

Japan: HDTV^(c)

In Japan, by the Radio Law of 2001, all frequency spectrum for analog terrestrial TV broadcasting will be cancelled by July 2011. Thereafter, all terrestrial TV broadcasting would be digital. However, Japanese consumers have been slow to buy digital TV sets. National Institute of Informatics researchers estimate that, in 2011, about 30 million analog TV sets would still be in service. In 2005, Japan comprised slightly over 49 million households.

The Japanese parliament is made up of a lower House of Representatives and an upper House of Councillors. At the time of writing, the governing Liberal Democratic Party held a small majority in the upper house. Between March and April 2008, opposition members of the upper house blocked the government's nominee for head of the central bank. Elections for one-half of seats in the upper house are held every three years. The next election will be held in 2010.

a. Construct the following game in extensive form. In 2011, the government must decide whether or not to cancel the analog TV frequency spectrum. In the 2013 upper house elections, voters must decide whether or not to vote for the Liberal Democratic Party.

b. How credible is the government threat to cancel analog TV frequency spectrum? How does your answer depend on the vote for the Liberal Democratic Party in the 2010 upper house election?

c. Japan has a relatively old population, which is continuing to age. Compare the rates at which older vis-à-vis younger households would replace their analog TV set with digital sets?

d. Suppose that older voters are relatively more likely to support the Liberal Democratic Party. How would your analysis in (c) affect your answer to (b)?

^(c) 2008, I.P.L. Png. This mini-case is based, in part, on Tadashi Mima, Masashi Ueda, Hitoshi Okada, Noboru Sonehara, "Cost benefit analysis of the digital terrestrial broadcasting in Japan", 3rd annual conference, Asian Law and Economics Association, Taipei, Taiwan, August 2007.