Goldschmidt Fellowship Training
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Any opinions and conclusions expressed herein are those of the author and do not represent the views of the U.S. Census Bureau. All results are from the Small Business Pulse Survey website which notes the following: The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release. CBDRB-FY21-292
Small Business Pulse Survey Background

Small Business Pulse Survey (SBPS)
The SBPS measures the effect of changing business conditions during the coronavirus pandemic and other major events such as hurricanes on our nation’s small businesses.

Timeline for SBPS Data Collection
April 26, 2020 - current

Partners
Small Business Administration
Federal Reserve Board of Governors
International Trade Administration
Minority Business Development Administration
Bureau of Economic Analysis
National Telecommunications and Information Administration
Bureau of Labor Statistics
U.S. Department of Health and Human Services
What’s the SBPS?
A weekly survey to measure the effect of changing business conditions during the Coronavirus pandemic on our nation's small businesses. Each phase has consisted of around 20 questions taking 5 - 6 minutes to complete. Each phase, this survey reaches ~1M small businesses split across nine weeks.

What are we collecting?
Near real time data from small business on operational challenges, vaccine requirements, supply chain impacts, and outlook and expectations.

Methodology and Collection
- ~1M sample representative of 5.6M small businesses
- Includes all single-location businesses with 1-499 employees and $1000+ revenue that reported an email address. Excludes non-employers or multi-units
- Initial email on Monday asking for a response by Thursday
- Due date reminder sent Wednesday and a final notice is sent on Friday.
- The company has until the end of the phase to respond.

Collaboration Partners
SBPS content has been developed in a joint effort between internal and external stakeholders. Internal: ADEP and CES. External: MBDA, FRB, SBA, ITA, NTIA, BTS, BEA and BLS

Phases
Phase 1: April 2020 – June 2020
Phase 2: August 2020 – October 2020
Phase 3: November 2020 – January 2021
Phase 4: February 2021 – April 2021
Phase 5: May 2021 – July 2021
Phase 6: August 2021 – October 2021
Phase 7: November 2021 – January 2022
Phase 8: February 2022 – April 2022

SBPS Key Facts
- In March-April 2020, Small Business Pulse Survey (SBPS) went from concept to data release in 39 days.
- Is the first economic survey conducted solely by email
- Weekly data releases
- Provides national estimates as well as state, top 50 metro, and sector detail
- Uses Centurion as reporting instrument
- Response rate of ~25%
SBPS Data Products Summary

Highly Interactive Website

• National estimates map
• Sector estimates
• By sector, state, and MSA:
  • Survey detail bar charts
  • Scatter plot of 2 questions/answers
  • Time series by sector, state, and MSA

Download Files and Documentation

• National estimates
• State estimates (includes Puerto Rico)
• Sector & Sub-sector (NAICS2, NAICS3) estimates
• MSA estimates for top 50 by population
• Employment size class (1-4, 5-19, 20+) estimates
<table>
<thead>
<tr>
<th>File</th>
<th>File Type</th>
<th>Date Range</th>
<th>Tags</th>
</tr>
</thead>
<tbody>
<tr>
<td>National, Sector</td>
<td>XLSX</td>
<td>01/10/2022 to 01/16/2022</td>
<td>National, Sector (NAICS)</td>
</tr>
<tr>
<td>National, State</td>
<td>XLSX</td>
<td>01/10/2022 to 01/16/2022</td>
<td>National, State</td>
</tr>
<tr>
<td>National, State by Sector</td>
<td>XLSX</td>
<td>01/10/2022 to 01/16/2022</td>
<td>National, State, Sector (NAICS)</td>
</tr>
<tr>
<td>Top 50 MSA</td>
<td>XLSX</td>
<td>01/10/2022 to 01/16/2022</td>
<td>MSA</td>
</tr>
<tr>
<td>Sub-sector (NAICS3)</td>
<td>XLSX</td>
<td>01/10/2022 to 01/16/2022</td>
<td>Sector (NAICS)</td>
</tr>
<tr>
<td>National, State, Sector by Employment Size</td>
<td>XLSX</td>
<td>01/10/2022 to 01/16/2022</td>
<td>National, State, Sector (NAICS), Employment Size</td>
</tr>
<tr>
<td>Index values - National, State, Sector</td>
<td>XLSX</td>
<td>01/10/2022 to 01/16/2022</td>
<td>National, State, Sector (NAICS)</td>
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<tr>
<td>Unit Response Rate</td>
<td>XLSX</td>
<td>01/10/2022 to 01/16/2022</td>
<td>Metrics, State</td>
</tr>
<tr>
<td>All Files</td>
<td>ZIP</td>
<td>01/10/2022 to 01/16/2022</td>
<td>National, State, Sector (NAICS), MSA, Employee Size, Metrics</td>
</tr>
</tbody>
</table>
SBPS Content Overview

Overall Effect
Operations Metrics
COVID-19 Testing/Vaccine
Challenges & Impacts
Change From Pre-Pandemic / 6 Months Ago
Business Finances
Future Outlook
Revenue & Employment

Q: In the last week, did this business have a change in operating revenues/sales/receipts?

Q: In the last week, did this business have a change in the number of paid employees?
Changes to Business Practices

In the next six months, do you think this business will do any of the following?
(Data Collected: 02/21/2022 - 02/27/2022)
Remote Work

How has the number of hours paid employees worked from home changed compared to...

What was normal before March 13, 2020

Percent of Small Businesses

6.8 6.7 6.6 7.0 6.7 6.5 6.4 6.1
7.9 8.4 8.6 8.0 8.5 8.3 8.1 8.5

6.6 6.2 6.7 6.6 6.4 6.5 6.7 7.0 7.4
8.6 8.4 8.5 8.1 8.7 8.5 8.9 9.0 8.9

Six months ago

76.1 76.3 76.1 76.4 75.9 76.6 76.4 77.1 76.9
75.9 76.7 75.7 76.1 76.2 76.3 76.0 75.7 74.8

84.7 85.1

5.3 5.3 5.3 5.0 5.5 5.2 5.3 5.2 5.2
3.9 3.3 3.5 3.6 3.4 3.5 3.3 3.2 3.3

5.3 5.0 5.7 5.5 5.5 5.1 5.1 5.6
3.6 3.7 3.4 3.6 3.3 3.2 3.2 3.2

5.0 4.7

Large decrease  Moderate decrease  Little or no change  Moderate increase  Large increase
Survey Indexes

Used to create a numeric representation of a question or set of questions.

- Overall Sentiment Index (OSI) assesses the overall effect of the pandemic on businesses.

- Operational Challenges Index (OCI) assesses the overall effect of the pandemic on business operations.

- Expected Recovery Index (ERI) summarizes the length of the expected recovery of businesses.

<table>
<thead>
<tr>
<th>Index</th>
<th>Survey Question</th>
<th>Response Categories</th>
<th>Numerical Value Assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Sentiment Index (OSI)</td>
<td>Q2 (Overall Impact)</td>
<td>Large negative effect</td>
<td>-1.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moderate negative effect</td>
<td>-0.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Little or no effect</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moderate positive effect</td>
<td>+0.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large positive effect</td>
<td>+1.0</td>
</tr>
<tr>
<td>Q4 (Revenue change)</td>
<td>Yes, increased</td>
<td>+1.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes, decreased</td>
<td>-1.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Operational Challenges Index (OCI)</td>
<td>Q5 (Temporary closure)</td>
<td>Temporary closure</td>
<td>-1.0</td>
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<tr>
<td></td>
<td></td>
<td>Permanent closure</td>
<td>-1.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All other responses</td>
<td>0.0</td>
</tr>
<tr>
<td>Q6 (Employment)</td>
<td>Yes, increased</td>
<td>+1.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes, decreased</td>
<td>-1.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Q7 (Hours)</td>
<td>Yes, increased</td>
<td>+1.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes, decreased</td>
<td>-1.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Q11 (Supply chain)</td>
<td>Any response besides none of the above</td>
<td>-1.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>None of the above</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Expected Recovery Index (ERI)</td>
<td>Q21 (Expected recovery)</td>
<td>1 month or less</td>
<td>-0.2</td>
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<tr>
<td></td>
<td></td>
<td>2-3 months</td>
<td>-0.4</td>
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<td></td>
<td></td>
<td>4-6 months</td>
<td>-0.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>More than 6 months</td>
<td>-0.8</td>
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<tr>
<td></td>
<td></td>
<td>I do not believe this business will return to its usual level of operations</td>
<td>-1.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>There has been little or no effect on this business's usual level of operations</td>
<td>0.0</td>
</tr>
</tbody>
</table>
Overall Sentiment - National

Overall sentiment index

Index values range from [-1, 1] with -1 (+1) representing the most negative (positive) sentiment.
Research Papers and Data Products

Papers

CATHARINE BUFFINGTON, DANIEL CHAPMAN, EMIN DINLERSOZ, LUCIA FOSTER, JIM HUNT, AND SHAWN KLIMEK
Small Business Pulse Survey Estimates by Owner Characteristics and Rural/Urban Designation

View paper here
WORKING PAPER NUMBER CES-WP-21-24 AUGUST 2021

CATHARINE BUFFINGTON, DANIEL CHAPMAN, EMIN DINLERSOZ, LUCIA FOSTER, AND JOHN HALTWANGER
High-frequency data from the U.S. Census Bureau during the COVID-19 pandemic: small vs. new businesses

View paper here
BUSINESS ECONOMICS VOL. 56 JULY 2021

CATHARINE BUFFINGTON, JASON FIELDS, AND LUCIA FOSTER
Measuring the Impact of COVID-19 on Businesses and People: Lessons from the Census Bureau’s Experience

View paper here
AER PAPERS AND PROCEEDINGS VOL. 111 MAY 2021

CATHARINE BUFFINGTON, DANIEL CHAPMAN, EMIN DINLERSOZ, LUCIA FOSTER, AND JOHN HALTWANGER
High Frequency Business Dynamics in the United States During the COVID-19 Pandemic

View paper here
WORKING PAPER NUMBER CES-21-06 MARCH 2021

CATHARINE BUFFINGTON, CARRIE DENNIS, EMIN DINLERSOZ, LUCIA FOSTER, AND SHAWN KLIMEK

View paper here
WORKING PAPER NUMBER CES-20-16 MAY 2020
Providing Insights Beyond COVID
Small Business Pulse Transitioning to Business Trends and Outlook Survey (BTOS)
Changes With BTOS

### Content
Pivot from COVID-19 to capturing:
- Economic baseline norms
- Unforeseen events and recovery

### Timing
Bi-weekly data collection and publications with no gaps between phases.

### Data Products
- New indexes summarizing core concepts
- Data available via API
BTOS Content

Reference Period
- Prior two weeks
- 6-month outlook

Concepts
- Performance
- Temporary Closures
- Hours
- Demand
- Supply Chain Delays
- Revenue
- Employment
- Hiring Difficulties
- Input/Output Prices
- E-commerce
SBPS Links

- Small Business Pulse Respondent Landing Page
- Small Business Pulse Data Landing Page
- Small Business Pulse Data Visualization and Downloads Page
- COVID19 Data Hub Link – uses downloads data: [https://covid19.census.gov/](https://covid19.census.gov/)
  - ESRI uses data download files from data viz page (MSA, National, Sector)
SBPS & BTOS Contacts

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