3$$

*BS = current business situation*

*CD = present tendency (volume of demand)*

*ED = future tendency (volume of demand)*

**Real Estate Confidence Indicator (RECI)**

$RECI = (BS + CD + ED)/3$

*BS = current business situation*

*CD = present tendency (volume of demand)*

*ED = future tendency (volume of demand)*

**Administrative and Support Service Confidence Indicator (ASCI)**

$ASCI = (BS + CD + ED)/3$

*BS = current business situation*

*CD = present tendency (volume of demand)*

*ED = future tendency (volume of demand)*

**Information and Communications Technology Confidence Indicator (ICTCI)**

$ICTCI = (BS + CD + ED)/3$

*BS = current business situation*

*CD = present tendency (volume of demand)*

*ED = future tendency (volume of demand)*

**Professional Confidence Indicator (PCI)**

$PCI = (BS + CD + ED)/3$

*BS = current business situation*

*CD = present tendency (volume of demand)*

*ED = future tendency (volume of demand)*

**Food and beverage Confidence Indicator (FBCI)**

$FBCI = (BS + CD + ED)/3$

*BS = current business situation*

*CD = present tendency (volume of demand)*

*ED = future tendency (volume of demand)*

**Health Confidence Indicator (HCI)**

$HCI = (BS + CD + ED)/3$

*BS = current business situation*

*CD = present tendency (volume of demand)*

*ED = future tendency (volume of demand)*

**Education Confidence Indicator (EDUCI)**

$EDUCI = (BS + CD + ED)/3$

*BS = current business situation*

*CD = present tendency (volume of demand)*

*ED = future tendency (volume of demand)*

**Other Services Indicator (OSCI)**

$OSCI = (BS + CD + ED)/3$

*BS = current business situation*

*CD = present tendency (volume of demand)*

*ED = future tendency (volume of demand)*

## **Confidentiality Requirements**

The survey is conducted under provisions of the Statistics Act 1965 (Revised 1989) which provides that the contents of individual returns are confidential and will not be divulged to any person.

## **Rounding**

The sum of net balances at sector level may differ due to rounding.