SHORT-TERM ECONOMIC INDICATORS AT BANCO DE MEXICO

June 2002

I. Summary

Banco de México generates a set of short-term economic indicators that has proved to be useful in assessing the current business cycle and in generating forecasts. At present, these indicators cover the following areas: surveys of various economic groups (manufacturing firms, commercial firms and private sector economic consultants) on the current economic conditions, cyclical indicators (coincident and leading indicators), and monthly timely indicators for a number of variables.

In the short term, Banco de México intends to produce new surveys and indicators such as a bimonthly survey of the country's main wholesale firms that distribute goods to retail companies, and a survey of private sector's confidence and business climate. There are also two projects in which Banco de México will participate along with the National Institute on Statistics, Geography and Informatics (Instituto Nacional de Estadística, Geografía e Informática, INEGI) to carry out surveys on consumer's confidence as well as on manufacturing firms' orders and inventories.

II. Manufacturing sector: monthly business survey

This is a monthly qualitative survey that covers a sample of firms from the manufacturing sector. It allows manufacturing output data to be estimated beforehand official data is released.

The survey includes questions regarding the following variables:

- Production and sales volume
- Product sales prices
- Employment
- Number of working days
- Inventory of finished goods/sales ratio
- Inventory of raw materials/output ratio

- Installed capacity utilization ratio
- Indicators of business climate and confidence
- Indicators of skilled labor shortage
- Indicators of orders by domestic and external markets

Several inquiries refer to firms' opinion regarding the behavior of these variables (whether they have posted growth/increases, remained the same or decreased in relation to the previous month; that is, at the previous month before the survey was carried out [opinion] as well as in the following month [expectations]). Every two months the survey also includes questions on entrepreneurs expectations of year inflation and year-end exchange rate.

The results of this survey have been overall satisfactory. The qualitative responses (percentage of responses) on manufacturing output are used to estimate monthly growth rates. A lineal relation is established between qualitative data and monthly growth rates through. This procedure enables to obtain current statistics on this sector's output to be obtained two months before the official statistics are released. The exercise assumes that the manufacturing output index is associated positively with the percentage of firms that indicated that their production levels had increased, and negatively with those that had experienced a decline in output. The lower left graph shows how estimates derived from the survey are a reliable indicator of trend and magnitude of the variations that are reported later by the official manufacturing output index.

**Manufacturing Output
and estimated series**
Annual percentage changes
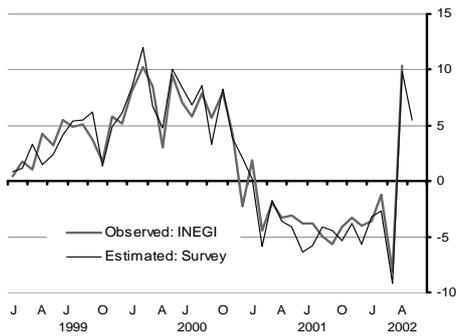
Manufacturing Firms Confidence Index
**Basis 1998=100**
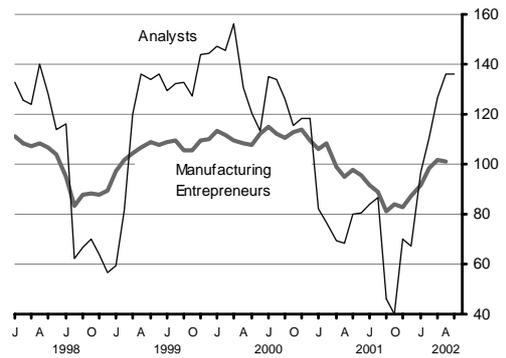
Business climate and confidence indicators that are obtained from seven questions from the survey are combined to calculate the index of business confidence in the manufacturing sector. The behavior of such index has been related to short-term changes in overall economic activity. The above graph also presents the private sector economic analysts' confidence index, which is generated from another survey that will be analyzed in the following section. As seen in the graph the manufacturing entrepreneurs confidence index has lower fluctuations than that of the economic analysts.

III. Monthly survey on economic expectations of the main private sector consulting firms regarding Mexico's economy

This monthly survey includes forecasts of the main macroeconomic variables done by thirty-two national and foreign private sector groups (economic institutes commercial banks, investment banks and consulting firms) that analyze Mexico's economy. Data on the expected inflation rate, interest rates and the exchange rate (in different periods ranging from one to six and twelve months, as well as annual expected values for the year 2002) are gathered. In addition, forecasts on the rate of growth of total GDP and by sector, on consumption, investment, employment, wages, the trade balance and current account balances, as well as opinions regarding those factors that could hinder economic growth (see attached questionnaire). Furthermore, the analyst's opinion on the business climate and on other variables that measure business confidence are also included in the survey. This last data is used to construct an Analysts' Confidence Index.

Inflation Expectations for 2002
Percent
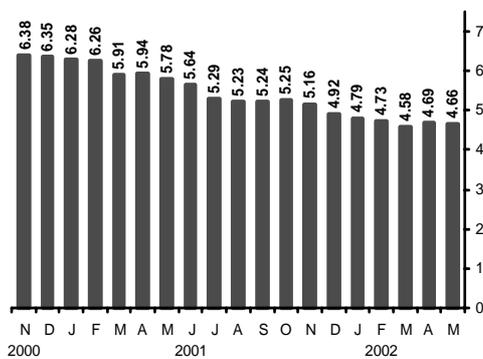
**Exchange Rate Expectations
for year-end 2002**
Pesos per US dollar

2
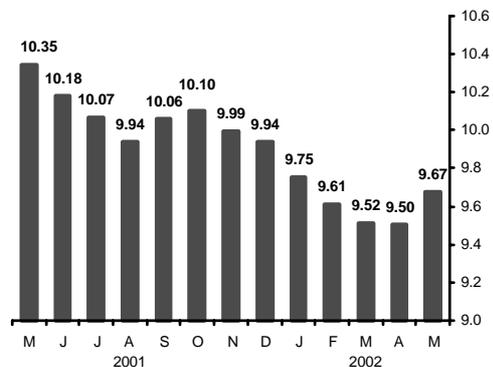
IV. Survey of commercial chain stores

This survey is aimed at obtaining the opinions and expectations of the entrepreneurs of the main commercial chain stores that conform the National Association of Department Stores and Supermarkets (Asociación Nacional de Tiendas de Autoservicio y Departamentales, ANTAD). It requests information on the total sales volume, the number of square meters of sale floor as well as the number of employees. Most questions are qualitative as to whether the variables' behavior posted growth/increases, decreases or remained unchanged, and it is also requested expected percentage changes for the above variables as well as those factors that have influenced sales behavior.

The survey includes five questions that deal with business confidence in the sector. These questions refer to the entrepreneurs perception of the business climate, the firms' economic-financial situation, employment (in the company and in the country as a whole), and decisions regarding investment. Questions pertaining to commercial chain stores' investment plans are occasionally included.

**Sales of Department Stores
and Supermarkets**
Percentage changes in real terms
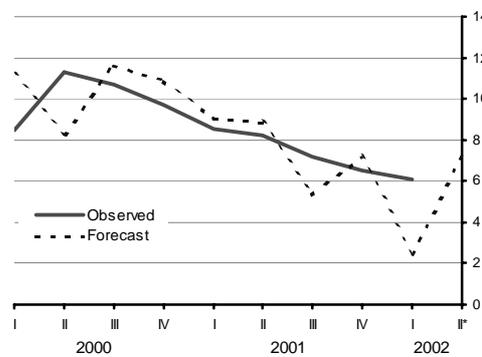

VI. Cyclical indicators: leading and coincident

Banco de México estimates a system of cyclical indicators, leading and coincident, that are useful to analyze Mexico's economy in the short term. Such indicators cover 1980 to date. Banco de México has elaborated a coincident index, a long-term leading index (done coordinately with the Economic Cycle Research Institute [ECRI]) and an additional mixed leading indicator that combines qualitative and quantitative data. This leading indicator is based on the methodology used by the OECD.

Cyclical indicators of Mexico's economy
1993=100
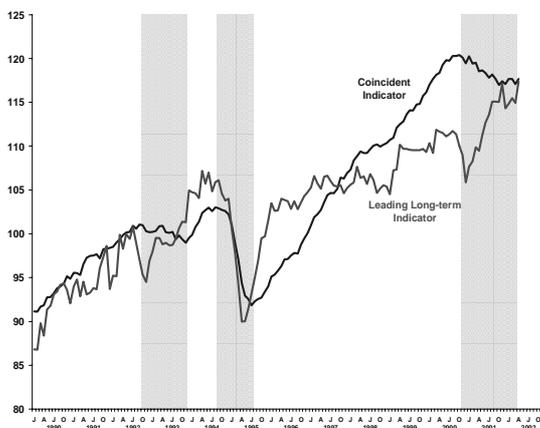
Growth cycles of Mexico's economy
Annual percentage changes
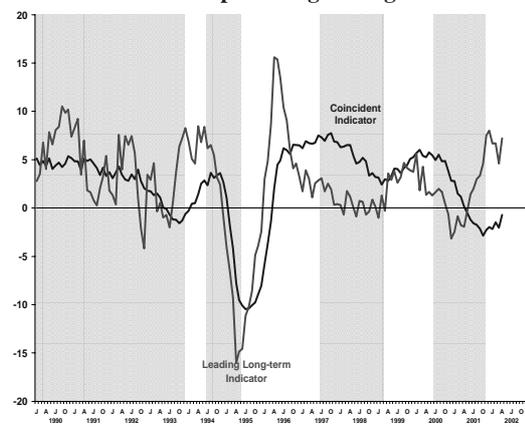
VII. Timely indicators

Banco de México generates monthly output and sales indices for 54 economic series that include nine sectors of the economy: commerce, construction, manufacturing, oil, electricity, transport, hotel, communications, and other services. This information is used as a timely indicator for the country's economic activity trends. The results are presented in monthly indexes of physical volume of output or sales at constant prices. To obtain the aggregate in all activities, the value of each sector's GDP is used as a weight. Data is obtained from direct sources and through surveys carried out with firms, institutions, chambers and associations representing the aforementioned sectors.

VIII. New surveys on process

Survey of wholesale trade

Banco de México began to carry out in January of 2002 a bimonthly survey of wholesale trade. This group of firmas sells goods to nearly 650 thousand small retail stores in Mexico. The purpose of this survey is to construct an indicator of wholesale sales, inventories, physical investment, financing and employment in this commercial sector. This survey also includes questions on wholesalers' perception of the business climate.

Survey on firms regarding expectations on confidence and business climate

This project is destined to widen the range of confidence indicators to other productive sectors in the Mexican economy and improve that of the manufacturing sector. The survey will be carried out on a monthly basis, covering a sample size of nearly 1000 firms. It will comprise issues such as firms' economic situation and country's economic conditions. Entrepreneurs will be asked to give their opinions regarding their own economic situation, short-term expectations, new hirings, orders, and investment opportunities under the current economic scenario. Most questions require qualitative answers (improved/remain unchanged/worsened; i.e.).

National survey of consumer's confidence

This is a joint project between Banco de México and The National Institute on Statistics of México (INEGI), aimed to obtain direct information from consumers on issues related to households and on country's economic situation (compared to the previous year and the expectations for the following year). The survey will be carried out in urban areas on a monthly basis, inquiring information regarding intentions of households to purchase durable and non-durable goods, real estate, and about their saving capacity. Likewise, qualitative questions on expected inflation and employment opportunities will also be included.

Survey of new orders

This is also a joint project between Banco de México and INEGI, aimed at obtaining data mainly from the manufacturing firms. This survey will provide monthly indicators of new orders from domestic and external markets, orders not supplied during the month, net sales, inventories, etc.

MANUFACTURING SECTOR: MONTHLY BUSINESS SURVEY

A.1. DURING APRIL 2002, RELATIVE TO MARCH 2002:

The volume of sales:

Increased	Remain unchanged	Decreased

The volume of production:

Increased	Remain unchanged	Decreased

The average sale prices:

Increased	Remain unchanged	Decreased

The stock of finished products:

Increased	Remain unchanged	Decreased

The value of total inventories, as a share of the sales value:

Increase	Remain unchanged	Decreased

The number of workers and employees:

Increased	Remain unchanged	Decreased

A.2. DURING APRIL 2002, RELATIVE TO APRIL 2001:

The volume of sales:

Increased	Remain unchanged	Decreased
In _____ %		In _____ %

The volume of production:

Increased	Remain unchanged	Decreased
In _____ %		In _____ %

B. DURING APRIL 2002:

The volume of production, relative to original plans, was:

Greater	Equal	Smaller

The volume of sales, relative to original plans, was:

Greater	Equal	Smaller

The intermediate goods inventories, relative to production, were:

Excessive	Adequate	Insufficient

The stock of finished products, relative to sales, were:

Excessive	Adequate	Insufficient

The number of workers and employees in the company at the end of the month were:

_____

The number of working days were: _____

The capacity utilization rate was (in the range 0 to 100 %):   _____

C.1. DURING MAY 2002, RELATIVE TO APRIL 2002:

The volume of sales:

Will increase	Will remain unchanged	Will decrease

The volume of production:

Will increase	Will remain unchanged	Will decrease

The value of sales:

Will increase	Will remain unchanged	Will decrease

The value of production:

Will increase	Will remain unchanged	Will decrease

The stock of finished products:

Will increase	Will remain unchanged	Will decrease

The average selling prices of your products:

Will increase	Will remain unchanged	Will decrease

The number of workers and employees in your company:

Will increase	Will remain unchanged	Will decrease

C.2. DURING MAY 2002, RELATIVE TO MAY 2001:

The volume of sales:

Will increase	Will remain unchanged	Will decrease
In _____ %		In _____ %

The volume of production:

Increased	Remain unchanged	Decreased
In _____ %		In _____ %

D.1. DURING MAY 2002, RELATIVE TO APRIL 2002:

How do you think will behave the business climate for your company over the next six months, relative the previous six months?:

Will improve	Will remain unchanged	Will deteriorate

Considering the economic-financial environment, do you consider that your company is better now than a year ago?:

Yes	No

In the economic sense, do you expect an improvement of your company over the next six months?:

Yes	No

How do you expect to behave the employment in your company over the next six months?:

Will increase	Will remain unchanged	Will decrease

How do you expect to behave the employment in the economy over the next six months?:

Will increase	Will remain unchanged	Will decrease

How do you evaluate the current state of your company to invest?:

Good time	Bad time	Not sure

How do you evaluate the current state of the economy for the firms to invest?:

Good time	Bad time	Not sure

E.1. DURING MAY 2002, RELATIVE TO APRIL 2002:

Your company experienced some difficulties to find and hire qualified personnel for productive areas?:

Greater difficulty	Same difficulty	Smaller difficulty

Your company experienced some difficulties to find and hire qualified personnel for administrative and marketing areas?:

Greater difficulty	Same difficulty	Smaller difficulty

Did you notice greater competition among the companies in your sector to hire qualified personnel?:

Greater competence	Same competence	Smaller competence

How was the number of workers that quit in your company to take a job in another firm?:

Increased	Remain unchanged	Decreased

How do you describe the inter-firm personnel rotation in the city where is located your production center?:

Greater	same	Smaller

F.1. DURING MAY 2002:

During May 2002 relative the previous month, did you notice a recovery in the number of domestic orders requested?:

Yes, they increased moderately	No, they were normal
Yes, they increased strongly	No, they decreased

Is your company exporting?:

Yes	No

In affirmative case, during may 2002 relative to previous month, did your company receive an increase in the number of overseas orders?:

Yes, they increased moderately	No, they were normal
Yes, they increased strongly	No, they decreased

How do you expect will behave your company's exports during the 2nd quarter of the year, relative to the previous quarter?:

We expect a significant increase	We expect a small decrease
We expect a moderate increase	We expect a significant decrease
We expect no change	

What is your expected *cumulated* inflation rate for 2002 *(Dec. 2002 to Dec. 2001)*?:   _____ %

What is your expected *average* inflation rate for 2002 *(Jan-Dec. 2002 to Jan-Dec. 2001)*?:   _____ %

What is your expected Peso-US exchange rate at the end of Dec. 2002?:   _____ Pesos per dollar

During 2002 how do you expect to increase the selling prices of your products, relative to the general consumer price index?

Will increased in greater proportion	Will increase in same proportion
Will increase in smaller proportion	They will not be increased

During 2002 how do you expect to increase the nominal wages in your company, relative to the general consumer price index?

Will increased in greater proportion	Will increase in same proportion
Will increase in smaller proportion	

MONTHLY SURVEY ON ECONOMIC EXPECTATIONS OF THE MAIN PRIVATE CONSULTING FIRMS

1. What is your forecast for inflation as measured by the Consumer Price Index?

For June 2002	_____	%
For July 2002	_____	%
For August 2002	_____	%
For September 2002	_____	%
For October 2002	_____	%
For November 2002	_____	%

What is your forecast for inflation in <u>the following twelve months</u> (from June <u>2002</u> – June <u>2003</u>)? _____%

What is your forecast for *core inflation* in <u>June 2002</u>? _____ %

What is your forecast for inflation in <u>2002</u> (from Dec. <u>2001</u> - Dec. <u>2002</u>)? _____ %

What is your forecast for *core inflation* in <u>2002</u> (<u>from</u> Dec. <u>2001</u> - Dec. <u>2002</u>)? _____ %

What is your forecast for inflation

For January 2003	_____	%
For February 2003	_____	%

What is your forecast for inflation in <u>2003</u> (from Dec. <u>2002</u> - Dec. <u>2003</u>)? _____ %

What is your forecast for inflation in <u>2004</u> (from Dec. <u>2003</u> - Dec. <u>2004</u>)? _____ %

2. What are your expectations for the Peso-U.S. dollar exchange rate?

Average value in July 2002	_____	Pesos/USD
Average value in August 2002	_____	Pesos/USD
Average value in September 2002	_____	Pesos/USD
Average value in October 2002	_____	Pesos/USD
Average value in November 2002	_____	Pesos/USD
Average value at year-end 2002	_____	Pesos/USD
Average value in January 2003	_____	Pesos/USD
Average value in February 2003	_____	Pesos/USD
Average value at year-end 2003	_____	Pesos/USD

By what percentage do you consider the peso will appreciate or depreciate (in nominal terms) in relation to the U.S. dollar in the following twelve months (from the end of June 2002 to the end of June 2003)?

Will appreciate		Will depreciate		_____ %

3. What are your expectations for the interest rate on 28-day Treasury bills?

Average level in July 2002	_____	%
Average level in August 2002	_____	%
Average level in September 2002	_____	%
Average level in October 2002	_____	%
Average level in November 2002	_____	%
Average level at year-end 2002	_____	%
Average level in January 2003	_____	%
Average level in February 2003	_____	%
Average level at year-end 2003	_____	%

4. What are your expectations for annual growth (or decline) in real GDP?

II Quarter 2002:	+	-	%	III Quarter 2002:	+	-	%	IV Quarter 2002:	+	-	%
2003	+	-	%								

5. What are your expectations for annual growth in industrial production in <u>May 2002</u> (from May 2001 – May 2002)? _____ %.

6. By what percentage do you expect consumption and investment will increase (or decline) in 2002?

Private consumption	Increase		Decline		_____ %
Private investment	Increase		Decline		_____ %
Public consumption	Increase		Decline		_____ %
Public investment	Increase		Decline		_____ %

7. Please specify by what amount the total number of affiliated workers to the Mexican Social Security Institute (<u>permanent and temporary urban employees</u>) will increase (or decrease) in 2002 and 2003

In 2002:	Will increase		Will decrease	in _____	thousands of workers
In 2003:	Will increase		Will decrease	in _____	thousands of workers

8. Do you expect real wages (not only minimum wages but all wages as a whole) to grow?

	Yes		No	
Second <u>half</u> of 2002 compared to first <u>half</u> of 2002	Yes		No	
First <u>half</u> of 2003 compared to second <u>half</u> of 2002	Yes		No	

9. What are your expectations for annual percentage increases in wage settlements that will be agreed upon in July and August of 2002?

July 2002: _____ %   August 2002: _____%.

10. What is your forecast for public sector's deficit or surplus (as a percentage of GDP)?

For 2002: Deficit _____% of GDP or Surplus ____% of GDP

For 2003: Deficit _____% of GDP or Surplus ____% of GDP

11. In your opinion, how will business climate on private sector's productive activities evolve in the following six months compared to the previous six months?

It will improve ☐   It will remain unchanged ☐   It will worsen ☐

12. Considering the recent economic environment, do you believe that the current condition of the Mexican Economy is better than last year?

Yes ☐   No ☐

13. Do you expect the economy will improve in the next six months of the year?

Yes ☐   No ☐

14. What are your expectations for employment in the following six months?

It will increase ☐   It will remain the same ☐   It will decline ☐

15. In your opinion, what is the current scenario for private investment?

Favorable time to invest ☐   Unfavorable time to invest ☐   Not sure ☐

16. What are your estimates for Foreign Direct Investment in Mexico in 2002 and 2003?

In 2002: _____ million U.S. dollars   In 2003: _____ million U.S. dollars

17. What are your estimates for the trade deficit in June 2002, the year 2002 and 2003, and for the current account deficit in 2002 and 2003?

Monthly trade deficit in June 2002: _____ million U.S. dollars

Annual trade deficit in 2002: _____ million U.S. dollars

Annual trade deficit in 2003: _____ million U.S. dollars

Annual current account deficit in 2002: _____ million U.S. dollars

Annual current account deficit in 2003: _____ million U.S. dollars

18. What are your estimates for the average price of the Mexican oil export mix in the third and fourth quarters of 2002?

III Quarter 2002: _____ dlls per barrel   IV Quarter 2002: _____ dlls per barrel

19. What are your estimates for growth rates of mercandise exports and imports (measured in current U.S. dollars) in 2002?

i) Non-oil exports in 2002	Will increase ☐	Will decline ☐	_____ %
ii) Oil exports in 2002	Will increase ☐	Will decline ☐	_____ %
iii) Total imports in 2002	Will increase ☐	Will decline ☐	_____ %

20. In your opinion, which would be the three main factors that could hinder economic growth in Mexico in the following six months? (Please indicate no more than three)

☐	**The weakness of external markets and of the world economy**	☐	**Current fiscal policy (including tax collection measures**
☐	**Contraction in foreign financing**	☐	**Current monetary policy**
☐	**Oil export prices**	☐	Firms' level of indebtedness
☐	Level of external interest rates	☐	Households level of indebtedness
☐	**International financial instability**	☐	*Uncertainty in the country's economic situation*
☐	**International political instability**	☐	Sluggish recovery of real wages
☐	Domestic inflationary pressures	☐	Exchange rate uncertainty
☐	**Higher wage costs**	☐	Exchange rate appreciation
☐	**Price increases in raw materials**	☐	Weakness of the domestic market
☐	High cost of domestic financing	☐	Limited installed capacity of production
☐	Domestic financing availability	☐	Public insecurity
☐	Shortage of skilled-labor	☐	Others (please specify) _____
☐	Current condition of commercial banks		_____
☐	Domestic political uncertainty		_____

21. In your opinion, what will be the rate of growth of the United States economy in 2002? _____ percent.

We would appreciate receiving your response no later than Monday, June 25, 2002 to the following e-mail address or fax:

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