Challenges on the Production and Dissemination of Economic Statistics during the COVID-19 pandemic in Mexico

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Index

• Effects of COVID-19 on the compilation of economic information

• Additional products and information programs for the analysis and measurement of the COVID-19 impact
Strategy to address non-response from economic units due to COVID-19

There are 5 economic surveys that capture monthly information from 33,000 economic units in the following sectors:

- Construction
- Manufacturing
- Wholesale and retail trade
- Non financial services
- For the previous sectors INEGI also carries out a survey on Enterprise Opinion (mainly by CATI)
Strategy to address non-response from economic units due to COVID

For several years the economic surveys have implemented the collection via CAWI, reaching a monthly average collection of 72% through this means in 2018-2019.

During contingency months information was captured through digital means such as CATI and email for the 28% remaining economic units.
COVID-19 lockdown: temporary closures and non-response rates

Temporary closures refers to the economic units that suspended economic activities during the contingency.

Non-response refers to the active economic units that did not provide any information to INEGI.
## Impact of non-response rates by survey

Effects on the collection of revenues due to non-response rates by survey (share)

<table>
<thead>
<tr>
<th>Statistical Program</th>
<th>Monthly average %</th>
<th>Revenue %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>April</td>
</tr>
<tr>
<td>Construction</td>
<td>0.3</td>
<td>1.1</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>2.8</td>
<td>5.1</td>
</tr>
<tr>
<td>Wholesale and retail trade</td>
<td>5.7</td>
<td>5.4</td>
</tr>
<tr>
<td>Non financial services</td>
<td>15.0</td>
<td>5.8</td>
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<tr>
<td>Enterprise Opinion</td>
<td>7.1</td>
<td>0.0</td>
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</table>
As of April 1st the price collectors have been working through home office.

The price collections are carried out through the websites of economic units, by phone, e-mail and home delivery platforms.

The lack of prices is imputed by implementing the methodology established in the *Consumer price index manual: theory and practice*.

The percentage of products impacted by the lockdown was 0.7% (measured by their weights) for the 1st fortnight of September, compared to the 11% reached in the 1st fortnight of May.
Data source for the quotation of the CPI price sample

<table>
<thead>
<tr>
<th>Data source</th>
<th>April</th>
<th>1st May</th>
<th>2nd May</th>
<th>1st Jun</th>
<th>2nd Jun</th>
<th>1st Jul</th>
<th>2nd Jul</th>
<th>1st Aug</th>
<th>2nd Aug</th>
<th>1st Sep</th>
</tr>
</thead>
<tbody>
<tr>
<td>Websites</td>
<td>43.71</td>
<td>49.38</td>
<td>62.69</td>
<td>61.60</td>
<td>58.26</td>
<td>57.02</td>
<td>50.77</td>
<td>49.97</td>
<td>46.52</td>
<td>44.65</td>
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<tr>
<td>Telephone</td>
<td>40.56</td>
<td>42.29</td>
<td>31.32</td>
<td>30.75</td>
<td>30.08</td>
<td>29.54</td>
<td>30.96</td>
<td>32.53</td>
<td>30.18</td>
<td>28.53</td>
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<td>Face-to-face visit</td>
<td>6.37</td>
<td>6.57</td>
<td>4.75</td>
<td>6.21</td>
<td>10.40</td>
<td>11.98</td>
<td>16.51</td>
<td>16.01</td>
<td>21.82</td>
<td>25.60</td>
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<tr>
<td>E-mail</td>
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<td>0.83</td>
<td>0.43</td>
<td>0.66</td>
<td>0.62</td>
<td>0.62</td>
<td>0.83</td>
<td>0.59</td>
<td>0.63</td>
<td>0.42</td>
</tr>
<tr>
<td>Apps</td>
<td>1.22</td>
<td>0.92</td>
<td>0.82</td>
<td>0.78</td>
<td>0.64</td>
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<td>0.90</td>
<td>0.85</td>
<td>0.80</td>
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<tr>
<td>Total</td>
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<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

The total of specifics quoted per fortnight is 119,608.
Additional products and information programs for analyzing and measuring the impact of COVID-19
The aim is to obtain qualitative indicators on the effects in businesses due to the measures adopted in the contingency by COVID-19. The survey was developed in accordance with the methodology proposed by the World Bank, allowing international comparisons.

Simultaneous processes
- Survey for Large Enterprises
- Survey for Micro, Small and Medium Enterprises

Interviews: via CATI

Sample size:
- Large Enterprises: 1,825
- MSM Enterprises: 3,095

Publication: July 23, 2020

The second round has started in September and it will finish in October.
Starting in May 2020, INEGI publishes a new indicator: **Early Monthly Index for Manufacturing Activity Level (IMOAM)**, using administrative data on **electric energy consumption** as an explanatory variable, in a log differences regression model, designed to estimate monthly growth rates of the Manufacturing Activity Level.
Geospatial information on businesses at the highest level of detail

Example: CDMX deployment with selected layers of essential activities during the COVID-19 pandemic
Two impact simulators were developed with the Input-Output Table to modelling the impacts of supply or demand on key variables such as: production, value-added and jobs according to the assumptions defined by each user.

- The used models are: **Ghosh Model** for supply approach and **Leontief Model** for demand.

- The publication covers 20 NAICS economic sectors.
Main goals:

✓ Releasing births, deaths and survivals rates occurred since the end of 2019 Economic Censuses until today

✓ Publish rates of surviving establishments that took some measures to deal with the COVID-19 pandemic

✓ Calculate rates of establishments that applied for a loan according to the financing sources, as well as knowing the main uses of the approved loans
Thank You!

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