2015 SME Survey Results

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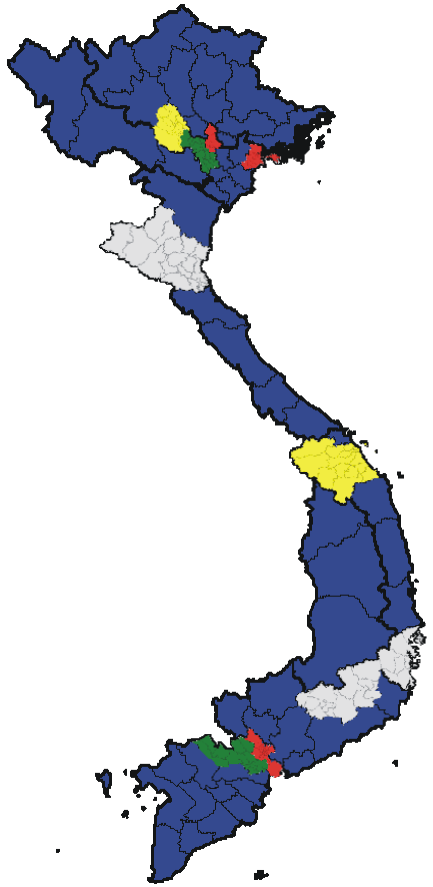
Chapter 2
Sampling and data

Sampling

- SME survey 2005, 2007, 2009, 2011, 2013 and now 2015
- Ten provinces
- Approximately 2,500 non-state manufacturing enterprises each year.
- Four questionnaires:
- Main (firm level), Employee (sub-sample), Economic accounts and Exit
- The report provides descriptive statistics and analysis of key trends in the 2015 data.
- Joint effort of UNU-WIDER, CIEM, DoE (University of Copenhagen) and ILSSA.



Data (1)

	Interviewed in 2015	Interviewed in 2013
Ha Noi	296	285
Phu Tho	254	259
Ha Tay	371	347
Hai Phong	219	190
Nghe An	340	347
Quang Nam	171	167
Khanh Hoa	99	90
Lam Dong	92	88
HCMC	653	622
Long An	133	136
Total	2,628	2,531
Note: The balanced panel includes 2,097 firm observations each year.		

Data (2)

- 72 percent are micro firms (1-9 full time employees)
- …. and some of these are informal.

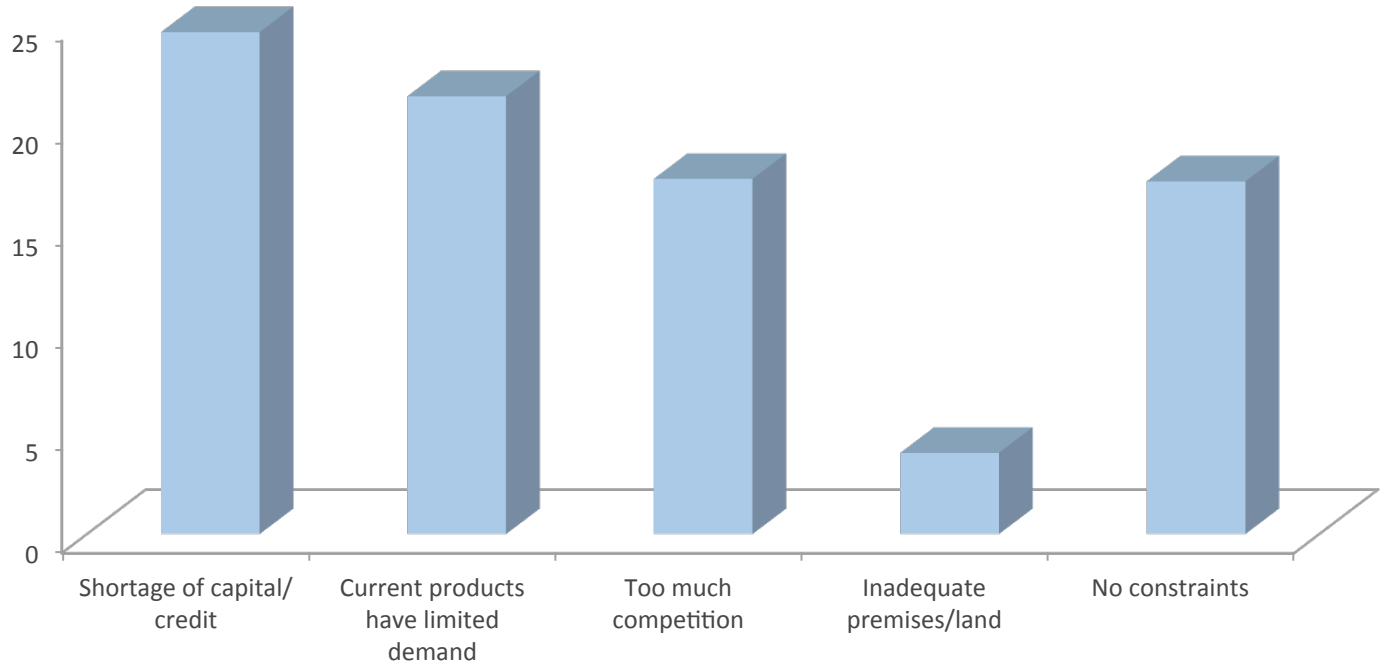
	Micro	Small	Medium	Total	Percent
Ha Noi	166	111	19	296	(11.3)
	(56.1)	(37.5)	(6.4)	(100.0)	
Phu Tho	239	10	5	254	(9.7)
	(94.1)	(3.9)	(2.0)	(100.0)	
Ha Tay	274	80	17	371	(14.1)
	(73.9)	(21.6)	(4.6)	(100.0)	
Hai Phong	151	48	20	219	(8.3)
	(68.9)	(21.9)	(9.1)	(100.0)	
Nghe An	288	39	13	340	(12.9)
	(84.7)	(11.5)	(3.8)	(100.0)	
Quang Nam	146	20	5	171	(6.5)
	(85.4)	(11.7)	(2.9)	(100.0)	
Khanh Hoa	72	19	8	99	(3.8)
	(72.7)	(19.2)	(8.1)	(100.0)	
Lam Dong	69	20	3	92	(3.5)
	(75.0)	(21.7)	(3.3)	(100.0)	
HCMC	377	207	69	653	(24.8)
	(57.7)	(31.7)	(10.6)	(100.0)	
Long An	106	22	5	133	(5.1)
	(79.7)	(16.5)	(3.8)	(100.0)	
Total	1,888	576	164	2,628	(100.0)
Percent	(71.9)	(21.9)	(6.2)	(100.0)	

Note: Figures in number of firms and for each location the share of firms in each size category (group percentages in parenthesis). Micro: 1-9 employees; Small: 10-49 employees; Medium: 50-299 employees (World Bank definition).

Chapter 3
SME growth and dynamics

The link to formality

Perceived Constraints



- The Usual Suspects: (i) Credit, (ii) Limited Demand and (iii) Competition
- But improvements
- Credit: 45% in 2011, 30% in 2013 and 24% in 2015

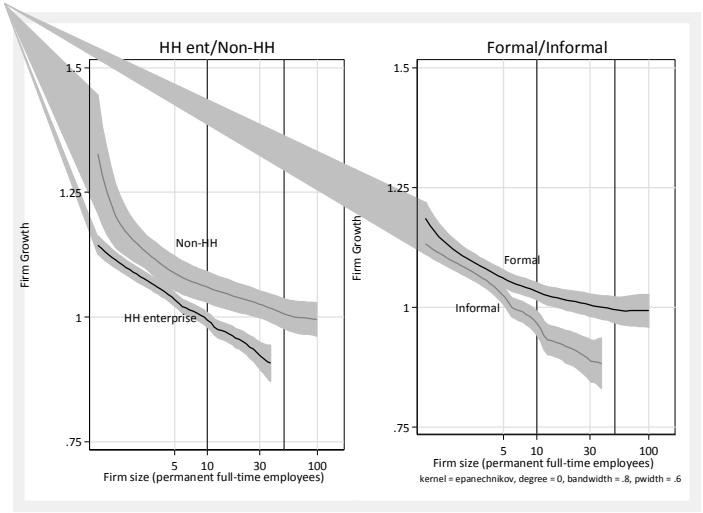
Firm Dynamics

- Micro likely to stay micro
- … but much more formalization
- … but has not yet materialized in increases in ”graduation” rates

	Micro 15	Small 15	Medium 15	Total	Percent
Micro 13	1,408	103	2	1,513	(72.2)
	(93.1)	(6.8)	(0.1)	(100.0)	
Small 13	90	345	35	470	(22.4)
	(19.1)	(73.4)	(7.4)	(100.0)	
Medium 13	1	23	90	114	(5.4)
	(0.9)	(20.2)	(78.9)	(100.0)	
Total	1,499	471	127	2,097	(100.0)
Percent	(71.5)	(22.5)	(6.1)	(100.0)	
Note: Percentage in parenthesis.					

Employment Growth

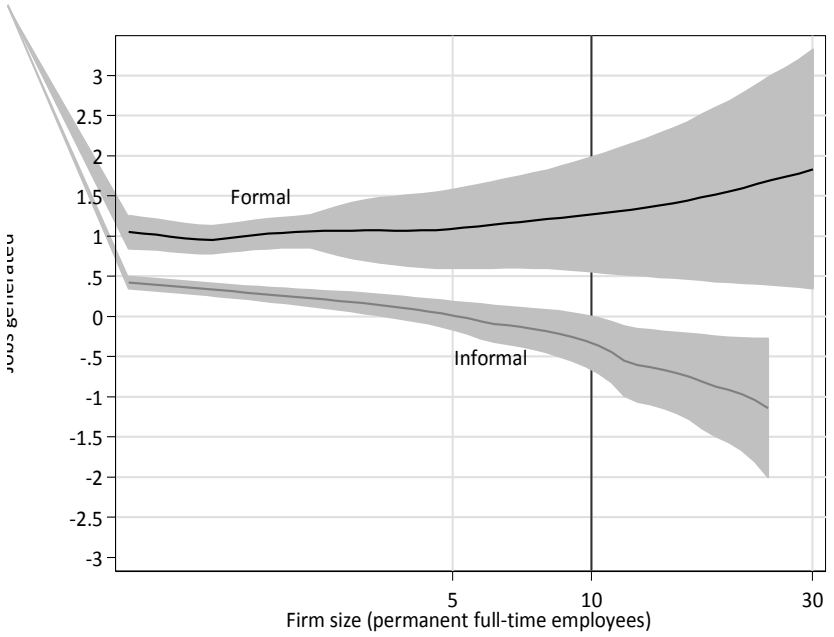
- Increase in total employment of 5.2 per cent over the two-year period 2013-15.
- But not equally distributed along the firm size dimension
- Non-HH versus HH
- Formal versus Informal



Job Creation

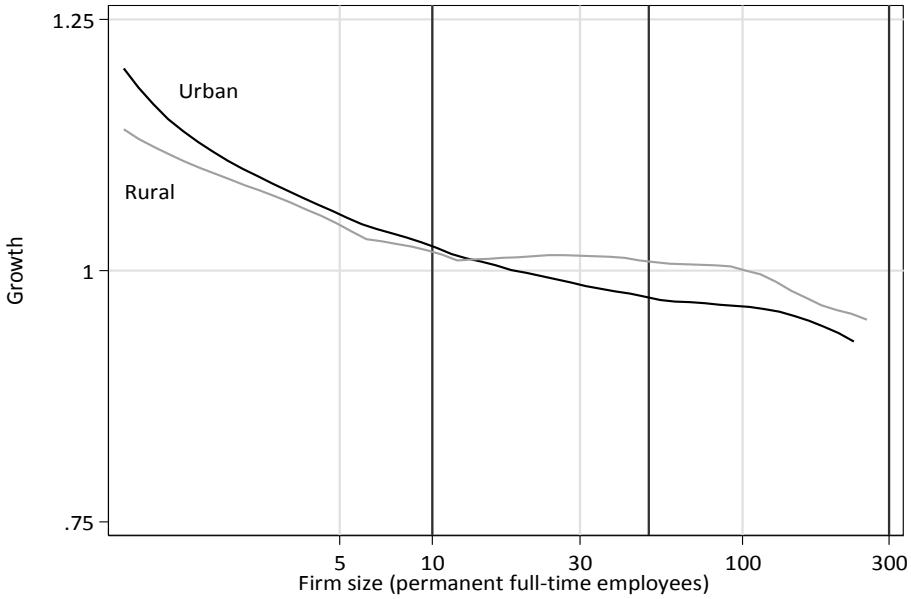
- Job Creation
- The Role of Informal Firms?
- Initiatives

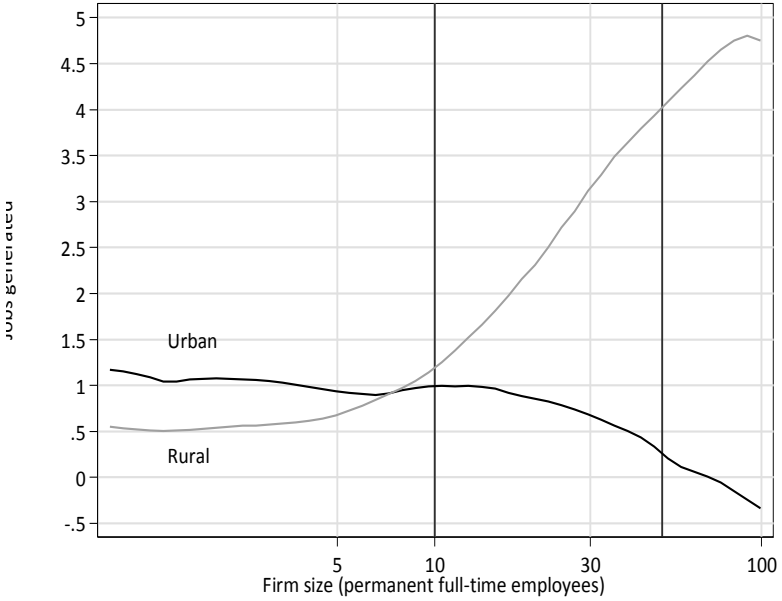
Job creation by firm size



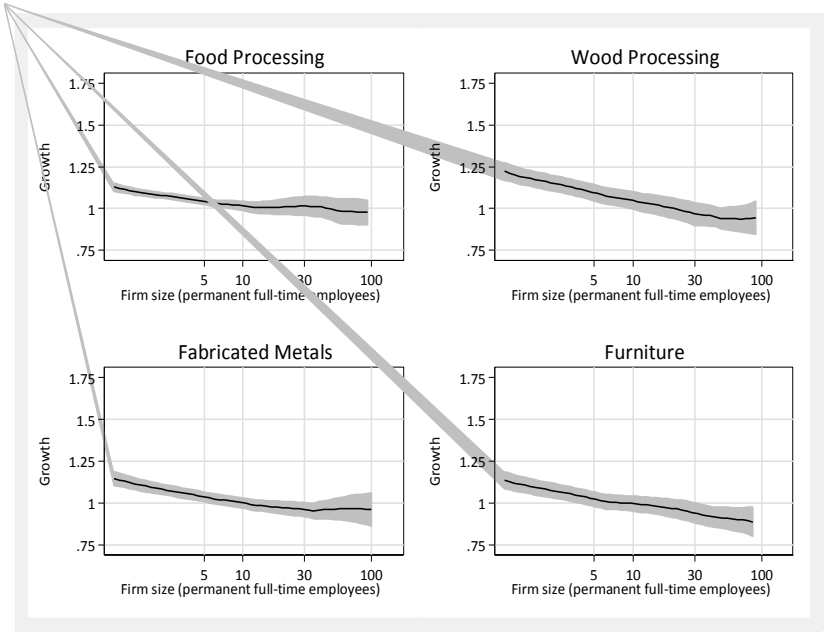
Growth and Job Creation, by Rural/Urban

- Job creation for mid-size firms especially in rural areas

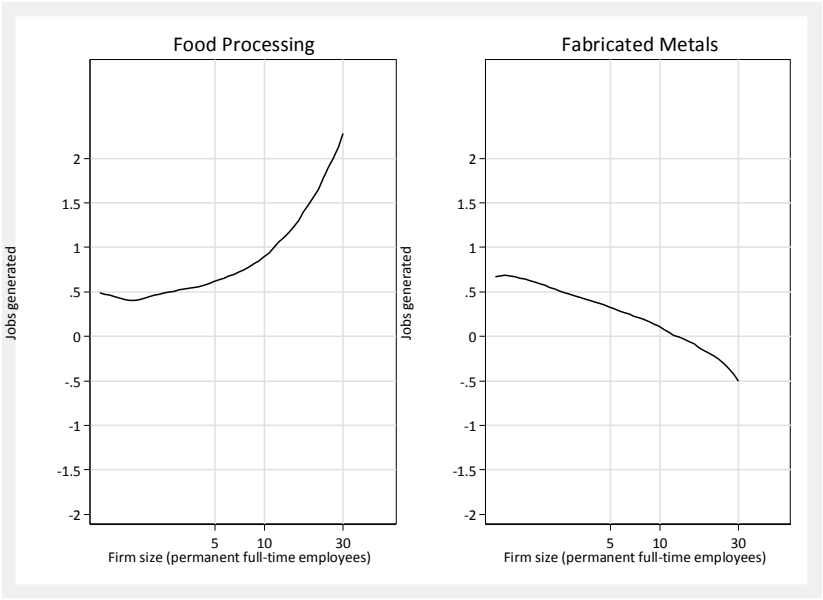




Growth and Job Creation, by Sector



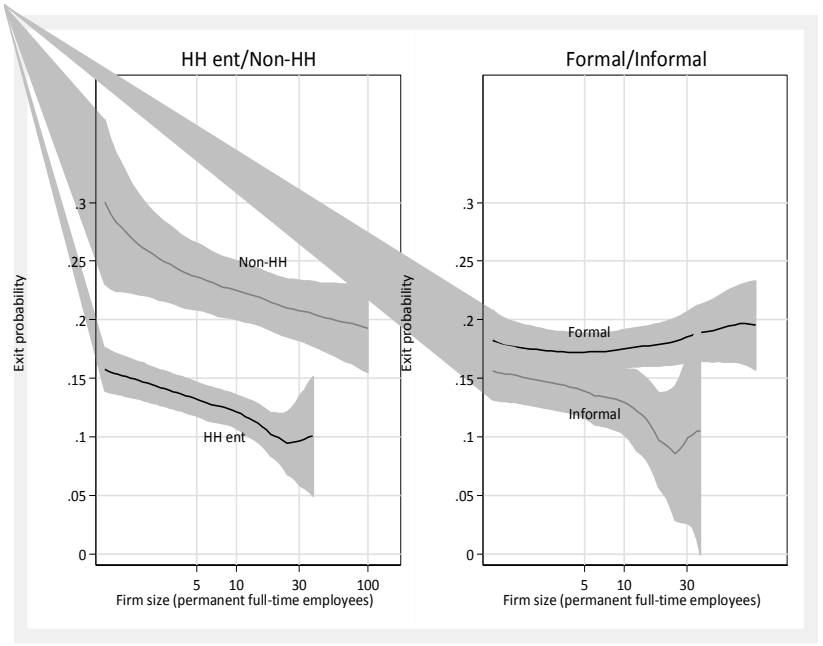
- Job creation especially within food processing



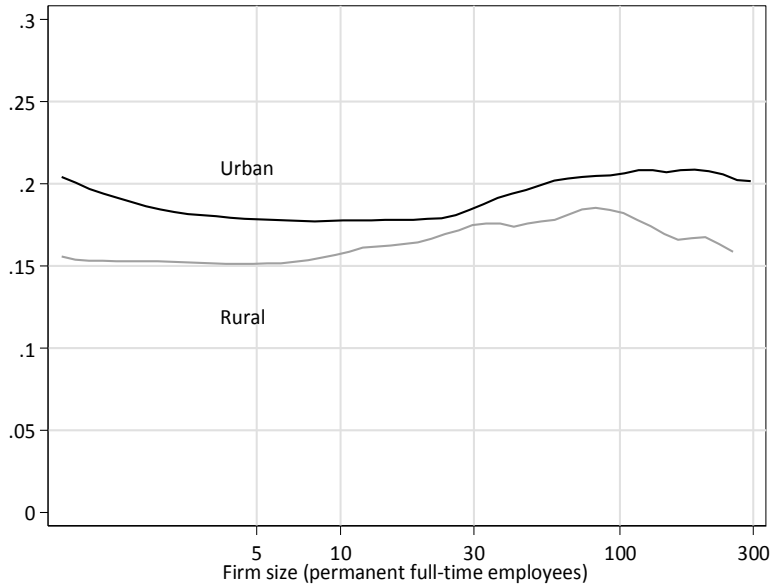
- Effects firm size dependent

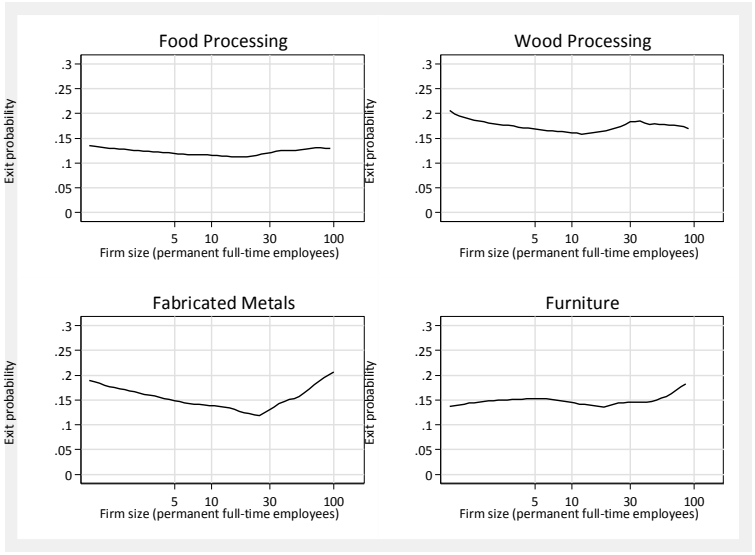
Exit Probabilities, by Firm Size

- Annual exit rate of 8.2 per cent (lower than exit rates observed between 2009 and 2013).
- Non-HH vs. HH
- Formal vs. Informal



Exit by Location and Sector





Chapter 4
Informality and corruption

Reasons for remaining informal

- Exclusion view: arduous entry regulations prohibit small firms from entering the formal sector.
- Exit view: decision to remain informal is a deliberate one. Firm owners willing to forego legal recognition in order to avoid incurring costs and taxes.
- Empirical studies report that transitioning to formality results in significant and large benefits for firms in terms of profitability, investments, and access to credit (McKenzie and Sakho 2010; Rand and Torm 2012; Sharma 2014).

Distribution of firms by (in)formality

	2013		2015	
	Per cent	Number	Per cent	Number
Formal (Total)	71.3	1,804	89.99	2,365
Formal (Balanced)	70.5	1,479	97.09	2,036

- Astronomical increase in formality between 2013 and 2015.
- May be explained by Law on Investment and Law on Enterprises passed in November 2014.
- Over 90 percent of informal firms are micro firms, in both years.

Firm dynamics and formality

	Firm growth		Firm exit	
	Col. 1	Col. 2	Col. 3	Col. 4
Firm size	-0.090***	-0.098***	-0.010	-0.020**
	(0.008)	(0.008)	(0.007)	(0.008)
Formal	0.093***	0.096***	0.040**	0.032
	(0.017)	(0.018)	(0.018)	(0.020)
Location dummies	No	Yes	No	Yes
Sector dummies	No	Yes	No	Yes
Observations	2,088	2,087	2,516	2,466
Pseudo R-squared	0.077	0.094	0.00	0.03

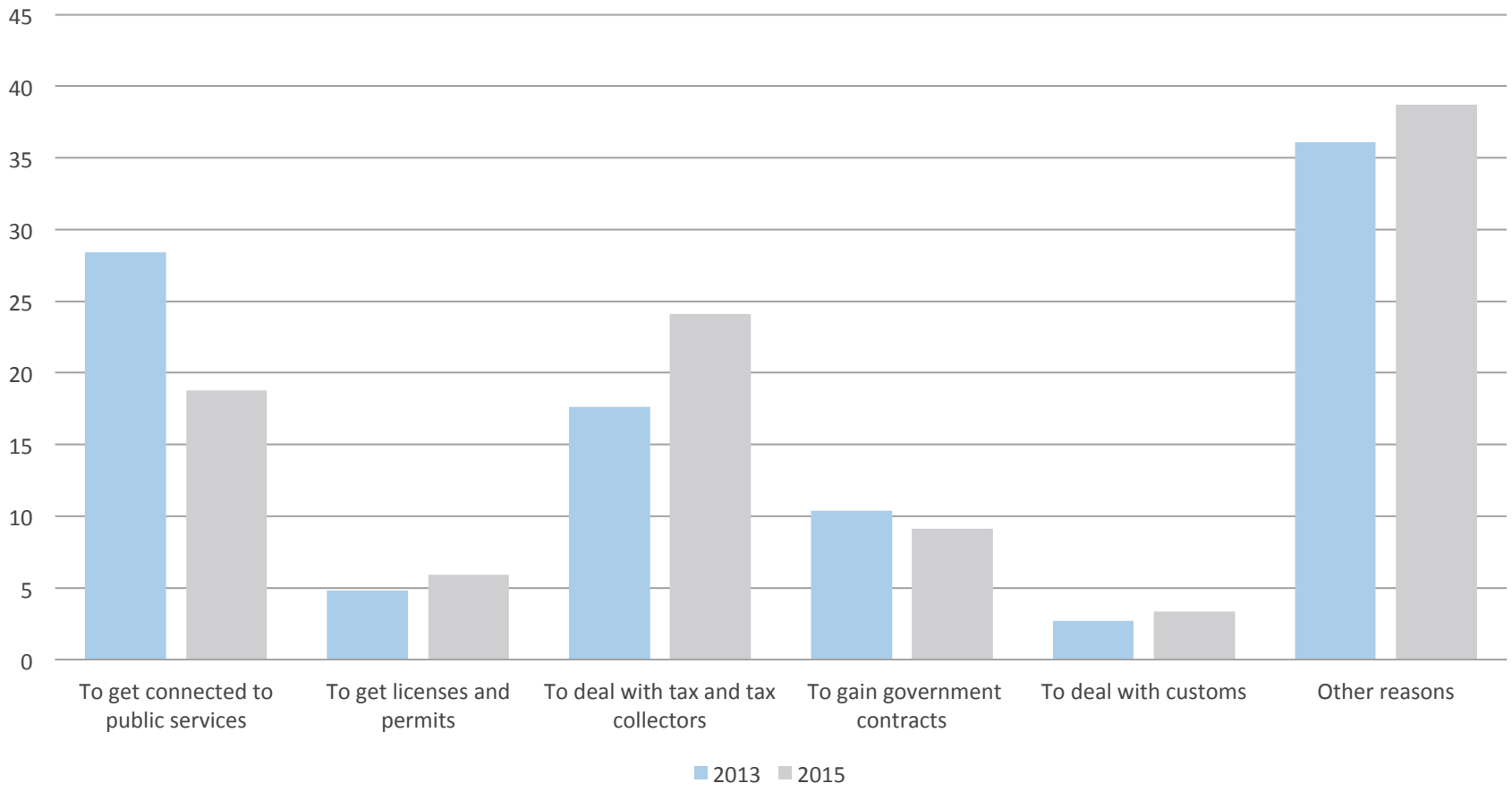
- Firm growth is positively associated with formal status.
- These results are robust to the inclusion of province and sector controls.
- Being formal also leads to greater probability of firm exit, but this result is not as robust.

How many enterprises pay bribes?

	All		Balanced	
	2013	2015	2013	2015
All firms	1,135 (44.8)	1,126 (42.9)	936 (44.6)	896 (42.7)
Formal firms	971 (85.6)	1,079 (95.8)	792 (84.6)	877 (97.9)
Informal firms	164 (14.4)	47 (4.2)	144 (15.4)	19 (2.1)

- Marginal decline in fraction of bribe-paying firms between 2013 and 2015.
- Overwhelming share of bribe-payers are formal firms: in accordance with Rand and Tarp (2012) who find that the “bribes to hide” hypothesis is not confirmed in Vietnamese context.
- Approx. 70 percent of firms paid bribes 2-5 times in the past year.

Reasons for paying bribes



Determinants of bribe-paying

	All		Balanced		FE
	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
Firm size	0.192***	0.173***	0.194***	0.175***	0.056**
	(0.008)	(0.009)	(0.009)	(0.010)	(0.024)
Formal firm	0.117***	0.062***	0.084***	0.021	-0.102***
	(0.020)	(0.022)	(0.025)	(0.027)	(0.027)
Location dummies	No	Yes	No	Yes	
Sector dummies	No	Yes	No	Yes	
Observations	5,144	5,139	4,200	4,198	4,200
R-squared					0.645

- Larger firms more likely to pay bribes.
- Relationship between formality and bribery appears tenuous.

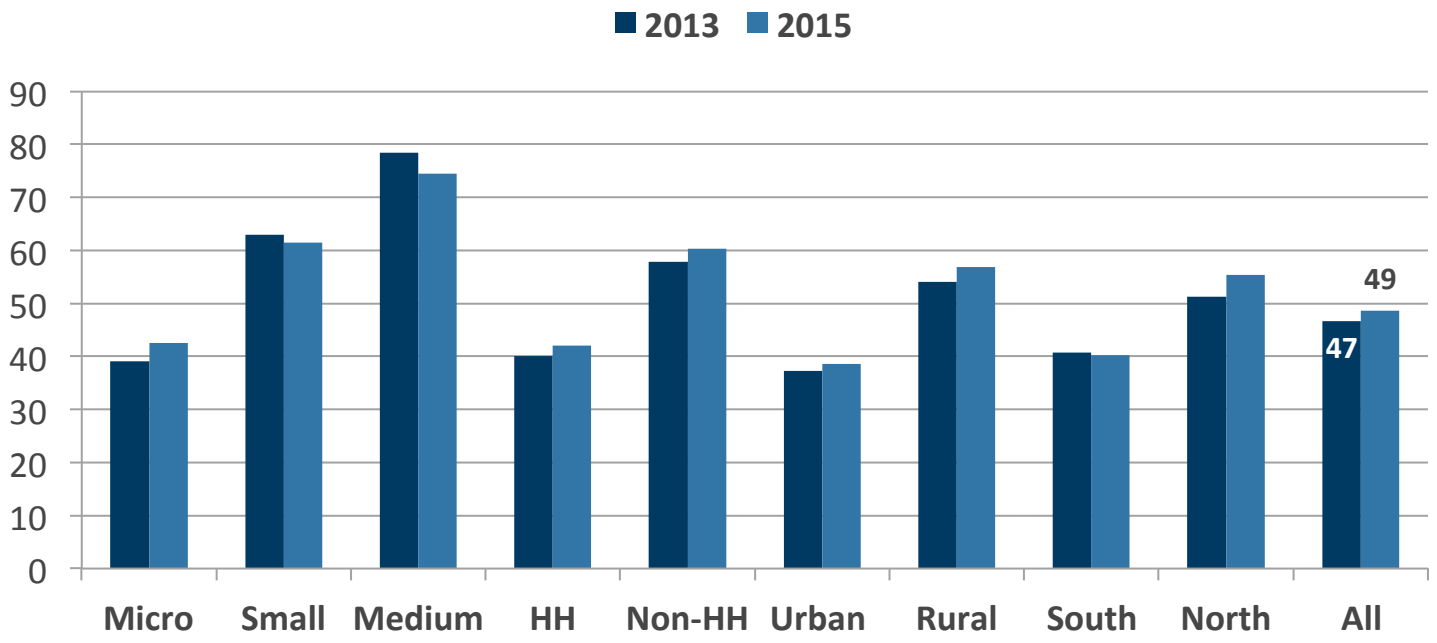
Bribes, firm growth and firm exit

	Firm growth		Firm exit	
	Col. 1	Col. 2	Col. 3	Col. 4
Firm size	-0.093***	-0.102***	-0.011	-0.020**
	(0.008)	(0.009)	(0.008)	(0.008)
Formal firm	0.091***	0.090***	0.039**	0.028
	(0.016)	(0.018)	(0.018)	(0.020)
Bribe	0.020	0.022	0.004	-0.011
	(0.015)	(0.016)	(0.016)	(0.016)
Location dummies	No	Yes	No	Yes
Sector dummies	No	Yes	No	Yes
Observations	2,088	2,087	2,516	2,466
R-squared	0.078	0.092		

- No evidence that firm growth is correlated with bribery (as in the 2013 report).
- Bribe-paying is not associated with exit (in contrast to 2013 survey).

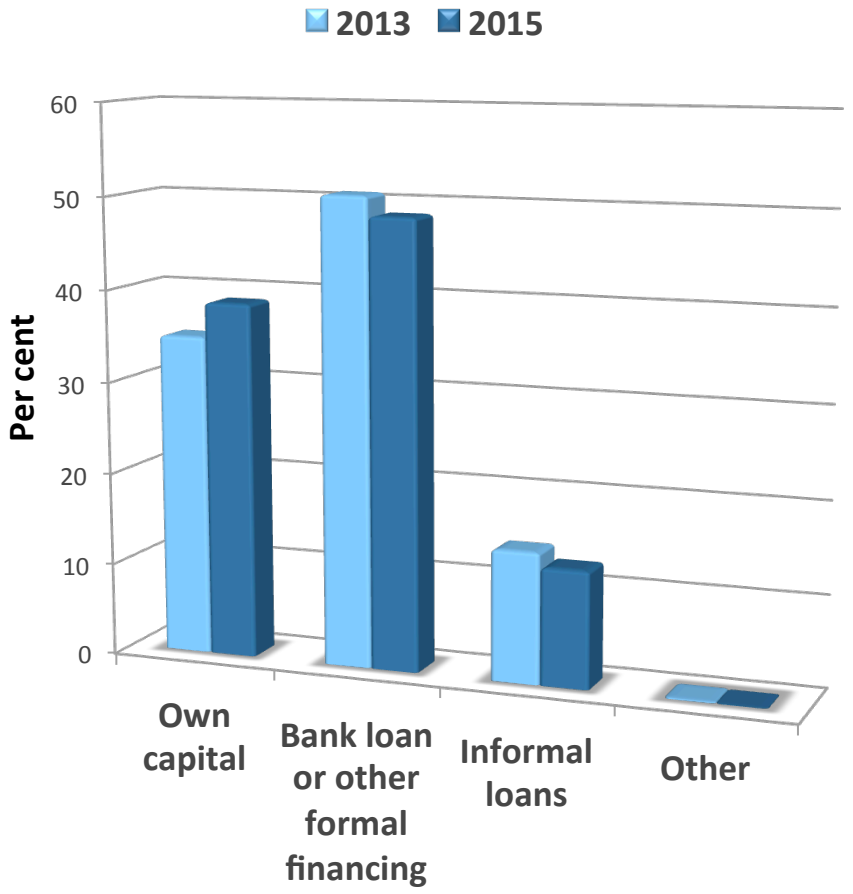
Chapter 5
Investments and credit

Investments



- Higher share of investments compared to 2013
- 34% new and 64% repeated investments compared to 2013
- 725 firms (around 35% of the sample) did not make any investment in the past four years
- Increasing in enterprise size and location in rural and northern provinces

How was the investment financed?



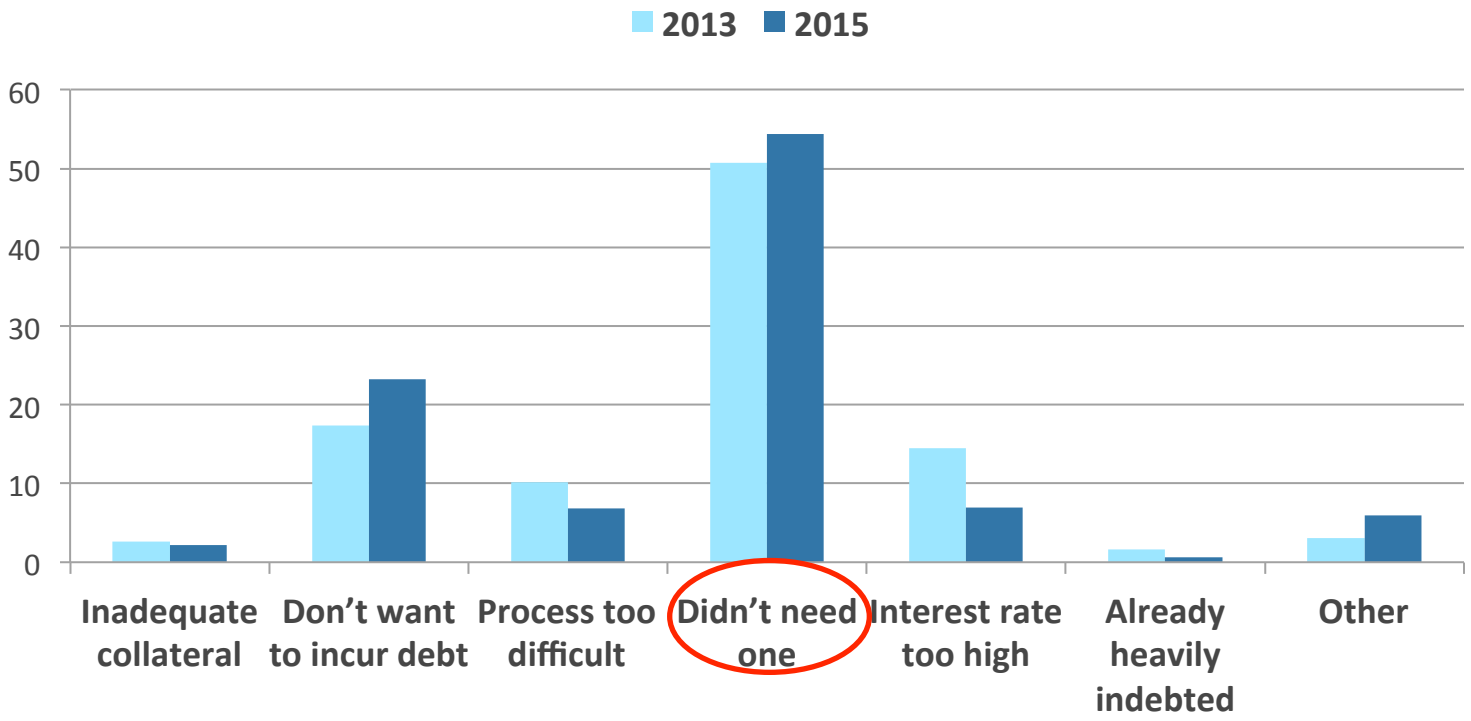
- Main source of finance for new investments are formal loans and retained earnings
- Higher share of new investments financed by own capital and lower share from informal loans
- Micro and household-owned firms more likely to use retained earnings or informal loans
- Larger firms finance investments through formal loans (69%)
- Slight increase in the value of investments in land, equipment and machinery, and buildings

Credit

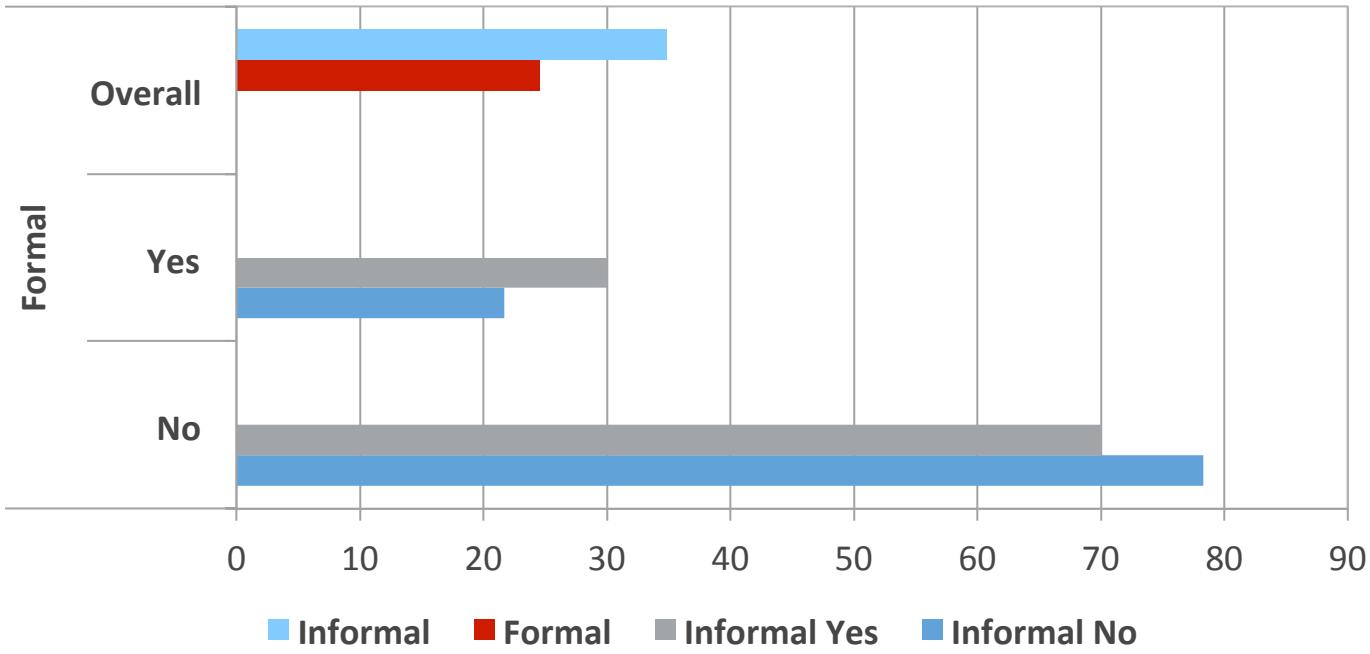
		2013 (Full sample)		2013 (Balanced sample)		2015 (Full sample)		2015 (Balanced sample)	
		Yes	No	Yes	No	Yes	No	Yes	No
Enterprise applied for formal loan	%	25.8	74.2	25.3	74.7	24.6	75.4	25.1	74.9
	Obs.	652	1,878	74.7	1,567	646	1,982	527	1,570
Problems getting loan	%	23.9	76.1	23.5	76.5	15.0	85.0	14.6	85.4
	Obs.	155	495	124	404	97	549	77	450

Source: Authors' calculations based on SME data.

Why enterprises do not apply for loans?



Formal and informal loans in 2015



- Informal loans are more common than formal (35% informal vs. 25% formal loans)
- 30% of firms have both types of loan

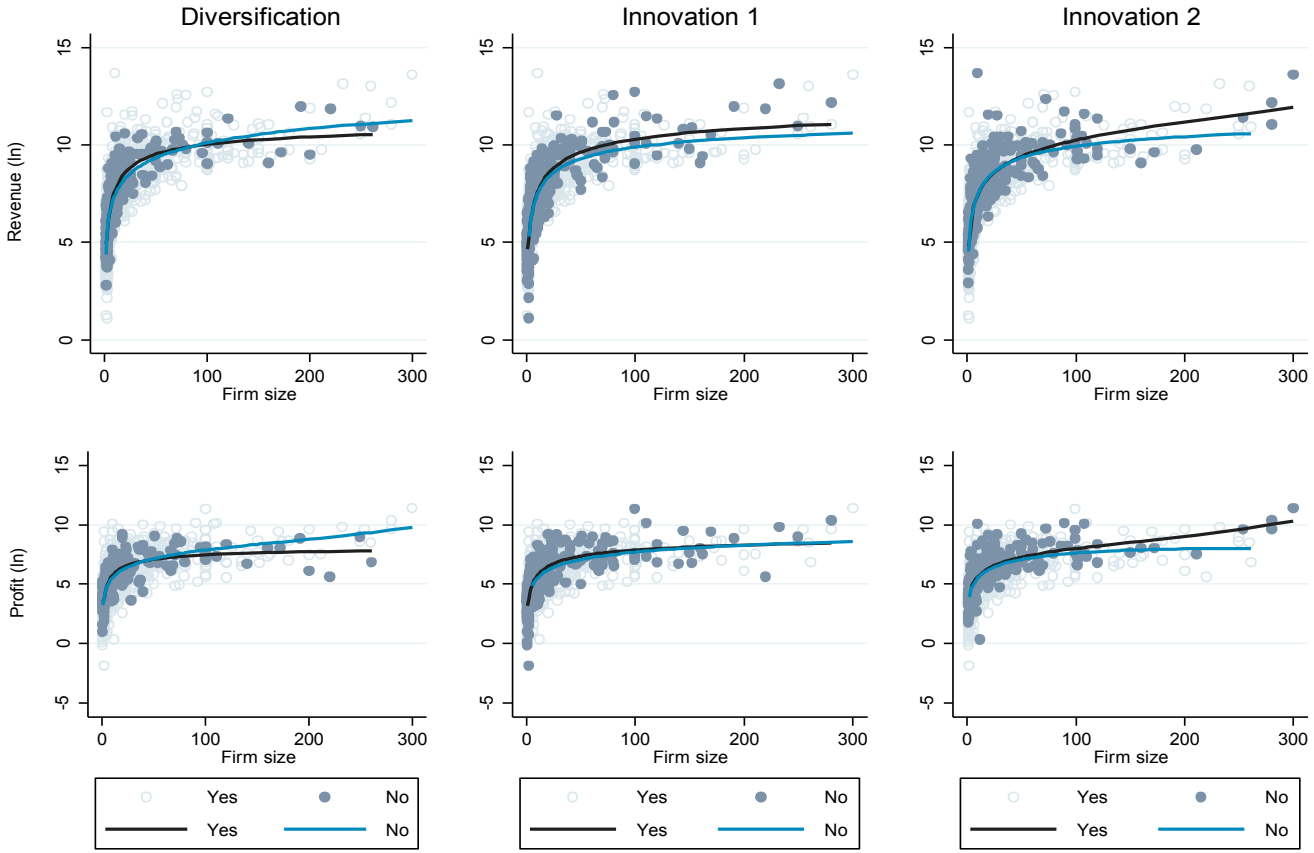
Chapter 6
Production, technology, and labour productivity

Diversification and innovation

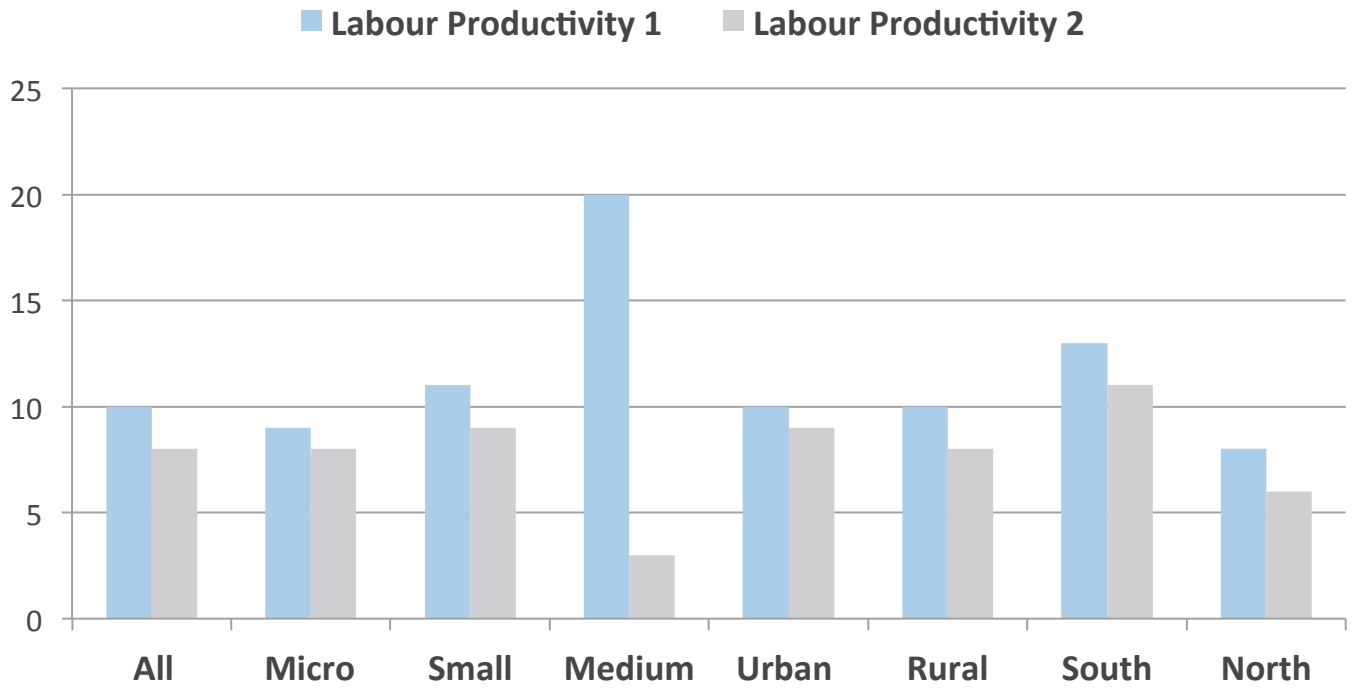
	Diversification (More than one 4-digit ISIC)		Innovation 1 (New product development)		Innovation 2 (Improvement of existing product)	
	2013	2015	2013	2015	2013	2015
All	11.1	11.6	0.7	23.8	16.4	13.2
Micro	9.1	10.1	0.4	23.9	12.9	10.0
Small	16.4	14.6	1.6	22.0	24.0	19.4
Medium	15.8	18.3	0.7	28.0	30.2	28.7
Urban	9.9	8.3	0.6	18.8	19.0	15.1
Rural	12.1	14.2	0.7	27.7	14.4	11.8
Industrial zone	18.2	15.1	1.5	24.5	30.3	24.5
Not in the industrial zone	10.8	11.5	0.6	23.8	15.6	12.8

- An average Vietnamese SME is specialised (only 11.6% of firms produced more than one product)
- New product development (Innovation 1) has largely increased but improvements of existing products (Innovation 2) have declined
- Firms from the food and fabricated metal sectors tend to diversify and innovate more than other sectors

Firm revenue and profits by diversification and innovation status

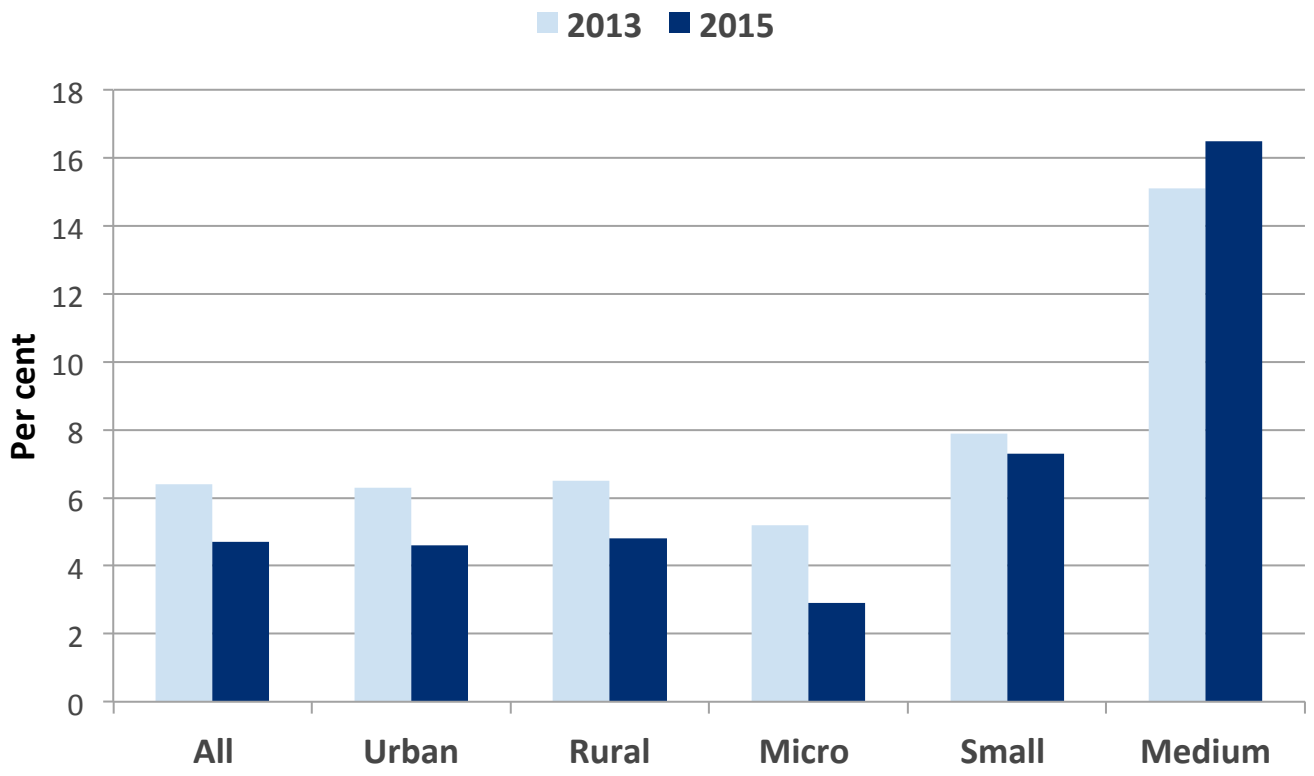


Labour productivity growth



- LP1 is real revenue per full-time employee and LP2 is real value added per full-time employee
- Larger urban enterprises show advantages over smaller ones, with higher values of both real revenue and value added per employee
- LP1 has higher growth than LP2

New technology adoption



Chapter 7
Employment

Chapter 7 - Employment

- Characteristics of enterprise respondents
- Workforce and hiring patterns disaggregated by size
- Wages from an employee survey

Age and gender of respondent

- Owner or manager as respondents
- For all size categories, owners are older than managers
- Slightly older owners in medium-sized enterprises
- Slightly younger managers in small and medium-sized enterprises
- Owners tend to be male (71%), whereas managers tend to be female (68%)

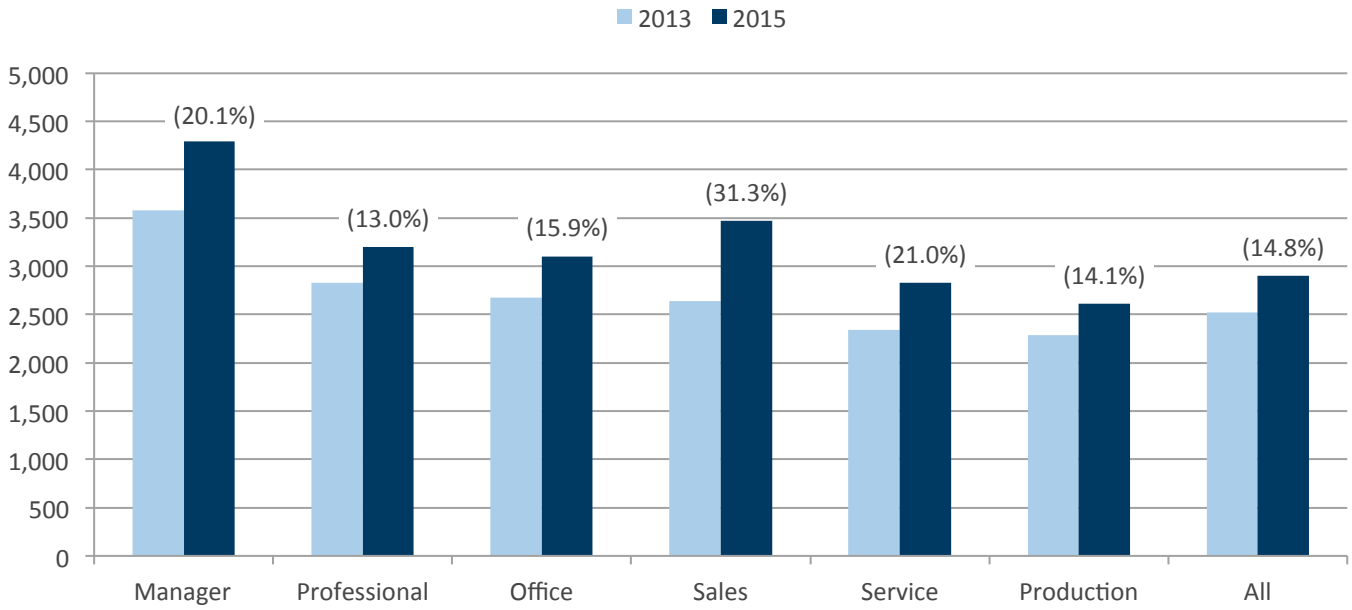
Employment in micro enterprises

- More workers are hired as unpaid labour
- The share of people working in production is lower
- Fewer jobs are created than jobs being left ➔ net job creation is negative
- Less likely to face difficulties hiring workers with required skills
- Less likely to provide training for new workers

	Micro	Small	Medium
Share of workforce that:			
- are unpaid	53.9	4.4	0.1
- are working in production	52.5	70.3	73.1
- got a new job in 2014	4.0	7.8	7.8
- left their job in 2014	4.9	7.1	5.4
Share of enterprises that:			
- have difficulties finding required skills	3.8	15.6	28.4
- provides training for new employees	17.2	30.7	43.2

Wage development from 2013 to 2015

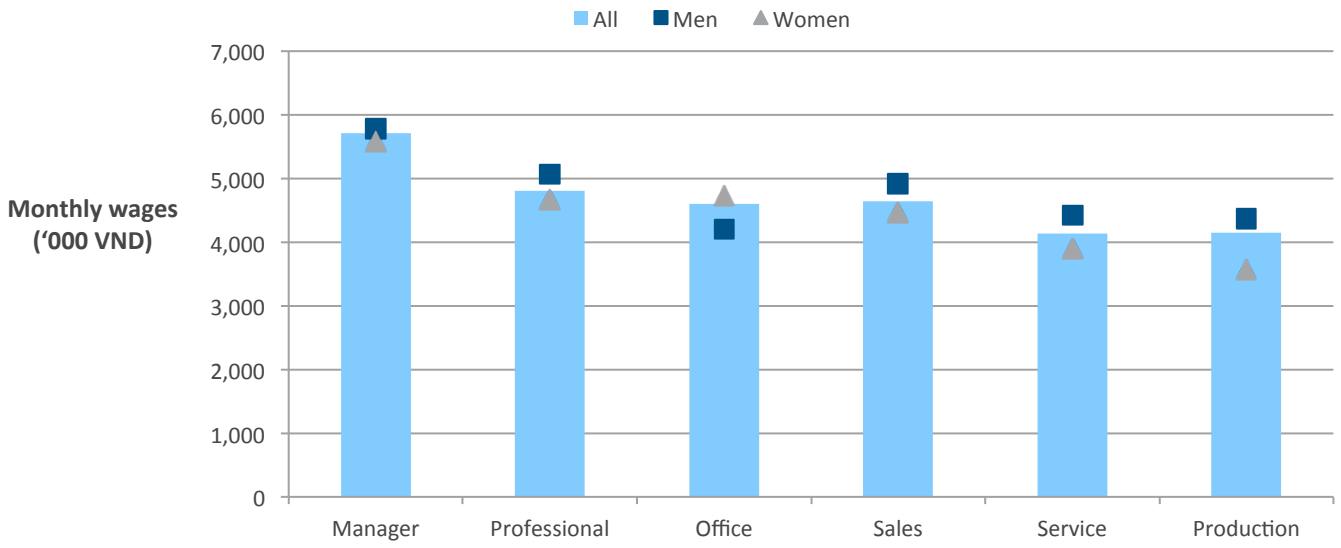
- Overall increase in real wages by 15% from 2013 to 2015
- Increases in wages of 13 - 31 percent depending on occupation category



Note: Monthly wages has been normalised using 2010 VND as base. Figures in parenthesis correspond to wage increase between 2013 and 2015.

Wage gap between males and females (1)

- Monthly wages are 200 thousands VND higher for males on average
- Especially large gap among production workers (22% larger wage for men)
- Only among office workers do females earn more



Wage gap between males and females (2)

- Method: simple OLS regression framework
- Controls for various individual characteristics. In addition, (2) controls for enterprise characteristics
- Result: No significant result on gender discrimination

More research is required to make robust conclusions

Table 7.10: Wage determinants

Dependent variable: ln(real wage)	(1)		(2)	
Gender of worker (male=1)	0.078	(1.50)	0.065	(1.29)

Chapter 8
Personality and behaviour

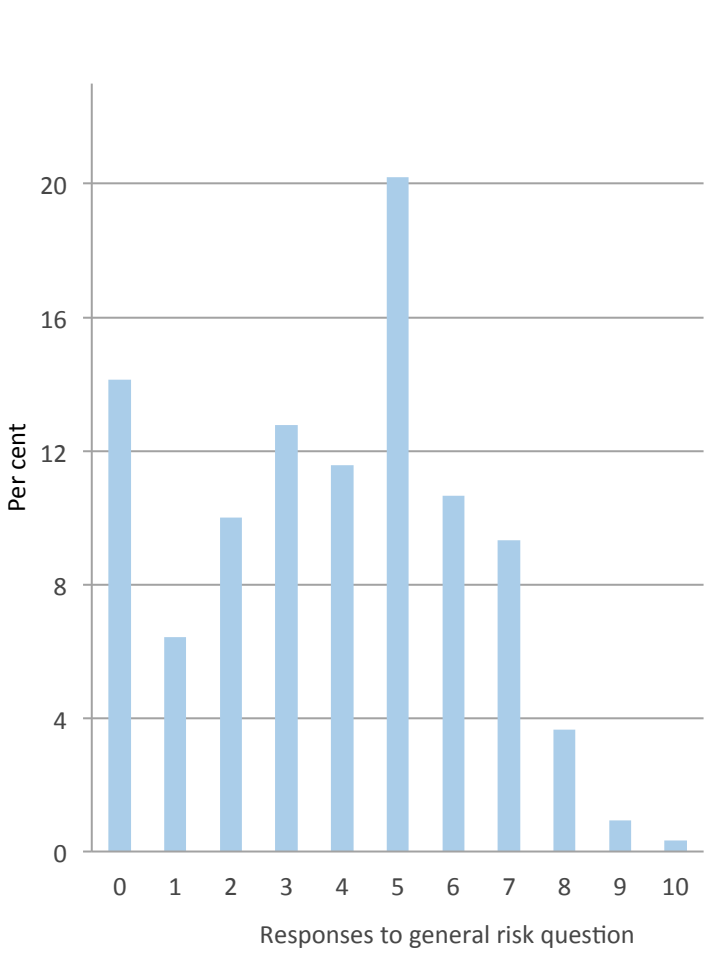
Motivation

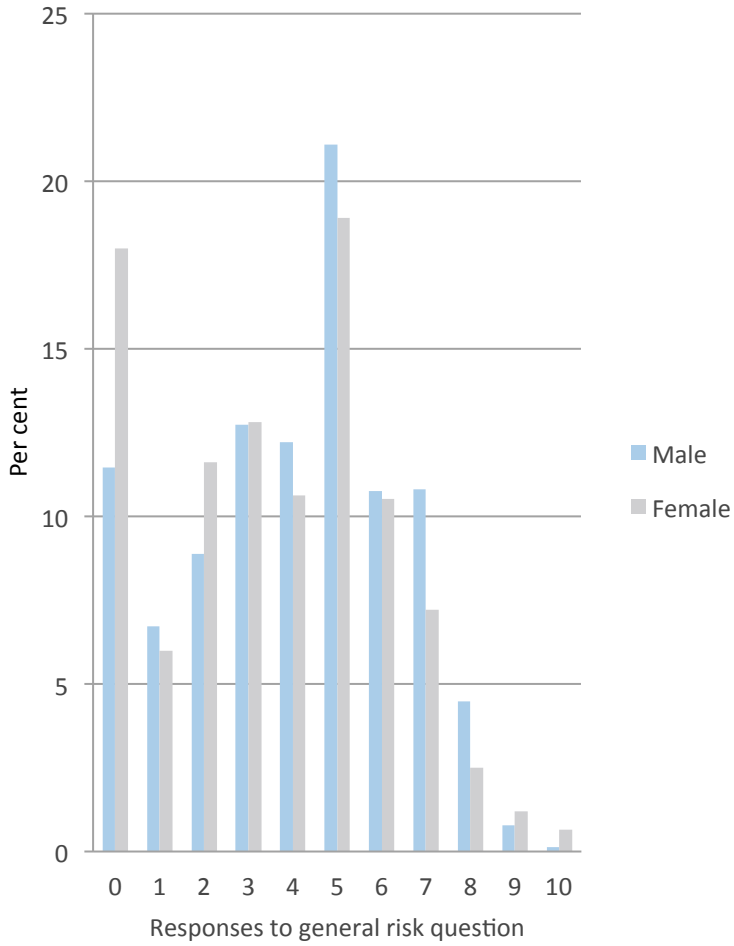
- Risk attitudes and preferences matter for entry into entrepreneurship, business performance, and also business survival.
- In a meta-analytic study, Zhao and Seibert (2006) find entrepreneurial entry to be positively correlated with the Big Five traits of conscientiousness, extraversion, and openness to experience, and negatively correlated with neuroticism and agreeableness.
- New module added to the 2015 survey to measure these preferences and traits among firm owners/managers in Viet Nam.

Measurement

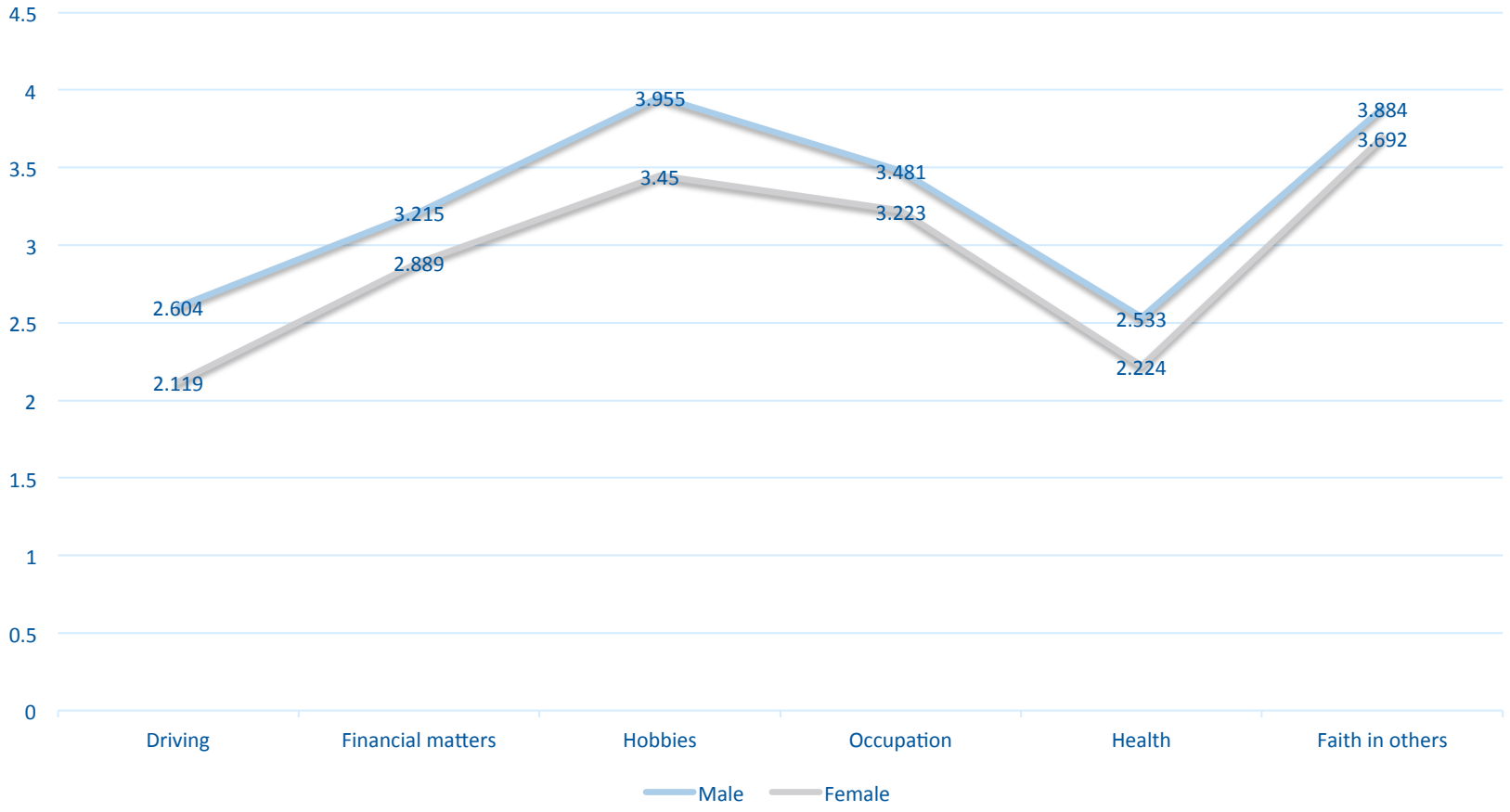
- Risk attitudes were elicited on an 11-point scale using 'willingness-to-take-risk' questions: general and context-specific.
- Big Five (Openness to experience, Conscientiousness, Extraversion, Agreeableness, Neuroticism): 15 questions on a 1-7 scale
- Locus of control: 10 questions on a 1-7 scale
- Innovation index: 3 questions on a 1-5 scale

Willingness to take risk





Context-specific willingness to take risks



Personality traits

	Col. 1	Col.2	Col. 3	Col. 4
	Overall	Males	Females	p-value
Big Five: Openness to experience	3.882 (1.44)	3.92 (1.43)	3.827 (1.47)	0.10
Big Five: Conscientiousness	5.535 (1.04)	5.479 (1.03)	5.616 (1.04)	0.00
Big Five: Extroversion	4.31 (0.99)	4.328 (0.98)	4.284 (0.99)	0.26
Big Five: Agreeableness	4.559 (0.90)	4.456 (0.9)	4.708 (0.88)	0.00
Big Five: Neuroticism	3.037 (0.99)	2.996 (1.00)	3.095 (0.97)	0.011
Internal locus of control	5.115 (0.85)	5.151 (0.84)	5.063 (0.88)	0.009
External locus of control	3.005 (1.1)	2.981 (1.11)	3.039 (1.10)	0.185
Innovativeness	3.613 (0.85)	3.6 (0.87)	3.62 (0.83)	0.53
Number of observations	2,648	1,564	1,084	

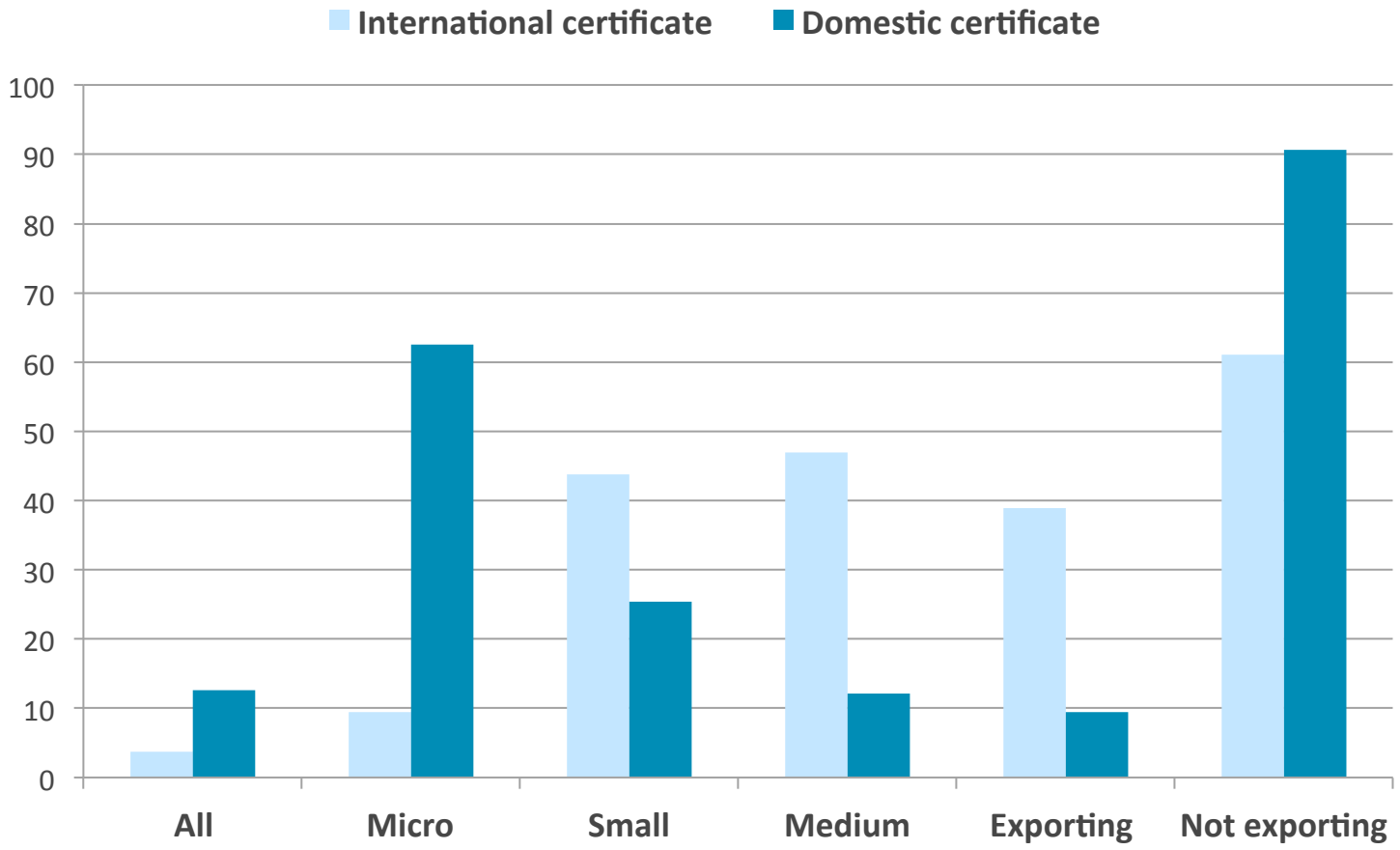
Key findings

The data indicates trends largely in line with previous literature:

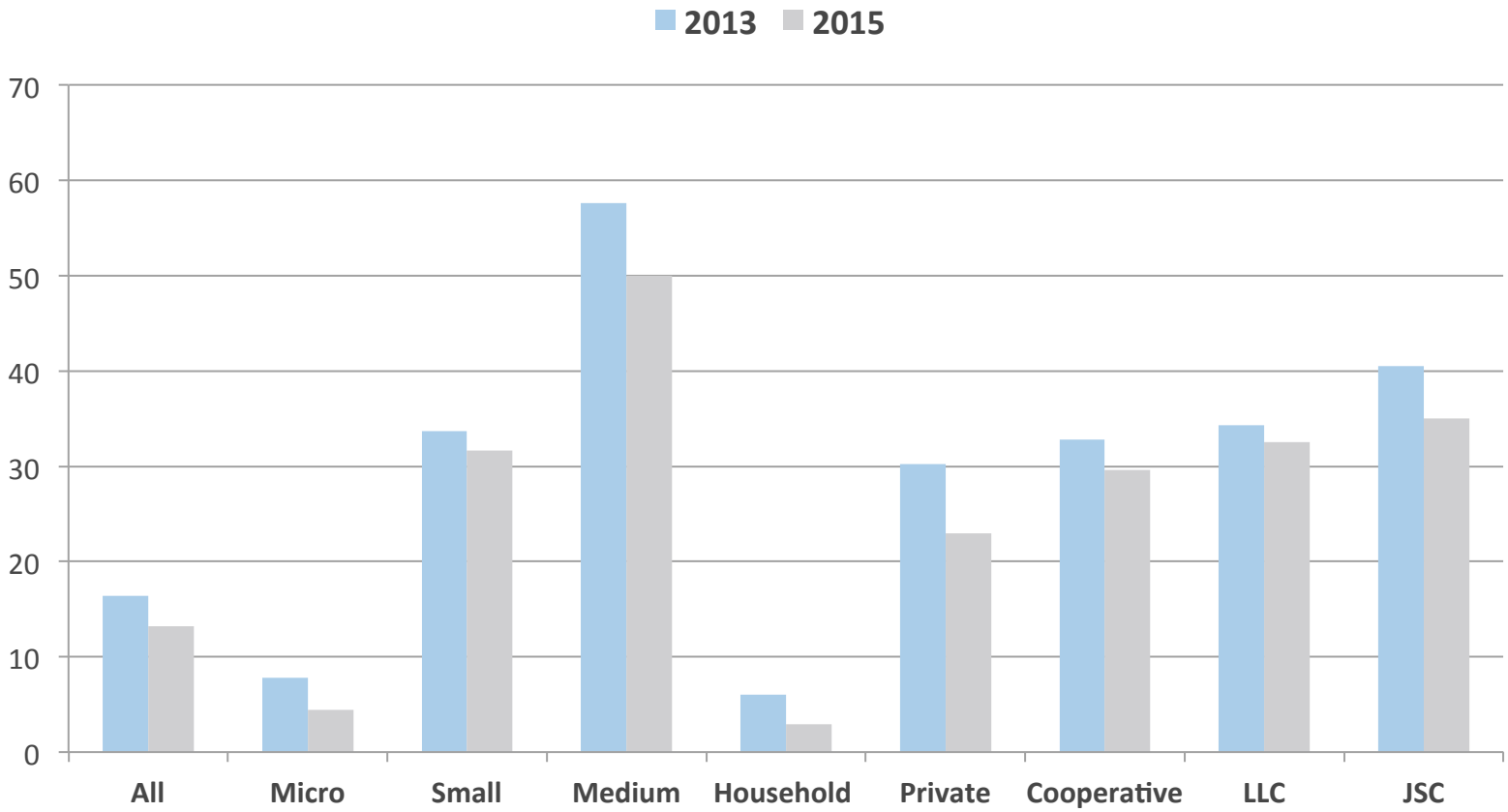
- Females are significantly more risk-averse than males, in general and across all six contexts.
- Females report significantly higher scores on conscientiousness, agreeableness, and neuroticism, and score significantly lower on the internal locus of control.
- Females also score lower on openness to experience and extroversion, and higher on external locus of control and innovativeness.

Chapter 9
Certification

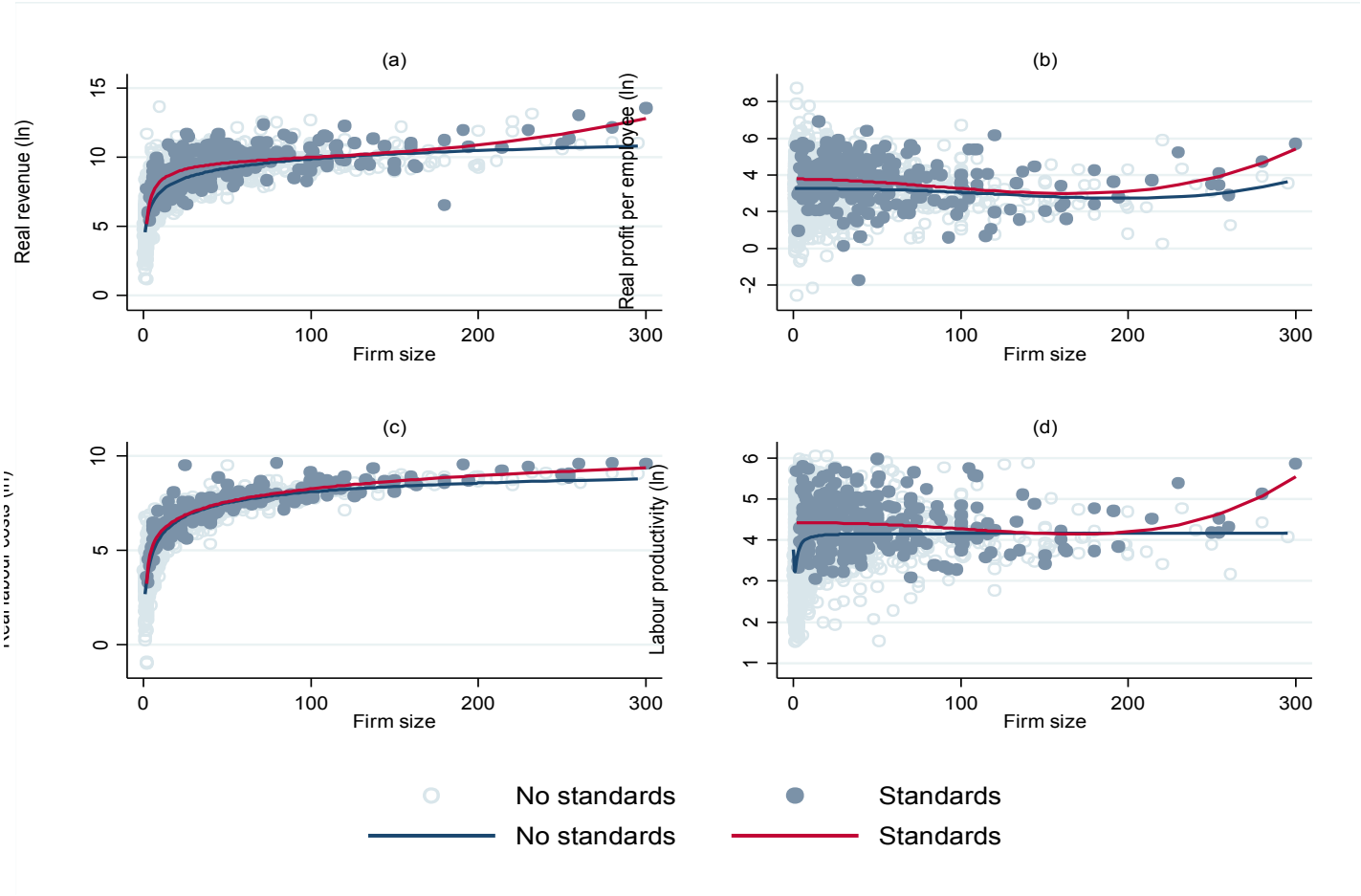
Quality standards



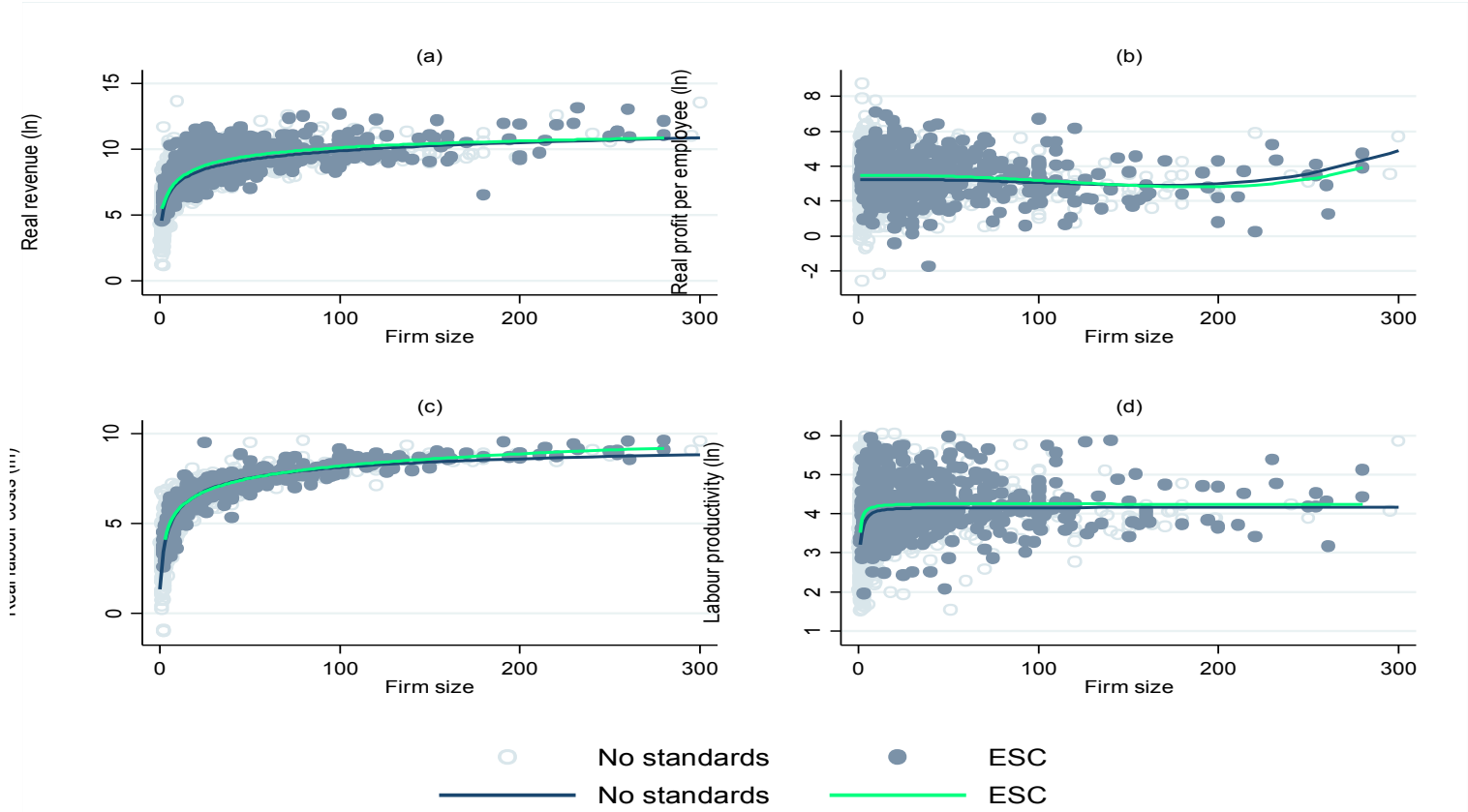
Environmental Standards Certificate (ESC)



Differences between firms by application of international standards



Differences between firms by application of environmental standards



Chapter 10
Trade and sales structures

Chapter 10 – Trade and sales structures

- Export behaviour
- Competition
- Sales structures

Exporting vs. non-exporting enterprises

- Clear size effect in exporting behaviour
- Only micro exporters have larger revenues per full-time employee
- Non-exporters earn higher profits per full-time employee

	All	Micro	Small	Medium
Exporting enterprises (%)	6.8	1.0	13.9	42.2
Revenue per full-time employee (exporters)	355.4	276.0	386.0	344.2
Revenue per full-time employee (non-exporters)	277.9	209.5	496.9	513.1
Profit per full-time employee (exporters)	30.4	33.1	32.9	27.2
Profit per full-time employee (non-exporters)	36.9	36.3	39.6	32.3

Note: Revenues and profits are in million 2010 VND.

Perceived competition (1)

- Lower share of micro enterprises reporting any competition
- Only borderline significance in a regression framework between size and perceived competition

	Micro	Small	Medium
Report any competition (%)	85.4	92.9	93.3

Table 10.7: Determinants of perceived competition

		Coefficient	z-stats
Enterprise Size	No. of employees (x1,000)	1.263*	(1.65)
Customer base	No. of customers	0.084***	(5.94)

Note: Binary probit. Marginal effects at the mean of covariates. Controls for accumulated goods, export, province, ownership type and sectors.

Perceived competition (2)

- Private informal and formal enterprises constitute the main source of competition

- Likelihood of introducing new product lines, improving existing product lines or introducing new technology increase with severity of competition

	Severity of competition
Source of competition	
- State enterprises	2.0
- Private formal enterprises	2.7
- Private informal enterprises	2.9
- Legal imports	1.7
- Smuggling	1.6
- Other sources	1.6

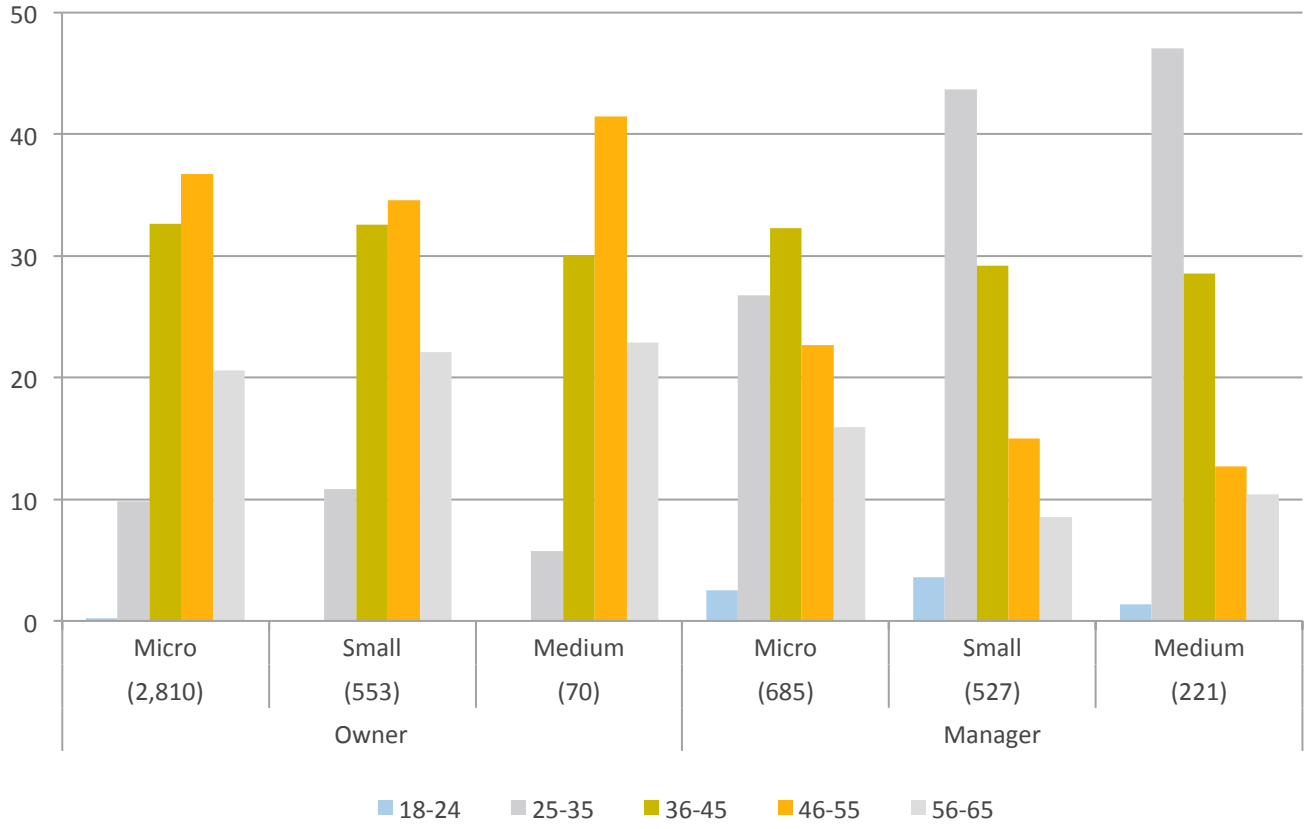
Note: Competition is ranked as follows: 4 = severe, 3 = moderate, 2 = insignificant, 1 = No competition

Sales structures

- Micro enterprises mainly sell for final consumption, whereas small and medium-sized enterprises sell more intermediates to service sector
- Micro enterprises are much more likely to sell to local people
- Small and medium-sized enterprises sell more to domestic non-state enterprises
- Micro enterprises are more likely to have many customers

	Micro	Small	Medium
Average share of sales:			
- used for final consumption (%)	53.5	29.6	17.8
- as intermediates in services (%)	38.1	49.1	54.8
- to local people (%)	49.2	22.6	10.5
- to domestic non-state enterprises (%)	47.0	63.1	52.9
Share of enterprises with 20 or more customers (%)	74.3	67.1	58.6

Appendix: Age and gender of respondents



Note: Data from both 2013 and 2015 are used and some enterprises are present in both years.

Conclusion and summing-up

Conclusion (1)

- General improvement in business environment. Formalization of business entities has increased substantially.
- But access to formal credit has remained challenging, especially for household enterprises.
- Employment growth has picked up to pre-crisis levels and firm exit rates have gone down as compared to the 2009–13 period.
- However, informal household firms are not very dynamic in job creation, which will have to come from formalized SMEs in the future.
- Not much change in bribe paying, but clearer that bribe-paying businesses do not have higher rates of growth than non-paying firms.
- The share of enterprises making investments has increased since 2013 driven by micro firms.
- The rate of new technology adoption has declined since 2013; a cause for concern.

Conclusion (2)

- Labour productivity increased; the demonstrated link between innovation and labour productivity is a justification for increased policy attention to innovation.
- Real wages have increased by almost 15 per cent during the considered two-year period.
- Substantial differences between men and women both in risk attitude and personality traits.
- Vietnamese enterprises do not appear to be very active in foreign markets. This is not only illustrated by low export rates, but also by a low prevalence of internationally recognized standards.
- A large proportion of SMEs do not have quality or environmental certificates and we have even observed a negative trend in certification of both international and environmental standards.
- Almost 90 per cent of enterprises reported they face severe competition in their line of activity. The competitive pressure increases with firm size. Moreover, enterprises feel that the degree of competition has increased during the past two years.

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