

Bridgewater®

Daily Observations

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(203) 226-3030

Jason Rotenberg
Matthew Karasz
Lauren Forman

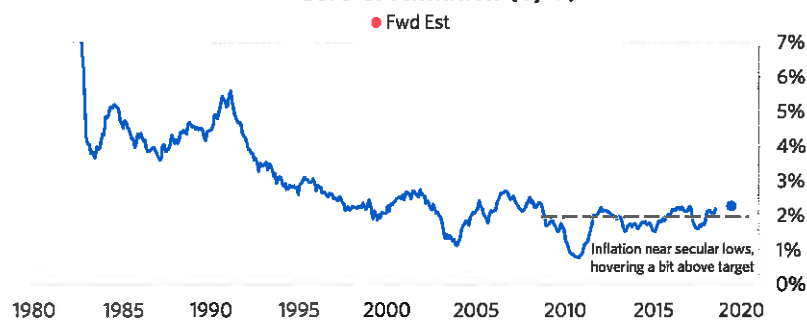
Looking Across US Industries, We See Further Evidence That Strong Demand Isn't Leading to Higher Inflation

For some time now, one of the big questions has been about what's behind the persistent weakness in US inflation even as growth has been strong and capacity tight by traditional standards. In today's *Observations*, we examine the question from a different angle and, while not answering the question, provide some interesting insights. Instead of the traditional lens of goods versus services inflation, we looked at the inflation dynamics at an industry level in the US, where growth has been strongest and capacity the tightest. This provides a more granular picture of where demand has been strongest, how it's been met, and how that traces through to rising input and output prices. A couple of things stood out to us:

- 1) **Moderate demand, but muted price pressures basically everywhere:** Across the vast majority of the economy, moderate growth has been met primarily by rising employment and mediocre productivity gains, leading to mediocre wage growth and inflation. The breadth of this dynamic provides further evidence that traditional cyclical dynamics (growth and unemployment) are only one pressure on inflation and don't tell the whole story. More secular forces, like the secular decline in healthcare costs, globalization, and increasingly automation are contributing to low inflation even as the cycle inflation pressures rise.
- 2) **Signs of digitization impacting the economy:** The reported numbers for the sectors with primarily digital products look pretty much as you would expect: very strong demand growth, met largely through big productivity gains, and low inflation, since these firms don't face the typical capacity constraints that force businesses to raise prices. Today, these industries make up a small share of the economy, so their growth is not yet flowing through to a broader increase in reported productivity or disinflation (at least not one that we can observe directly). However, over the next decade or so, these industries are discounted (by markets) to keep growing faster than the overall economy and, more importantly, will likely increase their influence on other sectors. While this is good for secular growth, it does tilt the odds toward inflation remaining weaker over time.

In terms of monetary policy implications, we remain more concerned about how secular disinflation could increase the risk of deflation in the next downturn. Both of these dynamics reinforce that thinking. The first chart below shows how muted US inflation remains relative to history, with Friday's CPI print pointing to a continuation of that story.

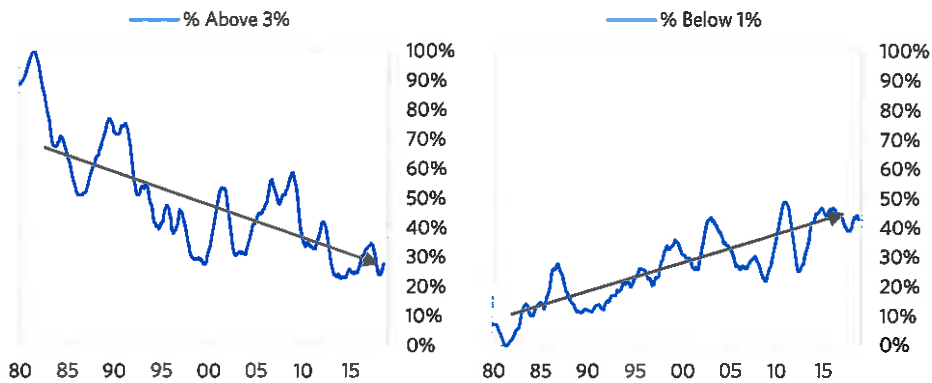
Core CPI Inflation (Y/Y)



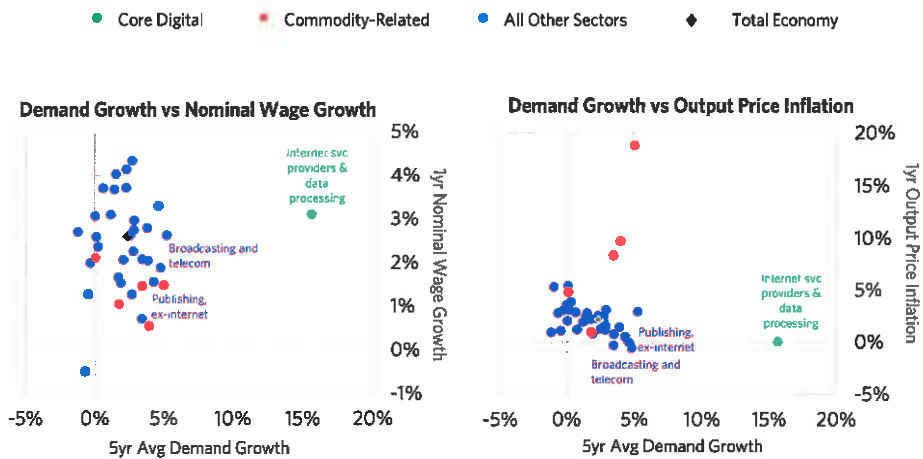
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As we have described in prior *Observations*, this weakness in inflation has been broad-based across types of goods and services. For example, the share of CPI basket categories with inflation above 3% has fallen secularly, while the share with inflation less than 1% has become much more common. This is one way of seeing that powerful disinflationary forces have been weighing on US inflation, offsetting the traditional cyclical pressures.

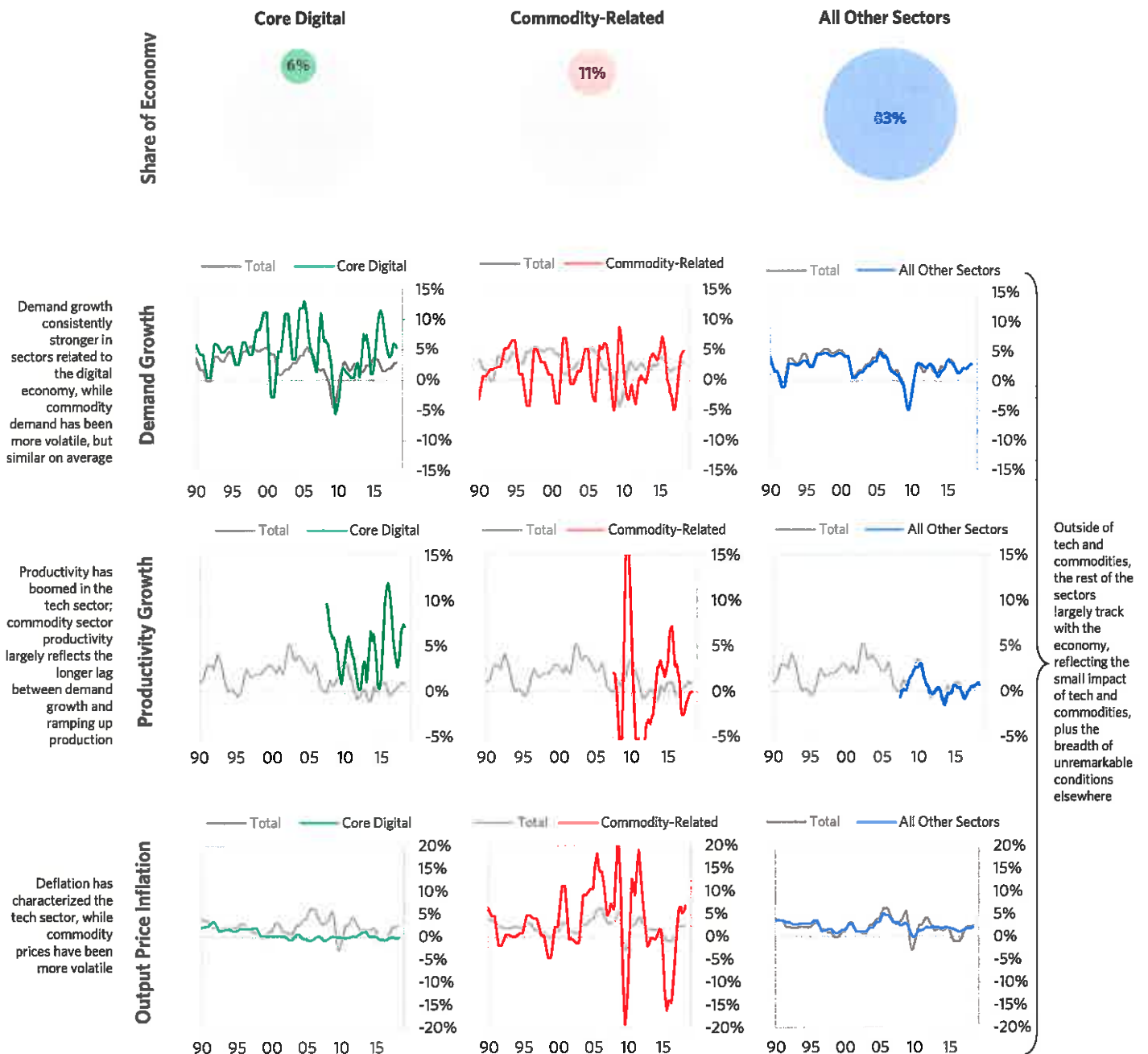
Share of CPI Basket Categories with Inflation Above 3% vs Below 1%



When we look at inflation pressures across industries, we see a similar dynamic: strong cyclical conditions aren't flowing through to price pressures in most industries, even those facing the most demand growth. Commodity-related sectors (which are influenced more by other drivers, such as global conditions) are the one exception. We also highlight "core digital" sectors, which have experienced extremely strong growth but little to no output price inflation and wage growth not much higher than the economy-wide average. This category includes sectors with entirely digital business models (e.g., internet service providers and data processing services like Google, Facebook, Netflix, etc.) and those that have very significantly digitized over the past 10 years (e.g., traditional publishing and broadcasting).



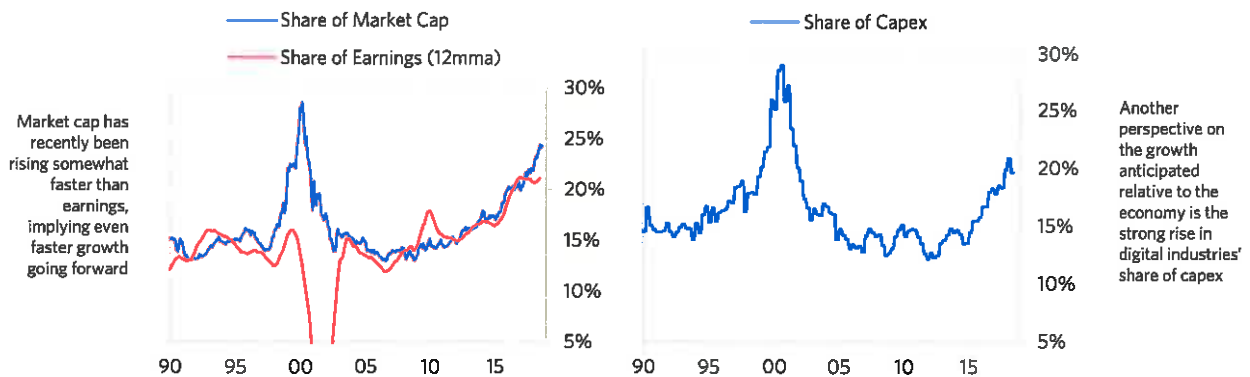
Below, we show a breakdown of demand, productivity growth, and output price inflation across the three aggregations of industries: core digital sectors, commodity-related sectors, and the rest of the economy. From the charts below, we can see where demand has been growing, how it has been met, and whether that's been leading to typical price pressures. Interestingly, the dynamics in core digital and commodity-related sectors clearly diverge from those in the overall economy, but those sectors are also fairly small.



Digital Industry Is Likely to Grow in Importance Going Forward

As noted above, while the direct impact of core digital industries on the economy is small at present, the equity market is priced for them to grow more quickly than the overall economy. One rough way of seeing this is by looking at their share of the US equity market cap versus their share of earnings. Typically, these track pretty closely, but they have diverged recently as the market has priced in meaningfully faster earnings growth in tech than the rest of the economy. Of course, it's also important to note that this pricing is much more realistic than what we saw during the tech bubble. Additionally, one way to see firms themselves anticipating faster growth than in the overall market is through their share of capex spending, which has risen significantly off of the post-crisis average. These perspectives aren't perfect for a variety of reasons, but they are indicative of the growing influence these digital sectors are likely to have going forward.

Core Digital Industries' Share of Market Cap, Earnings, and Capex



Stepping back, we see digitization as one among the many secular and idiosyncratic forces holding down inflation and counteracting the typical upward cyclical pressures. Given the balance of risks the Fed faces with inflation pretty mediocre across industries, we remain more concerned about how overreacting to a modest uptick could exacerbate deflationary risks in the next downturn.

Appendix: Table of Demand Growth, How It's Being Met, and Price Inflation by Industry

Green = >1% Red = <0% Green = >1% Red = <0%

Size	Share of Economy	Sector	Demand			How It's Being Met			Input & Output Prices		
			Growth in Real Value Add	Change in Hours Worked	Productivity Growth	Change in Output Prices	Nominal Wage Growth	Nominal Wage Growth (Adj for Productivity)	Change in Non-Labor Input Prices		
Today			Past 5yrs	Past 5yrs	Past 5yrs	Past Year	Past Year	Past Year	Past Year	Past Year	
100%		Non-farm private sector	2.3%	2.1%	0.2%	2.2%	2.6%	2.4%	2.9%		
19.9%		Financial activities	1.5%	1.8%	-0.3%	2.6%	4.0%	4.4%	2.0%		
8.2%		Healthcare and social assistance	2.6%	2.3%	0.2%	1.6%	2.7%	2.4%	1.8%		
7.3%		Professional and technical services	2.8%	2.8%	-0.1%	1.2%	2.3%	2.3%	1.6%		
6.3%		Retail trade	3.4%	1.0%	2.4%	0.8%	2.1%	-0.3%	1.9%		
5.9%		Wholesale trade	2.7%	1.1%	1.6%	2.1%	1.3%	-0.3%	1.9%		
4.7%		Construction	2.8%	4.5%	-1.6%	3.1%	3.0%	4.6%	2.9%		
3.7%		Transportation equipment manufacturing	1.9%	2.3%	-0.4%	0.9%	1.5%	2.0%	1.5%		
3.5%		Broadcasting and telecom	4.7%	-2.4%	7.3%	-0.5%	1.9%	-5.1%	1.2%		
3.2%		Food, beverage, and tobacco product manufacturing	1.8%	2.3%	-0.5%	1.0%	1.1%	1.6%	3.6%		
3.2%		Administrative and support services	2.8%	2.6%	0.2%	1.6%	2.8%	2.6%	1.8%		
2.7%		Chemicals manufacturing	0.1%	0.6%	-0.6%	4.8%	2.1%	2.7%	7.0%		
2.5%		Food service and drinking places	2.3%	3.2%	-0.9%	2.3%	4.2%	5.1%	1.7%		
2.4%		Management & holding companies	4.6%	2.8%	1.8%	0.0%	3.3%	1.5%	1.2%		
2.4%		Other services	1.2%	1.3%	-0.2%	2.0%	3.1%	3.3%	1.6%		
2.1%		Petroleum and coal products	5.0%	-0.5%	5.6%	18.9%	1.5%	-3.8%	15.2%		
2.0%		Mining	3.9%	-1.5%	5.5%	9.7%	0.6%	-4.7%	5.4%		
1.7%		Computer and electronic product manufacturing	3.4%	0.0%	3.4%	-0.2%	0.7%	-2.6%	1.0%		
1.5%		Utilities	0.1%	0.2%	-0.1%	3.1%	2.6%	2.7%	6.8%		
1.4%		Publishing, except internet	4.3%	-0.5%	4.8%	0.6%	1.6%	-3.1%	1.4%		
1.4%		Machinery manufacturing	-1.2%	0.2%	-1.4%	1.0%	2.7%	4.2%	2.7%		
1.1%		Arts, entertainment, and recreation	2.5%	2.9%	-0.4%	1.3%	2.6%	3.0%	2.0%		
1.1%		Truck transportation	0.6%	1.8%	-1.1%	2.9%	3.7%	4.9%	3.8%		
1.1%		Education services	0.0%	--	--	2.1%	--	--	1.6%		
1.1%		Offshore service provision and data processing services	15.6%	5.4%	8.7%	0.1%	3.1%	-5.1%	1.3%		
0.9%		Paper and printing	-0.7%	-0.5%	-0.2%	2.8%	-0.5%	-0.3%	3.2%		
0.8%		Primary metals and fabricated metal product manufacturing	3.4%	-1.0%	4.5%	6.3%	1.5%	-2.9%	6.7%		
0.8%		Accommodation	2.1%	2.1%	0.0%	2.3%	2.1%	2.1%	1.5%		
0.8%		Plastics and rubber product manufacturing	2.7%	2.2%	0.4%	2.6%	4.3%	3.9%	3.9%		
0.7%		Other transportation and support activities	1.4%	--	--	2.8%	--	--	3.6%		
0.6%		Air transportation	3.8%	1.4%	2.3%	1.5%	2.8%	0.5%	5.9%		
0.6%		Motion picture and sound recording industry	1.3%	3.3%	-1.9%	2.5%	8.4%	10.5%	2.1%		
0.5%		Miscellaneous manufacturing	-0.5%	0.5%	-1.0%	1.2%	1.3%	2.3%	2.7%		
0.4%		Electrical equipment and appliance manufacturing	1.4%	1.4%	0.0%	2.2%	3.7%	3.7%	4.3%		
0.4%		Non-metallic mineral product manufacturing	2.3%	2.7%	-0.5%	2.6%	3.7%	4.2%	3.3%		
0.4%		Warehousing and storage	5.2%	7.8%	-2.4%	3.0%	2.6%	5.2%	2.6%		
0.3%		Textiles, apparel, and leather product manufacturing	0.7%	-2.4%	3.1%	1.3%	8.4%	5.1%	2.0%		
0.3%		Wood product manufacturing	0.3%	3.5%	-3.2%	3.9%	2.4%	5.7%	3.9%		
0.3%		Waste management and remediation services	-0.3%	2.4%	-2.7%	5.1%	2.0%	4.8%	2.4%		
0.3%		Furniture and fixture manufacturing	3.8%	1.8%	2.0%	1.5%	2.1%	0.1%	3.4%		
0.3%		Rail transportation	-0.1%	--	--	3.6%	--	--	7.5%		
0.2%		Water transportation	-1.0%	--	--	5.3%	--	--	5.7%		
0.2%		Transit and ground passenger transportation	0.0%	2.5%	-2.4%	5.4%	3.1%	5.6%	3.2%		
0.1%		Pipeline transportation	1.7%	2.5%	-0.8%	2.2%	1.7%	2.5%	6.2%		
1%		Commodity Excludes	2.5%	0.4%	2.1%	7.5%	1.4%	1.4%	7.5%		
6%		Core Digital	6.6%	-0.3%	7.0%	-0.2%	2.0%	2.0%	1.3%		
83%		All Other Sectors	2.1%	2.0%	0.1%	1.9%	2.9%	2.9%	2.2%		

Other sectors highly impacted by digitization are largely seeing employees replaced

We see the core "digital" story most clearly here: very strong demand met by big employment growth and productivity gains + weak inflation and mediocre wage growth

Digitization had the opposite effect on warehousing, broadcasting, and telecom: strong demand from e-commerce; the sector faces more traditional constraints

Strong inflation largely in commodity related sectors with secondary effects (plus disgregate factors) also squeezing transport industries

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