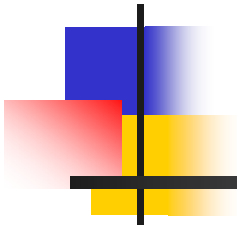


National Taipei University
**Department of Public Administration &
Policy**

May 14, 2008

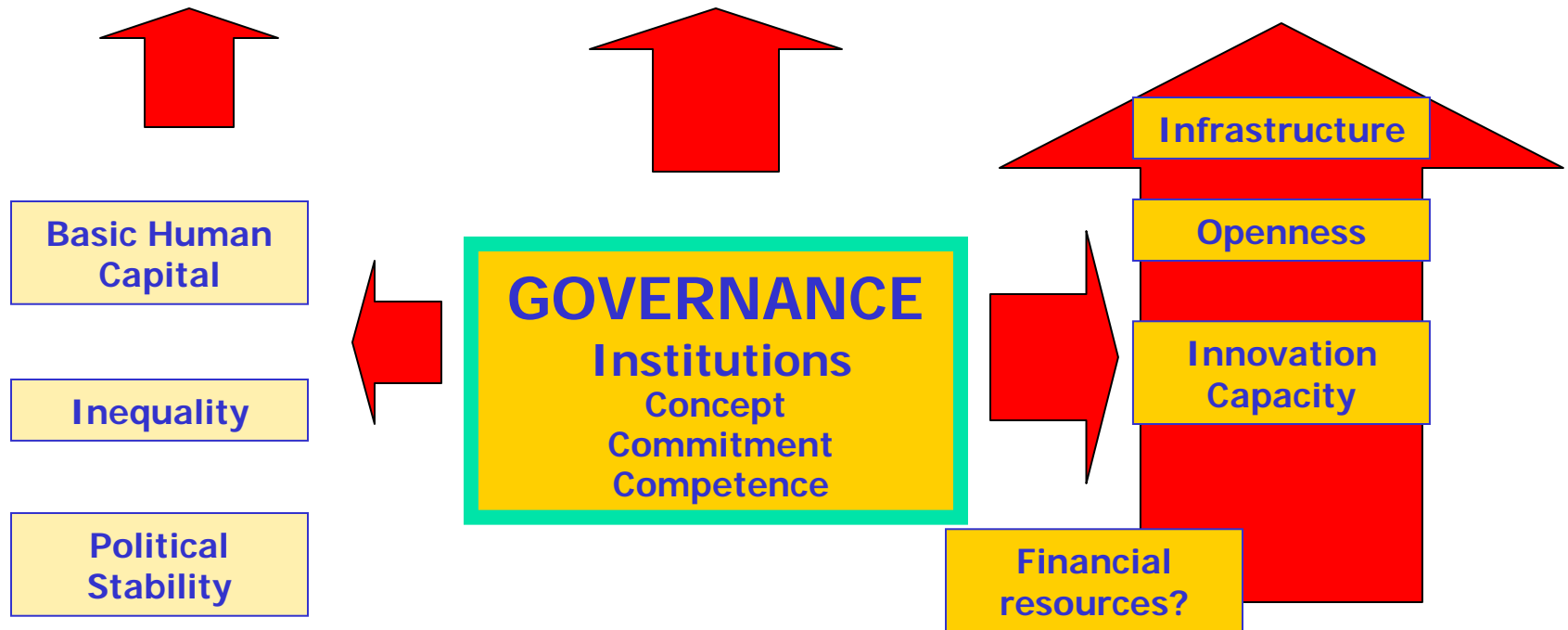


The Growth Divergence between Vietnam and China: Issues and Policy Implications

Dr. Vu Minh Khuong, Assistant Professor
Lee Kuan Yew School of Public Policy, National University of Singapore

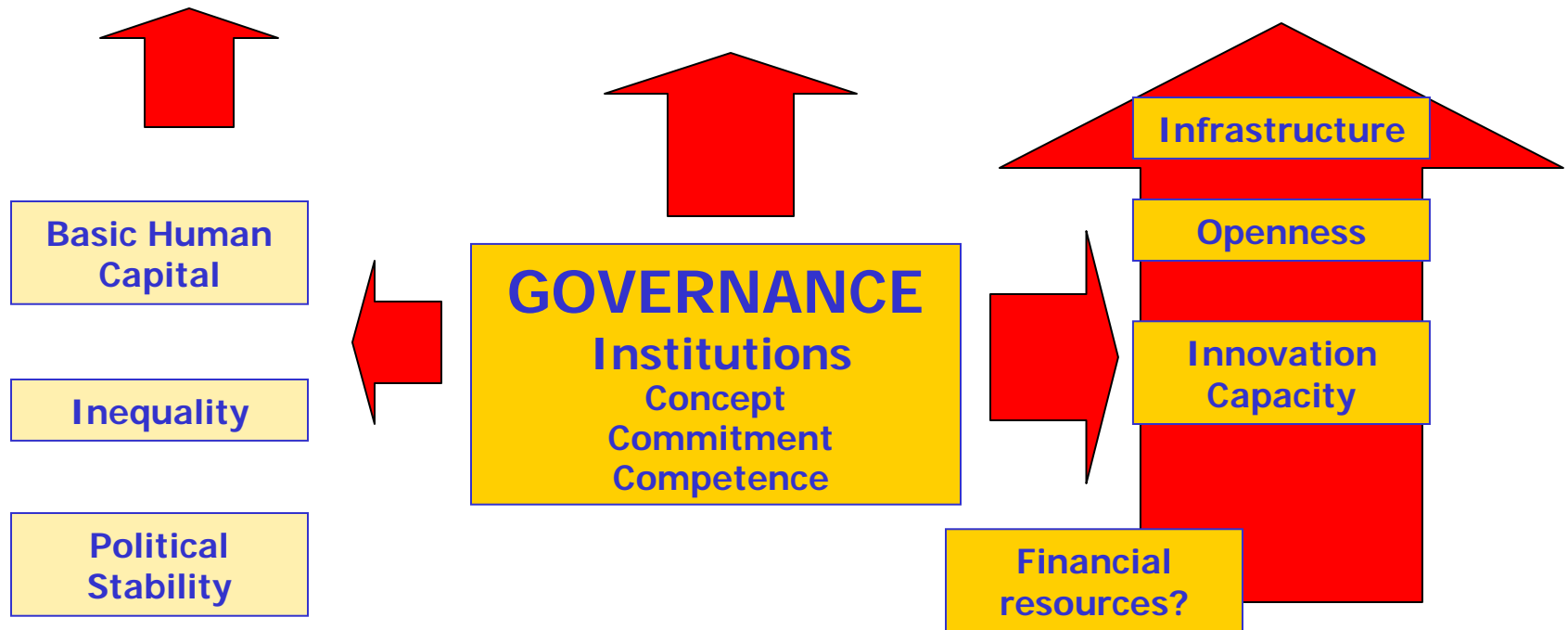
The Pillars of Long-Term Growth Foundation

Growth Performance



The Pillars of Growth Divergence

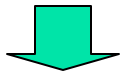
Growth Divergence between Vietnam and China



Motivation and Outline

Are the two countries comparable?

- Similarities in nature
- Resemblance in the features of reform: circumstance, initial conditions, and approach



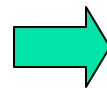
Is the divergence serious?

- Quantitative?
- Qualitative?
- Widening?
- Lessons from the Asian Financial crisis

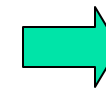


What are the factors causing the divergence?

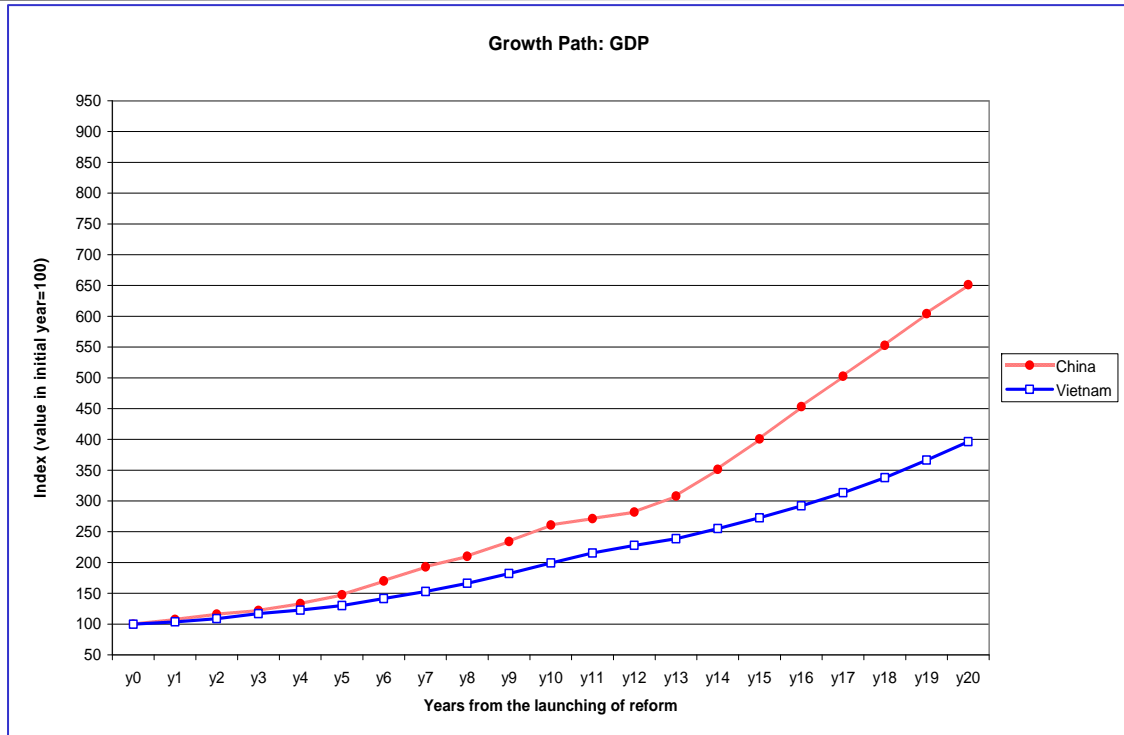
- initial conditions?
- Basic conditions?
- Advanced conditions?



What is the root-cause determinant?



What are Policy Implications?



Are the two countries comparable?

- Similarities in nature
- Resemblance in the features of reform: circumstance, initial conditions, and approach

Vietnam vs. China: Similarities in nature

Vietnam and China have striking similarities in human capital endowment due to their closeness in geography, culture, and history (Brantly, 2006):

- Culture: attitudes and practice concerning family, education, business, and development
- Health
- Education
- Geographic access to the world

Are the two countries comparable?

- Similarities in nature
- Resemblance in the features of reform: circumstance, initial conditions, and approach

Resemblance in the features of reform

- The circumstance leading to reform, characterized by the three factors critical for making a major change:
- The conditions at the launch of reform
- The reform approach and implementation

Are the two countries comparable?

- Similarities in nature
- Resemblance in the features of reform: circumstance, initial conditions, and approach

Resemblance in the features of reform: The conditions at the launch of reform

Indicator	China (1978*)	Vietnam (1986**)
<i>Human capital</i>		
Adult literacy (% of Total)	67.1	89.2
Young adult literacy (% of Total)	91.3	93.6
Calorie supply (kcal./day)	2,328	2,300
Median age	22.1	19.5
Life expectancy at birth, years	67	63
<i>Economy</i>		
<i>GDP Per Capita</i>		
• in 2000 US\$	165	203
• in 2000 PPP\$	685	1,031
<i>GDP Structure, %</i>		
• Agriculture	28.1	38.1
• Industry	48.2	28.9
• Services	23.7	33.1
<i>Rural economy</i>		
Share of rural population, %	81.3	80.3
Cereal yield (kg per hectare)	2,802	2,715
<i>Openness</i>		
Exports of goods and services (% of GDP)	6.6	6.6
Imports of goods and services (% of GDP)	7.1	16.6
<i>Infrastructure</i>		
Main line telephones per 1,000 population	2.0	1.3

Source: Vu and Quah(2008)

VN-CN-PREZ-2008-VMK

Is the divergence serious?

- Quantitative?
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Is the Divergence Serious?

Definitions of Some Terminologies

Definition of sustained growth acceleration episodes

Concerning the growth pattern of a country, a period $[t, t + k]$ (from year t to year $t + k$) is defined as a *sustained growth acceleration episode* (SGAE) if it meets the following conditions:

- $k \geq 5$; that is, the episode must last not less than 5 years.
- $g_{t-1} > 0$; that is, the growth in year $t-1$, the year right before the period, is positive.

$g_{t+i} > g_{t-1} + a$ for $0 \leq i \leq k$ and $a \geq 2.0\%$; that is, the growth rate in any year during the period $[t, t + k]$ is higher than the growth rate in the year right before the episode by at least $a\%$. The period is called a *moderate* growth acceleration episode if $2.0\% \leq a < 3.0\%$; and a *rapid* growth acceleration episode if $a \geq 3.0\%$

Is the divergence serious?

- Quantitative?
- Qualitative?
- Widening?
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Is the Divergence Serious?

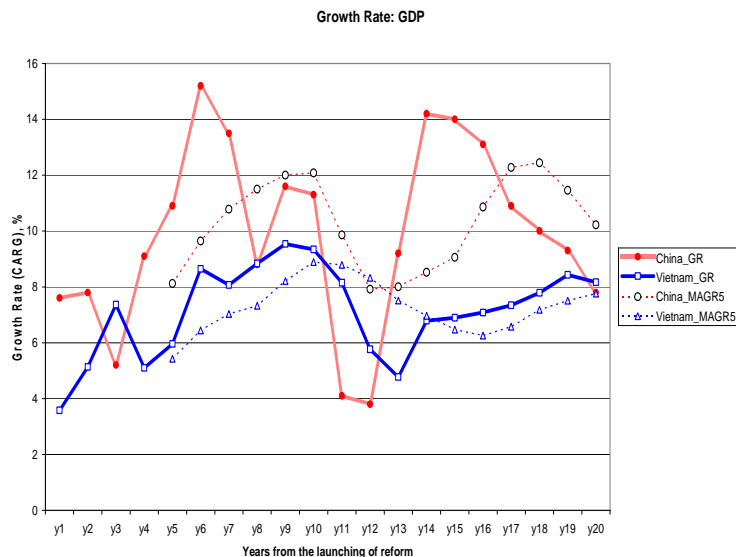
Definitions of Some Terminologies

Definition of growth divergence episode

Concerning the growth patterns of two countries X and Y, a period $[t, t+k]$ is defined as a *growth divergence episode* (GDE) led by country X if the following conditions are met:

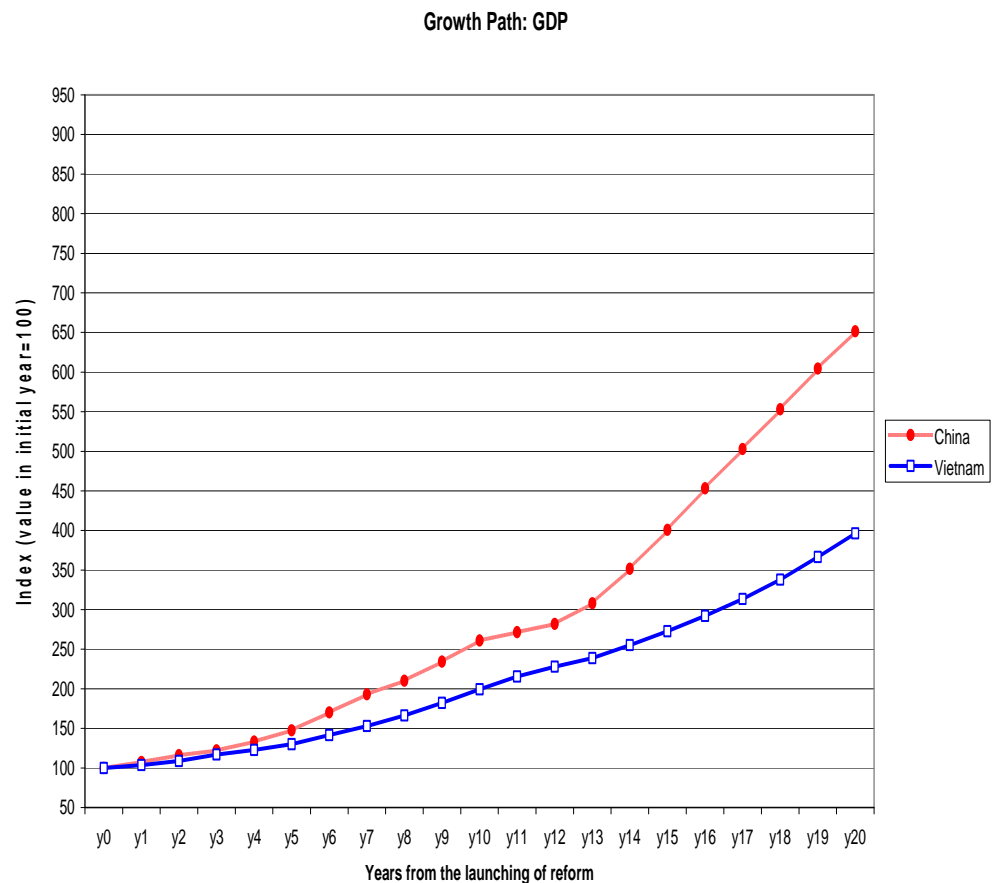
- $k \geq 5$; that is, the episode must last not less than 5 years.
- $g_{t-1}^X \leq g_{t-1}^Y$; that is, the growth rate of country X is not higher than country Y's in year $t-1$, the year right before the episode.
- $g_{t+i}^X \geq g_{t+i}^Y$ for $0 \leq i \leq k$ and $g_{t+i}^X > g_{t+i}^Y$ in most (say, $\geq k-1$) years; that is, the growth rate of the country X exceeds or equals the country Y's throughout the period $[t, t+k]$ and the "equal growth rate" can take place in not more than one year during the period.

The Growth Divergence between Vietnam and China: Over the First 20 Years of Reform (Vietnam: 1986-2006; China: 1978-1998)



Two episodes of sustained growth divergence:

- years 4-10; and
- year 13-19; the latter was more remarkable



Source: Vu and Quah(2008)

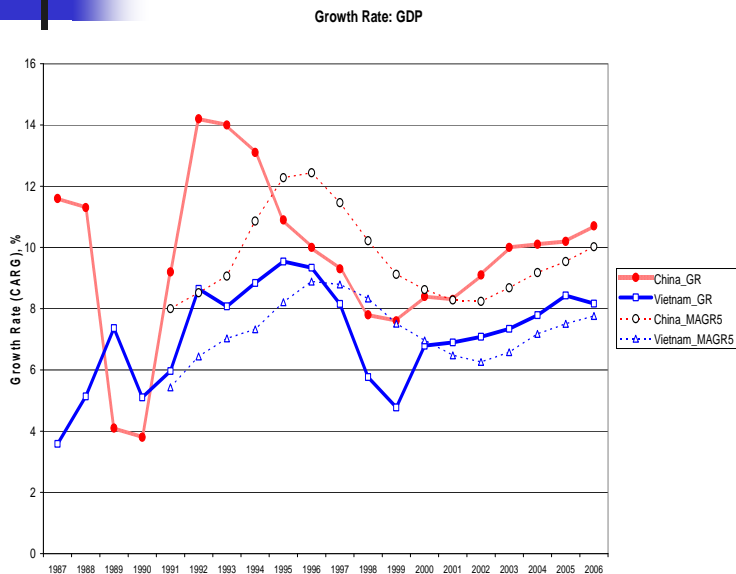
The Growth Divergence between Vietnam and China: Over the First 20 Years of Reform (Vietnam: 1986-2006; China: 1978-1998)

		Period Growth Rate (CAGR)				
		0 - 5	5 - 10	10 - 15	15 - 20	0 - 20
	China	1978-83	1983-88	1988-93	1993-98	1978-98
	Vietnam	1986-91	1991-96	1996-01	2001-06	1986-06
China						
GDP	A1	8.1%	12.1%	9.0%	10.2%	9.8%
Agriculture, value added	B1	6.2%	5.0%	4.4%	4.2%	4.9%
Industry, value added	C1	7.9%	14.3%	12.1%	12.7%	11.7%
Services, value added	D1	10.4%	15.4%	8.1%	9.8%	10.9%
Sectoral change	E1	0.1%	0.6%	0.02%	0.1%	0.2%
Vietnam						
GDP	A2	5.4%	8.9%	6.5%	7.8%	7.1%
Agriculture, value added	B2	2.5%	4.5%	4.1%	3.9%	3.8%
Industry, value added	C2	4.1%	13.4%	9.8%	10.2%	9.3%
Services, value added	D2	8.8%	8.9%	5.2%	7.4%	7.5%
Sectoral change	E2	0.4%	0.7%	0.2%	0.1%	0.5%
<i>Growth Gap: China vs. Vietnam</i>						
GDP	A1-A2	2.7%	3.2%	2.5%	2.4%	2.7%
Agriculture, value added	B1-B2	3.7%	0.4%	0.3%	0.3%	1.1%
Industry, value added	C1-C2	3.8%	0.9%	2.3%	2.5%	2.4%
Services, value added	D1-D2	1.6%	6.6%	3.0%	2.4%	3.4%
Sectoral change	E1-E2	-0.3%	-0.1%	-0.2%	0.0%	-0.3%

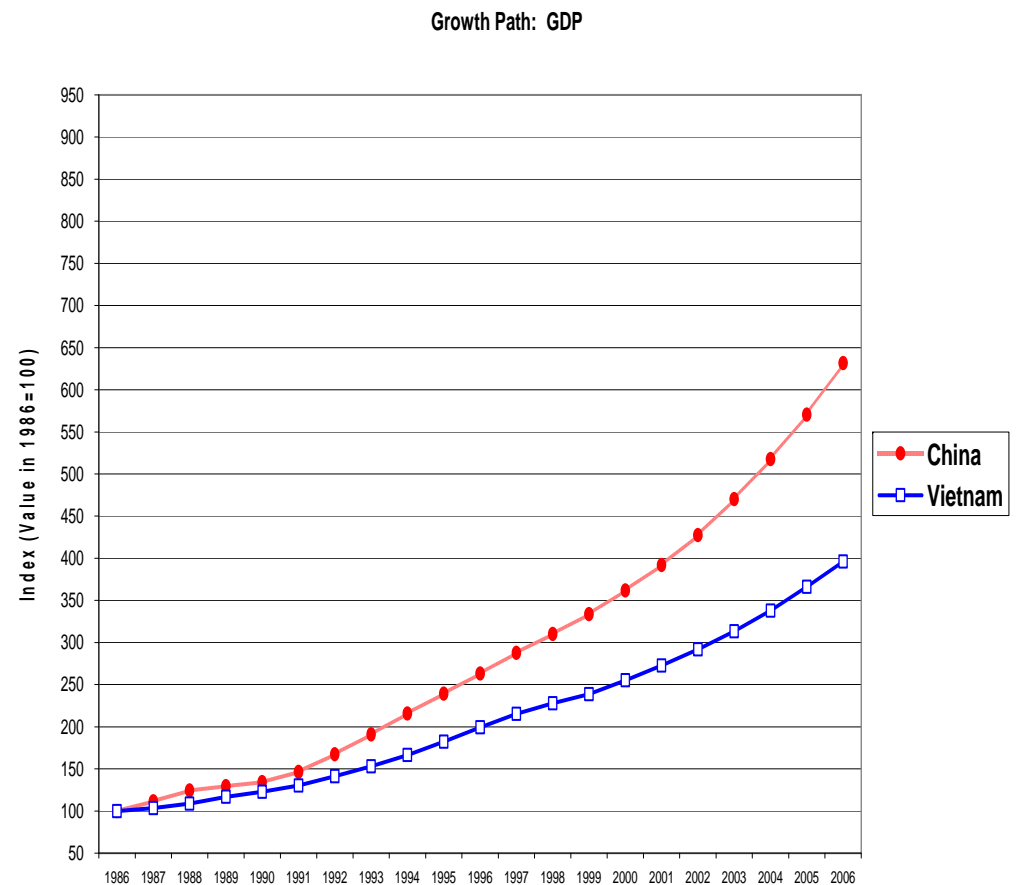
Source: Vu and Quah(2008)

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The Growth Divergence between Vietnam and China: Over the Past 20 Years (1986-2006)



Since 1991, China's GDP growth rate has been substantially above Vietnam's. The gap has been rapid widened.



Source: Vu and Quah(2008)

The Growth Divergence between Vietnam and China over the Past 20 Years (1986-2006)

		<i>Growth Rate (CAGR) over Period</i>				
		1986-91	1991-96	1996-01	2001-06	1986-06
China						
GDP	A1	7.9%	12.4%	8.3%	10.0%	9.7%
Agriculture, value added	B1	4.0%	4.7%	3.0%	4.3%	4.0%
Industry, value added	C1	9.7%	17.0%	9.1%	11.1%	11.7%
Services, value added	D1	8.7%	10.9%	9.6%	10.5%	9.9%
Sectoral change	E1	0.1%	0.4%	0.2%	0.2%	0.6%
Vietnam						
GDP	A2	5.4%	8.9%	6.5%	7.8%	7.1%
Agriculture, value added	B2	2.5%	4.5%	4.1%	3.9%	3.8%
Industry, value added	C2	4.1%	13.4%	9.8%	10.2%	9.3%
Services, value added	D2	8.8%	8.9%	5.2%	7.4%	7.5%
Sectoral change	E2	0.4%	0.7%	0.2%	0.1%	0.5%
<i>Growth Gap: China vs. Vietnam</i>						
GDP	A1-A2	2.5%	3.5%	1.8%	2.3%	2.5%
Agriculture, value added	B1-B2	1.5%	0.2%	-1.1%	0.4%	0.2%
Industry, value added	C1-C2	5.6%	3.7%	-0.8%	0.8%	2.3%
Services, value added	D1-D2	0.0%	2.1%	4.5%	3.1%	2.4%
Sectoral change	E1-E2	-0.3%	-0.3%	0.0%	0.1%	0.1%

Source: Vu and Quah(2008)

VN-CN-PREZ-2008-VMK

Is the divergence serious?

- Quantitative?
- Qualitative?
- Widening?
- Lessons from the Asian Financial crisis

Is the Divergence Serious?

Efficiency of Growth: TFP

Period	China				Vietnam			
	GDP Growth	Sources of Growth (% ppa)			GDP Growth	Sources of Growth (% ppa)		
		Capital	Labor	TFP		Capital	Labor	TFP
1989-2005	9.2	3.5	1.8	3.9	7.1	2.8	2.3	2
1989-1995	10.3	2.8	2.9	4.6	7.4	1.5	2.1	3.8
1995-2000	8.3	3.7	1.2	3.4	6.7	3.3	2.4	1.0
2000-2005	9.1	4.1	1.2	3.8	7.2	3.7	2.3	1.3

Source: Jorgenson and Vu (2006)

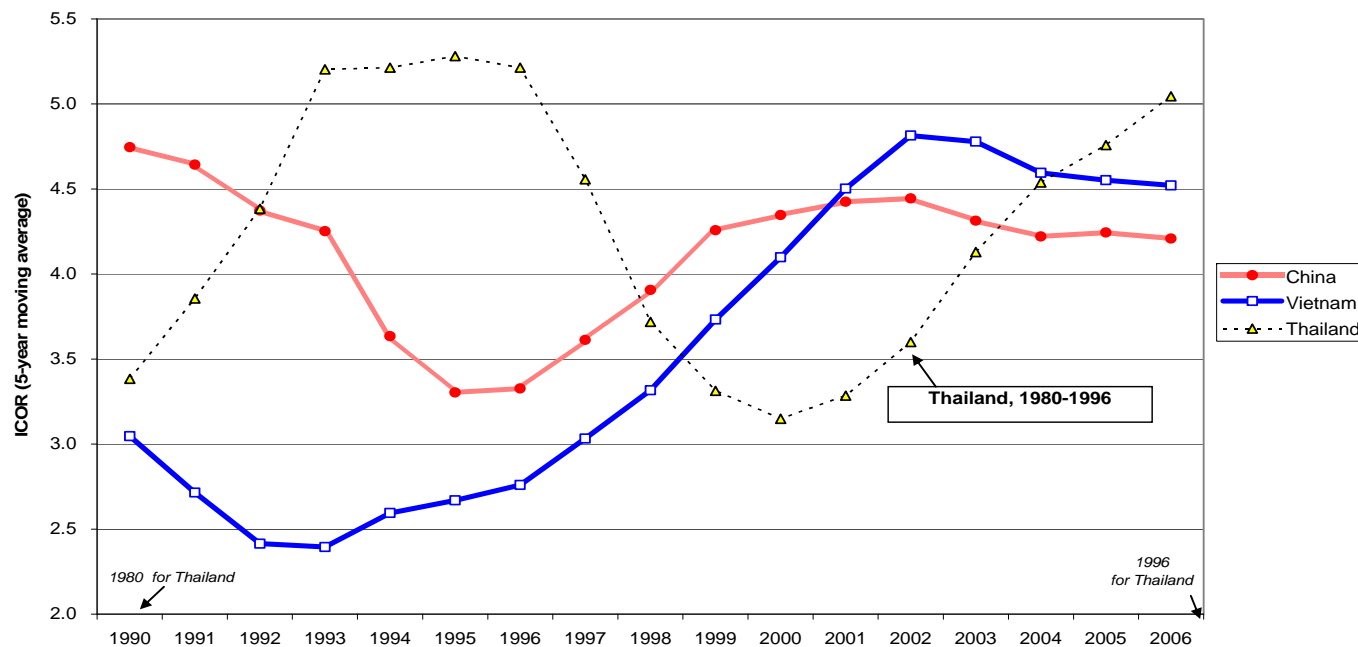
Is the divergence serious?

- Quantitative?
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Is the Divergence Serious?

Lessons from The Asian Financial Crisis: The ICOR

Incremental Capita-Output Ratio (ICOR): Vietnam and China, 1990-2006



Source: Vu and Quah(2008)

Vietnam's ICOR has become extremely high since 2000, approaching the level of Thailand before it entered the financial crisis.

Is the divergence serious?

- Quantitative?
- Qualitative?
- Widening?
- Lessons from the Asian Financial crisis

Is the Divergence Serious?

Lessons from The Asian Financial Crisis: From Success to Crisis

	Average Annual Growth Rate (%)				Investment Share in GDP (%)	Population below the poverty line ^c (%)		Life expectancy at birth ^d	
	GDP	TFP ^a	Agricultural income	Export		Initial year	Final year	Initial year	Final year
Korea, Rep.	8.2	3.1	2.9	22.6	29.3	41.1	5	57.7	72.3
Taiwan, China	9	3.8	NA	NA	22.2	47	3	64	74.8
<i>Korea & Taiwan, Avg.</i>	<i>8.6</i>	<i>3.5</i>							
Indonesia	6.9	1.3	4.2	5	22.6	58	11.3	46	65.1
Thailand	7.1	2.5	4.7	9.4	30	57	11.4	56.7	68.8
<i>Indonesia & Thailand, Avg.</i>	<i>7.0</i>	<i>1.9</i>							
<i>China</i>	<i>9.7</i>	<i>3.9</i>	4	14.4	39.3	28.3	10.8	68	72
<i>Vietnam</i>	<i>7.1</i>	<i>2.0</i>	3.8	21	25.3	27.3	8.4	63	71

Source: Vu and Quah(2008)

The divergence between Vietnam and China finds a parallel in the gap between ASEAN and "Four Tigers" models.

Is the divergence serious?

- Quantitative?
- Qualitative?
- Widening?
- Lessons from the Asian Financial crisis

Is the Divergence Serious?

Lessons from The Asian Financial Crisis: The Cost of Weak Growth Foundation

Economy	Annual GDP Growth Rate			Relative GDP
	1997	1998	1999	2000/1996
Korea, Rep.	4.7	-6.9	9.5	1.16
Taiwan	6.6	4.5	5.7	1.25
Indonesia	4.7	-13.1	0.8	0.96
Thailand	-1.4	-10.5	4.4	0.97

Source: Vu and Quah(2008)

Thailand and Indonesia, due to their weak growth foundation, were harder hit by the crisis and it took them longer time to recover!

Making Vietnam a Strategic Place for Investment

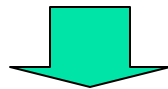


Vietnam and China possess striking similarities in:

- Basic growth conditions (people, culture, history, location).
- the fundamental features of economic reform

However, the gap in growth performance between Vietnam and China is

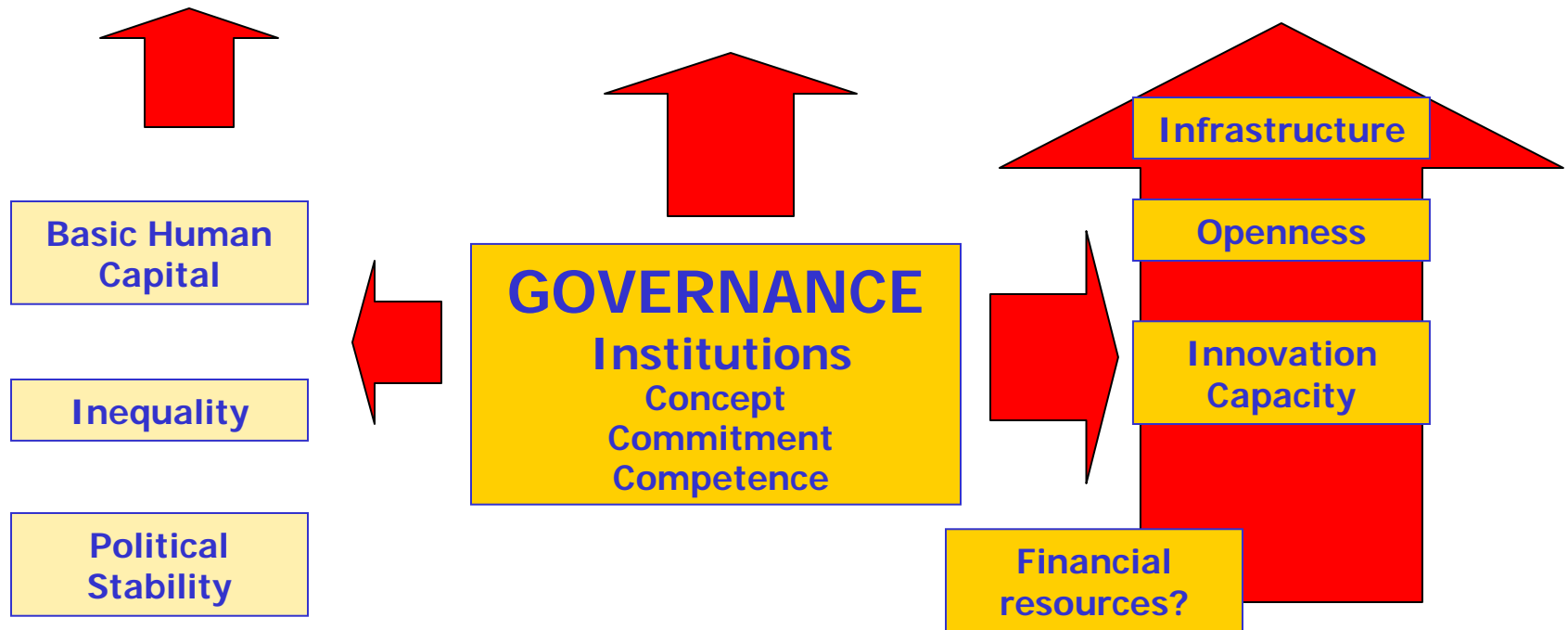
- **large and widening!**
- **Not only quantitative but qualitative**



Vietnam Needs to effectively addressing the factors that have driven the growth divergence between Vietnam and China.

Examining the Pillars of Vietnam's Long-Term Growth Foundation

Growth Divergence between Vietnam and China



What are the factors causing the divergence?

- initial conditions?
- Basic conditions?
- Advanced conditions?

What Cause the Divergence? The Determinants of Growth

- Initial income
- Political stability
- Inequality
- Basic Human capital
- Institutions
- Openness
- Infrastructure
- Financial resources
- Innovation capacity

What are the factors causing the divergence?

- initial conditions?
- Basic conditions?
- Advanced conditions?

What Cause the Divergence?

The Determinants of Growth

Determinants of Growth	Effect on Growth	Vietnam	China	Advantage**
Initial Level of Income, 1986	-	US\$203 PPP\$1,031	US\$311 PPP\$1,289	V
Political stability*	+	0.28	-0.13	V
Income inequality, 2004	-			V
•GINI	-	37.0%	46.9%	V
•Income share (20% richest/20% poorest)	-	6.3	12.2	V

Thailand and Indonesia, due to their weak growth foundation, were harder hit by the crisis and it took them longer time to recover!

What are the factors causing the divergence?

- initial conditions?
- Basic conditions?
- Advanced conditions?

What Cause the Divergence?

The Determinants of Growth

Determinants of Growth	Effect on Growth	Vietnam	China	Advantage* *
Human capital (Basic)	+	<i>Table A1</i>		~
Governance	+			C
Voice and Accountability*	+?	-1.54	-1.54	~
Government effectiveness*	+	-0.31	0.09	C
Regulatory Quality*	+	-0.64	-0.28	C
Control of corruption*	+	-0.73	-0.40	C
Rule of Law*	+	-0.61	-0.41	C
Average Inflation (CPI, 1990-06)	-	13.4%	5.0%	C
Average government share in total investment (1995-05)	-	52.6%	47.3%	C
Quality of industrial policy	+	<i>Perkins(2001)</i>		C

What are the factors causing the divergence?

- initial conditions?
- Basic conditions?
- Advanced conditions?

What Cause the Divergence?

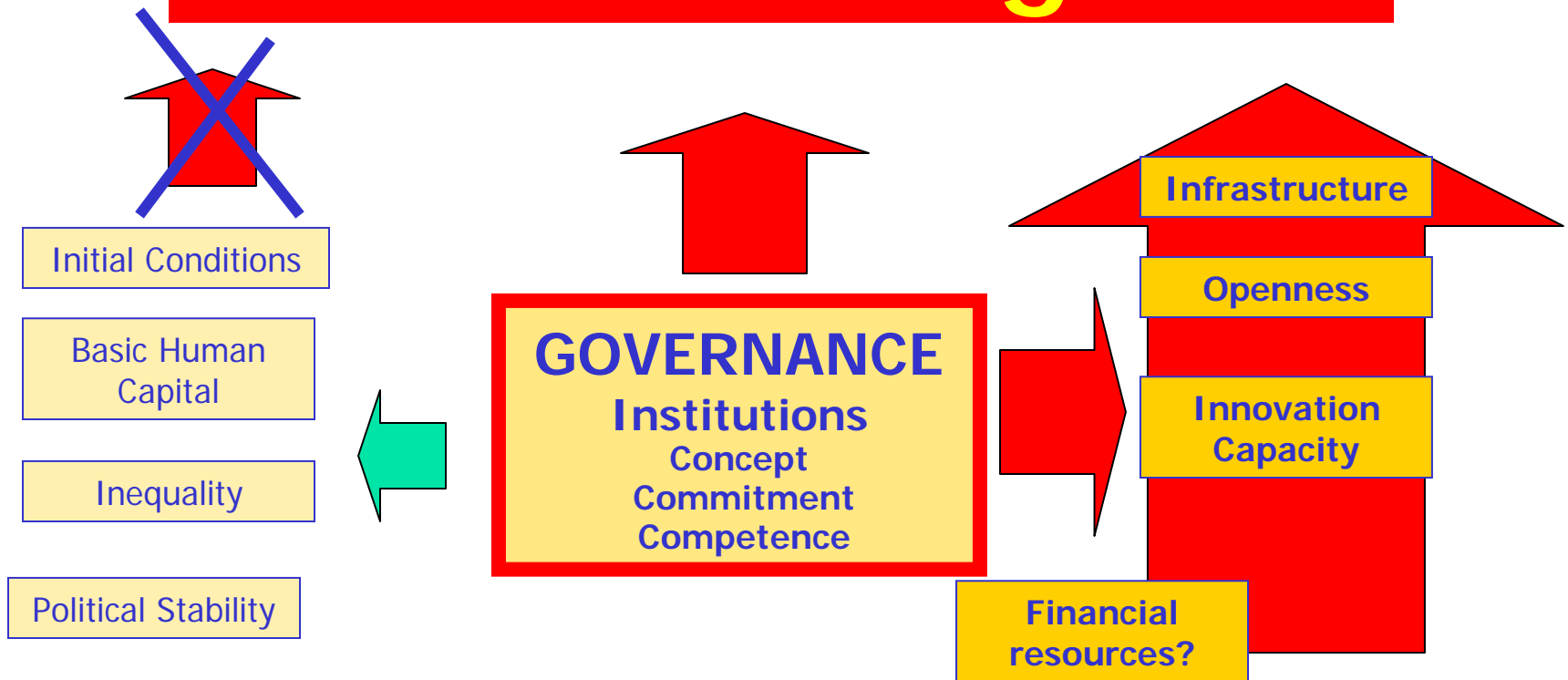
The Determinants of Growth

Openness	+	<i>Table A2 Figure F1</i>		?
Trade-to-GDP ratio (1995-05)	+	85.1%	44.4%	V
Weighted Mean of Tariff, 2000	-	15%	20%	V
Infrastructure	+	<i>Table A3</i>		C
Financial resources	+			?
Saving as share of GNI (1986-06)	+	20.9%	41.7%	C
Saving-Investment Gap		<i>Figure F2</i>		C
External finances	+	<i>Table A4</i>		V
Innovation Capacity	+	<i>Table A5</i>		C

Policy
Implications?

The Determinants of Growth and the Root-Cause Factors

Growth Divergence

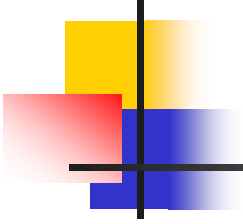




Policy Implications

Concept
Commitment
Competence

- Deepening reform is imperative for Vietnam.
- Upgrading the quality of governance is the most urgent priority.
 - **Human resource development**
 - **Organizational strengthening**
 - **Institutional reform**



Thank You for Your Attention!