Inward Foreign Direct Investment as a New Growth Paradigm: Empirical evidence from Japan

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Abstract

A puzzle has confounded observers of the Japanese economy in recent years—despite its strong innovative capacity, why has Japan failed to produce significant new business growth? This paper argues that Japan, historically closed to inward foreign direct investment (FDI), has an opportunity to pursue a new growth strategy through greater openness to foreign firms. This paper provides an overview of the population of foreign-owned firms in Japan and traces the growth in their establishment over the last 30 years, paying special attention to trends in the 2000s. Utilizing a unique, extensive set of data compiled from macro and micro level data from the Statistics Bureau, the Ministry of Internal Affairs and Communications (MIC), the Ministry of Economy Trade and Industry (METI), and Teikoku Data Bank (TDB), descriptive statistics compare domestic and foreign firms in three establishment cohorts (1980s, 1990s, 2000s) over a number of measures, including sales, capital, employment, and profit. Findings indicate that foreign-owned firms, particularly those established in the 2000s in Japan, are more efficient with capital and are lower credit risks than domestic firms. Furthermore, foreign firms employ more workers over time. As such, foreign firms have become agents of institutional change and new growth in Japan, presenting opportunities for Japan to improve its absorptive capacity to inward FDI and foreign business, netting positive returns for firms and the Japanese economy.

Keywords: Inward FDI, Japan, Foreign firms, Economic growth, Investment, Development

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Introduction

The Japanese economy faces a number of demographic challenges in maintaining (and improving upon) its global competitiveness. These include an aging society, low birth rates, and a decrease in interest among university students in studying abroad. Other advanced, mature economies facing similar labor and resource shortages have sought new growth via opening up to inward FDI and labor. Meanwhile, relative to other Asian economies, Japan has remained closed to both foreign firms and immigrants. This paper demonstrates that Japan can harness its existing domestic capacity and pursue a growth strategy that incorporates a greater role for FDI – a new growth paradigm.

Japan’s reluctance to open up to inward FDI is partly attributed to its legacy of an export-growth led industrial strategy, which protected emerging domestic firms. Meanwhile, despite numerous structural-institutional barriers (non-tariff barriers or NTBs) including Japan’s complex product distribution system, a small number of foreign firms have established operations in sectors including finance, retail, and manufacturing. Foreign firm entry and inward FDI have declined over the last decade, precipitously after the financial market downturn caused by the U.S. mortgage crisis, or “Lehman Shock,” in 2008. At the same time, greater openness to inward FDI and foreign firm entry, as part of a global and open economy, can become a new growth paradigm for Japan.

The paper has three sections. First, it reviews literature analyzing the role of inward FDI in economic growth, particularly in Asian countries. Second, Japan’s competitive position vis-à-vis other Asian economies is outlined, citing data on trends in foreign-owned firm growth and employment in Japan and elsewhere in Asia. Third, domestic and foreign firms are compared on a number of growth measures. An overview of foreign-owned business in Japan is provided, outlining key sectoral developments and highlighting trends in the 2000s. Descriptive statistics summarizing these trends are based on an original dataset compiled from the Statistics Bureau, the Ministry of Internal Affairs and Communications (MIC), the Ministry of Economy Trade and Industry (METI), and Teikoku Data Bank (TDB). The data indicate an increase in inward FDI in medical and pharmaceutical manufacturing (although within an aggregate decline), greater efficiency in the use of capital and labor, and higher credit worthiness of foreign-
owned firms compared to domestic firms. These findings are consistent with other studies comparing foreign and domestic firms in Japan. The paper concludes with reflections on Japan’s capacity to pursue a new growth paradigm based on a global outlook and greater openness to inward bound foreign investment.

Foreign firms have numerous options when considering business operations in Asia. Aggressive policies to attract FDI in China and India as well as in Singapore and Thailand have been credited with the stimulation of rapid economic growth, technology spillovers, and improvements in domestic human capital (Lipsey and Sjöholm, 2010; Zhang, 2001). At the same time, studies have shown that increasing inward FDI is not a panacea for all economies. Countries must have absorptive capacity (ability to recognize, integrate, and pursue investments to maximize the potential value in new resources) in domestic institutions in order to reap the benefits of opening up.

Analyses of the role of inward FDI have focused primarily on developing economies (Ram and Zhang, 2002; Carkovic and Levine, 2005; Moran et al., 2005). The rapid economic growth of Asian economies in particular has led to more research on FDI in Asia (Lipsey, 2006). Recent studies have emphasized the relationship between domestic absorptive capacity (open and stable institutions, human capital) and positive returns for host economies. For example, Alguacil et al. found that, for higher income countries, the institutional and macroeconomic environments are key determinants of whether inward FDI translates into domestic growth (Alguacil, 2010). In a comparative study of East Asian countries, Kotrajaras (2010) analyzed panel data of 15 East Asian countries and found that economic growth through FDI is promoted when the local factors include high levels of human capital infrastructure, financial development, and trade openness. Similarly, Tiwari and Mutascu (2011), in a study of 23 Asian countries, found that FDI increases macroeconomic growth. Furthermore, countries that favor export-led growth in the early stages of development produce more subsequent positive returns, for example, in income distribution, once opened to FDI (Tiwari and Mutascu, 2011). If this is true, then Japan may be facing a unique interstice of opportunity in its industrial development.

Despite its reputation as a stable, uncorrupt economy with ample technological resources and a highly skilled workforce, Japan, at the same time, is plagued by low
levels of private sector investment, especially venture capital (VC), and anemic levels of new business start-ups. The conditions are ripe in Japan for positive returns on openness to inward FDI and a broader paradigmatic shift away from being developmental and closed to global and open.¹ This change is already underway in leading Japanese firms, but their strategies are increasingly moving toward shifting operations and new hiring outside of Japan. At the same time, regulatory change has come incrementally and slowly. Meanwhile, Japan’s competitors in Asia have increased incentives to lure foreign investment.

Japan Becomes “Fly Over” Territory

According to a study by METI in 2010, a decreasing trend in foreign-owned firm establishment is evident in Japan. Countries such as Singapore, China, and Hong Kong have attracted greater numbers of leading foreign-owned companies which established regional headquarters. Japan attracted the fewest among the countries in the study.² The table below outlines Japan in comparison.

[INSERT New Asian Regional Headquarters Table]

Of the 1,856 firms with regional headquarters in Asian countries, a mere 75 were based in Japan while 307 were located in Singapore, 300 in China, and 251 in Hong Kong. Manufacturing sectors accounted for 330. Japan is clearly behind the developments in other Asian countries. Singapore, for example, has been particularly aggressive in courting inward FDI. A 2008 METI/JETRO “Japan Attractiveness Survey” given to executives of multinational firms (N=209 senior executives) indicated that a minority of 21% considered Japan to be a “gateway to Asia.”³ This reflects a continuing trend of moving away from Japan and toward other destinations in Asia, whereby Japan is becoming “fly over” territory (Japan watchers call this “Japan passing,” in a play on words from the “Japan bashing” that took place in its economic heyday in the 1980s, before the implosion of its asset bubble in 1989).

At the same time, leading Japanese companies continue to move operations abroad in search of “global” talent. The ability to conduct business in English and other
international languages has become a major draw in countries such as Singapore. Talent for leading Japanese firms is increasingly being found outside of Japan, further challenging the global competitiveness of Japanese workers, firms, and the economy as a whole.

Of the 2,931 (1,819 independent) foreign-owned firms in Japan as of 2009 for which METI has obtained data, 42.8% were European (1,257, of which 782 firms were independent), 30% were American (889, of which 544 were independent), followed by 13% Asian (604, of which 386 were independent). While these numbers do not directly indicate how many are entrepreneurial start-ups (an important source of high tech, high-growth firms), those with nine or fewer employees totaled 1,095 (37.3%). According to a related METI study (identifying N=2,956 firms), China is the leader among Asian countries in the number of firms in Japan (222, plus 112 from Taiwan and 104 from Hong Kong), followed by 134 from Korea. A look at the 8-year trend between 2001 and 2009 of foreign-owned firms in Japan in terms of sales and employment shows flat growth, with some modest increases in the number of life science (medical devices and pharma) related foreign firms entering the Japanese market. The most profitable foreign-owned firms are in medical and pharmaceutical goods (sales of 383.35 million yen, 2009) and transportation machinery (266.2 million yen), followed by finance and insurance (254.9 million yen), information technology (IT) (237.3 million yen), and wholesale (235.86 million yen).

Medical and pharmaceutical goods producers were among the few types of foreign-owned firms that increased research and development (R&D) expenditures in Japan in 2009 (161.2 million yen). Other than medical and pharmaceutical goods, the greatest investments were in transportation machinery (410 million yen). R&D expenditure remained flat for most other sectors of foreign firms. Fixed capital investment dropped significantly across all manufacturing sectors (with zero investments in precision machinery and general machinery from 2007-2009), with the exception of petroleum, food, and electrical machinery. Appendix B (8-Year Trends) indicates the trends in foreign-owned firms (2002-2009).

In 2009, foreign-owned firms employed 532,757 people, of which the majority (63%, 334,774) were in non-manufacturing sectors including finance, insurance and
wholesale, as well as IT. Of the 197,283 employees in manufacturing, 65,800 were employed in transportation machinery, 39,000 in medical and pharmaceutical goods, and 33,800 in communication equipment.

The following section outlines descriptive statistics of foreign-owned firms compared to domestic firms, drawn from the TDB COSMOS2 database. Teikoku is a private firm that provides services to the Japanese financial and credit reporting industries and the government, and specializes in firm-level financial (panel) data. An analysis comparing domestic and foreign firms in the TDB database shows several trends in firm performance as of the 2011-2012 data.\(^6\) Firms are divided into three age cohorts based on the date of establishment: 1980s (end of high-growth period), 1990s (recessionary “lost decade”), and 2000s (new growth).

**Methods and Limitations of the Data**

The TDB is the most comprehensive firm-level survey in Japan available to the public (via fee-based subscription). Its COSMOS2 2012 database contains 130,000 firm-level, survey-based observations across a number of manufacturing and non-manufacturing sectors and comprised of a number of demographic and performance measures. Limitations of the data are twofold. First, as a dataset used for credit rating, TDB focuses on firms active in utilizing traditional sources of financing, such as bank loans, which might underrepresent those that rely on informal financing (e.g. angel investment). Second, due to the small number of foreign firms in Japan, the number of domestic observations versus foreign ones in the dataset is concurrently larger. For example, for firms established in the 2000s (after cleaning of the dataset, e.g., deleting duplicates), TDB indicates 14,103 domestic and 289 foreign observations. The Appendix Table Firm Totals outlines the sample based on establishment cohort by the decade and whether it is manufacturing or non-manufacturing. The small relative sample size of foreign firms limits the ability to analyze sub samples by firm size, industry, and so forth.

**Key Findings**

1) **Capital Efficiency** - Foreign firms appear to be more efficient with their capital than domestic firms. The following figure outlines this difference.
Domestic firms have become less efficient with capital over time. Foreign firms established in the 1990s appear to be less efficient than those established in the 1980s, while those established in the 2000s fared better. Foreign firms established in the 1990s have higher capital, but this did not lead to greater sales. However, the most recently established (2000s) foreign firms have achieved the 1980’s cohort’s level of efficiency with both greater capital and sales, performing better than domestic firms in the same 2000s establishment cohort.

While foreign firms established in the 2000s had declining profits in 2011 (-23%), those established in the 1990s increased sales by 114% in the analyzed period of fiscal years 2011-2017. Firms established in the 1980s grew by an average of 81.5% over the same period. This reinforces the observation that entrants with a long-term commitment to the Japanese market are in a strong position, despite the economic turmoil experienced since the 2008 collapse of Lehman Brothers.

The finding of foreign firms to have higher capital efficiency is echoed by other research. For example, a 2010 report by the American Chamber of Commerce in Japan (ACCJ) found that foreign-held companies had the highest average productivity and high job creation rates. Citing a study by Fukao and Kwon (2010), the ACCJ report concluded that the “current drivers of net jobs growth in Japan’s economy are foreign companies and young, newly established firms.” However, Japan’s low economic “metabolism,” referring to low resource reallocation, is a major impediment to economic growth and undermines Japan’s absorptive capacity for inward FDI. Japan has an underdeveloped VC market relative to that of other industrialized economies, and its institutional investors as a whole have not invested in high-risk, high-return opportunities such as new ventures (ACCJ 2010).

2) Credit Worthiness - Foreign firms are perceived as being more credit worthy, as measured by their higher overall credit scores, in comparison to domestic firms. The analysis herein indicates that foreign firms show stronger credit scores across all three age cohorts. Foreign firms established in the 1980s have developed the strongest credit overall. As mentioned in the methods section, the TDB provides credit ratings on
Japanese firms. The TDB rating system evaluates individual firm’s performance history in the context of its industry and assigns a maximum score of 100. The following figure shows the higher credit scores earned overall by foreign firms.

[INSERT Figure Relative Credit Rating Trends]

Comparing the three age cohorts (1980s, 1990s, 2000s), the largest difference is that foreign firms have higher average and median credit scores overall. For example, while foreign firms established in the 1980s had an average score of 52.95, domestic firms of the same cohort averaged only 49.42. Domestic firms established in the 1990s had a lower average credit rating (47.31), while foreign firms maintained an average score of 49.7. Recently established domestic firms struggle to maintain credit (44.1), while foreign firms fare somewhat better (46.86).

3) Employment and Income - While METI statistics (updated to 2009) indicate a slight increase in the number of foreign-owned firms in Japan, the TDB data (updated to 2012) shows a decrease. This decline in foreign-firm-, investor-, and entrepreneur-level participation in the Japanese economy is exacerbated by the shift of multinational corporations (MNC) investments to other countries in Asia, particularly China and India (discussed below). In terms of returns per employee and growth in employment, foreign firms have done at least as well as domestic firms. The following figure outlines these findings.

[INSERT Figure Income v. Employment]

An obvious limitation in this graph is the use of net profits. As a consequence, the results will be skewed relative to the specific tax liability of individual firms. However, the graph shows an increase and then a decrease in efficiency in domestic firms as they age. Meanwhile, foreign firms’ efficiency (after-tax income per employee) consistently declines over the three age periods. Newer foreign firms also realize consistent increases in employment. The effects of the recent economic turmoil seem to hit young firms most dramatically, although foreign firms established in the 2000s are somewhat more profitable than domestic firms.

4) Research and Development Expenditure - Park (2001), in a study of 945 firms...
listed in the First Section of the Tokyo Stock Exchange and utilizing data from the Nikkei Economic Electronic Databank System (NEEDS), found that, contrary to perceptions that foreign investors are short-term speculators, a rise in foreign ownership from 10% to 40% corresponds to an increase in R&D expenditure. As the time to return on investment (ROI) on R&D expenditures is measured in multiple years, it indicates a longer-term commitment. Kazuyuki Motohashi (2011) analyzed Japanese patent and enterprise census data (N= 4.5 million industrial, non-service sector firms, of which 1.4%, or 650,000, produced patents, 2006 data). The study found that inter-firm linkage was strongly correlated with firm growth, particularly for small firms. Foreign firms, for example, may be more likely to seek out collaborations in R&D with other (domestic or foreign) firms, further enhancing growth. Japanese domestic firms, in contrast, tend to vertically integrate R&D and production.

Analyzing firm-level data (firm equity share of 10% or greater, N=22,000, 1994-1998 data), Kimura and Kiyota found that foreign-owned firms grow faster than domestic firms and bring assets to the Japanese market, enabling then to be a catalyst for structural reform. Furthermore, they are no more likely to exit than domestic firms. Consequently, foreign firms appear to be, at most, an equal (if not less of an) investment risk as domestic firms.

5) **High Growth Firms** - The following figure shows the results of an analysis of high-growth (20% or higher per annum) domestic and foreign firms across the three age cohorts. Although there was a greater proportion of high-growth, newly established firms in the early 2000s, more new firms have been experiencing steady growth (5%-10%) in recent years (Kimura and Kiyota 2004). The following figure outlines the trend in high-growth firm establishment as reflected in TDB data.

The incidence of fast growing domestic and foreign firms increased in the 2000s, with more steady performance among domestic firms, although foreign firms established after 2009 seem to be growing slightly faster. Foreign firms have managed to grow in Japan, contributing to employment and overall economic growth as well as institutional
stability via maintaining creditworthiness. Improving the regulatory receptivity to inward FDI in Japan, in conjunction with increasing absorptive capacity (e.g. promoting knowledge spillovers to domestic firms, encouraging upgrading in language and international business skills), could improve the basis for new growth.

6) **Labor Mobility** - Foreign firms are often viewed as violating social norms of trust and commitment in Japan, such as seniority-based (*nenko joretsu*) wages and lifetime employment. In reality, *nenko joretsu* exists in practice in 1% of Japanese firms – its corporate *keiretsu* – which employed less than 25% of the workforce in the post-war period). On the other hand, foreign firms increase the labor mobility of talented, highly-skilled workers, which enhances innovation flows across organizational boundaries (Ono 2007).

Hiroshi Ono, in a survey of full-time workers in Japan (N = 10,406), found that workers in foreign firms were better endowed with human capital than those in domestic firms. Human capital was measured in the study by the level of education, English language skills, and computer skills. Workers in foreign firms also had higher salaries on average than those in domestic firms. Another growth opportunity is in highly skilled Chinese expatriates, a potential source of nascent foreign entrepreneurs in Japan. LeBail (2012)\(^\text{10}\) cites the rapid increase in the number of Chinese residents working as business managers or investors— from less than 500 in the 1990s to 3,300 in 2010.

The demographic trend in Japan is one of an aging population (it is expected to decline to replacement by 2050), resulting in a declining percentage of working age people (ages 15 to 64), and within this dwindling pool, fewer internationally competitive new job applicants.

Morgan Stanley Japan produced a report in June 2011 analyzing the post-earthquake economy. The report is mainly an overview of macroeconomic trends. It also notes that, without fundamental electoral reform (something the Democratic Party of Japan (DPJ) was trying hard to accomplish), social decisions will continue to be “artificially skewed in favor of elderly interests.”\(^\text{11}\) Understandably, retired pensioners are not keen to engage in risky investments.

The approximately 100 policy recommendations in the Morgan Stanley report include suggestions for tax reform. Japan has the highest corporate tax rate compared to
other leading economies (Japan has a progressive corporate tax system, levying upwards of 40% on profits). Japan is particularly uncompetitive when compared to other Asian countries. Consequently, the recommendations include cutting corporate taxes, providing tax credits for losses on new business creation, and reducing taxes on long-term capital gain, as well as reforming inheritance taxes (a progressive tax up to 50%).

Conclusion

Injecting talented foreigners (students, executives, entrepreneurs) into the Japanese economy would bring game-changing and, yes, “disruptive” ideas and technologies, improve corporate governance (via making corporate boards more independent of keiretsu hierarchies as well as making them more global), and potentially revitalize its laggard VC market. With Japan’s premier science and technological capacity, reducing barriers to individuals – including foreigners – who can start firms and connect Japan’s stellar science and technology assets (patent activity in sectors such as biomedical bears this out) can help create an innovation to entrepreneurship pipeline.

As the data in this paper has demonstrated, foreign-owned firms are more efficient with capital and labor, are good credit bets, and can be a positive model of business practice (e.g. encouraging labor mobility) in the Japanese economy. Japan has the basis to become a major economic hub for Asia – ending its slide into “fly over” territory and reaping a healthy ROI for business, investors, the Japanese government, and Japanese citizens. All Japan needs now is a paradigmatic shift towards a globally competitive and open economy.
References


深尾京司, 權 赫旭「日本経済再生の原動力を求めて」2010年11月。


FIGURES for MAIN TEXT

Sales v Capital

<table>
<thead>
<tr>
<th></th>
<th>Domestic Firms</th>
<th>Foreign Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (1,000 Yen)</td>
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<tr>
<td>Capital (Million Yen)</td>
<td></td>
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</tbody>
</table>

Graphs by Foreign-funded enterprise code

n Values:
- 1980s Domestic Fitted Values - 21352
- 1990s Domestic Fitted Values - 18481
- 2000s Domestic Fitted Values - 14103
- 1980s Foreign Fitted Values - 270
- 1990s Foreign Fitted Values - 318
- 2000s Foreign Fitted Values - 289

Parameters:
- Linear fit Sales (current revenues) v. capital
- Separated by firm type (foreign v. domestic)
Relative Credit Rating Trends
For Foreign and Domestic Firms

Credit Rating v. Firm Type dummy

n Value:
1980s Fitted Values- 21802 (21532 domestic, 270 foreign)
1990s Fitted Values- 18799 (18481 domestic, 318 foreign)
2000s Fitted Values- 14392 (14103 domestic, 289 foreign)
n Values:
1980s Domestic Fitted Values- 21532
1990s Domestic Fitted Values- 18418
2000s Domestic Fitted Values-14103
1980s Foreign Fitted Values- 270
1990s Foreign Fitted Values- 318
2000s Foreign Fitted Values-289

Parameters:
Linear fit Income (current after tax profits) v. employees
Separated by firm type (foreign v domestic)
n Values:
   Domestic- 3148
   Foreign- 84
Parameters:
   Histogram of establishments
   If it grew over a 3-year period consistently by 5%, 10%, 15%, and 20% in sales and profits
   Separated by firm type (foreign v domestic)
APPENDIX: Descriptive Statistics

n Values:
- 1980s Domestic Fitted Values: 21352
- 1990s Domestic Fitted Values: 18481
- 2000s Domestic Fitted Values: 14103
- 1980s Foreign Fitted Values: 270
- 1990s Foreign Fitted Values: 318
- 2000s Foreign Fitted Values: 289

Parameters:
- Linear fit Sales (current revenues) v employees
- Separated by firm type (foreign v domestic)

Interpretations:
- As a whole, older domestic and foreign firms are similarly efficient with their labor. However, younger firms tend to become more efficient with regard to their labor. Foreign firms appear not to have realized significant gains across younger firms.
n Values:
1980s Domestic Fitted Values- 21532
1990s Domestic Fitted Values- 18481
2000s Domestic Fitted Values-14103
1980s Foreign Fitted Values- 270
1990s Foreign Fitted Values- 318
2000s Foreign Fitted Values-289

Parameters:
Linear fit Income (current after tax profits) v capital
Separated by firm type (foreign v domestic)

Interpretations:
Older firms, or those established in the 1980s, have greater efficiency followed by those that were established in the 1990s or 2000s.
n Values:
   Domestic Firms- 117,043
   Foreign Firms- 1,273

Parameters:
   (all industries)

Interpretations:
   Incorporations are more consistent for domestic firms over time than for foreign firms. As represented in the TDB, foreign firm incorporation increased steadily between the 1960s and 2000. However, this appears to have dropped off for both domestic and foreign firms after 2000.

   While the TDB data indicates a decline in foreign establishments after 2000, this is inconsistent with data from the Ministry of Internal Affairs and Communications (MIC, Somusho, 総務省), which indicates a moderate increase (see Appendix B: 8 Year Trend).
n Value:
1980s Fitted Values- 21802 (21532 domestic, 270 foreign)
1990s Fitted Values- 18799 (18481 domestic, 318 foreign)
2000s Fitted Values- 14392 (14103 domestic, 289 foreign)

Parameters:
Employees v. Firm Type dummy

Interpretations:
Looking at employment trends, it is not too surprising to find that firms tend to employ more as they age. However, not much should be made over the slight trend for foreign firms to be larger, since the confidence interval is grossly larger than the difference.
n Values:
1980s Fitted Values- 21802 (21532 domestic, 270 foreign)
1990s Fitted Values- 18799 (18481 domestic, 318 foreign)
2000s Fitted Values- 14392 (14103 domestic, 289 foreign)

Parameters:
Capital v. Firm Type dummy

Interpretations:
Newer firms appear to have greater capital than older firms. This could be due to insufficient time to invest their funds or perhaps adaptation to a riskier and more volatile economic environment.
### Firm Totals (TDB)

<table>
<thead>
<tr>
<th></th>
<th>1980s</th>
<th>1990s</th>
<th>2000s</th>
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<tr>
<td><strong>Domestic firms</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Manufacturing</td>
<td>17092</td>
<td>16120</td>
<td>12348</td>
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<tr>
<td>Non-Manufacturing</td>
<td>4440</td>
<td>2361</td>
<td>1755</td>
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<tr>
<td><strong>Total</strong></td>
<td>21532</td>
<td>18481</td>
<td>14103</td>
</tr>
<tr>
<td><strong>Foreign firms</strong></td>
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<tr>
<td>Manufacturing</td>
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<td>277</td>
<td>236</td>
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<tr>
<td>Non-Manufacturing</td>
<td>64</td>
<td>41</td>
<td>53</td>
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<tr>
<td><strong>Total</strong></td>
<td>270</td>
<td>318</td>
<td>289</td>
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### Firm Totals by Percentage (TDB)

<table>
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<th>1980s</th>
<th>1990s</th>
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<tbody>
<tr>
<td><strong>Domestic firms</strong></td>
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<tr>
<td>Manufacturing</td>
<td>79.38%</td>
<td>87.22%</td>
<td>87.56%</td>
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<tr>
<td>Non-Manufacturing</td>
<td>20.62%</td>
<td>12.78%</td>
<td>12.44%</td>
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<tr>
<td><strong>Total</strong></td>
<td>100.00%</td>
<td>100.00%</td>
<td>100.00%</td>
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<tr>
<td><strong>Foreign firms</strong></td>
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<tr>
<td>Manufacturing</td>
<td>76.30%</td>
<td>87.11%</td>
<td>81.66%</td>
</tr>
<tr>
<td>Non-Manufacturing</td>
<td>23.70%</td>
<td>12.89%</td>
<td>18.34%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100.00%</td>
<td>100.00%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Note: Japanese enterprise census data indicates that 15% of Japanese firms are in manufacturing, while TDB data indicates 24%
アジア・オセアニア地域における地域統括拠点数（合計）
Asia Oceania Regional Headquarters (Total)

（単位：社、国）(Unit: Firm, Country)

<table>
<thead>
<tr>
<th></th>
<th>企業数集計</th>
<th>日本</th>
<th>中国</th>
<th>香港</th>
<th>台湾</th>
<th>韓国</th>
<th>インド</th>
<th>ベトナム</th>
<th>タイ</th>
<th>インドネシア</th>
<th>カンボジア</th>
<th>フィリピン</th>
<th>マレーシア</th>
<th>シンガポール</th>
<th>オーストラリア</th>
<th>ニュージーランド</th>
<th>その他</th>
<th>立地していない</th>
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<tbody>
<tr>
<td>全産業</td>
<td>1,856</td>
<td>75</td>
<td>300</td>
<td>251</td>
<td>90</td>
<td>88</td>
<td>34</td>
<td>4</td>
<td>25</td>
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<td>66</td>
<td>3</td>
<td>285</td>
<td>393</td>
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<tr>
<td>全産業（金融・保険業、不動産業を除く）</td>
<td>1,759</td>
<td>71</td>
<td>293</td>
<td>222</td>
<td>89</td>
<td>87</td>
<td>31</td>
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<td>38</td>
<td>281</td>
<td>60</td>
<td>3</td>
<td>275</td>
<td>379</td>
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<tr>
<td>製造業</td>
<td>330</td>
<td>27</td>
<td>69</td>
<td>27</td>
<td>12</td>
<td>10</td>
<td>3</td>
<td>0</td>
<td>9</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>44</td>
<td>6</td>
<td>0</td>
<td>56</td>
<td>80</td>
</tr>
<tr>
<td>非製造業</td>
<td>1,526</td>
<td>48</td>
<td>231</td>
<td>224</td>
<td>78</td>
<td>78</td>
<td>31</td>
<td>4</td>
<td>16</td>
<td>6</td>
<td>0</td>
<td>1</td>
<td>32</td>
<td>263</td>
<td>60</td>
<td>3</td>
<td>229</td>
<td>313</td>
</tr>
<tr>
<td>非製造業（金融・保険業、不動産業を除く）</td>
<td>1,429</td>
<td>44</td>
<td>224</td>
<td>195</td>
<td>77</td>
<td>77</td>
<td>28</td>
<td>4</td>
<td>16</td>
<td>6</td>
<td>0</td>
<td>1</td>
<td>32</td>
<td>237</td>
<td>54</td>
<td>3</td>
<td>219</td>
<td>299</td>
</tr>
</tbody>
</table>

注1：集計企業数は、「1．日本」〜「17．立地していない」のいずれか1つ以上に回答した企業の合計。
注2：「1．日本」〜「16．その他」については、複数回答を含むため、1．〜17．の合計と集計企業数は一致しない。
APPENDIX B: 8-Year Trends

売上高の推移 Sales

<table>
<thead>
<tr>
<th></th>
<th>02年度</th>
<th>03年度</th>
<th>04年度</th>
<th>05年度</th>
<th>06年度</th>
<th>07年度</th>
<th>08年度</th>
<th>09年度</th>
</tr>
</thead>
<tbody>
<tr>
<td>全産業(金融・保険業、不動産業を除く)</td>
<td>27,048,239</td>
<td>32,539,666</td>
<td>32,060,263</td>
<td>34,960,292</td>
<td>35,409,567</td>
<td>39,469,491</td>
<td>37,370,823</td>
<td>32,790,315</td>
</tr>
<tr>
<td>製造業</td>
<td>16,362,747</td>
<td>19,303,183</td>
<td>18,774,604</td>
<td>19,543,607</td>
<td>20,727,227</td>
<td>22,440,642</td>
<td>20,490,708</td>
<td>18,911,197</td>
</tr>
<tr>
<td>非製造業(金融・保険業、不動産業を除く)</td>
<td>10,685,492</td>
<td>13,236,483</td>
<td>13,285,659</td>
<td>15,416,685</td>
<td>14,682,340</td>
<td>17,028,849</td>
<td>16,880,115</td>
<td>13,879,118</td>
</tr>
</tbody>
</table>

注: 日本標準産業分類の改訂に伴い、06年度以前は旧分類、07年度以降は新分類となっている。
「その他の・・・」は掲載業種（数値やXが記述されている業種）以外の業種をいう。

経常利益の推移 Profit (Ordinary income)

<table>
<thead>
<tr>
<th></th>
<th>02年度</th>
<th>03年度</th>
<th>04年度</th>
<th>05年度</th>
<th>06年度</th>
<th>07年度</th>
<th>08年度</th>
<th>09年度</th>
</tr>
</thead>
<tbody>
<tr>
<td>全産業(金融・保険業、不動産業を除く)</td>
<td>1,554,663</td>
<td>1,692,686</td>
<td>1,653,374</td>
<td>2,008,380</td>
<td>1,877,624</td>
<td>2,405,866</td>
<td>1,099,970</td>
<td>1,372,604</td>
</tr>
<tr>
<td>製造業</td>
<td>993,099</td>
<td>1,142,284</td>
<td>1,100,677</td>
<td>1,382,202</td>
<td>1,205,880</td>
<td>1,583,435</td>
<td>584,827</td>
<td>787,024</td>
</tr>
<tr>
<td>非製造業(金融・保険業、不動産業を除く)</td>
<td>561,564</td>
<td>550,402</td>
<td>552,697</td>
<td>626,178</td>
<td>671,744</td>
<td>822,431</td>
<td>515,143</td>
<td>585,580</td>
</tr>
</tbody>
</table>

注: 日本標準産業分類の改訂に伴い、06年度以前は旧分類、07年度以降は新分類となっている。
「その他の・・・」は掲載業種（数値やXが記述されている業種）以外の業種をいう。

総資産の推移 (Total Assets)

<table>
<thead>
<tr>
<th></th>
<th>02年度</th>
<th>03年度</th>
<th>04年度</th>
<th>05年度</th>
<th>06年度</th>
<th>07年度</th>
<th>08年度</th>
<th>09年度</th>
</tr>
</thead>
<tbody>
<tr>
<td>全産業(金融・保険業、不動産業を除く)</td>
<td>24,628,341</td>
<td>28,189,502</td>
<td>26,240,747</td>
<td>26,510,213</td>
<td>22,890,638</td>
<td>27,722,848</td>
<td>23,182,932</td>
<td>26,385,549</td>
</tr>
<tr>
<td>製造業</td>
<td>16,388,918</td>
<td>18,481,170</td>
<td>17,606,926</td>
<td>17,088,088</td>
<td>17,651,604</td>
<td>18,276,840</td>
<td>14,607,956</td>
<td>15,984,612</td>
</tr>
<tr>
<td>非製造業(金融・保険業、不動産業を除く)</td>
<td>8,239,423</td>
<td>9,708,332</td>
<td>8,633,821</td>
<td>9,422,125</td>
<td>8,239,034</td>
<td>9,446,008</td>
<td>8,574,976</td>
<td>10,400,937</td>
</tr>
</tbody>
</table>

注: 日本標準産業分類の改訂に伴い、06年度以前は旧分類、07年度以降は新分類となっている。
「その他の・・・」は掲載業種（数値やXが記述されている業種）以外の業種をいう。
### 設備投資額の推移 (Amount of Capital Investment)

(単位：百万円) (Unit: One million yen)

<table>
<thead>
<tr>
<th>年度</th>
<th>02年度</th>
<th>03年度</th>
<th>04年度</th>
<th>05年度</th>
<th>06年度</th>
<th>07年度</th>
<th>08年度</th>
<th>09年度</th>
</tr>
</thead>
<tbody>
<tr>
<td>全産業（金融・保険業、不動産業を除く）</td>
<td>814,501</td>
<td>978,143</td>
<td>944,103</td>
<td>1,047,677</td>
<td>1,147,589</td>
<td>1,566,408</td>
<td>1,013,843</td>
<td>575,032</td>
</tr>
<tr>
<td>製造業</td>
<td>404,562</td>
<td>597,441</td>
<td>648,217</td>
<td>697,602</td>
<td>896,465</td>
<td>1,236,199</td>
<td>757,810</td>
<td>426,408</td>
</tr>
<tr>
<td>非製造業（金融・保険業、不動産業を除く）</td>
<td>409,939</td>
<td>380,720</td>
<td>295,886</td>
<td>350,075</td>
<td>251,124</td>
<td>330,209</td>
<td>256,033</td>
<td>148,624</td>
</tr>
</tbody>
</table>

注：日本標準産業分類の改訂に伴い、06年度以前は旧分類、07年度以降は新分類となっている。「その他の・・・」は掲載業種（数値やxが記述されている業種）以外の業種をいう。

### 従業者数の推移 (Employees)

(単位：人) (Unit: Person)

<table>
<thead>
<tr>
<th>年度</th>
<th>02年度</th>
<th>03年度</th>
<th>04年度</th>
<th>05年度</th>
<th>06年度</th>
<th>07年度</th>
<th>08年度</th>
<th>09年度</th>
</tr>
</thead>
<tbody>
<tr>
<td>全産業（金融・保険業、不動産業を除く）</td>
<td>293,688</td>
<td>434,943</td>
<td>503,989</td>
<td>525,627</td>
<td>555,968</td>
<td>590,494</td>
<td>438,384</td>
<td>480,440</td>
</tr>
<tr>
<td>製造業</td>
<td>201,579</td>
<td>236,217</td>
<td>229,154</td>
<td>220,800</td>
<td>224,972</td>
<td>231,957</td>
<td>195,380</td>
<td>197,983</td>
</tr>
<tr>
<td>非製造業（金融・保険業、不動産業を除く）</td>
<td>92,109</td>
<td>198,726</td>
<td>274,835</td>
<td>304,827</td>
<td>330,996</td>
<td>358,537</td>
<td>243,004</td>
<td>282,457</td>
</tr>
</tbody>
</table>

注：日本標準産業分類の改訂に伴い、06年度以前は旧分類、07年度以降は新分類となっている。「その他の・・・」は掲載業種（数値やxが記述されている業種）以外の業種をいう。

http://www.meti.go.jp/statistics/tyo/gaisikei/result/result_44.html
統計 外資系企業動向調査 統計表一覧 第44回調査結果概要確報-平成21(2009)年度実績-accessed 3 April 2012
外資比率が３分の１を超えた理由
Reasons why foreign ownership is greater than one-third

A. By manufacturing & non-manufacturing

<table>
<thead>
<tr>
<th></th>
<th>単独で新規設立 Established independently</th>
<th>構成比</th>
</tr>
</thead>
<tbody>
<tr>
<td>全産業</td>
<td>1,819</td>
<td>62.1</td>
</tr>
<tr>
<td>製造業</td>
<td>189</td>
<td>37.4</td>
</tr>
<tr>
<td>非製造業</td>
<td>1,630</td>
<td>67.2</td>
</tr>
</tbody>
</table>

B. By home country

<table>
<thead>
<tr>
<th></th>
<th>単独で新規設立 Established independently</th>
<th>構成比</th>
</tr>
</thead>
<tbody>
<tr>
<td>母国籍北米系</td>
<td>566</td>
<td>61.9</td>
</tr>
<tr>
<td>（〃 アメリカ系）</td>
<td>544</td>
<td>61.2</td>
</tr>
<tr>
<td>（〃 中南米系）</td>
<td>45</td>
<td>50.0</td>
</tr>
<tr>
<td>（〃 アジア系）</td>
<td>386</td>
<td>63.9</td>
</tr>
<tr>
<td>（〃 中東系）</td>
<td>20</td>
<td>74.1</td>
</tr>
<tr>
<td>（〃 ヨーロッパ系）</td>
<td>782</td>
<td>62.2</td>
</tr>
<tr>
<td>（〃 オセアニア系）</td>
<td>20</td>
<td>58.8</td>
</tr>
<tr>
<td>（〃 アフリカ系）</td>
<td>-</td>
<td>0.0</td>
</tr>
<tr>
<td>（〃 不明）</td>
<td>-</td>
<td>0.0</td>
</tr>
</tbody>
</table>

C. By ownership

<table>
<thead>
<tr>
<th></th>
<th>単独で新規設立 Established independently</th>
<th>構成比</th>
</tr>
</thead>
<tbody>
<tr>
<td>外資比率１/３超 50％未満</td>
<td>29</td>
<td>16.8</td>
</tr>
<tr>
<td>〃 50％</td>
<td>21</td>
<td>11.1</td>
</tr>
<tr>
<td>〃 50％超 100％未満</td>
<td>171</td>
<td>34.4</td>
</tr>
<tr>
<td>〃 100％</td>
<td>1,598</td>
<td>77.2</td>
</tr>
</tbody>
</table>

D. By entry year

<table>
<thead>
<tr>
<th></th>
<th>単独で新規設立 Established independently</th>
<th>構成比</th>
</tr>
</thead>
<tbody>
<tr>
<td>参入時期 1984年度以前</td>
<td>310</td>
<td>59.4</td>
</tr>
<tr>
<td>〃 1985～89年度</td>
<td>182</td>
<td>65.0</td>
</tr>
<tr>
<td>〃 1990～94年度</td>
<td>189</td>
<td>64.3</td>
</tr>
<tr>
<td>〃 1995～99年度</td>
<td>320</td>
<td>64.3</td>
</tr>
<tr>
<td>〃 2000～04年度</td>
<td>457</td>
<td>59.3</td>
</tr>
<tr>
<td>〃 2005～09年度</td>
<td>361</td>
<td>63.8</td>
</tr>
</tbody>
</table>
外資系企業数の推移（2001〜2009：回収企業数）
Trend in number of foreign firms (2001~2009: Respondent Firms)

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>全産業</td>
<td>1,678</td>
<td>1,861</td>
<td>2,038</td>
<td>2,656</td>
<td>2,758</td>
<td>2,921</td>
<td>3,239</td>
<td>3,084</td>
<td>3,312</td>
</tr>
<tr>
<td>製造業</td>
<td>556</td>
<td>574</td>
<td>617</td>
<td>731</td>
<td>712</td>
<td>732</td>
<td>716</td>
<td>582</td>
<td>567</td>
</tr>
<tr>
<td>非製造業</td>
<td>1,122</td>
<td>1,287</td>
<td>1,421</td>
<td>1,782</td>
<td>1,958</td>
<td>2,184</td>
<td>2,456</td>
<td>2,465</td>
<td>2,723</td>
</tr>
<tr>
<td>業種不明</td>
<td>143</td>
<td>88</td>
<td>5</td>
<td>67</td>
<td>37</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

経済産業省：外資系企業動向調査
調査の対象
【地域】全国
【単位】企業
【属性】毎年3月末時点で以下の条件を満たす我が国企業を対象としています。
(1) 外国投資家が株式又は持分の3分の1超を所有している企業
(2) 外国投資家が株式又は持分の3分の1超を所有している株式会社が出資する企業であって、外国投資家の直接出資比率及び間接出資比率の合計が3分の1超となる企業
いずれの場合も、外国側筆頭出資者の出資比率が10%以上であること。
注1) 株式会社とは、事業活動を営むことを目的とするのでではなく、他の複数の会社の株式を所有することによって、それらを支配することを主たる目的とし、グループ全体の経営計画立案に携わる会社。
注2) 直接出資比率とは、資本金又は出資金総額に占める外国投資家の株式又は持分の比率。また、間接出資比率とは、外国投資家の株式会社への出資比率に株式会社からの当該企業への出資比率を乗じたもの。
【調査対象数】 約5,300社（2010年調査／2009年度実績）
【回収率】62.4%（2010年調査／2009年度実績）

1 In some ways, local governments have been more aggressive than the national government in courting inward FDI. Okinawa prefecture’s attempts to establish a biotech and trade hub in the image of Singapore and Tokyo city zones are examples.
2 All types of firms, including finance, insurance and real estate. 2010年外資系企業動向調査
3 2008 JETRO Invest Japan Division, Invest Japan Department, “Japan Attractiveness Survey”.

Ibata-Arens
RIETI Policy Update 047 February 25, 2013
This total is determined by a proxy of those firms indicating that they a) were 10% foreign-owned and b) had been established independently. Most studies use the proxy of either 1/3 foreign share ownership, or 1/3 or greater number of foreign senior executive staff (e.g. TDB); as determined by 総務省 and METI. See METI 外資比率が三分の一を超えた理念. For example, in 2009, METI identified 5,300 firms as having 1/3 or greater foreign ownership (private and public). 経済産業省:外資系企業動向調査 Other estimations, such as by 10% or greater foreign ownership, increase the number of “foreign” firms to more than 20,000 (Kimura and Kiyota 2004). Appendix B contains data from both METI and MIC, consequently firm totals are incongruous.

Performance data taken for the three years prior the most recent data update by Teikoku (including update year). Consequently, the observations reflect the period 2009-2010-2011 (75.5%), 2008-2009-2010 (24.4%) & 2007-2008-2009 (0.1%).


8 Nihon Keizai Shimbun Nikkei NEEDs and Pacific Basin Capital Markets (PAPCAP) Research Center Database, University of Rhode Island.
9 Kigyokatsudo Chosa Hokokusho (The results of the Basic Survey of Japanese Business Structure and Activity, Research and Statistics Department, MITI, now METI).