ppi radically pragmatic

Investment Heroes 2018:

Encouraging and Diffusing Innovation Throughout the Economy

Michael Mandel
Elliott Long

Progressive Policy Institute

Investment Heroes 2018: Encouraging and Diffusing Innovation Throughout the Economy

NOVEMBER 2018

Elliott Long

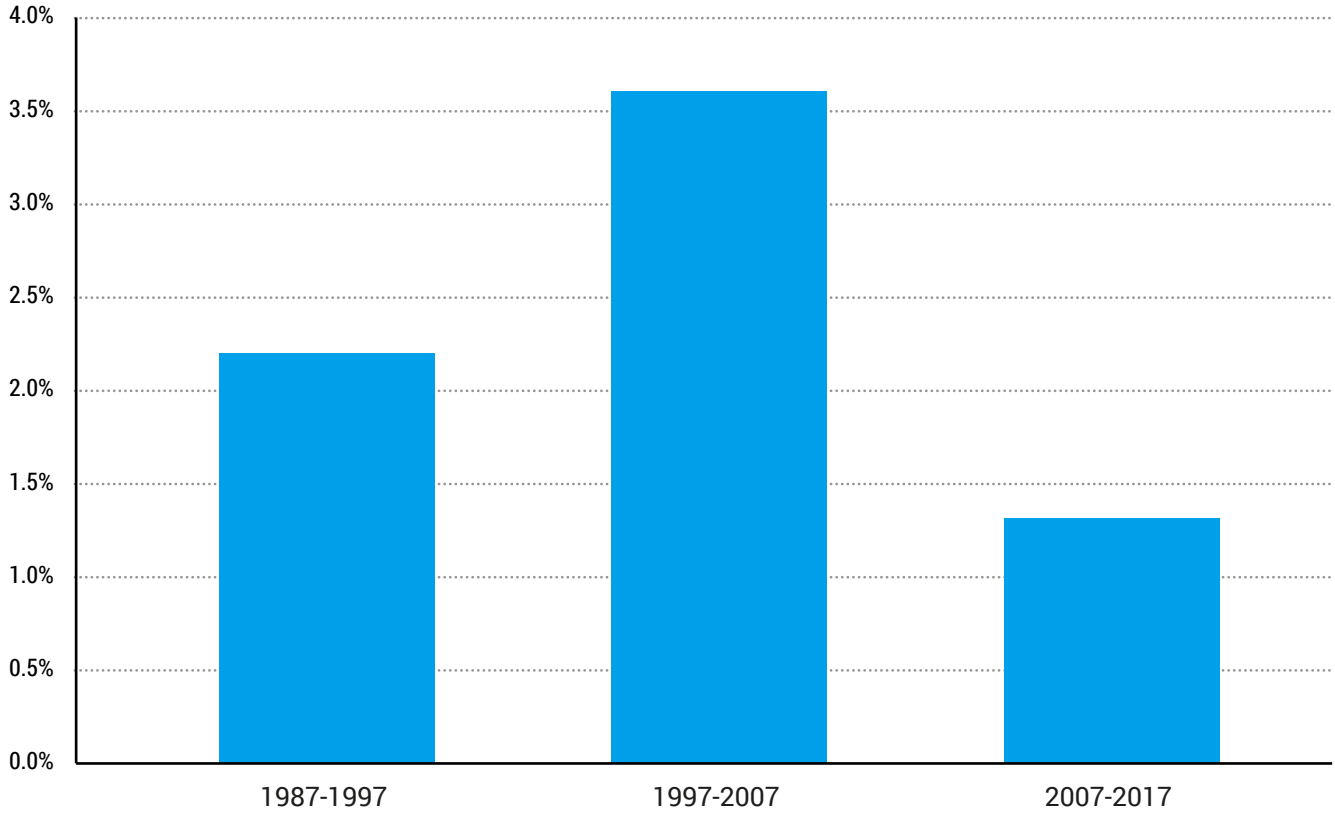
INTRODUCTION

Despite the low unemployment rate, productivity growth is still stuck in slow gear. Non-farm business output per hour increased by 1.3 percent from the third quarter of 2017 to the third quarter of 2018 – well below the post-war average of 2.2 percent.[1] Other countries around the world are also grappling with this slowdown in productivity growth.[2] Productivity growth is the primary factor in boosting wages and living standards.

The continued lack of productivity growth arises from several causes. One important issue is a growth shortfall in the amount of capital relative to the amount of labor, where capital represents investment in equipment, structures, software, and other intellectual property.

The Bureau of Labor Statistics (BLS) calculates a measure it calls "capital intensity," which measures the services produced by capital assets relative to the number of labor hours worked in the non-farm business sector. As shown in Figure 1, capital intensity has grown much more slowly over the past 10 years than in previous 10-year periods.

FIGURE 1: 10 Years of Lagging Investment (Average Growth Rate of Capital Intensity*)



*Capital services per hour of work, nonfarm business sector.
Source: Bureau of Labor Statistics

There has been much debate over the reasons for this shortfall. Some have suggested that corporate managers and stock market investors have become myopic and too focused on short-run returns. Others blame excessive regulation.

But, no matter the reason for the investment shortfall, we think it's important to identify those companies that are bucking the trend. Starting with our 2012 "Investment Heroes" report, and continuing through this report, we have focused on identifying those companies making the largest capital investments in the United States. By expanding the capital stock, these companies are helping boost productivity and wages, and creating new jobs.

The Progressive Policy Institute's (PPI) Investment Heroes report provides an exclusive estimate of domestic capital spending for major U.S. companies. Currently, accounting rules do not require companies to report their U.S. capital spending separately. To fill this gap in the data, we created a methodology using publicly-available financial statements from non-financial Fortune 150 companies to identify the top companies that were investing in the United States. That methodology, with small modifications, has been used in each year's report since the first in 2012.

To understand which companies are investing in the American economy, this 2017 list ranks the top 25 companies by their estimated domestic investment in their most recent fiscal year. We use a filing cut-off date of October 1, 2018. Our 2016 list, also presented in this paper, provides data for their previous fiscal year as well. In 2017, AT&T led the field, having invested an estimated $19 billion in the United States, based on the need to meet growing demand for high-speed broadband and invest in infrastructure to bring 5G wireless online. Verizon came in second in 2017, investing $15.4 billion. Amazon.com, Comcast, and Alphabet rounded out the top five.

Note the preponderance of tech, telecom, and ecommerce companies at the top of the list – also known as the "digital sector." Government statistics make a similar point. PPI analysis of Bureau of Economic Analysis (BEA) data reveals the digital sector has boosted domestic capital spending by 51 percent since 2007, compared to only 29 percent for the rest of the private sector.[3] As a result, the digital sector has raised its domestic capital spending from 17.9 percent of industry output in 2007 to 19.4 percent in 2017. By contrast, the rest of the private sector has not boosted domestic spending as a share of industry output.

PPI analysis of Bureau of Economic Analysis (BEA) data reveals the digital sector has boosted domestic capital spending by 51 percent since 2007, compared to only 29 percent for the rest of the private sector.

Looking forward, the continued strength of telecom spending is supported by the Federal Communications Commission's (FCC) largely anticipated repeal of the Open Internet Order in December 2017. There is sufficient quantitative evidence to suggest Title II suppressed capital investment, and investment would have been higher in Title II's absence.[4] The major mobile carriers are in intense competition to see who can bring 5G and cable upgrades to the domestic market first, which has great implications for industries such as manufacturing and healthcare.[5]

Also on the policy front, the 2017 Tax Cuts and Jobs Act (TCJA) – which became effective in 2018 – is reducing the cost of capital by cutting the tax rate on corporate profits, expanding bonus depreciation for capital investments, and increasing the Section 179 expensing cap. The benefit is increased incentives for investment. Through the third quarter of 2018, private non-residential investment in the United States shows a slight uptick as a share of GDP.

However, the downside of the TCJA is a huge increase in current and future budget deficits.[6] These have the potential for boosting interest rates in the future and hurting investment.

The final policy issue is President Trump's imposition of tariffs, which cannot be spun any other way than a negative for the whole U.S. economy. Tariffs, and the potential for a trade war, could be increasingly disruptive to investment all across the economy – especially transportation, which will feel the squeeze of the tariffs with overseas suppliers and dampened exports.

U.S. INVESTMENT HEROES: THE LISTS

In this paper we present our top 25 Investment Heroes. The top 25 Investment Heroes invested $185 billion and $178 billion in the United States in 2017 and 2016, respectively. That's up 5 percent in 2017, and relatively flat in 2016 compared to the 2015 total of $177 billion (as reported in our previous work on this topic).

AT&T led the Investment Heroes again, despite a 6 percent cut in domestic investments compared to 2016 and a 1 percent gain compared to 2015. Verizon came in second, investing less in each of the past two years relative to 2015. Amazon.com came in third, having boosted its domestic capital investments significantly in 2017 and 2016, according to our estimates. Comcast and Alphabet rounded out the top five, both increasing domestic investments year-over-year.

There were six newcomers that made both lists in 2017 and 2016. Charter Communications came in at sixth and 15th in 2017 and 2016, respectively, driven by its purchase of Bright House and merger with Time Warner. Southern came in 12th and fifth in 2017 and 2016, respectively, as the company continues to invest in new facilities, nuclear fuel, and retrofitting facilities to comply with environmental regulations. Facebook, UPS, United, and Delta completed the list of newcomers, as Facebook invested in data centers and network infrastructure and United and Delta invested in information technology and new aircraft. A noteworthy addition to the 2017 list is UPS, whose investments were up 98 percent compared to 2015 as the company invested in facilities, aircraft, trucks, and software to meet increasing demand from ecommerce.

Two companies from the 2016 list (and five companies from the 2015 list) did not make the 2017 list. Kroger and Ford both missed the top 25 this year by about $350 million after making the 2016 list. From the 2015 list, ConocoPhillips and Phillips 66 missed the 2017 list by about $300 million and $1.4 billion, respectively, after significantly reducing their domestic capital expenditures compared to 2015. Ford did not make the 2017 list. Time Warner merged with Charter Communications. And Freeport-McMoRan fell out of the Fortune 150 and, thus, the analysis of this report.

FIGURE 2: U.S. Investment Heroes:
Top 25 Non-financial Companies by Estimated 2017 U.S. Capital Expenditures

	COMPANY	ESTIMATED 2017 U.S. CAPITAL EXPENDITURES (MILLIONS USD)
1	AT&T	**18,972**
2	Verizon	**15,435**
3	Amazon.com	**12,021**
4	Comcast	**10,880**
5	Alphabet	**9,606**
6	Charter Communications	**8,681**
7	Energy Transfer Equity	**8,444**
8	Duke Energy	**8,052**
9	Apple	**7,684**
10	Exelon	**7,584**
11	Walmart	**7,444**
12	Southern	**6,904**
13	Chevron	**6,295**
14	Exxon Mobil	**6,122**
15	Microsoft	**6,026**
16	American Airlines Group	**5,971**
17	General Motors	**5,350**
18	Intel	**5,306**
19	Facebook	**4,958**
20	UPS	**4,361**
21	FedEx	**4,271**
22	United Continental Holdings	**3,998**
23	Delta Air Lines	**3,891**
24	General Electric	**3,394**
25	Union Pacific	**3,238**
	Top 25 Total	**184,889**

Data: Company financial reports, PPI estimates

FIGURE 3: U.S. Investment Heroes:
Top 25 Non-financial Companies by Estimated 2016 U.S. Capital Expenditures

	COMPANY	ESTIMATED 2016 U.S. CAPITAL EXPENDITURES (MILLIONS USD)
1	AT&T	**20,262**
2	Verizon	**15,551**
3	Comcast	**10,463**
4	Apple	**9,432**
5	Southern	**8,977**
6	Amazon.com	**8,776**
7	Exelon	**8,553**
8	Walmart	**7,922**
9	Duke Energy	**7,901**
10	Alphabet	**7,866**
11	Energy Transfer Equity	**7,771**
12	Exxon Mobil	**5,910**
13	American Airlines Group	**5,731**
14	Chevron	**5,456**
15	Charter Communications	**5,325**
16	Ford Motor	**5,300**
17	Intel	**4,944**
18	General Motors	**4,895**
19	Microsoft	**4,668**
20	FedEx	**4,638**
21	Kroger	**3,699**
22	Facebook	**3,550**
23	Union Pacific	**3,505**
24	Delta Air Lines	**3,391**
25	United Continental Holdings	**3,223**
	Top 25 Total	**177,710**

Data: Company financial reports, PPI estimates

This year, as with the 2016 list, telecom and cable companies accounted for the largest share of estimated domestic capital expenditure on our list.

AT&T and Verizon continued to invest in maintaining and building out their networks. However, according to our estimates, AT&T's domestic capital expenditure was down 6 percent compared to 2016, and up only 1 percent compared to 2015. Verizon's 2017 estimated U.S. capital expenditure was down 1 percent compared to 2016, and 7 percent compared to 2015. We estimate that Comcast increased their domestic capital expenditures in 2017 by 4 percent compared to 2016, spending on Docsis 3.1/Gig upgrades, infrastructure to increase network capacity, and line extensions. Newcomer Charter Communications increased domestic capital expenditures by 63 percent in 2017 compared to 2016, a result of their merger with Time Warner Cable and acquisition of Bright House.

> Comcast increased their capital expenditures in 2017 by 4 percent compared to 2016, spending on Docsis 3.1/Gig upgrades, infrastructure to increase network capacity, and line extensions.

The second highest spending sector on our list is the internet and technology sector. This category consists of Amazon.com, Alphabet, Apple, Microsoft, Intel, and Facebook. By our estimates, this sector spent $45.6 billion on domestic capital expenditures in 2017. Amazon.com spent 37 percent more than last year and has more than doubled their domestic capital spending since 2015 – expanding capacity to support fulfillment operations and continuing to build out its technology infrastructure for Amazon Web Services. Apple's domestic capital expenditure was down 19 percent compared to 2016, spending nearly $7.7 billion as the construction of the new headquarters came to an end. (Apple's 2018 results were released on November 1, 2018, after our cut-off date. However, using our methodology, we estimate the company spent $7.1 billion on domestic capital expenditures in FY 2018.) Alphabet spent an estimated 22 percent more on domestic capital in 2017 compared to 2016, investing in the cloud, machine learning, data centers, information technology infrastructure, as well as new products and services.

Microsoft spent an estimated $6 billion on capital expenditures in 2017, an increase of 29 percent compared to 2016. Intel invested $5.3 billion on capital expenditures in 2017, an increase of 7 percent compared to 2016, and 10 percent compared to 2015. Facebook increased capital expenditures by 40 percent compared to 2016, and more than doubled its capital expenditure compared to 2015 – continuing to invest in the Facebook app, its other products such as Instagram and WhatsApp, as well as long-term technology initiatives such as connectivity, artificial intelligence, and augmented and virtual reality.

The utility and energy distribution sector collectively invested $31 billion domestically on capital expenditures in 2017. That's a 6.7 percent decrease for these four companies – Energy Transfer Equity, Duke Energy, Exelon, and Southern – compared to 2016. Energy Transfer Equity spent an estimated $8.4 billion on domestic capital expenditures in 2017 compared to 2016, an increase of 9 percent year-over-year. Duke Energy spent $8.1 billion on capital expenditures in 2017 – investing in grid modernization, maintenance, new power

generation, nuclear fuel, and retrofitting its plants to comply with environmental regulations. Exelon decreased capital expenditures by 11 percent in 2017 compared to 2016, and 1 percent compared to 2015 – investing in energy production technology, nuclear fuel, the construction of new natural gas plants and solar facilities, and maintaining and improving operations. Southern spent $6.9 billion in 2017 as the company undertook construction programs to meet future demand, new power generation, and comply with environmental regulations.

Coming in fourth is the transportation sector, with an estimated domestic capital spend of $25.7 billion in 2017. Composed of American Airlines Group, UPS, FedEx, United Continental Holdings, Delta Air Lines, and Union Pacific, the sector spent 68.7 percent more in 2017 than in 2015 – primarily due to newcomers UPS, United, and Delta making the list. By our estimates, American Airlines spent $6 billion in 2017, investing in new aircraft. UPS increased capital expenditures by 80 percent in 2017 relative to 2016, and 98 percent relative to 2015. The company has prioritized facility automation, capacity expansion projects, aircraft, vehicles, and information technology as it looks to meet the growing demand of ecommerce. FedEx invested an estimated $4.3 billion in 2017 – a reduction of 8 and 4 percent compared to 2016 and 2015. United spent 24 percent more in 2017 than in 2016, and 46 percent more than in 2015, which went toward maintaining its current fleet and purchasing new aircraft and information technology. Like American Airlines and United, Delta spent $3.9 billion in 2017 – mainly on new aircraft.

The fifth highest spending sector was the energy production and mining sector, made up of Chevron and Exxon Mobil. By our estimates, the sector spent $12.4 billion in 2017, a decline of 63 percent compared to 2015. The decrease is due to only two companies comprising the category this year, compared to six in 2015, and the price of oil continues to recover. Phillips 66, ConocoPhillips, and Marathon Petroleum did not make the top 25 in 2017, and Freeport-McMoRan did not make the Fortune 150, thus falling outside the scope of our report. According to our estimates, Chevron reduced capital expenditures by 27 percent compared to 2015. Exxon Mobil spent $6.1 billion in 2017 – a cut of 44 percent compared to 2015.

Coming in sixth is the automotive and industrial sector, with an estimated total sector spend of $8.7 billion. This category includes General Motors and General Electric. This sector saw its investment decline by a third compared to 2015, the result of Ford missing the top 25 and not being included in the category this year. General Motors and General Electric's capital expenditures were relatively flat comparing 2017 to 2015, as the two giants continue to reinvent themselves in the wake of the Great Recession.

The retail sector ranks seventh, investing $7.4 billion in 2017. Walmart is once again the lone retailer making up the category this year. Walmart continues to invest in building out its ecommerce capacity, increasing capital expenditures for e-commerce and technology by 9 percent compared to 2016. The company also invested in store remodels and new stores, though new store investment continues to trend down.

FIGURE 4: U.S. Investment Heroes by Sector, 2017

SECTOR	ESTIMATED 2017 U.S. CAPITAL EXPENDITURES (MILLIONS USD)	% CHANGE COMPARED TO 2016
Transportation	**25,730**	**25.6%**
Internet/Technology	**45,601**	**16.2%**
Energy Production/Mining	**12,417**	**9.2%**
Telecom/Cable	**53,969**	**4.6%**
Utility/Energy Distribution	**30,984**	**-6.7%**
Automotive/Industrial	**8,744**	**-14.2%**
Retail	**7,444**	**-35.9%**
Top 25 Total	**184,889**	**4.0%**

Data: Company financial reports, PPI estimates

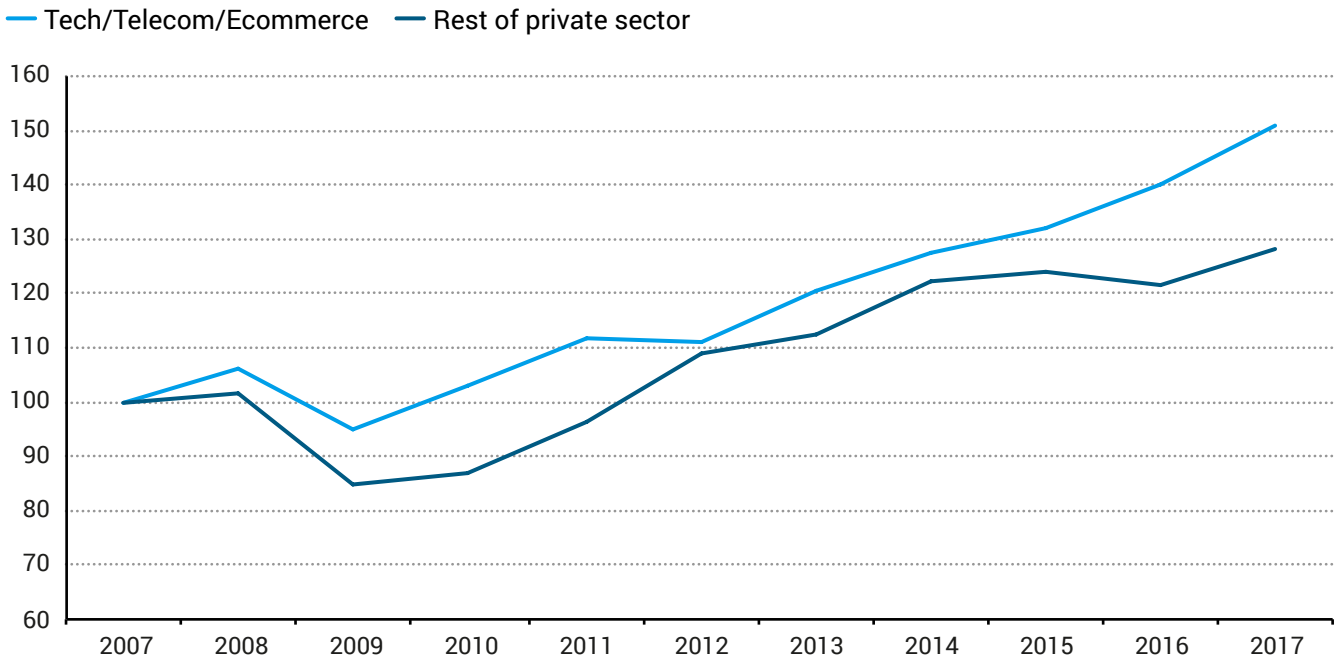
THE BIG PICTURE

Our list looks at domestic capital spending by company. But the big picture looks at domestic investment by sector, including small and large companies, and U.S. investment by foreign-based companies. We focus first on the combined tech/telecom/ecommerce sector – often called the "digital sector" – and the amount of money invested in long-lived tangible and intangible assets. These include equipment, structures, software, and research and development, as measured by the BEA.

As Figure 5 shows, investment spending by the tech/telecom/ecommerce sector has steadily increased, rising by 51 percent since 2007, in nominal dollars.[7] By comparison, investment spending by the rest of the private sector has increased by only 29 percent over the same time period. As a result, the digital sector has raised its domestic capital spending from 17.9 percent of industry output in 2007 to 19.4 percent in 2017. By contrast, the rest of the private sector has not boosted domestic spending as a share of industry output. What's happening is the companies in the tech/telecom/ecommerce sector are building the infrastructure other companies are using, including cloud computing and high-speed mobile.

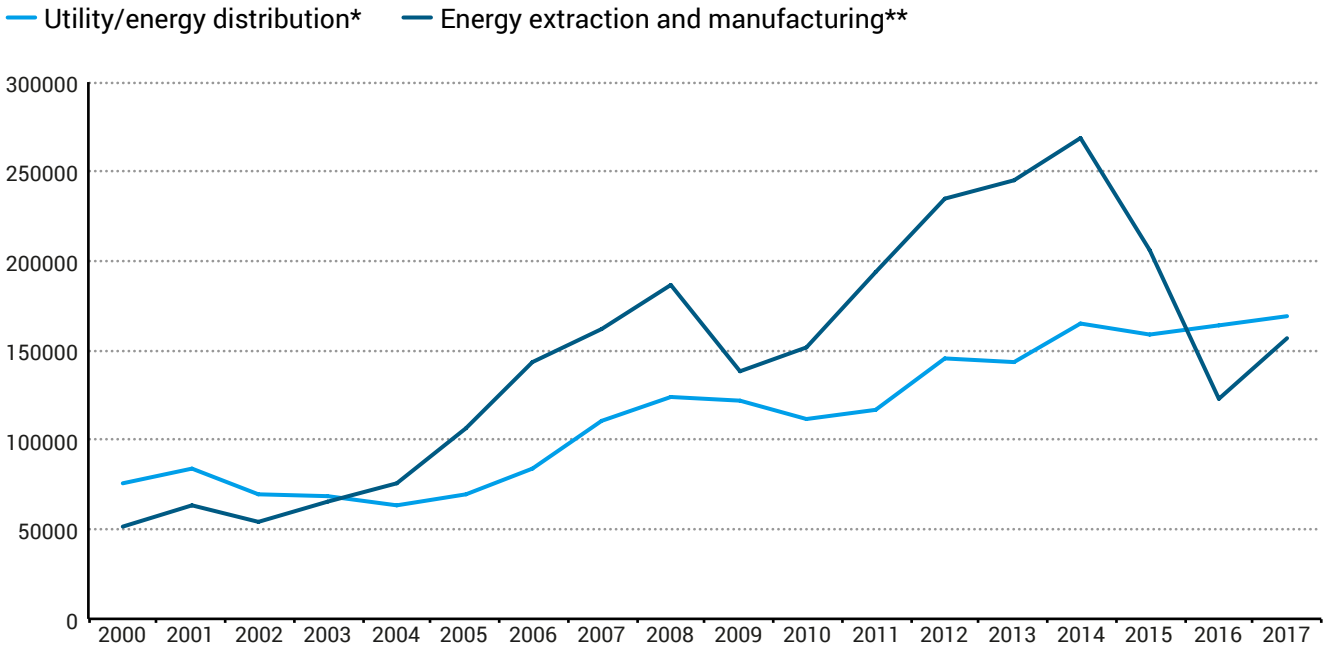
The energy extraction and manufacturing sector shows a very different pattern of investment. Driven by the shale oil/gas boom, domestic investment in energy extraction and manufacturing peaked in 2014 before plunging by more than half over the next two years. By contrast, investment in utilities and energy distribution, including pipelines, rose by 53 percent between 2007 and 2017, matching the rise in the digital sector.

FIGURE 5: Tech/Telecom/Ecommerce Investment Surges Ahead
(Domestic Spending on equipment, structures, software, R&D) (2007=100)



Tech/Telecom/Ecommerce includes a portion of investment in warehouses in 2016 and 2017.
Source: BEA, PPI

FIGURE 6: Domestic Investment By Energy Sector Fluctuates (millions of dollars in capital spending)



**Includes utilities and pipelines **Includes oil, gas and coal extraction and petroleum and coal product manufacturing*
Data: BEA, PPI

CONCLUSION

The capital shortfall has been with us since the 2007 downturn. This lack of investment has hurt productivity growth, competitiveness, job creation, and real wage growth. Without spending on equipment, structures, and software in this country, it will be hard to build lasting prosperity.

But, over time, it's become clear that some sectors have performed better than others. Technological innovation has created new investment opportunities in the digital sector and the energy sector, and companies have responded by beefing up their spending. For example, the shale oil and gas revolution was built on new data-intensive methods for identifying and tapping into reserves that were formerly inaccessible.

Similarly, the digitization of retail and distribution has led to massive investments in ecommerce fulfillment centers. Investment in warehouses has nearly doubled, going from $17 billion in 2007 to $30 billion in 2017. That gain more than made up for the drop in retail investment over the same period. Moreover, these ecommerce fulfillment centers have hired hundreds of thousands of workers at wages 30 percent higher than brick-and-mortar retail.[8]

We expect other sectors, such as manufacturing, to start generating new innovation-driven investment opportunities as well. New technologies such as 3D printing, robotics, and 5G will open up new markets in custom and semi-custom manufacturing. Such markets will encourage investment in local digital factories that will be able to compete on an even footing with foreign rivals.[9] Moreover, we expect these new digital factories to generate a raft of good paying jobs.

> New technologies such as 3D printing, robotics, and 5G will open up new markets in custom and semi-custom manufacturing.

Good policy can help encourage these new opportunities. For example, making it easier to build out 5G small cells can accelerate the growth of digital manufacturing and telemedicine outside of big cities, stimulating investment.[10] Similarly, policymakers should pay close attention to the impact of regulation on innovation in areas such as transportation and construction, which have great potential for investments in new markets.

Appendix

METHODOLOGY

Our U.S. Investment Heroes ranking for 2018 follows the same methodology as our most recent report in 2016. We started with the top 150 companies of the 2017 Fortune 500 list as our universe of companies. We removed all financial and insurance companies, since their reporting of capital expenditures is inconsistent with our interpretation of capital as plant, property, and equipment. We estimated the amount of gross capital expenditures in the United States for each of these companies in 2017 and 2016, then ranked the companies in order of their estimated domestic capital expenditures.

For these rankings, we used each company's two most recent available fiscal year statements. For our 2017 ranking, we used a filing cutoff date of October 1, 2018. In the report, we refer to all estimates as "2017" and "2016." The companies in these rankings are all based in the United States. Non-U.S. based companies were not included in this list because of data comparability issues, although there are many non-U.S. companies that invest in America.

Most multinational companies do not provide a breakdown of capital expenditures by country in their financial reports. However, PPI has developed a methodology for estimating U.S. capital expenditures based on the information provided in the companies' annual 10-K statements. This methodology should, in most cases, provide a reasonable approximation to actual spending.

Our estimation procedure goes as follows:

- If a company has no foreign operations, we allocated all capital spending to the United States.
- If a company reported U.S. capital spending separately, we used that figure.
- If a company did not report U.S. capital spending separately, but did report changes in U.S. long-lived assets or plant and equipment, we were able to use that information plus depreciation rates to estimate domestic capital spending.
- If a company has small foreign operations that were not reported separately, we allocated capital spending proportional to domestic vs foreign assets, revenues, or employees.

For example, Verizon does not report long-lived assets by geographic region. As a result, we used Verizon's domestic employment as a share of total employment to allocate Verizon's capital spending. In the case of Comcast, we allocated all of its cable operation and corporate capital expenditures, including cash paid for intangible assets such as software, to the U.S. We allocated a portion of NBC Universal's capital expenditures, including cash paid for intangible assets such as software, to the U.S. based on domestic vs. foreign revenues.

For Amazon.com, the methodological issue was their extensive use of capital leases. We used the principal payment on capital leases as the appropriate equivalent to capital expenditures.

For Southern, we used "construction in progress" as the best measure of U.S. capital expenditures rather than property additions.

For consistency, we omitted capital spending by the finance arm of companies such as General Electric, General Motors, and Ford, which reflects the financing of leased equipment rather than actual direct investment. The most difficult case to estimate was GE, which has been going through major structural changes. GE provides the geographic PPE split for the company as a whole, but does not separate out those statistics for the finance arm and the non-finance operations. We made the assumption that the geographic PPE split for GE's non-finance operations was the same as for the company as a whole. This methodology implies that GE's domestic capital expenditures were $3,529 million in 2015, $1,540 million in 2016, and $3,394 million in 2017. The 2016 decline in capital expenditures is consistent with GE divesting as the company looked to return to its industrial heritage.[11,1] We acknowledge that this is an estimate and there are other ways to calculate GE's U.S. capital expenditure.

NON-ENERGY U.S. INVESTMENT HEROES

As a complement to our complete U.S. Investment Heroes ranking, we are also presenting non-energy lists for 2017 and 2016 (Figures 7 and 8). These lists rank the top U.S. companies investing domestically, according to our estimates, that are both non-financial and non-energy.

FIGURE 7: Non-energy U.S. Investment Heroes: Top 25 Non-financial Companies by Estimated 2017 U.S. Capital Expenditures

	COMPANY	ESTIMATED 2017 U.S. CAPITAL EXPENDITURES (MILLIONS USD)
1	AT&T	**18,972**
2	Verizon	**15,435**
3	Amazon.com	**12,021**
4	Comcast	**10,880**
5	Alphabet	**9,606**
6	Charter Communications	**8,681**
7	Apple	**7,684**
8	Walmart	**7,444**

Data: Company financial reports, PPI estimates

	COMPANY	ESTIMATED 2017 U.S. CAPITAL EXPENDITURES (MILLIONS USD)
9	Microsoft	**6,026**
10	American Airlines Group	**5,971**
11	General Motors	**5,350**
12	Intel	**5,306**
13	Facebook	**4,958**
14	UPS	**4,361**
15	FedEx	**4,271**
16	United Continental Holdings	**3,998**
17	Delta Airlines	**3,891**
18	General Electric	**3,394**
19	Union Pacific	**3,238**
20	HCA Holdings	**3,015**
21	Kroger	**2,809**
22	Ford Motor	**2,808**
23	Disney	**2,807**
24	Target	**2,533**
25	Proctor & Gamble	**2,261**
	Top 25 Total	**157,721**

Data: Company financial reports, PPI estimates

FIGURE 8: Non-energy U.S. Investment Heroes: Top 25 Non-financial Companies by Estimated 2016 U.S. Capital Expenditures

	COMPANY	ESTIMATED 2016 U.S. CAPITAL EXPENDITURES (MILLIONS USD)
1	AT&T	**20,262**
2	Verizon	**15,551**
3	Comcast	**10,463**
4	Apple	**9,432**
5	Amazon.com	**8,776**
6	Walmart	**7,922**
7	Alphabet	**7,866**
8	American Airlines Group	**5,731**
9	Charter Communications	**5,325**
10	Ford Motor	**5,300**
11	Intel	**4,944**
12	General Motors	**4,895**
13	Microsoft	**4,668**
14	FedEx	**4,638**
15	Kroger	**3,699**
16	Facebook	**3,550**
17	Union Pacific	**3,505**
18	Delta Airlines	**3,391**
19	United Continental Holdings	**3,223**
20	HCA Holdings	**2,760**
21	Disney	**2,738**

	COMPANY	ESTIMATED 2017 U.S. CAPITAL EXPENDITURES (MILLIONS USD)
22	Boeing	**2,613**
23	UPS	**2,426**
24	CVS Health	**2,224**
25	PepsiCo	**2,048**
	Top 25 Total	**147,951**

Data: Company financial reports, PPI estimates

The non-energy ranking includes the non-energy companies from our complete ranking but has also made room for other companies, many of them returning from 2016's non-energy list. For example, Disney was a significant domestic investor again in 2017 and 2016 with theme park and resort expansion guiding their capital expenditures.

HCA Holdings returns to the 2017 non-energy list as the lone healthcare company on either list, after making both the 2016 and 2015 lists. HCA Holdings spent $3 billion in 2017, investing in existing properties and acquiring hospitals and other healthcare entities.

Kroger makes the list again in 2017 after making the energy top 25 in 2016. By our estimates, the company cut capital expenditures by 24 percent compared to 2016, and 16 percent compared to 2015.

Ford comes in at 22nd in 2017 after making the energy top 25 in both 2016 and 2015. According to our estimates, the company cut their investment in U.S. capital expenditures by nearly half in 2017 compared to 2016.

Target ranks 24th on the 2017 non-energy list after increasing their capital expenditures by $1 billion compared to 2016. The company invested in its existing stores, new stores, and information technology. Procter & Gamble rounds out the non-energy top 25, having spent an estimated $2.3 billion on domestic capital expenditures in 2017.

About the Authors:

Dr. Michael Mandel is chief economic strategist at the Progressive Policy Institute and senior fellow at Wharton's Mack Institute for Innovation Management at the University of Pennsylvania. Mandel received a Ph.D. in economics from Harvard University and formerly served as chief economist at BusinessWeek

Elliott Long is senior economic policy analyst at the Progressive Policy Institute. Elliott holds a BA in Political Science from Florida Gulf Coast University and MPA from George Washington University.

References

1 "Nonfarm Business Labor Productivity (output per hour)," Bureau of Labor Statistics, PRS85006093.

2 "Continued slowdown in productivity growth weighs down on living standards," Organisation for Economic Co-operation and Development, May 18, 2017. http://www.oecd.org/economy/continued-slowdown-in-productivity-growth-weighs-down-on-living-standards.htm

3 PPI analysis of BEA fixed asset data.

4 See "Restoring Internet Freedom Order," p. 54-57, Federal Communications Commission, December 14, 2017. https://www.fcc.gov/document/fcc-releases-restoring-internet-freedom-order

5 "Shares of gross domestic product: Gross private domestic investment: Fixed investment: Nonresidential [A008RE1Q156NBEA]," U.S. Bureau of Economic Analysis. Retrieved from FRED, Federal Reserve Bank of St. Louis; November 15, 2018. https://fred.stlouisfed.org/series/A008RE1Q156NBEA

6 "Preliminary Details and Analysis of the Tax Cuts and Jobs Act," Tax Foundation, December 18, 2017. https://taxfoundation.org/final-tax-cuts-and-jobs-act-details-analysis/

7 PPI analysis of BEA fixed asset data.

8 Michael Mandel, "How Ecommerce Creates Jobs and Reduces Income Inequality," Progressive Policy Institute, September 2017. https://www.progressivepolicy.org/blog/ecommerce-creates-jobs-reduces-income-inequality/

9 Michael Mandel, "The Rise of the Internet of Goods: A New Perspective on the Digital Future for Manufacturers," Manufacturers Alliance for Productivity and Innovation and Progressive Policy Institute, August 2018. https://www.progressivepolicy.org/wp-content/uploads/2018/08/Internetofgoods-reportPPI-2018.pdf

10 Michael Mandel and Elliott Long, "The Internet of Goods and a Revitalized Economy: Upstate New York as a Template," Progressive Policy Institute, January 2018. https://www.progressivepolicy.org/wp-content/uploads/2018/01/PPI_SmallCellFees_2018.pdf

11 Zacks Equity Research, "GE Completes Last Major Sale of GE Capital Exit Plan," Nasdaq, March 29, 2017. http://www.nasdaq.com/article/ge-completes-last-major-sale-of-ge-capital-exit-plan-cm767160

12 Ashlee Clark Thompson, "It's official: GE Appliances belongs to Haier," CNET, June 6, 2016. https://www.cnet.com/news/its-official-ge-appliances-belongs-to-haier/

ppi

The Progressive Policy Institute is a catalyst for policy innovation and political reform based in Washington, D.C. Its mission is to create radically pragmatic ideas for moving America beyond ideological and partisan deadlock.

Founded in 1989, PPI started as the intellectual home of the New Democrats and earned a reputation as President Bill Clinton's "idea mill." Many of its mold-breaking ideas have been translated into public policy and law and have influenced international efforts to modernize progressive politics.

Today, PPI is developing fresh proposals for stimulating U.S. economic innovation and growth; equipping all Americans with the skills and assets that social mobility in the knowledge economy requires; modernizing an overly bureaucratic and centralized public sector; and defending liberal democracy in a dangerous world.

Progressive Policy Institute
1200 New Hampshire Ave NW,
Suite 575
Washington, DC 20036

Tel 202.525.3926
Fax 202.525.3941

info@ppionline.org
progressivepolicy.org