

## Mexico

## Bank Watch

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## Bank of Mexico Quarterly Survey of Sources of Finance

Fco. Javier Morales E.  
fj.morales@bbva.bancomer.com

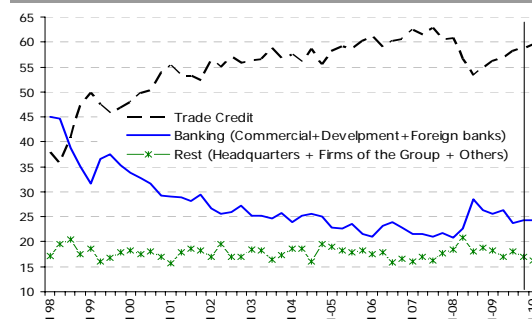
The Bank of Mexico's (Banxico) Quarterly Survey of Sources of Finance (the Survey) was modified starting in the first quarter of 2010 (1Q10). The most important differences in the new presentation of the Survey compared with the previous ones are that it: i) incorporates new information; ii) introduces diffusion indexes; and iii) presents the data in a differentiated fashion. This means that the information it contains is not fully compatible with the Survey published until 4Q09.<sup>1</sup>

**Previous survey**

Banxico began to publish the results of its Credit Market Evaluation Survey starting on 1Q98. The previous Survey did not provide information on the balance of funds received by companies. Instead, it gave the percentage of responses on the use of the seven sources of finance by companies over the quarter.<sup>2</sup> The Survey also reported the main reasons for which companies had not requested new bank credit.

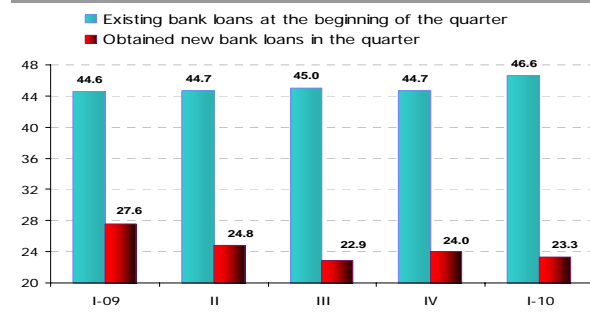
This Survey has two limitations. First: it only indicates the percentage of the use of each source of business resources in the quarter. Second: it does not provide information on the total amount of new finance granted over a quarter (flows) or on the total that each of the seven sources has granted (balances). This may lead to an incorrect assessment if one considers that the only main source of new funds for companies is Supplier Finance, as although this is true in the short term (Chart 1, previous Survey), a high percentage of companies may have bank credit they have obtained in the medium and long term (Chart 2, new Survey).

Chart 1  
**Sources of business finance, Percentage of Responses, %**



Source: BBVA Research with Banxico data

Chart 2  
**Companies with bank loans at the start of the quarter that applied for it in this quarter, %**



Source: BBVA Research with Banxico data

<sup>1</sup> The data published starting with 1Q10 only present quarterly data since 1Q09 and consider at least 450 companies of various sizes, whereas the previous publication used information since 1Q98 and considered at least 500 companies of different sizes.

<sup>2</sup> The seven sources of finance considered in the Survey are: i) Suppliers; ii) Commercial banks; iii) Foreign banks; iv) Other companies in the corporate group v) Development banks; vi) Head office; vii) Other lending. In the new Survey the heading vii) Other lending is now called "Debt issuance".

### New information

The new Survey introduced the heading “Companies with bank loans at the start of the quarter”, as can be seen in Chart 2. This information shows that a significant proportion of companies included in the Survey already have bank loans and that this proportion has grown over the last year. Thus, 23.3% of companies surveyed received new loans in 1Q10, while 46.6% of companies surveyed already had loans from banks in this period.

The new Survey breaks down information into “Companies with up to 100 Employees”, “Companies with more than 100 Employees”, “Manufacturing Companies”, “Service and Retail Trade Companies” and “Other Companies”.<sup>3</sup>

The information by size of company shows that companies in the “More than 100 Employees” category have greater access to bank finance than smaller ones. This difference was reduced significantly between 4Q09 and 1Q10, as can be seen in Chart 3.

Finally, the Survey now presents information on conditions of access to and cost of bank credit as a limiting factor for the operation of companies broken down by their type and size. There are three qualitative responses that indicate the importance of access conditions and cost on the company's operations: Major, Minor, or None. The results shown in Chart 4 indicate that although in 1Q10 bank credit is the Major limiting factor for around 30% of companies, this proportion has fallen by nearly 10 points over the last year. Chart 5 shows that from 1Q09 to 1Q10 the number of companies considering access to bank credit as the major limiting factor to their operations fell from 37.5% to 30.9%. A higher proportion of smaller companies in 1Q10 considered that access to bank credit is a major limiting factor (32.1%) for their operations than large companies (30.2%).

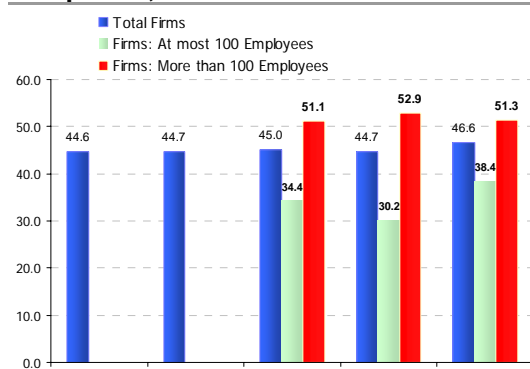
### New Diffusion Indexes

The new Survey defines diffusion indexes for access to bank credit and constructs them by adding the percentage of responses stating there are more accessible conditions for credit with the half of the percentage of responses stating that there were no changes in access conditions. By this construction, a value of the index higher (lower) than 50% indicates that a greater number of companies assessed the conditions of access to bank credit as better (worse).

These diffusion indexes are calculated on the basis of: i) amounts offered; ii) the loan periods offered; iii) collateral requirements; iv) time taken to grant the loan; v) problems for refinancing the loan; and vi) other bank requirements. Chart 6 shows that in 4Q09 and 1Q10 the diffusion index of access to bank credit improved in terms of the amount and the periods of the loans offered. The same is true for the Problems for Refinancing Loans variable, while the rest of the variables have moved close to but still below, 50%.

Chart 3

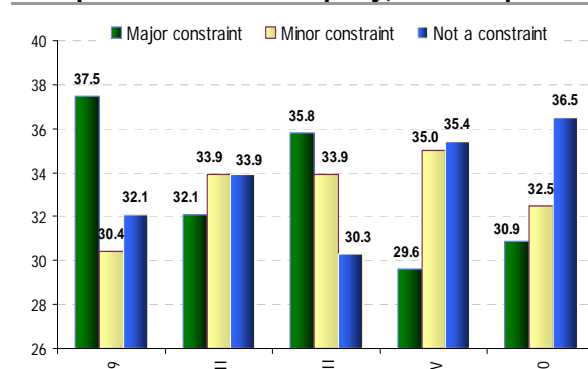
#### Companies with bank loans at the start of the quarter, %



Source: BBVA Research with Banxico data

Chart 4

#### Access to bank credit is a limiting factor for the operation of the company, % of responses



Source: BBVA Research with Banxico data

<sup>3</sup> The previous Survey considered data for companies in the categories of "Small", "Medium-sized", "Large", "AAA", "Exporting" and "Non-Exporting", and the size of the companies was defined by their sales.

### Diffusion index of the conditions of the cost of bank credit

This new Survey also defines a diffusion index for the cost of bank credit as the sum of the percentage of companies that considered conditions for bank credit were less costly plus the percentage that considered these conditions had not changed. As in the previous case, if the value of the index is higher (lower) than 50%, then a larger number of companies perceived less (more) costly conditions for bank credit. This diffusion index of the cost is calculated on the basis of: i) bank interest rates; and ii) fees and other expenses. Between 1Q09 and 1Q10, according to Chart 7, the Survey indicates that companies have perceived the cost of bank credit has improved, both in terms of interest rates and fees. What is more, in the case of interest rates there is a clear perception of lower costs starting in 1Q10, when the diffusion index of interest rates was clearly higher than 50%.

### Presentation of the Information:

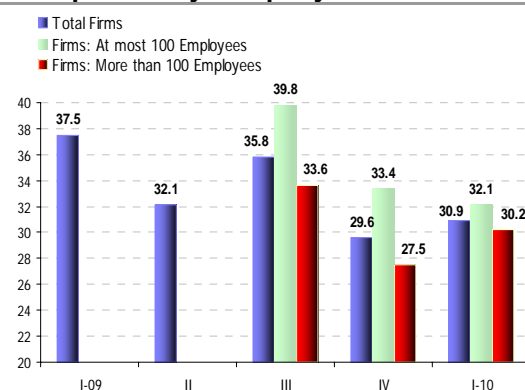
Until now Banxico provided data of the percentage of sources of new finance for companies. For example, in the previous Survey, 58.8% of the total sources of corporate finance were Supplier Finance. It is important to point out that the Survey did not say that 58.8% of the companies only had Supplier Finance, but that of the total sources of finance that companies had used in the quarter, 58.8% were in this category. The sum of the percentages of different categories of business finance (supplier, commercial banking, development banking, etc.) totals 100%.

The new presentation of information gives the total percentage of the responses for each source of finance, giving a total much greater than 100%, given that sources of corporate finance do not exclude each other. However it is presented (see Chart 1), the Banxico Survey reflects the growing use by companies of supplier finance as a new source of finance in each quarter. This trend was broken in 2008 when the use of bank credit by companies increased. The new information presented in this Survey indicates that although companies make a significant use of new Supplier Finance, or new quarterly flow of credit, the importance of bank credit has been growing, and 47% of companies has a loan (balance) of this type, compared with just over 44% in 1Q09, as can be seen in Chart 8.<sup>4</sup>

In addition, as Supplier Finance is not only short term, but can also be much shorter-term than that of bank credit, this would indicate that this finance can be constantly renewed (making more frequent use of the new finance of this type), while this would not be the case with bank credit.

Chart 5

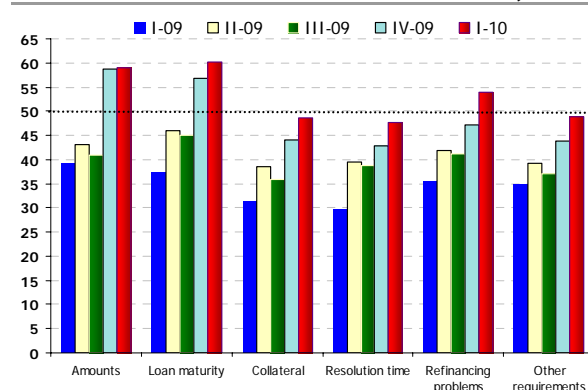
### Access conditions and cost of bank credit as a limiting factor for companies, % responses by company size



Source: BBVA Research with Banxico data

Chart 6

### Diffusion index of access to bank credit, %



Source: BBVA Research with Banxico data

<sup>4</sup> The Survey says that a greater number of companies had bank credit in this time if the balance sheet figures are considered. This is confirmed by the quarter-on-quarter figures for the flows or percentage of companies taking out new bank credit.

As can be seen in Chart 9, since 2001 or since inflation became consolidated at single-digit levels, the repayment periods that companies provided for their customer finance have been above 50 days, and in some up to a maximum of 70. This period of 50 or 70 days indicates that the finance granted by companies to their customers is short term. Thus companies with a permanent or long-term commercial relationship may be renewing the finance they have with each of their suppliers at around every 60 days. If the company has various suppliers, this process will also be applied much more frequently than the use of bank credit.

There are important reasons why Supplier Finance has increased its importance as a source of finance for companies. These are:

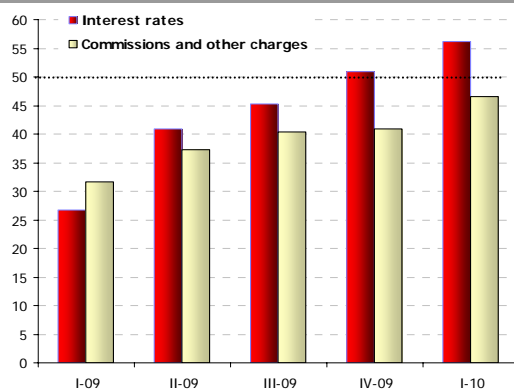
1. The replacement and limited availability of bank credit between 1998 and 2006, which extended this type of corporate finance during the period (see Chart 10).
2. The low financing cost for companies that granted this form of finance and the perception of a competitive advantage that encouraged its use.
3. Ease of access compared to bank credit, as the requirements for obtaining it are less strict.

### Assessment

The Banxico Survey now not only informs of the changes in the use of different forms of finance in a quarter, but also indicates what percentage of the total number of companies in the sample has bank loans at the start of a given period. According to the limited evidence available from 1Q09 to 1Q10, the percentage of companies with bank loans in the sample in 1Q09 was 44.6%. This increased to 46.6% in 1Q10. Thus the new Supplier Finance increased from 56.2% in 1Q09, using data from the previous Survey, to 59.4% in 1Q10, according to the transformed data for the Survey. This apparent contradiction can be explained because the earlier Survey only referred to the percentages using new finance according to its source; now the information in the Survey also indicates what percentage of companies have loans or bank credit at the start of the quarter.

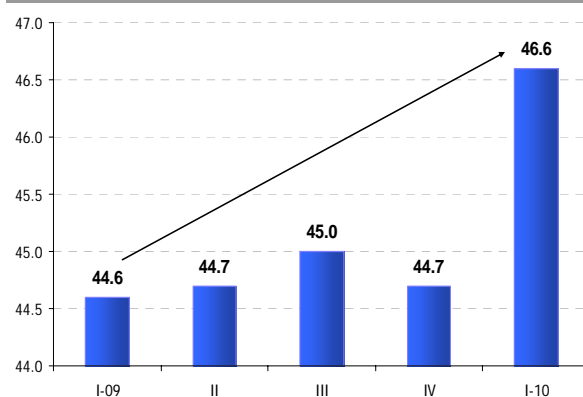
In addition, reasons such as the reduced payment period of Supplier Finance, the low cost of this finance for companies in terms of low interest rates and inflation, and its use as an instrument to boost sales, indicate that regardless of the progress in the penetration of bank credit in terms of balances, Supplier Finance will continue to be used at high levels, as happens in other countries such as the United States.

Chart 7  
**Diffusion index of the conditions of the cost of bank credit, %**



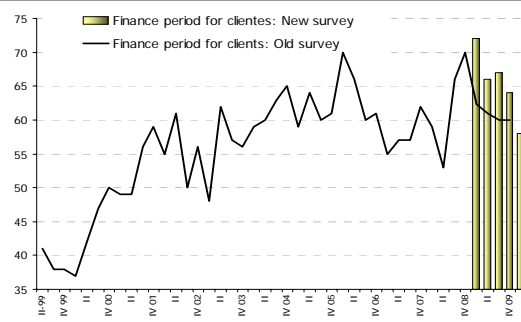
Source: BBVA Research with Banxico data

Chart 8  
**Companies with bank loans at the start of the quarter, % of responses**



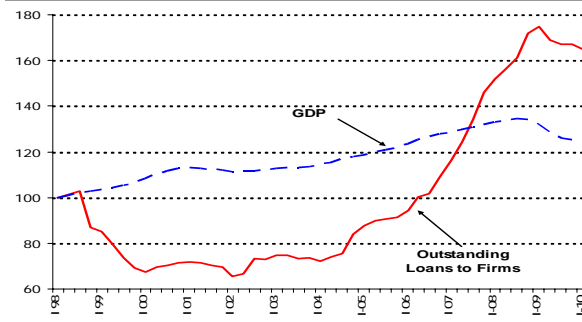
Source: BBVA Research with Banxico data

Chart 9

**Average finance period of suppliers, data in number of days**

Source: BBVA Research with Banxico data

Chart 10

**GDP and outstanding commercial bank loans for companies: real indexes, 1Q98=100**

Source: BBVA Research with Banxico data

**Appendix**

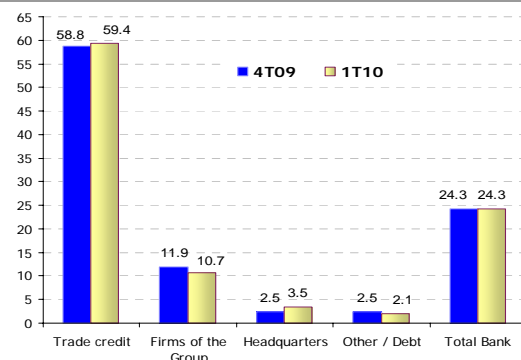
As can be seen in the table, the data of the new Survey can be transformed into those given in the previous Surveys. This is done by normalizing them, in other words considering the total of the various categories of responses and dividing each category of financing by this total. This is done in the table for the case of 4Q09 data that appear in the new presentation of the information (column 4). In this example, the total number of responses of sources of finance is 138.5% (column 3), which are used to obtain the percentage within this total for each individual source of finance (column 4). As can be seen, the data calculated in this way are similar to those presented in the 4Q09 Survey (column 1), and the small differences may be due to the different size of the sample: at least 500 companies in the 4Q09 Survey and at least 450 companies in the new 1Q10 Survey.

Sources of Business Finance According to Bank of Mexico´s Survey												
Percentage of Responses, %												
	1		2		3		4		5		6	
	Data Old Survey				Data 4Q09, New Survey				Data 1Q10 New Survey			
	1Q09	4Q09			Responses, %	Transformation to Old Format			Responses, %	Transformation to Old Format		
Trade Credit / Suppliers	56.2	58.8			81.5	58.8			80.4	59.4		
Commercial Banks	21.3	20.0			28.9	20.9			27.8	20.5		
Foreign Banks	2.6	2.8			4.0	2.9			3.0	2.2		
Firms of the Grup	13.1	11.9			15.6	11.3			14.5	10.7		
Developing Banks	1.7	1.5			2.1	1.5			2.1	1.6		
Headquarters	3.9	2.5			3.1	2.2			4.7	3.5		
Ohter / Debt issuing	1.3	2.5			3.3	2.4			2.8	2.1		
Total	100.0	100.0			138.5	100.0			135.3	100.0		
Total Bank *	25.51	24.30			35.00	25.27			32.9	24.32		

\*Total Bank = commercial banks + developing banks + foreign banks

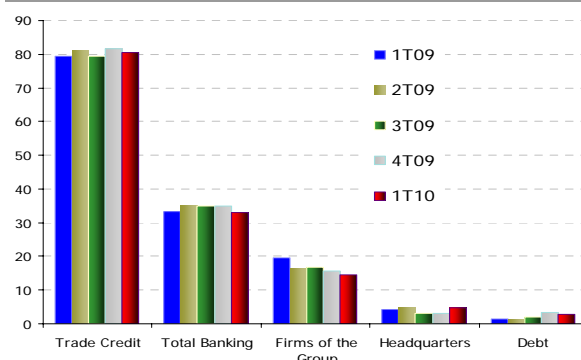
Source: BBVA Research with data of Bank of Mexico

Chart 11

**Sources of corporate finance, % of responses in 4Q09 and 1Q10 (New Survey)**

Source: BBVA Research with Banxico data

Chart 12

**Sources of corporate finance, % companies with finance by type (New Survey)**

Source: BBVA Research with Banxico data

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