



UN-ESCWA

UNITED NATIONS - Economic and Social Commission for Western Asia



# DATA TEMPLATE FOR HIGH FREQUENCY INDICATORS

**EXPERT GROUP MEETING ON  
ECONOMIC STATISTICS AND NATIONAL ACCOUNTS**  
Amman, 12-14 July 2011



- Work already done at international level on **Data Template and Analytical Indicators**
- Main objectives of the work:
  - Determine data and metadata structure
  - Review supporting statistical methodology
  - Explore feasibility of national central data hubs
  - Apply strategic approach with diagnostic tool
- With the final aim of:
  - **Economic monitor for macroeconomic surveillance** while being SNA compliant and compliant with other internationally accepted standards: BPM, prices, business statistics, etc.



- Scope
  - 12 categories  
National accounts, Production, Prices, Markets (labor, real estate and financial markets) and Sectors (government, financial, non-financial, household and external sector)
  - 3 layers
  - Availability, Frequency (monthly, quarterly) and Timeliness

- Macro structure for 12 categories:
  - Tier 1 (internationally accepted core set)
  - Tier 2 and 3: strategic indicators (sectoral accounts and “new” indicators but less available) and country specific indicators (‘Others’, not discussed here)
  - Adaptable to specific sectoral policy needs: agriculture and rural development and industrial sector indicators
  - Flexible for alternative groupings for policy purpose (e.g. housing sector, financial sector, household consumption, etc.)

# Data Template: Tier 1



|  | Indicator description  | Methodology | Periodicity |
|--|--|-------------|-------------|
| <b>Set 1 National accounts</b>           |  |             |             |
| 1.1                                      | Quarterly national accounts: Flash GDP estimate  | Drafting    | Quarterly   |
| 1.2.1                                    | GDP full release by expenditure  | Available   | Quarterly   |
| 1.2.2                                    | GDP full release by production   | Available   | Quarterly   |
| <b>Set 2 Production and turnover</b>     |  |             |             |
| 2.1                                      | Production index for industry, by major division (mining, manufacturing, electricity, water, etc.) | Available   | Monthly     |
| <b>Set 3: Price Indicators</b>           |  |             |             |
| 3.1                                      | Consumer price index   | Available   | Monthly     |
| 3.2                                      | Producer price index   | Available   | Monthly     |
| 3.3                                      | Import price index   | Available   | Monthly     |
| 3.4                                      | Export price index   | Available   | Monthly     |
| <b>Set 4: Labour market indicators</b>   |  |             |             |
| 4.1                                      | Unemployment   | Available   | Quarterly   |
| 4.2                                      | Unemployment rate  | Available   | Quarterly   |
| 4.3                                      | Employment total and by economic activity  | Available   | Quarterly   |
| <b>Set 5: External sector indicators</b> |  |             |             |
| 5.1                                      | Exports and imports (of goods and services)  | Available   | Monthly     |
| 5.3                                      | Official reserve assets  | Available   | Monthly     |
| 5.4                                      | External debt (by sector, maturity and foreign currency)   | Available   | Quarterly   |

# Data Template: Tier 1 (cntd.)



|  | Indicator description   | Methodology | Periodicity |
|--|---|-------------|-------------|
| <b>Set 6: Financial sector indicators</b>          |   |             |             |
| 6.1  | Central Bank net foreign assets   | Available   | Monthly     |
| 6.2  | Central Bank domestic lending   | Available   | Monthly     |
| 6.3  | Central Bank reserve money  | Available   | Monthly     |
| 6.4  | Depository corporations net foreign assets                                  | Available   | Monthly     |
| 6.5  | Depository corporations domestic lending                                    | Available   | Monthly     |
| 6.6  | Depository corporations broad money liabilities                             | Available   | Monthly     |
| <b>Set 7: General government sector indicators</b> |   |             |             |
| 7.1  | Revenue   | Available   | Monthly     |
| 7.2  | Expense   | Available   | Monthly     |
| 7.3  | Net operating balance (= Revenue – Expense)                                 | Available   | Monthly     |
| <b>Set 10: Financial market indicators</b>         |   |             |             |
| 10.1   | Interest rates, as relevant short and long term money and bond market rates | Available   | Monthly     |
| 10.2   | Exchange rates, as relevant spot and forward markets                        | Available   | Monthly     |
| 10.3   | Nominal and real effective exchange rate                                    | Available   | Monthly     |
| 10.4   | Stock market indicators   | Available   | Monthly     |

# Data Template: Tier 2



|  | Indicator description   | Methodology   | Periodicity |
|--|---|---------------|-------------|
| <b>Set 1 National accounts</b>           |   |               |             |
| 1.2.3                                    | GDP full release by income  | Available     | Quarterly   |
| <b>Set 2 Production and turnover</b>     |   |               |             |
| 2.2                                      | Production index for construction   | Not available | Monthly     |
| 2.3                                      | Turnover index for retail trade by major division   | Available     | Monthly     |
| 2.4                                      | Turnover index for industry by major division   | Not available | Monthly     |
| 2.5                                      | Turnover index for other services by major division<br>(excluding financial services and non-commercial services) | Not available | Monthly     |
| 2.7                                      | New orders index for construction (building permits or housing starts)  | Not available | Monthly     |
| <b>Set 4: Labour market indicators</b>   |   |               |             |
| 4.4                                      | Hourly wage rate  | Available     | Quarterly   |
| 4.5                                      | Hours of work   | Available     | Quarterly   |
| <b>Set 5: External sector indicators</b> |   |               |             |
| 5.2                                      | International investment position (IIP), specify balances and components  | Available     | Quarterly   |

# Data Template: Tier 2 (cntd.)



|  | Indicator description   | Methodology | Periodicity |
|--|---|-------------|-------------|
| <b>Set 6: Financial sector indicators</b>          |   |             |             |
| 6.7  | Other financial corporations balance sheet, assets and liabilities by sector. | Available   | Monthly     |
| 6.8  | Financial corporate profits   | Available   | Quarterly   |
| 6.9  | Financial corporate debt  | Available   | Monthly     |
| <b>Set 7: General government sector indicators</b> |   |             |             |
| 7.4  | Net acquisition of non-financial assets                                       | Available   | Quarterly   |
| 7.5  | Expenditure   | Available   | Quarterly   |
| 7.6  | Net lending/net borrowing (= Revenue - Expenditure)                           | Available   | Quarterly   |
| 7.7  | Gross debt  | Available   | Quarterly   |
| <b>Set 8: Household sector indicators</b>          |   |             |             |
| 8.1  | Household disposable income   | Available   | Quarterly   |
| 8.2  | Household saving  | Available   | Quarterly   |
| 8.3  | Household debt  | Available   | Quarterly   |
| <b>Set 11: Real estate market indicators</b>       |   |             |             |
| 11.1   | Residential property price index  | Drafting    | Quarterly   |
| <b>Set 12: Economic sentiment</b>                  |   |             |             |
| 12.1   | Consumer confidence   | Drafting    | Monthly     |
| 12.2   | Business confidence   | Drafting    | Monthly     |



# Data Template: Tier 3



|  | Indicator description   | Methodology   | Periodicity |
|--|---|---------------|-------------|
| <b>Set 2 Production and turnover</b>                       |   |               |             |
| 2.6  | New orders index for industry by major ISIC division (for those that work on order)   | Not available | Monthly     |
| 2.8  | Commodity production (as relevant at country level data on commodity productions and other indicators of economic activity) | Not available | Monthly     |
| <b>Set 9: Non-financial corporations sector indicators</b> |   |               |             |
| 9.1  | Non-financial corporate profits   | Available     | Quarterly   |
| 9.2  | Non-financial corporate debt  | Available     | Quarterly   |
| <b>Set 11: Real estate market indicators</b>               |   |               |             |
| 11.2   | New house sales   | Not available | Monthly     |
| 11.3   | Existing house sales  | Not available | Monthly     |
| <b>Set 12: Economic sentiment</b>                          |   |               |             |
| 12.3   | Composite Business Cycle Indicators   |               |             |
| 12.3.1   | Leading Indicator   | Drafting      | Monthly     |
| 12.3.2   | Coincident Indicator  | Drafting      | Monthly     |
| 12.3.3   | Lagging Indicator   | Drafting      | Monthly     |

# PEEIs (EU example)



## PRINCIPAL EUROPEAN ECONOMIC INDICATORS LIST: PERIODICITY AND DELAYS IN CALENDAR DAYS

| SET  | INDICATOR   | PERIODICITY           | EU DELAY TARGET | EU DELAY ACTUAL  |
|--|---|-----------------------|-----------------|------------------|
| <b>Set 1: Consumer Price Indicators</b>    |   |                       |                 |                  |
| 1.1.                                       | Harmonised Consumer Price Index: MUICP flash estimate               | monthly               | 0               | 2                |
| 1.2.                                       | Harmonised Consumer Price Index: actual indices                     | monthly               | 17              | 17               |
| <b>Set 2: National Accounts Indicators</b> |   |                       |                 |                  |
| 2.1.                                       | Quarterly National Accounts: First GDP estimate                     | quarterly             | 45              | NA               |
| 2.2.                                       | Quarterly National Accounts: First GDP release with more breakdowns | quarterly             | 60              | 70/120           |
| 2.3.                                       | Quarterly National Accounts: Household and Company Accounts         | quarterly             | 90              | NA               |
| 2.4.                                       | Quarterly National Accounts: Government Finance Statistics          | quarterly             | 90              | 100              |
| <b>Set 3: Business Indicators</b>          |   |                       |                 |                  |
| 3.1.                                       | Industrial production index   | monthly               | 40              | 48               |
| 3.2.                                       | Industrial output price index for domestic markets                  | monthly               | 35              | 35               |
| 3.3.                                       | Industrial new orders index   | monthly               | 40/50           | Preliminary data |
| 3.4.                                       | Industrial import price index                                       | monthly               | 45              | NA               |
| 3.5.                                       | Production in construction  | monthly/<br>quarterly | 45              | 75               |
| 3.6.                                       | Turnover index for retail trade and repair                          | monthly               | 30              | 60               |
| 3.7.                                       | Turnover index for other services                                   | quarterly             | 60              | Partial data     |
| 3.8.                                       | Corporate output price index for services                           | quarterly             | 60              | NA               |
| <b>Set 4: Labour Market Indicators</b>     |   |                       |                 |                  |
| 4.1.                                       | Unemployment rate   | monthly               | 30              | 30               |
| 4.2.                                       | Job vacancy rate  | quarterly             | 45              | NA               |
| 4.3.                                       | Employment  | quarterly             | 45              | 70/75            |
| 4.4.                                       | Labour cost index   | quarterly             | 70              | 90               |
| <b>Set 5: Foreign Trade Indicators</b>     |   |                       |                 |                  |
| 5.1.                                       | External trade balance: intra and extra for MU and EU               | monthly               | 45              | 50               |

NA : not available (not published yet at EU level)

# Strategy for establishing a HFI data set



- As the implementation programme for the 2008 SNA calls for strengthening the availability of the underlying economic statistics used in the integration framework of the SNA, the elements of this programme are also applicable for establishing a high frequency indicator data set
- The efficiency and sustainability for establishing a HFI data set should be based on the principles of: (a) strategic planning, (b) coordination, monitoring and reporting; and (c) improving statistical systems

# Strategy for establishing a HFI data set



- These principles are made operational through:
  - Establishing a common system wide consultative process comprising an assessment of the current strengths and weaknesses of the statistical production process, the development of goals to mitigate weaknesses and the development of a programme for remedying shortcomings and implementation of national and sectoral capacity building programmes
  - Establishing a common core set for sectoral and structural short term statistics

# Strategy for establishing a HFI data set



- These principles are made operational through:
  - Establishing a common structure for metadata template for sectoral and structural and short term statistics
  - Using a common diagnostic tools for the assessment of strengths and weaknesses of statistical production process

# Discussion for participants



- The discussion aims at:
  - Analysing a minimum set of core indicators among those previously discussed
  - Discussing their importance at the regional (ESCWA-Arab) and national levels
  - Analysing (a) **availability** at country level (b) information on sources and methods, **metadata** (c) **frequency** (quarterly, monthly) (d) **timeliness** (days from end of reference period) (e) **plans** for future

# Set 1: National Accounts



- **Scope and coverage:** Covers the quarterly national accounts and may include the first accelerated (flash) estimate of GDP and its subsequent releases with more breakdown by expenditure components, income and output components by industries, and the quarterly institutional sector accounts covering the full sequence of accounts and balance sheets
- **Analytical framework:** To offer an overview of recent economic and financial trends that is timelier than annual national accounts and more comprehensive than individual short-term indicators
- **Statistical framework:** Built on a foundation of timely and accurate quarterly source data that directly cover a high proportion of the totals

# Set 1: National Accounts



1.1 Quarterly National Accounts: Flash GDP Estimate

1.2 Quarterly National Accounts: GDP Full Release (by expenditure, production and income)

- Discussion for participants
  - Importance, availability and plans
  - Metadata
  - Frequency
  - Timeliness



# Set 2: Production and Turnover



- **Scope and coverage:** Covers indexes of industrial production, industrial new orders, construction, industrial turnover, retail trade and repair turnover, services turnover and production indexes of major commodities (as relevant). Several indicators can be subdivided between domestic and non-domestic, which is useful as it provides information on short-term development of distinct markets, especially close to turning points
- **Analytical framework:** The production index provides information on trends in actual monthly production output, turnover is used to assess current trends in sales and thus demand, new orders are forward looking etc.
- **Statistical framework:** Are often built on a foundation of timely and accurate monthly source data that directly cover a high proportion of the totals

# Set 2: Production and Turnover



2.1 Production index for industry, by major divisions

2.2 Production index for construction

2.3 Turnover index for retail trade, by major divisions

2.4 Turnover index for industry, by major divisions

2.5 Turnover index for other services, by major divisions

2.6 New orders index by industry by major ISIC divisions

2.7 New orders index for construction (build. permits or housing starts)

- **Discussion for participants**
  - Importance, availability and plans
  - Metadata
  - Frequency
  - Timeliness

# Set 3: Price Indicators



- **Scope and coverage:** Practices differ whether the imputed rents for the flows of housing services provided by owner-occupied dwellings is included in the overall CPI. PPI can refer to indices related to inputs or outputs of the production process. Unit values are generally used instead of import and export prices
- **Analytical framework:** Give an overall indication for household's inflation, producers' inflation and the dynamics of prices of exported and imported goods
- **Statistical framework:** In many countries, both the all item CPI and PPI as an aggregate are prepared on a monthly basis and released within a short period after the reference month. These indexes can be presented as year-to-year changes, month-to-month, as annual indices and annual change rates

# Set 3: Price Indicators



3.1 Consumer price index

3.2 Producer price index

3.3 Import price index

3.4 Export price index

- Discussion for participants
  - Importance, availability and plans
  - Metadata
  - Frequency
  - Timeliness

# Set 4: Labour Market Indicators



- **Scope and coverage:** Employment can refer to the number of persons employed but may be approximated on a temporary basis by the number of employees (the number of unpaid persons employed are included in the first indicator but not in the second)
- **Analytical framework:** Labour market data comprise indicators for the assessment of the cyclical situation and for macroeconomic and social policy making. Both the employment and labour cost indices play an essential role in the compilation of key indicators for the analysis of long-term economic equilibria and the movements around it, such as the NAIRU
- **Statistical framework:** Employment is broken down by sex and age, labour cost by cost items and economic activity

# Set 4: Labour Market Indicators



4.1 Unemployment

4.2 Unemployment rate

4.3 Employment, total and by economic activity

4.4 Hourly wage rate

4.5 Hours of work

- Discussion for participants
  - Importance, availability and plans
  - Metadata
  - Frequency
  - Timeliness



Thank You