



# International seminar on Timeliness, Methodology and Comparability of Rapid Estimates of Economic Trends

27-29 May 2009, Ottawa, Canada

**Quarterly National Accounts**  
**Timeliness, Reliability and accuracy**  
**Morocco**

15 May 2009

First off all, I would like pay homage to organizers of this prominent seminar whom results will surely clarify us on the good practices and probably the optimal issues. Timeliness, methodology and quality of short term indicators are topics with which we are constantly worry. We have done a part of way and the longer one is still to do. Morocco adhered to the special standard data dissemination of the International Monetary fund in October 2005. This adhesion was done on the basis to reach a minimum of timeliness, reliability and quality required by the standard.

High Commissioner of planning, as a public agency designed to collect, produce, handle and disseminate data, is the focal point of the national statistical system and have the legal, material and human means to place at the disposal of the decision makers, international institutions as well as the various users, the statistics available as soon as possible.

The statistics of the short term economic tendencies evaluation in Morocco come from several horizons at the national and regional level. They cover the various aspects of the economic and financial activities as well as their inter connexions within the real sector, the fiscal and financial sectors and finally the rest of the world.

The importance of the accountant statistics for establishing national economic policies is an undeniable priority for the Moroccan decision makers. In practice, the will to reinforce the consequent national statistical system is embodied and works aiming improvement and levelling statistics are implemented.

### **National accounts**

Moroccan national accounts have been establishing annually since 1970 according to the system of national accountancy of 1968. As such accounts were limited to the activity by industry at an aggregated level and to consolidated accounts of the nation by expenditure components according to the basic year 1980.

Like other countries, Morocco carried out the modernization of its national accounting by implementing the SNA 1993. This was necessary to:

- give a description of the most relevant economic reality and most complete and reliable economic data, updated and established according to international standards;
- make the results of Moroccan national accounting more comparable in time and space;
- provide a complete set of macro economic accounts to meet the needs of both users and decision makers of the private and public sectors.

This work led to the development of the complete sequence of the accounts and synthesis tables. Those were elaborated in a great detail which was allowed by the collection and the treatment of a great number of statistical and countable data from different sources. However, this information is available only with a long time. Thus for example, the accounts of the (2007) year were established from still incomplete data. These accounts are thus qualified the “provisional”. In practice, the national accountants limit themselves for two revisions each year. Indeed, before establishing the provisional accounts, they revise the two last year’s accounts according to new information they have.

Currently, accounts of 1998 to 2005 years are qualified final. The accounts 2006 (semi final) and the accounts 2007 (provisional) will be revised in 2009. Moreover, it is necessary to note that the provisional accounts are established on an aggregated level of the classifications in order to provide quickly fast results to the various users. However, the compilation methods of the provisional accounts differ appreciably from those retained for the final and semi final versions.

By the way, the implementation of the SNA93 constituted an important phase to rock towards a better statistical system in terms of quantity and quality. Indeed, three major actions were applied namely:

1. carrying out heavy surveys and census for the basic year:

- Surveys of structure in manufacturing, mining, energy, the building and public works;
- survey about the informal sector considering its importance in the economic activity;
- survey on standard of living
- survey on the households consumer expenditure
- survey on investment in the Public administrations.

2. the reform of the existing surveys in order to adapt them to the new needs for the national accounting such as the geographic coverage and the improved nomenclatures, in particular the employment survey and , manufacture production survey.

3. The sensitizing and coordination with the producing partners of the statistical data like the administrations and the publicly-owned establishments, the professional associations and the governmental organizations.

Currently, a system of the annual national accounts is operational. Those cover:

- The balance of the goods and services;
- Accounts of industries;
- Accounts of the institutional sectors;
- The supplies and uses table;
- The integrated economic accounts table;
- The social accounting matrix;
- The financial transactions table;
- The satellite account of tourism.

## **Towards a system of timely, reliable and accurate quarterly national accounts**

The data at low frequencies (in particular annual) have always constituted the essential support of the diagnosis and decision making. This is due to the more or less stable rhythm of the economic evolution which functions in the same logic of this frequency.

Currently, the analysis and monitoring the current economic situation are increasingly depending on synthetic and reliable information of short period and available as soon as possible (quarter or month).

In our country, like everywhere else in the world, we are aware , more and more, that the relevant analysis of the business tendency, the anticipations based on tools of short term forecasting such as the projection based on the availability of synthetic sub annual data allow, first of all, the follow-up and the apprehension of the economic tendencies. The phenomenon is crucial when it is issue of having synthetic data reflecting a coherent framework of relations between various categories aggregates such as the national accounting.

This awareness, combined with the important quantity of sub annual used in disparate ways, resulted, in practice, in the adoption of a strategy of compilation of the QNA. The principle consists in selecting relevant indicators and adequate methodology, in a first stage, then progressively improving them to match the qualitative and quantitative requirements.

On a short basis, a great lack of availability of the information exists, especially when it concerns those which come from surveys like households consumer expenditures, wholesale and retail trade, etc. Further, there is no access to VAT file which contains many potential indicators like turnover by activities. Meanwhile, there are many

statistics which exist at the source but not communicated for use or not still complete. So big effort must be done to locate data and request it or simply to move searching it.

The objective of the QNA in Morocco is naturally to provide a picture of current economic developments to the decision makers, because they are more opportune than the ANA and at the same time more significant than the business hard indicators.

However, these accounts must be punctual, coherent, precise, reliable and reasonably detailed, in order to be useful for assessment, analysis and follow-up of the early economic events. Furthermore, by providing quarterly data relating to the macroeconomic aggregates within a coherent countable framework, the CNT allow the analysis of the dynamic relations between these aggregates. Thus, the CNT, being currently built on the basis of quarterly indicator usually available in time series, provide the necessary tools to the analysis of the macroeconomic cycles, the detection of the turning points and economic modelling.

Practically, the compilation of the CNT according to the SCN93 and the basic year 1998 started actually in 2007. Currently, it is the approach of production which is applied given the availability of the necessary sub annual indicators, and a GDP breakdown by industries is obtained. However, in parallel works are undertaken to extend these accounts to the expenditure components, income and investment, financial and institutional sectors. This will require certainly the search for other data and the realization of other quarterly or monthly light surveys which would provide the adequate indicators.

The economic growth is approximated quarterly at the level of the principal sectors of economic activities. The overall quarterly GDP constitutes the aggregative index of economic evolution in the short term. It permits to know the possible turnings in case of recession or expansion and their rhythm of evolution. However, it always does not

reflect the dynamism of the national economic activity given the frequent and important fluctuations of agriculture. For this purpose, we prefer divide the GDP in two components, agriculture and out agriculture, to determine the tendencies of evolution.

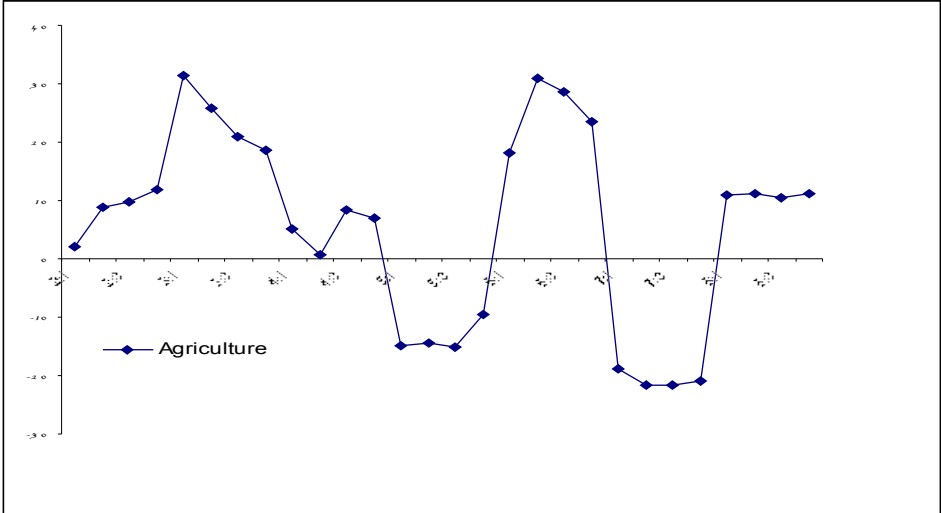
The quarterly accounts in volume are compiled from sub-annual gross volume indicators which are firstly adjusted seasonally, then an econometric method is applied to determine historic and current quarterly figures.

**In a sector-based configuration one can note the following characteristics:**

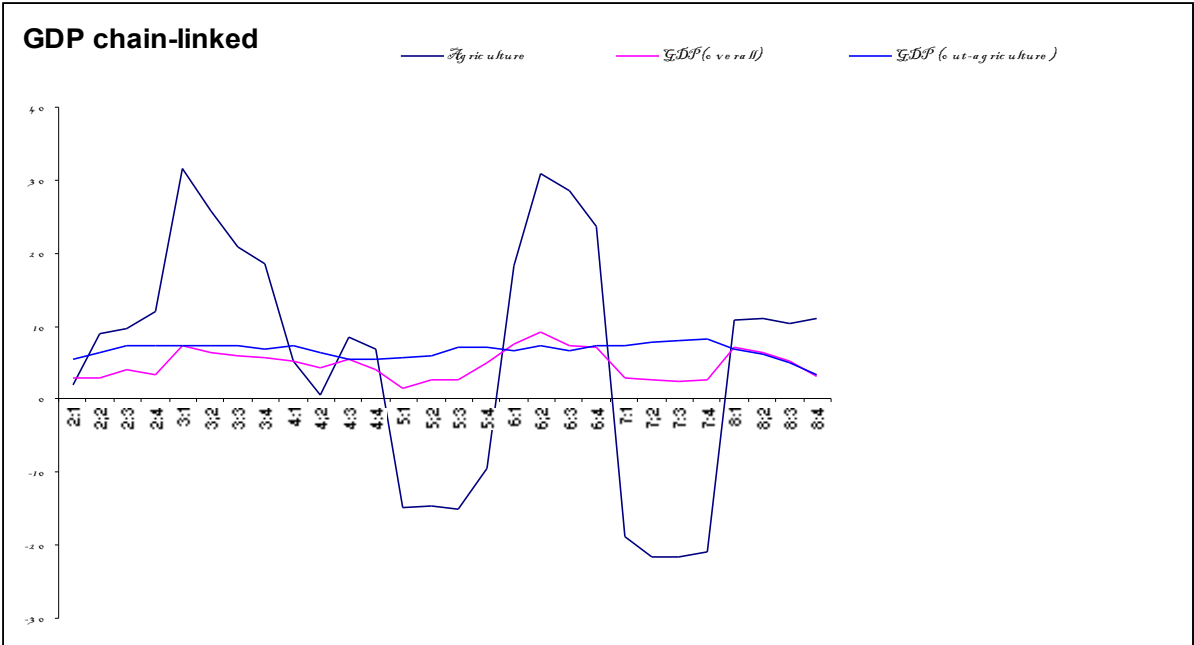
### **Agriculture**

It forms a large component of the national economy. Its contribution in the GDP varies between 13% and 16% dependently of the year climatic conditions and thus its high performance as its low one straightforwardly direct the evolution of the economic growth in a direction as in the other. However, this sector is prevailed by cereal cultures of which the production process is spread out over all the agricultural campaign and strongly depends on the climatic conditions which occur during many periods of the year (beginning, medium and end of the campaign). The estimates of the annual indicators of production in this sector are made in a progressive way during the year, by ministry of agriculture, using a set of surveys concerning the acreage, outputs, types of cultures, inputs of production, prices by product as well as the animalist production. These data make it possible to estimate the growth of the agricultural sector during the year. Then, quarterly value added is calculated on the basis of preliminary annual estimate as well as on a quarterly scale based on a quarterly structure of the inputs defined before by the Division of the quarterly accounts and the experts of the ministry of agriculture. We allot to each quarter a harvested production although this latter occurs during one given quarter. Employment in this sector is provided by the national labour survey carried out each quarter by statistics Directorate in both urban and rural areas.

### Value Added evolution

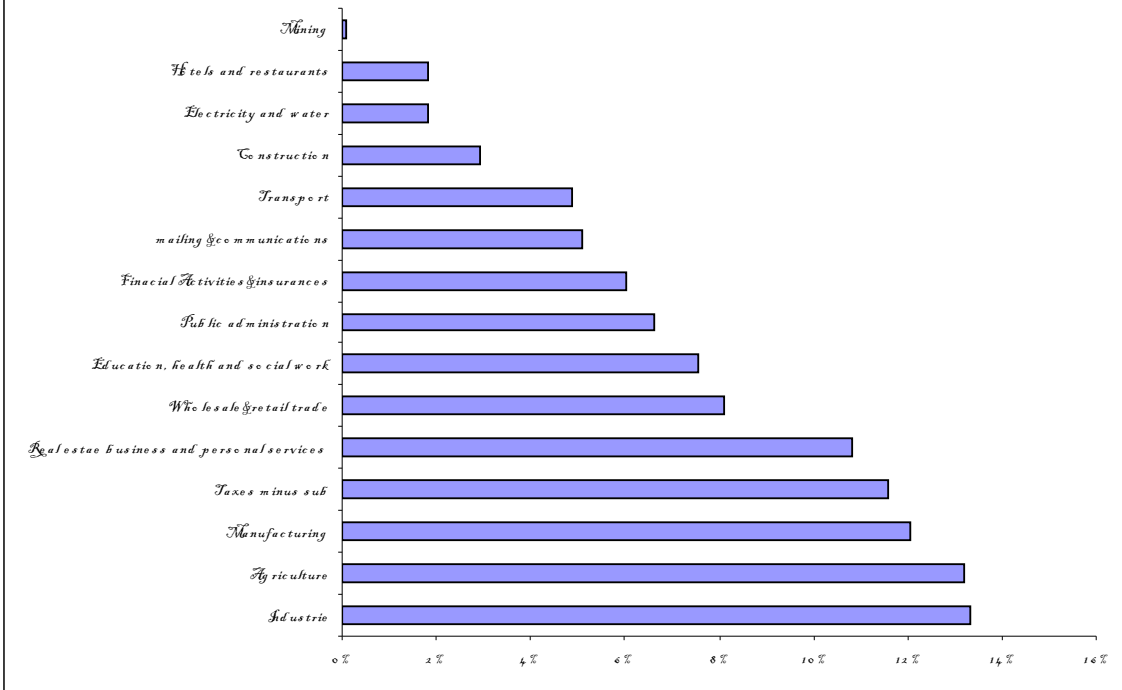


### GDP evolution





### Contribution structure 4th quarter 2008



### Manufacturing, mining and energy

The Statistic directorate carries out:

- quarterly survey about the manufacture production and thus calculates a quarterly production indices relating to manufacture, mining and energy. A monthly index of these sectors is under development and will be in use soon.
- survey of quarterly economic conjuncture in manufacturing and construction which point out orders, tendencies and the projections of the next quarter.
- quarterly households survey to measure “the moral one and the perception of the households of the economic situation and the purchasing power”. This one is under development and will become available soon .
- monthly survey about the price index of the industrial production.

The quarterly added-values of these sectors are compiled by sub industries of these

sectors, in volume and value. The evolution of employment is also provided by the labour survey.

### **Construction**

The building permits constitute an important base for estimating tendency in the construction sector. However, they come from the local government agencies with much delay and then exploited at the Statistics directorate.

The indicator used in the quarterly national accounts is an aggregative index made from the inputs of the industries used in construction drawn from of the annual input output table. The price index of construction is also established on the basis of inputs of this sector. The manpower is determined by the labour survey.

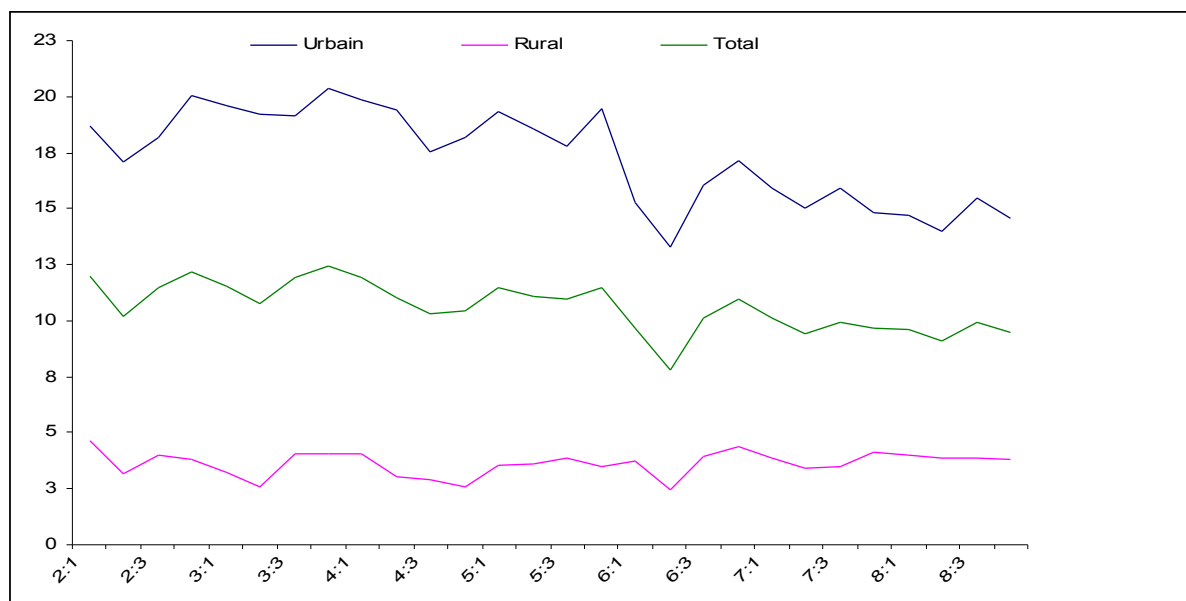
### **Inflation**

The trend of the consumer prices, the DS monthly carries out a survey on retail prices. That makes it possible to have the cost of living index (or consumer price index according to the current reform under development).

### **Labour survey**

Detailed figures on labour are disseminated each quarter concerning unemployment, working population, by urban and campaign areas, by sex, etc..

## Unemployment rate



## Financial sector

The analytical accounts of the central bank and other banks provide a lot of monthly indicators to measure the intensity of crisis in particular the movement of the credits allocated to the economy, the interests received and poured and interest rates.

Casablanca stock market has developed on 2002 two capitalization indices: MASI(Moroccan All Shares Index) which includes all securities of the share type listed on the Casablanca Stock Exchange, and MADEX(Moroccan Most Active Shares Index) which comprises most active listed securities in terms of liquidity.

## Fiscal sector

The government transactions statistics are given on monthly basis especially expenditure, revenue, investment, budgetary deficit by central government. These statistics form indicators used in the context of assessing the economic and financial crisis.

## **External sector**

Several aspects of the economic situation are in relation with the rest of the world and a battery of external sector short term statistics are available to appreciate their impacting effects. Essentially statistics of balance of payments like receipts of tourism and those of Moroccan residents out of country and merchandise trade (imports and exports).

The time of publication of the quarterly accounts is three months after the quarter of reference. This time is still long, however it is the cost of a better quality of result due to nature of indicators used in their calculations which are generally more exhaustive within these deadlines. The use of partial or estimated information, without solid methodological support, would reduce the lead times thus with applying frequent revisions that users couldn't generally understand.

The data used for compiling quarterly GDP come from several sub annual sources in particular surveys which were already operational, in particular the industrial production, which gives the index of industrial production, employment, economic tendency, the price index of consumption and the index of price to the industrial production. One of hampering difficulties is the low response rate for manufacturing production survey and business tendency one. This is sometimes a source of lack of precision. Big efforts are done continually to deal with by sensitising companies to increase and improve their fulfilment of the questionnaires.

Morocco had taken a commitment within the international community on the statistical cooperation field and does not spare any effort to provide relevant information likely to contribute to face the economic crisis and financial following the example other countries of the international community.

The subscription of Morocco to the special standard of data dissemination of the IMF in is a good illustration.