

Constructing a representative sample frame using commercial data providers

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Federal Reserve
Bank of Atlanta

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FRBA business surveys

Survey of Business Uncertainty

National

+900 responses monthly

43% response rate

CFO Survey

National

+500 responses
quarterly

30% response rate

Business Inflation Expectations Survey

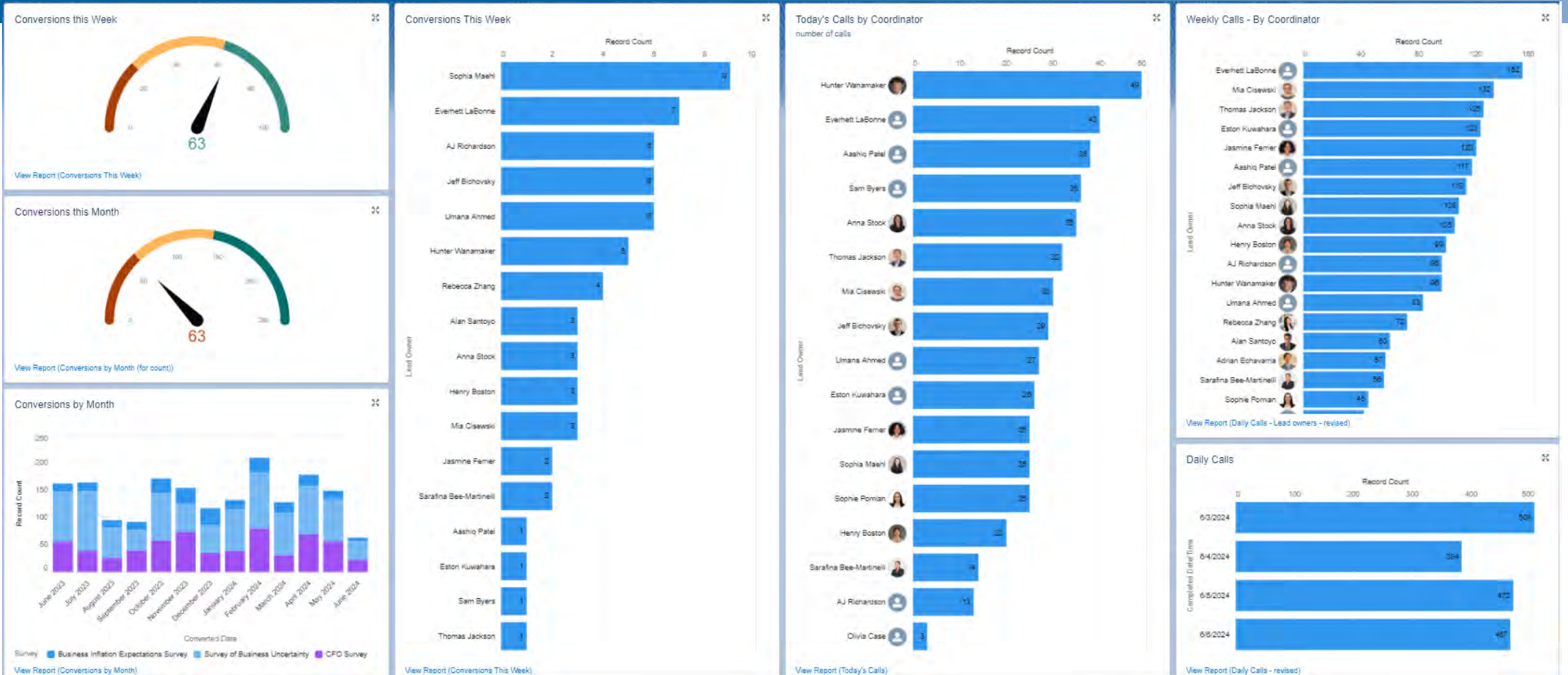
Regional, SE US

+300 responses monthly

46% response rate

Inform monetary policy + contribute to academic research

In-house panel construction



Constructing the sample frame

Ideal: census of businesses

Reality: commercial data providers

Challenges with commercial business databases

- Out of date/inaccurate
- Incomplete
- Expensive
- Skewed towards larger, older firms

Stratification matrix for sample frame construction

count based on 30,000 contacts requested by sector and firm size

30,000

Sector\Employment category	<10	10-19	20-29	30-39	40-74	75-149	150-299	300-499	500-999	1,000-1,999	2,000-4,999	5,000+	Total
Construction	328	194	216	183	270	257	217	166	165	105	79	65	2243
Educational services	15	15	108	107	120	123	123	116	123	84	27	13	974
Finance and insurance	202	69	137	128	173	202	225	190	232	195	155	110	2020
Health care and social assistance	153	121	170	151	214	255	261	211	236	184	136	92	2183
Information	75	51	133	124	160	180	187	170	192	162	113	76	1623
Leisure and hospitality	111	148	213	181	255	208	180	158	176	123	78	61	1892
Durable goods manufacturing	105	111	183	167	267	310	311	247	300	249	182	113	2545
Nondurable goods manufacturing	105	111	183	167	267	310	311	247	300	249	182	113	2545
Mining and utilities	46	34	123	119	154	169	164	152	177	132	81	52	1403
Other services except government	80	43	122	114	131	130	128	120	128	81	33	26	1137
Professional and business services	480	238	237	193	303	327	327	274	320	291	251	171	3412
Real estate and rental and leasing	880	289	254	209	324	333	341	281	303	201	168	148	3730
Retail and wholesale trade	373	237	230	194	306	319	276	207	231	174	196	165	2907
Transportation and warehousing	79	53	135	124	155	168	155	138	153	101	70	55	1387
Total	3031	1714	2445	2161	3099	3290	3206	2677	3036	2332	1750	1260	30000

Stratification matrix for sample frame construction

share of GDP by sector and firm size

Sector\Employment category	<10	10-19	20-29	30-39	40-74	75-149	150-299	300-499	500-999	1,000-1,999	2,000-4,999	5,000+	Total
Construction	1.09%	0.65%	0.72%	0.61%	0.90%	0.86%	0.72%	0.55%	0.55%	0.35%	0.26%	0.22%	7.48%
Educational services	0.05%	0.05%	0.36%	0.36%	0.40%	0.41%	0.41%	0.39%	0.41%	0.28%	0.09%	0.04%	3.25%
Finance and insurance	0.67%	0.23%	0.46%	0.43%	0.58%	0.67%	0.75%	0.63%	0.77%	0.65%	0.52%	0.37%	6.73%
Health care and social assistance	0.51%	0.40%	0.57%	0.50%	0.71%	0.85%	0.87%	0.70%	0.79%	0.61%	0.45%	0.31%	7.28%
Information	0.25%	0.17%	0.44%	0.41%	0.53%	0.60%	0.62%	0.57%	0.64%	0.54%	0.38%	0.25%	5.41%
Leisure and hospitality	0.37%	0.49%	0.71%	0.60%	0.85%	0.69%	0.60%	0.53%	0.59%	0.41%	0.26%	0.20%	6.31%
Durable goods manufacturing	0.35%	0.37%	0.61%	0.56%	0.89%	1.03%	1.04%	0.82%	1.00%	0.83%	0.61%	0.38%	8.48%
Nondurable goods manufacturing	0.35%	0.37%	0.61%	0.56%	0.89%	1.03%	1.04%	0.82%	1.00%	0.83%	0.61%	0.38%	8.48%
Mining and utilities	0.15%	0.11%	0.41%	0.40%	0.51%	0.56%	0.55%	0.51%	0.59%	0.44%	0.27%	0.17%	4.68%
Other services except government	0.27%	0.14%	0.41%	0.38%	0.44%	0.43%	0.43%	0.40%	0.43%	0.27%	0.11%	0.09%	3.79%
Professional and business services	1.60%	0.79%	0.79%	0.64%	1.01%	1.09%	1.09%	0.91%	1.07%	0.97%	0.84%	0.57%	11.37%
Real estate and rental and leasing	2.93%	0.96%	0.85%	0.70%	1.08%	1.11%	1.14%	0.94%	1.01%	0.67%	0.56%	0.49%	12.43%
Retail and wholesale trade	1.24%	0.79%	0.77%	0.65%	1.02%	1.06%	0.92%	0.69%	0.77%	0.58%	0.65%	0.55%	9.69%
Transportation and warehousing	0.26%	0.18%	0.45%	0.41%	0.52%	0.56%	0.52%	0.46%	0.51%	0.34%	0.23%	0.18%	4.62%
Total	10.10%	5.71%	8.15%	7.20%	10.33%	10.97%	10.69%	8.92%	10.12%	7.77%	5.83%	4.20%	100.00%

FRBA history with data providers

Dun and Bradstreet (2015-2021)

- Expensive, \$1 per contact

Data Axle (2021-2023)

- Inaccurate, +40% bad contacts

ZoomInfo (2023-present)

- Greater share of good contacts

Motivation to switch to ZoomInfo

Plateaued survey response counts

Share of inaccurate data: 45%

Recruiter experience:

- Hard to build trust
- Hard to get past gatekeeper
- Decline in recruiter effort

Growing pains with ZoomInfo

6-8 months to refine data request process

FRBA data needs differ from typical ZI client

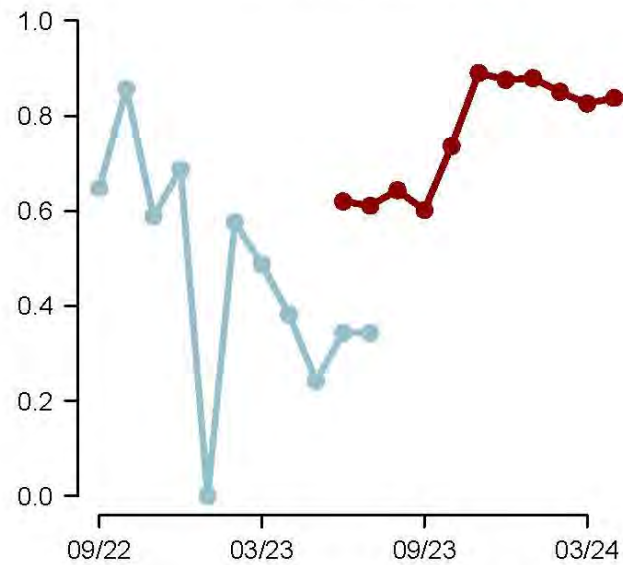
- A lot of refinement needed to the initial contact deliveries
- 4-5 data deliveries per year

Limits to Salesforce API connection

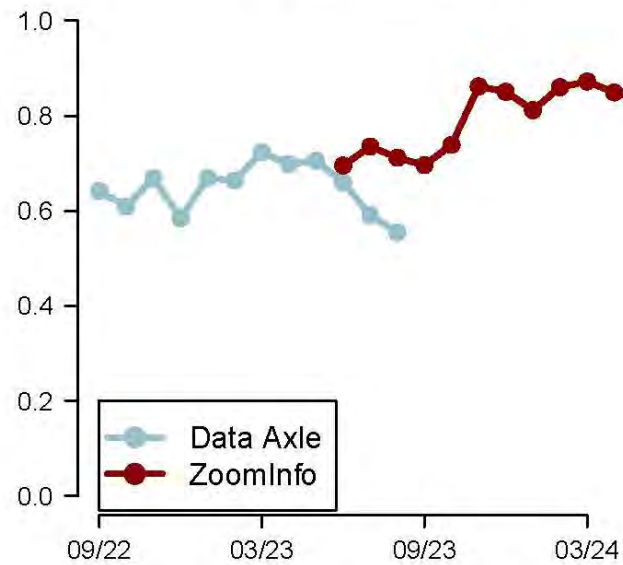
- Possible to imbed ZI database within Salesforce, but need unique licenses

Improved data quality

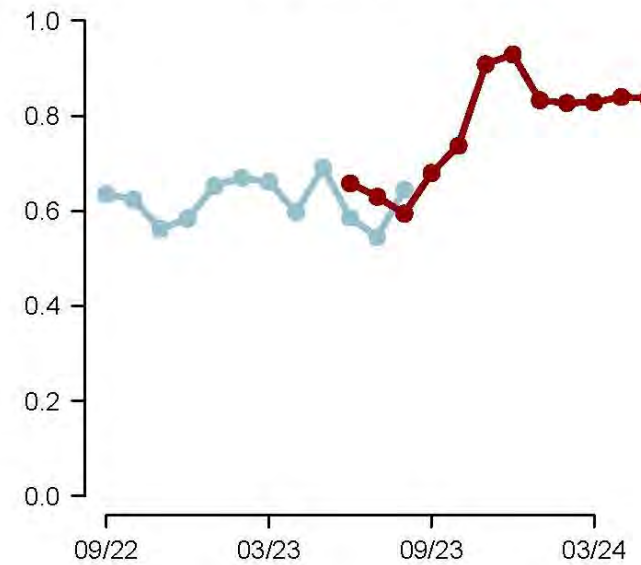
Good Contact Rate: BIE



Good Contact Rate: CFO

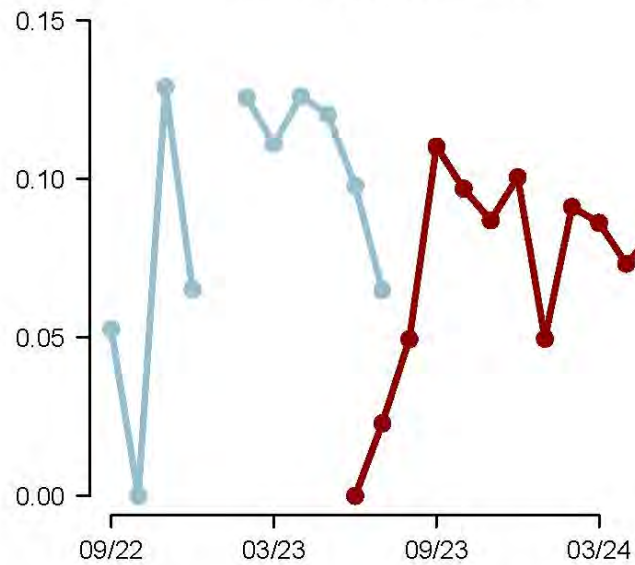


Good Contact Rate: SBU

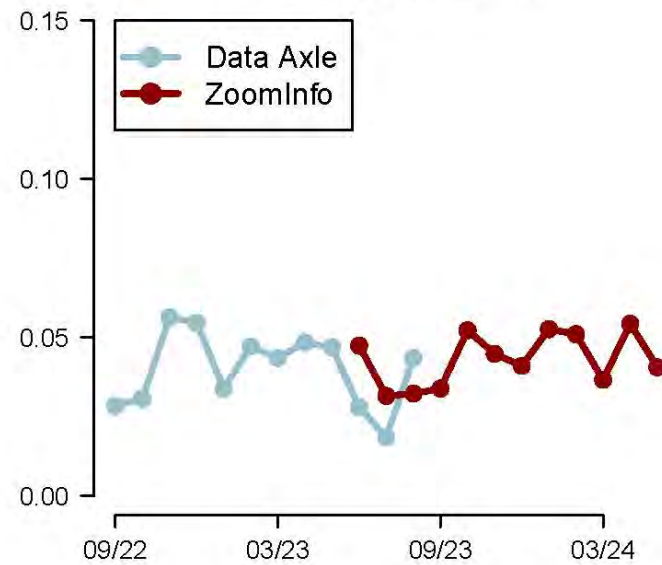


Conversion rate

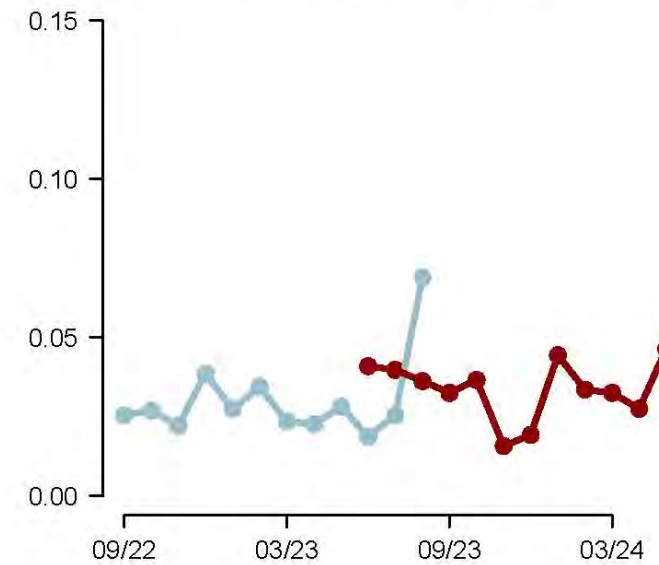
Conversion Rate: BIE
(among good contacts)



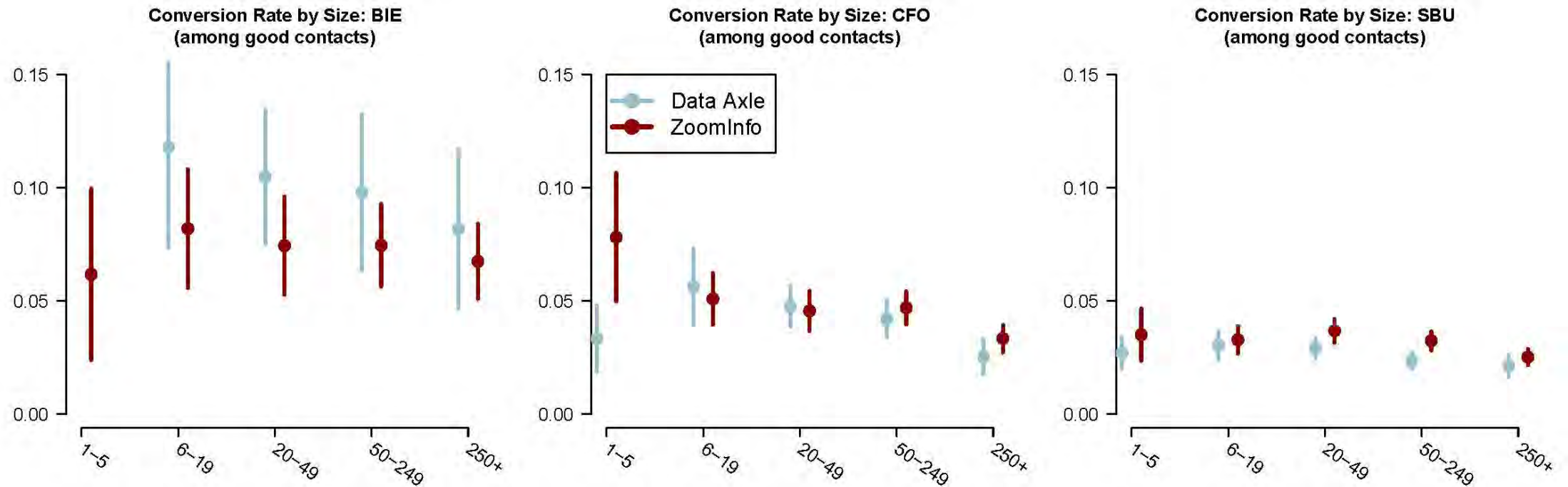
Conversion Rate: CFO
(among good contacts)



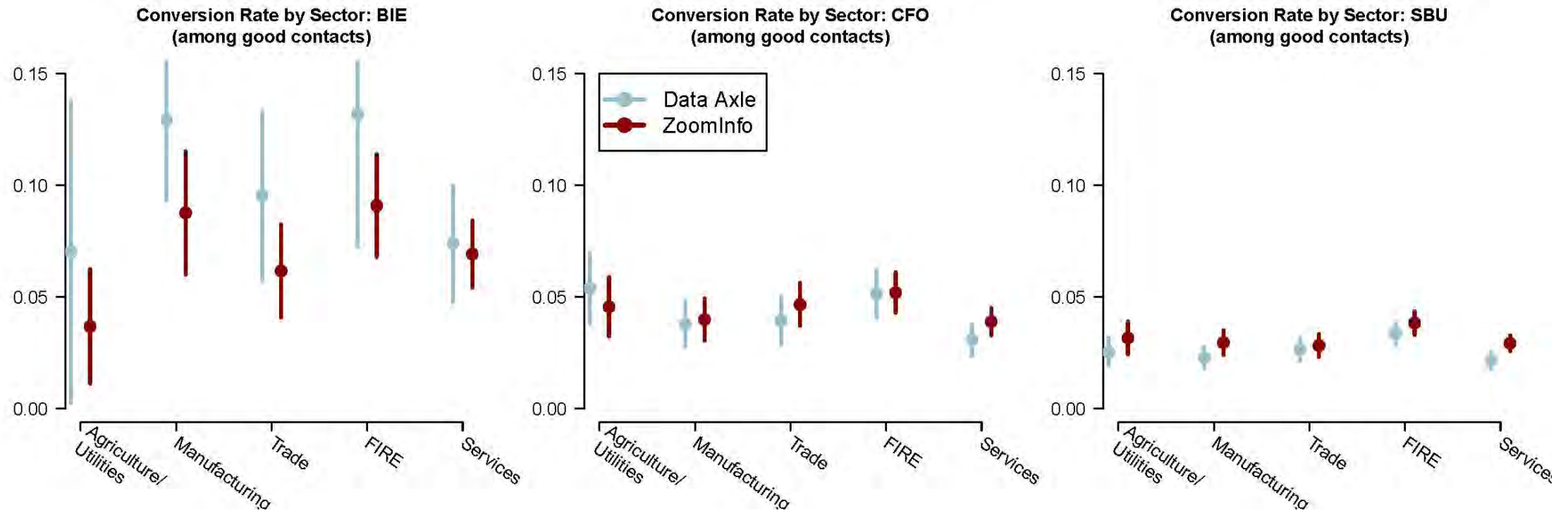
Conversion Rate: SBU
(among good contacts)



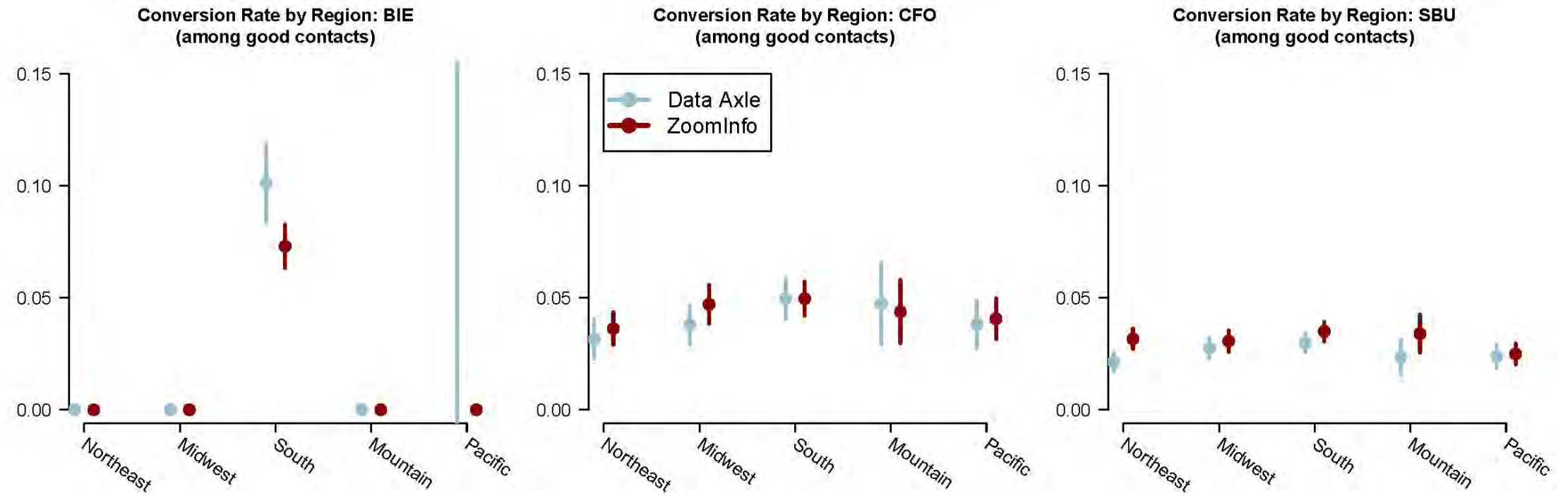
Conversion rate by firm size



Conversion rate by sector



Conversion rate by region



Changes to outreach approach

Additional fields available with ZoomInfo:

- direct phone numbers (mobile, direct work line)
- direct email address

Cold email outreach:

- Helps with identity verification
- Helps get past gatekeepers

Online contact database for one-off updates, network recruiting and small batch updates

Happy with ZoomInfo... for now

Significant response count increases over the last 12 months:

- SBU: 80% increase
- CFO: 55% increase
- BIE: 75% increase

Cost is more than Data Axle but still cheaper than Dun & Bradstreet

Thank you!

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ICES Conference, June 20, 2024



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