Firm-Level Planning Frequencies and Forecast Horizons

David Altig, Jose Maria Barrero, Nicholas Bloom, Steven J. Davis, Brent Meyer and Emil Mihaylov

28 November 2021

Abstract: We elicit new information about planning frequencies and forecast horizons from a survey of 500 US firms conducted in August 2018 and again in April-May 2021. Most firms update capital investment plans yearly, while updating plans for employment, prices and sales at monthly or quarterly intervals. Around one third of firms, mostly smaller ones, report having no formal plans. The most common forecast horizon for own-firm outcomes is one year ahead, with significant variation across firms. Planning frequencies and forecast horizons are extremely similar before and after the onset of the COVID-19 pandemic, which suggests they are rather insensitive to external economic conditions.

Keywords: Planning Horizon, Planning Updates, Forecast Horizon, Uncertainty

JEL Classification: L2, M2, O32, O33.

Disclaimer: Any opinions and conclusions expressed herein are those of the authors and do not necessarily represent the views of the Federal Reserve Bank of Atlanta. All results have been reviewed to ensure that no confidential information was disclosed.

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1 Federal Reserve Bank of Atlanta, 2 Instituto Tecnológico Autónomo de México, 3 Stanford University, 4 University of Chicago Booth School of Business and Hoover Institution
The role of planning frequencies and forecast horizons in business decision-making cuts across multiple areas of economics, finance, and management. Examples include investment under uncertainty (Majd and Pindyck, 1987), demand management under uncertainty (Mentzer and Moon, 2004), supply chain management (Stadtler, 2005), technology implementation and its integration across business segments (Lindberg, 1990), models of aggregate economic fluctuations (Kydland and Prescott, 1982), and the effects of commitment in the conduct of monetary policy (Woodford, 2018).

However, evidence on actual business planning frequencies and forecast horizons is scarce. Poterba and Summers (1995) provide survey-based evidence on CEO hurdle rates for investment decisions, the planning horizons that enter into those decisions, and how planning horizons are influenced by the policy environment. Petya (2000) gathers evidence on time-to-build for new manufacturing plants.

We draw on the panel Survey of Business Uncertainty (Altig et al., 2020) to provide evidence on planning frequencies and forecast horizons for a sample of roughly 500 U.S. firms that covers all major industries and regions of the country.
The Survey of Business Uncertainty is a monthly survey of up to 500 US firms covering the US private sector across industries and regions.

Firms are recruited by telephone by the Atlanta Federal Reserve Bank survey team and answer a 5-10 minute online monthly survey on a variety of topics.

Respondees are decision makers, 81 percent of whom are CEOs, CFOs or senior managers.

To scale up to national averages, we weight survey responses by firm size and industry size.

Further details on the survey are available on:

The website: https://www.atlantafed.org/research/surveys/business-uncertainty

The technical paper: “Surveying Business Uncertainty”, David Altig, Jose Barrero, Nicholas Bloom, Steven J Davis, Brent Meyer and Nicholas Parker, Journal of Econometrics, September 2020
How frequently does your firm update its plans or forecasts for the following? (Reweighted by Employment and to Match Industry Shares)

August 2018

April & May 2021

Source: Survey of Business Uncertainty conducted by the Federal Reserve Bank of Atlanta, Stanford University, and the University of Chicago Booth School of Business

Electronic copy available at: https://ssrn.com/abstract=3989304
What is the typical planning or forecasting horizon for your firm for the following?
(Reweighted by Employment and to Match Industry Shares)

August 2018

What is the typical planning or forecasting horizon for your firm for the following?

<table>
<thead>
<tr>
<th>Horizon</th>
<th>Sales</th>
<th>Employment</th>
<th>Prices</th>
<th>Capital Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doesn't plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 1 month ahead</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 months ahead</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 months ahead</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6 months ahead</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 months ahead</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12+ months ahead</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fiscal year</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Share of responses:

N(sales)=325; N(employment)=325; N(prices)=48; N(capex)=275;

April & May 2021

What is the typical planning or forecasting horizon for your firm for the following?

<table>
<thead>
<tr>
<th>Horizon</th>
<th>Sales</th>
<th>Employment</th>
<th>Prices</th>
<th>Capital Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doesn't plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 1 month ahead</td>
<td></td>
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<td></td>
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</tr>
<tr>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3 months ahead</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>6 months ahead</td>
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<tr>
<td>12 months ahead</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12+ months ahead</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fiscal year</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Share of responses:

N(sales)=398; N(employment)=400; N(prices)=400; N(capex)=398;

Source: Survey of Business Uncertainty conducted by the Federal Reserve Bank of Atlanta, Stanford University, and the University of Chicago Booth School of Business.
How frequently does your firm update its plans or forecasts for the following? What is the typical planning or forecasting horizon for your firm for the following? August 2018

### Planning Frequency (days)

<table>
<thead>
<tr>
<th>Sector</th>
<th>August 2018</th>
<th>April-May 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unweighted</td>
<td>Weighted</td>
</tr>
<tr>
<td></td>
<td>N  Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>Construction, real estate, and mining and utilities</td>
<td>35</td>
<td>90.6 78.8</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>67</td>
<td>98.8 104.2</td>
</tr>
<tr>
<td>Retail and wholesale trade</td>
<td>40</td>
<td>111.8 102.2</td>
</tr>
<tr>
<td>Business Services, Information, Finance, and Insurance</td>
<td>86</td>
<td>150.0 163.6</td>
</tr>
<tr>
<td>Education, health and other services except government</td>
<td>25</td>
<td>146.3 118.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>253</td>
<td>121.8 123.5</td>
</tr>
</tbody>
</table>

### Planning Horizon (days)

<table>
<thead>
<tr>
<th>Sector</th>
<th>August 2018</th>
<th>April-May 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unweighted</td>
<td>Weighted</td>
</tr>
<tr>
<td></td>
<td>N  Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>Construction, real estate, and mining and utilities</td>
<td>35</td>
<td>336.3 365.9</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>67</td>
<td>283.5 291.7</td>
</tr>
<tr>
<td>Retail and wholesale trade</td>
<td>40</td>
<td>245.1 267.0</td>
</tr>
<tr>
<td>Business Services, Information, Finance, and Insurance</td>
<td>86</td>
<td>337.8 358.6</td>
</tr>
<tr>
<td>Education, health and other services except government</td>
<td>25</td>
<td>306.6 295.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>253</td>
<td>305.6 316.9</td>
</tr>
</tbody>
</table>

### Employment

<table>
<thead>
<tr>
<th>Sector</th>
<th>August 2018</th>
<th>April-May 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unweighted</td>
<td>Weighted</td>
</tr>
<tr>
<td></td>
<td>N  Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>Construction, real estate, and mining and utilities</td>
<td>16</td>
<td>141.3 137.8</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>38</td>
<td>104.9 104.6</td>
</tr>
<tr>
<td>Retail and wholesale trade</td>
<td>28</td>
<td>84.3 97.7</td>
</tr>
<tr>
<td>Business Services, Information, Finance, and Insurance</td>
<td>62</td>
<td>164.8 169.2</td>
</tr>
<tr>
<td>Education, health and other services except government</td>
<td>19</td>
<td>135.7 137.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>163</td>
<td>131.3 134.3</td>
</tr>
</tbody>
</table>

### Prices

<table>
<thead>
<tr>
<th>Sector</th>
<th>August 2018</th>
<th>April-May 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unweighted</td>
<td>Weighted</td>
</tr>
<tr>
<td></td>
<td>N  Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>Construction, real estate, and mining and utilities</td>
<td>0</td>
<td>. .</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0</td>
<td>. .</td>
</tr>
<tr>
<td>Retail and wholesale trade</td>
<td>28</td>
<td>113.3 96.7</td>
</tr>
<tr>
<td>Business Services, Information, Finance, and Insurance</td>
<td>0</td>
<td>. .</td>
</tr>
<tr>
<td>Education, health and other services except government</td>
<td>0</td>
<td>. .</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>28</td>
<td>113.3 96.7</td>
</tr>
</tbody>
</table>

### CapEx

<table>
<thead>
<tr>
<th>Sector</th>
<th>August 2018</th>
<th>April-May 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unweighted</td>
<td>Weighted</td>
</tr>
<tr>
<td></td>
<td>N  Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>Construction, real estate, and mining and utilities</td>
<td>23</td>
<td>117.0 128.4</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>55</td>
<td>191.8 196.7</td>
</tr>
<tr>
<td>Retail and wholesale trade</td>
<td>7</td>
<td>55.7 49.9</td>
</tr>
<tr>
<td>Business Services, Information, Finance, and Insurance</td>
<td>62</td>
<td>158.4 162.2</td>
</tr>
<tr>
<td>Education, health and other services except government</td>
<td>19</td>
<td>255.3 246.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>166</td>
<td>170.5 173.7</td>
</tr>
</tbody>
</table>

**NOTE:** "Less often than annually" category was set to 500 days. Results exclude respondents who said that they don’t have any formal planning or forecasting processes set in place.
How frequently does your firm update its plans or forecasts for the following? What is the typical planning or forecasting horizon for your firm for the following? April/May 2021

<table>
<thead>
<tr>
<th>Firm Size</th>
<th>Planning Frequency (days)</th>
<th>Planning Horizon (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>August 2018</td>
<td>April-May 2021</td>
</tr>
<tr>
<td></td>
<td>Unweighted</td>
<td>Weighted</td>
</tr>
<tr>
<td>Sales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 50 employees</td>
<td>54</td>
<td>117.7</td>
</tr>
<tr>
<td>50-99 employees</td>
<td>51</td>
<td>112.1</td>
</tr>
<tr>
<td>100-249 employees</td>
<td>71</td>
<td>131.3</td>
</tr>
<tr>
<td>250+ employees</td>
<td>77</td>
<td>122.4</td>
</tr>
<tr>
<td>Total</td>
<td>253</td>
<td>121.8</td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 50 employees</td>
<td>25</td>
<td>151.4</td>
</tr>
<tr>
<td>50-99 employees</td>
<td>33</td>
<td>102.5</td>
</tr>
<tr>
<td>100-249 employees</td>
<td>47</td>
<td>134.2</td>
</tr>
<tr>
<td>250+ employees</td>
<td>58</td>
<td>136.7</td>
</tr>
<tr>
<td>Total</td>
<td>163</td>
<td>131.3</td>
</tr>
<tr>
<td>Prices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 50 employees</td>
<td>9</td>
<td>93.8</td>
</tr>
<tr>
<td>50-99 employees</td>
<td>7</td>
<td>143.9</td>
</tr>
<tr>
<td>100-249 employees</td>
<td>8</td>
<td>138.1</td>
</tr>
<tr>
<td>250+ employees</td>
<td>4</td>
<td>54.3</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>113.3</td>
</tr>
<tr>
<td>CapEx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 50 employees</td>
<td>27</td>
<td>171.9</td>
</tr>
<tr>
<td>50-99 employees</td>
<td>35</td>
<td>169.0</td>
</tr>
<tr>
<td>100-249 employees</td>
<td>48</td>
<td>149.2</td>
</tr>
<tr>
<td>250+ employees</td>
<td>56</td>
<td>189.0</td>
</tr>
<tr>
<td>Total</td>
<td>166</td>
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</tr>
</tbody>
</table>

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