



Regional Economic Report
April – June 2014



BANCO DE MÉXICO

September 11, 2014

Outline

- I. Introduction**
- II. Results April – June 2014**
 - A. Economic Activity**
 - B. Inflation**
 - C. Economic Outlook**
- III. Final Remarks**

Introduction

- The Regional Economic Report is a quarterly publication on the recent trends in economic activity, inflation and business agents' expectations in the Mexican regions.¹
- This information is taken into account by Banco de México's Board of Governors when evaluating the economic situation and the forecast for the Mexican economy.
- The economic performance of the regions in 2Q 2014 and the prospects for regional economic activity and inflation over the following 6 and 12 months are analyzed herein.

1/ For the purposes of this Report, the states of Mexico are grouped into the following regions. Northern: Baja California, Chihuahua, Coahuila, Nuevo León, Sonora and Tamaulipas. North-Central: Aguascalientes, Baja California Sur, Colima, Durango, Jalisco, Michoacán, Nayarit, San Luis Potosí, Sinaloa and Zacatecas. Central: Distrito Federal, Estado de México, Guanajuato, Hidalgo, Morelos, Puebla, Querétaro and Tlaxcala. Southern: Campeche, Chiapas, Guerrero, Oaxaca, Quintana Roo, Tabasco, Veracruz and Yucatán.

Outlook

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Economic Activity

- Economic activity in all regional economies significantly recovered in 2Q 2014, as compared to the weakness registered in 1Q 2014.
 - ✓ The business agents interviewed by Banco de México for this Report in the second half of June and the first half of July 2014 generally stated that demand for own goods and services increased with respect to 1Q.
 - ✓ The referred business contacts mentioned that the performance of regional economies principally derived from greater dynamism of external demand, although they also stressed an improvement in domestic demand.

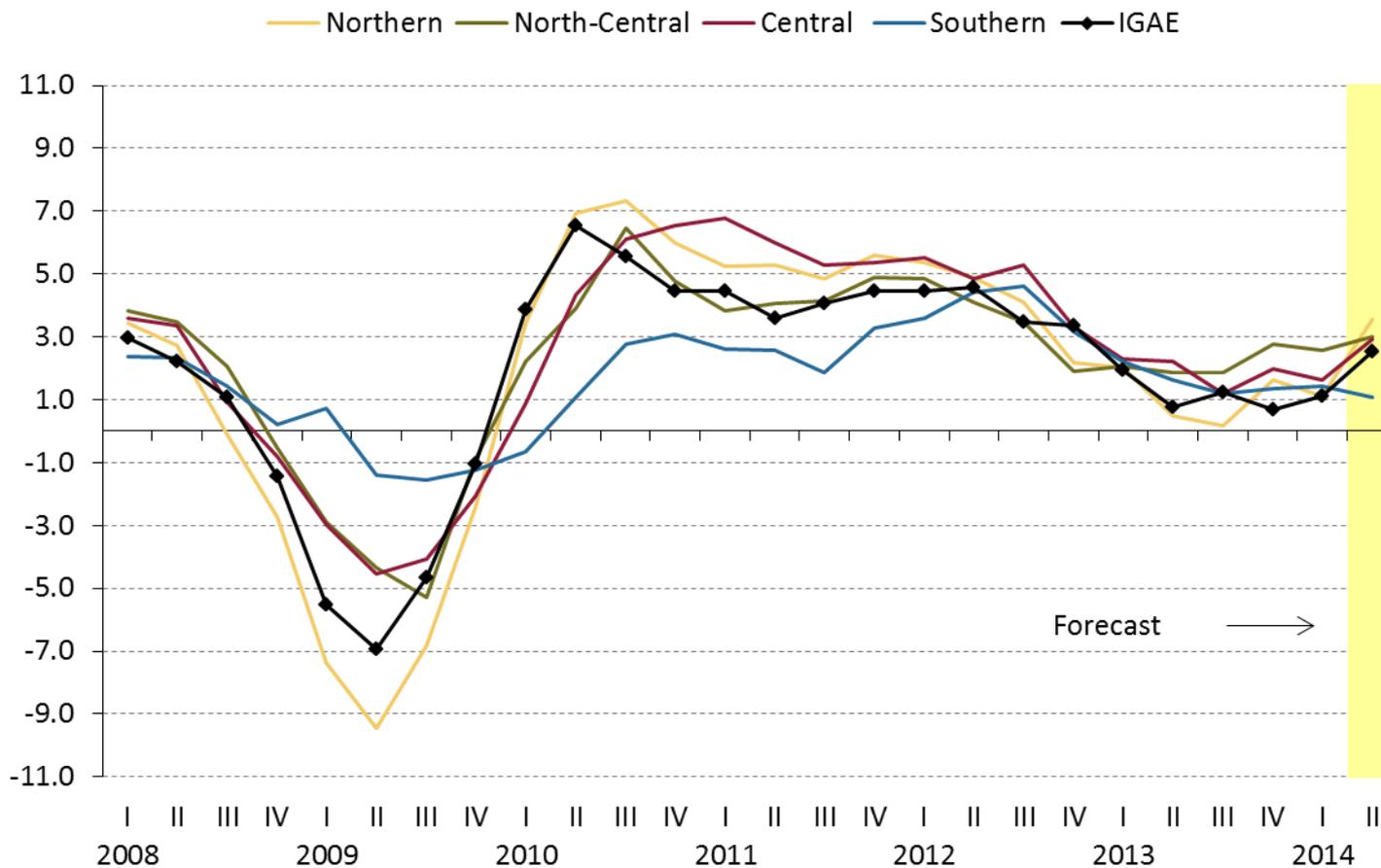
Economic Activity

- Various regional indicators point to a more vigorous rebound in the economic activity of the Northern region in 2Q 2014, while in the Southern region the dynamism of economic activity was relatively low.
 - ✓ Manufacturing activity expanded in all regions as compared to the same period of last year, with the most vigorous expansion observed in the Northern and North-Central regions.
 - ✓ Retail sales recovered significantly in the Northern region, moderately in the Central region and just incipiently in the North-Central and Southern regions.
 - ✓ Private construction improved in most regions.
 - ✓ The agricultural sector improved in the central regions.
 - ✓ The number of IMSS-insured workers observed greater dynamism in all regions.

Economic Activity

Regional Coincident Index ^{1/}

Annual change in percent



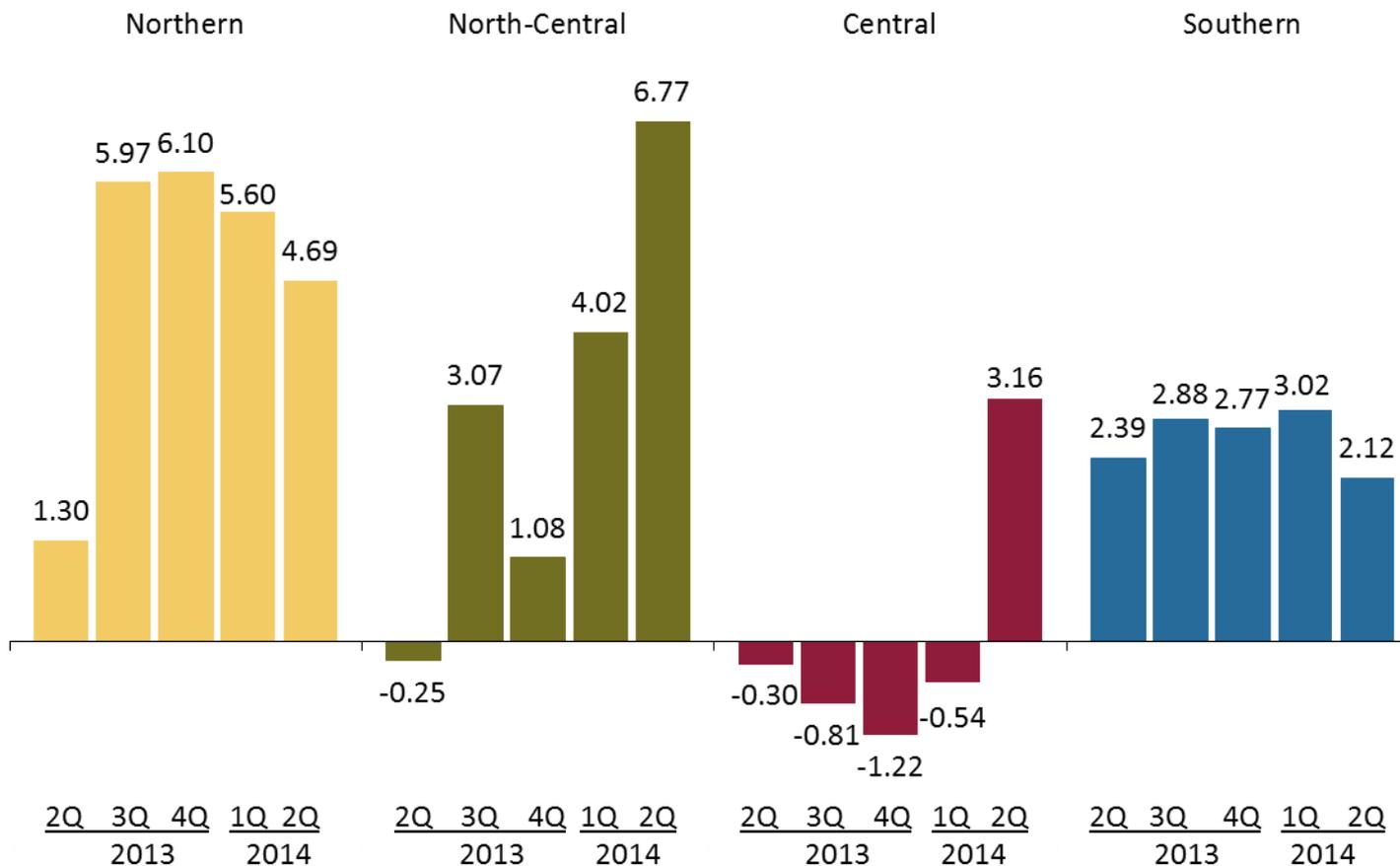
1/ This indicator's values in 2Q 2014 are a forecast.

Source: Estimated by Banco de México with seasonally adjusted data from IMSS and INEGI.

Economic Activity

Regional Manufacturing Indicator ^{1/}

Annual change in percent



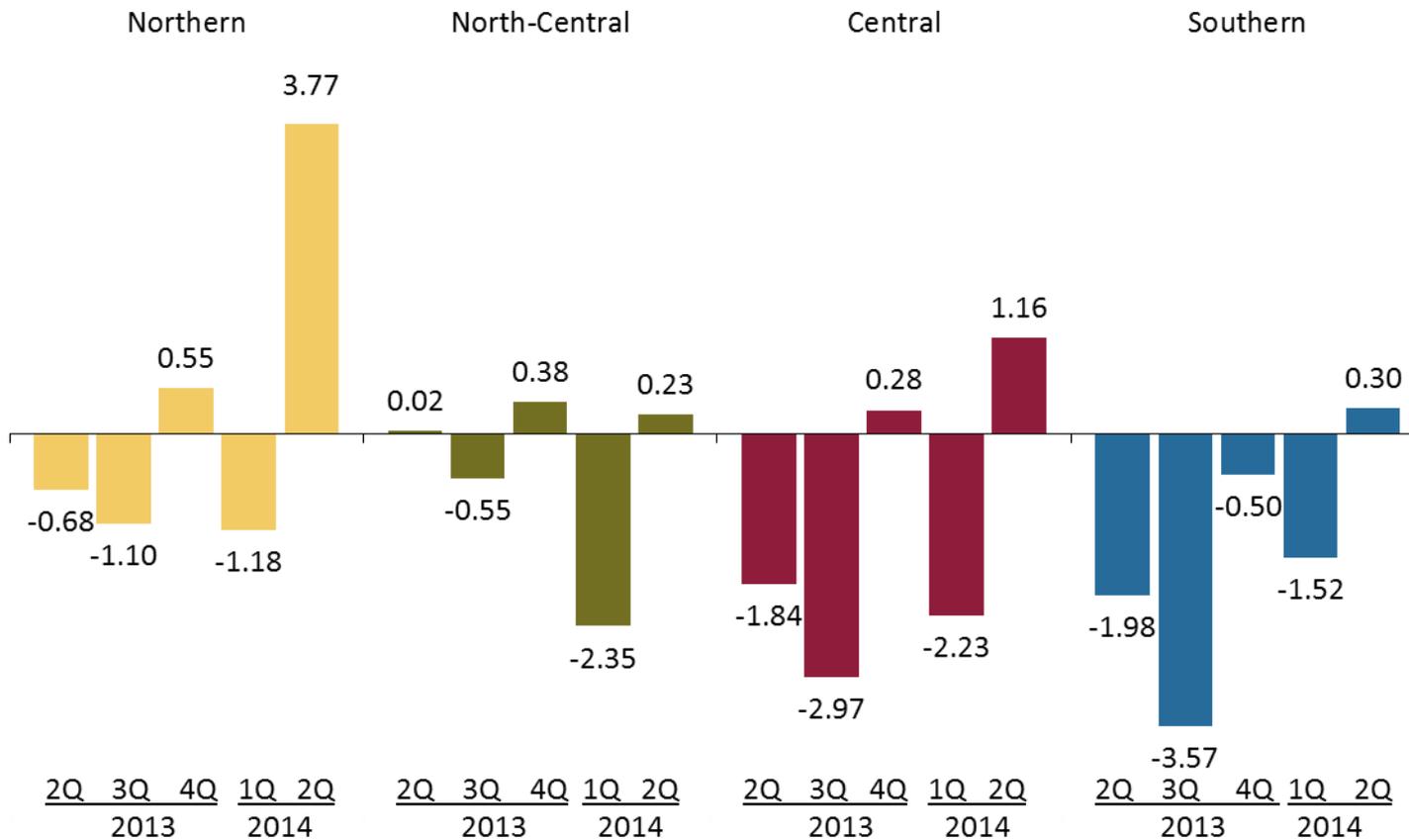
^{1/} This indicator's values in 2Q 2014 are a forecast.

Source: Estimated by Banco de México with seasonally adjusted data from INEGI.

Economic Activity

Regional Retail Sales Indicator

Annual change in percent

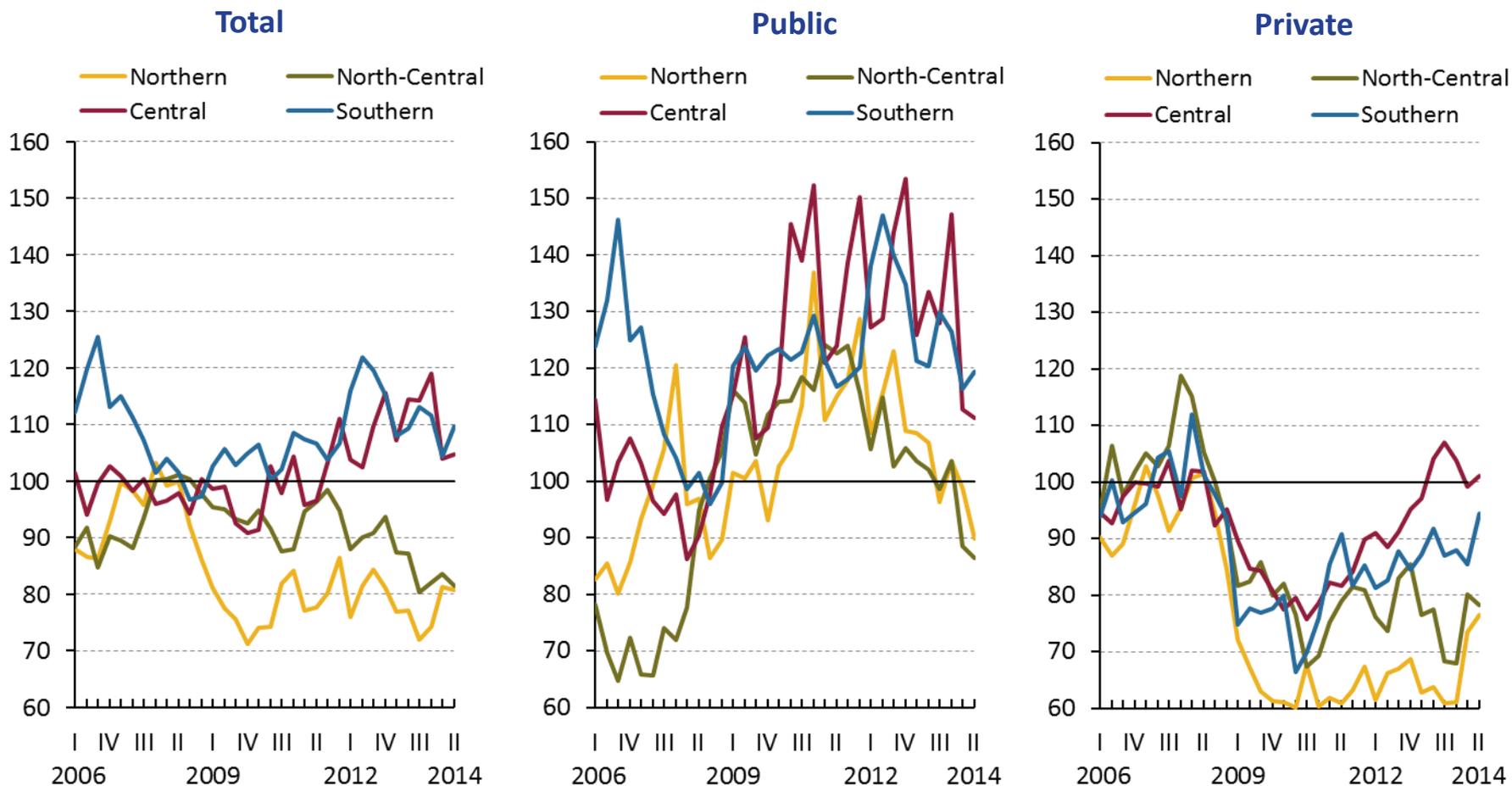


Source: Estimated by Banco de México with seasonally adjusted data from INEGI.

Economic Activity

Real Value of Production in the Construction Industry by Region

Index, base 2Q 2008 = 100, quarterly average

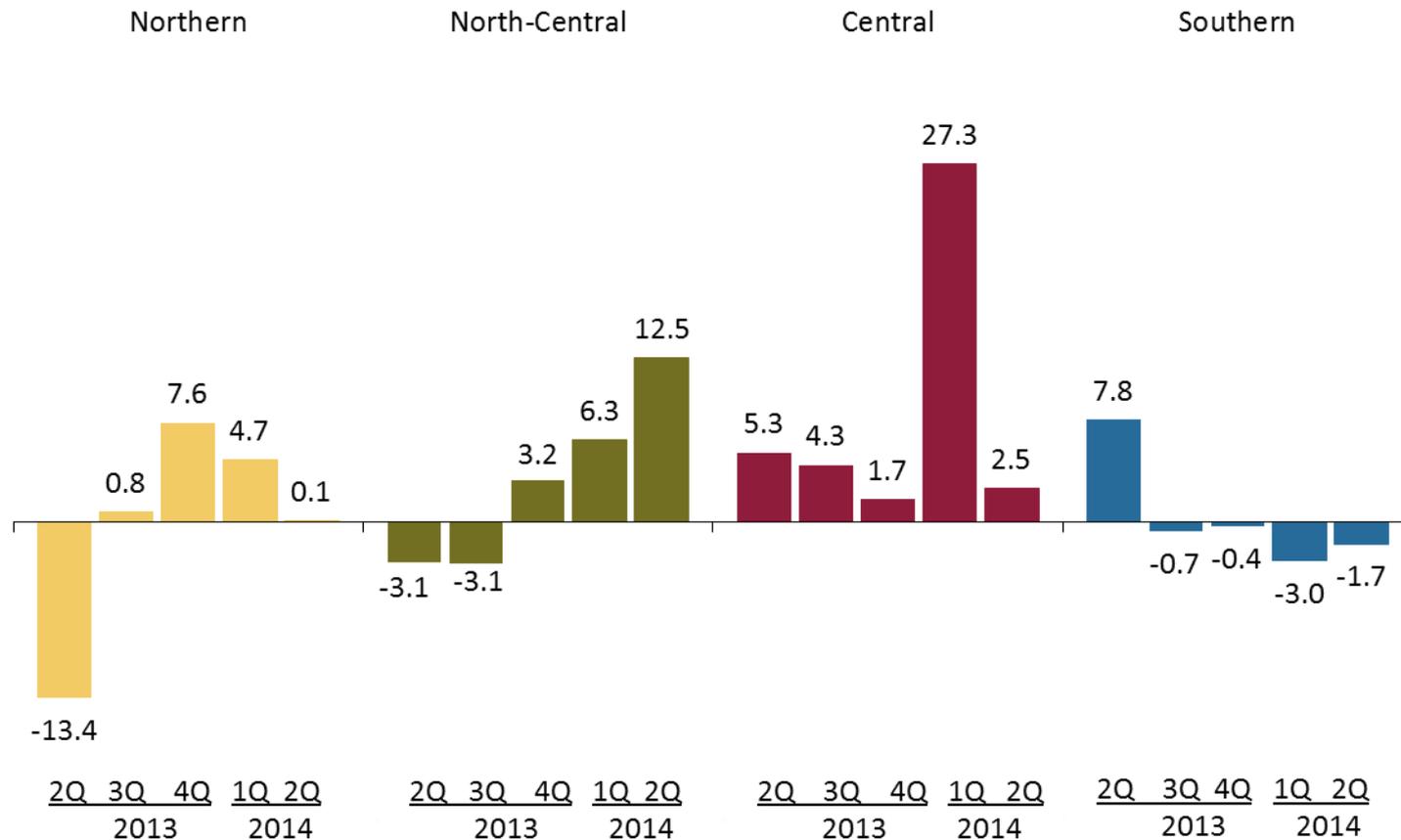


Source: Estimated by Banco de México with seasonally adjusted data from INEGI.

Economic Activity

Regional Agricultural Production Index

Annual change in percent



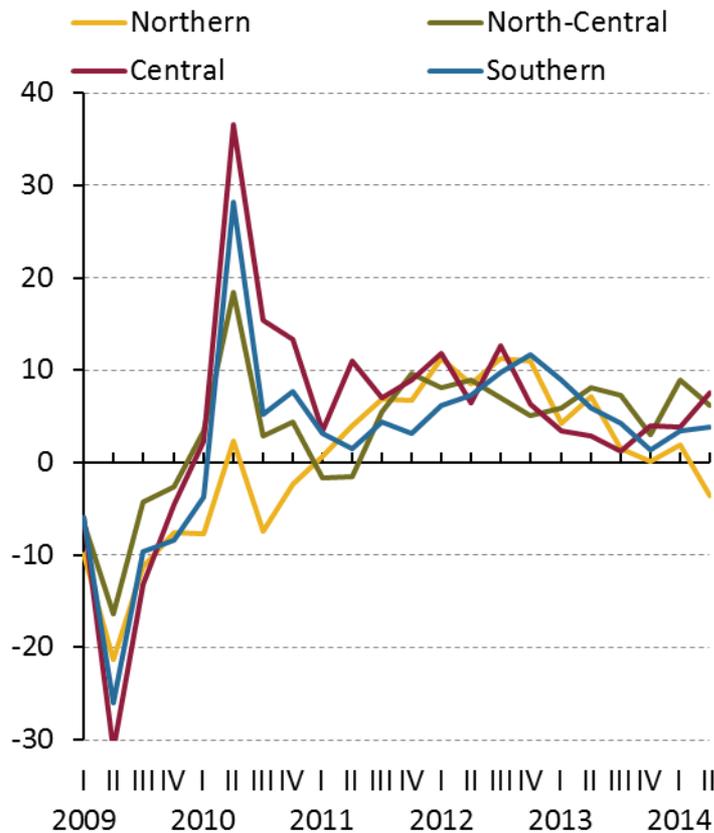
Source: Estimated by Banco de México with data from SAGARPA.

Economic Activity

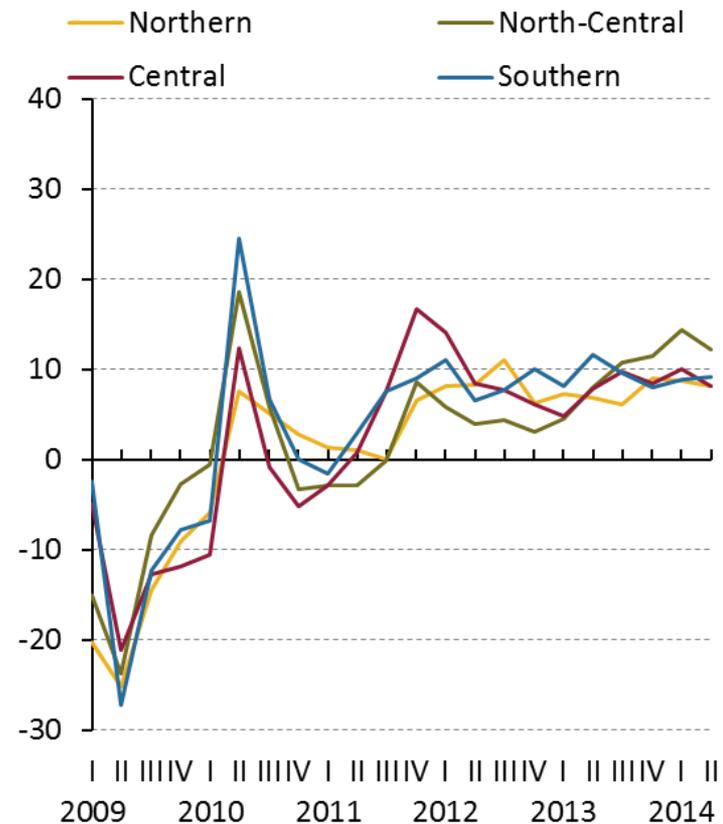
Regional Indicators of Activity in Tourism

Annual change in percent

Hotel Occupancy



Inflow of Passengers to Airports



Source: Estimated by Banco de México with seasonally adjusted data from the Mexican Secretariat of Tourism and from Airports and Auxiliary Services (ASA, for its Spanish acronym).

Economic Activity

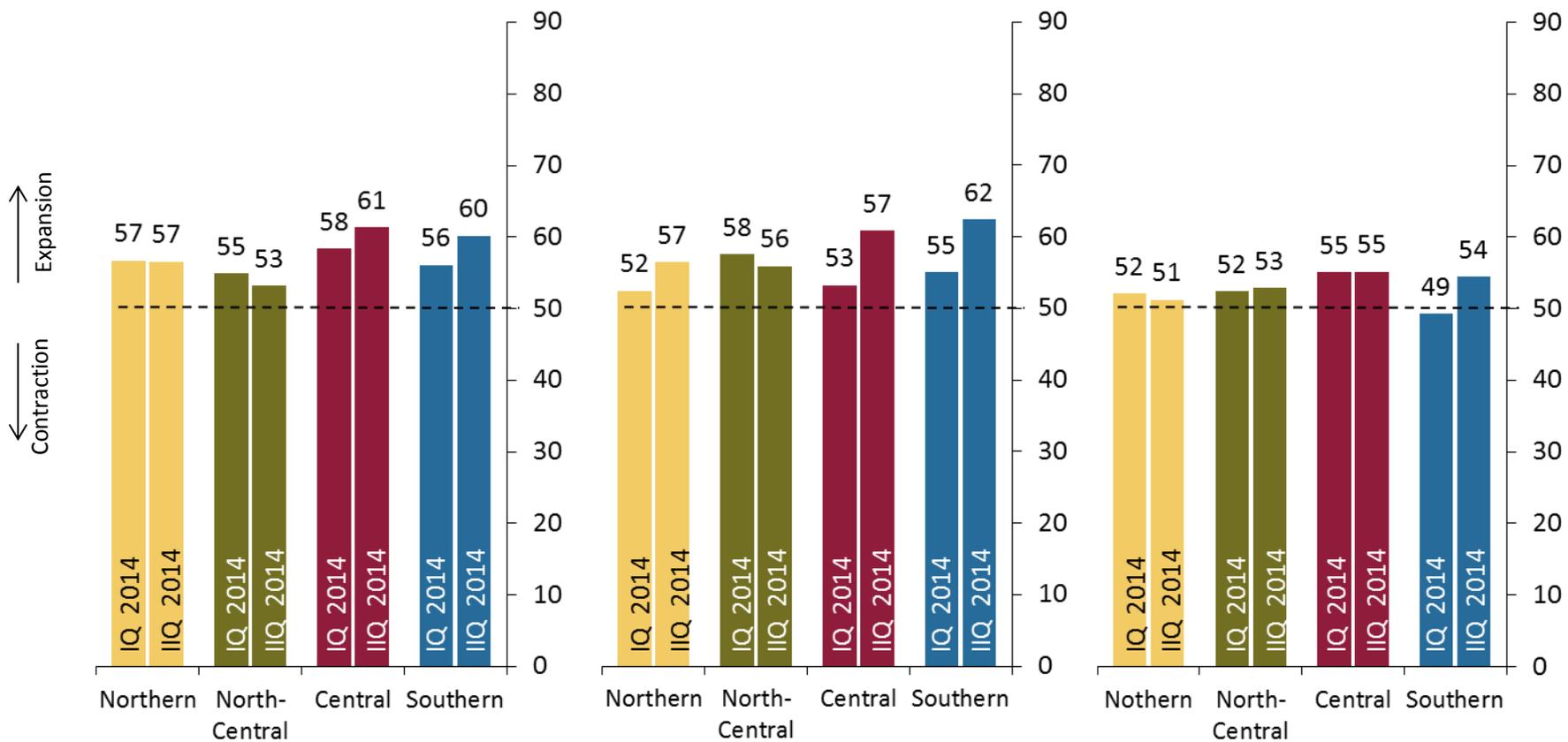
Main Sources of Financing to Firms

Diffusion index

Own Resources

Suppliers

Commercial Banks

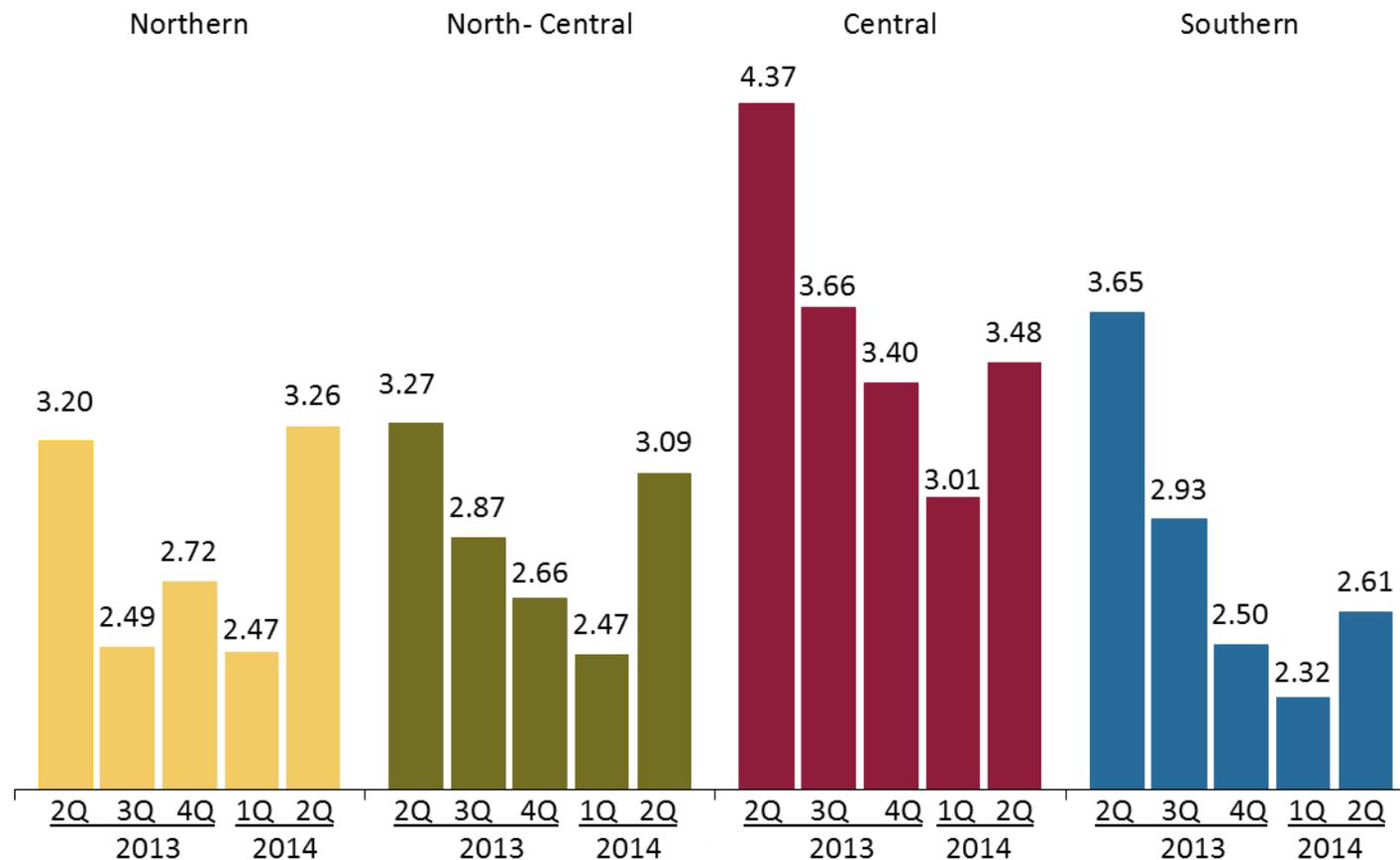


Source: Banco de México.

Economic Activity

Number of IMSS-insured Workers

Annual change in percent



Source: Estimated by Banco de México with seasonally adjusted data from IMSS.

Box 1: Informality in Regional Economies as Perceived by Interviewed Business Agents

- Previous reports presented the analysis of the role of local elements in the performance of regional economies.¹
- Taking into account that economic literature has partly linked informality to the difficulty to set up firms due to excessive local regulations, this Box provides a further analysis of informality.
- In particular, opinions of business agents interviewed by Banco de México for this Report in the four regions are presented regarding three aspects of the informal sector: its *size*, its *origin* and the *public policies* that could tackle it.

1/ See Boxes “Indicators of Ease to Set up Firms at the Regional and Municipal Level in Mexico”, and “Local Regulation and Business Set-up Costs in Mexico”, in the Regional Economic Reports of April – June 2012 and of October – December 2013, respectively.

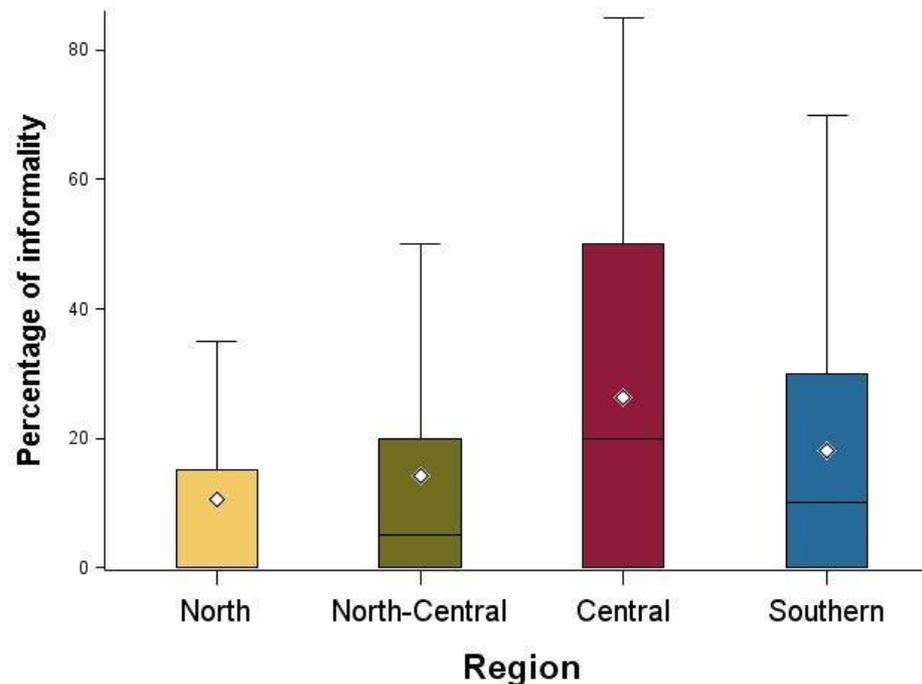
Box 1: Informality in Regional Economies as Perceived by Interviewed Business Agents

- In line with the referred contacts' opinion, the informal sector is perceived as smaller in the Northern and North-Central regions.
- Among the factors generating informality, these business agents highlight the administrative complexity of incorporating to the formal sector and the lack of incentives to leave informality.
- Therefore, they point out that the principal public policy to tackle informality is administrative simplification.

Box 1: Informality in Regional Economies as Perceived by Interviewed Business Agents

Regional Differences regarding the Perception of the Size of the Informal Sector

Box-and-whisker plot of responses, by region ^{1/}

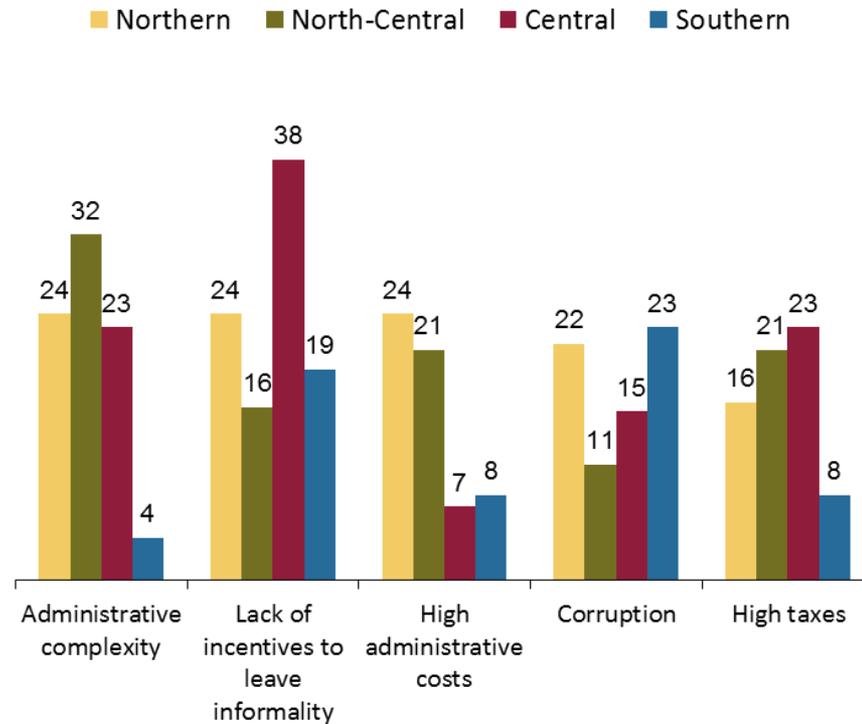


1/ In box-and-whisker plots, each box is delimited by the first quartile (the lower bound) and the third quartile (the upper bound) of the distribution of the perceived magnitude of informality and the intermediate line in the box represents the median of distribution (in the case of the Northern region, the median coincides with the first quartile). The third quartile indicates the maximum percentage of informality perceived by 75 percent of the interviewed business agents in each region. Finally, the diamond indicates the average of the distribution of responses.

Source: Estimated by Banco de México with data from the interviews with business agents in all regions of Mexico, carried out between June 16 and July 21, 2014. The question asked: "In the market of the main good or service you provide, in your opinion, what percentage of activity is performed informally?"

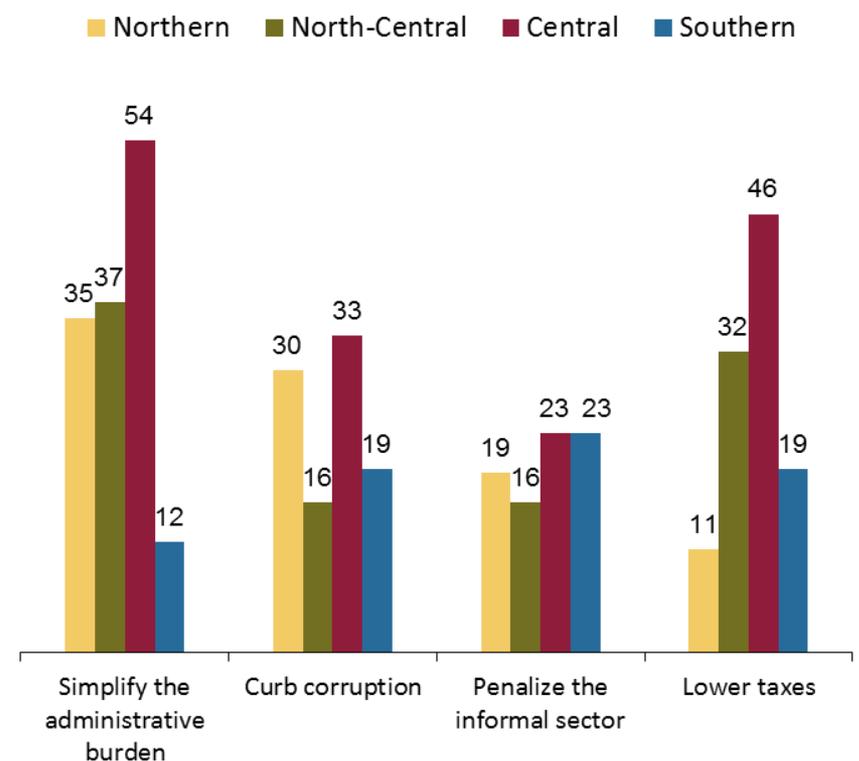
Box 1: Informality in Regional Economies as Perceived by Interviewed Business Agents

Main Factors Generating Informality as Indicated by Interviewed Business Agents
Percentage of mentions



Source: Estimated by Banco de México with data from interviews to business agents in four regions between June 16 and July 21, 2014. The question asked: “In your opinion, in the market of the main good or service you offer, what is the reason for and where does informality stem from?”.

Principal Measures of Public Policy Indicated by Business Agents to Tackle Informality
Percentage of mentions



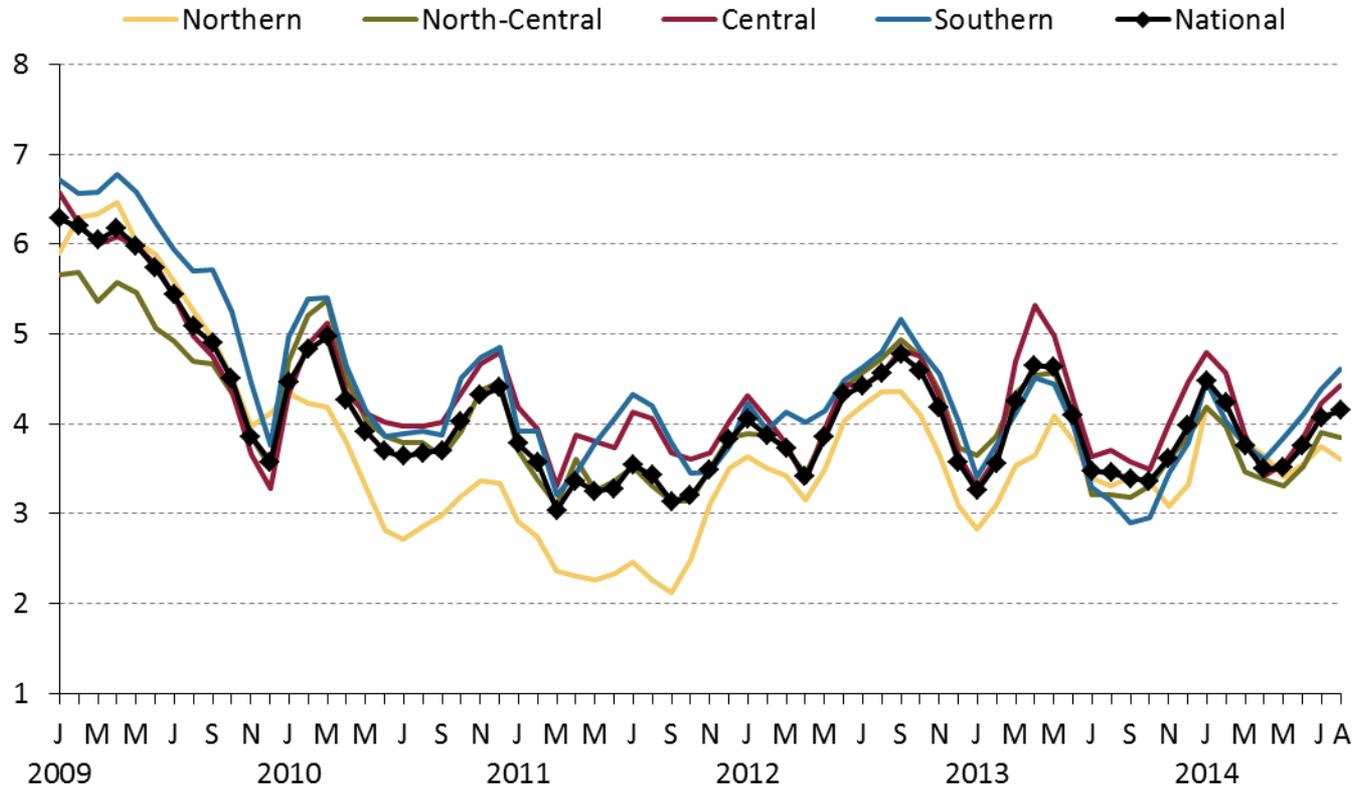
Source: Estimated by Banco de México with data from interviews to business contacts in four regions between June 16 and July 21, 2014. The question asked: “In your opinion, in the market of the main good or service you offer, what are the main measures of public policy that could be implemented to tackle informality?”.

Inflation

- As expected, annual headline inflation increased by the end of 2Q 2014, as a result of the fading effect coming from a high comparison base over most of the 1H 2014 in the subindex of agricultural prices.
- Subsequently, in July and August annual headline inflation increased further, which was mainly due to higher prices of some livestock products and of some processed foods, which use the referred livestock products as inputs.
- Derived from the above, annual headline inflation reached levels above 4 percent in the Central and Southern regions. In the Northern and North-Central regions, although it also increased, annual headline inflation persisted below 4 percent.

Inflation

Annual Headline Inflation Percent



Source: Estimated by Banco de México with own data and that of INEGI.

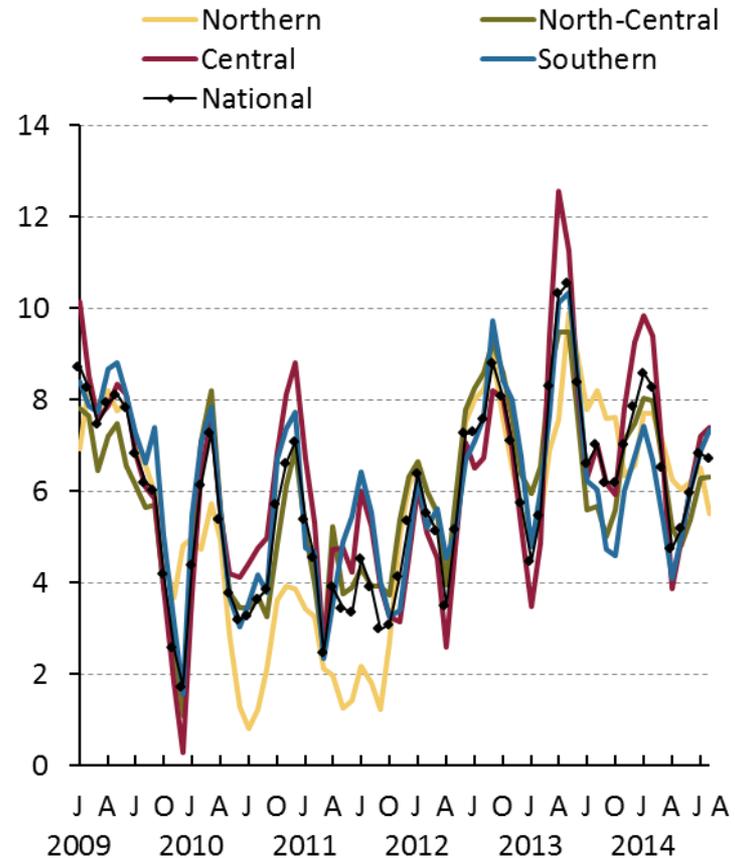
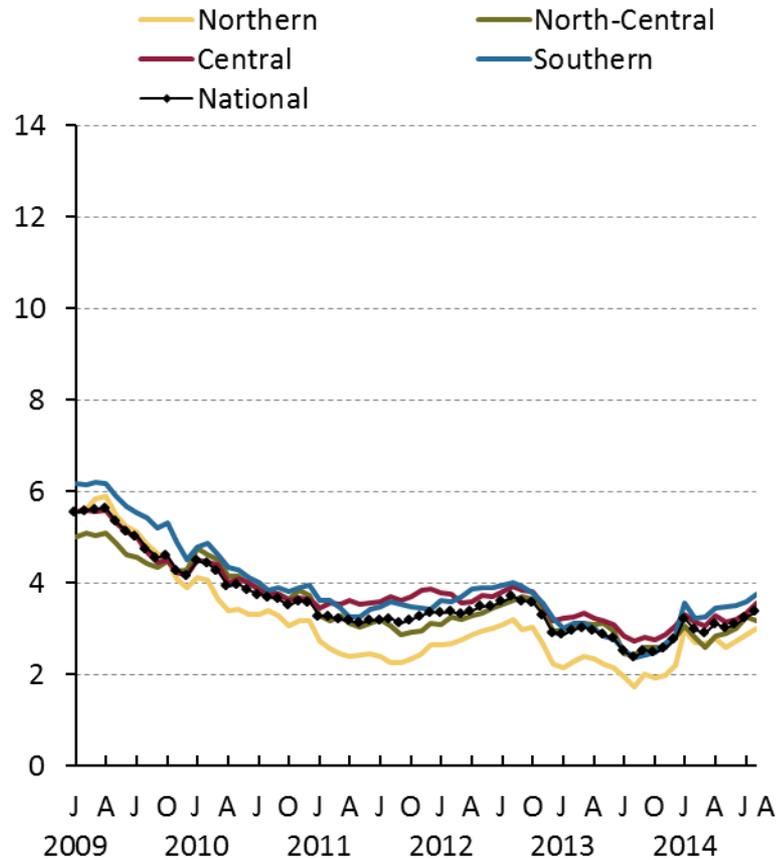
Inflation

Components of Annual Headline Inflation

Percent

Core

Non-core



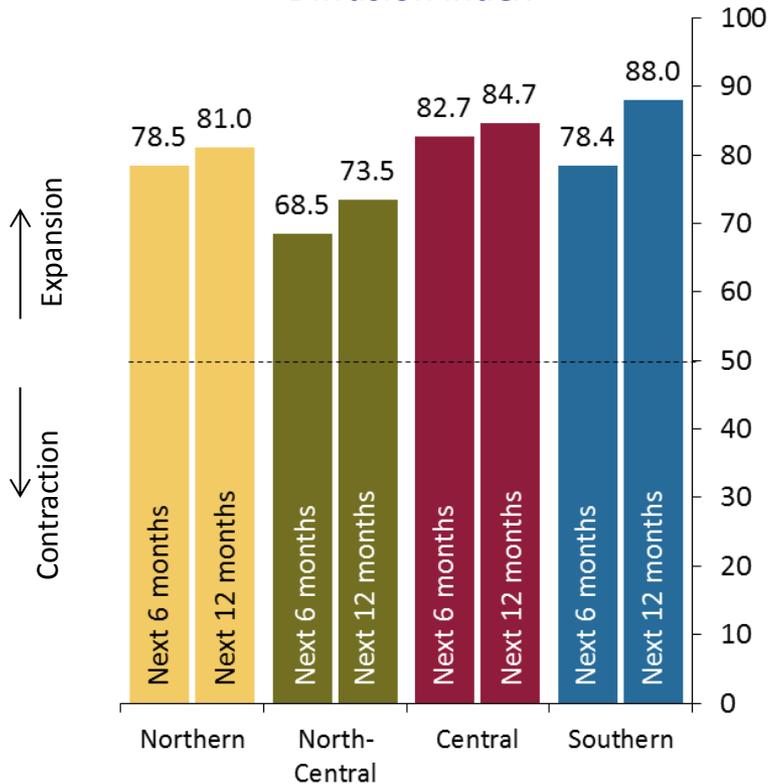
Source: Estimated by Banco de México with data from INEGI and Banco de México.

Economic Outlook

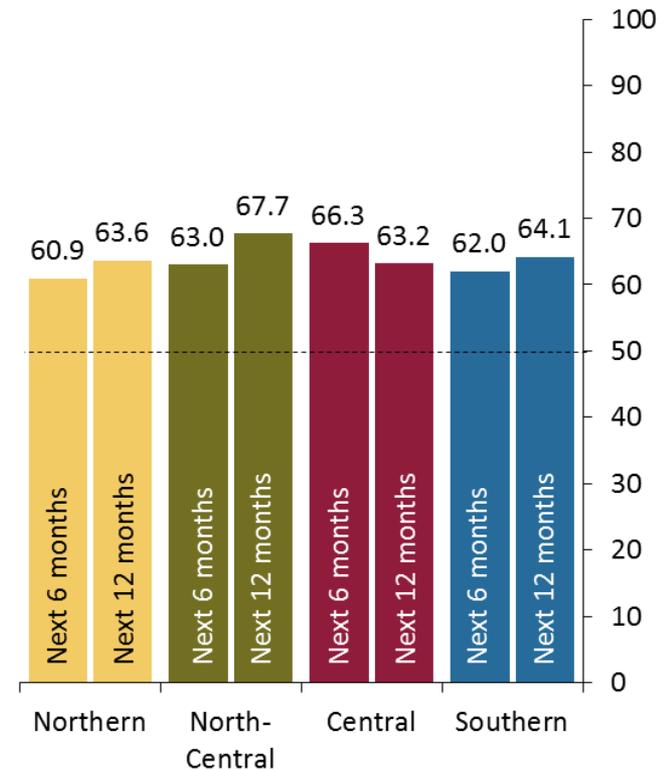
- The interviewed business agents generally stated that they anticipate an expansion of demand for own goods and services over the next 6 and 12 months.
- This estimation is associated with the boost coming from external demand, and, to a lesser degree, from domestic demand.
 - ✓ In particular, the consulted business contacts stressed that a good performance of the manufacturing industry and greater public expenditure on infrastructure are expected.
- Hence, the referred agents outlined the plan to increase the number of hired personnel and to increase the physical capital stock.

Economic Outlook

**Demand as Expected
by Business Agents ^{1/}**
Diffusion index



**Personnel Hired as Expected
by Business Agents ^{1/}**
Diffusion index



1/ Results obtained from responses to the question: “With respect to the situation in 2Q 2014, how do you expect demand for own goods and services to change over the next 6 and 12 months?, from the interviews conducted by Banco de México in the period of June 16 – July 21, 2014.

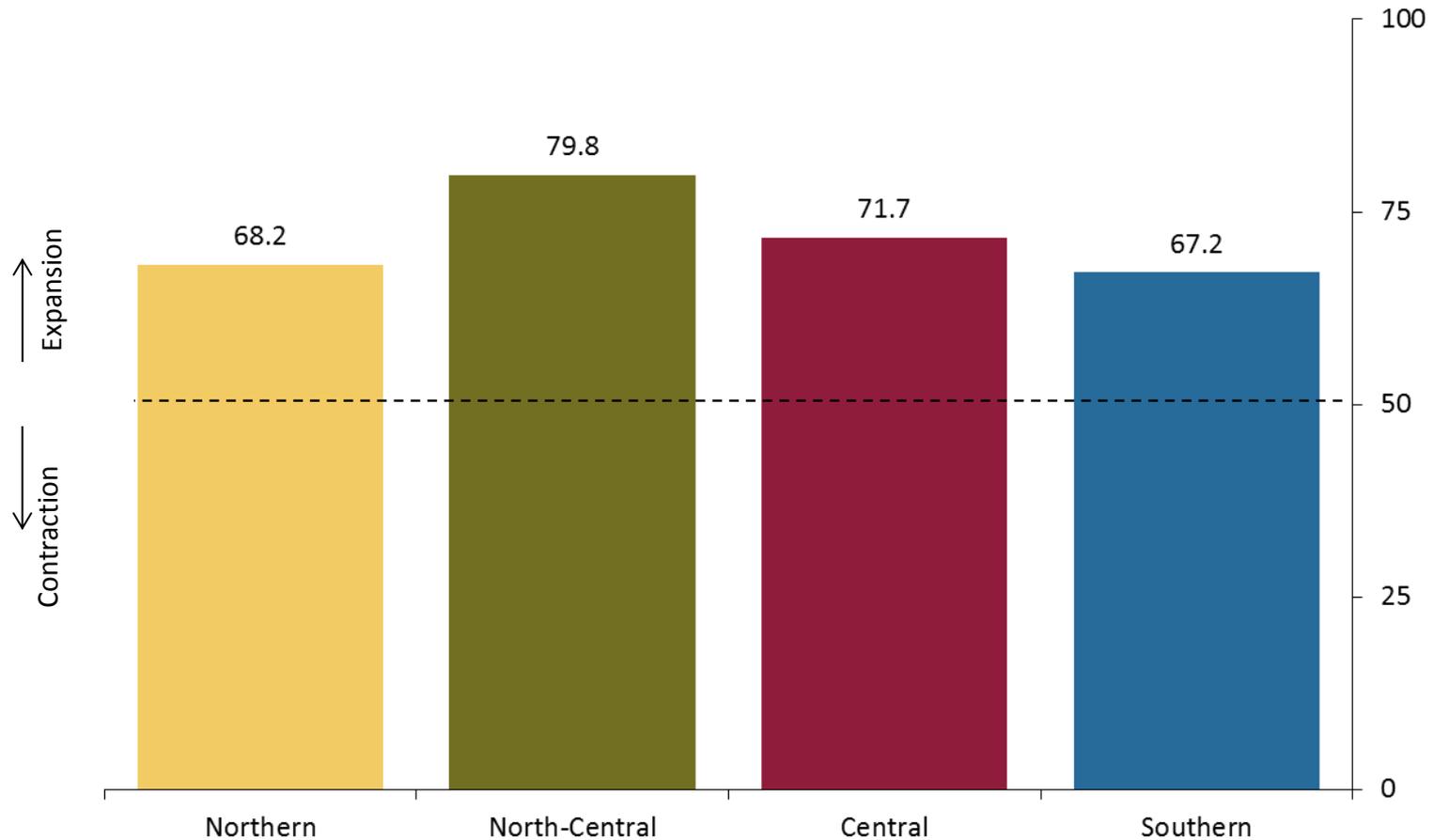
Source: Banco de México.

1/ Results obtained from responses to the question: “With respect to the situation in 2Q 2014, how do you expect the personnel hired by your firm to modify over the next 6 and 12 months?, from the interviews conducted by Banco de México in the period of June 16 – July 21, 2014.

Source: Banco de México.

Economic Outlook

Physical Capital Stock as Expected by Business Agents for the Next 12 Months ^{1/} Diffusion index



1/ Results obtained from responses to the question: "With respect to the situation in 2Q 2014, how do you expect your firm's physical capital stock to change over the next 12 months?", from the interviews conducted by Banco de México in the period of June 16 – July 21, 2014.
Source: Banco de México.

Economic Outlook

- Although the interviewed business agents anticipate that economic activity in their regions will continue recovering, they also mentioned the main risks they perceive for the next 6 and 12 months in their sectors:

Upward risks

- ✓ Public investment in infrastructure and higher than expected levels of private investment.
- ✓ A more vigorous than anticipated recovery of the U.S. economic activity.

Downward risks

- ✓ Deterioration in the perception of public safety.
- ✓ An extension, further than expected, of the effect of the fiscal changes on businesses' cash flow.
- ✓ A delayed execution of public expenditure at the local level.

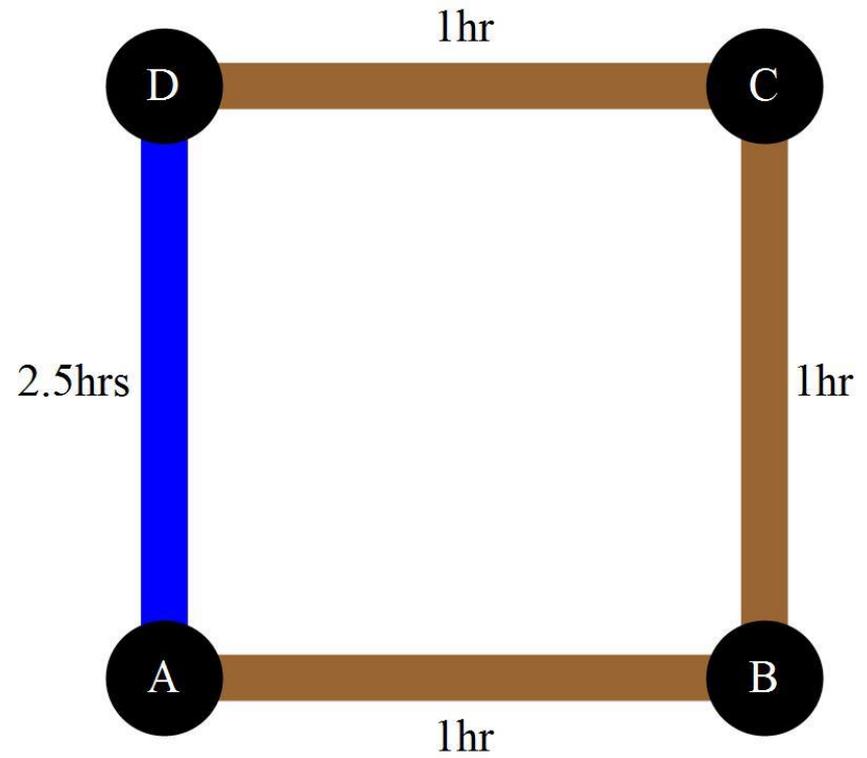
Box 2: Transport Infrastructure and Access to Domestic Market in the Regions of Mexico

- Previous reports highlighted the importance of transport infrastructure for economic development in the regions and analyzed the relation between productivity and infrastructure provision at the regional level.¹
- According to the business agents from the North-Central region interviewed for this Report, an example of this is the Durango-Mazatlan highway, which has been generating benefits that are expected to persist in the medium and long term, as a result of improved connectivity in the region.
- In line with this expectation, the Box analyzes the effect of the abovesaid infrastructure project on the value of the market the North-Central region has access to.
- The results suggest that improved infrastructure provision related to this highway construction lowered transport costs and increased the potential market value of localities in the extensive areas of the North-Central region, as well as in certain parts of the Northern region.

1/ See Boxes “Business Agents’ Opinion of Regional Infrastructure Projects”, and “Regional Differences in Labor Productivity in the Manufacturing Industry. How are they Related to Infrastructure Provision?”, in the Regional Economic Reports of October-December 2011 and October-December 2012, respectively.

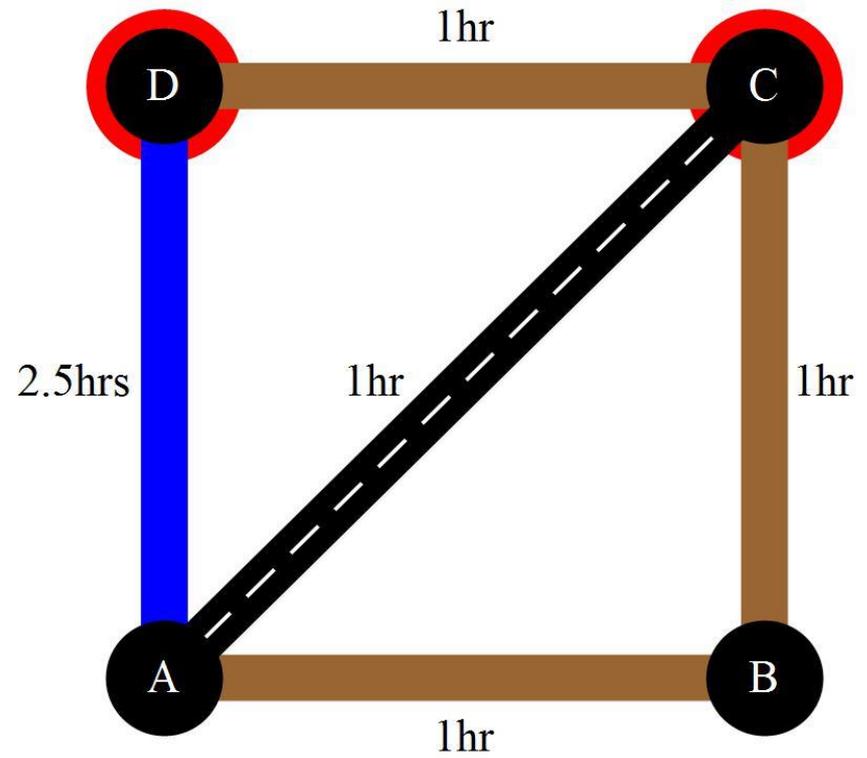
Box 2: Transport Infrastructure and Access to Domestic Market in the Regions of Mexico

- The analysis consists in estimating the increase in the potential market value (PMV) of each locality, as a result of improved connectivity, following the incorporation of a new highway Durango-Mazatlan into the communications network. The diagram below illustrates the exercise in an intuitive manner:
 - The PMV of Point A positively depends on income in all other points and negatively on the transportation time.



Box 2: Transport Infrastructure and Access to Domestic Market in the Regions of Mexico

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 - The PMV of Point A positively depends on income in all other points and negatively on the transportation time.
 - In light of improved connectivity after the highway construction from Point A to Point C, transportation costs from Point A to Points C and D decrease.
 - Therefore, the PMV of Point A increases with improved connectivity.

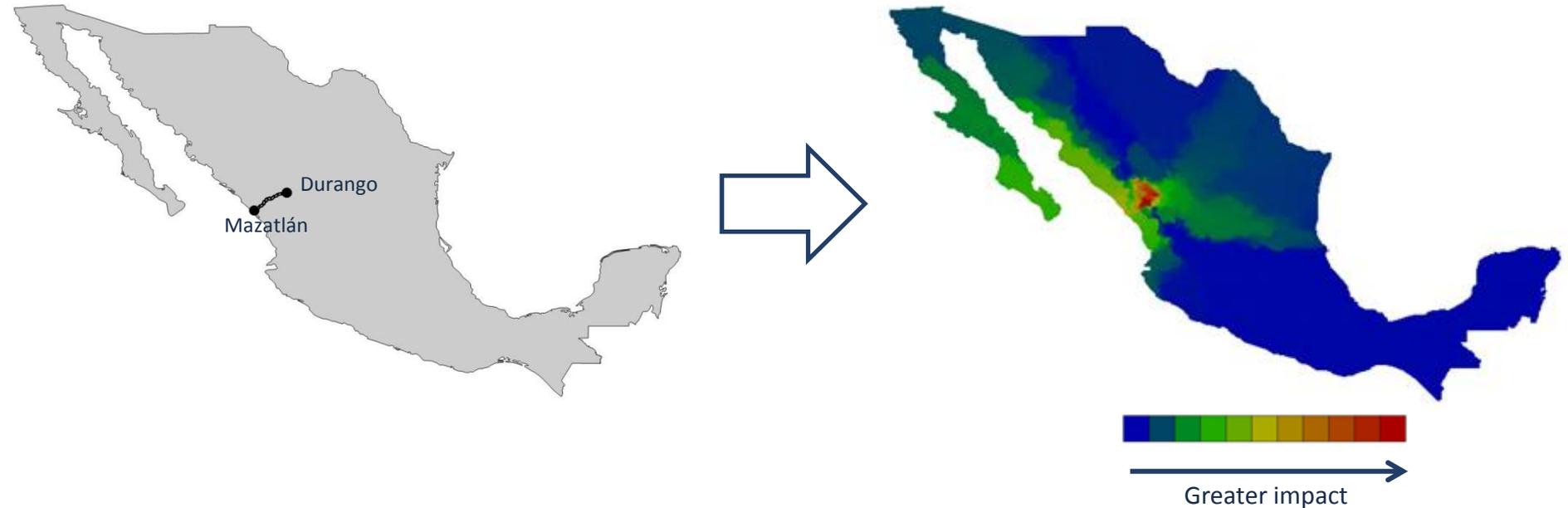


Box 2: Transport Infrastructure and Access to Domestic Market in the Regions of Mexico

Effect of Durango-Mazatlan Highway Construction on the Potential Market Value

New Highway Durango-Mazatlan

Estimated Change in the Potential Market Value



Source: Estimated by Banco de México with data from INEGI, SNIIM, CONEVAL.

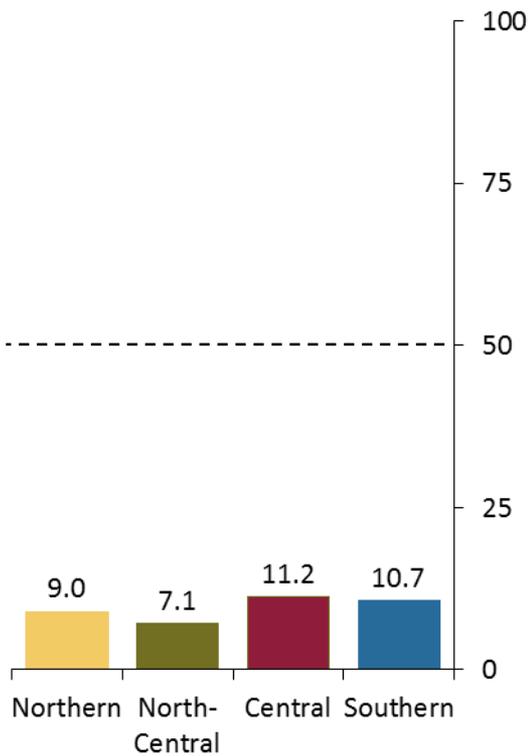
Economic Outlook

- As regards inflation expectations and compared to the previous year, for the next 6 and 12 months the interviewed business contacts in all regions anticipate lower annual rates of change in:
 - ✓ Labor costs
 - ✓ Commodity prices
 - ✓ Own products' prices

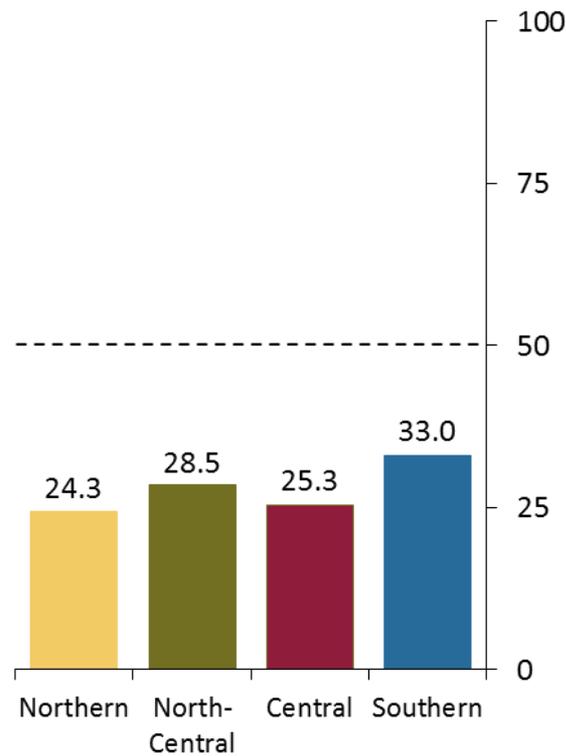
Economic Outlook

Business Agents' Inflation Expectations, Next 6 Months ^{1/} Diffusion index

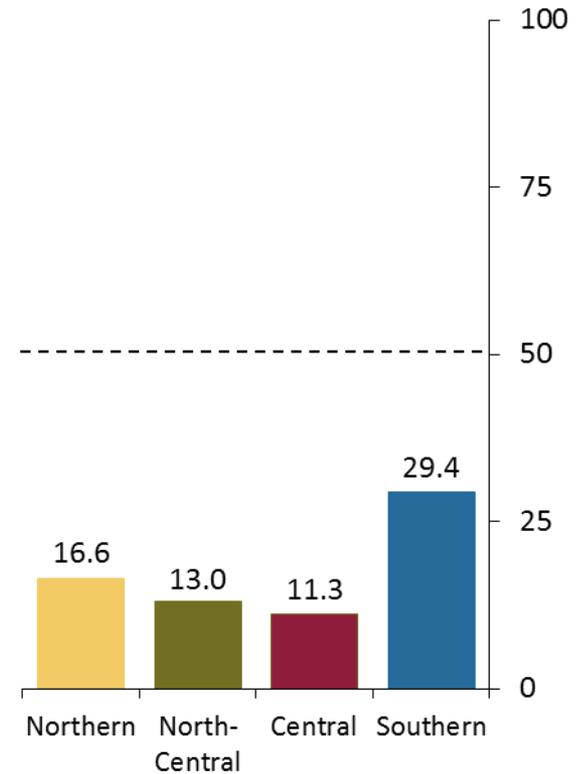
Labor Cost Inflation



Commodity Price Inflation



Own Products' Price Inflation



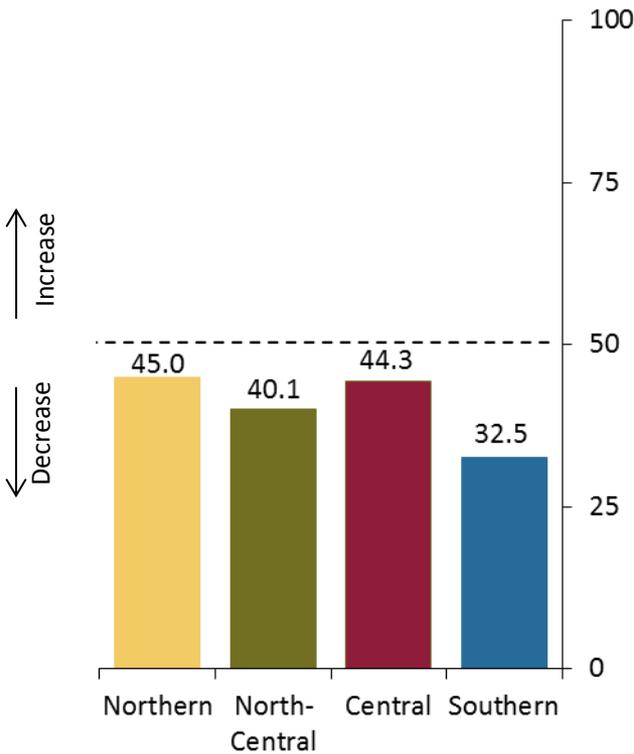
1/ Results obtained from responses to the questions: "With respect to the situation in 2Q 2014, do you expect any adjustment in labor costs, commodity prices and own products and services' prices over the next 6 months?" and "In comparison with the same period of last year, what magnitude of adjustment do you expect: greater, same or lower?", from the interviews conducted by Banco de México in the period of June 16 – July 21, 2014.

Source: Banco de México.

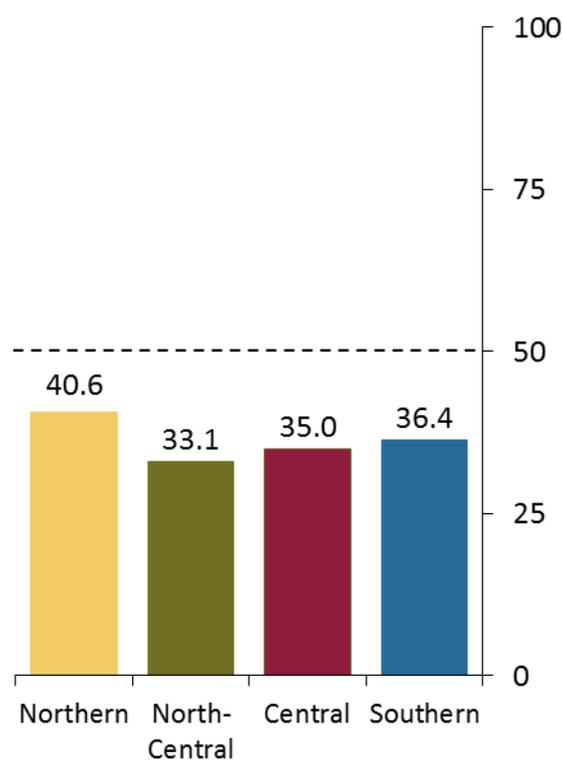
Economic Outlook

Business Agents' Inflation Expectations, Next 12 Months ^{1/} Diffusion index

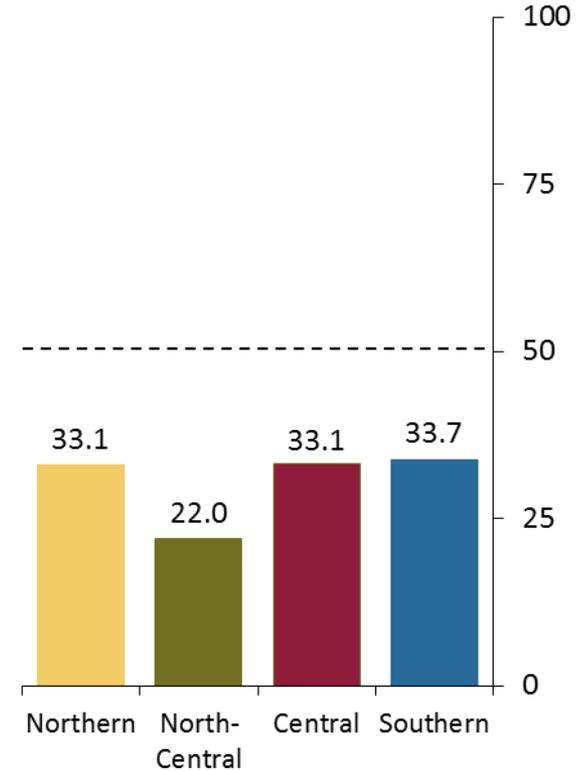
Labor Cost Inflation



Commodity Price Inflation



Own Products' Price Inflation



1/ Results obtained from responses to the questions: "With respect to the situation in 2Q 2014, do you expect any adjustment in labor costs, commodity prices and own products and services' prices over the next 12 months?" and "In comparison with the same period of last year, what magnitude of adjustment do you expect: greater, same or lower?", from the interviews conducted by Banco de México in the period of June 16 – July 21, 2014.

Source: Banco de México.

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Final Remarks

- 1 Regional economies presented greater dynamism in 2Q 2014, as compared to 1Q 2014, which was triggered by an expansion of external demand and an improvement in domestic demand.
 - The Northern region, followed by central regions, expanded the most vigorously.
- 2 The business contacts interviewed by Banco de México for this Report anticipate demand for own products and services to continue growing in all regions over the next 6 and 12 months. Therefore, most of these business agents stated that they will increase the number of hired personnel in their firms and that they will invest, mainly in machinery and equipment.

Final Remarks

- ③ By the end of the period analyzed in this Report, annual headline inflation rebounded in all regional economies of Mexico, as a result of the fading effect coming from a high comparison base in the prices of some agricultural products in 1H 2014, and as a result of higher prices of some livestock products and their by-products.
- ④ In all regions for the following 6 and 12 months, the consulted business agents anticipate lower annual growth rates of labor costs, of commodity prices and of own products' prices, as compared to the previous year.



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