### Table 3: 2002 NAICS Sectors

<table>
<thead>
<tr>
<th>Label</th>
<th>NAICS Codes</th>
<th>Name</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>11</td>
<td>Agriculture, Forestry, Fishing, Hunting</td>
</tr>
<tr>
<td>2</td>
<td>23</td>
<td>Mining</td>
</tr>
<tr>
<td>3</td>
<td>22</td>
<td>Utilities</td>
</tr>
<tr>
<td>4</td>
<td>23</td>
<td>Construction</td>
</tr>
<tr>
<td>5</td>
<td>31–33</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>6</td>
<td>42</td>
<td>Wholesale</td>
</tr>
<tr>
<td>7</td>
<td>44–45</td>
<td>Retail</td>
</tr>
<tr>
<td>8</td>
<td>48–49</td>
<td>Transportation</td>
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<tr>
<td>9</td>
<td>51</td>
<td>Information</td>
</tr>
<tr>
<td>10</td>
<td>52</td>
<td>Finance</td>
</tr>
<tr>
<td>11</td>
<td>53</td>
<td>Real Estate</td>
</tr>
<tr>
<td>12</td>
<td>54</td>
<td>Professions</td>
</tr>
<tr>
<td>13</td>
<td>55</td>
<td>Management</td>
</tr>
<tr>
<td>14</td>
<td>56</td>
<td>Administration</td>
</tr>
<tr>
<td>15</td>
<td>61</td>
<td>Education</td>
</tr>
<tr>
<td>16</td>
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<td>Health</td>
</tr>
<tr>
<td>17</td>
<td>71</td>
<td>Arts</td>
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<tr>
<td>18</td>
<td>72</td>
<td>Accommodation</td>
</tr>
<tr>
<td>19</td>
<td>81</td>
<td>Other Services</td>
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<tr>
<td>20</td>
<td>92</td>
<td>Public Administration</td>
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</table>

Numeric codes used in this paper to reference the twenty major NAICS sectors.
Table 4: Estimates of the Model Parameters

<table>
<thead>
<tr>
<th>Sector</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\alpha$</td>
<td>0.217</td>
<td>0.466</td>
<td>0.131</td>
<td>0.924</td>
<td>0.346</td>
<td>0.462</td>
<td>0.067</td>
<td>0.365</td>
<td>0.280</td>
</tr>
<tr>
<td>$\chi_1$</td>
<td>1.872</td>
<td>1.425</td>
<td>2.307</td>
<td>0.767</td>
<td>0.950</td>
<td>1.299</td>
<td>2.986</td>
<td>1.399</td>
<td>1.825</td>
</tr>
<tr>
<td>$\chi_2$</td>
<td>1.891</td>
<td>1.031</td>
<td>2.568</td>
<td>3.106</td>
<td>3.083</td>
<td>3.771</td>
<td>4.597</td>
<td>4.995</td>
<td>0.891</td>
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<tr>
<td>$\phi$</td>
<td>-0.015</td>
<td>0.009</td>
<td>0.080</td>
<td>0.028</td>
<td>-0.016</td>
<td>0.042</td>
<td>0.041</td>
<td>0.022</td>
<td>-0.002</td>
</tr>
<tr>
<td>$\delta_0$</td>
<td>0.496</td>
<td>3.555</td>
<td>2.278</td>
<td>0.358</td>
<td>2.216</td>
<td>2.772</td>
<td>2.667</td>
<td>2.198</td>
<td>-4.935</td>
</tr>
<tr>
<td>$\delta_1$</td>
<td>1.038</td>
<td>-0.656</td>
<td>0.025</td>
<td>1.034</td>
<td>0.631</td>
<td>0.098</td>
<td>0.100</td>
<td>0.103</td>
<td>1.788</td>
</tr>
<tr>
<td>$\gamma_0$</td>
<td>-0.708</td>
<td>3.466</td>
<td>-0.275</td>
<td>-0.276</td>
<td>0.174</td>
<td>0.330</td>
<td>2.687</td>
<td>0.975</td>
<td>-0.056</td>
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<tr>
<td>$\gamma_1$</td>
<td>-0.251</td>
<td>-2.692</td>
<td>-2.353</td>
<td>-1.616</td>
<td>-1.493</td>
<td>-2.069</td>
<td>-2.518</td>
<td>-1.953</td>
<td>-2.782</td>
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<tr>
<td>$\xi$</td>
<td>0.126</td>
<td>0.623</td>
<td>0.211</td>
<td>0.999</td>
<td>0.706</td>
<td>0.521</td>
<td>0.092</td>
<td>0.526</td>
<td>0.835</td>
</tr>
<tr>
<td>Residual</td>
<td>0.095</td>
<td>0.328</td>
<td>0.050</td>
<td>0.090</td>
<td>0.074</td>
<td>0.059</td>
<td>0.042</td>
<td>0.346</td>
<td>0.042</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sector</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>20</th>
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<tbody>
<tr>
<td>$\alpha$</td>
<td>0.944</td>
<td>0.139</td>
<td>0.072</td>
<td>0.375</td>
<td>0.075</td>
<td>0.099</td>
<td>0.233</td>
<td>0.182</td>
<td>0.772</td>
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<tr>
<td>$\chi_1$</td>
<td>2.173</td>
<td>2.133</td>
<td>3.099</td>
<td>1.548</td>
<td>3.247</td>
<td>2.888</td>
<td>2.035</td>
<td>1.923</td>
<td>1.338</td>
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<tr>
<td>$\chi_2$</td>
<td>0.918</td>
<td>3.829</td>
<td>4.678</td>
<td>4.954</td>
<td>2.886</td>
<td>4.913</td>
<td>3.845</td>
<td>4.794</td>
<td>2.843</td>
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<tr>
<td>$\phi$</td>
<td>0.116</td>
<td>0.027</td>
<td>0.104</td>
<td>0.062</td>
<td>0.092</td>
<td>0.092</td>
<td>0.080</td>
<td>0.035</td>
<td>0.044</td>
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<tr>
<td>$\delta_0$</td>
<td>0.517</td>
<td>2.322</td>
<td>2.179</td>
<td>3.157</td>
<td>2.141</td>
<td>1.376</td>
<td>2.657</td>
<td>2.300</td>
<td>-0.424</td>
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<td>$\delta_1$</td>
<td>0.332</td>
<td>0.022</td>
<td>0.340</td>
<td>-0.042</td>
<td>0.207</td>
<td>0.283</td>
<td>0.107</td>
<td>0.132</td>
<td>1.412</td>
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<tr>
<td>$\gamma_0$</td>
<td>2.306</td>
<td>1.681</td>
<td>1.651</td>
<td>1.896</td>
<td>0.594</td>
<td>0.431</td>
<td>0.120</td>
<td>1.862</td>
<td>4.323</td>
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<tr>
<td>$\gamma_1$</td>
<td>-2.018</td>
<td>-2.216</td>
<td>-0.645</td>
<td>-2.457</td>
<td>-0.648</td>
<td>-2.830</td>
<td>-1.530</td>
<td>-2.766</td>
<td>-2.154</td>
</tr>
<tr>
<td>$\xi$</td>
<td>0.491</td>
<td>0.105</td>
<td>0.051</td>
<td>0.592</td>
<td>0.056</td>
<td>0.103</td>
<td>0.159</td>
<td>0.088</td>
<td>0.005</td>
</tr>
<tr>
<td>Residual</td>
<td>0.277</td>
<td>0.090</td>
<td>0.120</td>
<td>0.044</td>
<td>0.033</td>
<td>0.310</td>
<td>0.036</td>
<td>0.083</td>
<td>0.261</td>
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</tbody>
</table>

GMM parameter estimates for the nested model that mixes the two technologies according to the parameter $\xi$. See text for details. Standard errors in parentheses.
Figure 8: Estimated Model Primitives: Mining Sector

(a) Vacancies

(b) Production
Figure 9: Data and Model Fit: Mining Sector
Figure 10: Estimated Equilibrium: Mining Sector

(a) Wages

(b) Low Prod. Vacs.

(c) High Prod. Vacs.

(d) App. Prob. Low Ability

(e) App. Prob. High Ability
Figure 11: Estimated Model Primitives: Utilities Sector
(a) \( \text{Var}(\theta) \)

(b) \( \text{Var}(\psi) \)

(c) Empirical \( E(\theta), E(\psi) \)

(d) Estimated \( E(\theta), E(\psi) \)

(e) \( \text{Corr}(\theta, \psi) \)

Figure 12: Data and Model Fit: Utilities Sector
Figure 13: Estimated Equilibrium: Utilities Sector

(a) Wages

(b) Low Prod. Vacs.

(c) High Prod. Vacs.

(d) App. Prob. Low Ability

(e) App. Prob. High Ability
Figure 14: Estimated Model Primitives: Construction Sector

(a) Vacancies

(b) Production
Figure 15: Data and Model Fit: Construction Sector
Figure 16: Estimated Equilibrium: Construction Sector
Figure 17: Estimated Model Primitives: Manufacturing Sector
Figure 18: Data and Model Fit: Manufacturing Sector

(a) $\text{Var}(\theta)$

(b) $\text{Var}(\psi)$

(c) Empirical $E(\theta), E(\psi)$

(d) Estimated $E(\theta), E(\psi)$

(e) $\text{Corr}(\theta, \psi)$
Figure 19: Estimated Equilibrium: Manufacturing Sector
Figure 20: Estimated Model Primitives: Wholesale Sector

(a) Vacancies

(b) Production
Figure 21: Data and Model Fit: Wholesale Sector

(a) $\text{Var}(\theta)$

(b) $\text{Var}(\psi)$

(c) Empirical $E(\theta), E(\psi)$

(d) Estimated $E(\theta), E(\psi)$

(e) $\text{Corr}(\theta, \psi)$
Figure 22: Estimated Equilibrium: Wholesale Sector

(a) Wages
(b) Low Prod. Vacs.
(c) High Prod. Vacs.
(d) App. Prob. Low Ability
(e) App. Prob. High Ability
Figure 23: Estimated Model Primitives: Retail Sector
Figure 24: Data and Model Fit: Retail Sector
Figure 25: Estimated Equilibrium: Retail Sector

(a) Wages

(b) Low Prod. Vacs.

(c) High Prod. Vacs.

(d) App. Prob. Low Ability

(e) App. Prob. High Ability
Figure 26: Estimated Model Primitives: Transportation Sector

(a) Vacancies

(b) Production
Figure 27: Data and Model Fit: Transportation Sector
Figure 28: Estimated Equilibrium: Transportation Sector

(a) Wages

(b) Low Prod. Vacs.

(c) High Prod. Vacs.

(d) App. Prob. Low Ability

(e) App. Prob. High Ability
Figure 29: Estimated Model Primitives: Information Sector
Figure 30: Data and Model Fit: Information Sector
Figure 31: Estimated Equilibrium: Information Sector

(a) Wages

(b) Low Prod. Vacs.

(c) High Prod. Vacs.

(d) App. Prob. Low Ability

(e) App. Prob. High Ability
Figure 32: Estimated Model Primitives: Finance Sector
Figure 33: Data and Model Fit: Finance Sector
Figure 34: Estimated Equilibrium: Finance Sector

(a) Wages

(b) Low Prod. Vacs.

(c) High Prod. Vacs.

(d) App. Prob. Low Ability

(e) App. Prob. High Ability
Figure 35: Estimated Model Primitives: Real Estate Sector

(a) Vacancies

(b) Production
Figure 36: Data and Model Fit: Real Estate Sector
Figure 37: Estimated Equilibrium: Real Estate Sector

(a) Wages

(b) Low Prod. Vacs.

(c) High Prod. Vacs.

(d) App. Prob. Low Ability

(e) App. Prob. High Ability
Figure 38: Estimated Model Primitives: Professional Services Sector
Figure 39: Data and Model Fit: Professional Services Sector
Figure 40: Estimated Equilibrium: Professional Services Sector
Figure 41: Estimated Model Primitives: Management Sector
Figure 42: Data and Model Fit: Management Sector

(a) $\text{Var}(\theta)$

(b) $\text{Var}(\psi)$

(c) Empirical $E(\theta), E(\psi)$

(d) Estimated $E(\theta), E(\psi)$

(e) $\text{Corr}(\theta, \psi)$
Figure 43: Estimated Equilibrium: Management Sector

(a) Wages

(b) Low Prod. Vacs.

(c) High Prod. Vacs.

(d) App. Prob. Low Ability

(e) App. Prob. High Ability
Figure 44: Estimated Model Primitives: Administration Sector
Figure 45: Data and Model Fit: Administration Sector
Figure 46: Estimated Equilibrium: Administration Sector
Figure 47: Estimated Model Primitives: Health Sector

(a) Vacancies

(b) Production
Figure 48: Data and Model Fit: Health Sector
Figure 49: Estimated Equilibrium: Health Sector

(a) Wages
(b) Low Prod. Vacs.
(c) High Prod. Vacs.
(d) App. Prob. Low Ability
(e) App. Prob. High Ability
Figure 50: Estimated Model Primitives: Arts Sector
Figure 51: Data and Model Fit: Arts Sector
Figure 52: Estimated Equilibrium: Arts Sector

(a) Wages

(b) Low Prod. Vacs.

(c) High Prod. Vacs.

(d) App. Prob. Low Ability

(e) App. Prob. High Ability
Figure 53: Estimated Model Primitives: Accommodation Sector
Figure 54: Data and Model Fit: Accommodation Sector
Figure 55: Estimated Equilibrium: Accommodation Sector

(a) Wages

(b) Low Prod. Vacs.

(c) High Prod. Vacs.

(d) App. Prob. Low Ability

(e) App. Prob. High Ability

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Figure 56: Estimated Model Primitives: Other Services Sector
Figure 57: Data and Model Fit: Other Services Sector
Figure 58: Estimated Equilibrium: Other Services Sector

(a) Wages

(b) Low Prod. Vacs.

(c) High Prod. Vacs.

(d) App. Prob. Low Ability

(e) App. Prob. High Ability
Figure 59: Estimated Model Primitives: Public Administration Sector

(a) Vacancies

(b) Production
Figure 60: Data and Model Fit: Public Administration Sector
Figure 61: Estimated Equilibrium: Public Administration Sector

(a) Wages

(b) Low Prod. Vacs.

(c) High Prod. Vacs.

(d) App. Prob. Low Ability

(e) App. Prob. High Ability