



Surveys conducted by the central bank of Morocco : an overview

8th Meeting of the Steering Committee of the Arab Statistics Initiative
“Arabstat”

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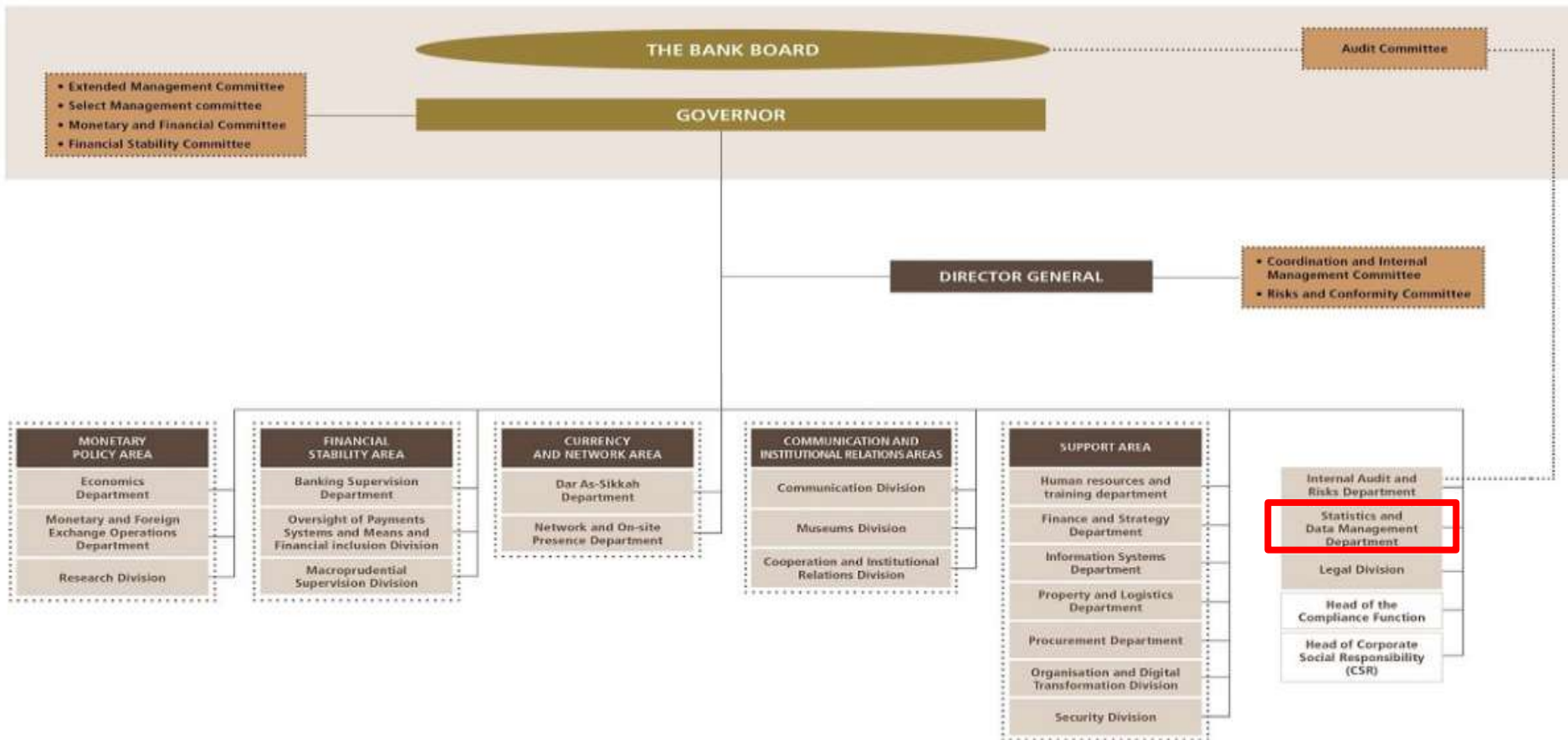
10-11 November, 2021

I. Morocco's Central Bank

II. Business Survey

III. Inflation Expectations Survey

IV. Bank Lending Survey



The primary objective of monetary policy in Morocco is price stability. In the absence of pressures on prices, the Bank may use its instruments to support growth or contribute to the achievement of other economic objectives.

I. Business Survey

II. Inflation Expectations Survey

III. Bank Lending Survey

Launched in 2006 to provide:

- ✓ Early information about tendencies in activity, demand and production capacity in industry
- ✓ Information on financing conditions of enterprises
- ✓ Information on what business leaders are seeing and planning
- ✓ short-term forecasting of the industrial outlook.

Methodology

- **Population reference** : Legal units of the industry field with more than 10 employees
- **Sampling frame** : Survey of industrial enterprises (8 600 industrial enterprises)
- **Sampling method** : The sample is stratified **by turnover and activity sector** in accordance with the Moroccan classification of activities
- **Sample size** : **400 industrial firms** covering 5 groups of activities (sectors)

Methodology

- **Sectors covered :**
 - Agri-food industry
 - Textile and leather industry
 - Chemical and paracheical industry
 - Mechanical and metallurgical industry
 - Electronics industry
- **Sample representativeness :**
 - **60% of the national industrial production**
- **Treatment of non-responses :** constant sample method for qualitative questions (carry-forward)



An enterprise is included in the constant sample if it has responded to that particular question in at least two of the last three surveys. Then, the enterprise response to Survey M-1 is copied to Survey M.

Response rate = 70%

■ Questionnaire :

- **Monthly-survey questions** : production ; capacity-utilization rate ; sells and exportations ; demand level ; Finished-product inventories ; selling prices ; expectations for production, sells and selling prices ; Inflation.
- **Quarterly-survey questions** : Overall business climate; conditions and costs production ; cash flow position; financing conditions.

■ Weighting : two stage aggregation

- 1) At a strata level, individual responses are weighted using turnover (supplied annually by the enterprises)
- 2) Strata aggregated results are aggregated using weights computed from the annual enterprise survey.

Collecting responses

Communicate questionnaire to firms through central bank agencies



Answers are collected via specific platform

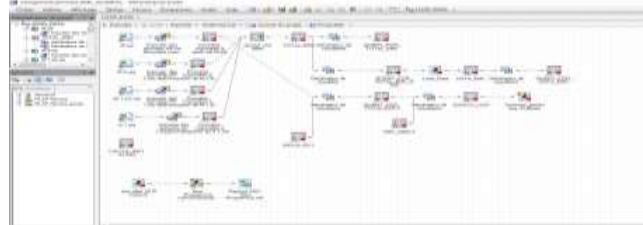


The screenshot shows a web-based interface with a table of data. The table has multiple columns, including what appears to be company identifiers and various survey responses. The interface is in Arabic and includes the Bank Al-Maghrib logo.

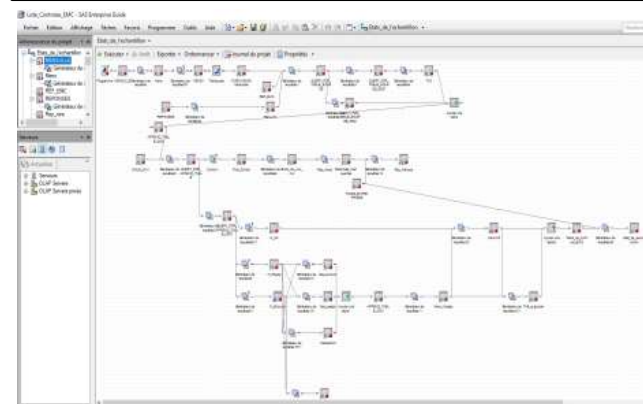
M+20days

Processing

Loading DATA



Control/Reliability of individual declaration



Agregation

Analysis and restitution to participants

Notes



The screenshot shows a document with text in Arabic, likely containing notes or instructions related to the survey process. It includes the Bank Al-Maghrib logo and some headings.

Publication on the web site



Restitution to panel



The screenshot shows a document with a table of data, likely representing the restitution of survey results to the participating firms. It includes the Bank Al-Maghrib logo and some text in Arabic.

DATA ARE CHERGED IN THE DATABASES

M+25days

Business Survey

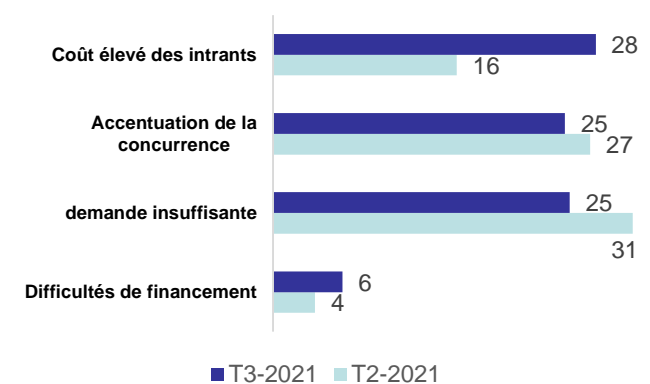
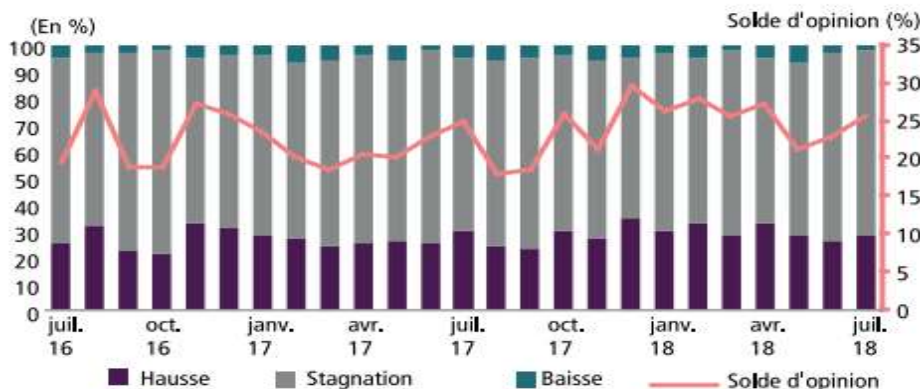
Keys points

■ Data collection

- Using the regional network of bank al maghrib
- First three weeks after the period of reference
- In addition to the platform, collection can be done By Mail or phone

■ Survey findings

- Bring to the monetary and financial committee information collected directly from firms to analyse conjuncture by subsector
- Published on the website of the institution & in monetary policy report
- A detailed version of the publication is shared with the enterprises.



Some challenges

- Lack of recent census of firms
- Difficulties to reach some firms especially with covid19 restrictions (response rate =60% rather than 74%)
- Concentration of firms in 3 main regions (more than 90%)→ no regional indicators
- Difficulties to integrate new question depending on the macroeconomic context (need time to explain to firms & to convince them to answer new questions)
- Non response (Poor awareness of the survey's importance; Statistical burden on businesses; High frequency of the survey...)
- Lack of coordination between public institutions

Why?

- They matter because actual inflation depends, in part, on what we expect it to be
- Measure the degree of anchoring of inflation expectations within the target (in case of inflation targeting regime) or the inflation forecast published by the central bank
- Contribute to forecast inflation once central banks are interested by indicators forward looking
- How “Ben Bernanke” explained the importance of anchoring inflation expectations in a 2007 speech: **“the extent to which [inflation expectations] are anchored can change, depending on economic developments and (most important) the current and past conduct of monetary policy. In this context, I use the term ‘anchored’ to mean relatively insensitive to incoming data.** So, for example, if the public experiences a spell of inflation higher than their long-run expectation, but their long-run expectation of inflation changes little as a result, then inflation expectations are well anchored. If, on the other hand, the public reacts to a short period of higher-than-expected inflation by marking up their long-run expectation considerably, then expectations are poorly anchored.”

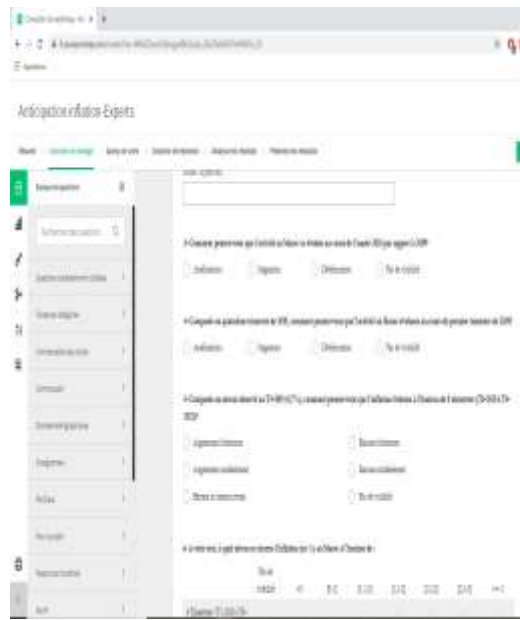
Launched in 2012, main characteristics :

- **Sampling frame** : list of EXPERTS from banks, insurance companies, stock broking companies and pension funds.
- **Sample size** : 130 person competent to respond to the questionnaire (Department manager, head of division, chief economist...)
- **Data collection** : Online
- **Questionnaire:**
 - quarter-to-quarter and year-to-year GDP growth (increase; decrease; no change)
 - Inflation rate expected one-year ahead, two years ahead and three years ahead { <0 ; [0,1] ; [1-1,5] ; [1,5-2] ; [2-2,5] ; [2,5-3] ; >3}
 - Inflation determinants : exchange rate; monetary policy; fiscal policy; oil prices...

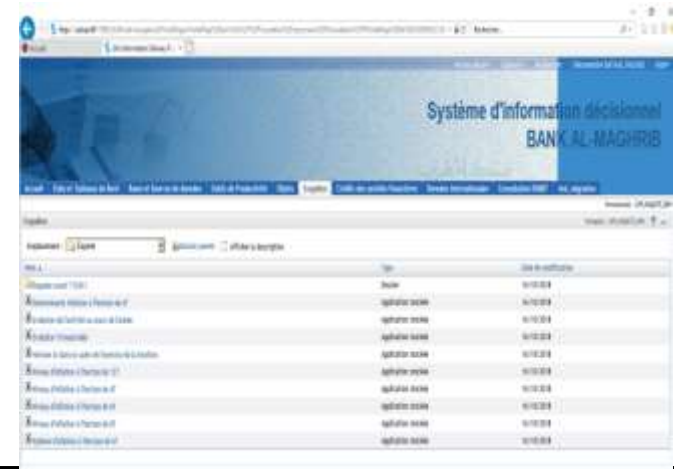
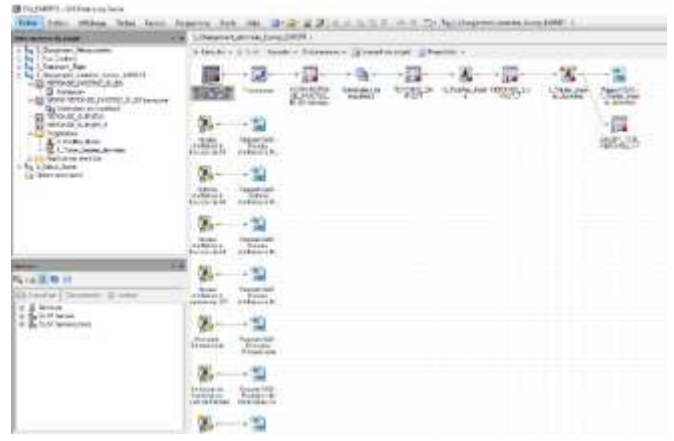
Collecting responses

Processing

Analysis and restitution to participants



« surveymonkey » Platform



- Note to MFC



- Restitution to panel



- Exploite in monetary policy report

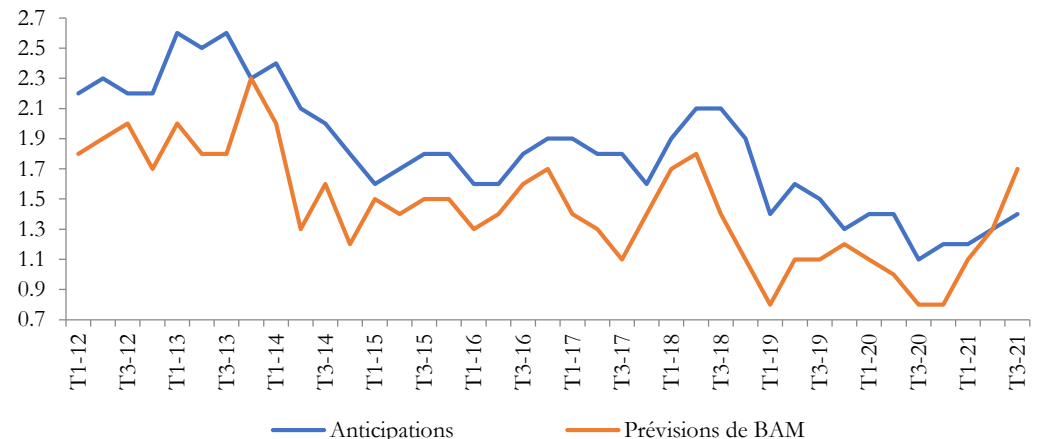
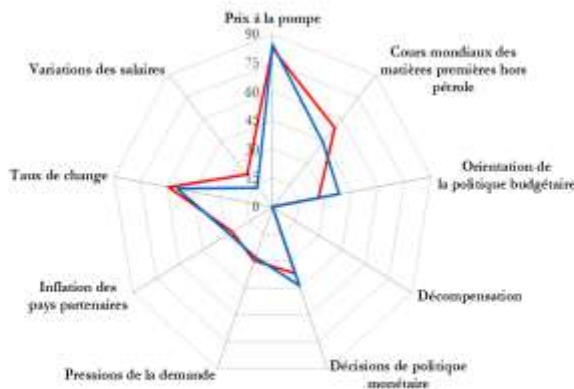


■ Data analysis

- For Inflation rate : mean of the center of intervals
- For GDP growth: Balance of opinion = % increase - %decrease

■ Survey findings :

- Submitted to Monetary and Financial Committee
- Submitted to the macroeconomics forecasting unit and price unit
- Published quarterly in the report of monetary policy



Inflations Expectations Survey

Some challenges

- Cover industrial firms/professors/household/
- How to communicate publicly about the results (almost complicated survey because forward looking driven)
- Difficulties in separating the expectations of professional experts from their personal perceptions of the future level of inflation
- Non response (Poor awareness of the survey's importance; ; ...)

Objectives

- Enhance the knowledge of financing conditions in Morocco
- Complement existing statistics on loans and bank lending rates with information on supply and demand conditions for both enterprises and households.
- Gather additional information on the impact of the crisis (COVID19) and of the central bank's monetary policy measures on banks' funding situation and bank lending conditions

Launched in 2013, main characteristics :

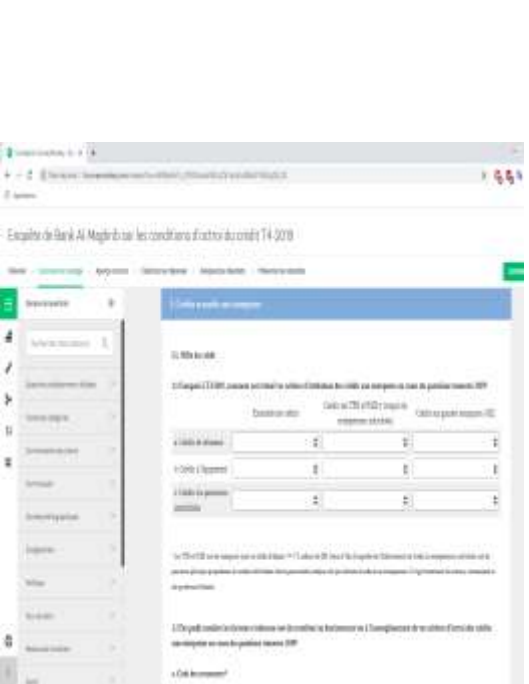
- **Sample size** : 12 most important banks (covering more than 97% of distributed credit)
- **Method of data collection** : Online questionnaire
- **Questionnaire** :
 - Questions on credit standards applied to loans to enterprises and households
 - ✓ Changes in credit standards over the past three months
 - ✓ Factors which have affected changes in credit standards over the past three months (cost of funds, pressure from competition and the perception of risk)
 - ✓ changes in conditions and terms for approving loans or credit lines over the past three months (bank's loan margin, the size of the loans, Maturity,...)

- Questions on demand for loans to enterprises and households
 - ✓ Demand for loans over the past three months by enterprises and households ;
 - ✓ Factors which have affected changes in demand over the past three months (financing needs, use of alternative finance,...) ;
- Expected changes in loans to enterprises and households over the next three months and current year.

Each question uses a scale of five possible answers, for example for change in credit standards:

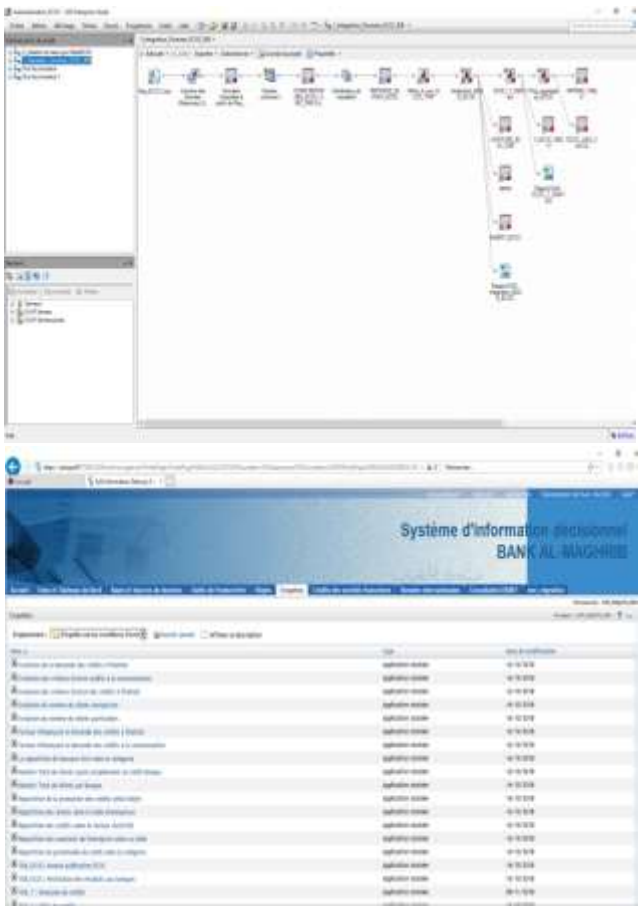
- eased considerably
- eased somewhat ;
- remained basically unchanged
- tightened somewhat
- tightened considerably

Collecting responses



« surveymonkey » Platform

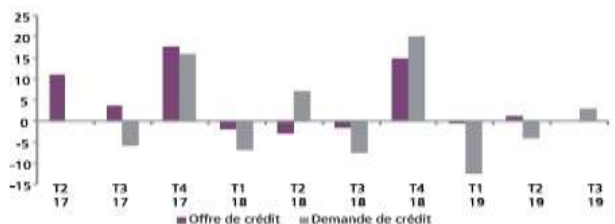
Processing



Analysis and restitution to participants



Graphique 3.10 : Evolution de l'offre et de la demande (Indice de diffusion)



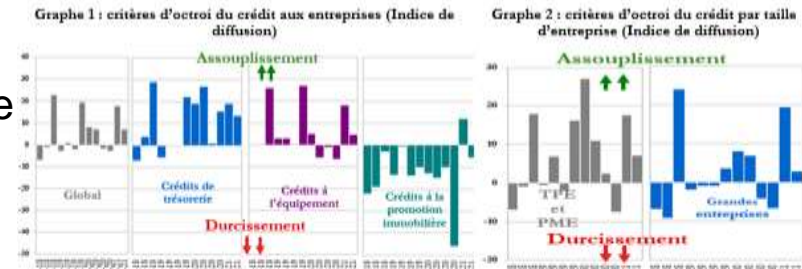
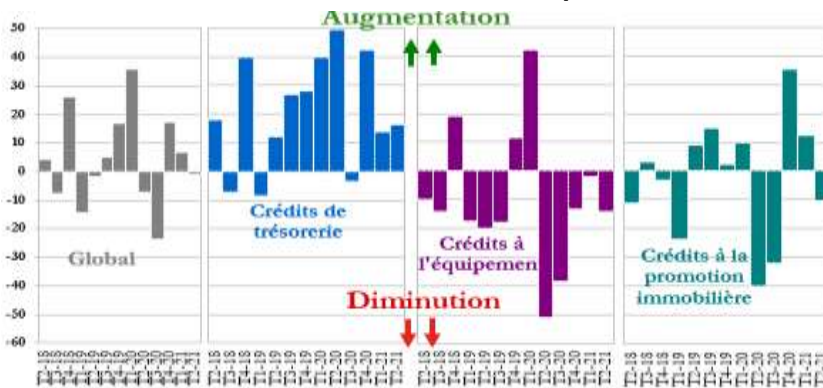
Data analysis :

- **Weighting:** bank responses are weighted using the amount of total outstanding loans.
- **Aggregation:** Diffusion index

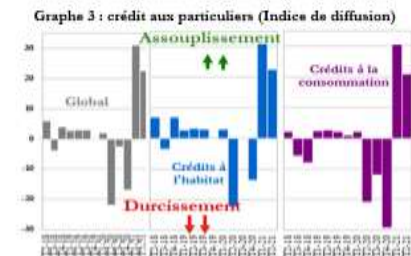
Diffusion index = (% eased considerably)*1 + (% eased somewhat)*0,5 - (% tightened somewhat)*0,5 - (%tightened considerably)*1

Survey findings :

- send to Monetary and Financial Committee
- Published in the report of monetary policy



Pour ce qui est des particuliers, les banques déclarent un assouplissement des critères d'octroi aussi bien pour les prêts à l'habitat que pour les crédits à la consommation, reflétée dans la hausse du montant du crédit accordé et dans la baisse de la marge des banques.



Some challenges

- Cover all deposit institution (more than banks)
- How to convince banks to answer question about their commercial strategy (manage confidential issues)
- Difficulties for the banks to separate their perception about the evolution of supply the demand credit with their real performance
- How to communicate publicly about the results – central banks messages
- Non response (Poor awareness of the survey's importance; ...)

Thank you

