# THE DEVELOPMENT OF TOURISM ENTERPRISE IN NORTHERN CENTRAL OF VIETNAM

Some findings and suggestion

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# OVERVIEW

Figure 1: Enteprise development in tourism industry

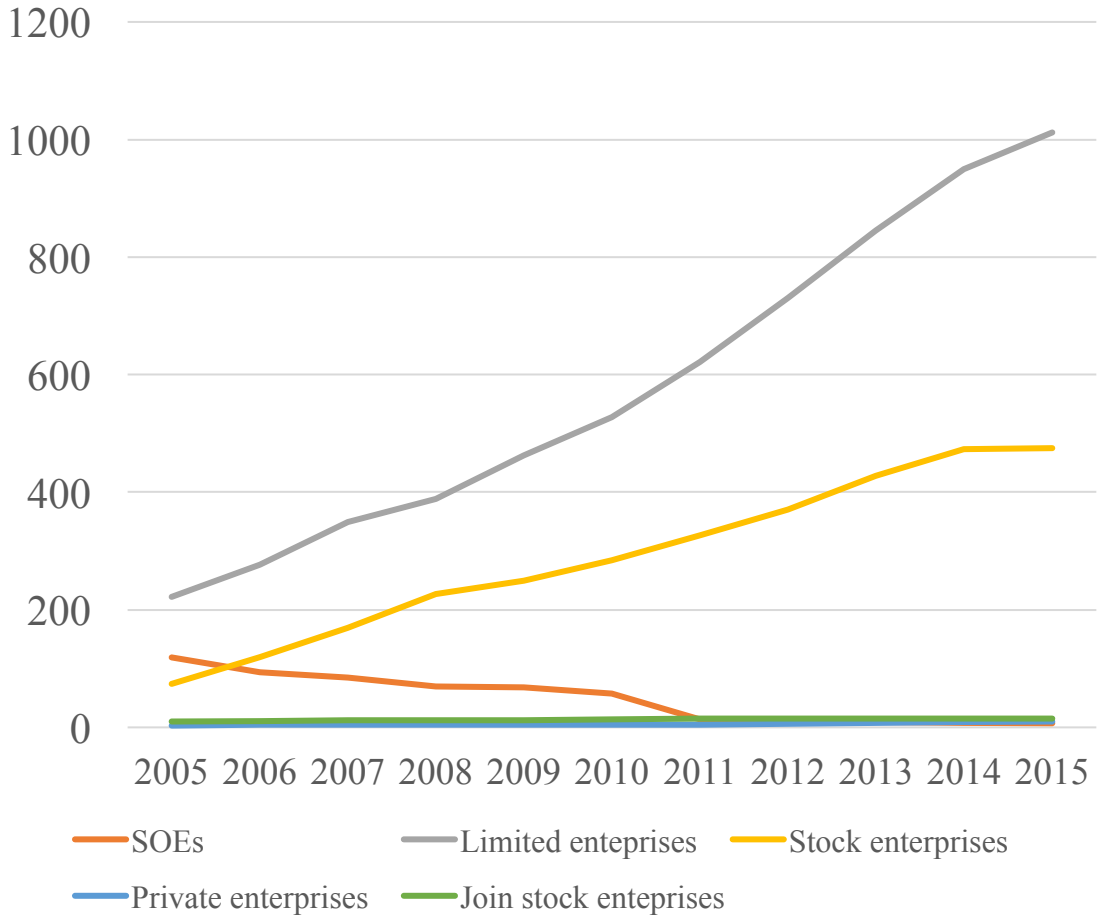



Figure 2: Accommodations's numbers and number of rooms


*(Soure: GSO)*

# OVERVIEW

Figure3: International visitors served by Accommodation Units 2000-2014

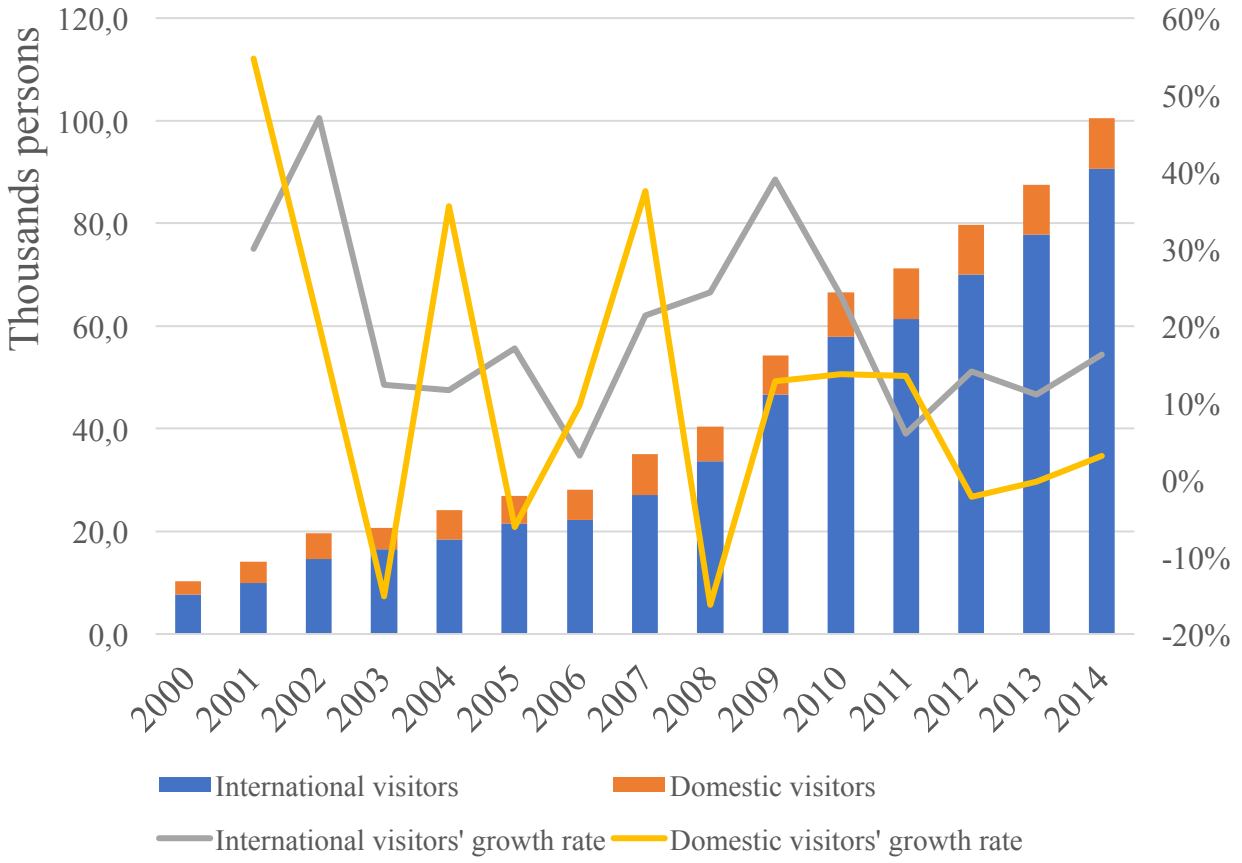
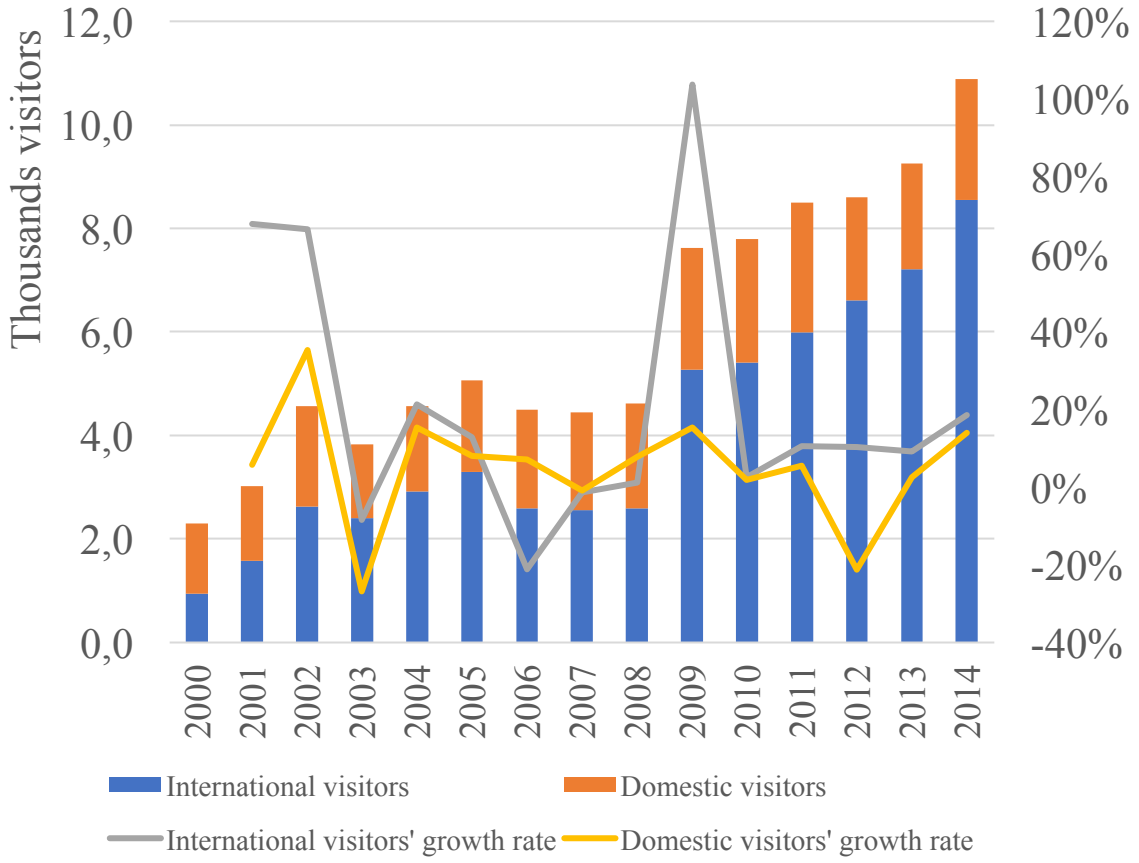



Figure 4: International visitors served by Travel Agencies 2000-2014




*(Source: GSO)*

# OVERVIEW

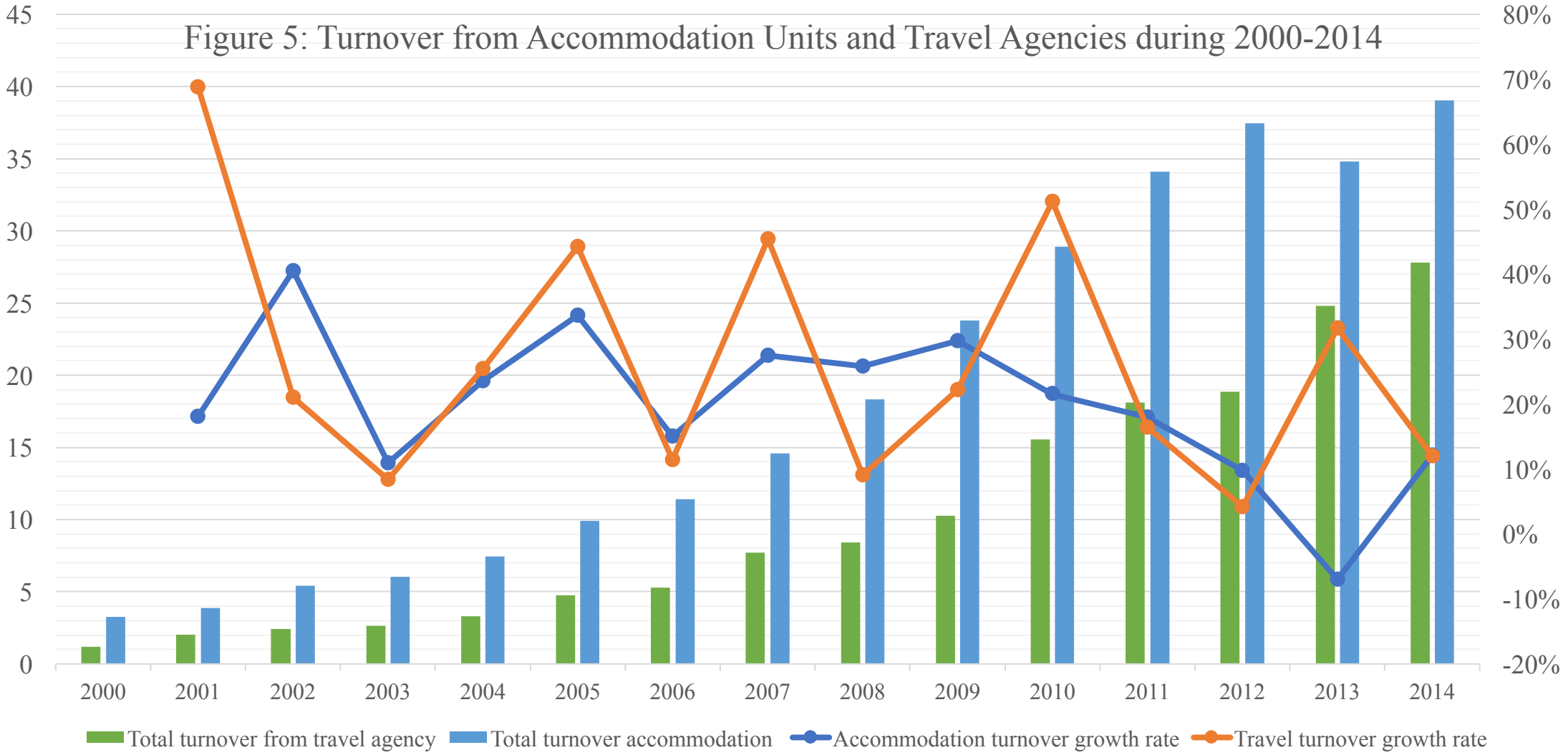


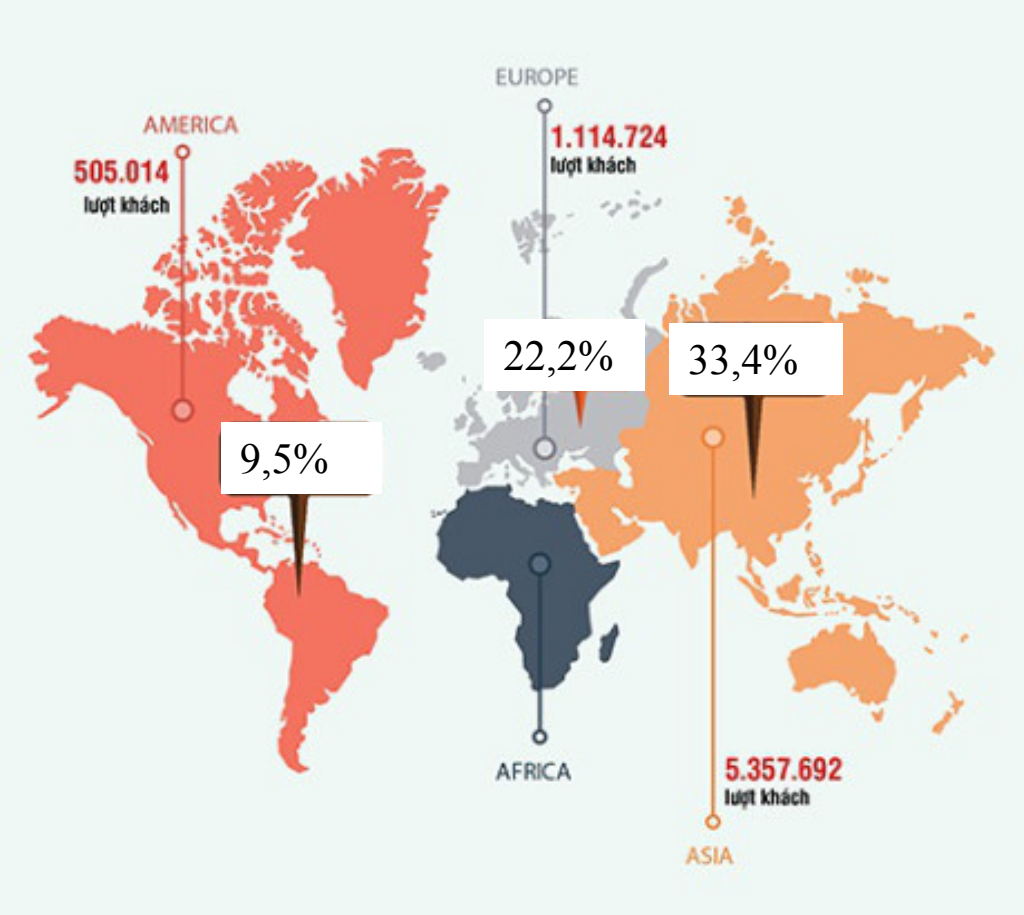
Figure 5: Turnover from Accommodation Units and Travel Agencies during 2000-2014
45
40
35
30
25
20
15
10
5
0
80%
70%
60%
50%
40%
30%
20%
10%
0%
-10%
-20%
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
Total turnover from travel agency
Total turnover accommodation
Accommodation turnover growth rate
Travel turnover growth rate

# OVERVIEW

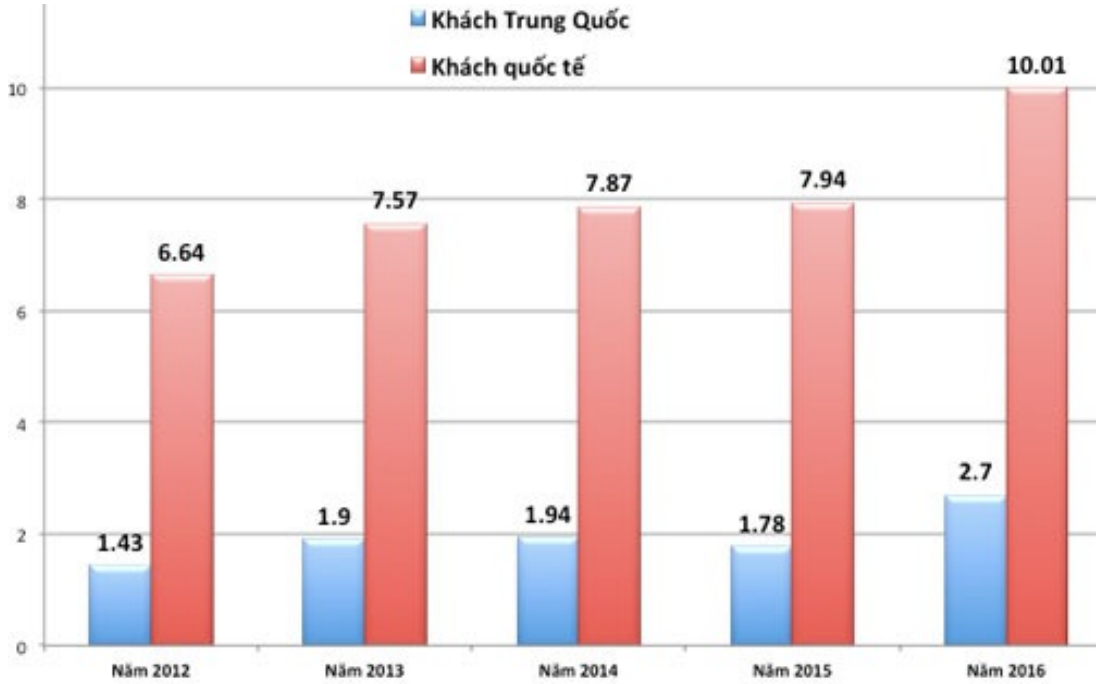
Figure 6: Tourism's turnover 2000-2014 (Thousands billionVND)


*(Source: GSO)*

# OVERVIEW




(*Source: Vietnam Economy*)




The number of visitors from America is around 500 persons, 9,5% increased compared with 2016 (7 months)
The number of Europe visitors is around 1.1 million persons, (22,2%)
Booming of visitors from Asia, 5.35 million persons, (33,4%). Among them, 2.2 million persons from China (51%)

# DEVELOPMENT OF NORTHERN CENTRAL REGION'S (NCR'S) TOURISM ENTERPRISES

- Question:
  - Given the improvement of trade conditions, the enhancement of road infrastructure, what is the situation of tourism enterprises development in NCR?
  - What are factors that affects the firms' performance?
- Hypothesis
  - In the tourism service, size is matter. Bigger firms tends to achieve better performance while smaller firms tends to have worse performance.
- Data
  - Annual Enterprises Survey by GSO (2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015)
  - Sub-dimensions of PCI (government's enthusiastic,  infrastructure enhenment, labor quality…)

# DEVELOPMENT OF NCR'S TOURISM ENTERPRISES

Figure 11: Number of NCR's Tourism Enterprises

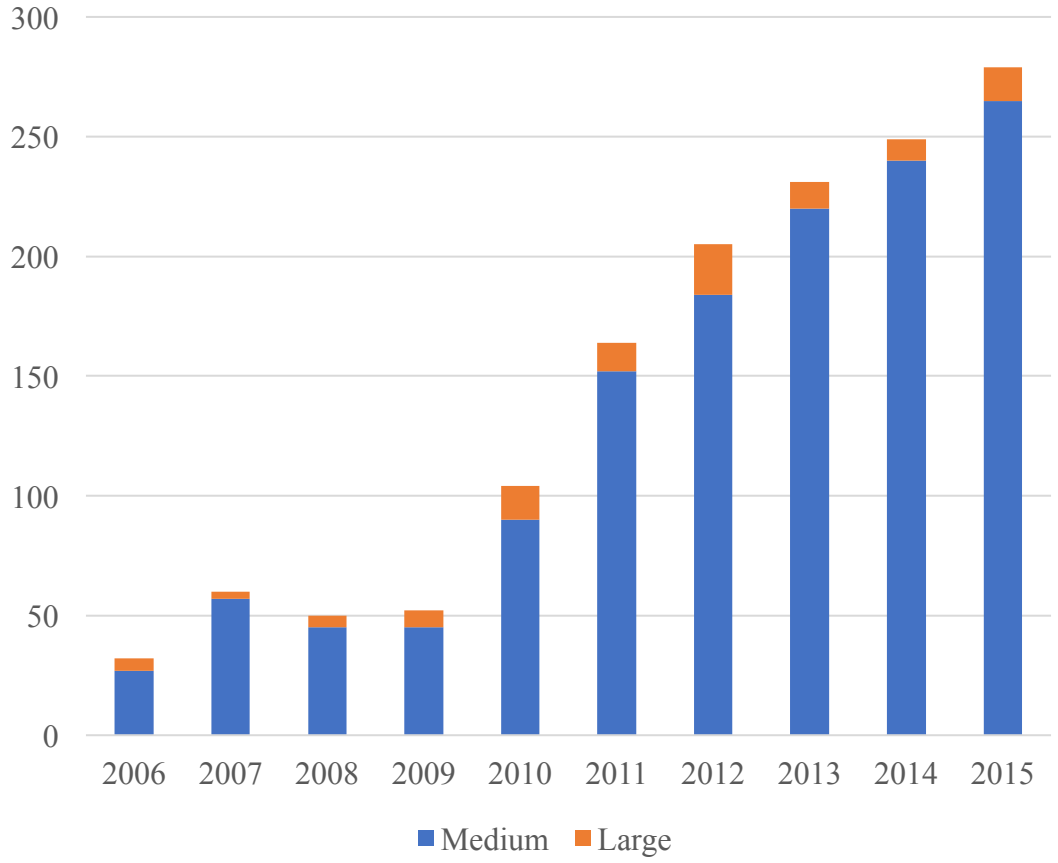
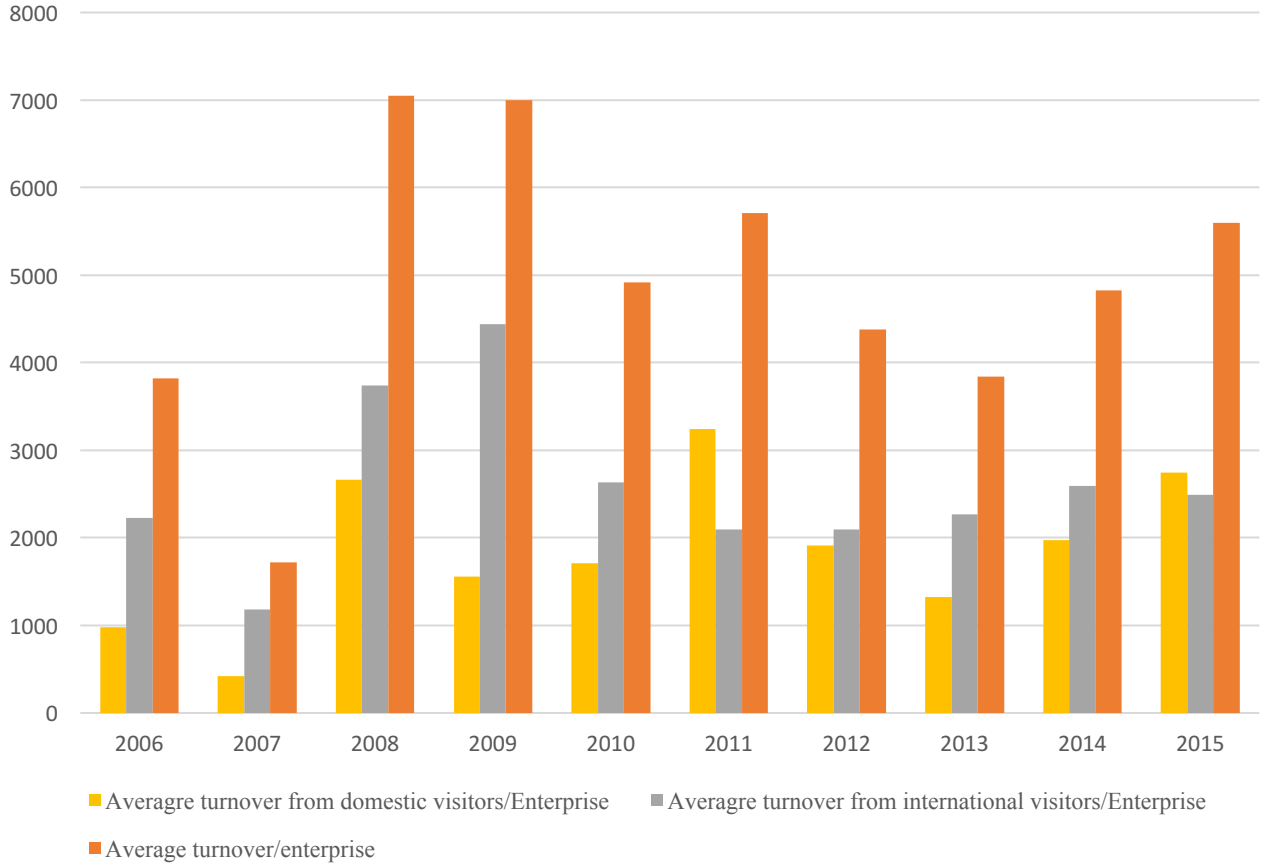


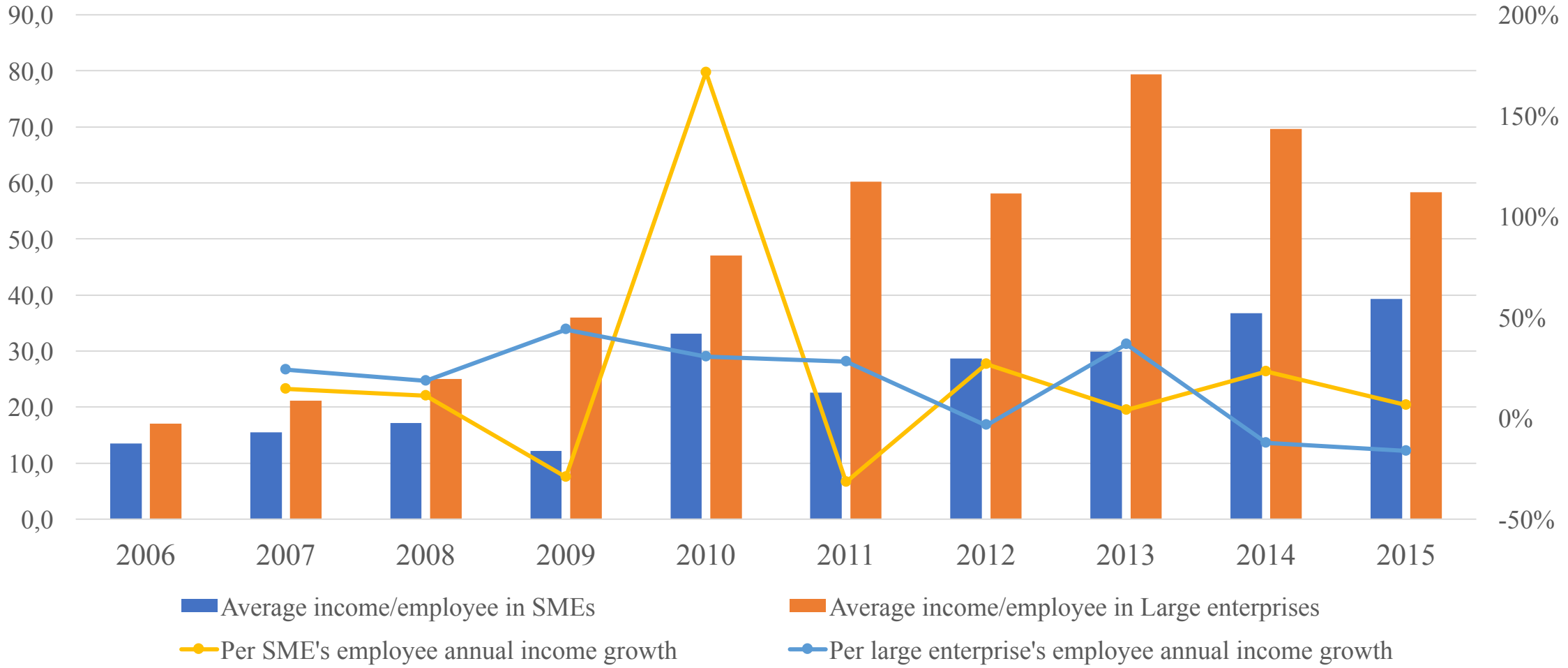

Figure 12: Average Turnover by type of visitors (Million VND)




- Number of enterprise
  - Most of enterprises are SMEs, especially after 2010
- Turnover
  - The variation of changes in the amount of annual turnover are significantly large. Reaching the Top during 2008-2009. Showing a decreasing trend after that
  - For the first time, turnover from domestic visitors higher than that of international visitors (2015). The recover of domestic visitors faster than that of international visitors.

# DEVELOPMENT OF NCR'S TOURISM ENTERPRISES

Figure 13: Per employee's average income by type of enterprise (million VND)/year)




- The gap of income per employee between SMEs and Large enterprise was increasing during 2009-2013; This gap tends to be smaller during 2013-2015
- SMEs income per employee tends to growth sustainably, especially after 2011. During the global economic crisis and macro economic instability, it was small
- The variation income per employee in large firms is large. It shows an increasing trend during 2006-2013 but deceased in recent years

# ENTERPRISE PERFORMANCE AND THE LOG-LINEAR MODEL

- Based on the theory of the firm (Storey, 1991, Itoh and others 1991,….):
  - In a market based economy, firms will join to the market or withdraw from the market freely, under the guidance of price mechanism
    - Firms having lower productivity will have higher possibility of withdraw from the market;
    - New firms participate the market are having higher productivity that the average.
  - Kết quả sản xuất kinh doanh
    - Đạt kết quả kinh doanh tốt hơn trước, hoặc
    - Đạt kết quả kinh doanh kém hơn trước
  - Nguyên nhân biến động do ảnh hưởng bởi các yếu tố như:
    - Bên trong doanh nghiệp: chất lượng lao động, quy mô doanh nghiệp, chất lượng sản phẩm, tuổi đời …
    - Môi trường kinh doanh: chất lượng kết cấu hạ tầng, chất lượng đào tạo nghề …

# THE EFFECTS OF FIRM'S CHARACTERISTIS AND BUSINESS' ENVIRONMENT ON FIRM PERFORMANCE

- *Saturate Model:*
  - *{F_PSLQ}*
- *Models with the elimination of some join effects among variables*
  - *{F_PSL} {F_PSQ} {F_PLQ}*
  - *{F_PSL} {F_PSQ}*
  - *{F_PSL} {F_PLQ}*
  - *{F_PSQ} {F_PLQ}*
  - *{F_P} {F_PSQ}*
  - *{F_P} {F_PLQ}*
  - *{F_P} {SLQ}*
  - *{SLQ}*
- *Log-linear form of the last model*
  - $\ln F_{\mathrm{ij}k} = \mu + \lambda_i^{\mathrm{S}} + \lambda_j^{\mathrm{L}} + \lambda_{\mathrm{k}}^{\mathrm{Q}} + \lambda_{ik}^{SQ} + \lambda_{ij}^{SL} + \lambda_{jk}^{LQ} + \lambda_{ijk}^{SLQ}$

- Dependent variable
- F_P is firm's performance.
  - In this research, the enterprise's productivity is a proxy of firms' performance.
  - The firms' performance were standardize by Min-Max method

# DESCRIPTIVE ANALYSIS

- Independent variables:
- S: is the size of enteprise
  - The size of enterprise is classified by government (Decree 56/2009/NĐ-CP on supporting the development of SMEs classified enterprise size by either number of labors and/or the amount of capital. The criteria are different across sectors of the economy).
- L: is the labor quality
  - Based on the assumption that higher quality labor will have higher paid, the proxy of labor quality in an enterprise is the average income per employee.
  - The quality of labor is also standardize.
- Q: is quality of vocational training by government
  - Change in vocational training by the government will help to enhance the quality of employed labors.
  - Data of vocational training is from PCI sub-dimension reflecting the evaluation of enterprises on the trained labor across provinces.

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| F_Perform | 1426 | 0 | 1 | 0,01 | 0,099 |
| SizeCapital | 1426 | 2 | 3 | 2,07 | 0,257 |
| Labor_quality | 1426 | 0 | 1 | 0,02 | 0,141 |
| TrainingQuality | 1426 | 0 | 1 | 0,59 | 0,492 |
| NoofDayI | 353 | 0 | 1 | 0,8669 | 0,34021 |
| Valid N (listwise) | 353 | | | | |

# SELECTING MODEL

| Step[a] | | | Effects | Chi-Square[c] | df | Sig. | Number of Iterations |
|---|---|---|---|---|---|---|---|
| 0 | Generating Class[b] | | F_Perform*SizeCapital*Labor_quality*TrainingQuality | 0,000 | 0 | | |
| | Deleted Effect | 1 | F_Perform*SizeCapital*Labor_quality*TrainingQuality | 0,000 | 1 | 1,000 | 4 |
| 1 | Generating Class[b] | | F_Perform*SizeCapital*Labor_quality, F_Perform*SizeCapital*TrainingQuality, F_Perform*Labor_quality*TrainingQuality, SizeCapital*Labor_quality*TrainingQuality | 0,000 | 1 | 1,000 | |
| | Deleted Effect | 1 | F_Perform*SizeCapital*Labor_quality | 1,525 | 1 | ,217 | 13 |
| | | 2 | F_Perform*SizeCapital*TrainingQuality | ,000 | 1 | 1,000 | 4 |
| | | 3 | F_Perform*Labor_quality*TrainingQuality | ,000 | 1 | 1,000 | 4 |
| | | 4 | SizeCapital*Labor_quality*TrainingQuality | 1,825 | 1 | ,177 | 3 |
| 2 | Generating Class[b] | | F_Perform*SizeCapital*Labor_quality, F_Perform*Labor_quality*TrainingQuality, SizeCapital*Labor_quality*TrainingQuality | ,000 | 2 | 1,000 | |
| | Deleted Effect | 1 | F_Perform*SizeCapital*Labor_quality | 1,525 | 1 | ,217 | 14 |
| | | 2 | F_Perform*Labor_quality*TrainingQuality | ,000 | 1 | 1,000 | 5 |
| | | 3 | SizeCapital*Labor_quality*TrainingQuality | 1,825 | 1 | ,177 | 6 |

# SELECTING MODEL

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3 | Generating Class[b] | | F_Perform*SizeCapital*Labor_quality, SizeCapital*Labor_quality*TrainingQuality, F_Perform*TrainingQuality | ,000 | 3 | 1,000 | |
| | Deleted Effect | 1 | F_Perform*SizeCapital*Labor_quality | 1,525 | 1 | ,217 | 13 |
| | | 2 | SizeCapital*Labor_quality*TrainingQuality | 1,825 | 1 | ,177 | 7 |
| | | 3 | F_Perform*TrainingQuality | 7,951 | 1 | ,005 | 2 |
| 4 | Generating Class[b] | | SizeCapital*Labor_quality*TrainingQuality, F_Perform*TrainingQuality, F_Perform*SizeCapital, F_Perform*Labor_quality | 1,525 | 4 | ,822 | |
| | Deleted Effect | 1 | SizeCapital*Labor_quality*TrainingQuality | 3,882 | 1 | ,049 | 13 |
| | | 2 | F_Perform*TrainingQuality | 10,047 | 1 | ,002 | 11 |
| | | 3 | F_Perform*SizeCapital | 11,502 | 1 | ,001 | 7 |
| | | 4 | F_Perform*Labor_quality | 34,952 | 1 | ,000 | 6 |
| 5 | Generating Class[b] | | SizeCapital*Labor_quality*TrainingQuality, F_Perform*TrainingQuality, F_Perform*SizeCapital, F_Perform*Labor_quality | 1,525 | 4 | ,822 | |

a. At each step, the effect with the largest significance level for the Likelihood Ratio Change is deleted, provided the significance level is larger than ,050.

b. Statistics are displayed for the best model at each step after step 0.

c. For 'Deleted Effect', this is the change in the Chi-Square after the effect is deleted from the model.

# SELECTING MODEL

- The model is as following
  - {F_P} {SLQ}

| Goodness-of-Fit Tests[a,b] | | | |
|---|---|---|---|
| | Value | df | Sig. |
| Likelihood Ratio | 1,525 | 4 | ,822 |
| Pearson Chi-Square | 1,376 | 4 | ,848 |
| a. Model: Poisson | | | |
| b. Design: Constant + F_Perform*Labor_quality + F_Perform*SizeCapital + F_Perform*TrainingQuality + SizeCapital * Labor_quality * TrainingQuality | | | |

# ESTIMATING LAMDA PARAMETERS

- Biến phụ thuộc: F_P

| Parameter | Estimate | Std. Error | Z | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| Constant | 1.822 | .386 | 4.719 | .000 | 1.065 | 2,578 |
| [SizeCapital = 2] * [Labor_quality = 0] * [TrainingQuality = 0] | -15.456 | .684 | -22.601 | .000 | -16.796 | -14,116 |
| [SizeCapital = 2] * [Labor_quality = 0] * [TrainingQuality = 1] | -.664 | .682 | -.974 | .330 | -2.000 | ,672 |
| [SizeCapital = 2] * [Labor_quality = 1] * [TrainingQuality = 0] | -15.419 | .746 | -20.675 | .000 | -16.881 | -13,957 |
| [SizeCapital = 2] * [Labor_quality = 1] * [TrainingQuality = 1] | -.786 | .622 | -1.263 | .206 | -2.005 | ,433 |
| [SizeCapital = 3] * [Labor_quality = 0] * [TrainingQuality = 0] | -15.197 | .701 | -21.666 | .000 | -16.572 | -13,822 |
| [SizeCapital = 3] * [Labor_quality = 0] * [TrainingQuality = 1] | -1.224 | .682 | -1.794 | .073 | -2.562 | ,113 |
| [SizeCapital = 3] * [Labor_quality = 1] * [TrainingQuality = 0] | 0.000 | | | | | |
| [Labor_quality = 0] * [F_Perform = 0] | 2.991 | .645 | 4.640 | .000 | 1.728 | 4,255 |
| [Labor_quality = 1] * [F_Perform = 0] | -1.224 | .682 | -1.794 | .073 | -2.562 | ,113 |
| [SizeCapital = 2] * [F_Perform = 0] | 2.509 | .711 | 3.528 | .000 | 1.115 | 3,903 |
| [TrainingQuality = 0] * [F_Perform = 0] | 0.000 | | | | | |

# WHAT CAN WE LEAN FROM THE MODEL

- In tourism sector, enterprises size is matter. The result shows that
  - The join effect of small sized enterprises, low labor quality and low level of training quality reduce the number of enterprises in better performance group (with Lamda = -15.456, statistically significant at 0.01). Even when training tends to improve, that the join effect of small size and low labor quality tends to reduce number of enterprise in better performance ( lamda = - 0.664, but not significant. We have to investigate more)
  - The join effect of large size enterprise, low labor quality and low level of training quality also reduce the number of enterprises in better performance group, with smaller Lamda (significantly at 0.01)
  - The observed number of firms in the group of worse performance than average tend to increase (lamda = 2.991, statistic significant at 0.01) given labor quality is lower than the average.
  - The observed number of firms in the group of worse performance than average tend to decrease (lamda = - 1224 statistic significant at 0.10) given labor quality is better than the average
  - The observed number of firms in the group of worse performance than average tend to increase (lamda = 2.991, statistic significant at 0.01) given size of enterprise is small.
  - No direct affect from training quality to firm’s performance

# IMPLICATION

- Labor quality plays important role in firm's performance. Firms with better labor quality have higher probability of joining better performance group.
- In this service sector, firm size is matter. Firms with medium size (size capital =2) tend to fall into group of worse performance no matter what the quality of labor is (line 1 and 3).
- The smaller the size, the easier the firm exit the market.

# LIMITATION

- Effects from the vocational training is not clear (no statistic significant)
  - There may have the lag of training to firm performance
  - The diffusing effect of training could not be account in this model (Quang Binh province)
  - The effect of firms product's characteristics have not include in this model yet.
- The effect of infrastructure have not been integrated in this model