

# **2016 Outward Foreign Direct Investment of Thai Listed Firms**

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**The Stock Exchange of Thailand**

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## Executive Summary

The number of Thai listed firms undertaking outward foreign direct investment (OFDI) has continuously increased. At the end of 2016, there are 198<sup>1</sup> firms investing abroad, up from 192 firms at the end of 2015. These 198 listed firms undertaking OFDI accounts for 39% of the total 511<sup>2</sup> listed firms on SET and account for 71% of SET market capitalization.

Out of these 198 firms, 78% invested in ASEAN and 59% in CLMV. Myanmar is the main investment destination. As for the industry that had the most number of Thai listed firms undertaking OFDI, the Resources industry retained its top rank as in previous year.

The net OFDI flow of Thai listed firms in 2016 was THB 180 billion, increasing from the THB 75 billion in 2015. This was partly due to large investment transaction of THB 76 billion in 2016 of large 3 transactions (more than THB 10 billion per transaction).

In 2016, revenue from abroad of Thai listed firms, derived from operation overseas and exports revenue of 238 firms, was THB 2.3 trillion, dropped 1.6% from previous year. Noteworthy is the trend that foreign revenue has continued to grow higher than domestic revenue. Foreign revenue of 107 firms that had continuously been reporting from 2006 to 2016 grew 8% CAGR, while their domestic revenue grew 3% CAGR. Due to the high growth of foreign revenue, the ratio of foreign revenue to total revenue of these 107 firms increased to 47% in 2016 from 36% in 2006.

To assess the internationalization effects of these firms, the “Economic Exposure Universe” has been created to compile the Thai listed firms undertaking OFDI and/or receiving revenue from abroad. The firms are grouped into 3 regions as: Global, ASEAN and CLMV Economic Exposure Universe. In 2016, Global Economic Exposure Universe increased to 289 firms from 282 firms in the prior year. Meanwhile, ASEAN Economic Exposure Universe and the CLMV Economic Exposure Universe covered 175 and 130 firms, respectively.

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<sup>1</sup> Firms with OFDI outstanding at the end of year, no matter how long firms have been investing.

<sup>2</sup> All listed firms in SET excluded all types of funds and firms in rehabilitation group.

## Chapter 1: Database Construction and Definition

Outward foreign direct investment (OFDI) database of listed firms in The Stock Exchange of Thailand has been created to study the current direct overseas investment activities as well as revenue from abroad of Thai listed companies. The published research paper covers all listed firms in The Stock Exchange of Thailand (SET) except those in rehabilitation. The number of firms used for compiling the database was as of the end of each year during the period of 2006-2015.

### 1.1 Data Sources

OFDI and foreign revenue data were obtained from the firms' publicly disclosed official reports such as notes of financial statement, 56-1 reports, annual reports and other corporate presentations.

### 1.2 Important Definitions

**“Outward foreign direct investment (OFDI)”** refers to investment in shares of firms abroad by investors (Thai listed firms). The investors must have controlling stakes whereby the investees can be subsidiaries, associated companies, joint ventures as well as investment assets such as factories built by the investors themselves. In addition, objectives of investment stated by listed firms have to be clearly identified. However, investment to set up an investment company or a holding firm is excluded. Portfolio investment is also excluded.

**“Revenue from abroad”** is the revenue derived from operation overseas and exports revenue from factories based in Thailand. Nevertheless, some firms usually classify revenue from overseas based on geographical locations of customers without indicating whether the amount is derived from operation overseas or exports. All foreign revenue that fall under these criteria will be classified as ‘revenue from abroad’.

This analysis, firms will be grouped into 2 classifications: 1. based on the **industry**, and 2. based on the **size** by using market capitalization value.

According to SET's categorization, there are 8 different industries and 28 sectors. Each **industry** consists of various **sectors** as shown in Table 1.

**Table 1 Industry and Sector on SET**

Industry	Sector
1. Agro & Food Industry	1.1 Agricultural Business 1.2 Food and Beverage
2. Consumer Products	2.1 Fashion 2.2 Home & Office Products 2.3 Personal Products & Pharmaceuticals
3. Financials	3.1 Banking 3.2 Finance & Securities 3.3 Insurance
4. Industrials	4.1 Automotive 4.2 Industrial Materials & Machinery 4.3 Paper & Printing Materials 4.4 Petrochemicals & Chemicals 4.5 Packaging 4.6 Steel
5. Property & Construction	5.1 Construction Materials 5.2 Construction Services 5.3 Property Fund & REITs 5.4 Property Development
6. Resources	6.1 Energy and Utilities 6.2 Mining
7. Services	7.1 Commerce 7.2 Health Care Services 7.3 Media & Publishing 7.4 Professional Services 7.5 Tourism & Leisure 7.6 Transportation & Logistics

Industry	Sector
8. Technology	8.1 Electronic Components 8.2 Information & Communication Technology

Also, the firms are grouped according to the market capitalization as shown below:

- 1) Listed firms in SET50 according to SET classification are in SET50 group
- 2) Listed firms in SET100 according to SET classification excluded SET50 are in SET51-100 group
- 3) Listed firms in Non-SET100 which ranked 101-200 in terms of market capitalization are in SET101-200 group
- 4) Listed firms in Non-SET100 which ranked 201-300 in terms of market capitalization are in SET201-300 group
- 5) Listed firms in Non-SET100 which ranked 301 onward in terms of market capitalization are in SET301+ group

Amounts of revenue vary according to the sizes of market capitalization. The groups with larger market capitalization generally post higher average earnings and vice versa (Table 2).

**Table 2 Average revenue and range of revenue of firms categorized by market capitalization in 2016**

(unit: million THB)

	SET50	SET51-100	SET101-200	SET201-300	SET301+	รวม
Average revenue (mean)	142,129	12,858	17,401	5,295	2,399	20,742
Median	57,730	9,580	7,640	3,739	1,246	3,377
Highest revenue	1,737,145	48,389	172,790	23,950	56,599	1,737,145
Lowest revenue	8,355	1,453	320	323	4	4

### **1.3 Limitations of database**

Since there are neither regulations nor standards on OFDI and revenue from abroad reporting system, listed firms may or may not report such information. As such, this database may not fully reflect all the information.

To increase efficiency and accuracy of database of OFDI and revenue from abroad in the future, Research Department at Stock Exchange of Thailand would like to propose for standardized information disclosure and technology development for centralized OFDI and revenue from abroad information collection. However, the development of such processes may take some time.

*The Stock Exchange of Thailand fully supports the access of OFDI database by responsible OFDI policy making government sectors and educational institutions that wish to pursue this information for the use of further studies that contribute to economic development.*

## Chapter 2: Status of Listed Firms' Outward Foreign Direct Investment

Over the past 10 years, the number of Thai listed firms undertaking outward foreign direct investment<sup>3</sup> (OFDI) has increased steadily. By the end of 2016, there were 198 firms, increased from 192 firms in 2015.

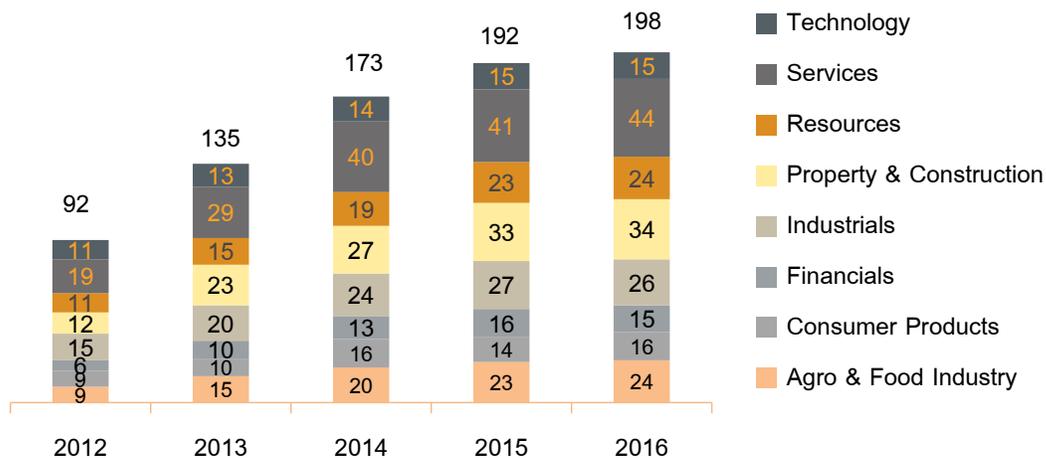
### 2.1 Outward Foreign Direct Investment Status Classified by Industry

In 2016, Services industry showed the largest number of 44 firms with OFDI whereas Financials industry and Technology industry showed the smallest of 15 firms. In the previous year, Services industry showed the largest number, however, an industry with the smallest number was Consumer Products which accounted for 14 firms.

The number of Thai listed firms undertaking OFDI increased in 5 industries: Agro & Food industry, Consumer Products, Property & Construction, Resources and Services. Technology Industry remained unchanged. Financials and Industrials, however, showed a decrease in number of firms from the previous year. (Figure 1)

**Figure 1 Number of Thai listed firms undertaking OFDI classified by industry**

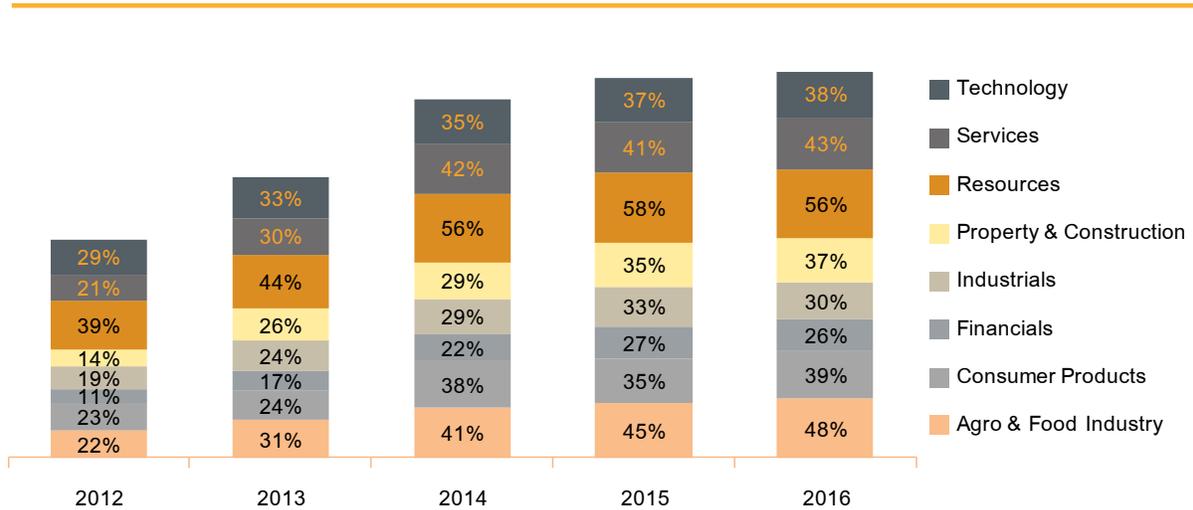
(data end of year)



<sup>3</sup> Firms undertaking OFDI at the end of year, no matter how long firms have been investing.

As there were unequal numbers of firms in different industries, the ratio of firms undertaking OFDI to the total number of firms in each industry should be taken into consideration. In 2016, Resources industry had the highest proportion of firms undertaking OFDI, representing 56%, followed by Agro & Food Industry of 48%, and Services industry of 43%, while Financials industry had the lowest proportion of 26%. (Figure 2)

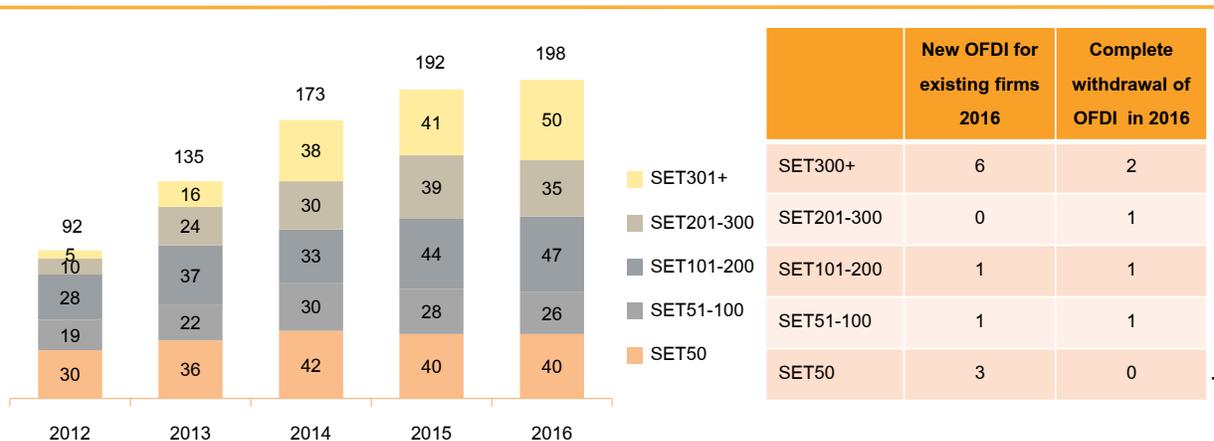
**Figure 2 Proportion of Thai listed firms undertaking OFDI to the total number of firms in each industry**



## 2.2 Outward Foreign Direct Investment Status Classified by Firms' Size

In 2016, the number of large firms in SET50 group undertaking OFDI remained unchanged at 40 firms, equivalent to 80% of SET50. SET51-10 firms undertaking OFDI showed a decrease from 28 to 26 firms. Non-SET100 (SET101-200, SET201-300 and SET301+), however, showed an increase from 124 in 2015 to 132 firms in 2016. (Figure 3)

**Figure 3 Number of Thai listed firms undertaking OFDI classified by firm size**



Possible reasons for changes in number of firms undertaking OFDI in each group, for instance, are 1) Changes of firms from one group to another due to changes in their market capitalization 2) New Listing of firms that have already had OFDI prior to being listed 3) Delisting of firms undertaking OFDI 4) New OFDI for the existing firms and 5) Complete withdrawal of OFDI by existing firms.

For this research study, we analyzed only changes caused by existing firms undertaking OFDI for the first time; and existing firms that completely withdrew their investment. Not taken into consideration were: firms that have already had OFDI prior to being listed, the delisted firms with OFDI, and the firms transferred from one group to another. There were three additional SET50 firms undertaking OFDI for the first time and no SET50 firm withdrew their investment. Among SET51-100 group, there were 1 firm undertaking OFDI for the first time and 1 firm withdrew their investments.

As for Non-SET100 (SET101-200, SET201-300 and SET301+) group, there were 7 firms undertaking OFDI for the first time whereas 4 firms withdrew their investment.

## **2.3 Outward Foreign Direct Investment Status Classified by Regions**

At the end of 2016, ASEAN is the major investment destination with 78% of the total 198 firms undertaking OFDI. Breaking into sub-regions, CLMV, a high growth sub-region, attracted 116 firms or equivalent to 59% of the total firms.

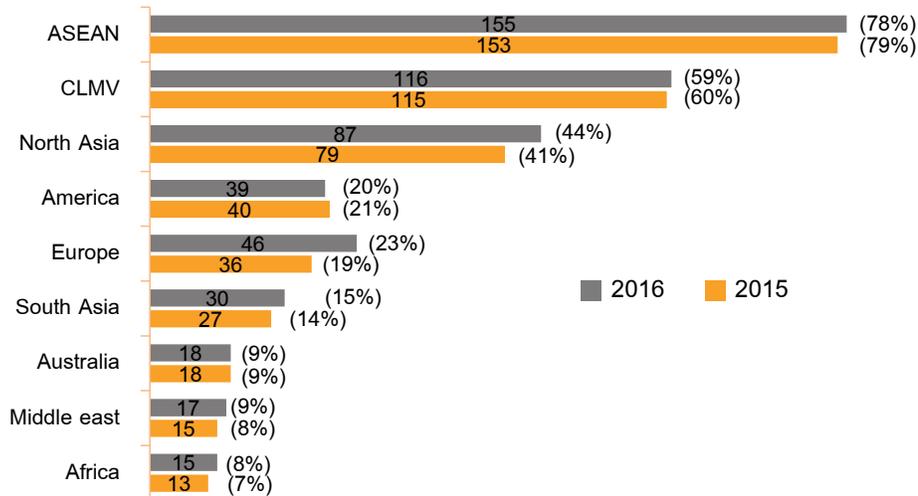
In 2016, the proportion of OFDI firms classified by region illustrated no significant change except for North Asia<sup>4</sup> and Europe region. There was a rise from 79 firms (41%) to 87 firms (44%) investing in North Asia. At the same time, Europe region attracted 10 more firms from 36 firms (19%) to 46 (23%) firms. It is important to acknowledge that many companies invested in more than one region. Thus, the calculation contained repetitive counts of the number of the company if it invested in more than one region. (Figure 4)

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<sup>4</sup> North Asia: China, Japan, Hong Kong, Taiwan, S.Korea, Macau, Mongolia

**Figure 4 Number of Thai listed firms undertaking OFDI classified by region**

(The proportion of listed firms invested in each region to the total 198 companies with overseas investment in 2016, 192 companies in 2015\*)



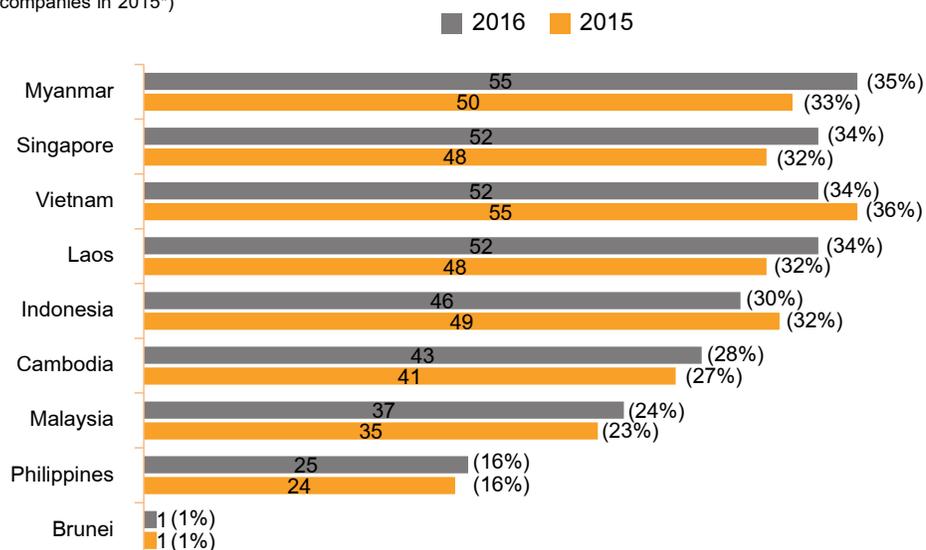
\*Note: A company has invested in more than one region, the calculation contained repetitive counts of the company if it invested in more than one region.

Looking into ASEAN, there were 55 Thai listed firms with investment in Myanmar, the highest number comparing to any other ASEAN countries in 2016, following by Singapore, Vietnam, Laos which yielded the same number of investing firms at 52 firms or equivalent to 34% of total firms investing in ASEAN.

Compared to 2015, more firms invested in Myanmar, Singapore, Laos, Cambodia, Malaysia and Philippines, but fewer firms invested in Vietnam and Indonesia. (Figure 5)

**Figure 5 Number of Thai listed firms undertaking OFDI classified by ASEAN countries**

(The proportion of listed firms invested in each country to the total 155 companies invested in ASEAN in 2016, 153 companies in 2015\*)

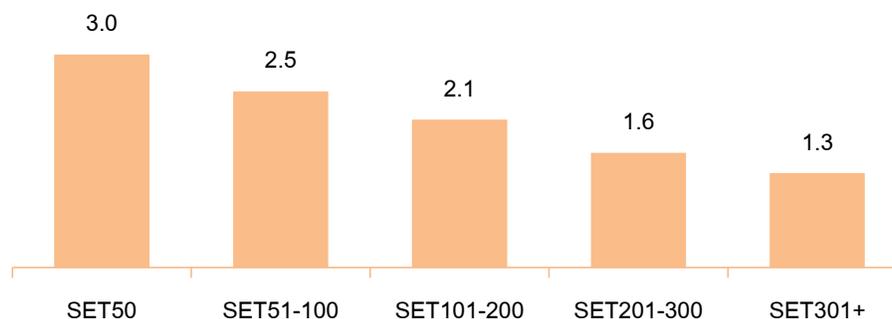


\*Note: A company has invested in more than one region, the calculation contained repetitive counts of the company if it invested in more than one region.

A firm may have invested in more than one country or region. Noticeably, the bigger firms have more diversified investment in region than the smaller ones. A single SET50 firm, on average, invested in 3 different regions in 2016 while on average SET301+ firm invested in 1.3 regions. (Figure 6)

**Figure 6 Average number of regions invested per Thai listed firm**

(data as of end 2016)



## Chapter 3: Value of Outward Foreign Direct Investment

**Value of outward foreign direct investment (OFDI)** refers to the amount of capital flow to invest abroad. In 2016, Thai listed firms had the OFDI net value<sup>5</sup> of THB 185 billion, an increase from THB 75 billion in 2015 due to 3 large transactions (more than THB 10 billion per transaction) which accounted for 76 billion or equivalent to 41% of total OFDI net value.

### 3.1 Value of Outward Foreign Direct Investment Classified by Industry

In 2016, every industry except Consumer Products demonstrated an increase in net OFDI value. Of this, Agro and Food industry had the highest net OFDI value, surpassed Resources industry which had always been the first rank in past decades. (Table 3)

Agro and Food industry recorded net OFDI value of THB 61 billion, increased from THB 27 billion in the previous year. Of THB 61 billion, a major transaction accounted for THB 39 billion derived from an acquisition of Bellisio Parent, a frozen food producer and distributor company in the United States of America by Charoen Pokphand Foods PCL.

Resources, the second ranked industry in term of OFDI value in 2016, showed net OFDI value of THB 56 billion consisting of a THB 22 billion transaction from PPT Exploration and Production PCL continuing investment in a petrochemical subsidiary in Canada.

Compared to past decades, Financials industry showed significant net OFDI value growth in 2016. The current year value accounted for THB 13 billion, of which THB 5.3 billion came from investment of Bank of Ayudhaya PCL to acquire Hattha Kaksekar Limited, a subsidiary operating in microfinance business in Cambodia.

Considering net OFDI value in the last decade, Resources industry had the highest amount of THB 560 billion or equivalent to 50% of the 11-year accumulated amount (THB 1.1 trillion). Following by

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<sup>5</sup> Net OFDI value is OFDI flow deducted by complete withdrawal of OFDI.

Consumers Product and Agro and Food industry, of the accumulated amount, these two industries accounted for 17% and 16%, respectively. (Table 3)

**Table 3 Net OFDI value classified by industry**

(million THB)

	Agro & Food Industry	Resources	Industrials	Property & Construction	Financials	Services	Technology	Consumer Products	Grand Total
2006	1,933	5,875	446	5,879	0	182	932	783	16,030
2007	2,353	17,975	8,435	2,864	0	1,403	401	1,065	34,496
2008	3,420	23,746	6,323	1,411	470	2,825	1,219	1,040	40,455
2009	2,848	30,181	2,373	3,466	0	4,037	425	1,229	44,559
2010	29,711	159,705	2,829	1,781	0	9,377	1,693	369	205,464
2011	5,084	31,336	70,277	18,753	0	3,948	2,066	2,318	133,782
2012	3,586	114,444	61,186	10,388	64	5,539	1,151	261	196,618
2013	2,895	44,441	5,563	10,161	222	4,083	721	2,369	70,456
2014	39,007	35,658	6,957	19,339	1,903	10,919	1,359	659	115,800
2015	27,650	39,915	-1,493	4,199	3,095	1,120	544	147	75,177
2016	61,895	56,810	29,894	13,774	12,906	6,031	3,842	-41	185,111
Grand Total	180,381	560,086	192,790	92,016	18,660	49,462	14,352	10,200	1,117,948

### 3.2 Value of Outward Foreign Direct Investment Classified by Region

In 2016, North America and ASEAN have remained the main target regions in term of capital flow amount. The net value of investment in North America was THB 90 billion, of these there were 3 transactions amounted over THB 10 billion which are: 1) An acquisition of Bellosio Parent Company in the United States of America by Charoen Pokphand Foods PCL to operate in frozen food production and distribution business which accounted for THB 39 billion 2) A continuing investment in petrochemical investment subsidiary in Canada by PPT Exploration and Production PCL which accounted for 22 billion and 3) An investment in chemical factory in the United States of America by Indorama Ventures which accounted for THB 15 billion. These aforementioned transactions contributed to 84.6% of the net OFDI value in North America in 2016. ASEAN, on the other hand, had net OFDI value of THB 49 billion with no transaction accounted for over THB 10 billion. (Table 4)

**Table 4 Net OFDI value classified by region**

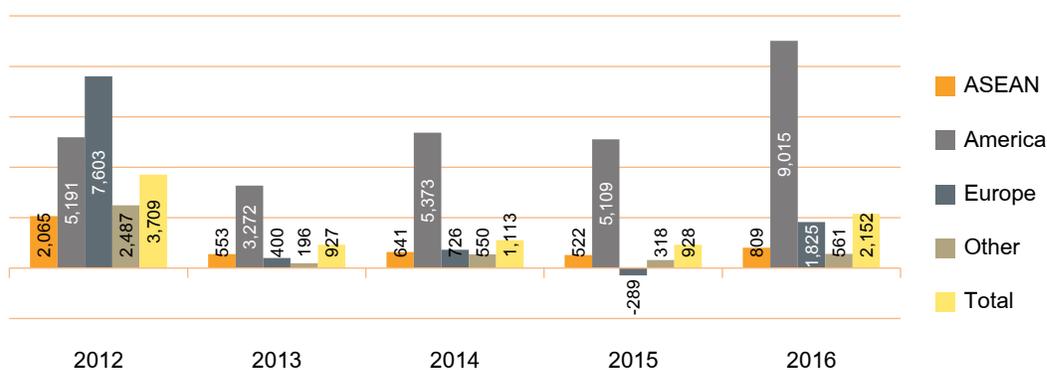
(million THB)

	America	ASEAN	Europe	Australia	Africa	North Asia	South Asia	Middle East	Grand Total
2006	506	9,481	616	-	-	4,951	477	-	16,030
2007	5,180	6,284	3,221	-	16,428	2,146	1,230	7	34,496
2008	169	14,254	6,521	660	379	18,145	327	-	40,455
2009	816	19,720	2,375	18,551	0	2,104	935	58	44,559
2010	69,685	20,930	29,735	70,939	321	13,541	132	182	205,464
2011	27,892	31,874	37,984	26,855	-	5,984	3,190	3	133,782
2012	41,528	60,013	30,414	2,551	59,049	2,228	835	1	196,618
2013	29,446	30,917	4,402	4,094	302	791	495	10	70,456
2014	37,610	45,293	10,893	5,255	5,768	10,055	875	51	115,800
2015	40,876	29,780	- 3,753	3,576	1,087	2,309	720	582	75,177
2016	90,153	49,342	23,722	1,455	579	15,453	5,212	- 806	185,111
Grand Total	343,859	317,888	146,129	133,936	83,913	77,705	14,430	88	1,117,948

The average net investment value per Thai listed firm in North America, Europe and ASEAN were THB 9 billion, 1.8 billion and 800 million, respectively. ASEAN, apparently, showed the lowest amount among the three major regions. In 2016, there were 3 largest investment transactions in North America which have been mentioned in the above paragraph. (Figure 7)

**Figure 7 Average OFDI per Thai listed firm classified by investment target region**

(million THB)



Number of firms invested abroad in each year					
	2012	2013	2014	2015	2016
ASEAN	29	55	70	57	61
America	8	9	7	8	10
Europe	4	11	15	13	13
Others	26	29	40	26	39
Total	53	76	104	81	86

### 3.3 Value of Outward Foreign Direct Investment Classified by Firm Size

Considering the value of investment according to market capitalization, listed firms in the SET50 group have had the highest total investment consistently. In 2016, SET50 recorded total investment value of THB 129 billion representing 68.5% of net OFDI flow. (Table 5)

**Table 5 Net OFDI value classified by firm size**

(million THB)

	SET50	SET51-100	SET101-200	SET201-300	SET301+	Grand Total
2006	12,887	736	1,837	520	50	16,030
2007	26,636	2,836	4,570	134	319	34,496
2008	33,812	2,753	3,757	4	129	40,455
2009	35,579	2,350	2,935	3,329	99	44,559
2010	188,439	4,601	6,850	4,925	649	205,464
2011	100,196	5,354	13,054	2,031	13,147	133,782
2012	172,791	6,590	4,892	426	11,915	196,618
2013	52,917	4,089	7,532	814	5,105	70,456
2014	95,106	6,190	11,992	1,931	580	115,800
2015	79,618	8,250	12,773	2,355	-27,818	75,177
2016	129,645	9,465	44,940	479	582	185,111
Grand Total	927,627	53,214	115,131	16,947	4,756	1,117,948

Compared to the previous year, SET101-200 showed a sharp rise in investment from THB 12 billion to THB 45 billion owing to 3 main reasons: 1) 2016 was the first year that BANPU Power PCL which had THB 9.5 billion investment overseas, equivalent to 21% of SET101-200's overseas investment, became listed company. 2) Group Lease PCL increased its overseas investment from THB 260 million to THB 7.3 Billion in leasing and microfinance business in various countries. 3) Bank of Ayudhaya PCL acquired Hattha Kaksekar Limited for THB 5.3 billion to operate microfinance business in Cambodia.

### 3.4 Value of Accumulated Outward Foreign Direct Investment Classified by Industry and Region

Different industries have different regional investments. According to accumulated OFDI from 2006 to 2016 information, the relationship between industry and regional investment can be classified to 2 main groups as follow:

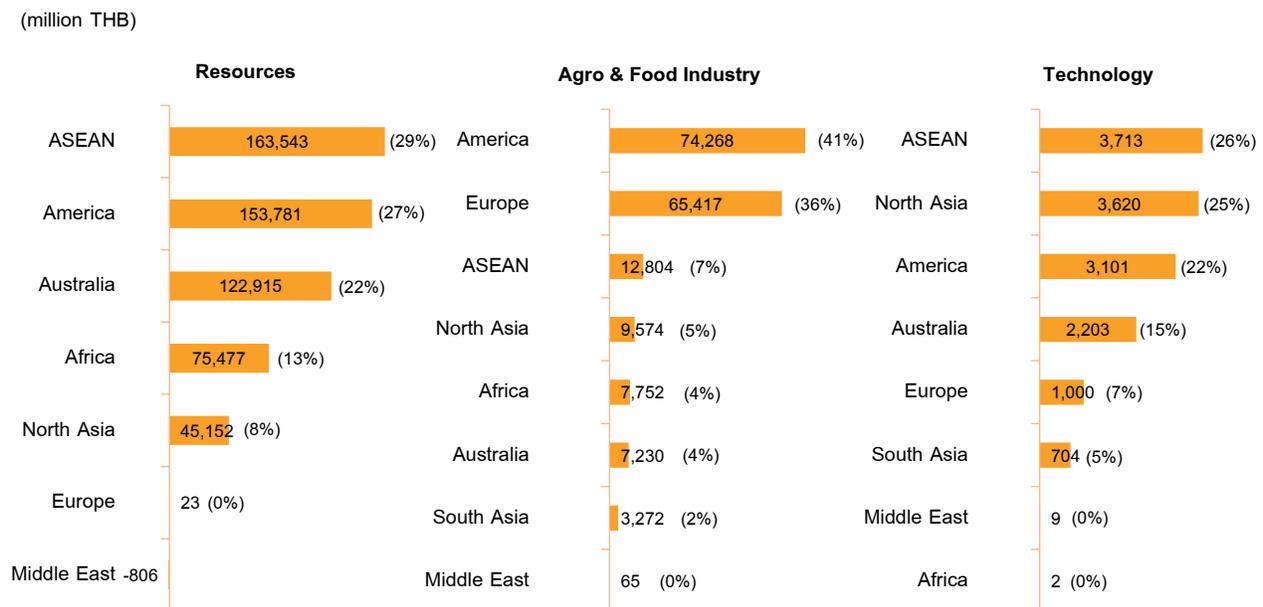
1. Group with accumulated OFDI in a certain region less than 50% of total OFDI can be classified into 3 sub groups (Figure 8) accordingly:

1.1 Resources industry had highest accumulated OFDI in ASEAN following by America and Australia which was accounted for 29%, 27% and 22% of total OFDI, respectively.

1.2 Agro & Food industry had highest accumulated OFDI in America following by Europe and ASEAN which was accounted for 41%, 36% and 7% of total OFDI, respectively.

1.3 Technology industry had highest accumulated OFDI in ASEAN following by North Asia and North America which was accounted for 26%, 25% and 22% of total OFDI, respectively.

**Figure 8 Accumulated net value of OFDI between 2006 - 2016 classified by industry and region**



2 Groups with accumulated OFDI in a certain region greater than 50% of total OFDI can be classified into 5 sub groups (Figure 9) accordingly:

2.1 Industrials industry had highest accumulated OFDI in America followed by Europe and ASEAN which was accounted for 53%, 34% and 9% of total OFDI, respectively.

2.2 Property and Construction industry had highest accumulated OFDI in ASEAN followed by Europe and America which was accounted for 75%, 11% and 7% of total OFDI, respectively.

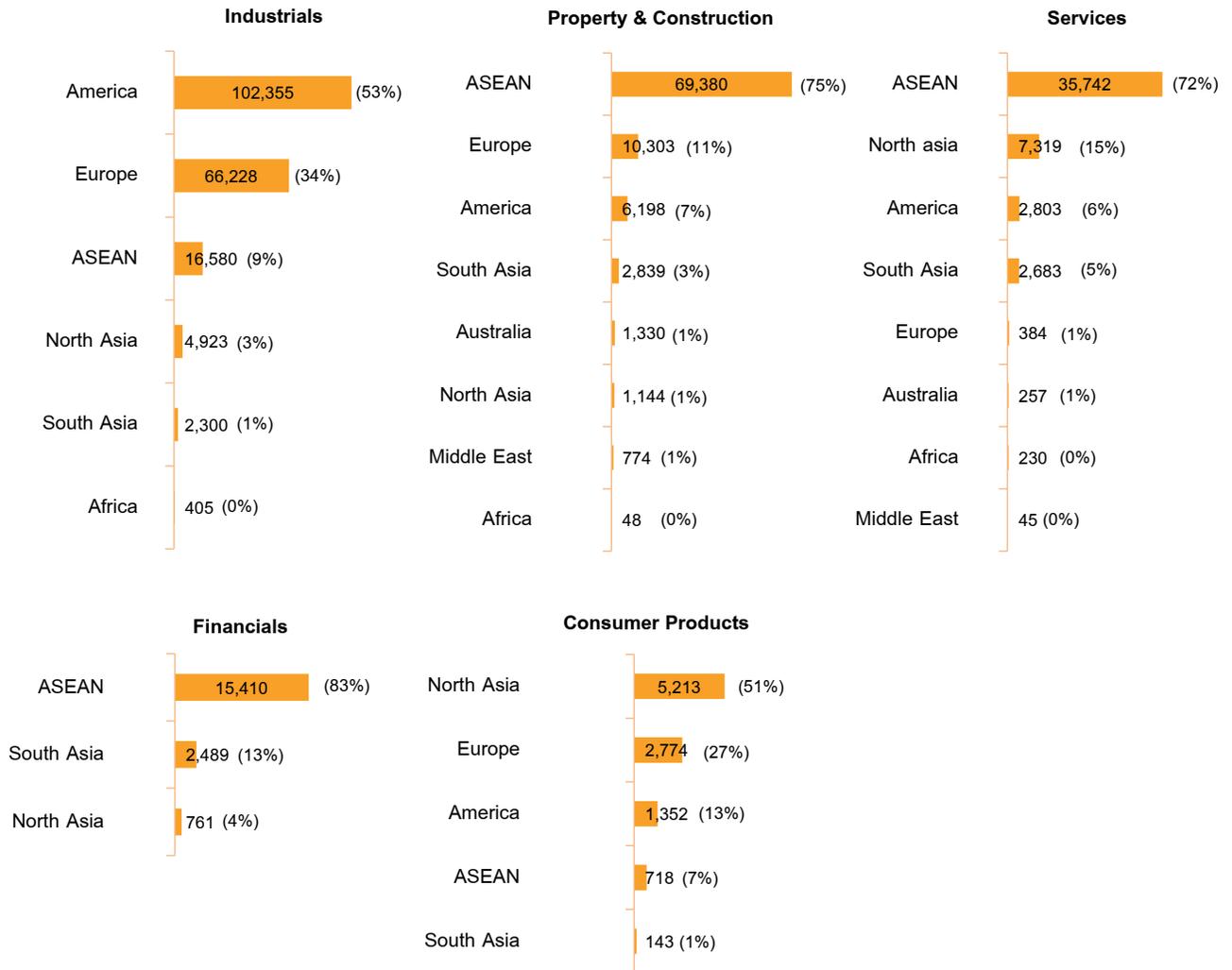
2.3 Services industry had highest accumulated OFDI in ASEAN followed by North Asia and America which was accounted for 72%, 15% and 6% of total OFDI, respectively.

2.4 Financial industry invested in only three regions and was considered to have the least diversified regional investments. The industry had highest accumulated OFDI in ASEAN followed by South Asia and North Asia which was accounted for 83%, 13% and 4% of total OFDI, respectively.

2.5 Consumers Products industry had highest accumulated OFDI in North Asia followed by Europe and America which was accounted for 51%, 27% and 13% of total OFDI, respectively.

**Figure 9 Accumulated net value of OFDI between 2006 - 2016 classified by industry and region**

(million THB)



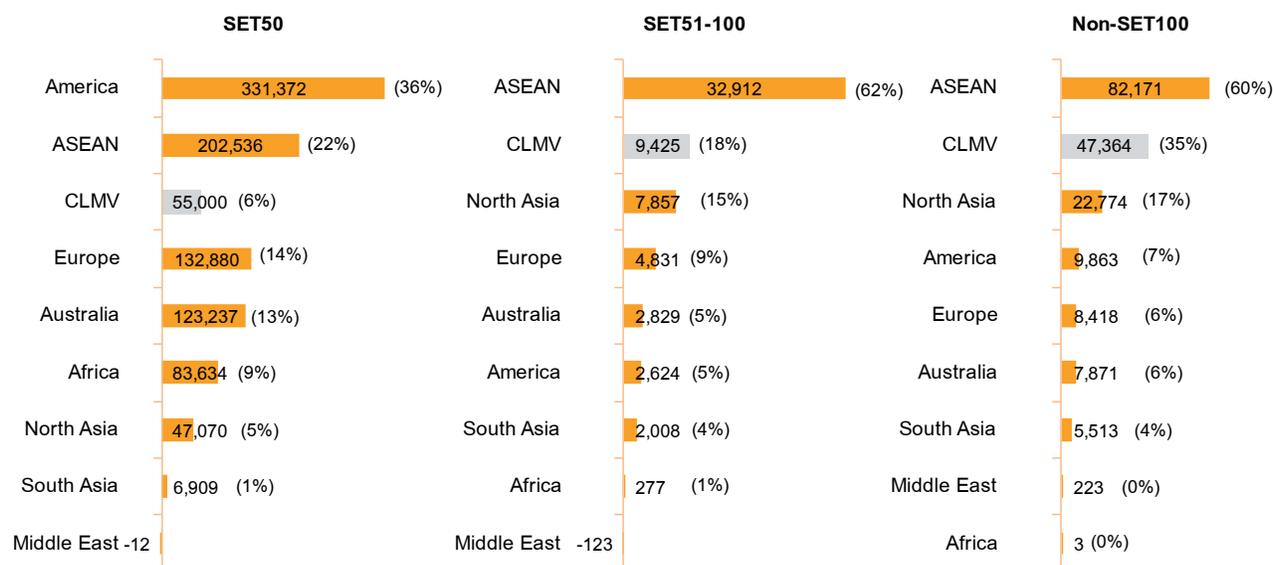
### 3.5 Value of Accumulated Outward Foreign Direct Investment Classified by Firm Size and Region

Considering accumulated OFDI amount from 2006-2016, different firm size has different geographical diversification. SET50 companies invested in more diversified regions and did not have accumulated OFDI in any region greater than 50% of the total accumulated OFDI. In addition, SET50 companies had the highest accumulated OFDI in America region, following by ASEAN and Europe which was accounted for 36%, 22% and 14%, respectively.

On the other hand, SET51-100 and Non-SET100 shared common characteristics of having highest accumulated OFDI in ASEAN for over 50% of the total accumulated investment following by North Asia. SET51-100 had accumulated OFDI in ASEAN and North Asia at 62% and 15% of total investment, respectively. With slightly different proportion, Non-SET100 had those of at 60% and 17%, respectively. (Figure 10)

**Figure 10 Accumulated net value of OFDI between 2006 - 2016 classified by firm size and region**

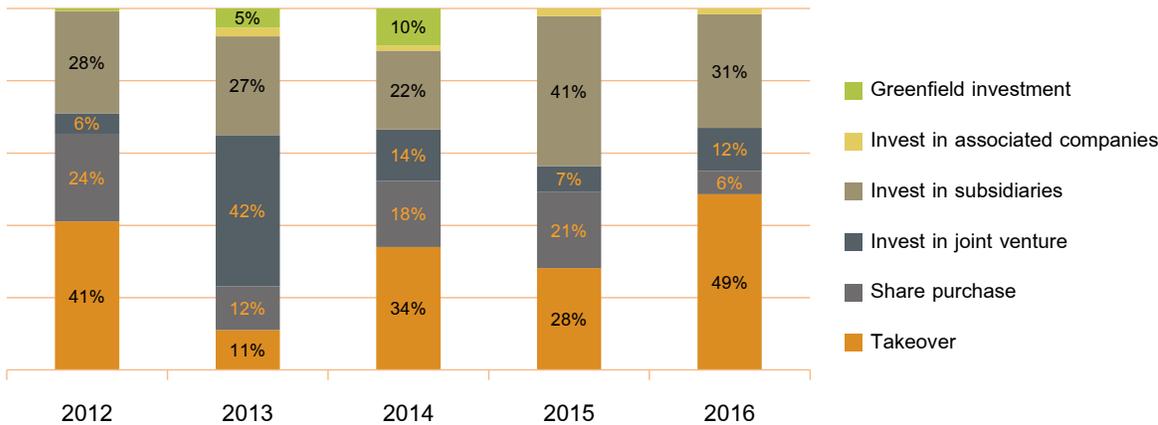
(million THB)



### 3.6 Value of Outward Foreign Direct Investment Classified by Investment Method

There are various OFDI options for listed firms to achieve their overseas goals. Due to the different natures and complexities of businesses in different countries, cooperation with foreign business partners turned out to be the preferred alternative for listed firms than to investing on their own. When looking at the investment that aimed to increase controls, listed firms preferred to invest in the forms of takeovers or share purchases from foreign partner firms that had already possessed local knowledge instead of setting up new businesses on their own. In 2016, the most preferred investment method among listed firms were taking over, purchasing portion of shares from foreign firms and jointly investing which was accounted for 67% of the total investment flow. (Figure 11)

**Figure 11 The proportion of OFDI value classified by investment method**



## Chapter 4: Revenue from Abroad

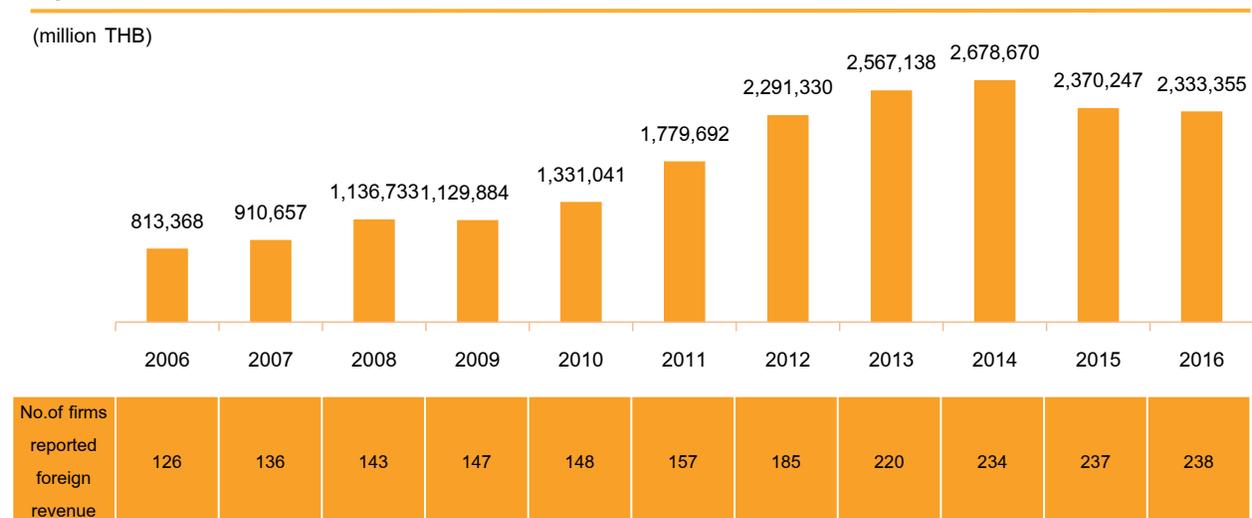
“Revenue from abroad” refers to both the revenue derived from businesses operating overseas and the revenue derived from exports. Unfortunately, there are firms that group only revenue from overseas based on the geographical location of customers without indication whether the derived amount is from overseas operations or exports. Therefore, foreign revenue of these firms will be grouped together and referred to ‘revenue from abroad’.

### 4.1 Revenue from Abroad Overview

#### 4.1.1) Revenue from Abroad of Thai Listed Firms that Disclosed the Revenue from Abroad

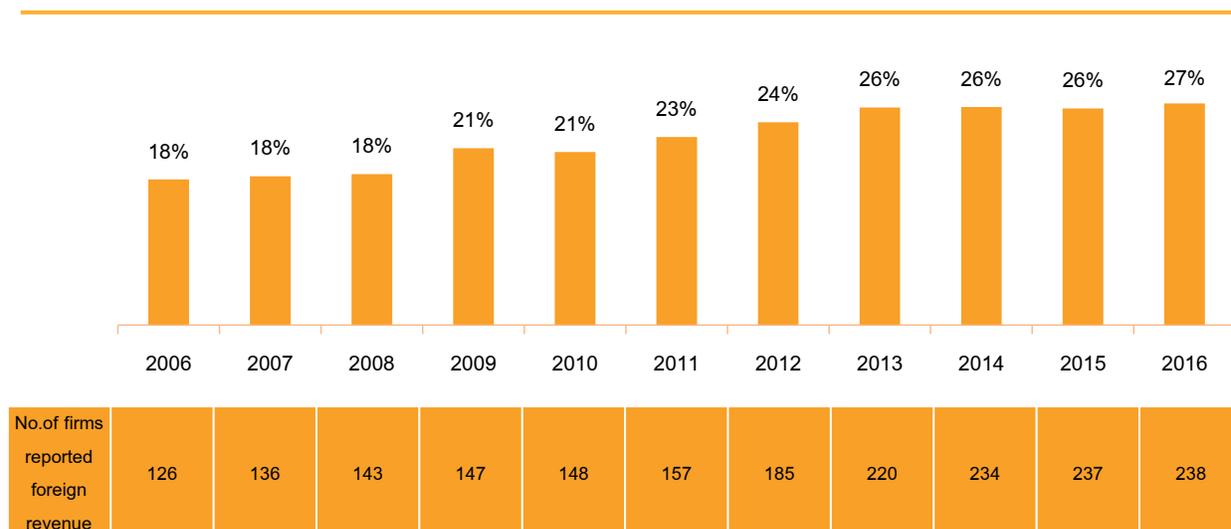
In 2016, 238 listed firms disclosed a total of THB 2.33 trillion overseas revenue, decreased by 1.6% from THB 2.37 trillion in the previous year. (Figure 12)

**Figure 12 Revenue from abroad**



Overseas revenue played an increasing role on the total revenue of listed firms. According to the disclosed information, proportion of overseas revenue to total revenue has been increasing from 18% in 2006 to 27% in 2016. Please be noted that, in a certain year a number of listed firms disclosing the information was different. (Figure 13)

**Figure 13 The proportion of revenue from abroad to total revenue (on average)**



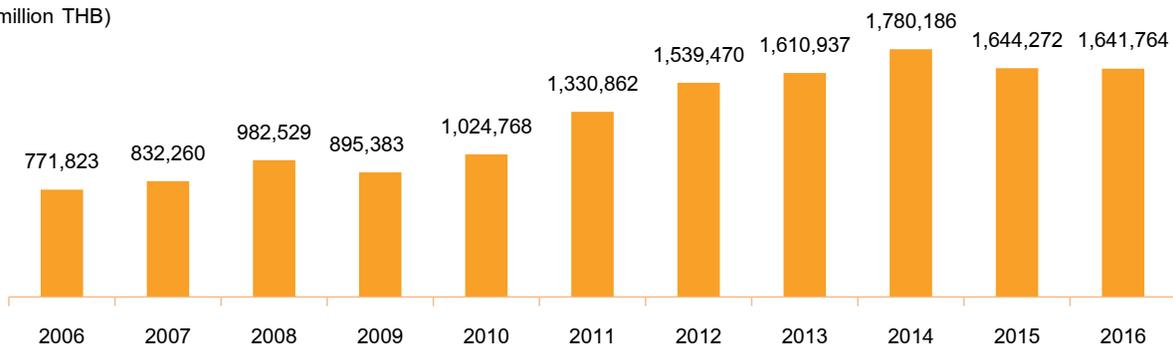
**4.1.2) Revenue from Abroad of Thai Listed Firms that Continuously Been Disclosing the Revenue from Abroad from 2006 to 2016 (107 Listed Firms)**

In order to look into ‘real’ foreign revenue growth, excluding the effects of shifts in number of firms, the firms taken into account would be only those who had continuously reported foreign revenue from 2006 to 2016. As such, compared to the previous year, the total of 107 listed firms reported constant overseas revenue at THB 1.64 trillion while their domestic revenue decreased by 4%. However, from 2006 to 2016, average growth of overseas revenue was accounted for 8% per annual which was greater than 3% average growth of domestic revenue. (Figure 14-15)

**Figure 14 Revenue from abroad (same firms comparison)**

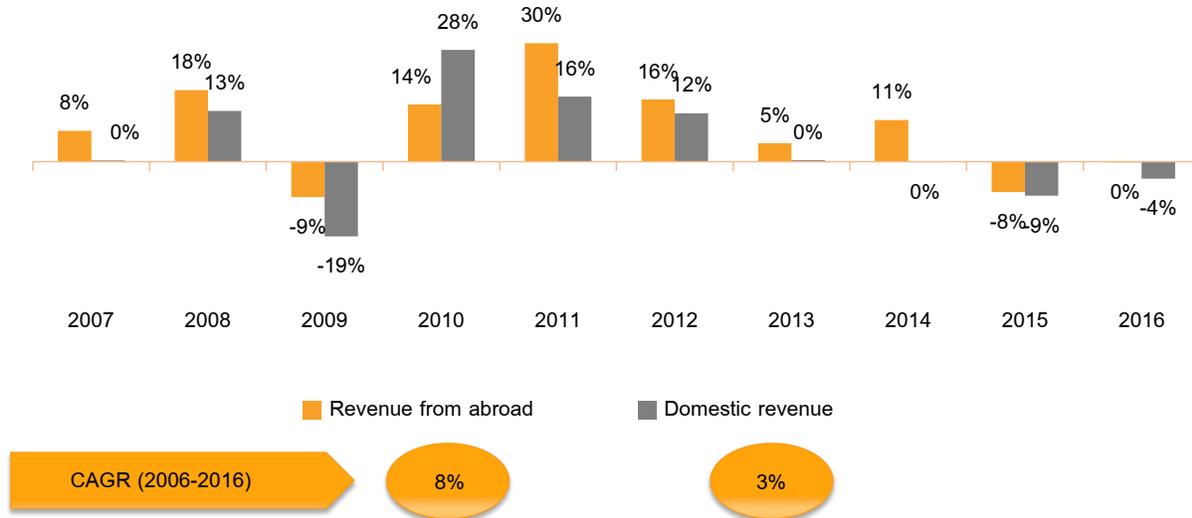
(Revenue of 107 companies continuously reporting from 2006 – 2016)

(million THB)



**Figure 15 Growth of revenue from abroad (same firms comparison)**

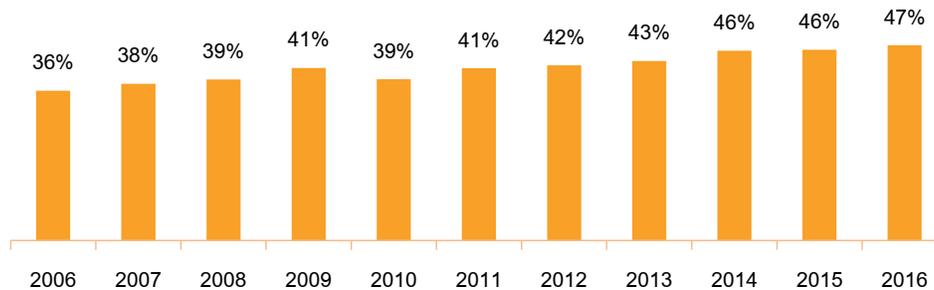
(Revenue of 107 companies continuously reporting from 2006 – 2016)  
(%YoY)



Overseas revenue played an increasing role on the total revenue of listed firms. According to a disclosed information from those aforementioned 107 listed firms, proportion of overseas revenue to total revenue continues to increase steadily from 46% in 2015 to 47% in 2016. (Figure 16)

**Figure 16 The proportion of revenue from abroad to total revenue (on average) (same firms comparison)**

(Revenue of 107 companies continuously reporting from 2006 – 2016)



## 4.2 Revenue from Abroad Classified by Industry

### 4.2.1 ) Revenue from Abroad of Thai Listed Firms that Disclosed the Revenue from Abroad

In 2016, among 8 industries, Agro and Food Industry had the highest revenue from abroad, overtaking Resources Industry which had the highest revenue in the prior years. Comparing to 2015, 3 industries reported increasing overseas revenue which are; Agro & Food, Financials and Property & Construction Industry. Other industries reported decreasing revenue. (Table 6)

**Table 6 Revenue from abroad classified by industry**

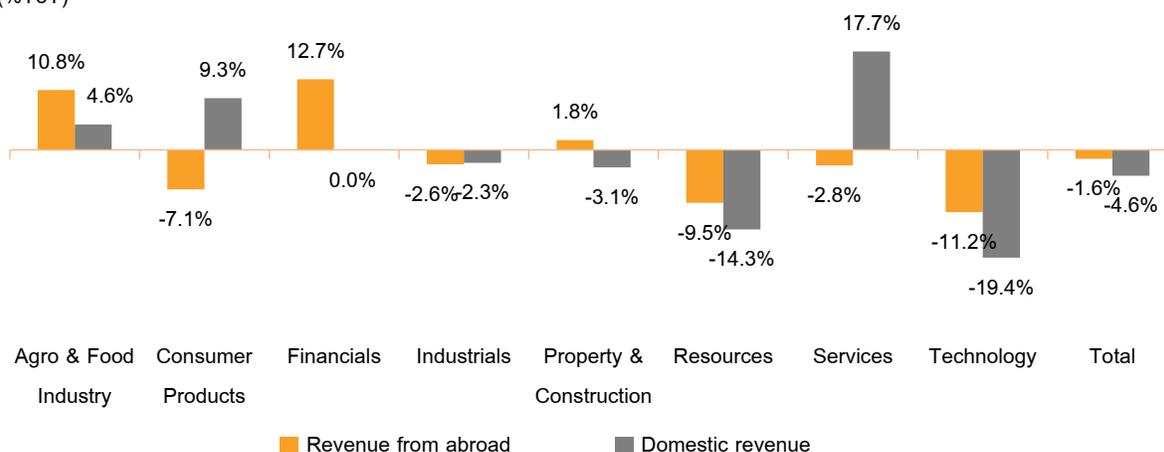
(million THB)

	Agro & Food Industry	Resources	Industrials	Property & Construction	Services	Technology	Consumer Products	Financials	Grand Total	No. of firms reported foreign revenue
2006	127,510	119,006	52,688	120,030	156,481	172,091	40,105	18,229	806,139	126
2007	140,248	138,878	89,682	135,655	167,547	169,539	40,172	21,463	903,184	136
2008	209,969	251,493	124,447	143,832	157,717	189,363	40,889	13,514	1,131,224	143
2009	189,438	358,923	120,522	129,289	128,185	158,485	33,930	9,238	1,128,010	147
2010	231,660	454,361	112,490	163,047	143,886	178,222	36,921	10,454	1,331,041	148
2011	284,900	641,511	268,443	188,038	151,139	186,368	44,329	14,964	1,779,692	157
2012	462,281	747,308	485,317	208,362	161,595	170,268	43,203	12,995	2,291,330	185
2013	494,960	893,820	526,085	231,526	193,034	167,005	44,437	16,269	2,567,138	220
2014	521,233	787,581	570,811	288,489	229,133	218,413	41,385	21,626	2,678,670	234
2015	527,543	623,572	454,077	279,062	222,427	197,313	41,619	24,634	2,370,247	237
2016	584,514	564,436	442,381	284,064	216,257	175,262	38,677	27,763	2,333,355	238
<b>No. of firms reported foreign revenue</b>										
2015	42	23	53	35	26	17	29	12	237	
2016	42	23	54	36	28	15	28	12	238	

Comparing to the previous year, total revenue from abroad decreased by 1.6% while domestic revenue decreased by a higher magnitude of 4.6%. Five of eight industries had higher overseas revenue growth than the domestic revenue growth. In other words, overseas revenue of those industries decreased in smaller magnitude compared to their domestic revenue. (Figure 17)

**Figure 17 Growth of revenue from abroad in 2016 classified by industry**

(Revenue of 237 companies reporting in 2015 and 238 companies reporting in 2016)  
 (%YoY)



Financials industry reported the highest overseas revenue growth at 12.7% compared to 2015 since 67% of financial firms had reported increasing overseas revenue. For Agro & Food industry, its revenue from abroad increased by 10.8% from 2015 because 70% of Agro & Food firms had reported increasing overseas revenue.

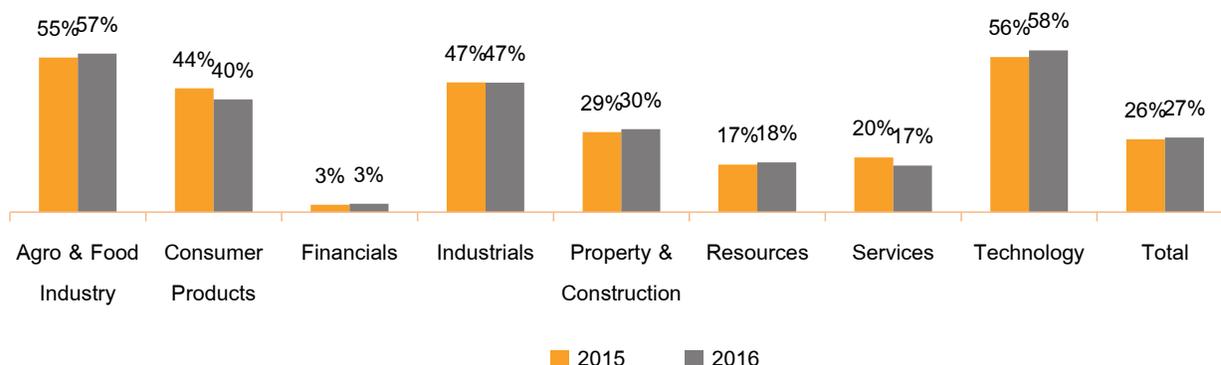
On the other hand, Technology industry reported the lowest overseas revenue growth (highest negative growth) at -11.2% from 2015 since 47% of technology firms reported decreasing overseas revenue. As those 47% firms accounted for 35% of total overseas revenue reported by Technology industry, their decreasing revenue had high impact on the industry's revenue growth rate.

Considering Resources industry, its revenue from abroad decreased by 9.5% compared to the previous year because 70% of resources firms reported decreasing overseas revenue.

Proportion of overseas revenue to total revenue increased to 27% from 26% compared to the previous year. Of this, 5 industries that had reported higher proportion are Agro & Food, Industrials, Property & Construction, Resources and Technology. (Figure 18)

**Figure 18 The proportion of revenue from abroad to total revenue (on average) classified by industry**

(Revenue of 237 companies reporting in 2015 and 238 companies reporting in 2016)



#### 4.2.2) Revenue from Abroad of Thai Listed Firms that Continuously Disclosed the Revenue from Abroad from 2006 to 2016 (107 Listed Firms)

In order to exclude the effects of shifts in number of firms, we only take into account the firms who continuously reported foreign revenue from 2006 to 2016. As such, the total of 107 firms reported constant revenue at THB 1.64 Trillion. (Table 7)

**Table 7 Revenue from abroad classified by (same firms comparison)**

(Revenue of 107 companies continuously reporting from 2006 – 2016)

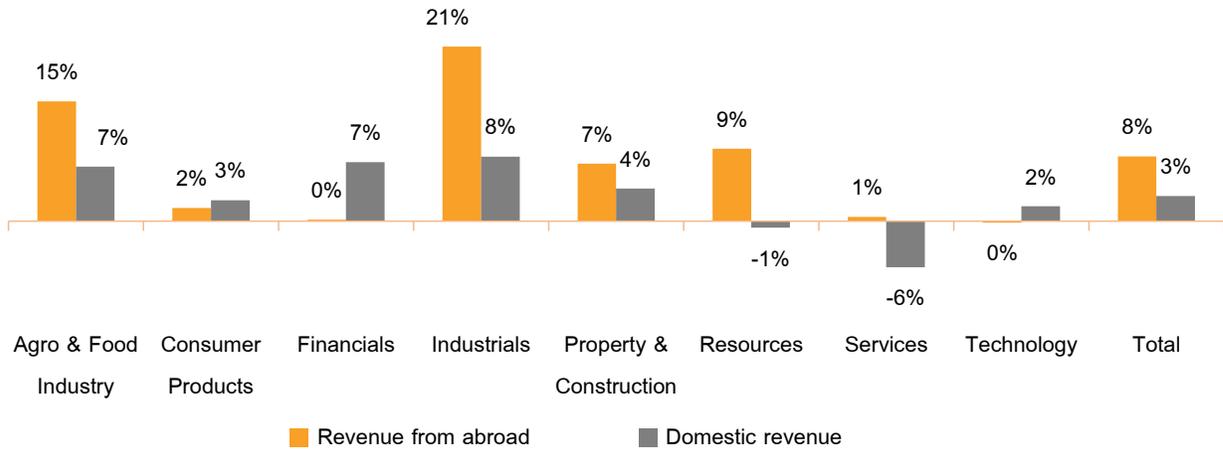
(million THB)

	Agro & Food Industry	Industrials	Resources	Property & Construction	Technology	Services	Consumer Products	Financials	Grand Total
2006	126,474	43,246	103,493	119,366	171,918	156,481	25,458	18,159	764,594
2007	139,352	64,932	103,255	134,932	169,404	167,547	25,699	19,666	824,786
2008	161,226	94,494	194,046	142,631	189,327	155,649	26,901	12,745	977,020
2009	160,088	107,924	181,898	127,644	158,450	126,139	22,439	8,926	893,509
2010	182,894	98,507	225,504	160,008	178,205	141,172	28,532	9,946	1,024,768
2011	226,986	224,491	320,340	179,256	186,320	146,777	32,564	14,129	1,330,862
2012	389,592	244,072	353,677	187,573	169,879	151,645	30,727	12,305	1,539,470
2013	417,589	264,746	366,104	199,059	166,252	151,495	33,529	12,164	1,610,937
2014	444,467	286,776	362,841	248,242	212,998	180,461	28,822	15,579	1,780,186
2015	446,074	278,677	279,106	232,286	191,316	170,938	29,269	16,607	1,644,272
2016	490,559	294,418	240,087	234,347	169,194	164,715	29,905	18,539	1,641,764
No. of firms reported foreign revenue	20	29	6	11	12	4	21	4	107

Considering long term growth from 2006 to 2016, nonetheless, the average growth of overseas revenue was accounted for 8% per annual which was greater than 3% average growth of domestic revenue. Categorized by industry, 5 industries had reported higher average growth of overseas revenue than those of domestic revenue which are; Agro & Food, Industrials, Property & Construction, Resources and Services. (Figure 19)

**Figure 19 Average growth of revenue from abroad from 2006 to 2016 classified by industry**

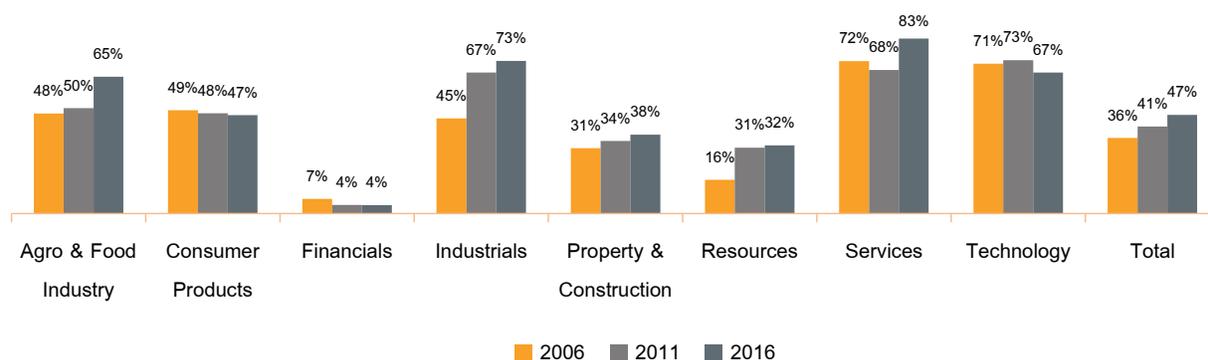
(Revenue of 107 companies continuously reporting from 2006 – 2016)  
(%CAGR)



Proportion of overseas revenue to total revenue of those 107 firms had been increasing from 36% in 2006 to 47% in 2016. Of which, 5 industries had reported higher overseas revenue proportion which are; Agro & Food, Industrials, Property & Construction, Resources and Services. (Figure 20)

**Figure 20 The proportion of revenue from abroad to total revenue (on average) classified by industry**

(Revenue of 107 companies continuously reporting from 2006 – 2016)



### 4.3 Revenue from Abroad Classified by Firm Size

#### 4.3.1 ) Revenue from Abroad of Thai Listed Firms that Disclosed the Revenue from Abroad

From overseas revenue information disclosed by all listed firms, SET50 reported THB 1.77 trillion, equivalent to 76% of total overseas revenue in 2016. (Table 8)

**Table 8 Revenue from abroad classified by firm size**

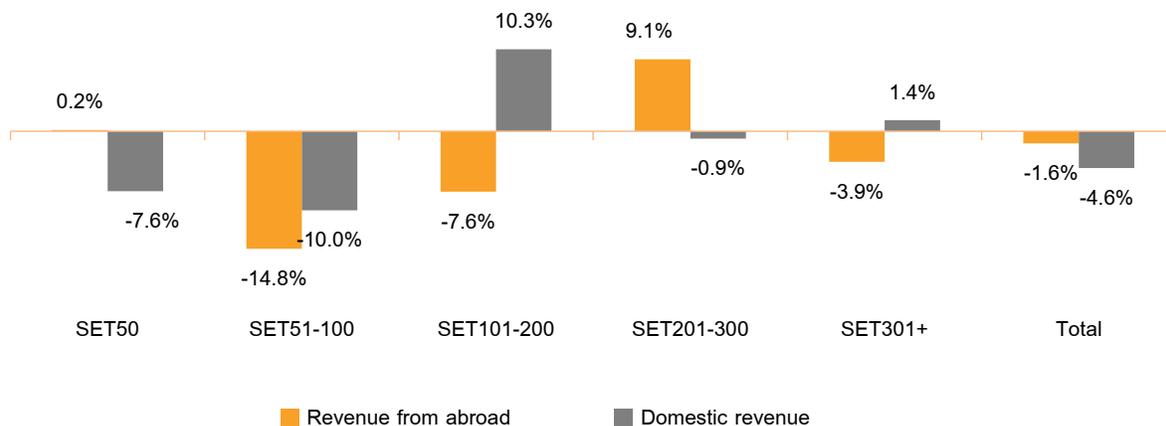
(million THB)

	SET50	SET51-100	SET101-200	SET201-300	SET301+	Grand Total	No. of firms reported foreign revenue
2006	522,119	40,291	88,883	81,902	80,173	813,368	126
2007	559,989	46,216	145,279	74,172	85,001	910,657	136
2008	677,342	49,237	235,764	76,216	98,175	1,136,733	143
2009	772,201	47,360	187,275	52,909	70,139	1,129,884	147
2010	925,136	49,809	210,348	63,911	81,837	1,331,041	148
2011	1,293,625	73,005	248,693	71,556	92,814	1,779,692	157
2012	1,766,369	79,940	276,903	77,181	90,937	2,291,330	185
2013	1,980,045	127,530	272,741	85,300	101,521	2,567,138	220
2014	2,040,553	150,645	275,489	98,915	113,067	2,678,670	234
2015	1,773,522	156,958	275,661	85,946	78,159	2,370,247	237
2016	1,776,202	133,683	254,605	93,726	75,139	2,333,355	238

SET50 and SET201-300 shared common characteristics of having an increasing amount of overseas revenue and having higher overseas revenue growth compared to any other groups which reported decreasing revenue from abroad. (Figure 21)

**Figure 21 Growth of firms with revenue from abroad in 2016 classified by Firm Size**

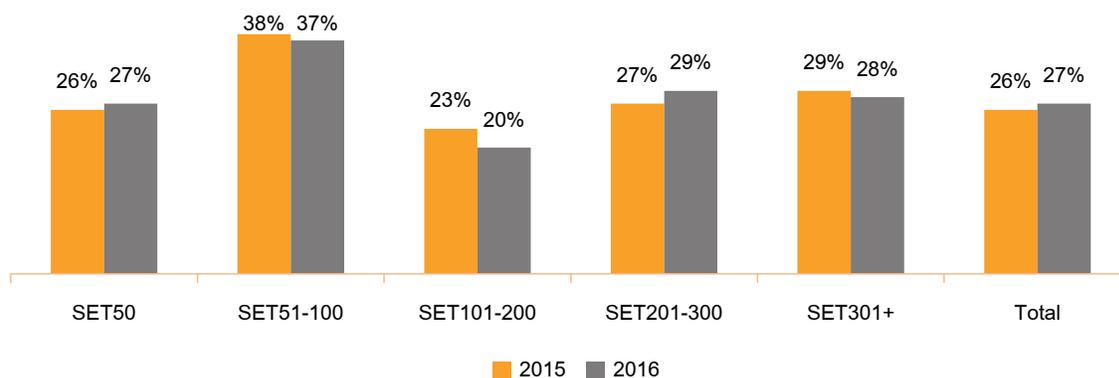
(Revenue of 237 companies reporting in 2015 and 238 companies reporting in 2016)  
(%YoY)



Compared to the previous year, proportion of overseas revenue to total revenue of SET50 increased slightly from 26% to 27% which was equivalent to the average proportion of all groups. Compared to any other groups, SET51-100 had the highest proportion of overseas revenue to total revenue at 37%. In contrast, SET101-200 had proportion of overseas revenue to total revenue at 20%, considered to be the lowest of all groups. (Figure 22)

**Figure 22 The proportion of revenue from abroad to total revenue (on average) classified by industry**

(Revenue of 237 companies reporting in 2015 and 238 companies reporting in 2016)



#### **4.3.2) Revenue from Abroad of Thai Listed Firms that Continuously Disclosed the Revenue from Abroad from 2006 to 2016 (107 Listed Firms)**

Considering only those firms that continuously report foreign revenue from 2006 to 2016 and can be categorized into 3 groups (Table 9 and Figure 23) as follow:

- Group with higher overseas revenue growth than domestic revenue growth constituted of SET50 and SET51-100. SET50 had average overseas revenue growth of 10% per annum while had domestic revenue growth of 3% per annum. For SET51-100, its annual average overseas revenue growth was 4% and domestic revenue growth was 1%.
- Group with lower overseas revenue growth than domestic revenue growth constituted of SET101-200 and SET201-300. SET101-200 had average overseas revenue growth of 3% per annum while had domestic revenue growth of 9% per annum. However only 2 out of 15 companies in SET101-200 had negative growth and weighed 52% of SET101-200 foreign revenue, if these 2 companies excluded, SET101-200 had average overseas revenue growth of 11% per annum while had domestic revenue growth of 8% per annum. For SET201-300, its annual average overseas revenue growth was -3%, in contrast, its domestic revenue growth was 5%. However only 4 out of 21 companies in SET201-300 had negative growth and weighed 33% of SET201-300 foreign revenue, if these 4 companies excluded, SET201-300 had average overseas revenue growth of 7% per annum while had domestic revenue growth of 5% per annum.
- Group with similar overseas revenue growth to domestic revenue growth constituted of SET300+ which average overseas and domestic revenue growth at 1%.

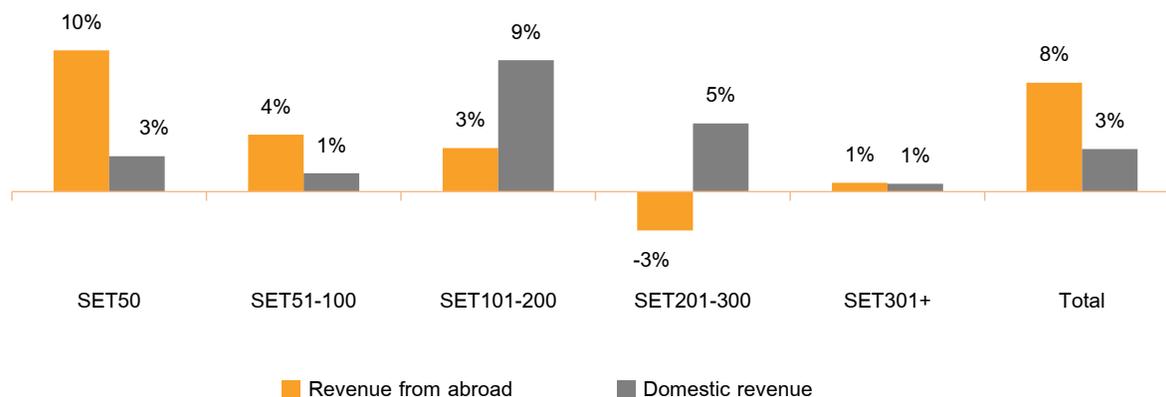
**Table 9 Revenue from abroad classified by firm size (same firms comparison)**

Revenue of 107 companies continuously reporting from 2006 – 2016)  
(million THB)

	SET50	SET51-100	SET101-200	SET201-300	SET301+	Grand Total
2006	510,639	39,627	88,804	73,538	59,215	771,823
2007	546,201	45,742	115,588	63,734	60,995	832,260
2008	659,702	48,332	144,583	63,675	66,238	982,529
2009	622,832	46,946	126,345	46,651	52,609	895,383
2010	720,132	48,441	133,316	55,413	67,466	1,024,768
2011	990,146	52,070	154,495	60,437	73,713	1,330,862
2012	1,221,364	50,220	135,158	62,775	69,953	1,539,470
2013	1,303,396	47,411	128,513	62,926	68,692	1,610,937
2014	1,425,494	60,465	159,590	67,427	67,210	1,780,186
2015	1,315,285	66,735	144,188	55,734	62,330	1,644,272
2016	1,343,089	59,222	120,963	55,433	63,056	1,641,764
<b>No. of firms reported</b>						
foreign revenue	17	7	15	21	47	107

**Figure 23 Average annual growth of firm with revenue from abroad from 2006 to 2016 classified by industry**

(Revenue of 107 companies continuously reporting from 2006 – 2016)  
(%CAGR)



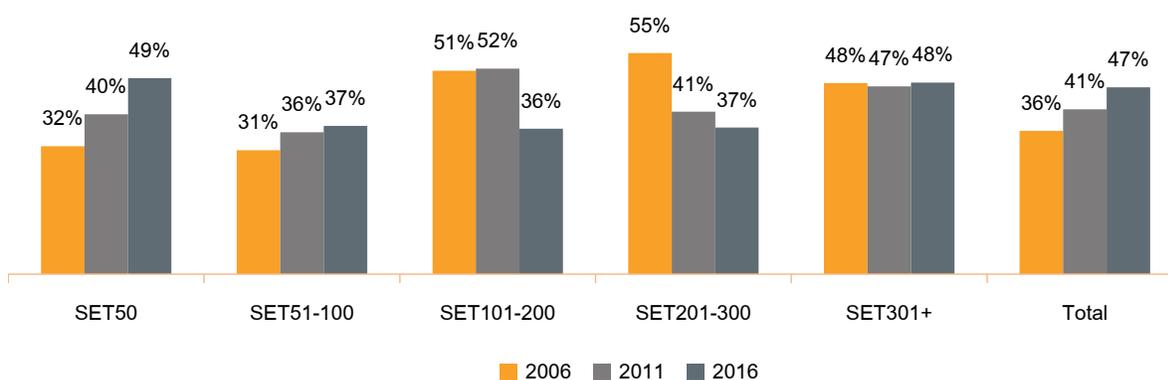
Since their long term average growth of overseas revenue was greater than those of domestic revenue, proportion of overseas revenue to total revenue of SET50 and SET51-100 had continuously been increasing from 2006 to 2016. For SET50, the proportion had been increasing from 32% in 2006 to 49% in 2016. With less magnitude, SET51-100's proportion had been rising from 31% in 2006 to 37% in 2016.

On the contrary, proportion of overseas revenue to total revenue of SET101-200 and SET201-300 had continuously been decreasing from 2006 to 2016. For SET101-200, the proportion had been declining from 51% in 2006 to 36% in 2016. With greater magnitude, SET201-300's proportion had been decreasing from 55% in 2006 to 37% in 2016.

The proportion of overseas revenue to total revenue of SET300+ had remained constant at 48% owing to the equivalency of its long term average growth of overseas revenue and those of domestic revenue. (Figure 24)

**Figure 24 The proportion of revenue from abroad to total revenue (on average) classified by firm size**

(Revenue of 107 companies continuously reporting from 2006 – 2016)



#### 4.4 Revenue from Abroad Classified by Region

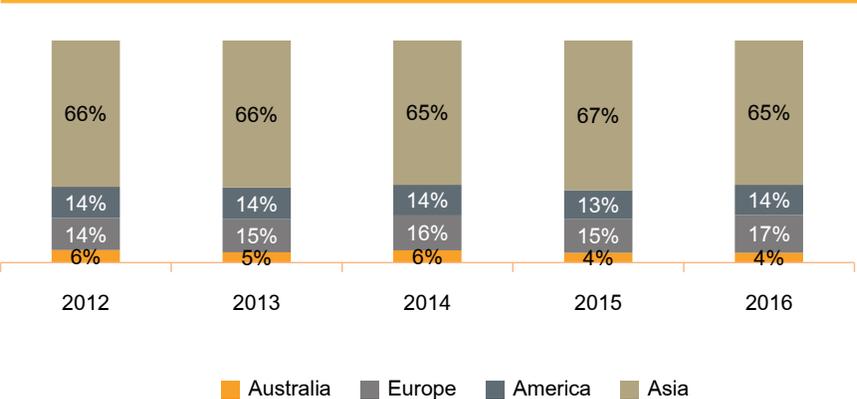
Since Thailand Financial Reporting Standards do not require listed firms to disclose revenue information by geographical segment, listed firms present their geographical revenue in various forms subject to their judgments. The smallest scale segment was by country following by sub-region, for example ASEAN, and by continent. At the same time, listed firms can choose not to disclose revenue information by geographical segment or choose to come up with their own geographical presentation. Therefore, the analysis of revenue from abroad classified by region may not accurate.

Total overseas revenue that could be classified by region was accounted for 60% of the total disclosed overseas revenue from the listed firms and was categorized to 4 main regions as follow: Asia, America, Europe and Australia.

Revenue from abroad of listed firms mostly came from Asia which was accounted for 65% of the total revenue from abroad that was able to be classified by region in 2016, following by Europe, America

and Australia, respectively. Moreover, there was no significant change in geographical revenue structure from 2012 to 2016. (Figure 25)

**Figure 25 Revenue from abroad structure classified by region**



## **Chapter 5: Economic Exposure Universe**

The increase in OFDI and foreign revenue base represents the potential of Thai listed firms to grow in diverse economies, not restricted to only in Thailand. This ability to grow would not only enhance the survival capabilities of the Thai listed firms but also benefit other businesses in each supply chain of the firms, including stakeholders such as employees and shareholders, etc.

The compilation of Thai listed firms undertaking OFDI and/or generating revenue from abroad (Economic Exposure Universe) can display the linkage of Thai firm to foreign economies, enabling them grow even further.

'Global Economic Exposure Universe' includes firms undertaking OFDI and/or have revenue from abroad. There are also subsets of the global universe that are the ASEAN Economic Exposure Universe and CLMV Economic Exposure Universe since these 2 universes (or regions) are the main investment targets for Thai listed firms.

In 2016, there were 289 firms in the Global Economic Exposure Universe (Appendix 1), increased from 282 in 2015. The ASEAN Economic Exposure Universe (Appendix 2) consisted of 175 firms and CLMV Economic Exposure Universe (Appendix 3) consisted of 130 firms.

**Appendix 1 Thai Listed Firms in Global Economic Exposure Universe (289 firms)**

Agro & Food Industry		Consumer Products	Financials	Industrials		Property & Construction		Resources	Services		Technology
APURE	PB	AFC	AEONTS	AEONTS	SAT	AMATA	RML	AKR	AAV	MACO	CCET
ASIAN	PM	BTNC	BAY	BAY	SITHAI	AMATAV	S	BANPU	AS	MAJOR	DELTA
BR	PR	CPH	BBL	BBL	SLP	BJCHI	SCC	BCP	ASIA	MAKRO	DRACO
BRR	PRG	CPL	BKI	BKI	SMIT	CGD	SCCC	BCPG	BA	MC	EIC
CBG	SAPPE	DSGT	CIMBT	CIMBT	SMPC	CK	SEAFCO	BPP	BDMS	MEGA	FORTH
CFRESH	SAUCE	DTCI	FNS	FNS	SNC	CPN	SIRI	CKP	BEAUTY	MIDA	HANA
CHOTI	SFP	FANCY	FSS	FSS	SPG	DCC	SPALI	DEMCO	BEC	MONO	INTUCH
CM	SNP	ICC	GL	GL	SSI	DRT	SQ	EARTH	BH	MPIC	KCE
CPF	SORKON	JCT	KBANK	KBANK	SSSC	EPG	SRICHA	EGCO	BIGC	NOK	METCO
CPI	SSC	KYE	KKP	KKP	STANLY	GEL	STEC	ESSO	BJC	PLANB	PT
F&D	SSF	L&E	KTB	KTB	SUTHA	ITD	STPI	GLOW	BTS	PRAKIT	SAMART
GFPT	STA	LTX	SAWAD	SAWAD	TCB	LH	TASCO	GPSC	CENTEL	PSL	SIM
ICHI	TC	NC	SCB	SCB	TCCC	MBK	TCMC	GUNKUL	CPALL	RCL	SMT
KBS	TF	OGC	TCAP	TCAP	TCOAT	NUSA	TFD	IEC	DTC	ROBINS	SPPT
KSL	TIPCO	PG	TK	TK	TFI	NWR	TGCI	IFEC	EPCO	SHANG	SVI
KTIS	TKN	PRANDA	TMB	TMB	TGPRO	PACE	TICON	IRPC	ERW	SPC	TEAM
LEE	TLUXE	ROCK	ZMICO	ZMICO	THIP	PAE	TPIPL	LANNA	GLOBAL	SPI	THCOM
LST	TRUBB	S & J		AH	TMD	PF	TRC	MDX	HMPRO	SVH	TRUE
M	TU	SABINA		AJ	TNPC	POLAR	TTCL	PDI	JWD	THAI	
MALEE	TVO	SAWANG		ALUCON	TOPP	PPP	U	PTT	KAMART	TKS	
MINT	TWPC	SIAM		AMC	TPA	PSH	UMI	PTTEP	LOXLEY	TTA	
OISHI	UVAN	STHAI		APCS	TPBI	Q-CON	VNG	RATCH	LRH	VGI	
		SUC		BAT-3K	TSC	RCI	WHA	SCI		WICE	
		TNL		CSC	TSTH		WIIK	SCN			
		TOG		CTW	TWP			SGP			
		TPCORP		CWT	TYCN			SOLAR			
		TR		EASON	VARO			SPRC			
		TTI		FMT	VNT			SUSCO			
		UPF			WG			TCC			
		UT						TOP			
		WACOAL									

**Appendix 2 Thai Listed Firms in ASEAN Economic Exposure Universe (175 firms)**

Agro & Food Industry	Consumer Products	Financials	Industrials	Property & Construction	Resources	Services		Technology
BR	BTNC	AEONTS	AH	AMATA	AKR	AAV	MACO	CCET
CBG	DSGT	BAY	AMC	AMATAV	BANPU	AS	MAJOR	DELTA
CHOTI	L&E	BBL	CSC	CK	BCP	BA	MAKRO	DRACO
CM	PRANDA	BKI	CTW	CPN	BPP	BDMS	MC	FORTH
CPF	S & J	CIMBT	EASON	DRT	CKP	BEAUTY	MEGA	HANA
CPI	SUC	FNS	FMT	EPG	DEMCO	BEC	MIDA	INTUCH
F&D	TNL	FSS	IHL	GEL	EARTH	BH	MONO	KCE
ICHI	TOG	GL	IRC	ITD	EGCO	BIGC	MPIC	PT
KSL	TPCORP	KBANK	IVL	NWR	GLOW	BJC	NOK	SAMART
LEE	TR	KTB	KKC	PACE	GPSC	BTS	PLANB	SIM
M	WACOAL	SAWAD	MILL	PSH	GUNKUL	CENDEL	PRAKIT	SVI
MALEE		SCB	PK	RML	IEC	CPALL	PSL	THCOM
MINT		TK	PMTA	SCC	IFEC	DTC	RCL	
OISHI		TMB	PTTGC	SCCC	LANNA	ERW	ROBINS	
SAPPE		ZMICO	SAM	SEAFCO	MDX	GLOBAL	SHANG	
SNP			SITHAI	SIRI	PDI	HMPRO	SPC	
STA			SLP	SPALI	PTT	JWD	SPI	
TC			SPG	SQ	PTTEP	KAMART	SVH	
TF			SSSC	STEC	RATCH	LOXLEY	THAI	
TKN			STANLY	TASCO	SCI	LRH	TTA	
TRUBB			SUTHA	TICON	SGP		WICE	
TU			TCB	TTCL	SUSCO			
TWPC			TOPP	WHA	TCC			
UVAN			VNT		TOP			
			WG					

**Appendix 3 Thai Listed Firms in CLMV Economic Exposure Universe (130 firms)**

Agro & Food Industry	Consumer Products	Financials	Industrials	Property & Construction	Resources	Services		Technology
CBG	BTNC	AEONTS	AMC	AMATA	AKR	AAV	MAKRO	DELTA
CM	L&E	BAY	CTW	AMATAV	BANPU	BA	MC	FORTH
CPF	PRANDA	BBL	EASON	CK	BPP	BDMS	MEGA	HANA
KSL	SUC	BKI	IRC	DRT	CKP	BEAUTY	MIDA	INTUCH
LEE	TOG	CIMBT	IVL	EPG	DEMCO	BEC	MONO	PT
M	TR	FNS	MILL	GEL	EGCO	BH	MPIC	SAMART
MINT	WACOAL	FSS	PMTA	ITD	GLOW	BIGC	NOK	SIM
OISHI		GL	PTTGC	NWR	GPSC	BJC	PRAKIT	SVI
SNP		KBANK	SAM	PSH	GUNKUL	CENTEL	RCL	THCOM
STA		KTB	SITHAI	SCC	IFEC	CPALL	ROBINS	
TF		SAWAD	SLP	SCCC	MDX	GLOBAL	SHANG	
TLUXE		SCB	SPG	SEAFCO	PDI	JWD	SPC	
TRUBB		TK	SSSC	SQ	PTT	KAMART	SPI	
TU		TMB	STANLY	STEC	PTTEP	LOXLEY	SVH	
TWPC		ZMICO	SUTHA	TASCO	RATCH	MAJOR	THAI	
			TOPP	TTCL	SCI		TTA	
			WG	WHA	SGP			
					SUSCO			
					TOP			

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