

## Online Appendix

### for “Why do Family Business Groups Expand by Creating New Public Firms: The Role of Internal Capital Markets”

*Available online and not for publication*

**Table A1.** Country-level control thresholds and second-tier stock exchanges

The mandatory offer threshold, presented in the second column below, is the maximum percentage of voting rights that can be acquired without triggering a mandatory tender offer to all shareholders. We obtain this information from country takeover guides provided by the International Bar Association (IBA), with the exception of Indonesia, Mexico, Pakistan, Philippines, South Korea, Thailand, and Taiwan, for which we research the rules through *Factiva* and internet searches. We also verified that these thresholds applied as of 2007 (the end of our sample period). Information on second-tier markets or market segments is obtained from national stock exchanges, the *World Federation of Exchanges*, and *Factiva* and internet searches. The third column of the table below provides the name of the second-tier market (or market segment) for each country (or NA if no such market exists), and the year of its establishment and the effective year of closure if relevant (if the market is closed or merged before 2007) in parentheses. Some countries may have more than one second-tier market.

| Country        | Mandatory offer threshold | Second-tier markets (segments)  |
|----------------|---------------------------|---|
| Argentina      | 0.5                       | Buenos Aires Stock Exchange PyME Board (2005)   |
| Austria        | 0.3                       | Austrian Growth Market (1999-2001),<br>Vienna Stock Exchange Specialist Segment (2001)                                  |
| Australia      | 0.2                       | NA  |
| Belgium        | 0.3                       | Euro.NM Belgium (1997-2005),<br>Euronext Alternext (2005)   |
| Brazil         | 0.5                       | BM&F BOVESPA Bovespa Mais (2006)  |
| Canada         | 0.2                       | Toronto Stock Exchange Venture Exchange (2000)  |
| Chile          | 0.67                      | NA  |
| Colombia       | 0.25                      | NA  |
| Czech Republic | 0.3                       | NA  |
| Denmark        | 0.33                      | Dansk AMP (2000)  |
| Finland        | 0.3                       | Helsinki Exchanges NM List (2000-2006)  |
| France         | 0.33                      | Euronext Paris Nouveau March (1996-2005),<br>Euronext Alternext (2005)  |
| Germany        | 0.3                       | Neuer Markt (1997-2003)<br>Entry standard (2005)  |
| Greece         | 0.33                      | Athens Stock Exchange Parallel Market and New Market (1989)   |
| Hong Kong      | 0.3                       | Hong Kong Stock Exchange Growth Enterprise Market (2000)  |
| Hungary        | 0.33                      | NA  |
| India          | 0.25                      | Bombay Stock Exchange SME Platform (2011)<br>National Stock Exchange Emerge (2012)                                      |
| Indonesia      | 0.25                      | Jakarta Stock Exchange Development Board (2000)   |
| Ireland        | 0.3                       | ITEQ and Developing Companies Market (2000),<br>Irish Enterprise Exchange (2005)  |
| Israel         | 0.45                      | NA  |
| Italy          | 0.3                       | Nuovo Mercato (1999-2004)   |
| Japan          | 0.33                      | JASDAQ Securities Exchange (1991),<br>Tokyo Stock Exchange Mothers (1999),<br>Osaka Securities Exchange Hercules (2000) |
| Malaysia       | 0.33                      | MESDAQ, renamed ACE Market (1998)   |
| Mexico         | 0.3                       | NA  |

|                |      |   |
|----------------|------|---|
| Netherlands    | 0.3  | Euro.NM Amsterdam (1997-2005),<br>Euronext Alternext (2005)                     |
| New Zealand    | 0.2  | NZX Alternative Market (2003)   |
| Norway         | 0.33 | Oslo Stock Exchange SMB List (1992-2007),<br>Oslo Stock Exchange Axxcess (2007) |
| Peru           | 0.25 | Lima Stock Exchange Venture Exchange (2003)                                     |
| Pakistan       | 0.5  | Karachi Stock Exchange OTC Market (2011)  |
| Philippines    | 0.35 | Philippines Stock Exchange SME Board (2001)                                     |
| Poland         | 0.25 | Warsaw Stock Exchange New Connect (2007)  |
| Portugal       | 0.33 | Euronext Lisbon Novo Mercado (2000-2005),<br>Euronext Alternext (2005)          |
| Singapore      | 0.3  | Singapore Stock Exchange SESDAQ (1987)  |
| Spain          | 0.3  | Neuvo Mercado (2000-2007)   |
| South Korea    | 0.15 | KOSDAQ Securities Exchange (1996)   |
| Sri Lanka      | 0.3  | Colombo Stock Exchange Second Board (1997)                                      |
| Sweden         | 0.3  | Stockholm Stock Exchange O-List (1988-2006)                                     |
| Switzerland    | 0.33 | SWX New Market (1999-2004)  |
| Thailand       | 0.25 | Stock Exchange of Thailand Market for Alternative Invest-<br>ments (1999)       |
| Turkey         | 0.25 | Borsa Istanbul Second National Market (1995)                                    |
| Taiwan         | 0.2  | GreTai Securities Market, renamed Taipei Exchange (1995)                        |
| United Kingdom | 0.3  | London Stock Exchange Alternative Investment Market<br>(1994)                   |
| United States  | NA   | NASDAQ (1971)   |
| South Africa   | 0.35 | Johannesburg Stock Exchange Alternative Exchange (2004)                         |

**Table A2.** Definitions and sources for country-level variables

|                      |   |
|----------------------|---|
| <i>FAMGRP%</i>       | The percentage of existing listed firms in a country, excluding IPOs in the same year, that belong to a family-controlled business group.   |
| <i>GOVERNINDEX</i>   | This index aggregates three dimensions of a country’s corporate governance environment using a principal component analysis. These components are (i) the extent of shareholder rights (based on the anti-director index from <a href="#">La Porta et al. (1997)</a> and updated by <a href="#">Pagano and Volpin (2005)</a> ), (ii) the effectiveness of the legal enforcement of these rights (based on the average strength of rule of law, regulatory quality and control of corruption taken from <a href="#">Kaufmann, Kraay, and Mastruzzi (2003)</a> ), and (iii) the quality of corporate disclosure (based on a survey variable measuring disclosure standards from the <i>World Economic Forum’s Global Competitiveness Report 2003</i> ).   |
| <i>INSTOFUNDS</i>    | The total institutional equity investments scaled by stock market capitalization. To capture this, we use a measure of the extent of external capital available from institutional investment, compiled by <a href="#">Li, Moshirian, Pham, and Zein (2006)</a> and computed as the total equity invested locally and internationally by domestic banks, insurance companies, pension funds and mutual funds, scaled by domestic stock market capitalization.   |
| <i>VENTURE</i>       | A survey variable from the <i>World Economic Forum’s Global Competitiveness Report 2003</i> , which ranks the availability of venture capital funding in a country from 1 = “unavailable” to 7 = “widely available”.  |
| <i>FOREIGNLIB</i>    | A measure of the extent to which foreign ownership restrictions are liberalized in a local market, constructed by averaging (i) the extent of restrictions on foreign investor purchases of domestic equity and (ii) the extent of restrictions on shares issues by foreign companies. The first component (i) is itself the average of: (a) industry-specific restrictions and (b) market-wide restrictions, each of which takes the value of 0 if a country does not impose any restriction, 0.5 if a country requires regulatory approval for foreign ownership of a domestic firm in excess of a threshold, and one if a country imposes a strict foreign ownership cap. The second component (ii) takes a value of 0 if there is no restriction on shares issues by foreign companies, 0.5 if such transactions require regulatory approval and one if they are prohibited. Information on these restrictions is obtained from the <i>2002 International Monetary Fund Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER)</i> . |
| <i>DUALCLASSRES</i>  | An indicator variable for whether a country restricts the use of dual-class shares. This variable is coded using information collected by <a href="#">the project on Law, Finance and Development</a> at the <i>Centre for Business Research</i> of the <i>University of Cambridge</i> , <a href="#">the report into Proportionality between Capital and Control</a> commissioned by the European Commission, and other sources for individual countries, which are available upon request.   |
| <i>SECONDBOARD</i>   | An indicator variable for whether a second-tier stock market (market segment) exists in a country, as discussed in <a href="#">Table A1</a> .   |
| <i>CONSOLIDATION</i> | An indicator variable that is equal to 1 if firms are able to consolidate a subsidiary in which they have ownership stakes of less than 90%, and zero if consolidation is either not allowed or can only occur if the parent owns more than 90%. Source: <i>Deloitte International Taxation Guide</i>   |
| <i>TAXAVOIDANCE</i>  | Measures the stringency of tax laws related to intra-corporate transactions, which is based on information from the <i>Deloitte International Taxation Guide</i> . It is calculated as a sum of four anti-tax-avoidance indicators. The indicators relate to whether regulations exist to limit (i) transfer-pricing, (ii) thinly capitalized firms, (iii) holding companies in low tax jurisdictions, and whether (iv) full disclosures of inter-corporate transactions are required.  |

**Table A3.** Firm characteristics of family-group IPO firms compared other IPO firms and other existing listed firms in the same group

The table reports the median levels and the median differences in the following characteristics of family-group IPO firm compared to existing firms in the same group and to non-group IPO firms matched by size and IPO market conditions. *ASSETS* and *MARKETCAP* are the book value of assets at the first financial year-end after listing and market capitalization at the listing date (both in \$US million). *RISK* is measured by the standard deviation of weekly stock returns. *LOGAGE* is the natural logarithm of firm age (in years) since incorporation at listing. *CASHINCOME* and *INTANGIBLE* are cash net income and intangible assets scaled by total assets, computed at the first financial year-end after listing.

|   | Family-<br>group<br>IPO<br>firms (A) | Same-<br>group<br>(listed)<br>firms (B) | Diff. (A)<br>vs (B) | Matched<br>IPO firms<br>(not in<br>family<br>groups)<br>(C) | Diff. (A)<br>vs (C)    |
|---|--------------------------------------|---|---------------------|---|------------------------|
| <i>ASSETS</i>                           | 120.24                               | 480.61                                  | -19.73***           |   | 56.68*** <sup>\$</sup> |
| <i>MARKETCAP</i>                        | 150.36                               | 427.97                                  | -16.51***           |   | 60.72*** <sup>\$</sup> |
| <i>RISK</i>                             | 7.61                                 | 6.83                                    | 0.39***             | 7.71  | -0.09                  |
| <i>LOGAGE</i>                           | 1.95                                 | 3.30                                    | -1.35***            | 2.20  | -0.25***               |
| <i>CASHINCOME</i>                       | 7.56                                 | 7.85                                    | -0.68**             | 8.57  | -0.71*                 |
| <i>INTANGIBLE</i>                       | 1.02                                 | 0.00                                    | 0.96***             | 0.85  | 3.69*** <sup>†</sup>   |
| % of IPOs in new industries 2 digit SIC | 70.33%                               |   |                     |   |                        |
| % of IPOs in new industries 1 digit SIC | 52.25%                               |   |                     |   |                        |

\*, \*\* and \*\*\* indicate significance at the 10, 5 and 1 percent levels respectively.

<sup>\$</sup> indicates difference before matching.

<sup>†</sup> indicates that the median difference is zero but the *Wilcoxon* statistic is positive, and the mean difference is reported instead

**Table A4.** Group internal capital and IPO likelihood – Alternative estimation methods

The sample consists of family business groups from 45 countries. All variables are computed for each group in a given year. Column 1, 2, and 4 report the estimates of three alternative conditional logit models with the dependent variable being the indicator variable for a group conducting an IPO. Columns 3a and 3b report a fixed-effects multinomial logit model with the dependent variable being a discrete choice variable for a group conducting an IPO (3a), an SEO (3b), or no capital raising (as the omitted category). The subsample used in Column 4 excludes group-year observations with no equity raising events. *GRPINCOME* and *GRPDIVIDEND* are total cash net income and common dividends scaled by total assets. *GRPCONTROL* and *GRPPYRLAYER* are the (market capitalization) weighted average family control rights and pyramid layer positions of existing member firms. *GRPNOFIRMS* and *GRPFIRMSIZE* are the number of existing member firms and the (averaged) natural logarithm of their asset value. *GRPAGE* is the natural logarithm of the listing age of the oldest group member firm (excluded in models that include group fixed effects due to correlation with the time dimension). *GRPQ*, *GRPCAPEX*, and *GRPDEBT* are the total market value of assets scaled by, total capital expenditures, and total debt, scaled by the book value of total assets. *GRPHHI* is a Herfindahl industry-concentration index. *GRPFINMEMBER* is an indicator for the presence of a financial member firm. *MKTRET* and *IPOVOL* are the country's MSCI index return and the relative frequency of IPOs during the financial year. Clustered standard errors are reported in parentheses.

|                     | Cond. logit model    |                      | Multi. logit model  |                      | Cond. logit model    |
|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|
|                     | Full sample          | Full sample          | IPO eq.             | SEO eq.              | IPO v SEO            |
|                     | (1)                  | (2)                  | (3a)                | (3b)                 | (4)                  |
| <i>GRPINCOME</i>    | 1.882***<br>(0.423)  | 1.228***<br>(0.505)  | 1.246***<br>(0.526) | 1.967***<br>(0.469)  | 0.066<br>(0.361)     |
| <i>GRPDIVIDEND</i>  | -8.303***<br>(2.283) | -6.772**<br>(3.261)  | -7.304**<br>(3.370) | -5.621*<br>(2.919)   | -0.192<br>(2.311)    |
| <i>GRPCONTROL</i>   | -0.611**<br>(0.292)  | -3.462***<br>(0.681) | -3.355***<br>(0.69) | -0.407<br>(0.381)    | 0.602<br>(0.417)     |
| <i>GRPPYRLAYER</i>  | -0.223**<br>(0.106)  | 0.091<br>(0.227)     | 0.13<br>(0.245)     | -0.274***<br>(0.118) | 0.036<br>(0.187)     |
| <i>GRPHHI</i>       | 0.860***<br>(0.19)   | 2.819***<br>(0.380)  | 2.694***<br>(0.401) | 1.084***<br>(0.235)  | -1.282***<br>(0.302) |
| <i>GRPFIRMSIZE</i>  | 0.152***<br>(0.029)  | 0.348***<br>(0.073)  | 0.447***<br>(0.077) | 0.025<br>(0.035)     | 0.239***<br>(0.053)  |
| <i>GRPNOFIRMS</i>   | 0.128***<br>(0.018)  | -0.242***<br>(0.06)  | -0.049<br>(0.066)   | 0.043*<br>(0.022)    | 0.371***<br>(0.053)  |
| <i>GRPAGE</i>       |                      |                      |                     | -0.427***<br>(0.124) |                      |
| <i>GRPQ</i>         | 0.198***<br>(0.044)  | 0.162***<br>(0.065)  | 0.307***<br>(0.071) | -0.108*<br>(0.06)    | 0.315***<br>(0.055)  |
| <i>GRPCAPEX</i>     | 1.562***<br>(0.542)  | 0.513<br>(0.683)     | 0.863<br>(0.696)    | -0.546<br>(0.653)    | 0.842*<br>(0.483)    |
| <i>GRPDEBT</i>      | -0.864***<br>(0.243) | -0.811*<br>(0.454)   | -0.891*<br>(0.461)  | -0.980***<br>(0.302) | -0.250<br>(0.299)    |
| <i>GRPFINMEMBER</i> | 0.464***<br>(0.112)  | 2.325***<br>(0.335)  | 2.489***<br>(0.365) | 0.28 **<br>(0.128)   | 0.327<br>(0.227)     |
| <i>MKTRET</i>       |                      | 4.872***<br>(0.649)  | 5.455***<br>(0.665) | 2.299***<br>(0.453)  |                      |
| <i>IPOVOL</i>       |                      | 0.316**<br>(0.152)   | 0.448***<br>(0.161) | 0.491***<br>(0.109)  |                      |
| Country×year FEs    | YES                  |                      |                     |                      | YES                  |
| Group FEs           |                      | YES                  | YES                 |                      |                      |
| No. of observations | 11363                | 11363                | 11363               |                      | 3295                 |

\*, \*\* and \*\*\* indicate significance at the 10, 5 and 1 percent levels respectively.

**Table A5.** Group internal capital and IPO likelihood – Alternative measures

The sample consists of family business groups from 45 countries. The dependent variable is the indicator variable for a group conducting an IPO. All models are linear probability models that exclude group-year observations with no equity raising events, effectively comparing IPOs to SEOs. For each group-year observation,  $GRPINCOME_{t-k}$  is the  $k$ -lag of total cash net income scaled by total assets.  $GRPINCOME3Y$  is the 3-year average of  $GRPINCOME_{t-k}$ , with  $k=0, 1$ , and  $2$ .  $GRPRETAINED$  is the total accumulated retained earnings scaled by total assets. The following variables are not reported.  $GRPDIVIDEND$  are total common dividends scaled by total assets.  $GRPCONTROL$  and  $GRPPYRLAYER$  are the (market capitalization) weighted average family control rights and pyramid layer of existing member firms.  $GRPNOFIRMS$  and  $GRPFIRMSIZE$  are the number of existing member firms and the (averaged) natural logarithm of their asset value.  $GRPAGE$  is the natural logarithm of the listing age of the oldest group member firm.  $GRPQ$ ,  $GRPCAPEX$ , and  $GRPDEBT$  are the total market value of assets scaled by, total capital expenditures, and total debt, scaled by the book value of total assets.  $GRPHHI$  is a Herfindahl industry-concentration index. Clustered standard errors are reported in parentheses.

|                     | (1)                 | (2)              | (3)                 | (4)                 | (5)                 | (6)                 |
|---------------------|---------------------|------------------|---------------------|---------------------|---------------------|---------------------|
| $GRPINCOME_{t-1}$   | 0.134***<br>(0.063) |                  |                     |                     |                     |                     |
| $GRPINCOME_{t-2}$   |                     | 0.094<br>(0.068) |                     |                     |                     |                     |
| $GRPINCOME_{t-3}$   |                     |                  | 0.213***<br>(0.067) |                     |                     |                     |
| $GRPINCOME_{t-4}$   |                     |                  |                     | 0.177***<br>(0.076) |                     |                     |
| $GRPINCOME3Y$       |                     |                  |                     |                     | 0.294***<br>(0.080) |                     |
| $GRPRETAINED$       |                     |                  |                     |                     |                     | 0.033***<br>(0.013) |
| Country×year FEs    | YES                 | YES              | YES                 | YES                 | YES                 | YES                 |
| No. of observations | 3154                | 3006             | 2839                | 2636                | 3295                | 3127                |

\*, \*\* and \*\*\* indicate significance at the 10, 5 and 1 percent levels respectively.

**Table A6.** Group internal capital and IPO likelihood – pyramid vs horizontal structures, and non-family business groups

The sample consists of family business groups (Columns 1 and 2) and non-family business groups (Columns 3 and 4) from 45 countries. All variables are computed for each group in a given year. Columns 1a and 1b report the estimates from a multinomial logit model (with random effects), where the dependent variable is a discrete choice variable for a family group conducting the IPO of a firm controlled through a pyramidal structure (pyramidal IPO), the IPO of a firm held directly by the family or through a private holding company (horizontal IPO), an SEO (estimates not reported), or no capital raising (as the omitted category). Columns 2a and 2b report the estimates of the same model but with group fixed effects. Columns 3a and 3b report a multinomial logit model (with random effects), where the dependent variable is a discrete choice variable for a non-family group conducting an IPO (3a), an SEO (3b), or no capital raising (as the omitted category). Columns 4a and 4b report the estimates of the same model but with group fixed effects. *GRPINCOME* and *GRPDIVIDEND* are total cash net income and common dividends scaled by total assets. The following variables are not reported. *GRPCONTROL* (not constructed for non-family groups) and *GRPPYRLAYER* are the (market capitalization) weighted average family control rights and pyramid layer of existing member firms. *GRPNOFIRMS* and *GRPFIRMSIZE* are the number of existing member firms and the (averaged) natural logarithm of their asset value. *GRPAGE* is the natural logarithm of the listing age of the oldest group member firm (excluded in models that include group fixed effects due to correlation with the time dimension). *GRPQ*, *GRPCAPEX*, and *GRPDEBT* are total market value of assets scaled by, total capital expenditures, and total debt, scaled by the book value of total assets. *GRPHHI* is a Herfindahl industry-concentration index. *GRPFINMEMBER* is an indicator for the presence of a financial member firm. *MKTRET* are the country's MSCI index return and the relative frequency of IPOs during the financial year. Clustered standard errors are reported in parentheses.

|                     | Family group sample  |                       |                      | Non-family group sample |                    |                      |                   |                    |
|---------------------|----------------------|-----------------------|----------------------|-------------------------|--------------------|----------------------|-------------------|--------------------|
|                     | Pyramidal<br>IPO eq. | Horizontal<br>IPO eq. | Pyramidal<br>IPO eq. | Horizontal<br>IPO eq.   | IPO<br>eq.         | SEO<br>eq.           | IPO<br>eq.        | SEO<br>eq.         |
|                     | (1a)                 | (1b)                  | (2a)                 | (2b)                    | (3a)               | (3b)                 | (4a)              | (4b)               |
| <i>GRPINCOME</i>    | 2.152***<br>(0.479)  | 1.350**<br>(0.586)    | 1.140*<br>(0.648)    | 1.214<br>(0.974)        | 0.791<br>(0.958)   | -2.633***<br>(0.737) | 0.763<br>(1.134)  | -1.257*<br>(0.728) |
| <i>GRPDIVIDEND</i>  | -7.232***<br>(2.832) | -9.393***<br>(3.623)  | -4.749<br>(3.969)    | -12.576**<br>(5.918)    | -7.576*<br>(3.983) | -1.749<br>(2.542)    | -2.540<br>(5.600) | 4.723<br>(2.982)   |
| Group FEs           |                      |                       |                      | YES                     |                    |                      |                   | YES                |
| No. of observations | 11363                |                       | 11363                | 4899                    |                    |                      | 4899              | 4899               |

\*, \*\* and \*\*\* indicate significance at the 10, 5 and 1% levels respectively.

**Table A7.** Group internal capital and IPO likelihood – Different institutional environments

The sample consists of family business groups. Columns 1a and 1b report the estimates from a multinomial logit model (with random effects), where the dependent variable is a discrete choice variable for a family group conducting an IPO (1a), an SEO (1b), or no capital raising (as the omitted category), estimated for the sub-sample of groups from countries with above-median *GOVERNINDEX*. This index is a proxy for the strength of legal institutions, constructed by aggregating three different dimensions of a country's corporate governance environment (defined in detail in Appendix A2). The same estimates for the sub-sample of groups from countries with below-median *GOVERNINDEX* are reported in Columns 2a and 2b. Columns 3a, 3b, 4a, and 4b report the estimates on country sub-samples split by *INSTOFUNDS*. This measure is a proxy for the strength of financial institutions, computed for each country by as the total institutional equity investments scaled by stock market capitalization. *GRPINCOME* and *GRPDIVIDEND* are total cash net income and common dividends scaled by total assets. The following variables are not reported. *GRPCONTROL* and *GRPPYRLAYER* are the (market capitalization) weighted average family control rights and pyramid layer of existing member firms. *GRPNOFIRMS* and *GRPFIRMSIZE* are the number of existing member firms and the (averaged) natural logarithm of their asset value. *GRPAGE* is the natural logarithm of the listing age of the oldest group member firm. *GRPQ*, *GRPCAPEX*, and *GRPDEBT* are the total market value of assets scaled by, total capital expenditures, and total debt, scaled by the book value of total assets. *GRPHHI* is a Herfindahl industry-concentration index. *GRPFINMEMBER* is an indicator for the presence of a financial member firm. *MKTRET* are the country's MSCI index return and the relative frequency of IPOs during the financial year. Clustered standard errors are reported in parentheses.

|                     | Strong legal institutions |                     | Weak legal institutions |                     | Strong financial institutions |                     | Weak financial institutions |                    |
|---------------------|---------------------------|---------------------|-------------------------|---------------------|-------------------------------|---------------------|-----------------------------|--------------------|
|                     | IPO                       | SEO                 | IPO                     | SEO                 | IPO                           | SEO                 | IPO                         | SEO                |
|                     | eq.                       | eq.                 | eq.                     | eq.                 | eq.                           | eq.                 | eq.                         | eq.                |
|                     | (1a)                      | (1b)                | (2a)                    | (2b)                | (3a)                          | (3b)                | (4a)                        | (4b)               |
| <i>GRPINCOME</i>    | 1.779***<br>(0.490)       | -0.659*<br>(0.385)  | 2.749***<br>(0.740)     | -0.202<br>(0.974)   | 2.203***<br>(0.508)           | -0.654*<br>(0.398)  | 1.706***<br>(0.667)         | -0.123<br>(0.623)  |
| <i>GRPDIVIDEND</i>  | -12.251***<br>(3.458)     | -5.021**<br>(2.404) | -3.290<br>(3.339)       | -6.365**<br>(3.193) | -14.479***<br>(3.468)         | -5.947**<br>(2.626) | -2.083<br>(3.318)           | -4.858*<br>(2.814) |
| No. of observations | 5924                      |                     | 5439                    |                     | 5486                          |                     | 5877                        |                    |

\*, \*\*, and \*\*\* indicate significance at the 10, 5 and 1% levels respectively.