

*Remarks as Prepared for Delivery*  
October 27, 2015

**Testimony of Michael Mandel, Chief Economic Strategist at the Progressive Policy Institute, before the U.S. House of Representatives Committee on Energy and Commerce's Subcommittee on Communications and Technology on the Topic, "Common Carrier Regulation of the Internet: Investment Impacts."**

**SUMMARY**

In this testimony I will make three points. First, according to estimates by the Progressive Policy Institute, the telecom/cable/broadband providers were national leaders in domestic investment under the previous light-touch regulatory regime. Second, the share of consumer spending going for communication services has barely risen since 2000, in large part due to strong broadband and mobile investment under the previous light-touch regulatory regime. Third, I note that if we are trying to understand the impact of regulation on investment, it's worth looking at the case of health care, historically the most regulated industry. Investment per worker in health care has lagged the rest of the private economy by a wide margin over the long run. This investment gap holds down productivity in health care and ultimately drives up costs for consumers. Keeping in mind both the cautionary tale of health care and the consumer benefits associated with the previous light-touch regulatory regime, I suggest that investment—and consumers—might suffer from the common carrier approach to regulating the Internet.

**TESTIMONY**

Chairman Walden, Ranking Member Eshoo and distinguished members of the subcommittee: My name is Michael Mandel, and I hold the position of chief economic strategist at the Progressive Policy Institute, a think tank based in Washington DC. I am honored to be invited to testify on the investment impact of common carrier regulation of the Internet.

In this testimony I will make three points. First, estimates by the Progressive Policy Institute show that the telecom/cable/broadband providers were national leaders in domestic investment under the previous light-touch regulatory regime. Second, the share of consumer spending going for communication services has barely risen since 2000, in large part due to strong broadband and mobile investment under the previous light-touch regulatory regime. Third, I note that if we are trying to understand the impact of regulation on investment, it's worth looking at the case of health care, historically the most regulated industry. Investment per worker in health care has lagged the rest of the economy by a wide margin over the long run. This investment gap holds down productivity in health care and ultimately drives up costs for consumers. Keeping in mind both the cautionary tale of health care and the consumer benefits associated with the previous light-touch regulatory regime, I suggest that investment—and consumers—might suffer from the common carrier approach to regulating the Internet.

Each year the Progressive Policy Institute systematically analyzes the financial statements of large US-based companies to estimate how much they actually invest in equipment, buildings, and software in this country. We undertake this unique project because we see domestic business investment as an essential component in a progressive policy for generating higher wages and good middle class jobs. As we wrote in 2012, “sustainable economic growth, job creation, and rising real wages require domestic business investment.”

Unfortunately, domestic investment in productive nonresidential assets such as equipment and buildings is still well below its long-term trend, more than six years after the official end of the Great Recession (Appendix Figure 1). There are many explanations for why this might be so—including a lack of innovation and excess regulation—but the growing consensus is that the weakness in domestic investment is holding down productivity gains and real wages. Jason Furman, head of the White House Council of Economic Advisors, who recently spoke at a PPI event, has called the decline in productivity growth “an investment-driven slowdown.”

However, our analysis showed several bright spots for domestic investment. One such bright spot has been the telecom/cable/broadband sector. As part of our analysis of domestic investment, we publish an annual list of the top 25 “investment heroes” --companies that are the leaders in capital spending in the United States. Our most recent list came out in September 2015, based on 2014 financial data—that is, before the Federal Communications Commission imposed common carrier regulations on broadband providers (Mandel 2015).

Our analysis showed that the top two companies investing in the US in 2014 were AT&T and Verizon, as they have been in all four years that we have done this project (Appendix Figure 2). Comcast and Time Warner are on our list as well. All told, the telecom/cable sector was the largest single sector on our investment heroes list, accounting for almost \$50 billion in capital spending in 2014 (Appendix Figure 3).

The second point I'd like to make is that this investment added enough wired and wireless capacity to hold down consumer bills, despite the soaring demand for data in recent years. In a forthcoming paper on the benefits of the tech/info sector, I calculate the share of personal consumer expenditures going to communications services (wired, wireless, cable, and satellite).

I find that under the previous light touch regulatory regime, communications services have absorbed roughly the same share of personal consumer spending since 2000. In 2014, consumer payments for all communications services took 2.9 percent of personal consumption expenditures. That's up only slightly from a 2.7 percent share in 2000. (The share fluctuated in a fairly narrow band between 2000 and 2014). This analysis is based on official data from the Bureau of Economic Analysis.

We can take this analysis a step further. The growing availability of fixed and mobile broadband services has enabled the shift from expensive desktop computers to less expensive smartphones, and reduced the need for video rentals and separate video, photographic and audio equipment. As a result, the share of consumer spending absorbed by "tech/info" goods and services has actually fallen, from 6 percent in 2000 to 5.8 percent in 2014. ("Tech/info" goods and services includes all communications services, info-tech and related equipment, and consumer content such as movies, music, and books).

In other words, telecom/cable/broadband investment under the previous light-touch regulatory regime appears to have created enough capacity to absorb the astounding increase in data used by consumers, without a significant increase in the share of spending going for either communication services or for the broader basket of tech/info goods and services.

Third, I ask the question of what will happen to telecom/cable/broadband investment under common carrier regulation. Studies such as Hassett and Shapiro (2015) have concluded that Title II regulation "will likely have significant adverse effects on future investment in the Internet."

To additionally support this conclusion, I would like to raise the controversial example of health care. I strongly favor the extension of health care coverage stemming from the Affordable Care Act. However, it is important to acknowledge that health care has been the most regulated industry in the economy for decades, both to protect consumers and to hold down costs. For example, a federal law was enacted in 1974 that required states to approve major health care capital investments in an effort to eliminate duplication. That law is no longer on the books, but about 35 states still require "certificates of need" for some kinds of health care investments (NCSL 2015).

Analysis by PPI suggests that real investment per worker in the health care industry has consistently lagged the rest of the economy for many years. From 1990 to 2014, real investment per worker in health care rose by 39%, compared to a 103% gain in real nonresidential investment per worker in the entire private sector.

Adding in the pharmaceutical industry narrows but doesn't eliminate the investment gap. From 2004 to 2014, real investment per worker in health care, including the pharmaceutical industry, only grew by 17%, compared to a 25% gain in real nonresidential investment per worker in the entire private sector (Mandel 2015). This investment gap may be one reason why productivity growth is relatively slow in health care, and why the share of consumer spending going to health care has continued to increase.

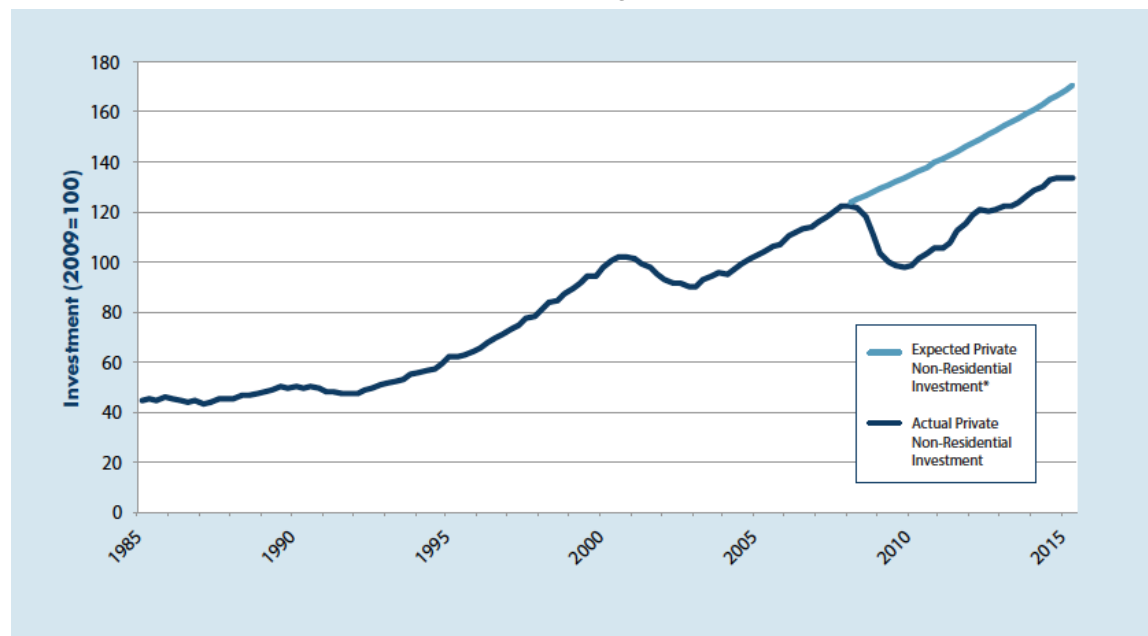
Now, broadband is not the same as health care. However, the impact of regulation on investment may be similar, since the application of common carrier regulation to broadband is moving towards the all-encompassing regulatory environment that historically has characterized health care.

In conclusion, under the previous light-touch regulatory regime, the telecom/cable/broadband industry has been characterized by strong investment and a roughly constant share of consumer spending, despite a vast increase in data usage. To the degree that common carrier regulation reduces investment, we may see the same slow productivity growth and rising costs to consumers that have characterized health care for decades. For these reasons, I suggest that Title II regulation may—in the interest of protecting consumers—have the perverse effect of reducing investment and increasing consumer costs.

**REFERENCES**

- Hassett, Kevin and Robert Shapiro. 2015. "Regulation and Investment: A Note on Policy Evaluation under Uncertainty, With an Application to FCC Title II Regulation of the Internet," Georgetown Center for Business and Public Policy.
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## Private Nonresidential Investment Well Below Long-term Trends



\*Based on 10-year growth rate ending in 2007, extrapolated to current date.  
Data: BEA, PPI

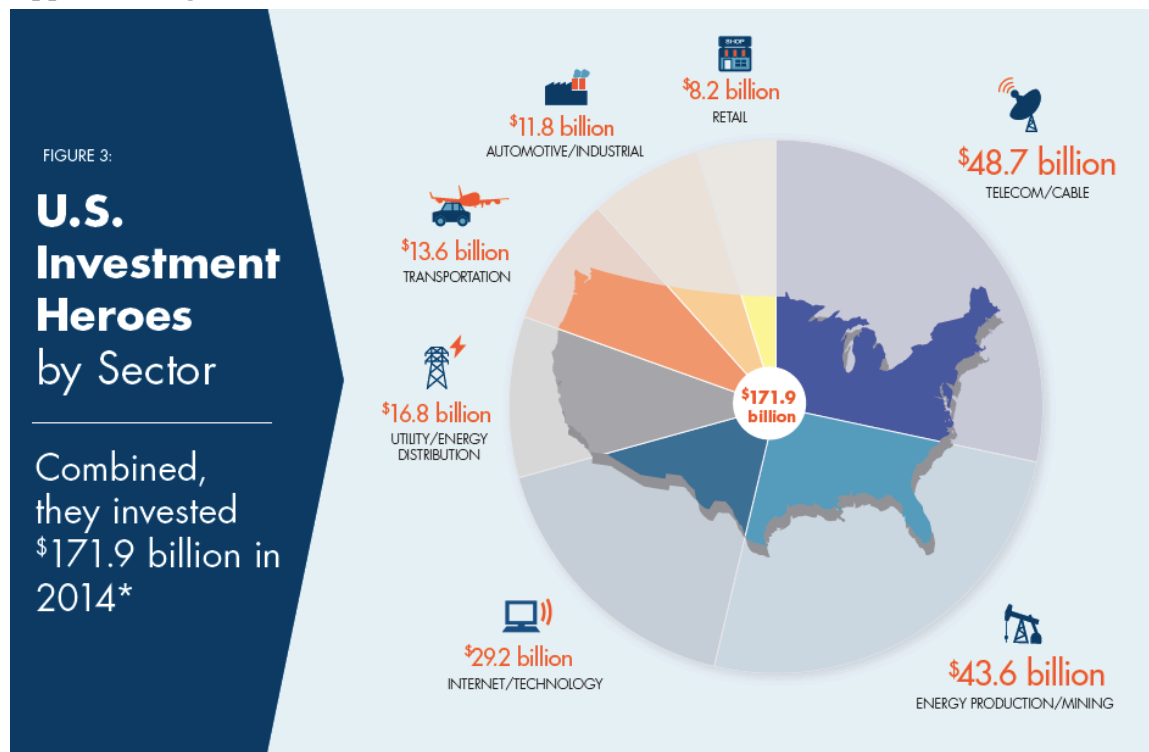
**Appendix - Figure 2**

U.S. Investment Heroes: Top 25 Nonfinancial Companies by Estimated U.S. Capital Expenditure

Rank	Company	Estimated 2014 U.S. Capital Expenditures (millions of dollars)	Rank	Company	Estimated 2014 U.S. Capital Expenditures (millions of dollars)
1	AT&T	21,199.0	14	American Airlines Group	5,311.0
2	Verizon	16,004.8	15	General Motors	4,924.4
3	Exxon Mobil	12,401.0	16	Amazon.com	4,808.3
4	Google	10,709.7	17	Union Pacific	4,346.0
5	Chevron	10,011.0	18	Freeport McMoRan	4,278.0
6	Walmart	8,238.0	19	Time Warner Cable	4,097.0
7	ConocoPhillips	7,618.0	20	Apple	4,076.8
8	Comcast	7,420.0	21	FedEx	3,912.1
9	Intel	6,535.2	22	Ford Motor	3,767.8
10	Exelon	6,077.0	23	Hess	3,645.0
11	Occidental Petroleum	5,657.0	24	General Electric	3,076.1
12	Energy Transfer Equity	5,381.0	25	Microsoft	3,068.3
13	Duke Energy	5,317.0	<b>Total</b>		<b>171,879.6</b>

*Data: Company financial reports, PPI estimates*

## Appendix - Figure 3



\*Or the most recent fiscal year available.

Data: Company financial reports, PPI estimates