



BADAN PUSAT STATISTIK

Pelopop
Data Statistik
Terpercaya
Untuk Semua

ECONOMIC TENDENCY SURVEY IN INDONESIA

INTERNATIONAL WORKSHOP ON SHORT TERM STATISTICS
BEIJING, CHINA 18-20 MAY 2015

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BUSINESS TENDENCY SURVEY

This survey aims to provide information of business and economic condition in short term from the businessmen point of view.

CONSUMERS TENDENCY SURVEY

This survey aims to observe consumers confidence about the general economic condition in current and next quarter.



INTRODUCTION

- ✓ Bisnis Tendency Survey (BTS) and Consumers Tendency Survey (CTS) in Indonesia are started in 1995 (in national level). Since 2011 Consumers Tendency Survey is conducted for National and Provincial level.
- ✓ BTS and CTS are panel survey that are conducted quarterly (March, June, September, December).
- ✓ The survey period of BTS is 1 month, while CTS is 15 days.
- ✓ BTS is a collaboration survey between BPS (Statistics Indonesia) and BI (Central Bank of Indonesia), meanwhile CTS is a BPS Survey.



DATA COLLECTION

✓ BUSINESS TENDENCY SURVEY

- ✓ Respondents in this survey are large and medium establishments, represented by their managers.
- ✓ The number of sample for each quarter is approximately 3,100 establishments, spread over all economics sectors. Number of sample for each sector represent its share in GDP.
- ✓ Sampling frame is the establishment directory based on 2006 Economic Census, updated by subject matter surveys (Business Register has been developing).
- ✓ Data is collected by interview and online system.
- ✓ There are 7 questionnaires:
 - ✓ Agriculture, Fishery and Forestry;
 - ✓ Mining and quarrying, Electricity, Gas and Water, Manufacturing industry;
 - ✓ Construction Sector
 - ✓ Wholesale and Retail Sector
 - ✓ Hotel & restaurant
 - ✓ Transportation, Storage and IT ;
 - ✓ Services.
- ✓ Response rate about 80 %.



DATA COLLECTION

CONSUMERS TENDENCY SURVEY

- ✓ Respondents in this survey are households in urban areas, represented by head of household or his/her spouse.
- ✓ Sampling frame is households based on 2010 Population Census.
- ✓ The number of sample is approximately 14,000 households for each quarter. Sampling Method is Two Stage Two Phase.
- ✓ Data is collected by interview.
- ✓ Response rate about 90 %



QUESTIONS IN BTS

- GENERAL INFORMATION
 - Name, address, status , main product, number of worker, % export.
- BUSINESS ACTIVITY
 - ✓ PRODUCTION (volume, income, production capacity)
 - ✓ WORKER (number of worker, working hour)
 - ✓ ORDER AND PRICE (volume domestics order book , volume export order book, volume import order book , average selling price)
 - ✓ BUSINESS CONDITION
 - ✓ ASSET



QUESTIONS IN CTS

- HOUSEHOLDS CHARACTERISTICS
 - Gender, age, education attainment, occupation, number of households member
- HOUSEHOLDS INCOME
 - Total income of households, reason decrease or increase
- CHANGES PRICE OF GOODS AND SERVICES
 - Change price in current quarter
- HOUSEHOLDS EXPENDITURE
 - Volume consumption of goods and services, total expenditure
- SAVING
- JOB AVAILABILITY
- TIME TO BUY DURABLE GOODS
 - Right time to buy durable goods in the current quarter
 - Willingness to buy durable goods (electric, electronic, car, house, renovation of house) for the next quarter.



ECONOMIC TENDENCY INDEX

✓ **BUSINESS TENDENCY INDEX (BTI)**

- ✓ is calculated in National level and grouped in 9 industrial sectors (before 2015) and 17 industrial categories (since Q-1 2015).

✓ **CONSUMERS TENDENCY INDEX (CTI)**

- ✓ is calculated in National and provincial level.
- ✓ BTI and CTI are comprised of 2 indices Current Tendency Index and Future Tendency Index that are used independently.
- ✓ There is no composite index of current and future index.



DATA COMPILATION

✓ BUSINESS TENDENCY SURVEY

- ✓ Data was collected by BPS representatives in 3 provinces and 8 BI representatives. Since Q2-2015 it will be collected in 33 province.
- ✓ Cleaned data is compiled in BPS HQ to be calculated as Business Tendency Index.

✓ CONSUMERS TENDENCY SURVEY

- ✓ Data was collected by BPS representatives in 33 provinces.
- ✓ Cleaned data is compiled in BPS HQ to be calculated as Consumers Tendency Survey.



BUSINESS TENDENCY INDEX

Current
Business
Tendency
Index

- Income
- Production Capacity
- Average working hours

Future
Business
Tendency
Index

- Domestic order
- Overseas order
- Price
- Order of Input



CONSUMERS TENDENCY INDEX VARIABLE

Current
Consumers
Tendency
Index

- Income
 - Current Income
- Price
 - Change price of goods
 - Total expenditure
- Consumption

Future
Consumers
Tendency
Index

- Income
 - Future Income
- Plan to buy durable goods



METHODOLOGY OF INDEX CALCULATION

- ✓ Using Balance Score (Net Balance + 100)
- ✓ Score is given for each answer:
 - Three category answer : Increase (1) , Same (0), Decrease (-1)
 - Five category answer : Increase a lot (1), Increase (½), Same (0), Decrease (-½) Decrease a lot (-1).
- ✓ Index is calculated as follows:

$$I_{vi} = \left(\sum_{i=1}^m PA_i \right) + 100$$

Where:

I_{vi} = Index for variable i

PA = percentage answer multiplied by the score answer

m = number of category answer



METHODOLOGY OF INDEX CALCULATION

- Composite Index is calculated as follows :

$$CI = \frac{\sum (w_i I_{vi})}{\sum w_i}$$

Where:

I_{vi} = Index for variable i

CI = Composite Index

w = weighted value for variable i

- Value of index is between 0-200:
 - $I_{IK}/I_{IM} > 100$: business/consumer condition is better .
 - $I_{IK}/I_{IM} = 100$: business/consumer condition is stagnant.
 - $I_{IK}/I_{IM} < 100$: business/consumer condition is worse.

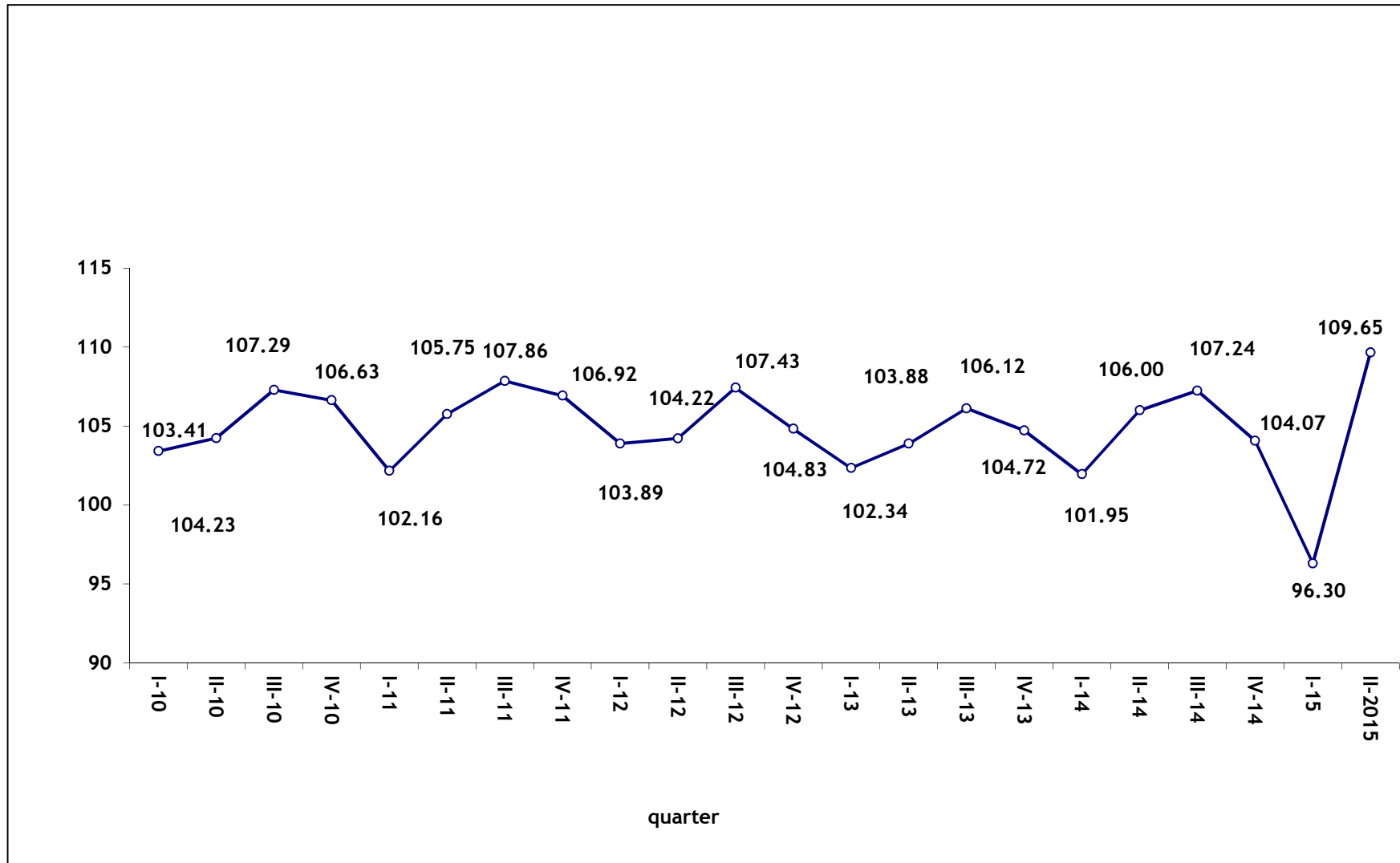


DISSEMINATION

- ✓ Since 2002 Business Tendency Index and Consumers Tendency Index are disseminated quarterly in the Press Release by BPS Head Quarter, at the same time of GDP release. There is a plan to disseminate it before GDP release.
- ✓ It is released 35 days after the end of quarter (5th February, 5th May, 5th August, 5th November). It was one of BPS product that mentioned in the Advance Release Calendar list.
- ✓ Besides Press Release, it is also disseminated in forms of Report to President and Report to Ministries and uploaded on the BPS Website (www.bps.go.id). The series data and metadata also available in the website.
- ✓ Analysis of time series data also available in the publication. The analysis is among province and characteristics of households for CTI and across sectors for BTI. This publication also uploaded in the website.

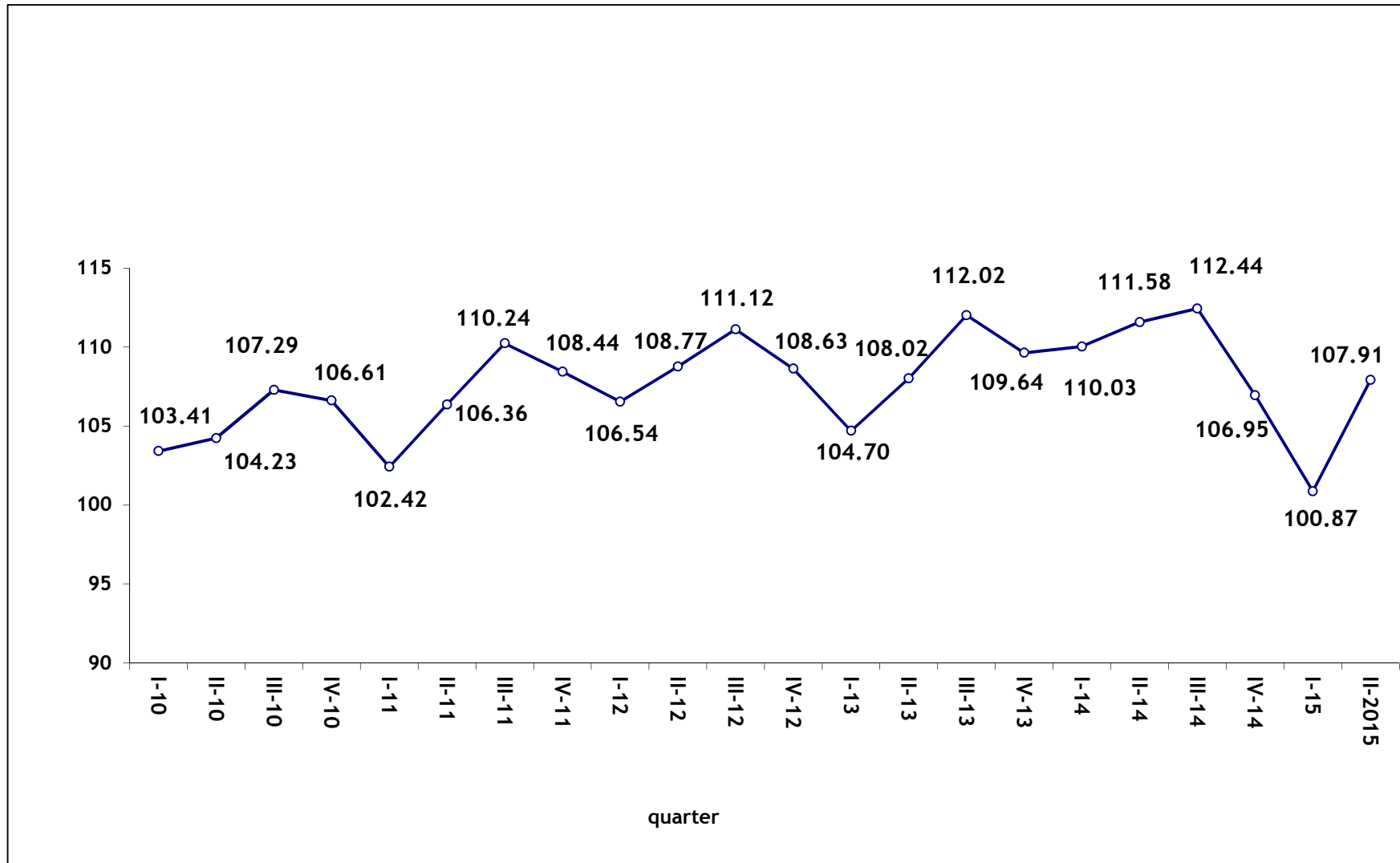


Business Tendency Index q1 2010 – q2 2015





Consumers Tendency Index q1 2010– q2 2015





USERS

- ✓ BPS :
 - ✓ as additional information for GDP calculation.
- ✓ Government:
 - ✓ as early warning information for government dealing with business condition, in current quarter and next quarter.
- ✓ Business:
 - ✓ as early warning information for production planning in the next quarter.
- ✓ Others (university, researchers)
 - ✓ used it for research.



CHALLENGES

- ✓ In data collection:
 - ✓ Respondent burden for both surveys.
 - ✓ BTS:
 - ✓ Late responses, especially from large establishments.
 - ✓ CTS:
 - It is difficult to collect data from high income level households.
 - It is hard to get answers for some particular questions such as job availability, inflation level (the answers tend to be high and even very high), and total household expenditure level (the answers tend to be 'increase' rather than 'decrease').
 - Respondents optimism or pessimism is sometimes influenced by local culture that leads the answers tend to be the same over time.

- ✓ In data processing
 - ✓ Seasonal adjustment is not applied yet.
 - ✓ There is no reference base year.

- ✓ In data analysis:
 - ✓ The indices sometimes show different trend to GDP, therefore need some additional information to prove it, especially for services and electricity, gas and water supply.



IMPROVEMENT

BUSINESS TENDENCY SURVEY

- ✓ Increase the number of sample in order to get representative sample for 22 categories industry (2008 SNA)
- ✓ Online system of data collection.
- ✓ Sample replacement of $\frac{1}{4}$ number of sample every quarter.

CONSUMERS TENDENCY SURVEY

- ✓ Used Wealth Index to stratified the households into 3 groups (low, middle, high) income groups. Sample for CTS is designed for middle and high income level households.
- ✓ Revised wording of some questions in the questionnaire.
- ✓ Sample replacement of $\frac{1}{4}$ number of sample every year.
- ✓ Online system of data collection.
- ✓ Improvement in Methodology of Index Calculation (Using reference base year to compare between quarters or years).



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TERIMA KASIH