Economic Policy Vignette 2012-5-29

The Wireless Revolution: Are The Elderly Keeping Up?

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May 2012

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It is, of course, no surprise to anyone that the telecommunications landscape is changing very rapidly. Among the most prominent changes, millions of Americans have adopted wireless telephones to augment—or increasingly displace—their traditional landline service. The reasons behind this wireless revolution are somewhat obvious. Wireless telephony adds an element of mobility—anytime, anywhere communications—that is simply not possible through traditional landline service. Moreover the latest generation of wireless phones integrates “smart” features that allow transmission of not only voice, but also text, video and data. The consequence of this wireless revolution could not be more profound. Many Americans are abandoning their landline telephones altogether. Today over 30 percent of all U.S. households have effectively “cut the cord” (i.e., eliminated their landline service), and another 16 percent are “wireless mostly.” For “wireless mostly” households, landline service is increasingly like that old pair of worn out tennis shoes that we keep in the closet rather than throwing away. Even though we have a new and sleeker pair for everyday use, the old ones remain because keeping them is pretty cheap.

Against this backdrop, the 20th century regulatory structure that is predicated on traditional landline service as a monopoly and extensive price and quality regulation is clearly antiquated. Landline telephony companies of today compete against the reality that households are increasingly dropping their landline service if this service fails to be economically attractive and/or of high quality. It is therefore commendable that some states and the Federal Communications Commission (FCC) appear ready to discuss issues related to telecommunications regulatory reform.

Among the “but what about” issues that has surfaced in these discussions is the impact of any regulatory reform on the elderly. Of particular concern is the fear that this demographic segment will not participate in the transformation to a “wireless economy” to the same extent as other demographic segments. That is, might the elderly be disadvantaged due to their inabilities or unwillingness for change,
technological anxieties, limited wireless telephony options, or some other reason? While these concerns are substantive, policy ought not to be based merely on fears. In particular, two important questions must be addressed before concerns about the ability of the elderly to make the transition to wireless telephony is allowed to slow otherwise needed regulatory reform. First, do the elderly have telephony choices? And second, are the elderly taking advantage of these telephony choices?

As part of a larger research effort\(^1\), we have investigated the evolution of telephone demand among the U.S. elderly population over the 2003-2010 period. To do so, we utilize a unique annual survey database of thousands of households (over 190,000 in total over 2003-2010) from across the country that queries households about their consumption of wireline and wireless services.\(^2\) The result—both at a cursory level and a more econometrically refined examination—are telling: while younger households have moved more quickly to embrace the wireless revolution, older households are rapidly transitioning to wireless services. In short, elderly households are not “stuck in the past” or “stuck in their ways” but are instead demonstrably nimble adopters of modern wireless technologies and the ever increasing platform of communications options that this new technology brings.

Consider Figure 1 which shows the portfolio of elderly households’ telephone choices over the 2003 through 2010 period.\(^3\) Each household is categorized as being in one of four mutually exclusive and exhaustive categories: “none,” “landline,” “wireless,” or “both”. The “none” category represents households with no (wireless or landline) phone. In short, these are households “off the grid.” The “landline” category represents households with only a landline phone (no wireless phone), while the “wireless” category represents households with only a wireless phone (no landline phone). The “both” category represents households with both a landline phone and a wireless phone.

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\(^2\) For a description of these data, see Blumberg and Luke (2011).

\(^3\) We utilize a 50 year cutoff for head of household because it represents the age at which individuals become eligible for membership in the American Association of Retired Persons (AARP). Our results are robust to other age cutoff
We highlight three facts regarding the elderly and wireless telephony using Figure 1. First, the adoption of wireless telephony by the elderly has been pronounced, especially over the past decade. Although cellular telephony was first introduced in 1983, only 41 percent of elderly households possessed wireless subscription service in 2003. But by 2010, wireless adoption among the elderly has grown to nearly 80 percent. Four out of five elderly households today possess wireless service as an alternative to traditional landline service.

Second, the growth of wireless only elderly households has been significant: from one percent in 2003 to 14.5 percent by 2010. Among the nominally most vulnerable elderly households—those living in poverty—we find that roughly 22 percent have “cut the cord” by dropping their landline telephone subscription all together. While it is still true that the level of wireless only elderly households is lower than the average across all other U.S. households, this demographic segment is indeed embracing the wireless revolution and “catching up” to the younger population.

Third, complementing the move by elderly households toward wireless services, we find that the percentage of these households that rely exclusively on landline telecommunications has fallen dramatically: from 58 percent in 2003 to 19 by 2010.

In sum, the data that we have examined provide considerable comfort that elderly households are not as vulnerable to advancing communications technologies as some may fear or have posited. Indeed, elderly households—similar to all other U.S. households—appear to increasingly see value in wireless services and are transitioning rapidly to adopt a portfolio of wireless and landline telephones. This demonstrated propensity to transition to wireless telephony means that elderly households, together with the massively mobile remainder of society, are powerful agents to ensure that telecommunications services remain competitively and affordably priced in the 21st century. While regulatory reform in landline telecommunications needs to be sensitive to potentially vulnerable segments of society, it should not be sidetracked by nonexistent concerns, such as a “vulnerable” elderly population.
Figure 1

HOUSEHOLDS WITH LANDLINE, WIRELESS, BOTH OR NONE AMONG HOUSEHOLDS WITH HEAD OF THE HOUSEHOLD OVER 50 YEARS OLD, 2003-2010

<table>
<thead>
<tr>
<th>Year</th>
<th>Landline</th>
<th>Both</th>
<th>Wireless</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>0.67%</td>
<td>57.99%</td>
<td>40.09%</td>
<td>1.25%</td>
</tr>
<tr>
<td>2004</td>
<td>0.56%</td>
<td>54.70%</td>
<td>42.81%</td>
<td>1.94%</td>
</tr>
<tr>
<td>2005</td>
<td>0.53%</td>
<td>52.72%</td>
<td>44.26%</td>
<td>2.40%</td>
</tr>
<tr>
<td>2006</td>
<td>0.77%</td>
<td>46.79%</td>
<td>48.05%</td>
<td>4.39%</td>
</tr>
<tr>
<td>2007</td>
<td>0.88%</td>
<td>31.72%</td>
<td>61.85%</td>
<td>5.55%</td>
</tr>
<tr>
<td>2008</td>
<td>0.92%</td>
<td>27.81%</td>
<td>63.50%</td>
<td>7.87%</td>
</tr>
<tr>
<td>2009</td>
<td>0.93%</td>
<td>21.88%</td>
<td>66.04%</td>
<td>11.15%</td>
</tr>
<tr>
<td>2010</td>
<td>1.11%</td>
<td>19.36%</td>
<td>65.03%</td>
<td>14.51%</td>
</tr>
</tbody>
</table>

Legend:
- Wireless
- Both
- Landline
- None
REFERENCES
