

# Third International Seminar on Early Warning and Business Cycle Indicators

17 – 19 November 2010 Moscow, Russian Federation

**Developing Early Warning Indicators in Oman** 

Sultanate of Oman Ministry of National Economy Directorate General Economic Statistics



# THIRD INTERNATIONAL SEMINAR ON EARLY WARNING AND BUSINESS CYCLE INDICATORS MOSCOW, 17 – 19 NOVEMBER 2010

# DEVELOPING EARLY WARNING INDICATORS IN OMAN

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# Introduction

- 1. The recent economic and financial turmoil has highlighted the need for quick shortterm economic indicators in the Sultanate – just as it has elsewhere in the region and globally. However, the region's reliance of highly volatile Oil prices and Real Estate sector (to a lesser degree in Oman) makes the region's short-term economic forecasting very challenging. The rapid credit growth and opening of the financial sector has increased its dependency from the global financial markets making it more difficult to follow the development by domestic indicators only. Common international approaches to timely measuring (and forecasting) of business cycle turning points are critical for both domestic purposes as well as for gaining a better regional and global picture.
- 2. It is essential for the policymakers to keep their finger on the economy's pulse and for the statistical producers to provide timely, accurate and relevant information for them to monitor and evaluate effectiveness of regulatory, fiscal and financial moves. The development of forward-looking indicators is to accompany primary short-term statistics and to summarize the results in an easily understandable way for policy and decision makers. While the individual components are certainly important on their own, the aggregate indicator could also describe a broad overall, though less nuanced, picture of recent and possibly anticipated economic activity that it relates to.
- 3. The Ministry of National Economy, a primary producer of economic statistics in the Sultanate of Oman, is currently developing some of these indicators. We are mainly adapting existing methodologies from other countries and trying to apply local approaches that suit the domestic and regional economic development. This work will continue at the Ministry and we hope that international guidelines for compiling relevant short-term economic and financial statistics will soon evolve.

# **Flash GDP**

4. The development initiative of "Flash GDP" estimates or a quick "First Estimate" for quarterly National Accounts at current prices came from internal needs to monitor the economy. Due to the ease of relatively accurately covering the hydrocarbon sector's significant share in a timely fashion, the effort has been concentrated in improving the measurement of the non-hydrocarbon sector. While the work on improving the accuracy of the first estimate is still ongoing, few promising developments have been established that will help both improve flash estimate, produce other independent short-term indicators on their own, and to improve the quarterly and annual National Accounts.

## What is the Omani Flash GDP?

- 5. It is the first estimate of recent overall economic activity, using the concepts of the System of National Accounts. It gives the estimate of year-on-year quarterly development of value added at current basic prices. It is compiled for main economic activities using partly incomplete data that usually requires imputations for the latest month of the quarter.
- 6. The Flash GDP in Oman is calculated using the production approach 10 days after the end of the quarter by short term indictor, administrative data, price statistics, monthly and quarterly survey results monthly financial statement of the large enterprises.
- 7. The Ministry started a monthly Manufacturing sector turnover survey and plans to extend it to other activities (i.e. construction, retail and wholesale trade, services). The manufacturing sector turnover survey is mainly used for currently developed monthly Index of Industrial Production which estimates the constant price volume changes of industrial output.
- 8. Oil and Gas sector and accompanying manufacturing sector (oil refining, LNG and manufacturing of petrochemicals) account for some 50% of the GDP. While the volumes and prices are available on monthly basis. Hence monitoring the recent and projecting the likely near-future development of the sector is crucial.
- 9. The Table 1 below describes the primary data sources and estimation methods of key activities in the flash GDP estimate. The following chart indicates the magnitude of the overall revisions between the flash estimate and the final (non-revised) quarterly estimates.

Activity	GDP share	Primary data source / estimation method	
Oil and Gas	41%	Actual data on quantity produced and the	
		corresponded prices from Ministry of Oil and Gas	
Refining and	7%	Monthly Financial statement from the producers	
petrochemicals			
Manufacturing	4%	Turnover estimates, export values/quantities	
Construction	6.8%	Production survey, labor statistics, construction	
		material index	
Services	41%	Production Survey	
Etc.		Ministry of Finance, Sectoral Ministries	

#### Table 1. Flash GDP methodology

#### **Preliminary results**

10. The accuracy of the first estimate has so far been acceptable. The average revision rate of the annual total value added change from the first estimate to the final quarterly release has been just around two percentage points in a high volatility environment. The Ministry continues evaluating the accuracy and hopes to make the flash GDP series available for external users during next year.

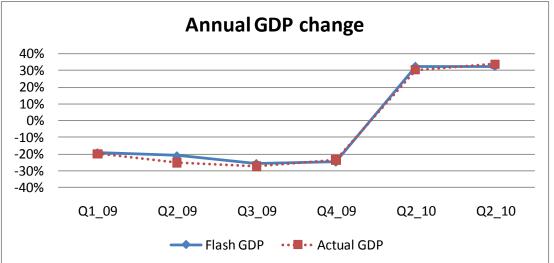


Chart 1. Annual GDP changes (comparing the same quarter year before)

11. The Flash GDP will benefit from other developments in economic statistics. In particular, the monthly industrial production index and turnover indices will improve the reliability of both the flash estimate and the final National Account aggregates.

#### **Business Confidence Survey**

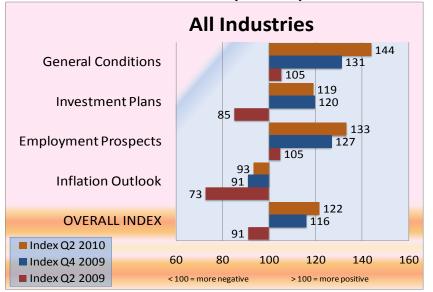
12. The Ministry has conducted three bi-annual Business Confidence Surveys and is at the moment conducting the latest, fourth survey. Top management of some 160 largest non-oil and gas sector top corporations are surveyed for their outlook of the past quarter and the following quarter. The companies represent six important non-oil industries: Manufacturing; Construction; Banking, Insurance and Finance; Retail and Wholesale trade. Hotels and Transport Industries were added to the latest two surveys. The objective of the survey is to get a quantifiable, first-hand sense of the current market sentiment directly from the decision makers at top businesses and, beginning in 2011, to follow the changes in these sentiments through a periodic quarterly survey.

## What it is?

13. The survey inquires the Omani business leaders' outlook on the following key business activities: General Business Conditions, Investment Plans, Employment Prospects and Inflation Outlook. Sub-indices are calculated for these activities by industry based on the data collected using a simple 10 question survey questionnaire. An aggregate general confidence measure is also compiled. This overall balance score (diffusion index) – Business Confidence Index – is calculated as the difference between the percentage of all positive and negative answers in all four areas. The indicator values below 100 mean that more negative than positive replies were recorded, whereas values above 100 indicate that more positive than negative replies were recorded. This gives the indicator a possible scale from 0 to 200.

#### Latest results

14. The three surveys have shown a gradual improvement in overall index. Only inflation outlook indicates a continued decrease, meaning that the top managers expect price and fees for their goods and services to decrease. The results shed also light into the differences between that various industries perceive to have. The following chart illustrates the aggregate results for the main key business activities across all industries.



#### Chart 2. Business Confidence Survey summary results

# **Composite Economic Indicator**

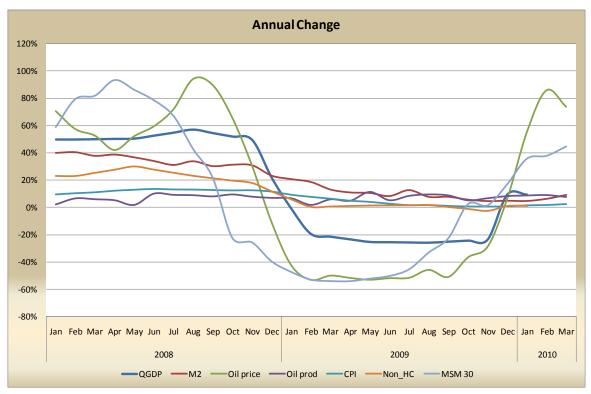
- 15. Composite Leading Indicators try to capture the essence of a set of forward-looking data and summarize the results in an easily understandable way for policy and decision makers. While the individual components are certainly important on their own, the aggregate indicator could still describe a broad overall, however less nuanced, picture of recent and possibly anticipated economic activity that it relates to.
- 16. The Ministry proposes to first compile and collect a set of potential, existing or soonto-exist indicators. This work is currently under ongoing, trying to produce these potential different indicators' historical series as far back as possible. After that an explicit or implicit weighting system of a set of these indicators will be chosen and the indicator compiled for the recent past, to the extent possible.
- 17. The potential indicators so far identified for the MONE Composite Economic Indicator could include the following indicators. The weighting structure is only indicative at the moment, the final structure will decided at a later stage:

Table 2. Composite Leononite indicator structure with prenninary weights					
General	20%	Financial sector 30%			
Business confidence index	6.9%	Money supply, M2 10%			
Number of workers	6.9%	Nominal Interest rate 5%			
Total retail sales	6.9%	CPI inflation 5%			
Government revenue	6.9%	MSI stock market index 5%			
Hydrocarbon sector	30%	Foreign Direct Investment 5%			
Hydrocarbon sector Production	15%	External sector 12.5%			
Oil price, Oman crude monthly average price	15%	Total exports 6.25%			
Real Estate	7.5%	Total imports 6.25%			
Building permits, non-gov.	2.5%				
Hotel (4-5 star) revenue	2.5%				
<b>Construction Sector Business</b>					
Confidence Index	2.5%				

Table 2. Composite Economic Indicator Structure with preliminary weights

18. The weighing structure, as well as inclusion or exclusion of the Hydrocarbon sector to the overall indicators will need further discussion. In the graph below some of the potential indicators are drawn together with (possible) GDP-related response variable.

Chart 3. Annual changes of key variables, %



# **Way Forward**

19. The Ministry of National Economy will continue developing these indicators on their own right and hope to disseminate the results to all interested parties after reviewing the compilation practice and evaluating the indicator quality. They will add value to users of short-term economic data.

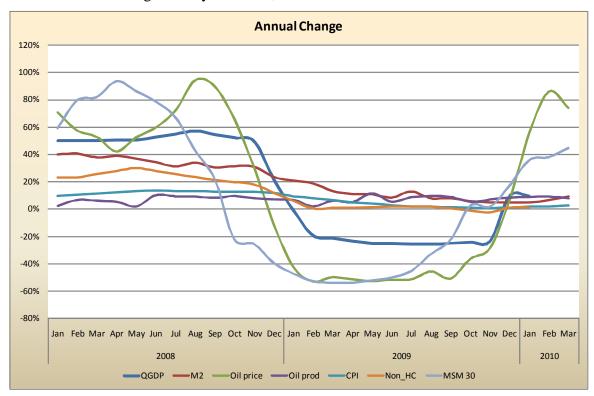


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