# Supplemental Appendix

# Home-country Internet and Immigrants' Well-being

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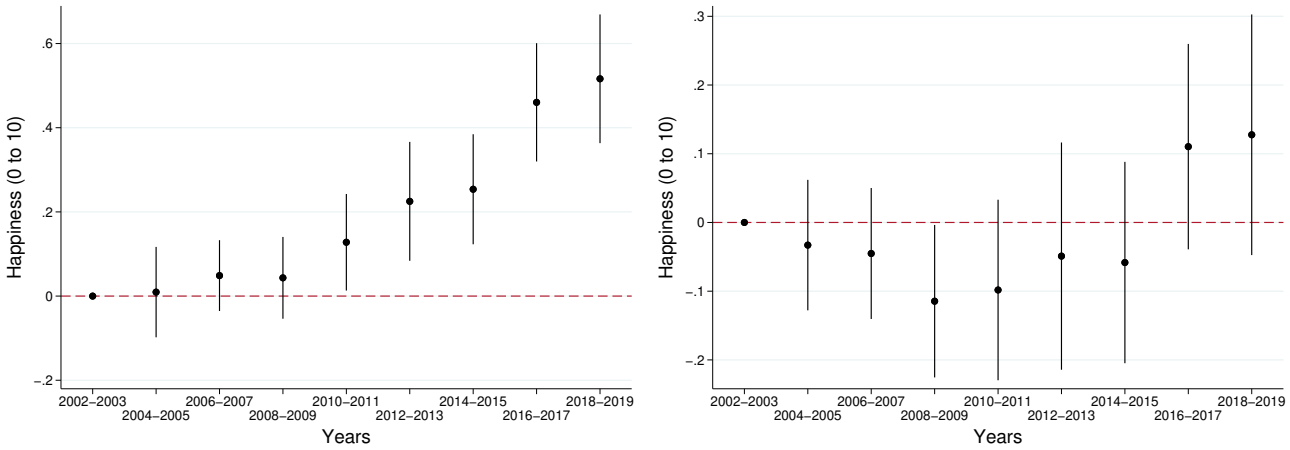
## SUPPLEMENTAL APPENDIX

### *A. Additional Figures*




(a) Baseline (b) Control for home-country Internet

Figure A1. : Dynamics of immigrants' SWB: (a) baseline, (b) accounting for home-country Internet

*Note:* This Figure reports the estimates of ESS round FEs from model (**??**), excluding Destination x Year FEs, but including destination and origin FEs. Controls: age, age sq., gender, education, and marital status. S.e. clustered at the origin-country level. Panel (a) excludes origin-country Internet, and panel (b) includes origin-country Internet. The sample is restricted to 1st-gen immigrants, who arrived before 2002. Thus, the entire increasing trend in immigrants' SWB is attributed to origin-country Internet growth.

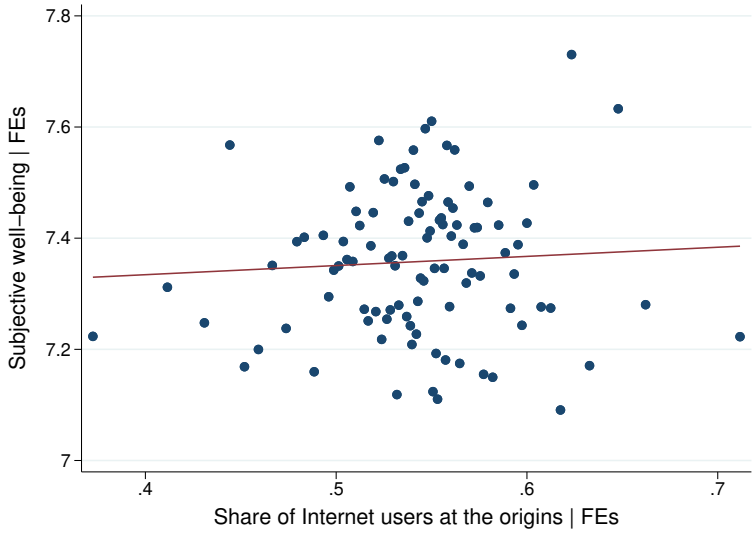



Figure A2. : Origin Internet and migrants' SWB: 2nd-generation immigrants only

*Note:* $\beta = 0.165$, s.e. = 0.240, p-val = 0.496. Included are destination x year, and origin FEs. Controls: age, age sq., gender, education, and marital status. S.e. clustered at the origin-country level. 17474 observations are split into 100 equal sized bins.

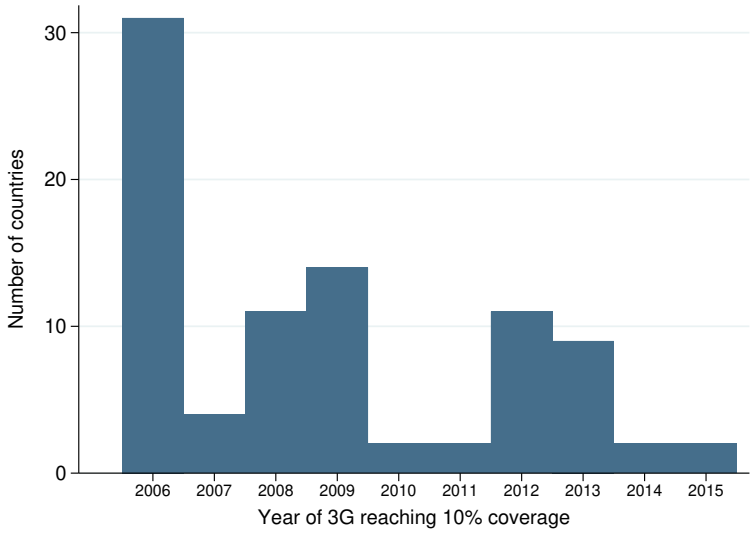
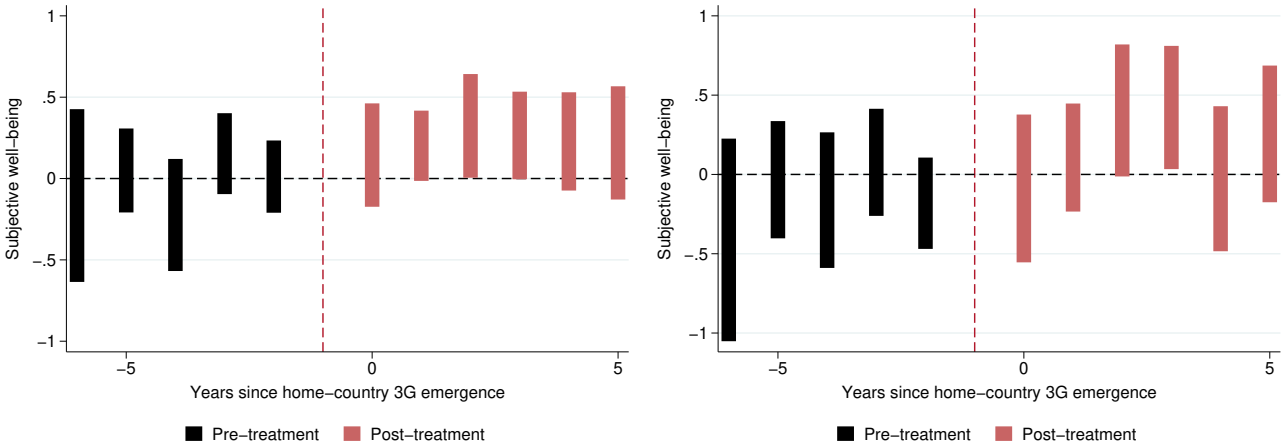



Figure A3. : Distribution of 3G treatment cohorts, by year of 10% 3G coverage

*Note:* Countries that never reached 10% 3G coverage or those that reached it after 2017 are used as never-treated in the analysis.




(a) Baseline (b) Collapsed data

Figure A4. : **?** event-study estimates: home-country 3G Internet and immigrants' SWB.

*Note:* This Figure reports the **?** event-study estimates of the effects of home-country 3G (reaching 10% coverage) on immigrants' SWB, model **??**. The model includes Destination x Year and Origin FEs. Controls: age, age sq., gender, education, and marital status. To include controls in the CS (2021) estimator, I first partialled out FEs and controls from the outcomes, and then ran the CS (2021) estimator on the residualized outcome. S.e. clustered at the origin-country level. Panel (a) shows the results based on non-collapsed data, and panel (b) shows similar specification but collapsed down to destination x origin x year level. The sample is restricted to 1st-gen immigrants, 18 to 64 years old, who arrived before 2002.

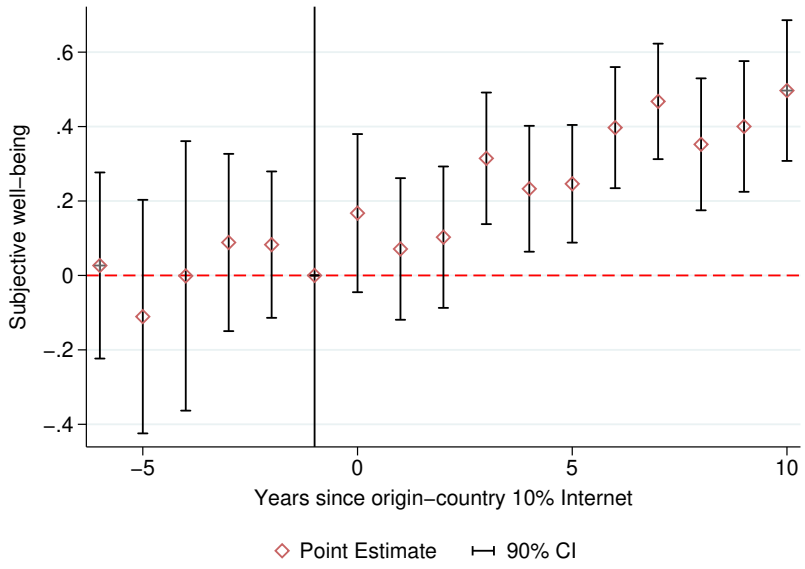



Figure A5. : Event study: effects of origin-country Internet (10% threshold) on immigrants' SWB.

*Note:* The main treatment variable is the number of years since the origin-country Internet crossed the 10% threshold. The model includes standard individual controls, as well as origin and destination x year FEs. Standard errors are clustered at the origin-country level. The sample is restricted to pre-2002 arrivals.

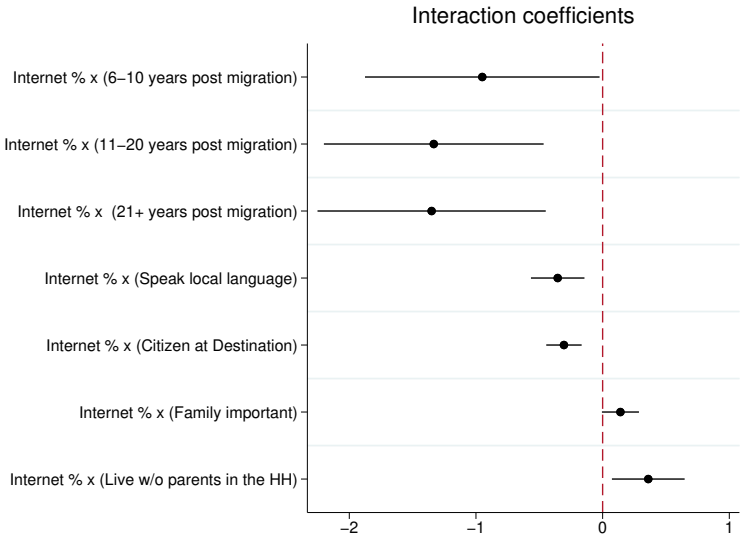
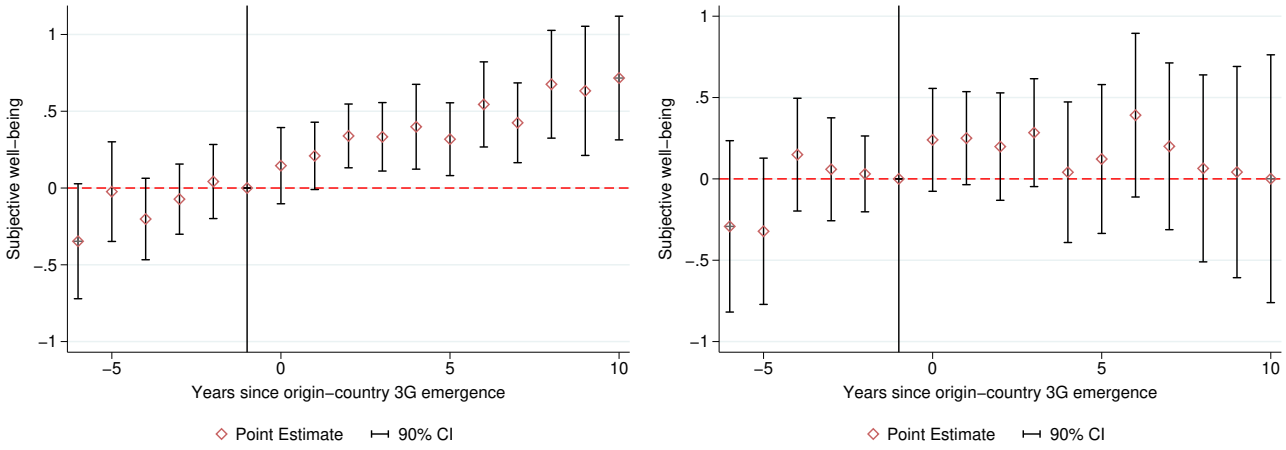



Figure A6. : Origin-country Internet and immigrants' SWB: Interactions with measures of integration at destination and family ties

*Note:* Estimates of interaction coefficients with selected characteristics, $\beta \cdot X$, where $X$ is a demographic, integration, or related characteristic. Specification from column (2) in Table 1. Included are destination x year, and origin FEs. Controls: age, age sq., gender, education, and marital status. The sample is restricted to 1st-gen immigrants, who arrived before 2002. S.e. clustered at the origin-country level, and 90% confidence intervals are reported. For the years post migration, the omitted category is "0-5 years post migration", and the estimate of $\beta$ for this category is 1.71. Thus, the effect of home-country Internet improvements gradually declines with years spent at destination. The effects of citizenship and speaking local language work above and beyond the effect of years spent at destination.




(a) Younger immigrants (up to 50) (b) Older immigrants (51 and over)

Figure A7. : Event-study: effects of origin-country 3G on immigrants happiness, by age groups

*Note:* The main treatment variable is the number of years since the launch of 3G or 4G Internet at the origins. The model includes standard individual controls, as well as origin and destination x year FEs. Standard errors are clustered at the origin-country level. The sample is restricted to pre-2006 arrivals. Panel (a) restricts the sample to ages 18 to 50, and panel (b) considers only ages 51 and older, splitting the sample roughly in half by age of the respondent.

*B. Additional Tables*

Table B1—: Effect of origin-country Internet on immigrants' SWB: stages of Internet expansion

| VARIABLES | (1) Happy | (2) Happy | (3) Happy | (4) Happy |
|---|---|---|---|---|
| Internet coverage (% pop) | 0.627 | 0.559 | | |
| | (0.369) | (0.520) | | |
| Coverage 10% reached | | | 0.013 | |
| | | | (0.119) | |
| Coverage 25% reached | | | | 0.203 |
| | | | | (0.071) |
| Observations | 14,003 | 13,067 | 10,800 | 10,800 |
| Adjusted R-squared | 0.129 | 0.130 | 0.135 | 0.136 |
| Controls | Yes | Yes | Yes | Yes |
| Origin FEs | Yes | Yes | Yes | Yes |
| Dest. x Year FEs | Yes | Yes | Yes | Yes |
| Sample | 0 to 50 coverage | 50+ coverage | 0 to 50 coverage | 0 to 50 coverage |

*Note:* Reported are the estimates of $\beta$ from model (1). The outcome is the level of happiness (from 0 to 10). In column (1), (3), and (4), the sample is restricted to Internet coverage from 0 to 50% of population. In column (2) the sample is restricted to 50+ coverage (weaker effects). In all columns, the sample is restricted to 1st-gen immigrants, who arrived before 2002. In addition, in columns (3) and (4), the sample is restricted to origin countries which had not got 10% or higher until at least 2003 (thus removing the always-treated). Standard errors are clustered at the origin-country level (in parentheses).

Table B2—: Origin-country Internet and immigrants' SWB: development confounders

| VARIABLES | (1) Happy | (2) Happy | (3) Happy | (4) Happy | (5) Happy |
|---|---|---|---|---|---|
| Internet coverage (% pop) | 0.421 | 0.412 | 0.416 | 0.419 | 0.434 |
| | (0.194) | (0.199) | (0.192) | (0.192) | (0.193) |
| Log(GDP per capita) | | 0.055 | | | |
| | | (0.133) | | | |
| GDP growth | | | -0.001 | | |
| | | | (0.005) | | |
| Political stability | | | | -0.054 | |
| | | | | (0.033) | |
| Control of corruption | | | | | -0.076 |
| | | | | | (0.082) |
| Observations | 27,020 | 27,020 | 27,020 | 27,020 | 27,020 |
| Adjusted R-squared | 0.138 | 0.138 | 0.138 | 0.138 | 0.138 |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Origin FEs | Yes | Yes | Yes | Yes | Yes |
| Dest. x Year FEs | Yes | Yes | Yes | Yes | Yes |

*Note:* Reported are the estimates of $\beta$ from model (1). The outcome is the level of happiness (from 0 to 10). In column (1), (3), and (4), the sample is restricted to Internet coverage from 0 to 50% of population. In column (2) the sample is restricted to 50+ coverage (weaker effects). In all columns, the sample is restricted to 1st-gen immigrants, who arrived before 2002. In addition, in columns (3) and (4), the sample is restricted to origin countries which had not got 10% or higher until at least 2003 (thus removing the always-treated). Standard errors are clustered at the origin-country level (in parentheses).

Table B3—: Effect of origin-country Internet on immigrants' SWB: stages of Internet expansion

| VARIABLES | (1) Happy | (2) Happy | (3) Happy | (4) Happy |
|---|---|---|---|---|
| Reached 10% 3G | 0.158 | | | 0.207 |
| | (0.057) | | | (0.056) |
| Reached 25% 3G | | 0.071 | | |
| | | (0.063) | | |
| Reached 50% 3G | | | 0.052 | |
| | | | (0.079) | |
| Reached. 10% 3G after 50% Int. | | | | -0.195 |
| | | | | (0.077) |
| Observations | 16,829 | 16,829 | 16,829 | 16,806 |
| Adjusted R-squared | 0.123 | 0.122 | 0.122 | 0.123 |
| Controls | Yes | Yes | Yes | Yes |
| Origin FEs | Yes | Yes | Yes | Yes |
| Dest. x Year FEs | Yes | Yes | Yes | Yes |

*Note:* Reported are the TWFE estimates of the effects of 3G expansion at the origins on immigrants' SWB. The outcome is the level of happiness (from 0 to 10). In column (4), the 10% 3G treatment is interacted with the dummy variable taking the value of 1 for countries where 10% 3G coverage was reached after the overall Internet coverage exceeded 50% of the population. We see that 3G shocks matter only when the overall Internet is not yet highly developed. In all columns, the sample is restricted to 1st-gen immigrants, who arrived before 2006. Origin-country sample is restricted to countries with consistent data on 3G coverage (like in the event-study estimates). Standard errors are clustered at the origin-country level (in parentheses).