

Rural Entrepreneurship and regional development in Asia – the case of Vietnam

Prof. Dr. Javier Revilla Diez

Institute of Economic and Cultural Geography
Leibniz Universität Hannover

diez@wigeo.uni-hannover.de

- ▶ **Vietnam – recent development trends**
- ▶ **Doi Moi and its implications**
- ▶ **Entrepreneurship in rural Vietnam**
 - **Project description**
 - **Theoretical assumptions on entrepreneurship**
 - **Main research questions and methodology**
 - **Empirical results**
 - **General characteristics and human capital**
 - **Profits and employment**
 - **Performance**
- ▶ **Conclusions**

Vietnam – recent development trends

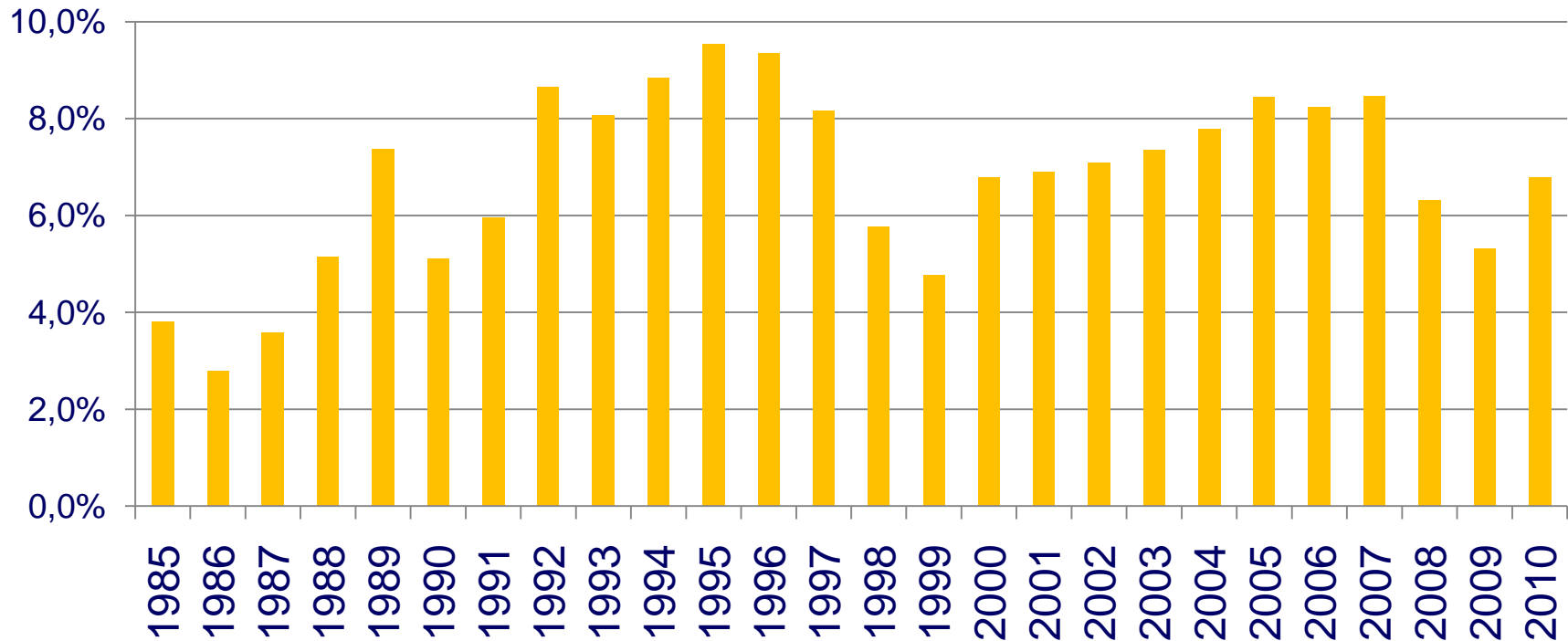


Development trends over the last 20 years

- Stable economic growth
- Drastic poverty reduction
- Structural change

Annual growth rate of GDP in Vietnam

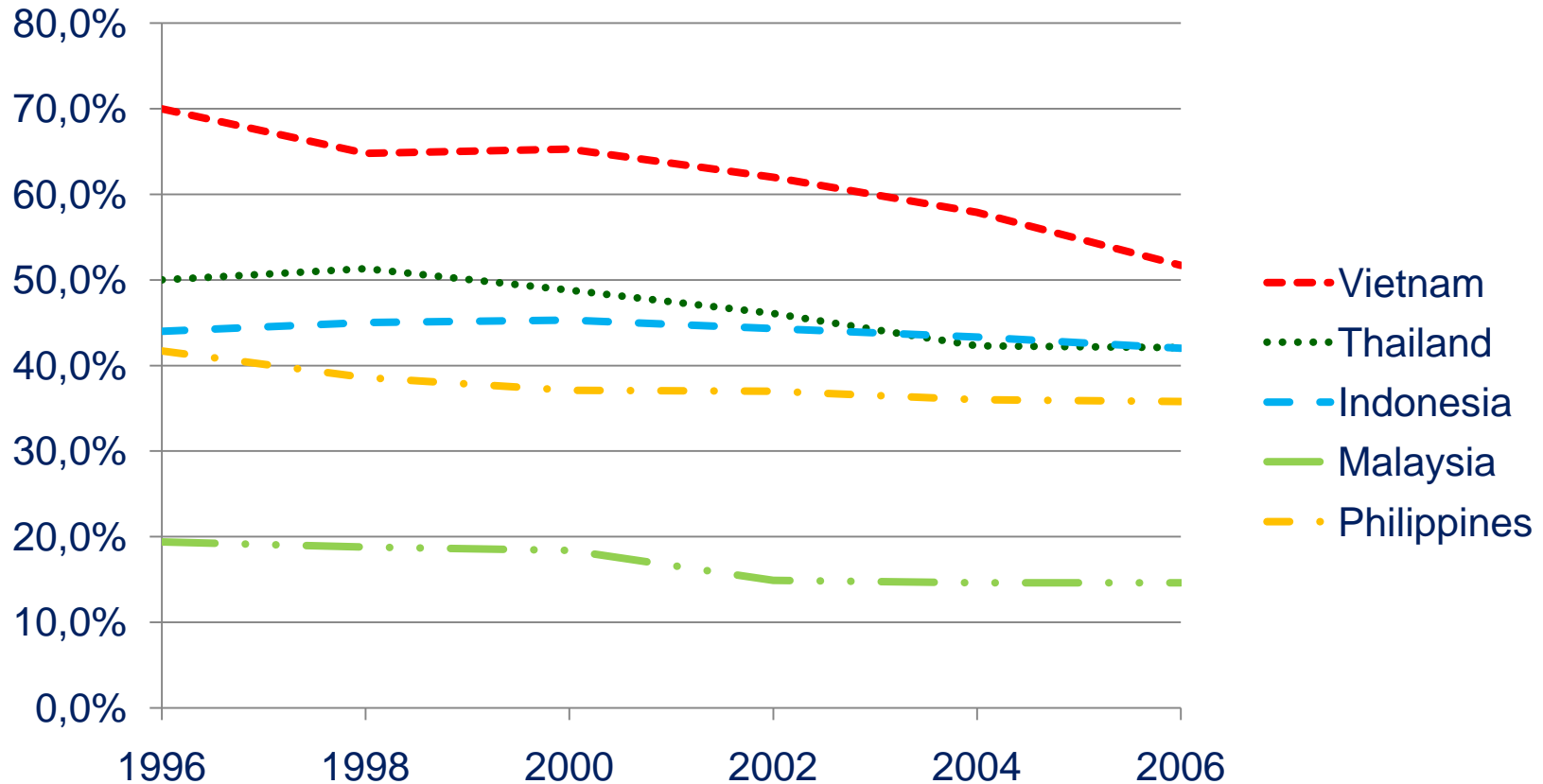
(in % and real prices)



Source: WORLD BANK (2011)

Employment in agriculture

(in % of total employment)

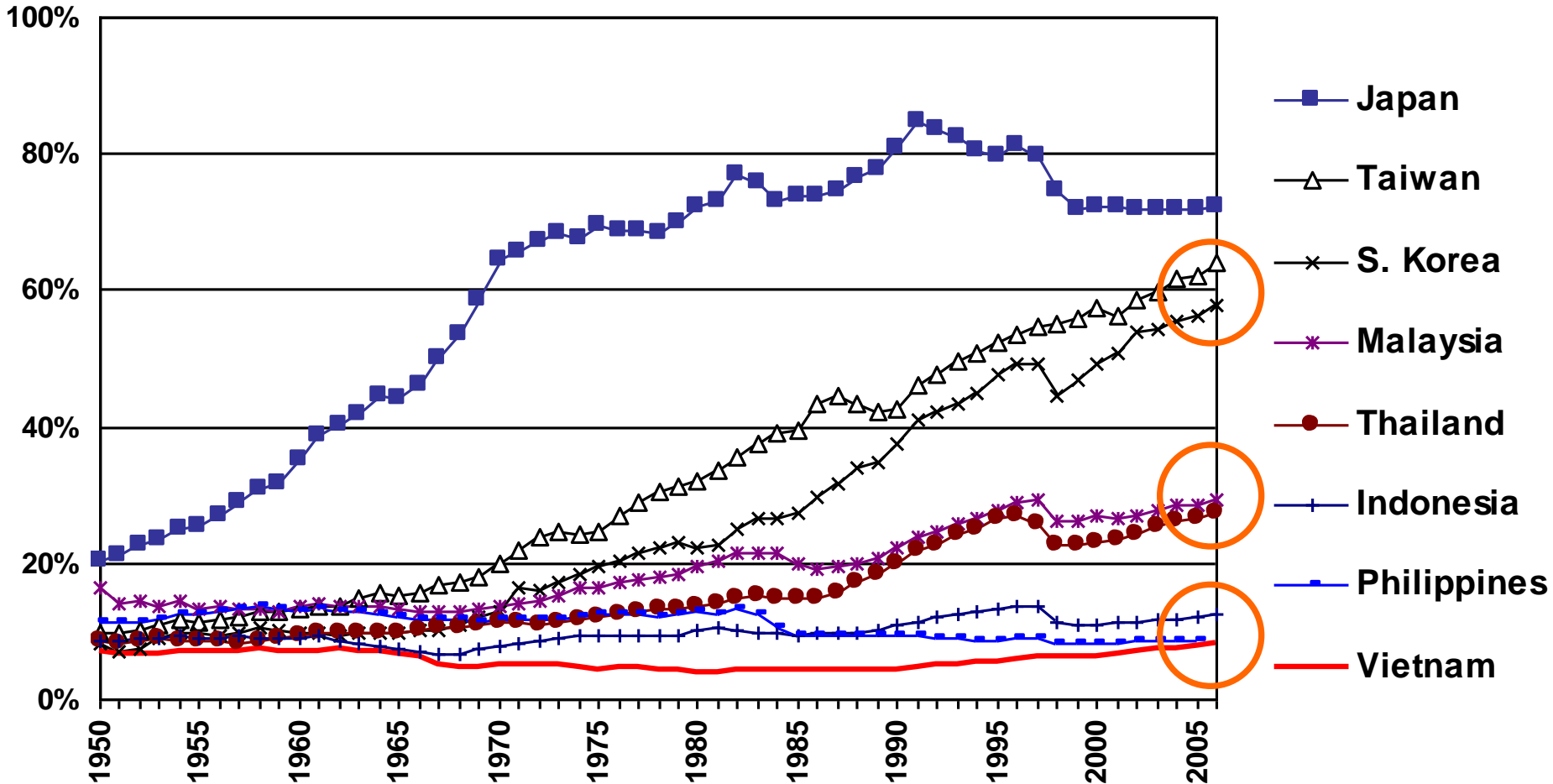


Source: WORLD BANK (2011)

Different Speeds of Catching Up

Per capita real income relative to US

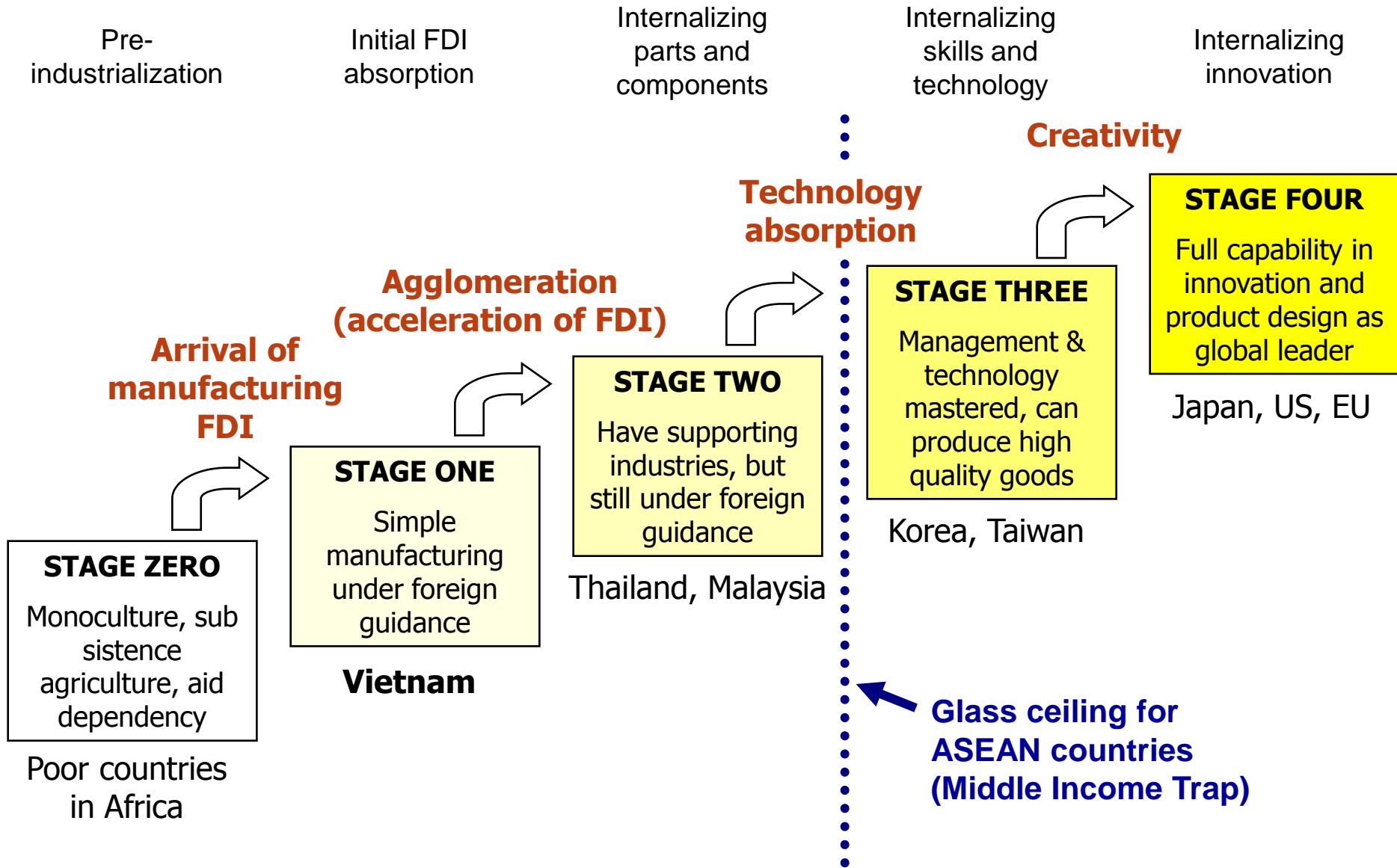
(Measured by the 1990 international Geary-Khamis dollars)



Quelle: Kenichi Ohno 2009

Sources: Angus Maddison, *The World Economy: A Millennium Perspective*, OECD Development Centre, 2001; the Central Bank of the Republic of China; and IMF *International Financial Statistics* (for updating 1998-2006).

Stages of Catching-up Industrialization



► Colonial history

- Strong Chinese influence - Vietnam was a province of China, unified in the 1700s.
- French influence from 1787:
- Emergence of nationalism in early 20th century.

► Japanese occupation during WWII

► Unification of Vietnam in 1975: Vietnam War

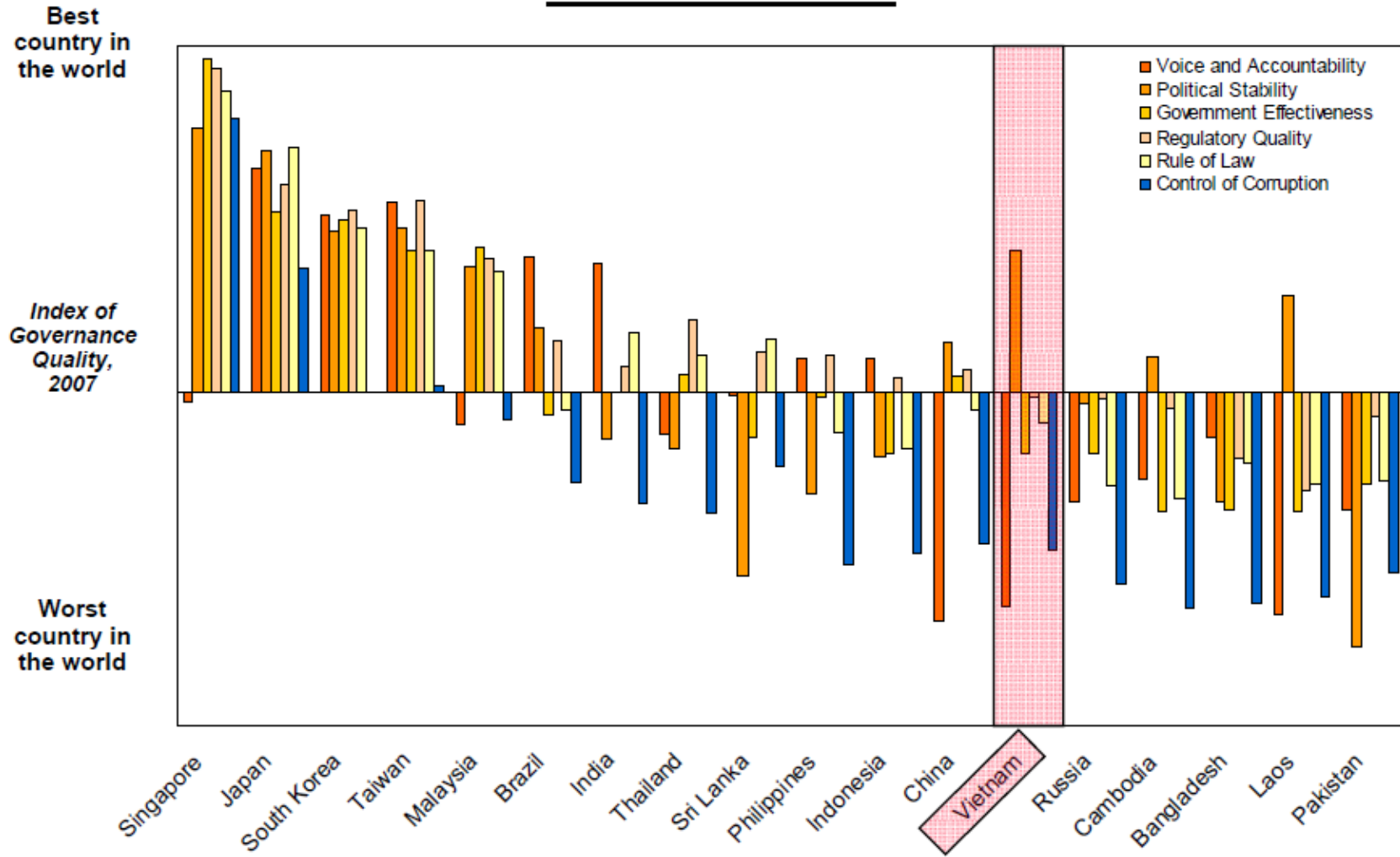
- Civil War (1945-1954):
- Involvement of the United States in the Vietnam War:
- Conflicts with China (1979).

- ▶ **1986: 6. Party Congress** = transformation of the economic system (doi moi = Renovation)

- ▶ Basic elements of a market economy:
 - right to private property,
 - freedom of contract and enforcement of contractual claims,
 - bankruptcy codes,
 - investment, production and distribution are based on supply and demand
 - prices of goods and services are determined in a free price system and the right to fair competition

- ▶ **But:** transition to a socialist market economy

Governance Indicators Selected Countries



Note: Sorted left to right by decreasing average value across all indicators. The 'zero' horizontal line corresponds to the median country's average value across all indicators.

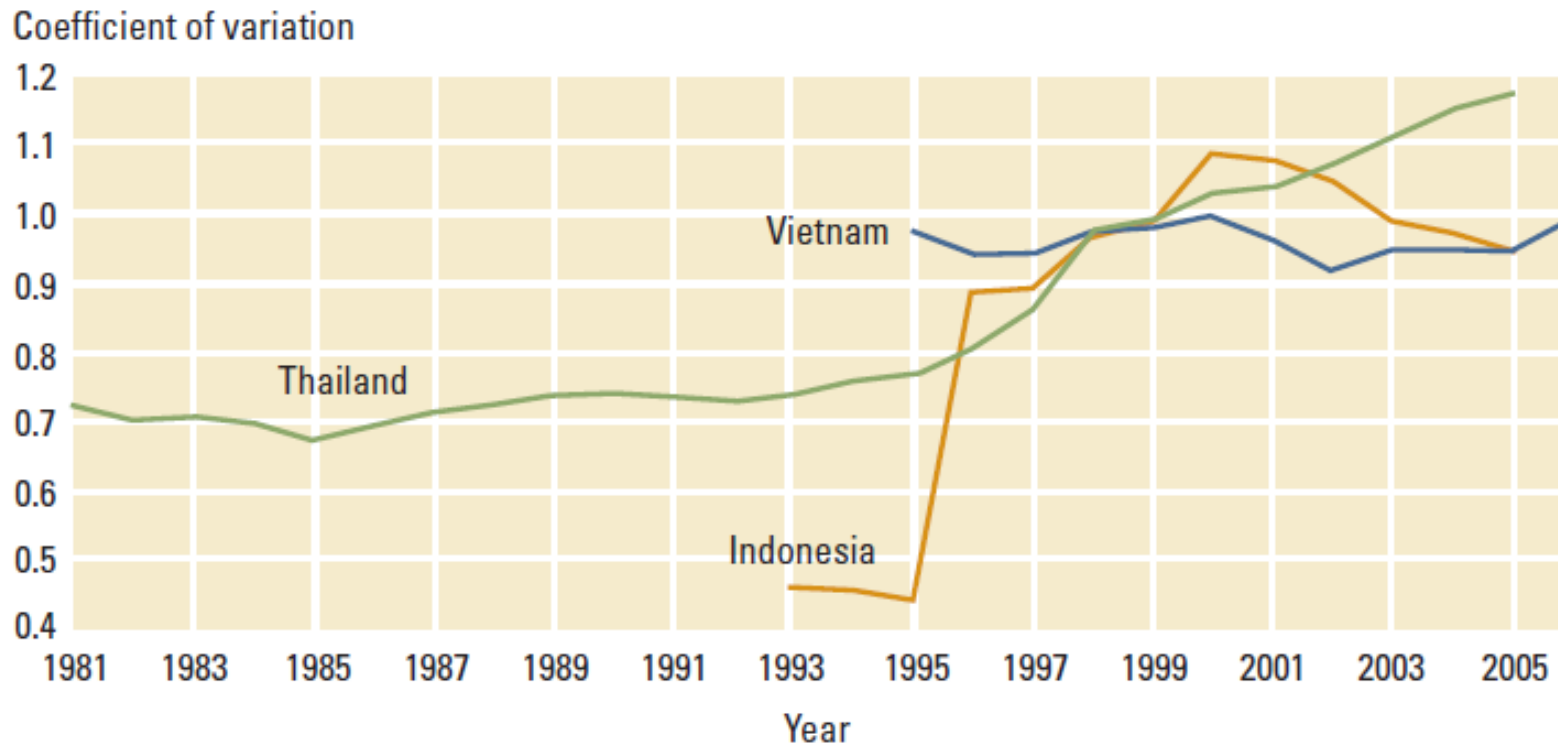
Source: World Bank (2008)

Copyright 2008 © Professor Michael E. Porter

Doi Moi and its implications



Figure 2.9 Disparities in per capita gross product have been rising between leading and lagging areas in Southeast Asia



IN: The World Bank (2009), World Development Report.

Doi Moi and its implications

Indicator	Unit	1993	1998	2002	2004	2005
Poverty^a	%	58.1	37.4	28.9	24.1	12.9
Urban	%	25.1	9.2	6.6	10.8	n.a.
Rural	%	66.4	45.5	35.6	27.5	n.a.
Ethnic Minorities	%	86.4	75.2	69.3	n.a.	n.a.
Food Poverty	%	24.9	15.0	9.9	7.8	10.9
Living with less than 1 \$ a day	%	39.9	16.4	13.6	10.6	2.2
Gini Coefficient		0.34	0.35	0.37	0.37	n.a.

Notes: a Here the national poverty line is referred to.

Source: Mausch/Revilla Diez/Klump 2011

Share of industrial output in % of total Vietnam

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Red River Delta	19,74	20,08	21,45	20,34	19,12	20,21	20,19	21,04	21,25	21,78	22,92	24,49
Northern midlands and mountain areas	4,24	3,72	3,59	3,27	2,79	2,85	2,77	2,52	2,6	2,47	2,42	2,59
North Central area and Central coastal area	8,5	8,22	7,96	7,71	7,26	7,32	7,12	6,99	6,85	7,04	6,65	6,53
Central Highlands	1,25	1,19	1,01	1,05	0,93	0,71	0,72	0,75	0,64	0,73	0,71	0,74
South East	49,65	50,64	49,45	52,65	54,78	54,61	55,65	55,89	56,62	55,55	55,19	53,3
Mekong River Delta	11,18	10,47	10,34	9,67	10,55	9,59	8,81	8,35	7,96	8,83	8,74	9,25
NEC.	5,45	5,67	6,21	5,29	4,57	4,71	4,74	4,43	4,06	3,6	3,37	3,2
WHOLE COUNTRY	100	100	100	100	100	100	100	100	100	100	100	100

Source: General Statistical Office 2010

Table 1: In, Out and Net Migration Rates of Regions of 1999 and 2009 Census Sample Data⁸⁵.

Region	Migration-in rate*		Migration-out rate**		Net migration rate***	
	1999	2009	1999	2009	1999	2009
North East	16.15	15.9	27.53	33.5	- 11.38	- 17.5
North West	13.24		14.57		-1.32	
Red River Delta	23.28	35.0	32.61	36.7	-9.33	- 1.7
North Central Coast	8.61	16.0	31.97	50.6	-23.36	- 34.6
South Central Coast	17.02		29.74		-12.71	
Central Highlands	86.24	43.3	16.22	32.1	70.02	11.2
South East	68.33	135.4	26.80	27.7	41.53	107.7
Mekong River Delta	14.71	16.3	24.59	56.7	-9.88	- 40.4

* Migration-in rate is a ratio of number of migrants-in over total local inhabitants (per thousand)

** Migration-out rate is a ratio of number of migrants-out over total local Inhabitants (per thousand)

*** Net migration is a ratio of net migrants (migrants-in minus migrants-out) over total local inhabitants (per thousand)

Doi Moi and its implications

Urban population in % of total population

	Viet Nam	Thailand	South Korea
1950	11,6	16,5	21,4
1960	14,7	19,7	27,7
1970	18.3	20,9	40.7
1980	19.4	26,8	56,9
1990	20.3	29,4	73,8
2000	24,3	31,1	79,6
2005	26,7	32,5	80,8
2011	31, 0	34,1	83,2

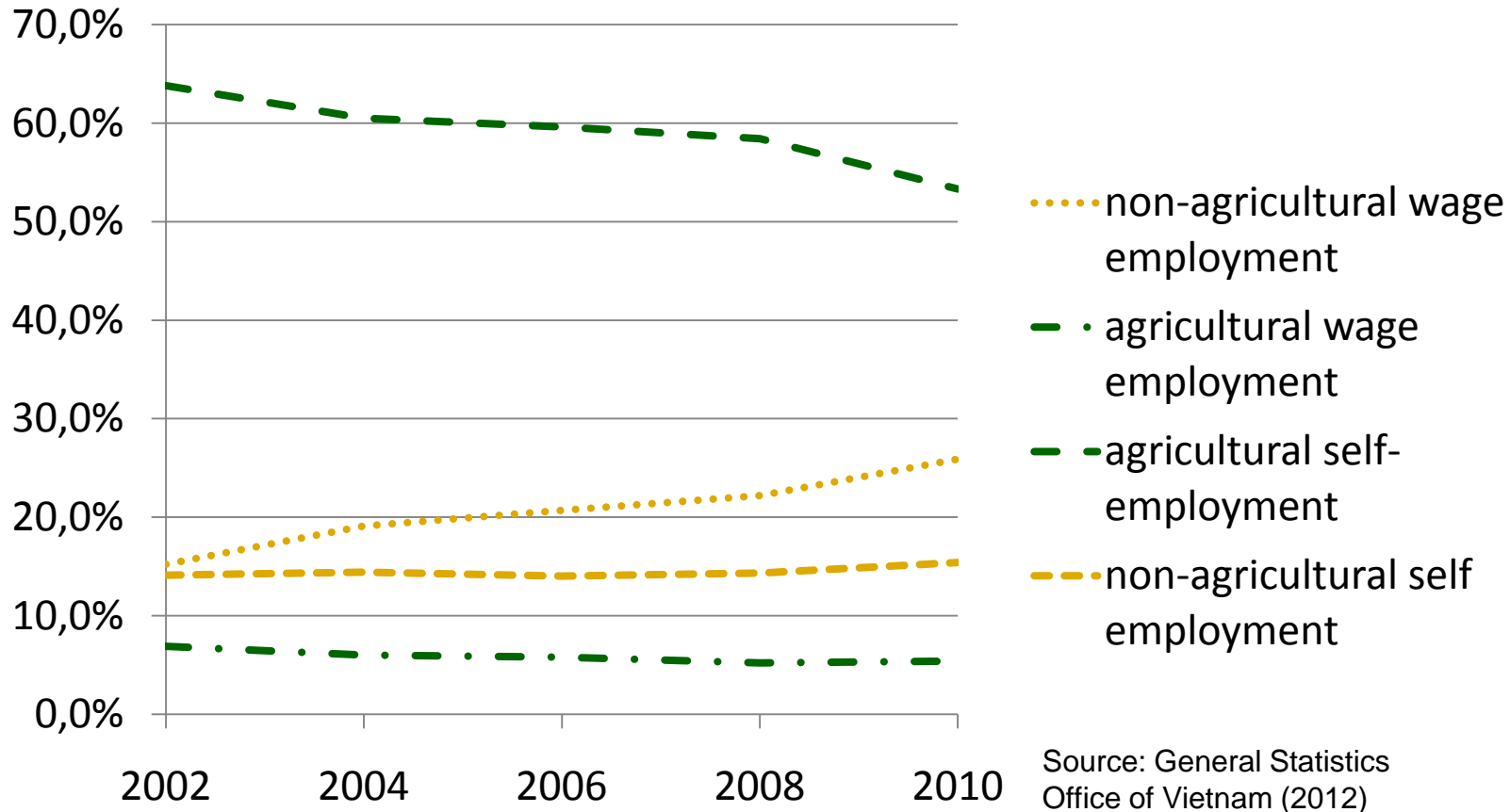
PKE 2011: VN 3.600 US\$, TH 10.300 US\$, SK 32.800 US\$

Brazil: 12.200 US\$, 87 % urban population

Quelle: CIA World Factbook



- 31.5% of households own a non-farm business in rural Vietnam (VHLSS 2008)
- 20.2% of the 1st and 46.9% of the 5th income quintile own a non-farm business (VHLSS 2008)



Employment shares of working age population in rural Vietnam (main employment)

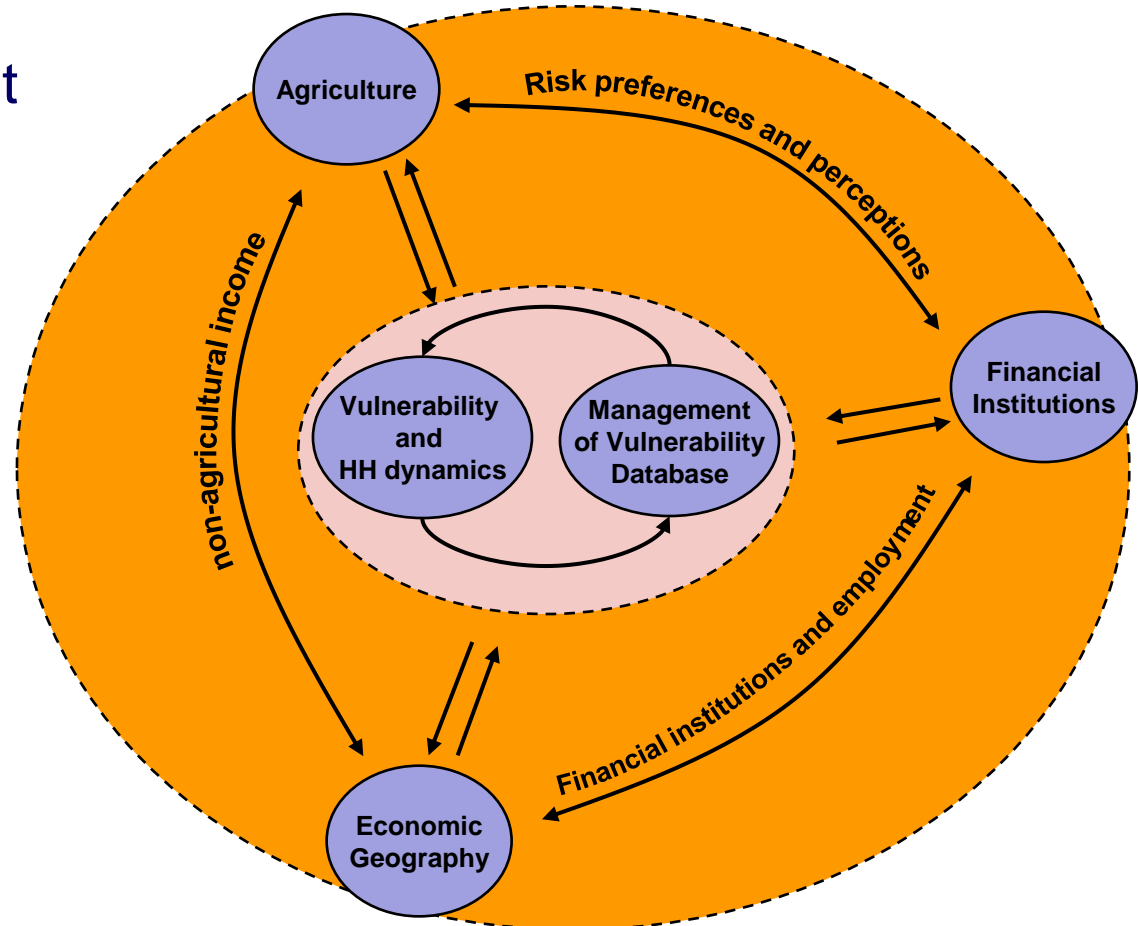
- ▶ DFG-Research group 756: „Vulnerability in Southeast Asia“ (2006-2012)
- ▶ Interdisciplinary Cooperation of Leibniz University Hannover with Georg-August-University Göttingen, Goethe University Frankfurt/Main and Justus-Liebig-University Gießen
- ▶ Research Area:
 - 3 Provinces in Vietnam
 - ◆ Ha Tinh, Thua Thien Hue and Dak Lak
 - 3 Provinces in Northeast Thailand
 - ◆ Nakhon Phanom, Ubon Ratchathani and Buriram
- ▶ Panel-Data: about 2200 Households per country in 2007, 2008, und 2010



Research themes of Economic Geography sub-project

Regional development in rural areas

- Rural non-farm employment and vulnerability
- Migration and remittances
- Human capacity building and rural industrialization
- Local institutions and the performance of companies





Source: Own Photographs

► Opportunity Entrepreneurs

...pulled into entrepreneurship by opportunity recognition.

► Necessity Entrepreneurs

...pushed into entrepreneurship because they have no other choice to earn a living

(REYNOLDS et al. 2002)

→ But necessities and opportunities differ in rural areas in developing countries (see Livelihoods literature)

Theoretical assumption on opportunity and necessity entrepreneurship

► Results for developed countries

- Two types of entrepreneurs differ in their socio-economic characteristics
- Opportunity entrepreneurs are more innovative.
- Opportunity entrepreneurs are more successful

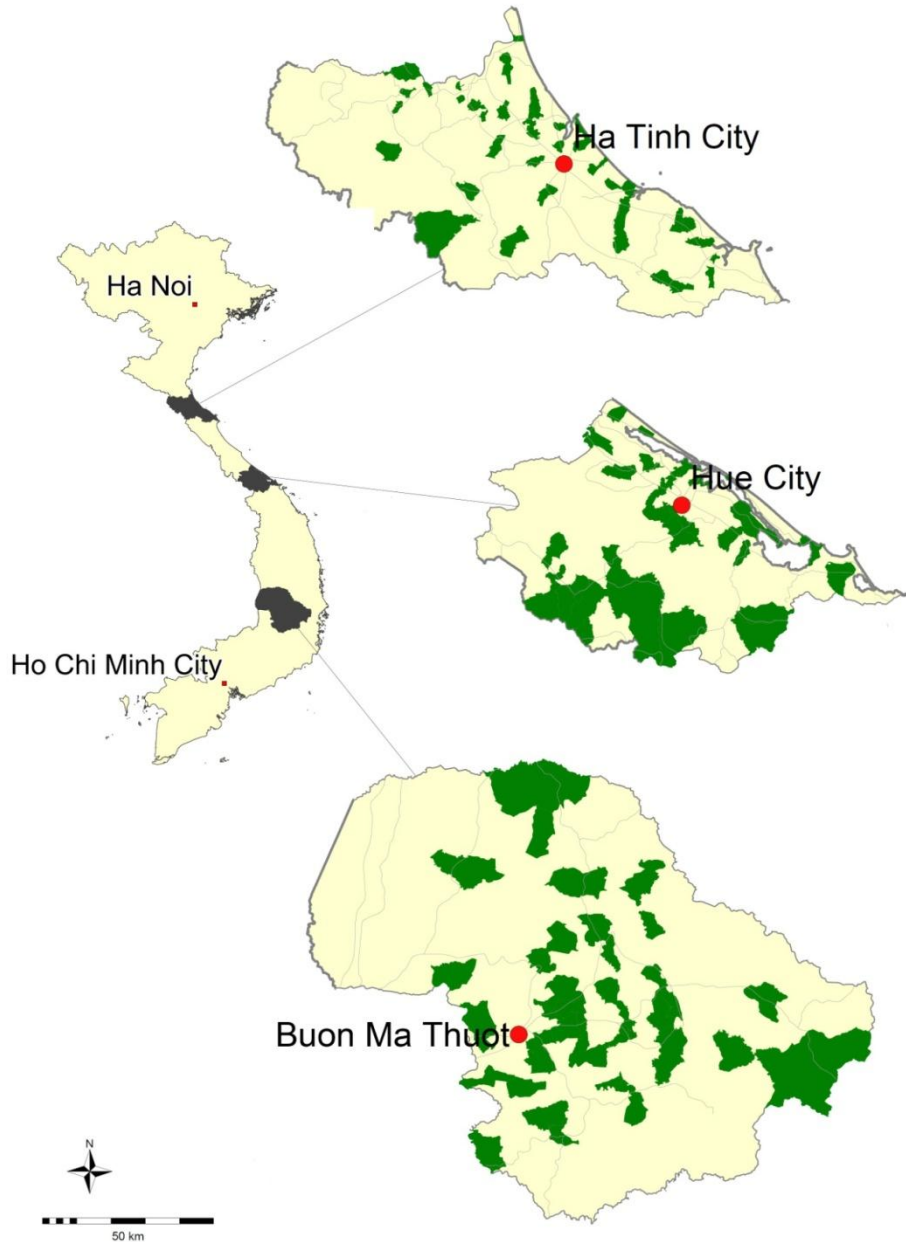
(Amit and Muller, 1995; Arias and Pena, 2010; Block and Wagner, 2010)

► Implications for developing countries

- Opportunity entrepreneurs as drivers of structural change in developing countries?

(Gries and Naudé, 2010; Naudé, 2010)

1. How common are opportunity entrepreneurs in a rural developing environment?
2. How do opportunity entrepreneurs differ from necessity entrepreneurs in terms of general characteristics and in terms of human capital and skills?
3. Are opportunity entrepreneurs more successful in terms of profits and employment generation than necessity entrepreneurs?



DFG Research Unit 756:

- Household survey in 2010 (2099 households / 8,939 individuals)
- Attached small business survey (N=346)

- ▶ Asked for most important and second most important reason for starting the business

- ▶ We then use two ways to distinguish opportunity from necessity entrepreneurs:
 1. Use only primary reasons
 2. Use primary and secondary reason

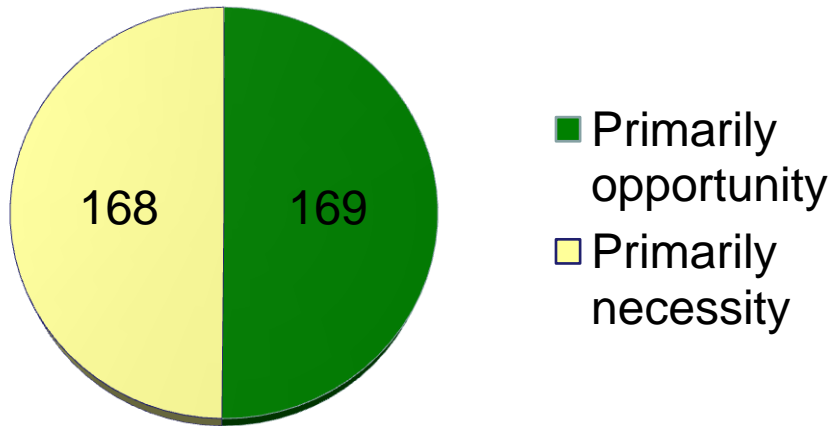
► In rural Vietnam:

- 51 % of business opportunity-driven
 - Previous experience in this kind of business
 - Saw other successful business of that kind
 - Figure that this kind of business can be successful
 - ...

- 49 % of businesses necessity-driven
 - Insufficient income from farming
 - Insufficient income from agricultural job
 - Insufficient income from non-agricultural job
 - Too old to work / bad health
 - ...

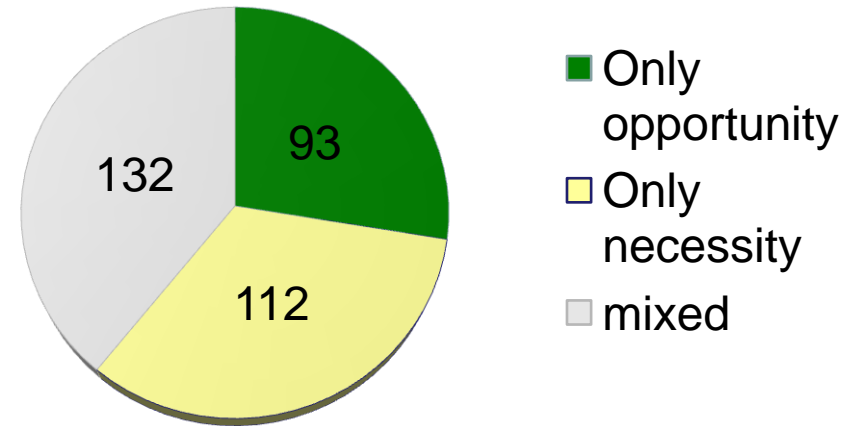
1. How common are opportunity entrepreneurs in a rural developing environment?

Classification 1



N= 346; Missings: 9
Chi² Test on uniform distribution: $p > 0.1$

Classification 2



N= 346; Missings: 9;
Chi² Test on uniform distribution: $p < 0.05$

2. How do opportunity entrepreneurs differ from necessity entrepreneurs in terms of general characteristics and in terms of human capital and skills?

Commonalities:

▶ Same sectoral structure

- Retail (27.8% vs. 25.0%)
- Wholesale (10.1% vs. 20.2%)
- Handicrafts (11.8% vs. 10.7%)
- Food processing (10.7% vs. 16.1%)
- Also: petty trading, construction, taxi and transport, restaurant/cafe/hotel, rice mills and repair shops.

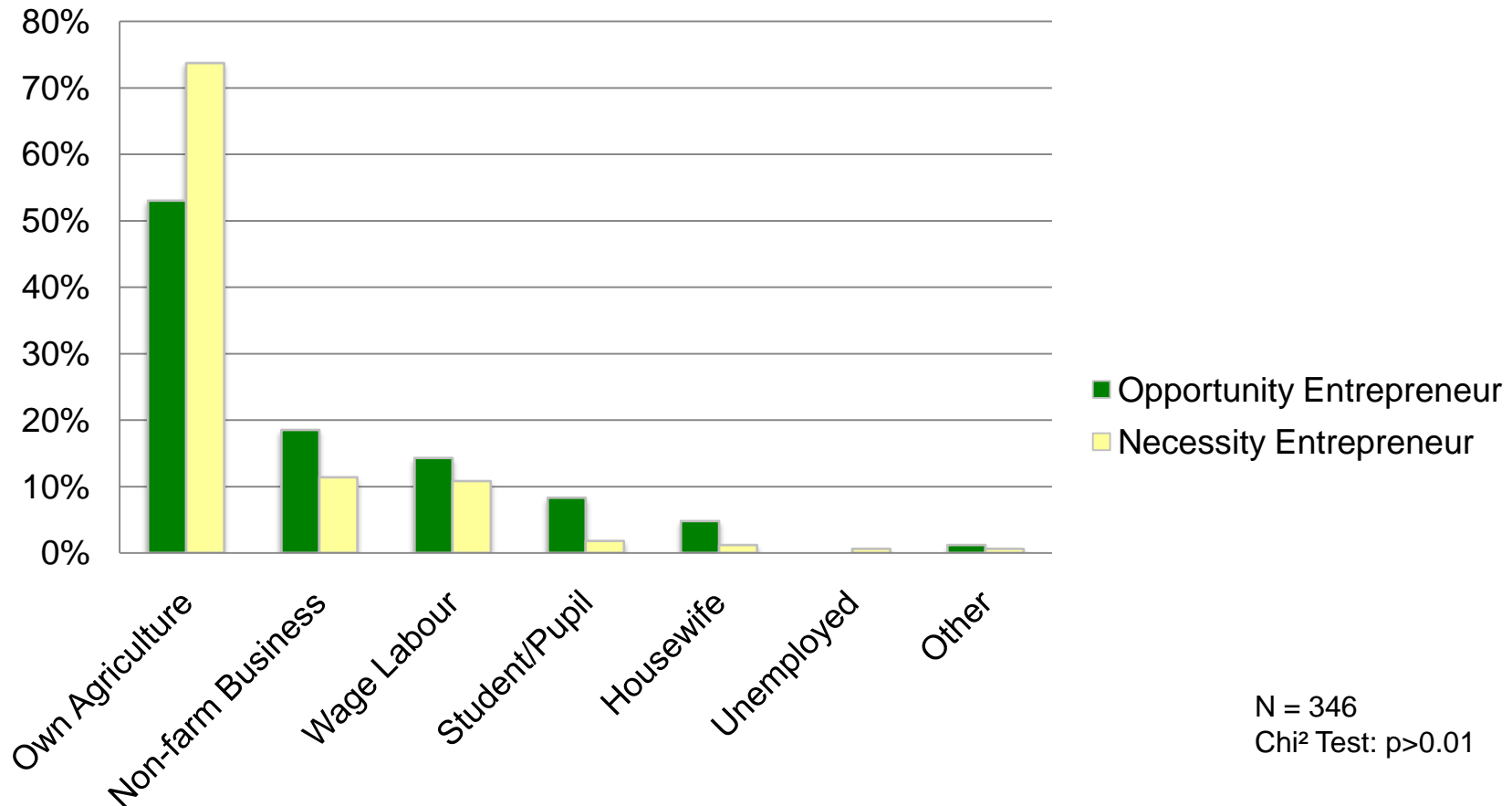
▶ Age of the owner (43.3 vs. 44.3)

▶ Female gender (59.8% vs. 67.9%)

▶ Ethnic minority (3.0% vs. 6.6%).

Differences

Primary employment status before starting the business



Differences:

Compared to necessity entrepreneurs, opportunity entrepreneurs are...

- ...less often have an agricultural background (53.0% vs. 73.7%, with $p < 0.01$)
- ...are better educated (8.1 vs. 6.6 years of schooling, with $p < 0.01$)
- ...have more often acquired skills for the enterprise through vocational training (13.6% vs. 6.6%, with $p < 0.05$).
- ...are more often primary occupation (67.5% vs. 56.5%, with $p < 0.05$)

3. Are opportunity entrepreneurs more successful in terms of profits and employment generation than necessity entrepreneurs?

Mean profits per month

- ▶ Opportunity entrepreneurs: 345.8 USD
- ▶ Necessity entrepreneurs: 235.5 USD

($p < 0.01$)

Mean number of non-family employees

- ▶ Opportunity entrepreneurs: 0.6 employees
- ▶ Necessity entrepreneurs: 0.2 employees

($p < 0.01$)

► Multivariate regression models (OLS) and Instrumental Variable regression with control variables:

General characteristics:

- 10 sectoral dummies
- Business age
- Initial investment (ln)
- Education
- Vocational skills
- Female
- Minority
- Natural shocks

Locational characteristics

- Non-farm wage rate
- Distance to Market
- Distance to intermediate city (ln)
- Two lane road
- Thua Thien Hue
- Dak Lak

→ Results confirmed for profits per month

→ Results not confirmed for employment

► Motivation as determinant of business success

	Profits	Profits	Employees	Employees
	classification 1	classification 2	classification 1	classification 2
Motivation:				
Primarily opportunity (vs. primarily necessity)	0.14*** (2.7)		0.05 (0.9)	
Opportunity only (vs. necessity only)		0.12** (2.0)		0.07 (1.2)
Mixed (vs. necessity only)		0.22*** (4.0)		-0.00 (-0.1)
N	318	318	326	326
F statistic	7.71	7.94	9.19	8.88
R ²	0.39	0.40	0.42	0.43
adjusted R ²	0.34	0.35	0.38	0.38
LR test Motivation	7.20***	8.01***	0.89	1.10
LR test Individual characteristics	3.83***	3.64***	9.66***	9.71***
LR test Locational characteristics	2.40**	2.50**	0.87	0.87

Notes: Control variables omitted. For profits, the natural logarithm was used and cases with negative or zero profits/sales had to be excluded. Displayed are standardised coefficients. t statistics in parentheses * p < 0.10, ** p < 0.05, *** p < 0.01

Source: Own calculations based on DFG-FOR 756 Household Survey 2010.

- ▶ Necessity / opportunity entrepreneurship concept suitable in a rural developing context if contextual specifics are taken into account

 - ▶ Opportunity and necessity entrepreneurs have a limited capacity to generate non-farm employment for other households.
 - ▶ Opportunity entrepreneurs have greater entrepreneurial skills.
 - ▶ Opportunity entrepreneurs generate higher profits
- Opportunity entrepreneurs scarce resource at the ‘bottom of the pyramid’ (Prahalad, 2005)

- ▶ Different policies for different needs of opportunity and necessity businesses.
- ▶ Support of necessity businesses may have greater impact on livelihoods and poverty reduction.
- ▶ Support of opportunity businesses has greater potential for endogenous non-farm growth and employment.

Thank you for listening!

- Amit, R., and E. Muller. 1995. "Push" and "Pull" Entrepreneurship. *Journal of Small Business and Entrepreneurship* 12: 64-80.
- Arias, A., & Pena, I. (2010). The effect of entrepreneurs' motivation and the local economic environment on young venture performance. *International Journal of Business Environment*, 3(1), 38-56
- Block, Joern Hendrich, and Marcus Wagner. 2010. Necessity and Opportunity Entrepreneurs in Germany: Characteristics and Earnings Differentials. *Schmalenbach Business Review* 62 (4): 154-174.
- Brünjes, J.; Revilla Diez, J. (2012): Opportunity entrepreneurs – potential drivers of non-farm growth in rural Vietnam? In: *Working Papers on Innovation and Space* 01.12
- Brünjes, J.; Revilla Diez, J. (2012): 'Recession push' and 'prosperity pull' entrepreneurship in a rural developing context - the case of Vietnam. *Entrepreneurship & Regional Development*. Online first: <http://www.tandfonline.com/doi/abs/10.1080/08985626.2012.710267>
- GENERAL STATISTICS OFFICE 2009: Results of the survey on household living standards 2008. Hanoi: Statistical Publishing House.
- GENERAL STATISTICS OFFICE 2011: Results of the survey on household living standards 2010. Hanoi: Statistical Publishing House.
- Gries, T., & Naudé, W. (2010). Entrepreneurship and structural economic transformation. *Small Business Economics*, 34(1), 13-29.
- HARDEWEG, B.; PRANEETVATAKUL, S.; DUC, T. P.; WAIBEL, H. 2007: Samplig for vulnerability to poverty: cost effectiveness versus precision. In: Proceedings of Tropentag 2007 - Conference on International Agricultural Research for Development, University of Kassel-Witzenhausen.
- Kenichi Ohno, K. (2009): Avoiding the Middle-Income Trap: Renovating Industrial Policy Formulation in Vietnam. *ASEAN Economic Bulletin*. 26 (1), 25-43.
- PRAHALAD, C. K. 2005: The Fortune at the Bottom of the Pyramid. Upper Saddle River: Pearson Education, Inc.
- Reynolds, P. D., S. M. Camp, W. D. Bygrave, E. Autio, and M. Hay. 2002. *Global Entrepreneurship Monitor 2001 - Summary Report*. Babson Park, London: London Business School and Babson College
- WORLD BANK 2009: World Development Report. Reshaping Economic Geography. Washington DC..
- WORLD BANK 2011: World Development Indicators & Global Development Finance. <http://databank.worldbank.org>. [last accessed: 01.11.2011].

Industrial production and ownership forms

	1995			2008		
	State	Non-state	FDI	State	Non-state	FDI
WHOLE COUNTRY	50,3	24,6	25,1	24,9	34,9	40,3
Red River Delta	60,9	24,5	14,6	22,9	34,7	42,4
Northern midlands and mountain areas	72,7	18,1	9,2	44,8	41,9	13,3
North Central area and Central coastal area	58,6	35,3	6,1	27,8	51,8	20,4
Central Highlands	34,3	58,6	7,1	16,4	71,7	11,9
South East	38,8	19,7	41,5	18,3	27	54,7
Mekong River Delta	45,7	46,6	7,7	20,3	64,4	15,3

Source: General Statistical Office 2010

General characteristics

	Classification 1			Classification 2			F-test / chi ² -test
	Primarily opportunity	Primarily necessity	t-test / chi ² -test	Only opportunity	Only necessity	Mixed	
	Mean/ Share	Mean/ Share		Mean/ Share	Mean/ Share	Mean/ Share	
Age of owner	43.3	44.3	-0.7	43.1	44.1	44.0	0.2
Female	59.8%	67.9%	2.4	61.3%	67.9%	62.1%	1.2
Ethnic minority	3.0%	6.6%	2.4	2.2%	6.3%	5.3%	2.0
Bad health status	9.5%	17.9%	5.0 ^{**}	8.6%	17.0%	14.4%	3.1
Age of business	9.6	8.2	1.7 [*]	9.7	7.9	9.2	1.8
Registration	50.3%	38.7%	4.6 ^{**}	51.6%	39.3%	43.9%	3.2
Is primary occupation of the owner	67.5%	56.6%	4.3 ^{**}	72.0%	56.3%	59.9%	5.8 [*]
Days worked in business per month	24.6	23.4	1.7 [*]	23.8	23.2	24.8	1.57
N	169	168		93	112	132	

Notes: T-Test or F-Test was calculated for comparing group means, Pearson Chi² test was calculated for comparing shares. ^{*} significant at the 10% level. ^{**} significant at the 5% level. ^{***} significant at the 1% level.
Source: Own calculations based on DFG-FOR 756 Household Survey 2010.

Table: Sectoral Distribution

	Opportunity	Necessity	chi ² -test
Rice Mills	4.7%	2.4%	1,4
Handicrafts	11.8%	10.7%	0,1
Repair shops	5.3%	3.0%	1,2
Construction	5.3%	1.8%	3.1 [*]
Food processing and selling	10.7%	16.1%	2,1
Restaurant/cafe/hotel	6.5%	3.0%	2,3
Retail-Shop (sales store)	27.8%	25.0%	0,3
Petty trader (sales on street)	7.1%	8.3%	0,2
Wholesale	10.1%	20.2%	6.8 ^{***}
Taxi and transport	2.4%	6.6%	3.5 [*]
Others	8.3%	3.0%	4.5 ^{**}
Total	100%	100%	
N	169	168	

Notes: T-Test or F-Test was calculated for comparing group means, Pearson Chi² test was calculated for comparing shares. * significant at the 10% level. ** significant at the 5% level. *** significant at the 1% level.

Source: Own calculations based on DFG-FOR 756 Household Survey 2010.

Education and skills

	Classification 1			Classification 2			
	Primarily opportunity	Primarily necessity		Only opportunity	Only necessity	Mixed	
	Mean/ Share	Mean/ Share	t-test / chi ² -test	Mean/ Share	Mean/ Share	Mean/ Share	F-test / chi ² -test
Education of entrepreneur (years)	8.1	6.6	4.2 ^{***}	8.3	6.6	7.3	6.5 ^{***}
Acquired skills in school	3.0%	1.2%	1.3	3.2%	0.9%	2.3%	1.4
Acquired skills in vocational training	13.6%	6.6%	4.6 ^{**}	12.9%	8.9%	9.1%	1.1
Acquired skills in farming	9.5%	11.9%	0.5	8.6%	8.9%	13.6%	2.0
Acquired skills in previous business	14.2%	4.8%	8.7 ^{***}	9.7%	3.6%	14.4%	8.3 ^{**}
Acquired skills in wage labour	4.1%	3.6%	0.1	5.4%	2.7%	3.8%	1.0
Acquired skills in family	60.4%	62.5%	0.2	54.8%	62.5%	65.2%	2.5
N	169	168		93	112	132	

Notes: T-Test or F-Test was calculated for comparing group means, Pearson Chi² test was calculated for comparing shares. * significant at the 10% level. ** significant at the 5% level. *** significant at the 1% level.
Source: Own calculations based on DFG-FOR 756 Household Survey 2010.



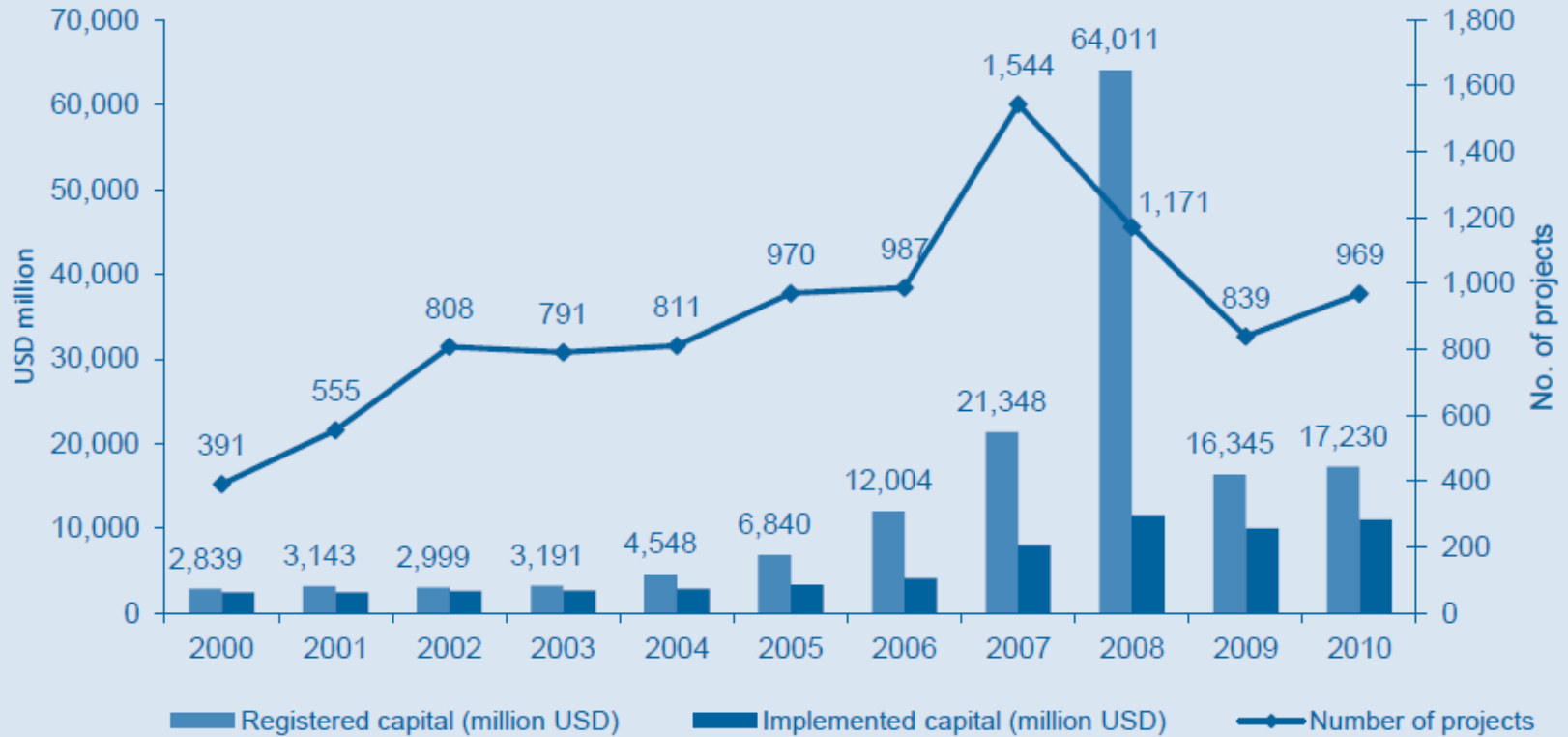








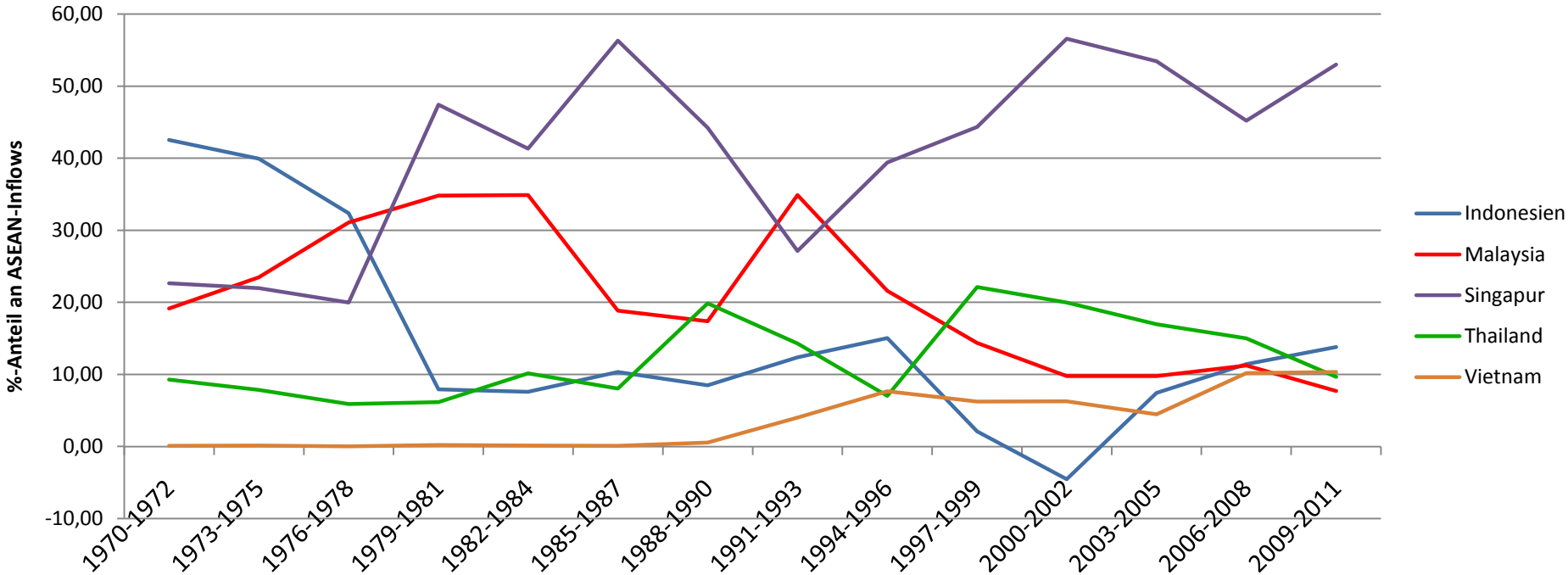
Figure 2.3 Trend in the number of FDI projects and capital flows



Source: General Statistics Office, Viet Nam

3. Malaysia in der „Middle-Income Trap“?

Anteile der ADI-Inflows an den ASEAN-Inflows



Quelle: eigene Darstellung basierend auf UNCTADSTAT

- Mitte 70er bis Mitte der 90er: Malaysia neben Singapur als attraktivste Region in der ASEAN-Region
- Verliert seitdem kontinuierlich an (relativer) Bedeutung!