

Example:

Oman Technical Cooperation Project

Enhancement of the Institutional Capacity of the
Government of Oman for Industrial Development through
Improvement of the Statistical Infrastructure

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Outline of the presentation

Why Industrial Statistics and why UNIDO

Recent trends of the world industrial growth

The Project:

Problems to be addressed

Update of statistical methodology

Summary and Conclusions



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UNIDO statistical activities

- Collection, compilation and worldwide dissemination of industrial statistics as per mandate of UN Statistics Commission
- Support to UNIDO research programmes with timely, reliable and internationally comparable statistics
- Contribution to international statistics community in development of statistical methodology and international standard settings
- Technical assistance programme for developing countries for capacity building in the field of industrial statistics



UNIDO Statistical publications



UNIDO Data Quality:
A quality assurance framework
for UNIDO statistical activities



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Contents of UNIDO databases

Business structure statistics for manufacturing

1. Number of establishments
2. Number of employees
3. Wages and salaries
4. Gross output
5. Value added
6. Gross fixed capital formation
7. Share of female employees
8. Index numbers of industrial production

Mining and utilities (except 6-8)

MVA, GDP, Population

Aggregated indicators published in the Yearbook

Industrial demand supply balance

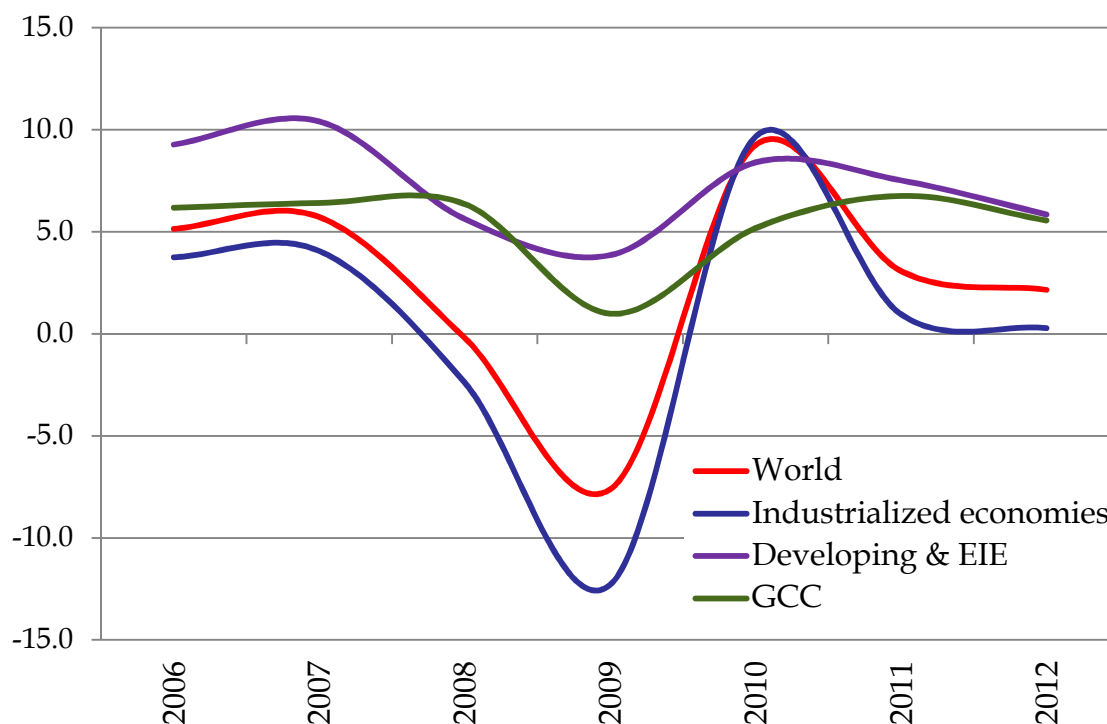
Apparent consumption =
Output + import – Export

Quarterly growth rates for manufacturing



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Recent growth trends of the world MVA



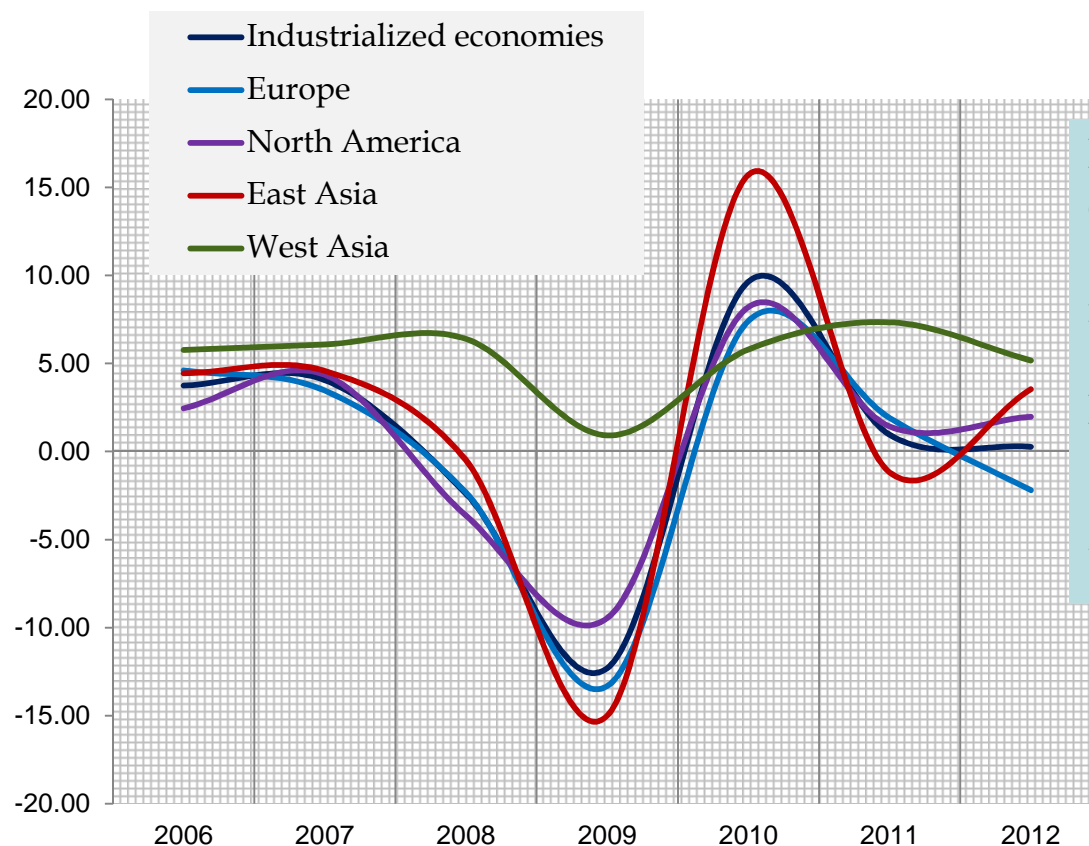
Weak recovery of the world industrial growth 2008/09 crisis

Relatively higher growth of developing economies

GCC countries maintained positive growth throughout last five years



Recent growth trends of industrialized countries by region



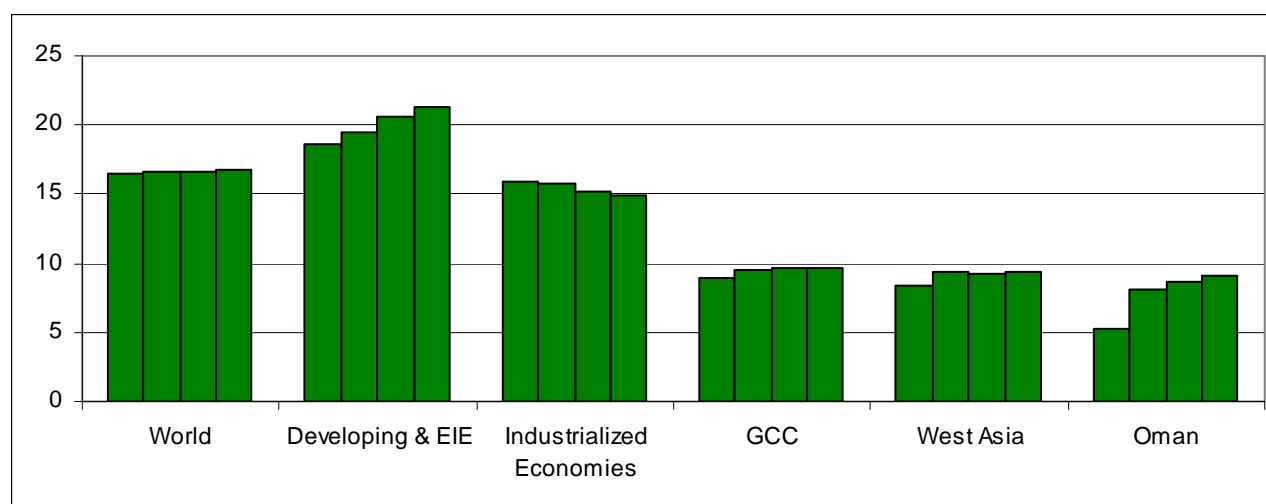
High fluctuation in East Asia, especially due to Japan, which suffered recession plus Tsunami in 2011

Prolonged recession in Europe (five years of stagnation)

Least fluctuation in West Asia



MVA share in GDP by country groups (2000-2012)



- Data are given for time points of 2000, 2005, 2010 and 2012
- Industrialized countries have tendency of declining MVA share
- Increased share of service sector – in US and Europe due to outsources of production facilities to developing countries



Overview of manufacturing of GCC countries

value at constant prices of 2005

	Annual growth rate, in %	MVA per capita US\$	Share in GCC total In %	Four GCC countries are classified to industrialized and two to emerging industrial economies
Bahrain	4.0	1884	3.0	Saudi Arabia accounts for nearly half of the industrial production of GCC
Kuwait	5.6	2323	7.8	
Oman	7.6	1362	4.6	
Qatar	5.1	4122	9.1	
Saudi Arabia	5.7	1405	46.7	Qatar is the most industrialized economy in GCC group
United Arab Emirates	5.2	3087	28.8	
GCC	5.5	1884	100.0	

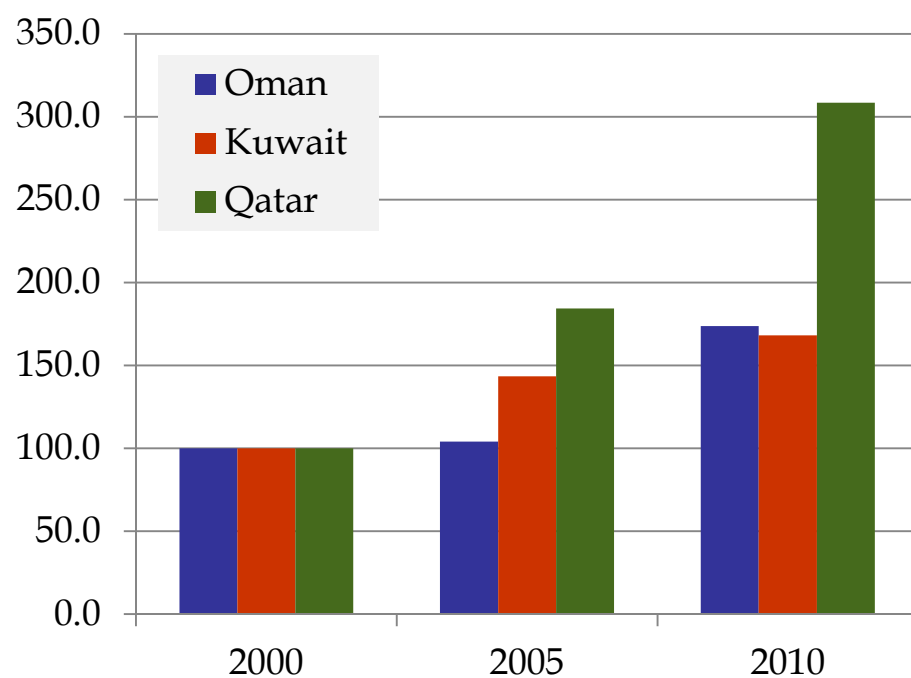
Growth figure 2012/2011, other figures for 2011



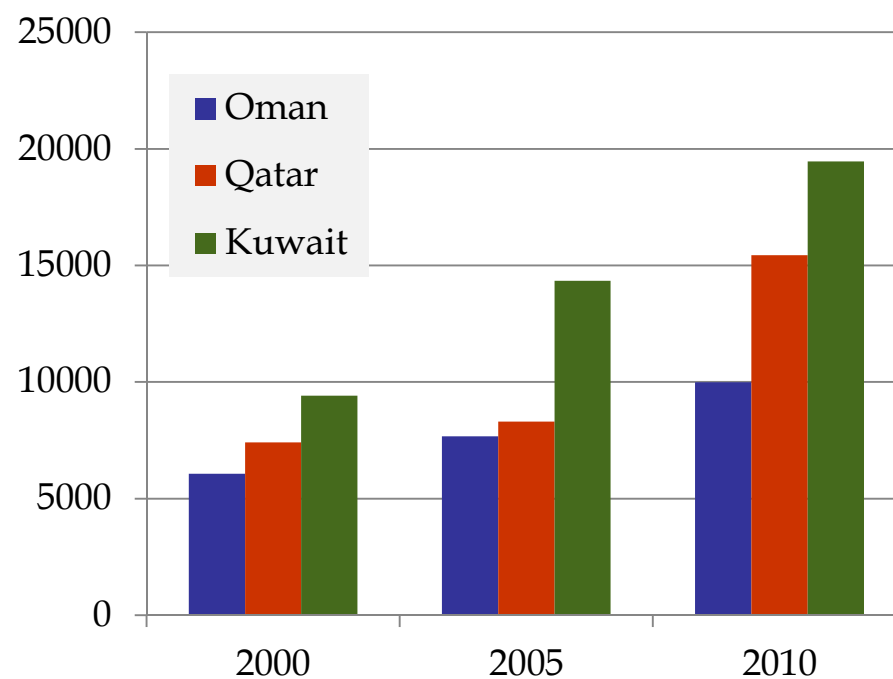
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Employment and remuneration

Number of employees in manufacturing
2000=100



Annual wages and salaries per
employee in US\$



The Project: Background

- Since 1993 - a statistical system operated by the Directorate General of Industry, at the Ministry of Commerce and Industry (MCI);
- This system implements annual industrial surveys of the active industrial establishments in the Sultanate;
- Since 2002 - covering only those with more than 10 employees;
- The data collected since 1993 are available in the statistical database and have been published in various annual publications;
- This exercise uses a system that was created with support from the Japanese Agency for International Cooperation (JICA).



The Project: in brief

- Executing agency: UNIDO
- Counterpart: The Ministry of Commerce and Industry (MCI)
- Project start: 1. June 2013
- Project duration: 18 months
- **The project could serve as a template for follow up projects in the other GCC countries**



The Project: Problems to be addressed

- Annual establishment surveys based on a complete and up-to-date **business register** of establishments be implemented regularly in accordance with international standard methods of **data collection, data processing** and **classification**.
- A national statistical system - able to produce **internationally comparable data** on structural business statistics and key short-term indicators (e.g., quarterly index numbers of production) for industry.
- Needed by MCI as well as by other national and international public agencies dealing with the economic development of the country, the country's manufacturers and business people at large and potential foreign investors



The Project: Problems to be addressed

- The current system has to be revised and brought to the level of best international practices
 1. Statistical methodology
 2. Database and IT system
 3. Development of performance indicators for policy relevant analysis
 4. Building staff capacity



The Project: 1. Statistical methodology

- In the time since 1993 a lot of changes have happened in the area of statistical methodology:
 - International Recommendations for Industrial Statistics (IRIS) 2008
 - ISIC Revision 4 replacing ISIC revision 3.1
 - The System of National Accounts (SNA) 2008 which replaces the SNA 1993
 - International Recommendations for the Index of Industrial Production (IRIIP) 2010 - to replace the Index Numbers of Industrial Production manual from 1950



The Project: 1. Statistical methodology

- These new updated methods have to be implemented in the statistical system by
 - Implementation of Business register (manufacturing)
 - Implementation of ISIC Revision 4
 - Back-casting (back to 2005, aggregates)
- Redesign of the questionnaire for annual survey;
- Review and possible modification of the data collection process and
- Review and possible modification of the data dissemination process



The Project: 1. Statistical methodology

- ISIC Revision 3 → ISIC Rev. 4
- Past data available since 1993 → back-casting back to 2005
- No dedicated business register → BR implemented, ISIC Rev.4
- Annual industrial survey: establishments with 10 and more employees → completed, reference year 2012
- Data stored in survey format, not as time series → new dissemination system under development



BR recoding: numbers in manufacturing

Note 1: Establishments with 10 and more persons engaged

Note 2: 5 from the 28 establishments for which manual recoding was necessary, were wrongly coded in ISIC Rev. 3

Basis	Number of classes	Percentage of classes	Number of establish.	Percentage of establish.
1-1	107	90%	1220	98%
n-1	0	0%	0	0%
1:n	12	10%	28	2%
n:m	0	0%	0	0%
TOTAL	119	100%	1248	100%



Classes to be recoded manually

#		ISIC Revision 3		ISIC Revision 4	
1	9	1549	Manufacture of other food products n.e.c.	1075	Manufacture of prepared meals and dishes
				1079	Manufacture of other food products n.e.c.
2	1	1711	Preparation and spinning of textile fibres; weaving of textiles	1311	Preparation and spinning of textile fibres
				1312	Weaving of textiles
3	1	1730	Manufacture of knitted and crocheted fabrics and articles	1430	Manufacture of knitted and crocheted apparel
				1391	Manufacture of knitted and crocheted fabrics
4	1	2219	Other publishing	5813	Publishing of newspapers, journals and periodicals
				5819	Other publishing activities
5	5	2429	Manufacture of other chemical products n.e.c.	2029	Manufacture of other chemical products n.e.c.
				2680	Manufacture of magnetic and optical media
6	2	2912	Manufacture of pumps, compressors, taps and valves	2812	Manufacture of fluid power equipment
				2813	Manufacture of other pumps, compressors, taps and valves
7	



The Project: 3. Performance indicators

- Development of performance indicators for policy relevant analysis:
 - Based on the collected data,
 - Monitoring and measuring the overall performance of the industrial sector
 - Monitoring and measuring the performance of the divisions of the industrial sector
 - Applicable for policy relevant analysis



The Project: 3. Performance indicators

- IRIS-2008 has broadly defined three types of performance indicators, namely:
 1. growth rates;
 2. ratio indicators, and
 3. share indicators.
- Performance can be evaluated:
 - at firm level,
 - at the ISIC branch level and
 - at the level of industrial sector in relation to other economic activities or to the economy as a whole



The Project: 3. Performance indicators

- Dimensions of industrial performance:
 - **Productivity:** MVA per capita, VA per employee, VA per hours worked, VA per unit of capital, capital per employee, multifactor productivity;
 - **Structural change:** change in sector share, coefficient of absolute and relative structural change, integral coefficient of structural change, rank correlation, coefficient of diversification, regional disparity index, position of manufacturing in economy;
 - **Competitiveness:** manufactured exports per capita, sector shares in manufactured exports, export concentration index;
 - **Composite index of industrial performance** – the UNIDO Competitive Industrial Performance (CIP) index, which comprises several indicators of industrial performance.



Summary

- A project to revise the statistical system of the Industrial Information Department and bring it to the level of best international practices
- Duration 18 months; the main activities are to be carried out in 2013
- The main components of the project are:
 - Revision of the statistical methodology
 - Development of a new database and software system
 - Development of indicators for industrial performance
 - Staff capacity building



Thank you!

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