

# **The Internet, Social Capital, and Subjective Well-Being**

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- **The project was motivated by two stylised facts:**

- In the years that preceded the social networking revolution, **indicators of social participation have declined** in many OECD countries (Bartolini et al., 2013; Costa & Kahn, 2003; Putnam, 2002; Sarracino, 2010).

- However, more recently, the success of social networking sites (SNSs) has resulted in a steep **rise in online social participation** (Antoci et al. 2012a; 2012b; 2013; Brenner and Smith, 2013).

# Some facts

- As of May 2013, according to Pew Research Center (PRC) Internet & American Life Project Survey data:
- **72%** of U.S. online adults were active on SNSs (67% use Facebook, 16% use Twitter, 15% use Pinterest and 13% use Instagram).
- **80%** of online young adults (aged 18–29) use SNSs
- **77%** of middle-aged adults (30–49) use SNSs
- **50%** create and share original content online.
- **46%** of adult users post original photos or videos online that they themselves have created.

# Main research questions

- In the “social networking era”, may Internet use **accelerate the decline in social participation** documented by empirical studies?
- Or does it offer **a way to support social relationships** against the threats posed by the disruption of ties and the weakening of community life?
- **How does social networking affect trust?**
- **Which is the overall impact on social and individual well-being?**

# Preliminary research outcomes

- The development of the project has so far led to the preparation of two papers respectively describing a theoretical and an empirical analysis.
- **Theoretical paper:** Antoci, A., Sabatini, F., Sodini, M. (2013). Social poverty traps and Internet-mediated interactions. Can social networks save human relations?
- **Empirical paper:** Sabatini, F., Sarracino, F. (2013). Will Facebook save or destroy social capital? An empirical investigation into the role of online interactions in social trust and networks.
- Printed copies of these papers have been distributed to participants.

**Will Facebook save or destroy  
social capital?**

**An empirical investigation into the  
role of online interactions in the  
evolution of trust and networks**

**Fabio Sabatini  
Francesco Sarracino**

# Pessimistic views on Internet use

3

main arguments:

- The more time people spend using the Internet during leisure time, the more time has to be detracted from social activities.
- The Internet allows users to conduct many daily transactions such as shopping or banking online from home: this may reduce the opportunities for face to face interactions.
- “Community without propinquity” argument (Webber, 1963). A heterogeneous urban environment would be characteristic of the absence of “intimate personal acquaintanceship” and would result in the “segmentation of human relations” into those that were “largely anonymous, superficial, and transitory” (Wirth, 1938, p. 1).

# Pessimistic views on Internet use

3

main weaknesses:


- These studies were in most cases conducted before the online networking revolution, when Internet use mainly was an individual activity.
- Small and biased samples (usually, limited communities of undergrad students).
- Endogeneity issues not always completely addressed.

# Opimistic views

- A couple of pioneer economic studies support the intuition that Internet use may actually not discourage sociability and participation (Pénard and Poussing, 2010; Bauernschuster et al., 2011).
- Empirical studies in the fields of applied psychology and communication science have specifically analyzed how online networking influences social interactions across Internet users (e.g. many papers in the *Journal of Applied Social Psychology* and *Journal of Computer Mediated Communication*). Most of these studies find that networking supports social interactions, trust, self-esteem and sbw in small (and non representative!) samples.

A collection of papers in this field can be browsed – and downloaded – from the Social Capital Gateway at the url:


[www.socialcapitalgateway.org/internet](http://www.socialcapitalgateway.org/internet)



Go >


# SCG


## Social Capital Gateway



### Euricse

European Research Institute on Cooperative and Social Enterprises

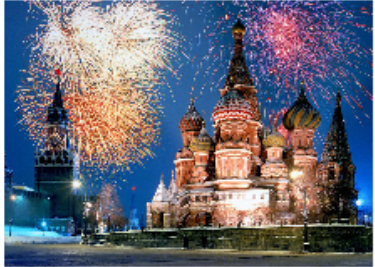
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### Social and Cultural Changes in Cross-National Perspective: Values and Modernization

The Laboratory for Comparative Social Research of National Research University "Higher School of Economics" invites to participate in the Fourth LCSR International Workshop "Social and Cultural Changes in Cross-National Perspective: Values and Modernization" that will take place from March, 28 till April, 4, 2014 in Moscow within the framework of the XV International Academic Conference on Economic and Social Development at HSE. The deadline for applications is February 1, 2014.





[Follow the link for full details](#)

### Next conferences

**12th EUDN PhD Workshop on Development Economics - Centre for Finance and Development**  
Thu, 2013-11-21 - Fri, 2013-11-22 [more >](#)

**IARIW-UNSW Special Conference on Productivity Measurement, Drivers and Trends**  
Tue, 2013-11-26 - Wed, 2013-11-27 [more >](#)

**Italian Society of Law and Economics 9th Annual Conference**  
Thu, 2013-12-12 - Fri, 2013-12-13 [more >](#)

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2014, January  
**Contemporary Issues in Development Economics**  
Mon, 2014-01-06 - Tue, 2014-01-07

# Contribution to the literature

- We add to this multidisciplinary debate by carrying out the **first** empirical study on the effect of online interactions through:
  - 1) **social networking sites (SNSs)**
  - 2) **chats, newsgroups, and forums**on two dimensions of social capital:
  - 1) **trust towards unknown others** (hereafter “social trust”) – **cognitive SC**
  - 2) **social networks** developed through face-to-face interactions among friends and acquaintances – **structural SC**in a **large and representative sample** of the Italian population ( $n = 117,878$ ).

# Social capital

- The **structural dimension** is given by face to face interactions, as measured by the **frequency of meetings with friends**. Respondents were asked to report how many times they meet their friends on a scale from 1 (in case they have no friends) to 7 (if respondents meet their friends everyday).

# Social capital

- **Cognitive dimension - Social trust** was measured through:
- 
- ```
graph LR; A[• Cognitive dimension - Social trust was measured through:] --> B[• The Rosenberg question – “Generally speaking...”]; A --> C[• The “wallet question”: In the city or area where you live, imagine you lost your wallet holding money and your identification or address and it was found by someone else. How likely do you think your wallet would be returned to you if it were found by a stranger?];
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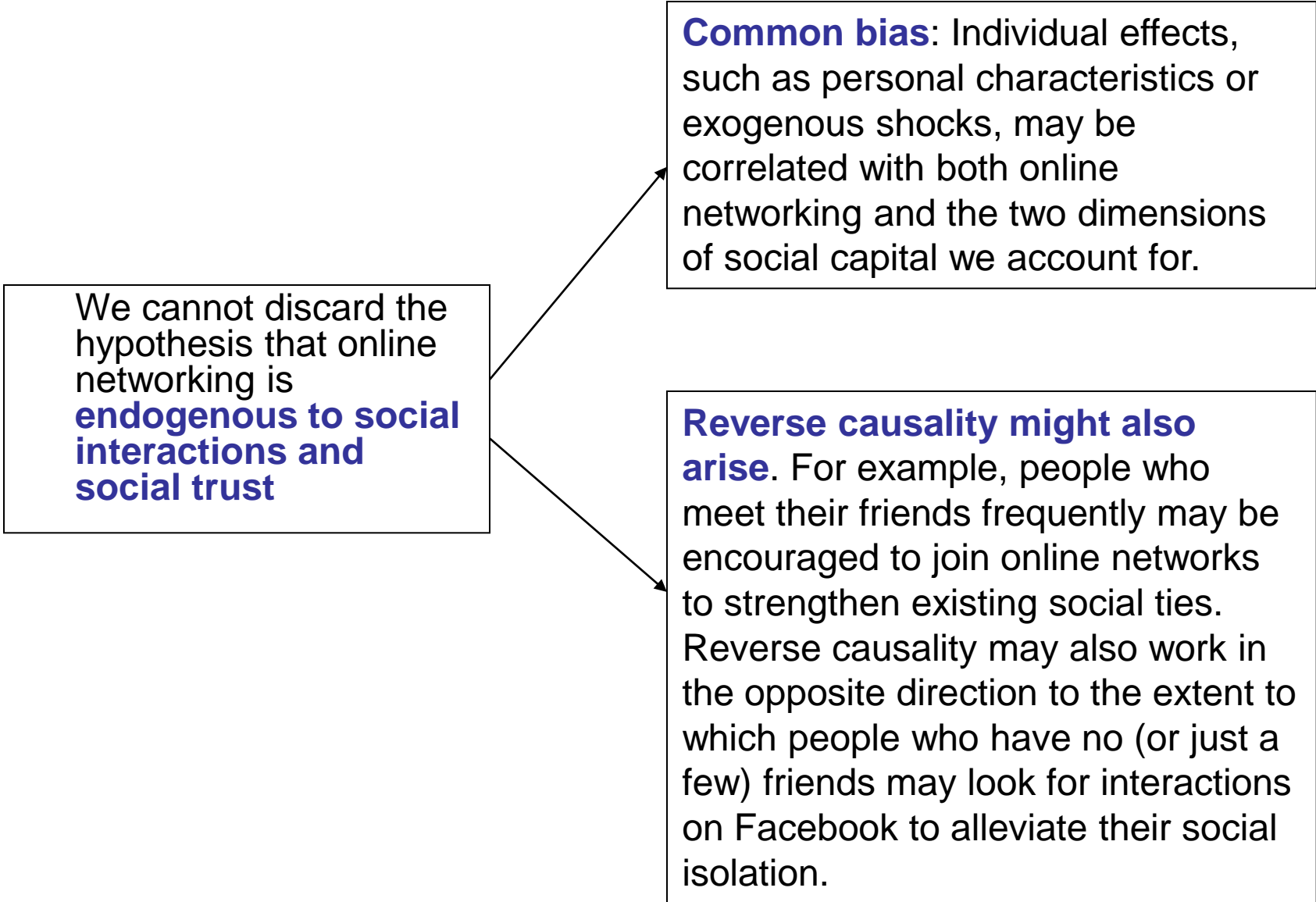
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# Online networking

- We measure social networking with two dichotomous variables reporting:
  - 1) Participation in social networking sites such as Facebook and Twitter.
  - 2) Participation in chats, newsgroups, and forums.

# Identification issues

We cannot discard the hypothesis that online networking is **endogenous to social interactions and social trust**

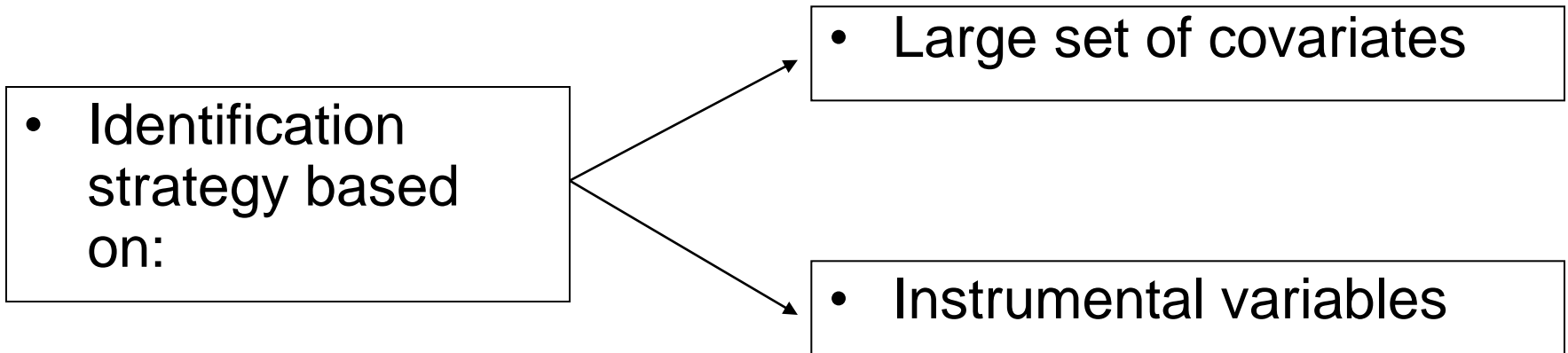


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graph LR; A["We cannot discard the hypothesis that online networking is endogenous to social interactions and social trust"] --> B["Common bias: Individual effects, such as personal characteristics or exogenous shocks, may be correlated with both online networking and the two dimensions of social capital we account for."]; A --> C["Reverse causality might also arise. For example, people who meet their friends frequently may be encouraged to join online networks to strengthen existing social ties. Reverse causality may also work in the opposite direction to the extent to which people who have no (or just a few) friends may look for interactions on Facebook to alleviate their social isolation."];
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# Identification strategy



# Instruments

- 1)** The percentage of the population for whom a DSL connection was available in respondents' region of residence.
  - 2)** Regional digital divide, given by the percentage of the region's area that was not covered by optical fibre.
- Both the instrumental variables were measured in **2008**, two years before the first wave of the Multipurpose Household Survey we employ in our study.

# Instruments' orthogonality

- 2008 level of regional DSL or fibre coverage cannot *per se* exert a direct influence on individual social capital. Rather, their availability in the area creates the premise for the individual choice to purchase a fast-speed access and, subsequently, to participate in SNSs.
- DSL or fibre coverage in the region of residence have never been found to be correlated with social interactions and social trust at the individual level.
- DSL and fibre coverage in 2008 cannot be endogenous – in the sense of reverse causality – to the individual involvement in online networks in 2010-2012.
- The digital divide in terms of fibre coverage also depend on orographic differences between regions, which generated a variation in access to fast Internet across Italian regions that is exogeneous to people's social capital.
- The assumption of orthogonality of the instruments is not disconfirmed by the tests of over-identifying restrictions we run in the context of IV estimates.

# Controls

- The technology that respondents used to connect to the Internet. Possible categories were cable broadband (optical fibre, intranet, PLC, etc.), satellite or other wireless connections (e.g. wi-fi and wi-max), wireless connection through a tablet and or a mobile phone employing a 3G mobile telecommunication technology, wireless connection employing a 3G modem (e.g. a USB key), or connection with a WAP or a GPRS mobile phone.
- Age (both in linear and squared form), gender, marital status, the number of children, education, work status, and
- The time spent in commuting (in minutes).

# Main results

- **Face to face interactions** are strongly significantly and **POSITIVELY** correlated with online networking.
- **Social trust** – however measured – is significantly and **NEGATIVELY** correlated with online networking.

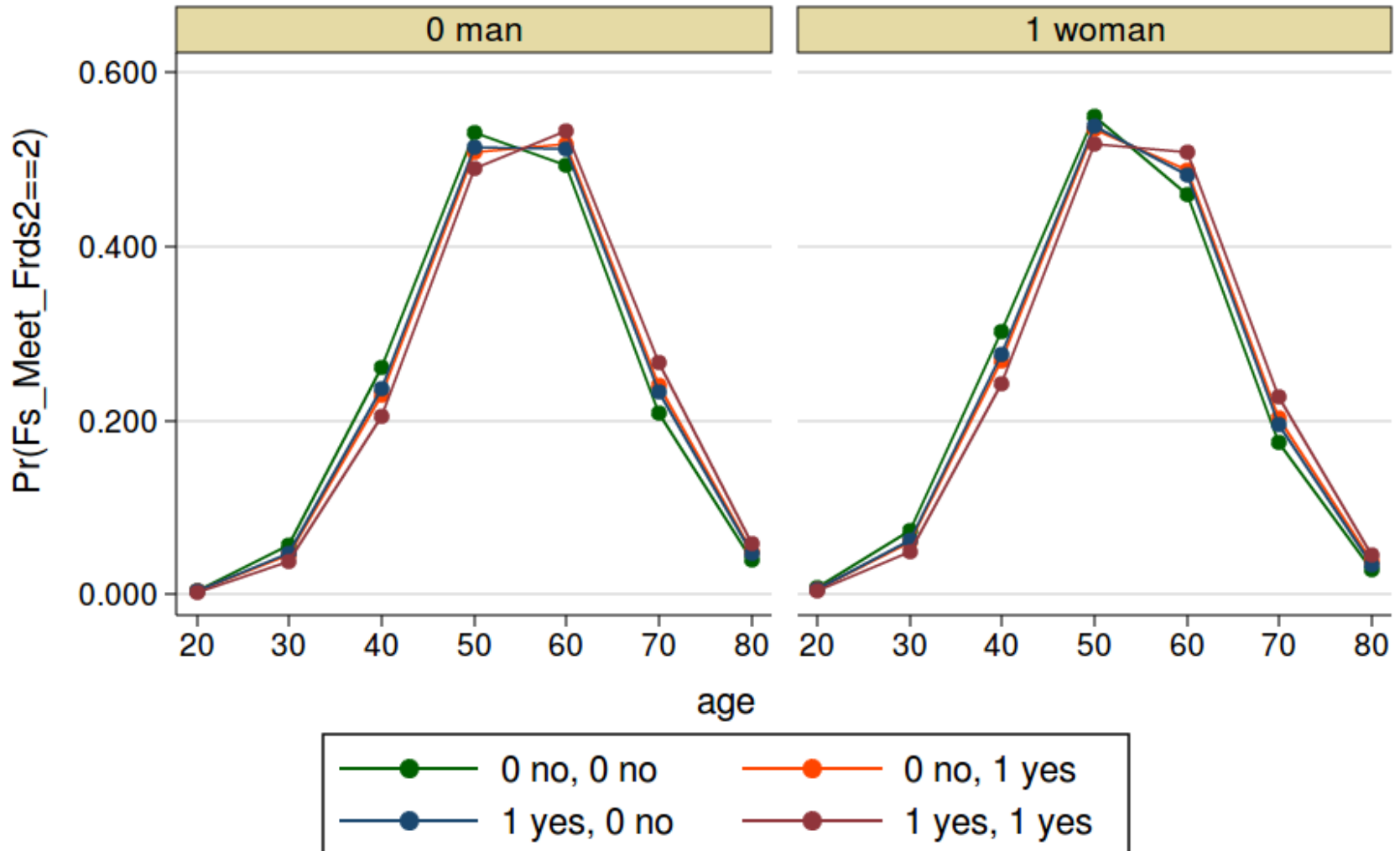
These results are robust: 1) to all the estimation methods we employed in the analysis, including probit and ordered probit estimates, 2SLS estimates conducted through the CMP estimator developed by Roodman (2009), and other techniques. 2) to all the models specification we tested.

# Other results

- Women show:
  - 1) a significantly lower propensity for participation in networks like Facebook and Twitter and in chats, forums, and newsgroups.
  - 2) a significantly lower propensity for face to face interactions.
  - 3) a significantly higher propensity to trust others.

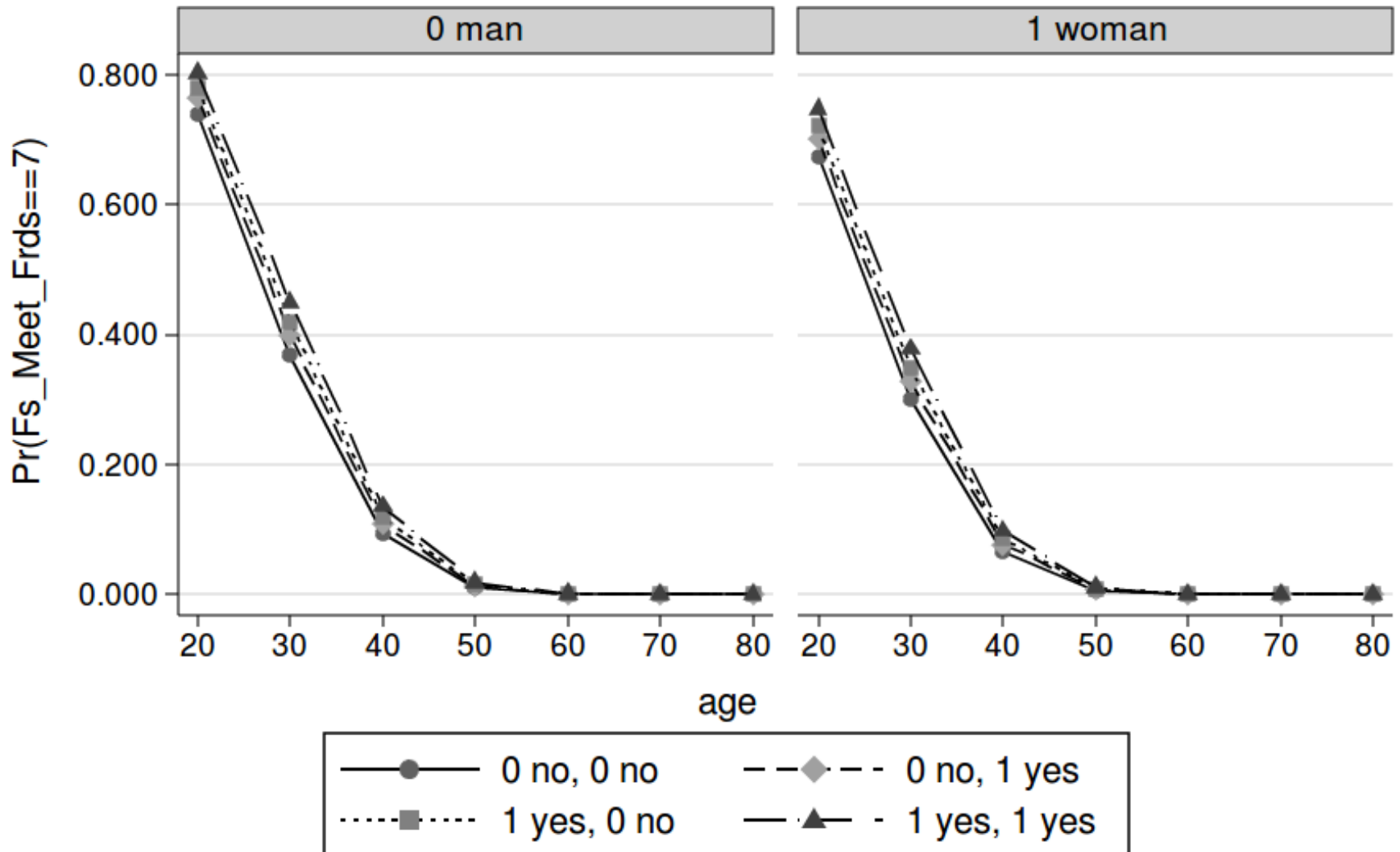
## Prob of meeting friends less than 4 times per year

## Adjusted Predictions



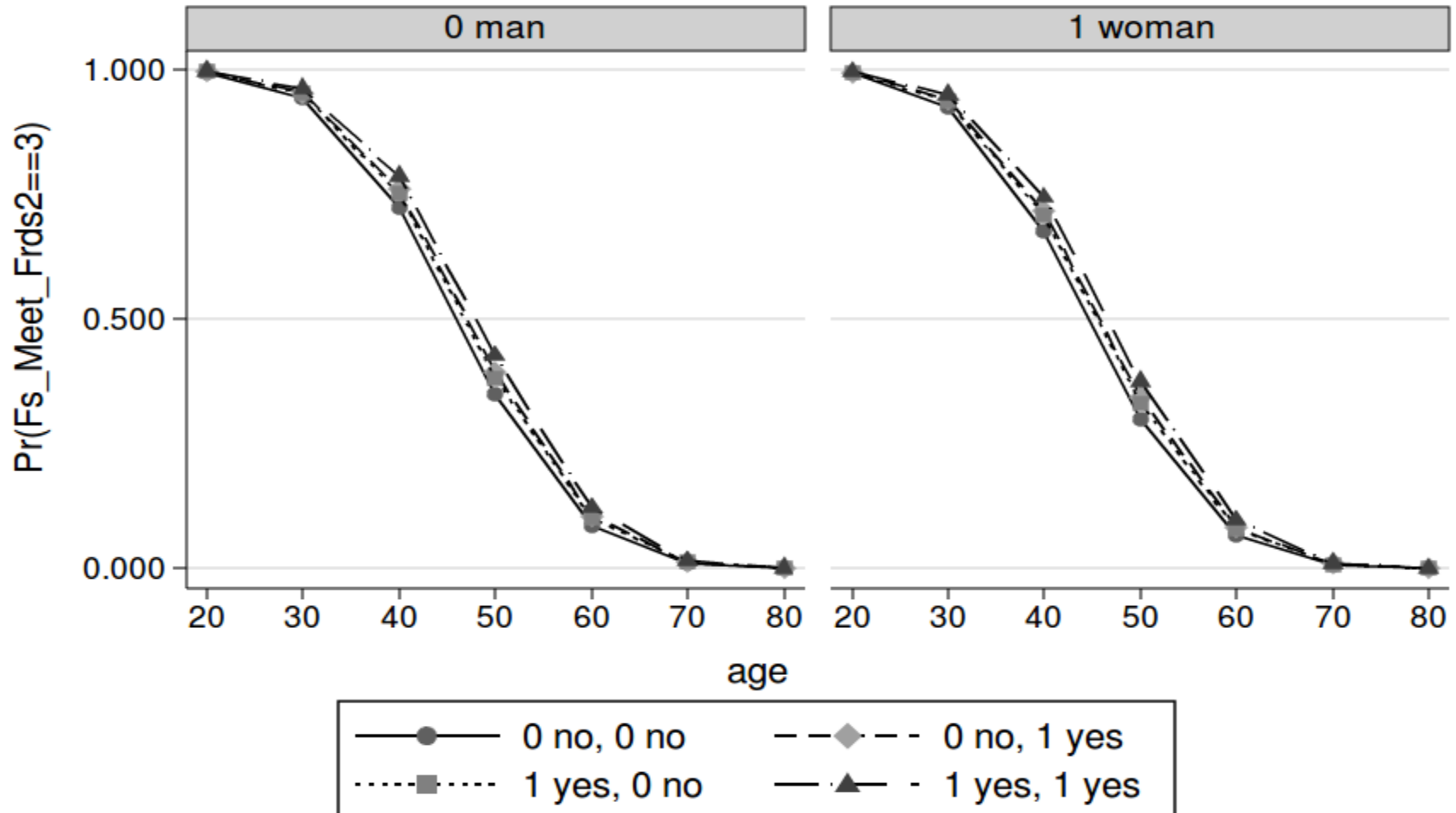
# Prob of meeting friends EVERYDAY

## Adjusted Predictions

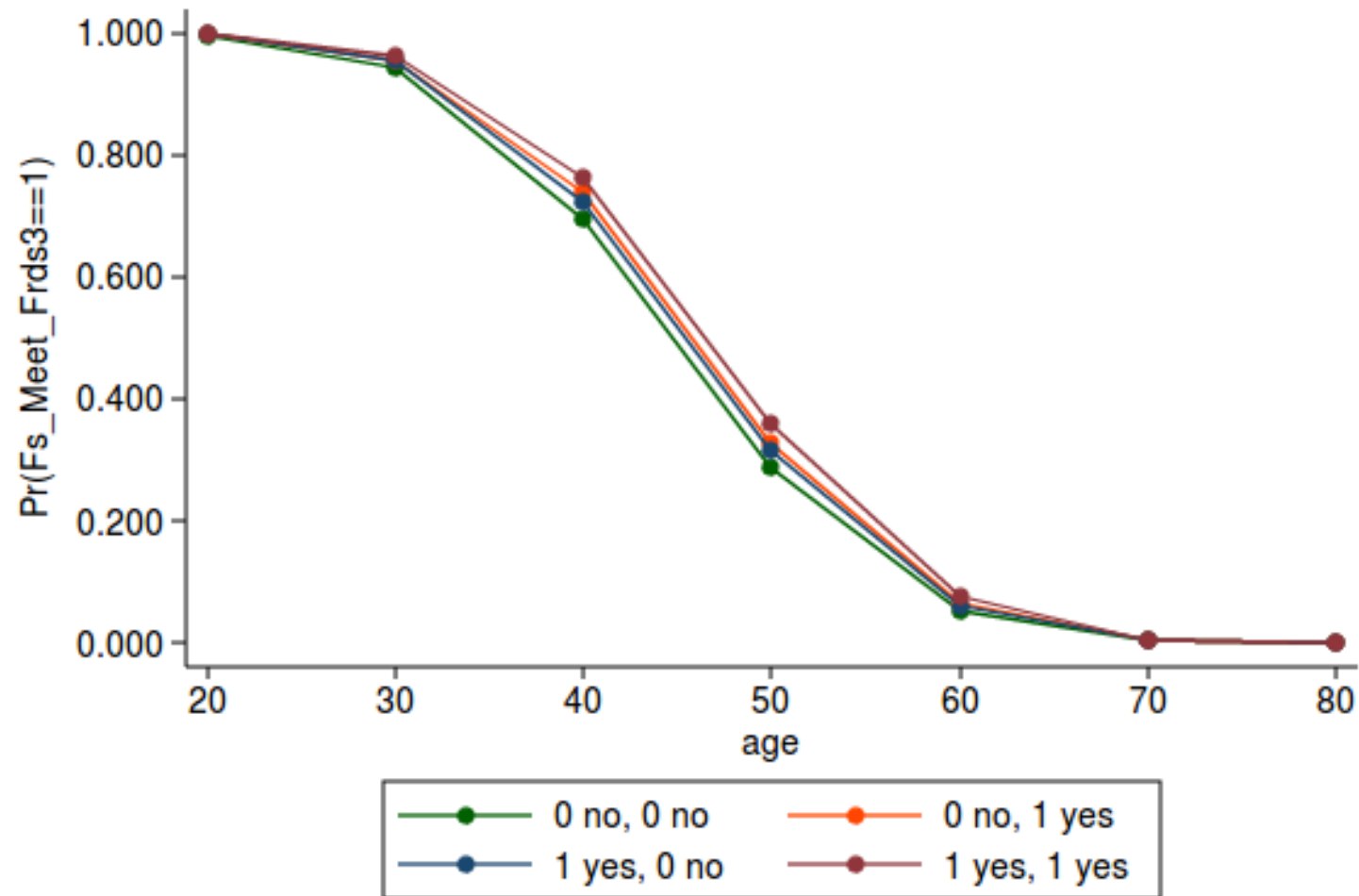


# Prob of meeting friends very frequently

## Adjusted Predictions



# Probability of not being socially isolated



# **Interpretation – face to face interactions**

- Online networking seems more likely to support – rather than destroy – sociability and face-to-face interactions.

# Facebook & co.:

- Allow users to preserve existing relationships against the threats posed by increasing busyness and mobility (bonding social capital).
- Allow users to consolidate or activate weak or latent ties that might otherwise remain ephemeral (bridging social capital)
- Help to cope with social anxiety and negative moods associated with loneliness.
- Encourage teenagers to relate to their peers.
- Promote civic engagement and political participation.
- Stimulate social learning and improve cognitive skills.

# Interpretation – social trust

- However, Facebook also favours **new contacts with people outside of usual reference groups**.
- In face-to-face interactions, we usually select a narrow circle of people with whom to discuss about values and beliefs (e.g. political and moral issues, such as those related to racism and civil rights).
- SNSs, by contrast, **propose rooms for discussion where selection mechanisms are weak or lacking**.

# Is it a matter of diversity?

- Think for example of the Fb page of a newspaper, where a very heterogeneous audience can comment on news and op-ed articles without moderation.
- In these online discussions, individuals are forced to confront themselves with a wide variety of points of views.
- For example, a homophobic individual may discover to be surrounded with people who support marriage equality (or vice versa)
- A Real Madrid's fan will probably discover that Barcelona's supporters are spread all over the world.

# Is it a matter of diversity?

- Diversity is much more diffused in the global population of Internet users than in their limited reference groups.
- Empirical studies have shown that, at least in the short run, diversity along ethnic, religious, and socio-economic characteristics may be a powerful source of frustration and distrust towards unknown others (Alesina and La Ferrara 2006)

# NEED HELP!

- Social trust: do you find the “diversity argument” convincing?
- The gender effect is puzzling.
- Which other data source could we use to test the effect of online networking?
- Are there Russian data sources including information on online networking?

# Next steps

- To assess the role of online networking in two dimensions of individual well-being – several measures of physical health and SBW.
- To extend the analysis to other case studies – Russia, cross-country.