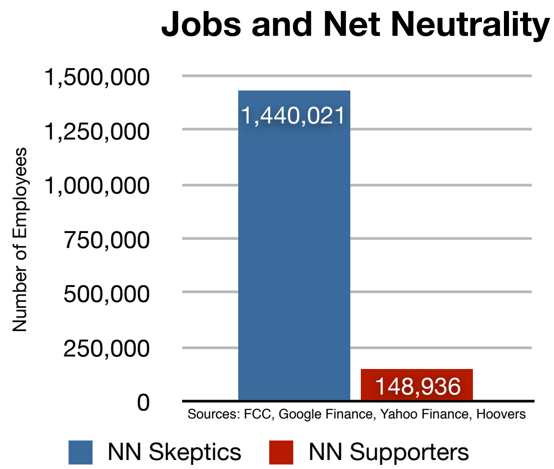
February 5, 2010

What Would Net Neutrality Mean for U.S. Jobs?

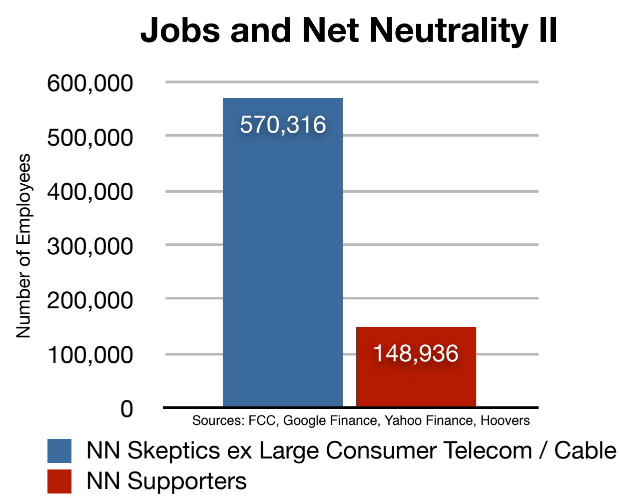
With 16.5% of the nation "underemployed" and economists gloomily doubting next-generation job creation, Washington is considering a number of strategies, including the President's "jobs bill." "Jobs," President Obama insisted in his state of the union address, "must be our number one focus in 2010."



But as Washington concentrates on employment, it also is considering a possibly job-killing set of new regulations on the communications sector. Known as "Net Neutrality," these proposed new rules could, in their extreme form, prohibit many technologies and business plans used today on the Internet, not to mention stifling future experimentation and entrepreneurship. The rules as proposed would apply mainly to the nation's large broadband infrastructure investors like telecom and cable TV companies but over time would likely seep into all technology and content that touches the Internet.

On February 3, Cisco CEO John Chambers offered an upbeat report on Internet investment and said his company would be adding up to 3,000 new jobs in coming months. A new Milken Institute study, meanwhile, makes the case that broadband networking could be the second most important infrastructure-related job-creator, behind only the large highway/transportation sector.

We wondered about this cognitive dissonance – between job creation and new restrictions on Internet innovation and investment. So we analyzed the official comments that Internet industry companies submitted to the Federal Communications Commission as of January 15, 2010. Excluding comments from trade associations, individuals, and academics, we looked at company filings and discerned support for or opposition to the FCC's proposed Net Neutrality rules, labeled Supporters and Skeptics. Erring on the side of conservatism, we attempted to exclude non-U.S. employees of foreign-based Skeptics but included any foreign employees of Supporters. We found the Skeptics outpace the Supporters nearly 10 to 1.

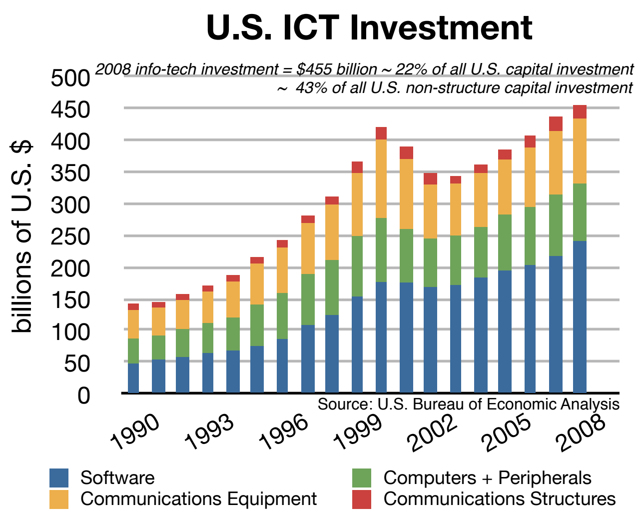


- Net Neutrality Skeptics directly employ 1,440,021 workers.
- Net Neutrality Supporters directly employ 148,936 workers.

Some Net Neutrality backers might argue that the large telecom and cable TV companies that most aggressively oppose new regulation could tilt these numbers disproportionately. So next (see chart at right) we removed from the analysis these large consumer service providers (AT&T, Bright House, Cablevision, Charter, Cincinnati Bell Wireless, Comcast, Covad, Cox, Cricket, Leap, MetroPCS, Qwest, Sprint-Nextel, T-Mobile, Time Warner Cable, and Verizon). The remaining Skeptical companies, including many networking and wireless technology companies, still employed almost four times as many workers as all the Supportive companies, 570,316 versus 148,936.

This analysis of company FCC filings is, of course, not dispositive. The efficacy of Net Neutrality regulation is not determined solely by who submits FCC comments nor only by its impact on near-term job creation.

This analysis does show that many U.S. companies employing large numbers of American workers oppose a major increase in regulation of perhaps the nation's most important high-growth industry. An industry that today is healthy, growing, and dynamic. Moreover, the companies represented among the Skeptics are among the nation's largest infrastructure investors. Because of their reliance on Wall Street for massive financing of long-term capital projects, they are highly sensitive to regulatory changes that could prohibit business models or even ban the microchip innards of routers, switches, modems, and mobile phones.

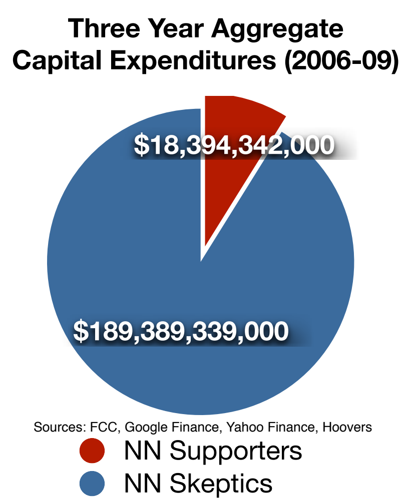


We just suffered a business investment recession. Consumer spending, at 70.9% of GDP, reached near an all time high in the fourth quarter of 2009. Fixed investment of 11.9% was an all time low. The U.S. economy desperately needs an expansion of new business investment to revive job growth.

We have often noted the communications sector's important capital investment role in the U.S. economy. In 2008, U.S. info-tech capital investment totaled $455 billion, or 43% of all U.S. non-structure investment. The communications service providers alone invest $65 billion or more annually. Among companies filing FCC comments, the Net Neutrality Skeptics invested $189 billion over the last three years, compared to $18 billion for the Net Neutrality Supporters (see pie chart). Two of the nation's largest infrastructure investors, AT&T and Verizon, each have more employees than all the Net Neutrality Supporting companies combined.

A new report from the American Consumer Institute found a corresponding relationship: "for every $1 billion in revenue, 'core' network companies provided 2,329 jobs, while non-network 'edge' companies provided 1,199 (about half as many)."

Proponents might argue that Net Neutrality will protect consumer access to Web applications. They might argue that Net Neutrality would foster long-term innovation. They might argue the policy is about the companies and jobs of the *future*. These are important goals. The policy path to achieve these consumer protection and long-term innovation objectives, however, is highly debatable. Indeed, I have argued that Net Neutrality would very likely *harm* consumer welfare and the growth, dynamism, and future jobs of the digital economy.



Innovations like the Apple iPhone and YouTube, for example, relied on business and technical innovations that could have been banned had Net Neutrality been in force. The iPhone was the product of a company previously outside the mobile phone world entering an exclusive arrangement with a wireless carrier. The result was an efflorescence in mobile sector, where hundreds of software developers created thousands of jobs building the 150,000 "apps" for the iPhone App Store. YouTube transformed the online video space by making crucial use of content delivery networks (CDNs) that store content closer to end users to supply a faster and more robust and satisfying multimedia experience. Exclusive partnerships and content delivery networks are just two of the many innovations that led to unexpected jobs today. It is likely that similar "non-neutral" innovations will lead to unexpected jobs tomorrow.

Regardless of one's view of long-term effects, however, there is little chance Net Neutrality regulations could improve the near-term jobs picture.

There is, on the other hand, a substantial possibility for harm. Net Neutrality could substantially reduce the willingness of service providers to invest in new wired and wireless networks. And it could do so immediately. Any capital expenditure reductions would directly affect tens of thousands of workers who build and maintain these networks. Capex reductions would also ripple through the whole network equipment and software value chain, starting with large companies like Cisco, Juniper, Alcatel-Lucent, and Qualcomm; then damaging the prospects of hundreds of smaller suppliers in the high-end semiconductor and software sectors.

The longer-term adverse effects of less bandwidth, less robust and sophisticated networks, and less ubiquitous connectivity are difficult to quantify, but they are large. Every new digital device, Web business plan, and content model in the burgeoning Web media space would be put into question. The general productivity of the economy could suffer as the digital tools that speed up work around the world advance at a slower pace. It is our view that both the short-term and long-term interests of U.S. jobs and innovation are served by the maintenance of the existing "Four Open Internet Principles" without new Net Neutrality regulation.

Washington's current preoccupation with short-term job creation is just one more reason to oppose Net Neutrality.

– Bret Swanson