

Enikolopov, Ruben; Petrova, Maria

Article

Homophily, social capital, and social trust

EconPol Forum

Provided in Cooperation with:

Ifo Institute – Leibniz Institute for Economic Research at the University of Munich

Suggested Citation: Enikolopov, Ruben; Petrova, Maria (2025) : Homophily, social capital, and social trust, EconPol Forum, ISSN 2752-1184, CESifo GmbH, Munich, Vol. 26, Iss. 4, pp. 33-35

This Version is available at:

<https://hdl.handle.net/10419/334427>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

Policy Debate of the Hour

Homophily, Social Capital, and Social Trust

Key Messages

- High level of homophily in online social networks may result in erosion of local social capital
- Friendship recommendation algorithms play an important role in determining the level of homophily
- Insufficient attention is paid to friendship recommendation algorithms compared to the algorithms that form the news feed



Ruben Enikolopov is ICREA research professor at Pompeu Fabra University, a research professor at the Barcelona School of Economics, and a research fellow at CEPR.
Photo © ICREA / F. Camallonga.



Maria Petrova is ICREA research professor at Pompeu Fabra University, a research professor at the Barcelona School of Economics, and a research fellow at CEPR.

Two decades into the social media era, evidence reveals a profound reshaping of social and political life. Since Robert Putnam's seminal work documented the erosion of civic life (Putnam 2000), there has been a dramatic acceleration in the decline of face-to-face socialization. In the US, time spent with friends plummeted from 60 minutes per day in 2003 – the year before Facebook's launch – to just 20 minutes per day in 2020 (Kannan and Veazie 2023). Although no similar longitudinal studies exist for Europe, recent evidence suggests that the problem of loneliness

and reduced social cohesion is prevalent across all European countries (Schnepf, d'Hombres and Mauri 2024).

These trends coincide with the spread of social media and raise a fundamental question about the role of online networks in reshaping social life. Does the same mechanism that allows people to find like-minded communities online simultaneously erode local bonds?

Recommendation Algorithms and Social Cohesion

Homophily is a natural tendency of like-minded people to form connections with each other in social networks (McPherson, Smith-Lovin and Cook 2001). Unsurprisingly, online social networks are also characterized by a high level of homophily (Bakshy, Messing and Adamic 2015). However, the level of homophily in online social networks is determined not only by the preferences of users but also by the algorithms that the platforms use to suggest content to read and, most importantly, new friends.

The goal of the platforms is focused almost exclusively on increasing user engagement, and their algorithms are optimized to achieve this goal. Since the algorithms also

exploit the psychological biases of the users and do not take into account possible spillovers, this may lead to a situation in which social media users get “too much of a good thing” – they overconsume social media and have social networks that are characterized by an inefficiently high level of homophily (i.e., insufficient diversity).

Recent academic work has confirmed that users indeed consume too much social media (Allcott, Gentzkow and Song 2022). In our recent work, we also show evidence that the level of homophily on social media may be inefficiently high (Enikolopov, Petrova, Russo and Yanagizawa-Drott 2024). We start by demonstrating that friendship recommendations by Facebook play an important role in determining the structure of online networks and have a longterm effect that can last for years. More importantly, we provide evidence that an increase in homophily driven by the algorithms may have negative social consequences. In particular, we show that an increase in homophily of the connections, while increasing the use of social media, reduced offline socialization. In communities in which Facebook users have more homophilic connections, we observe a persistent decline in visits to places where social interactions are most likely to occur, such as bars, restaurants, and live sports events.

This shift is accompanied by a deterioration of local social capital. In particular, we use data on economic social capital from Chetty et al. (2022), which measures the probability that people form connections across income strata (e.g., the rich connect to the poor). We document that higher online homophily reduces economic connectedness, leading to a decrease in this measure of local social capital. A reduction in social cohesion also affects political opinions, reducing political homogeneity. The probability that two randomly picked residents of the same community vote for the same party is significantly lower in places with higher online homophily.

Policy Implications

Overall, our results uncover an important and often ignored aspect of higher online homophily. Death-of-distance technologies (Cairncross 2002) are responsible for transforming the world into a global village (Alstytne and Brynjolfsson 2005), increasing the diversity of networks (Eagle, Macy and Claxton 2010) and facilitating the creation of beneficial long ties (Jahani, Fraiberger, Bailey and Eckles 2023). However, the effect of social media crucially depends on the structure of online networks. As long as they promote the creation of homophilic networks, all the potential positive effects may come at the cost of undermining local communities and their social and

political cohesion. Policymakers wanting to bring people closer online should keep in mind the trade-offs that such technologies introduce.

One of the key challenges at this stage in managing such trade-offs is the lack of evidence on the magnitude of both positive and negative effects of homophilic networks. While more and more attention is being paid to the effect of algorithms that influence the news feeds of the users (e.g., González-Bailón et al. 2023; Guess et al. 2023; Gauthier, Hodler, Widmer and Zhuravskaya 2024), there is almost no public discussion of friendship recommendation algorithms and their effects.

Thus, at the current stage, potential policy interventions should be focused on requiring more transparency with respect to the algorithms affecting the structure of network connections, as well as on providing more flexibility to users in terms of access to alternative algorithms.

In conclusion, we highlight the following evidence-based policy recommendations:

- Require social media platforms to be more transparent about the recommendation algorithms they use to recommend new friends. At a minimum, it should be possible to obtain information on the accounts that were recommended to different users and how they change over time.
- Encourage more customization of the friendship recommendation algorithms so that users themselves can influence the level of homophily, especially when it comes to following politicians, opinion leaders, and mass media rather than personal friends.
- The most ambitious recommendation is to force social media platforms to offer APIs (application programming interfaces) that are open to third parties and would allow users to choose algorithms for friend recommendations and news feed formation. That would break the monopoly of social media platforms in this domain and allow for fair competition between alternative recommendation algorithms. •

References

- Allcott, H., M. Gentzkow, and L. Song (2022), "Digital Addiction", *American Economic Review* 112(7), 2424–2463.
- Alstyne, M. V. and E. Brynjolfsson (2005), "Global Village or Cyber-Balkans? Modeling and Measuring the Integration of Electronic Communities", *Management Science* 51(6), 851–868.
- Bakshy, E., S. Messing, and L. A. Adamic (2015), "Exposure to Ideologically Diverse News and Opinion on Facebook", *Science* 348(6239), 1130–1132.
- Cairncross, F. (2002), "The Death of Distance", *RSA Journal* 149(5502), 40–42.
- Chetty, R., M. O. Jackson, T. Kuchler, J. Stroebel, N. Hendren, R. B. Fluegge, S. Gong, F. Gonzalez, A. Grondin, M. Jacob, et al. (2022), "Social Capital I: Measurement and Associations with Economic Mobility", *Nature* 608(7921), 108–121.
- Eagle, N., M. Macy, and R. Claxton (2010), "Network Diversity and Economic Development", *Science* 328(5981), 1029–1031.
- Enikolopov, R., M. Petrova, G. Russo, and D. Yanagizawa-Drott (2024), "Socializing Alone: How Online Homophily Has Undermined Social Cohesion in the US", *Working Paper*.
- Gauthier, G., R. Hodler, P. Widmer, and E. Zhuravskaya (2025), "The Political Effects of X's Recommender Algorithm", *Working Paper*.
- González-Bailón, S., D. Lazer, P. Barberá, M. Zhang, H. Allcott, T. Brown, A. Crespo-Tenorio, D. Freelon, M. Gentzkow, A. M. Guess, et al. (2023), "Asymmetric Ideological Segregation in Exposure to Political News on Facebook", *Science* 381(6656), 392–398.
- Guess, A. M., N. Malhotra, J. Pan, P. Barberá, H. Allcott, T. Brown, A. Crespo-Tenorio, D. Dimmery, D. Freelon, M. Gentzkow, et al. (2023), "How Do Social Media Feed Algorithms Affect Attitudes and Behavior in an Election Campaign?", *Science* 381(6656), 398–404.
- Jahani, E., S. P. Fraiberger, M. Bailey, and D. Eckles (2023), "Long Ties, Disruptive Life Events, And Economic Prosperity", *Proceedings of the National Academy of Sciences* 120(28), e2211062120.
- Kannan, V. D. and P. J. Veazie (2023), "US Trends in Social Isolation, Social Engagement, and Companionship – Nationally and by Age, Sex, Race/Ethnicity, Family Income, and Work Hours, 2003–2020", *SSM-population health* 21, 101331.
- McPherson, M., L. Smith-Lovin, and J. M. Cook (2001), "Birds of a Feather: Homophily in Social Networks", *Annual Review of Sociology* 27(1), 415–444.
- Putnam, R. (2000), *Bowling Alone: The Collapse and Revival of American Community*, Touchstone Books/Simon & Schuster.
- Schnepf, S. V., B. d'Hombres, and C. Mauri (2024), *Loneliness in Europe: Determinants, Risks and Interventions*, Springer Nature.