# Labor Market Analysis

## Summary Findings

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### Research Questions:

With a past of racial inequality in the southern states it would be interesting to examine how race/ethnicity is related to access to the internet and other technologies and how not having or having access could effect a persons earnings. This can be explored via the following research questions:

- 1. In the state of Alabama, how to earnings vary by access to the internet/technology?
- 2. Does the internet/technology premium vary by race and ethnicity?

#### Table of Descriptive Statistics for Free Internet Access

Table 1: Free Access

| Statistic          | N   | Mean           | St. Dev.       | Min   | Pctl(25) | Pctl(75)   | Max     |
|--------------------|-----|----------------|----------------|-------|----------|------------|---------|
| Age (years)        | 372 | 42.078         | 12.541         | 17    | 31       | 53         | 62      |
| Earnings (dollars) | 372 | $40,\!218.280$ | $35,\!526.310$ | 1,600 | 18,500   | $50,\!250$ | 356,000 |

### Table of Descriptive Statistics for No Internet Access

Table 2: No Access

| Statistic          | N     | Mean       | St. Dev.   | Min | Pctl(25) | Pctl(75) | Max     |
|--------------------|-------|------------|------------|-----|----------|----------|---------|
| Age (years)        | 1,268 | 43.839     | 12.821     | 16  | 32       | 55       | 62      |
| Earnings (dollars) | 1,268 | 32,564.900 | 30,005.720 | 100 | 15,900   | 40,000   | 356,000 |

Table 3: Results

|  | Dependent variable:           |
|--|-------------------------------|
|  | $ln\_earnings$                |
| Free Access  | 0.100**                       |
|  | (0.042)                       |
| Hispanic   | 0.013                         |
|  | (0.082)                       |
| Black  | -0.141***                     |
|  | (0.036)                       |
| Female   | -0.373***                     |
|  | (0.035)                       |
| Age (Years)  | 0.069***                      |
|  | (0.010)                       |
| Age Squared  | -0.001***                     |
|  | (0.0001)                      |
| High School Diploma or GED   | 0.184***                      |
|  | (0.048)                       |
| Some College   | 0.318***                      |
| , and the second | (0.051)                       |
| Undergraduate Degree or Higher   | 0.659***                      |
|  | (0.065)                       |
| Constant   | 8.436***                      |
|  | (0.202)                       |
| Observations   | 1,640                         |
| $R^2$  | 0.212                         |
| Adjusted $\mathbb{R}^2$  | 0.207                         |
| Residual Std. Error  | 0.681 (df = 1630)             |
| F Statistic  | $48.618^{***} (df = 9; 1630)$ |
| Note:  | *p<0.1; **p<0.05; ***p<0.01   |

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Table 4: Results

|                                | Dependent variable:          |                              |                           |  |  |  |
|--------------------------------|------------------------------|------------------------------|---------------------------|--|--|--|
|                                | ln_earnings                  |                              |                           |  |  |  |
|                                | White                        | Black                        | Hispanic                  |  |  |  |
|                                | (1)                          | (2)                          | (3)                       |  |  |  |
| Free Access                    | 0.055                        | 0.177**                      | 0.304                     |  |  |  |
|                                | (0.051)                      | (0.076)                      | (0.249)                   |  |  |  |
| Female                         | $-0.472^{***}$               | -0.236***                    | -0.128                    |  |  |  |
|                                | (0.043)                      | (0.060)                      | (0.158)                   |  |  |  |
| Age (Years)                    | 0.075***                     | 0.074***                     | -0.022                    |  |  |  |
|                                | (0.013)                      | (0.018)                      | (0.051)                   |  |  |  |
| Age Squared                    | -0.001***                    | -0.001***                    | 0.0004                    |  |  |  |
|                                | (0.0002)                     | (0.0002)                     | (0.001)                   |  |  |  |
| High School Diploma or GED     | 0.212***                     | 0.117                        | 0.147                     |  |  |  |
| •                              | (0.062)                      | (0.083)                      | (0.180)                   |  |  |  |
| Some College                   | 0.336***                     | 0.287***                     | 0.165                     |  |  |  |
| O                              | (0.067)                      | (0.088)                      | (0.233)                   |  |  |  |
| Undergraduate Degree or Higher | 0.739***                     | 0.468***                     | 0.631**                   |  |  |  |
|                                | (0.081)                      | (0.121)                      | (0.291)                   |  |  |  |
| Constant                       | 8.340***                     | 8.170***                     | 10.192***                 |  |  |  |
|                                | (0.254)                      | (0.358)                      | (1.032)                   |  |  |  |
| Observations                   | 976                          | 586                          | 78                        |  |  |  |
| $R^2$                          | 0.244                        | 0.153                        | 0.210                     |  |  |  |
| Adjusted R <sup>2</sup>        | 0.238                        | 0.143                        | 0.131                     |  |  |  |
| Residual Std. Error            | 0.662 (df = 968)             | 0.713  (df = 578)            | 0.619 (df = 70)           |  |  |  |
| F Statistic                    | $44.623^{***}$ (df = 7; 968) | $14.968^{***} (df = 7; 578)$ | $2.652^{**} (df = 7; 70)$ |  |  |  |

*Note:* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01