

TABLE 1—DIFFERENT TYPES OF ENTREPRENEURS AND NONENTREPRENEURS

| Specification  | (1) Probit          | (2) Probit                   | (3) Probit                       | (4) Multinomial logit                  |                          |                      | (5) Multinomial logit                  |                         |                      |
|--|---------------------|------------------------------|----------------------------------|--|--------------------------|----------------------|--|-------------------------|----------------------|
|  | E                   | E with positive sales growth | NE who thought of business       | E                                      | NE who failed as E       | NE who never was E   | E by opportunity                       | E by necessity          | NE who never was E   |
| Comparison group                                     | All NE              | Other E                      | NE who never thought of business | The other two groups                   |                          |                      | The other two groups                   |                         |                      |
| Report   | $dP(E)/dx$          | $dP(\cdot)/dx$               | $dP(\cdot)/dx$                   | $dP(\cdot)/dx (\sum dP(\cdot)/dx = 1)$ |                          |                      | $dP(\cdot)/dx (\sum dP(\cdot)/dx = 1)$ |                         |                      |
| Father had higher education                          | 0.005<br>[0.020]    | -0.221<br>[0.077]***         | -0.003<br>[0.081]                | 0.005<br>[0.012]                       | 0.015<br>[0.020]         | -0.02<br>[0.017]     | 0.005<br>[0.010]                       | -0.004<br>[0.001]***    | -0.001<br>[0.009]    |
| Father was a boss or director                        | 0.011<br>[0.022]    | -0.011<br>[0.090]            | 0.006<br>[0.064]                 | 0.007<br>[0.013]                       | 0.009<br>[0.021]         | -0.016<br>[0.022]    | 0.001<br>[0.006]                       | 0.001<br>[0.004]        | -0.002<br>[0.009]    |
| Mother was a boss or director                        | 0.081<br>[0.059]    | -0.167<br>[0.138]            | 0.191<br>[0.151]                 | 0.035<br>[0.025]                       | 0.002<br>[0.060]         | -0.037<br>[0.077]    | 0.025<br>[0.014]*                      | -0.007 a<br>[0.005]     | -0.019<br>[0.015]    |
| Mother was a party member                            | -0.021<br>[0.012]*  | -0.109<br>[0.156]            | 0.093<br>[0.069]                 | -0.023<br>[0.015]                      | 0.011<br>[0.043]         | 0.012<br>[0.043]     | -0.013<br>[0.012]                      | -0.003<br>[0.003]       | 0.015<br>[0.014]     |
| Family members entrepreneurs                         | 0.012<br>[0.007]*   | 0.088<br>[0.032]**           | 0.065<br>[0.018]***              | 0.011<br>[0.005]**                     | 0.026 c<br>[0.020]       | -0.037<br>[0.024]    | 0.004<br>[0.004]                       | 0.002 c<br>[0.001]***   | -0.006<br>[0.004]    |
| Friends entrepreneurs (from the last place of study) | 0.031<br>[0.010]*** | -0.004<br>[0.020]            | 0.078<br>[0.023]***              | 0.028<br>[0.006]***                    | 0.036 c<br>[0.009]***    | -0.064<br>[0.003]*** | 0.016<br>[0.005]***                    | 0.004 a,c<br>[0.002]**  | -0.019<br>[0.007]*** |
| Cognitive test score                                 | 0.004<br>[0.005]    | -0.031<br>[0.038]            | 0.005<br>[0.013]                 | 0.003<br>[0.003]                       | -0.002<br>[0.018]        | -0.001<br>[0.020]    | 0.001<br>[0.001]                       | 0.001 c<br>[0.001]*     | -0.003<br>[0.002]    |
| Height   | 0.001<br>[0.000]**  | 0.008<br>[0.005]             | 0.003<br>[0.002]                 | 0.001<br>[0.001]                       | -0.005 a,c<br>[0.001]*** | 0.005<br>[0.002]**   | 0<br>[0.000]                           | 0<br>[0.000]            | -0.001<br>[0.000]    |
| Risk loving  | 0.078<br>[0.006]*** | 0.157<br>[0.120]             | -0.005<br>[0.028]                | 0.075<br>[0.009]***                    | 0.027 c<br>[0.041]       | -0.102<br>[0.049]**  | 0.046<br>[0.008]***                    | 0.012 a,c<br>[0.003]*** | -0.057<br>[0.007]*** |
| Top 10% in secondary school (self reported)          | -0.007<br>[0.010]   | 0.118<br>[0.057]*            | -0.018<br>[0.017]                | 0.001<br>[0.012]                       | 0.092 a,c<br>[0.037]**   | -0.093<br>[0.044]**  | -0.004<br>[0.005]                      | -0.001 c<br>[0.003]     | 0.004<br>[0.008]     |
| Greed  | 0.141<br>[0.027]*** | 0.134<br>[0.032]***          | 0.032<br>[0.047]                 | 0.072<br>[0.011]***                    | 0.008 a,c<br>[0.024]     | -0.08<br>[0.021]***  | 0.043<br>[0.009]***                    | 0.015 a,c<br>[0.003]*** | -0.058<br>[0.011]*** |
| Local population perceived favorable toward E        | 0.009<br>[0.008]    | -0.03<br>[0.092]             | 0.015<br>[0.049]                 | 0.009<br>[0.007]                       | 0.004<br>[0.023]         | -0.013<br>[0.025]    | 0.005<br>[0.007]                       | 0.002 c<br>[0.000]***   | -0.007<br>[0.007]    |
| Government perceived favorable toward E              | 0<br>[0.004]        | 0.035<br>[0.021]*            | -0.014<br>[0.017]                | -0.004<br>[0.002]*                     | -0.042 a,c<br>[0.005]*** | 0.046<br>[0.003]***  | 0<br>[0.002]                           | 0<br>[0.001]            | -0.001<br>[0.002]    |
| Observations   | 802                 | 340                          | 392                              | 802                                    |                          |                      | 782                                    |                         |                      |
| Pseudo R-sqrd (R-sqrd)                               | 0.38                | 0.12                         | 0.2                              | 0.35                                   |                          |                      | 0.35                                   |                         |                      |

Notes: E—entrepreneur; NE—nonentrepreneur. Robust standard errors corrected for clusters at city level in brackets. Asterisks denote significance of difference from 0 at 10, 5, and 1 percent; “a” and “c” in the middle column in each multinomial logit regression denote significant-at-5-percent level difference from the same coefficients in the left and the right columns, respectively. All regressions include controls for gender, age, and education with a quadratic term; regression 3 includes controls for employment size and industry dummies. The unreported controls are jointly significant at 1-percent level.

### Number of Factories Classifies by Size of Employment and Regions (1980)

| Size of employment | Bangkok           | Central          | Northern        | North-eastern    | Southern        | Total              | Percentage for each size |
|--------------------|-------------------|------------------|-----------------|------------------|-----------------|--------------------|--------------------------|
| 1-9                | 10,019<br>(48.9%) | 4,935<br>(24.1%) | 1,602<br>(7.8%) | 2,415<br>(11.8%) | 1,526<br>(7.5%) | 20,497<br>(100.0%) | 63.3%                    |
| 10-49              | 4,145<br>(45.2%)  | 2,410<br>(24.7%) | 932<br>(9.5%)   | 1,257<br>(12.9%) | 760<br>(7.8%)   | 9,774<br>(100.0%)  | 30.2%                    |
| 50- 199            | 507<br>(29.3%)    | 663<br>(38.3%)   | 169<br>(9.8%)   | 281<br>(16.2%)   | 112<br>(6.5%)   | 1,732<br>(100.0%)  | 5.3%                     |
| 200 and over       | 118<br>(29.6%)    | 118<br>(47.1%)   | 43<br>(10.8%)   | 32<br>(8.0%)     | 18<br>(4.5%)    | 399<br>(100.0%)    | 1.2%                     |
| Total              | 15,059<br>(46.5%) | 8196<br>(25.3%)  | 2,746<br>(8.5%) | 3,985<br>(12.3%) | 2,416<br>(7.5%) | 32,402<br>(100.0%) | 100                      |

Source: Townsend (2011) - Factory Control Division, Ministry of Industry

\*Excluding rice mills, sawmills, ice making and printing firms

### Number of Establishments by Size of Establishment (Number of Persons Engaged) and Region (2007)

| Size   | Bangkok | Around Bkk | Central | North   | Northeast | South   | Total     | Percentage for each size |
|--------|---------|------------|---------|---------|-----------|---------|-----------|--------------------------|
| 1-5    | 235,735 | 150,199    | 308,138 | 372,953 | 631,892   | 294,570 | 1,993,487 | 91.09%                   |
|        | 11.83%  | 7.53%      | 15.46%  | 18.71%  | 31.70%    | 14.78%  | 100.00%   |                          |
| 6-10   | 28,857  | 10,381     | 15,351  | 13,578  | 16,688    | 12,490  | 97,345    | 4.45%                    |
|        | 29.64%  | 10.66%     | 15.77%  | 13.95%  | 17.14%    | 12.83%  | 100.00%   |                          |
| 11-50  | 25,133  | 10,778     | 11,061  | 9,604   | 13,322    | 7,998   | 77,896    | 3.56%                    |
|        | 32.26%  | 13.84%     | 14.20%  | 12.33%  | 17.10%    | 10.27%  | 100.00%   |                          |
| 51-200 | 4,256   | 3,229      | 2,678   | 1,273   | 1,860     | 1,282   | 14,578    | 0.67%                    |
|        | 29.19%  | 22.15%     | 18.37%  | 8.73%   | 12.76%    | 8.79%   | 100.00%   |                          |
| > 200  | 1,301   | 1,423      | 1,302   | 352     | 387       | 344     | 5,109     | 0.23%                    |
|        | 25.46%  | 27.85%     | 25.48%  | 6.89%   | 7.57%     | 6.73%   | 100.00%   |                          |
| Total  | 295,282 | 176,010    | 338,530 | 397,760 | 664,149   | 316,684 | 2,188,415 | 100.00%                  |
|        | 13.49%  | 8.04%      | 15.47%  | 18.18%  | 30.35%    | 14.47%  | 100.00%   |                          |

Source: NSO, Industry census survey

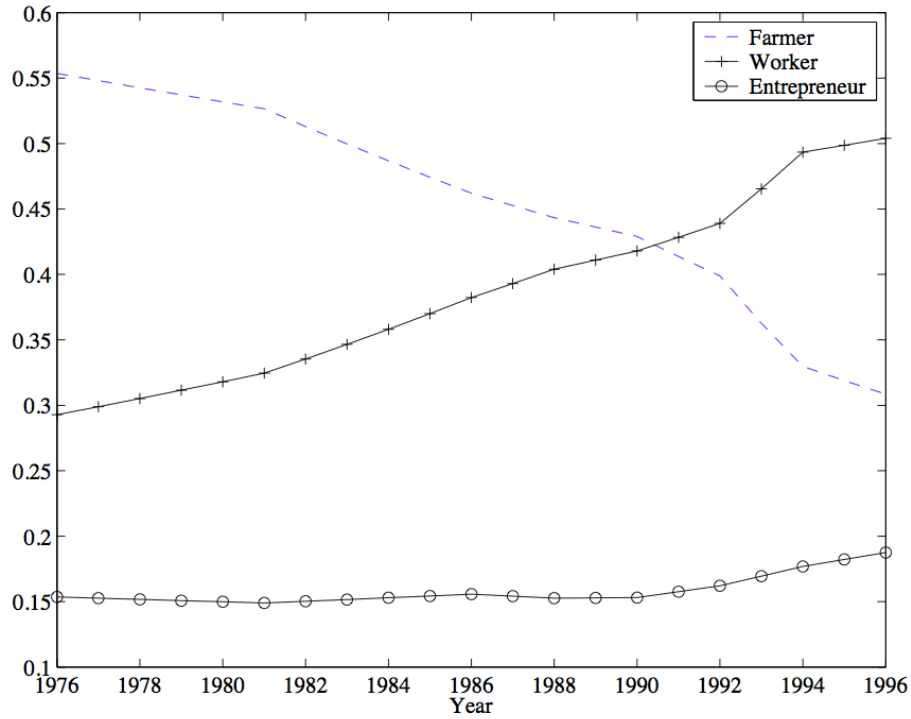


Figure 3. Occupational Transition in Thailand

[Figure 5.1.2.1.Trend of Occupational Composition. Source: SES, data Jeong and Townsend (2005)]

Table 1: Non-farm household businesses dynamic between 2005 and 2010  
(report number of households for each group and percentages of transition out of total)

| 2005  | 2010         |              |             |             |       |
|-------|--------------|--------------|-------------|-------------|-------|
|       | No NF        | SE           | MIE         | SME         | Total |
| No NF | <b>1,283</b> | 197          | 21          | 1           | 1,502 |
| %     | <b>61.07</b> | 9.38         | 1.00        | 0.05        | 71.49 |
| SE    | 183          | <b>330</b>   | 21          | 5           | 539   |
| %     | 8.71         | <b>15.71</b> | 1.00        | 0.24        | 25.65 |
| MIE   | 13           | 18           | <b>20</b>   | 1           | 53    |
| %     | 0.62         | 0.86         | <b>0.95</b> | 0.05        | 2.48  |
| SME   | 3            | 2            | 2           | <b>1</b>    | 8     |
| %     | 0.14         | 0.10         | 0.10        | <b>0.05</b> | 0.38  |
| Total | 1,482        | 547          | 64          | 8           | 2,101 |
| %     | 70.54        | 26.04        | 3.05        | 0.38        | 100   |

No NF = No NF business, NF0 = NF self-employed without employee, MIE = NF business with employees < 10 (microenterprise), SME = NF business with employees >= 10

- Earn more income if transition into nonfarm sector, but more inequality within these occupational groups

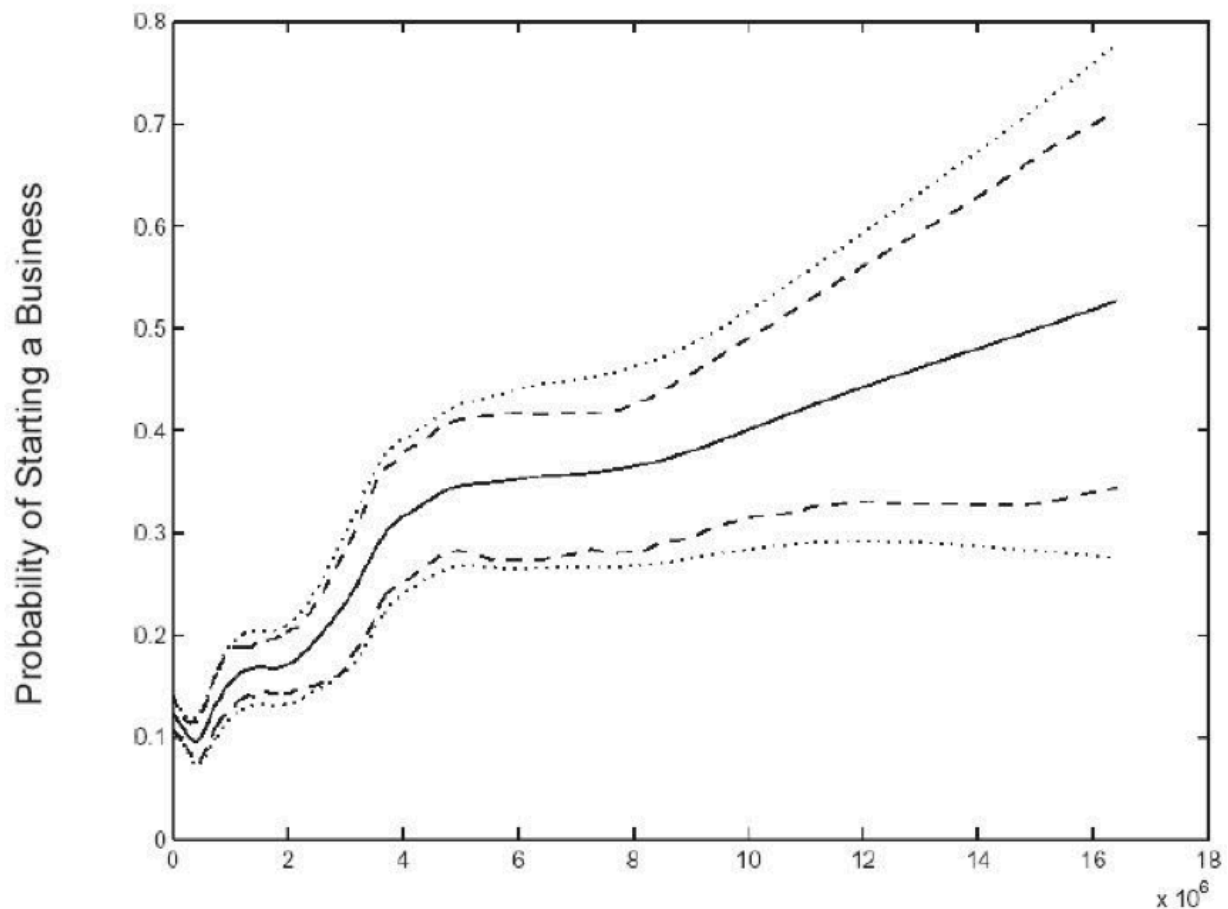
| Year                     | 1976 | 1981 | 1986 | 1988 | 1990 | 1992  | 1994  | 1996 | 76-96 <sup>1</sup> | 76-86 <sup>2</sup> | 86-92 <sup>2</sup> | 92-96 <sup>2</sup> |
|--------------------------|------|------|------|------|------|-------|-------|------|--------------------|--------------------|--------------------|--------------------|
| <b>Occupation</b>        |      |      |      |      |      |       |       |      |                    |                    |                    |                    |
| Small Farmer             | 637  | 799  | 649  | 749  | 844  | 911   | 1069  | 1309 | 3.7                | 0.2                | 5.8                | 9.5                |
| Fisher & Other Farmer    | 875  | 1221 | 798  | 1305 | 1472 | 1982  | 2833  | 2370 | 5.1                | -0.9               | 16.4               | 4.6                |
| Big Farmer               | 1090 | 1361 | 1064 | 1425 | 2037 | 1546  | 1743  | 2379 | 4.0                | -0.2               | 6.4                | 11.4               |
| Non-farm Self-employed   | 1421 | 1645 | 1485 | 1654 | 1956 | 2244  | 2391  | 2961 | 3.7                | 0.4                | 7.1                | 7.2                |
| Non-farm Employer        | 3422 | 3629 | 3525 | 3637 | 5647 | 6223  | 6607  | 6979 | 3.6                | 0.3                | 9.9                | 2.9                |
| Own-account Professional | 2536 | 2108 | 2455 | 7427 | 2843 | 13517 | 10851 | 7257 | 5.4                | -0.3               | 32.9               | -14.4              |
| Farm Worker              | 715  | 748  | 616  | 676  | 753  | 833   | 942   | 1147 | 2.4                | -1.5               | 5.2                | 8.3                |
| General Worker           | 766  | 893  | 720  | 685  | 800  | 1056  | 1117  | 1391 | 3.0                | -0.6               | 6.6                | 7.1                |
| Production Worker        | 1217 | 1470 | 1388 | 1532 | 1674 | 1957  | 1787  | 2078 | 2.7                | 1.3                | 5.9                | 1.5                |
| Service Worker           | 1521 | 2055 | 2122 | 2244 | 2498 | 3115  | 3231  | 3711 | 4.6                | 3.4                | 6.6                | 4.5                |
| Professional Worker      | 2245 | 3082 | 3389 | 3837 | 4557 | 6127  | 6008  | 6964 | 5.8                | 4.2                | 10.4               | 3.3                |
| Assisted                 | 1233 | 1917 | 1645 | 1842 | 1796 | 2050  | 1942  | 2299 | 3.2                | 2.9                | 3.7                | 2.9                |
| Rentier                  | 1372 | 2238 | 2311 | 2125 | 4504 | 4301  | 4250  | 3774 | 5.2                | 5.3                | 10.9               | -3.2               |

[Table 5.1.2.3. Average Income Profile (1990 Baht) Source: SES data, Jeong and Townsend (2005)]

| Year                     | 1976  | 1981  | 1986  | 1988  | 1990  | 1992  | 1994  | 1996  | 76-96 <sup>1</sup> | 76-86 <sup>2</sup> | 86-92 <sup>2</sup> | 92-96 <sup>2</sup> |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|--------------------|--------------------|--------------------|
| <b>Occupation</b>        |       |       |       |       |       |       |       |       |                    |                    |                    |                    |
| Small Farmer             | 0.180 | 0.179 | 0.217 | 0.216 | 0.230 | 0.229 | 0.275 | 0.288 | 10.8               | 0.37               | 0.20               | 1.48               |
| Fisher & Other Farmer    | 0.216 | 0.395 | 0.253 | 0.377 | 0.381 | 0.514 | 0.887 | 0.467 | 25.1               | 0.37               | 4.34               | -1.15              |
| Big Farmer               | 0.236 | 0.239 | 0.296 | 0.285 | 0.504 | 0.326 | 0.334 | 0.400 | 16.4               | 0.60               | 0.51               | 1.84               |
| Non-farm Self-employed   | 0.251 | 0.258 | 0.265 | 0.262 | 0.294 | 0.297 | 0.290 | 0.285 | 3.4                | 0.14               | 0.54               | -0.32              |
| Non-farm Employer        | 0.325 | 0.366 | 0.392 | 0.398 | 0.584 | 0.512 | 0.513 | 0.465 | 14.0               | 0.68               | 1.98               | -1.17              |
| Own-account Professional | 0.183 | 0.344 | 0.379 | 0.728 | 0.294 | 1.372 | 0.932 | 0.349 | 16.6               | 1.95               | 16.56              | -25.58             |
| Farm Worker              | 0.133 | 0.161 | 0.207 | 0.163 | 0.160 | 0.201 | 0.191 | 0.189 | 5.6                | 0.74               | -0.10              | -0.30              |
| General Worker           | 0.120 | 0.156 | 0.179 | 0.164 | 0.143 | 0.166 | 0.195 | 0.169 | 4.9                | 0.59               | -0.21              | 0.06               |
| Production Worker        | 0.173 | 0.219 | 0.243 | 0.247 | 0.247 | 0.272 | 0.247 | 0.250 | 7.6                | 0.69               | 0.50               | -0.56              |
| Service Worker           | 0.172 | 0.213 | 0.229 | 0.231 | 0.254 | 0.263 | 0.274 | 0.250 | 7.8                | 0.57               | 0.57               | -0.33              |
| Professional Worker      | 0.166 | 0.200 | 0.208 | 0.202 | 0.221 | 0.316 | 0.277 | 0.287 | 12.2               | 0.42               | 1.80               | -0.71              |
| Assisted                 | 0.313 | 0.325 | 0.405 | 0.408 | 0.382 | 0.451 | 0.374 | 0.330 | 1.7                | 0.92               | 0.77               | -3.03              |
| Rentier                  | 0.415 | 0.530 | 0.607 | 0.423 | 1.007 | 0.700 | 0.602 | 0.510 | 9.4                | 1.91               | 1.55               | -4.75              |

[Table 5.1.2.4. Inequality Profile by Theil-L Index. Source: SES data, Jeong and Townsend (2005)]

## Non-parametric relationship between start-up and wealth



[Figure 5.1.2.10. Non-Parametric Relationship Between Starting a Business and wealth. Notes: y-axis indicates probability of starting a business (1992-1997), x-axis indicates prior wealth in 1992. Dashed line indicates 90% confidence interval, dotted line =  $\pm 2\sigma$ . Source: Paulson, Townsend and Karaivanov (2003)]

Paulson, Townsend and Karaivanov (2003) use the Townsend Thai data to measure occupation transitions. Non-parametric regressions reveal that the 1992 wealth of those still in farming helps to predict the fraction that makes a subsequent transition out of the farm and into other enterprise, 1992-1997. There are barriers to entry, for example, imperfect credit markets. This is a key feature of the constrained household choice problems.