# Exacerbated Inequalities: the Learning Loss from COVID-19 in Italy 

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Online Appendix

|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standarized Test Scores in Grade 8: Math |  |  |  |  | Standarized Test Scores in Grade 8: Reading |  |  |  |  |
|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q1 | Q2 | Q3 | Q4 | Q5 |
| Panel A. All Sample |  |  |  |  |  |  |  |  |  |  |
| 2021 | $\begin{gathered} -0.211^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.186^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.164^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.164^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.053^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.103^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.109^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.083^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.095^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} 0.043^{* * *} \\ (0.004) \end{gathered}$ |
| N | 206222 | 210179 | 202502 | 206330 | 205480 | 206274 | 210420 | 202863 | 206661 | 205819 |
| Panel B. By Gender |  |  |  |  |  |  |  |  |  |  |
| $2021 \times$ Female | $\begin{gathered} -0.045^{* * *} \\ (0.008) \end{gathered}$ | $\begin{gathered} -0.043^{* * *} \\ (0.008) \end{gathered}$ | $\begin{gathered} -0.038^{* * *} \\ (0.009) \end{gathered}$ | $\begin{gathered} -0.029^{* * *} \\ (0.009) \end{gathered}$ | $\begin{gathered} -0.054^{* * *} \\ (0.009) \end{gathered}$ | $\begin{gathered} -0.038^{* * *} \\ (0.008) \end{gathered}$ | $\begin{gathered} -0.019^{* *} \\ (0.008) \end{gathered}$ | $\begin{aligned} & -0.014^{*} \\ & (0.008) \end{aligned}$ | $\begin{gathered} 0.005 \\ (0.008) \end{gathered}$ | $\begin{gathered} -0.034^{* * *} \\ (0.008) \end{gathered}$ |
| 2021 | $\begin{gathered} -0.193^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.166^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.146^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.150^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.019^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.078^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.097^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.076^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.097^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} 0.051 * * * \\ (0.006) \end{gathered}$ |
| Female | $\begin{gathered} -0.072^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.079^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.085^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.104^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.135^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} 0.210^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} 0.236^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} 0.257^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} 0.236^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} 0.233^{* * *} \\ (0.006) \end{gathered}$ |
| N | 206222 | 210179 | 202502 | 206330 | 205480 | 206274 | 210420 | 202863 | 206661 | 205819 |
| Panel C. By Immigration Status |  |  |  |  |  |  |  |  |  |  |
| $2021 \times$ Immigrant | $\begin{gathered} -0.008 \\ (0.011) \end{gathered}$ | $\begin{gathered} -0.026^{* *} \\ (0.013) \end{gathered}$ | $\begin{gathered} -0.063^{* * *} \\ (0.016) \end{gathered}$ | $\begin{gathered} -0.120^{* * *} \\ (0.021) \end{gathered}$ | $\begin{aligned} & -0.044 \\ & (0.034) \end{aligned}$ | $\begin{gathered} 0.129^{* * *} \\ (0.011) \end{gathered}$ | $\begin{aligned} & -0.020 \\ & (0.013) \end{aligned}$ | $\begin{gathered} -0.048^{* * *} \\ (0.016) \end{gathered}$ | $\begin{gathered} -0.164^{* * *} \\ (0.020) \end{gathered}$ | $\begin{gathered} -0.140^{* * *} \\ (0.032) \end{gathered}$ |
| 2021 | $\begin{gathered} -0.210^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.182^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.159^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.154^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.055^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.134^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.104^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.078^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.079^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} 0.041^{* * *} \\ (0.004) \end{gathered}$ |
| Immigrant | $\begin{gathered} -0.046^{* * *} \\ (0.007) \end{gathered}$ | $\begin{gathered} -0.112^{* * *} \\ (0.009) \end{gathered}$ | $\begin{gathered} -0.207^{* * *} \\ (0.011) \end{gathered}$ | $\begin{gathered} -0.278^{* * *} \\ (0.015) \end{gathered}$ | $\begin{gathered} -0.420^{* * *} \\ (0.020) \end{gathered}$ | $\begin{gathered} -0.476^{* * *} \\ (0.008) \end{gathered}$ | $\begin{gathered} -0.411^{* * *} \\ (0.009) \end{gathered}$ | $\begin{gathered} -0.463^{* * *} \\ (0.012) \end{gathered}$ | $\begin{gathered} -0.475^{* * *} \\ (0.015) \end{gathered}$ | $\begin{gathered} -0.589^{* * *} \\ (0.019) \end{gathered}$ |
| N | 206222 | 210179 | 202502 | 206330 | 205480 | 206274 | 210420 | 202863 | 206661 | 205819 |

Table (A.II) Standarized Test Scores in 2019 and Demographic Characteristics

|  | $(1)$ | $(2)$ |
| :--- | :---: | :---: |
|  | Std. Score Math | Std. Score Reading |
| Mother education: Less than High School | $-0.311^{* * *}$ | $-0.311^{* * *}$ |
|  | $(0.003)$ | $(0.003)$ |
| Mother education: College | $0.238^{* * *}$ | $0.228^{* * *}$ |
|  | $(0.004)$ | $(0.004)$ |
| Father education: Less than High School | $-0.236^{* * *}$ | $-0.254^{* * *}$ |
|  | $(0.003)$ | $(0.003)$ |
| Father education: College | $0.197^{* * *}$ | $0.188^{* * *}$ |
|  | $(0.005)$ | $(0.004)$ |
|  | $-0.086^{* * *}$ | $0.238^{* * *}$ |
| Student is female | $(0.003)$ | $(0.003)$ |
|  | $-0.237^{* * * *}$ | $-0.569^{* * *}$ |
| Students is immigrant | $(0.005)$ | $(0.005)$ |
|  |  |  |
| N | 538810 | 538470 |

