

Labor Productivity in Vietnam

Data Analysis and Policy Recommendations

Nguyen Duc Thanh, PhD.

Vietnam Institute for Economic and Policy Research (VEPR)

UEB, Vietnam National University (VNU)

Addis Ababa, November 2017

Outline

- Vietnam Economic Performance in the last three decades
- Low Middle Income Trap: Productivity Challenge
- Implications and Recommendations

Basics of Viet Nam



Facts:

Capital: Ha Noi

Largest cities: Ho Chi Minh City, Ha Noi, Da Nang, Hai Phong, etc...

Area: 331,690 sq km²

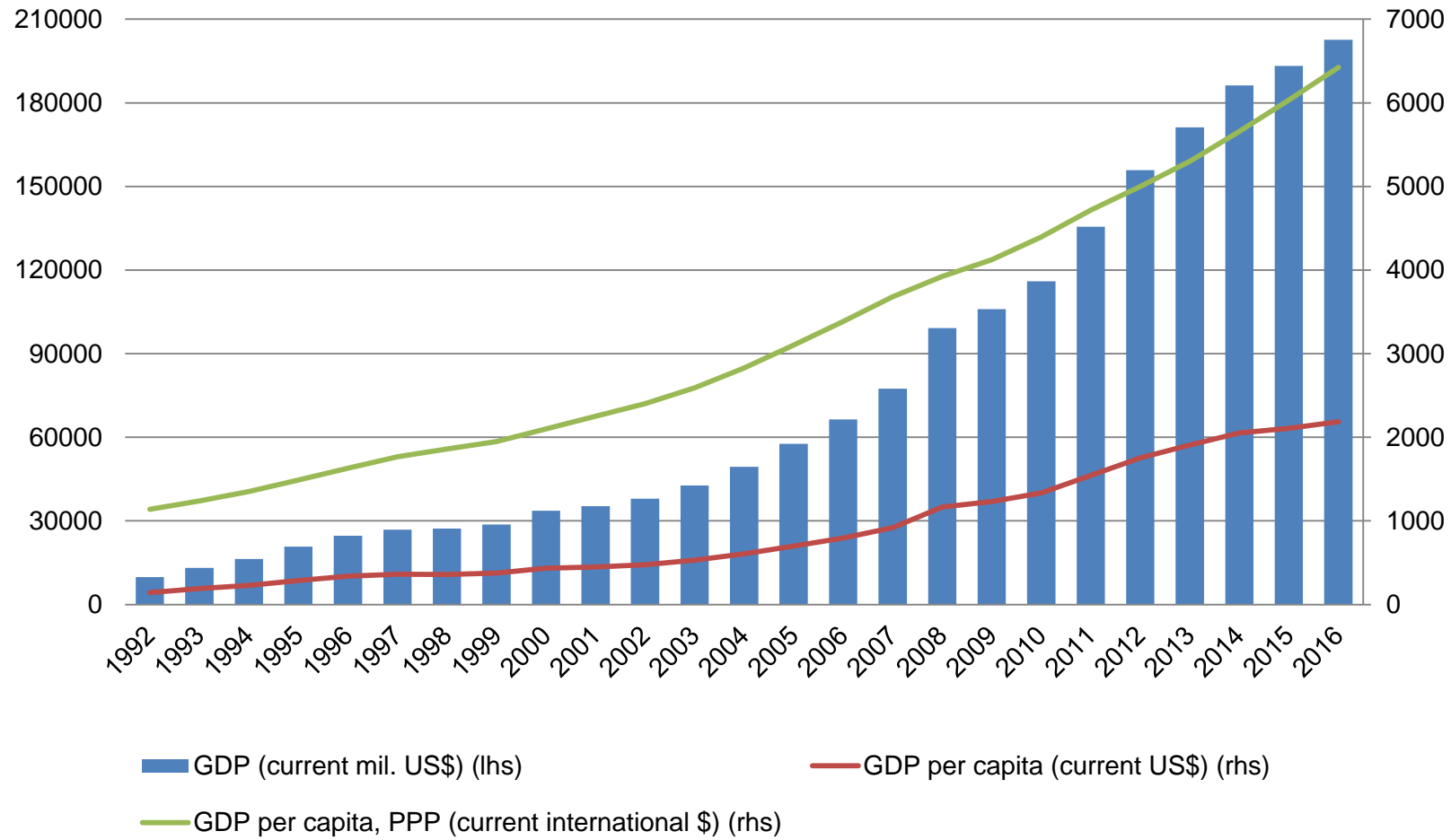
Population: 92.71 millions (2016)

GDP: USD: 205.3 billion (2016)

GDP per capita: 2.214 USD (2016)

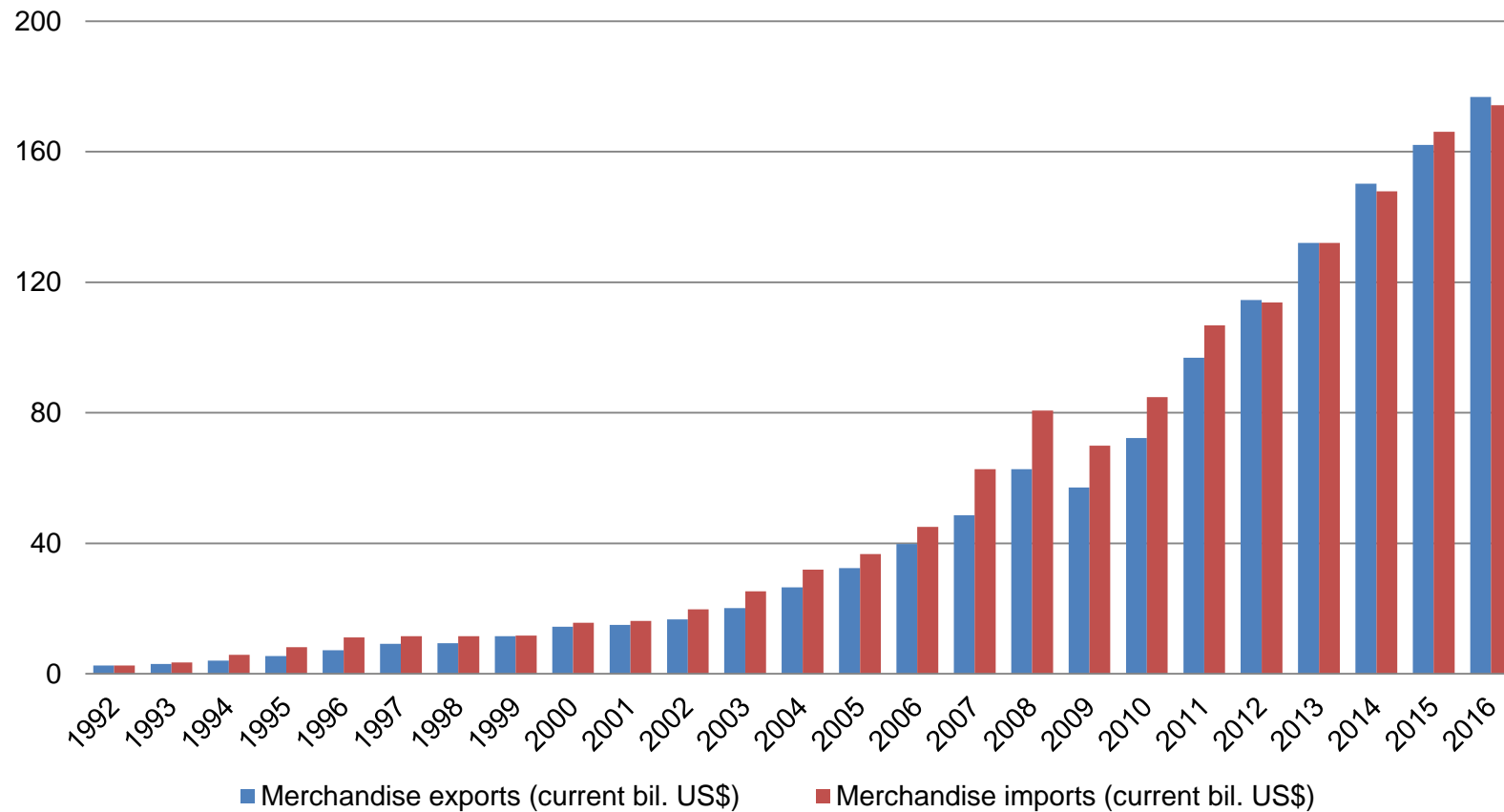
GDP per capita (PPP): 6.034 USD (2016)

Economic Performance: GDP and GDP per capita, 1992-2016 (bil. USD)



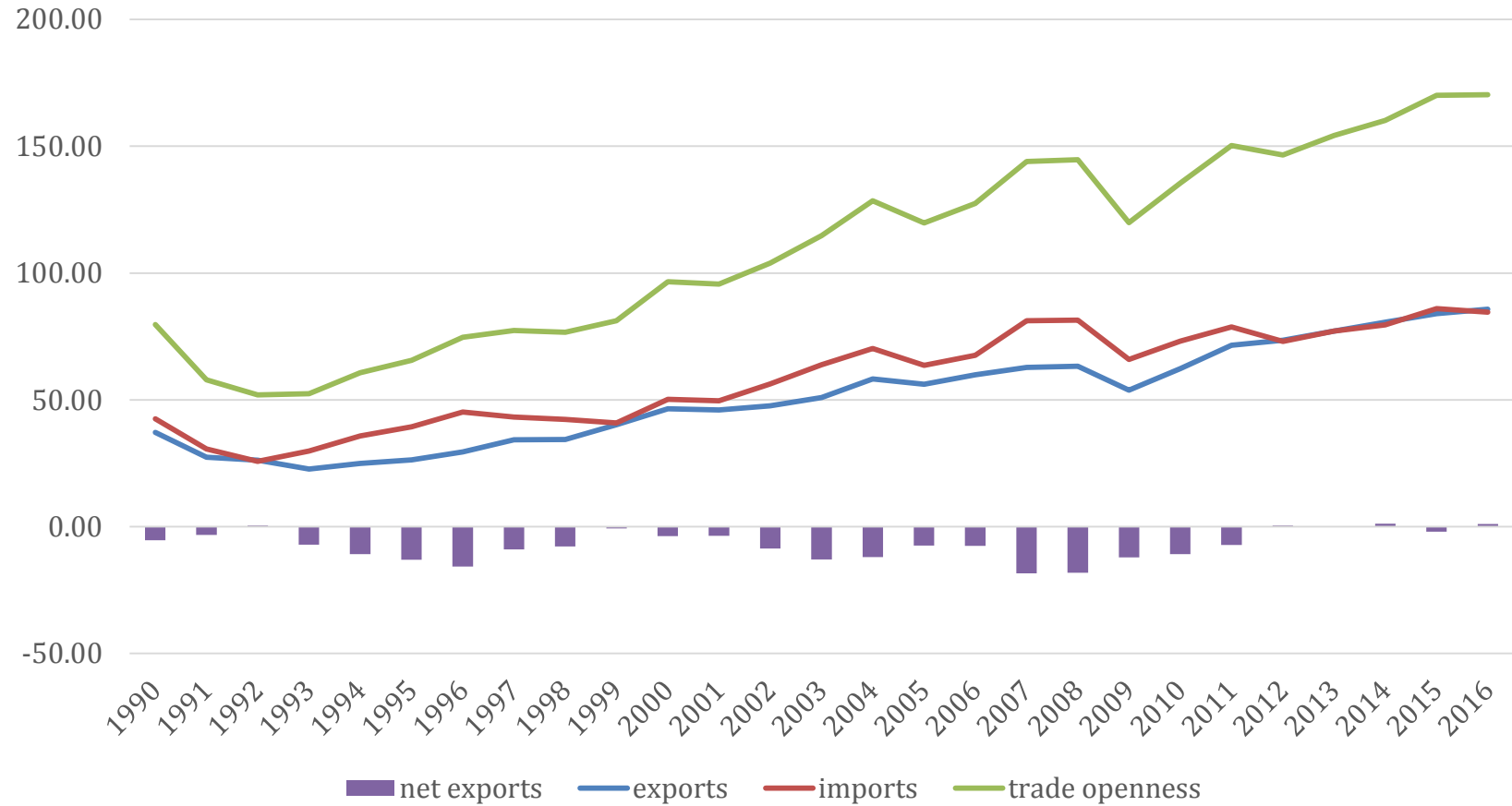
Source: WB (2017)

Economic Performance: Merchandise Exports and Imports, 1992-2016 (bil. USD)



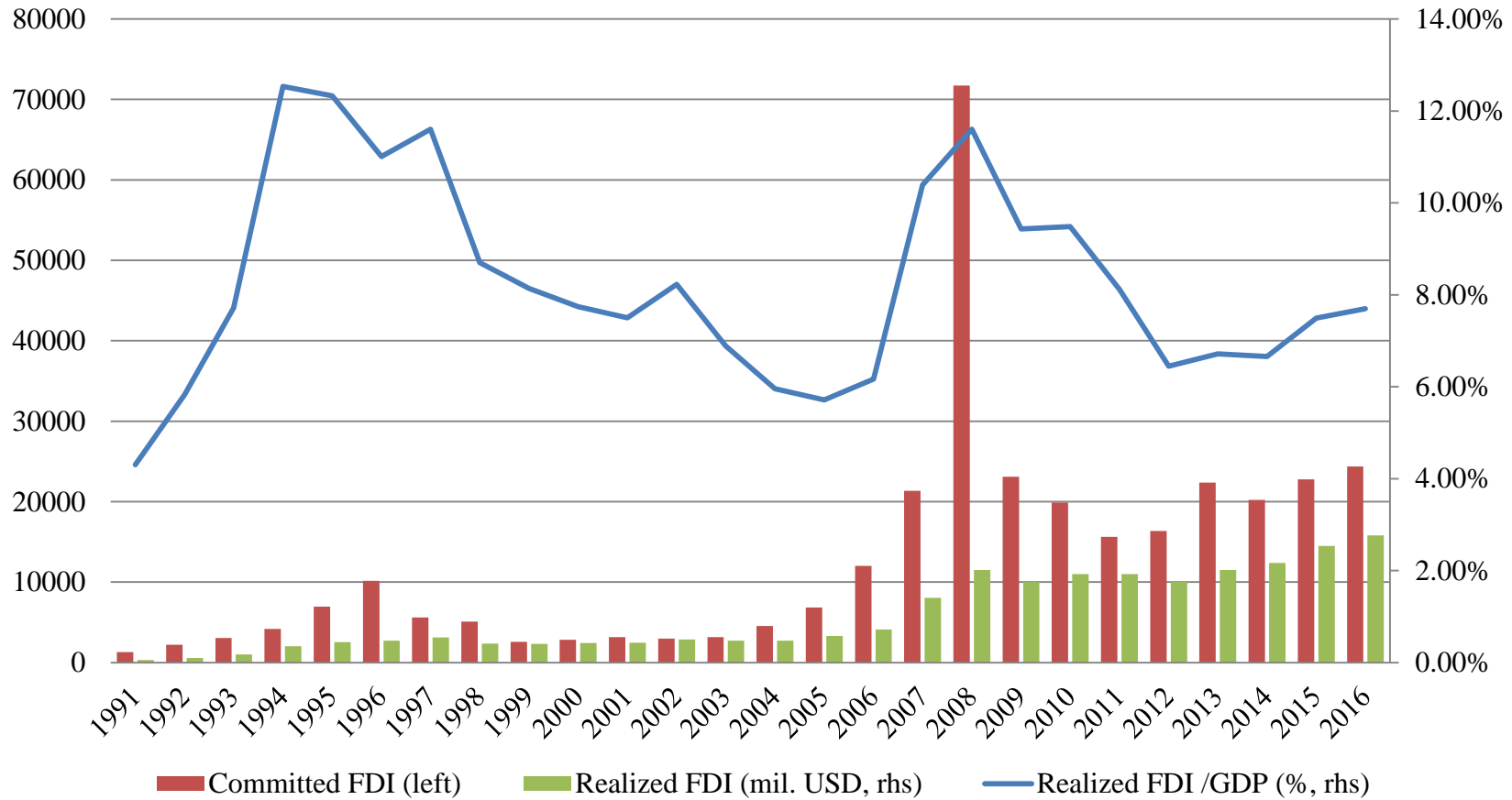
Source: WB (2017)

Openness and Net Export, 1990-2016 (% GDP)



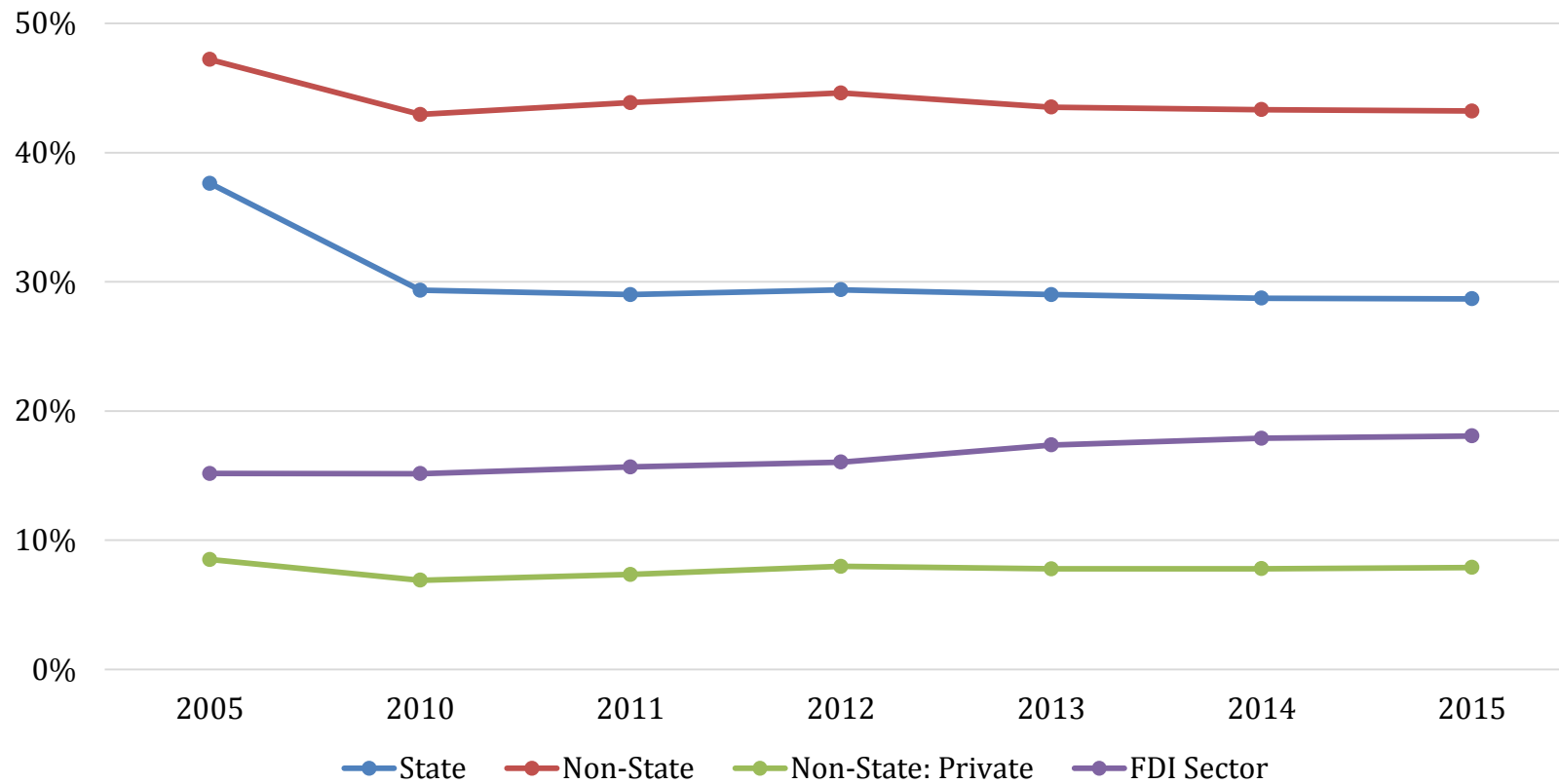
Source: Author's calculation from CEIC database, GSO

FDI inflows, 1991-2016



Source: Authors' calculation from GSO, MPI and CEIC database

Economic Structure: Contribution to GDP by Sector, 2005-2015 (%)

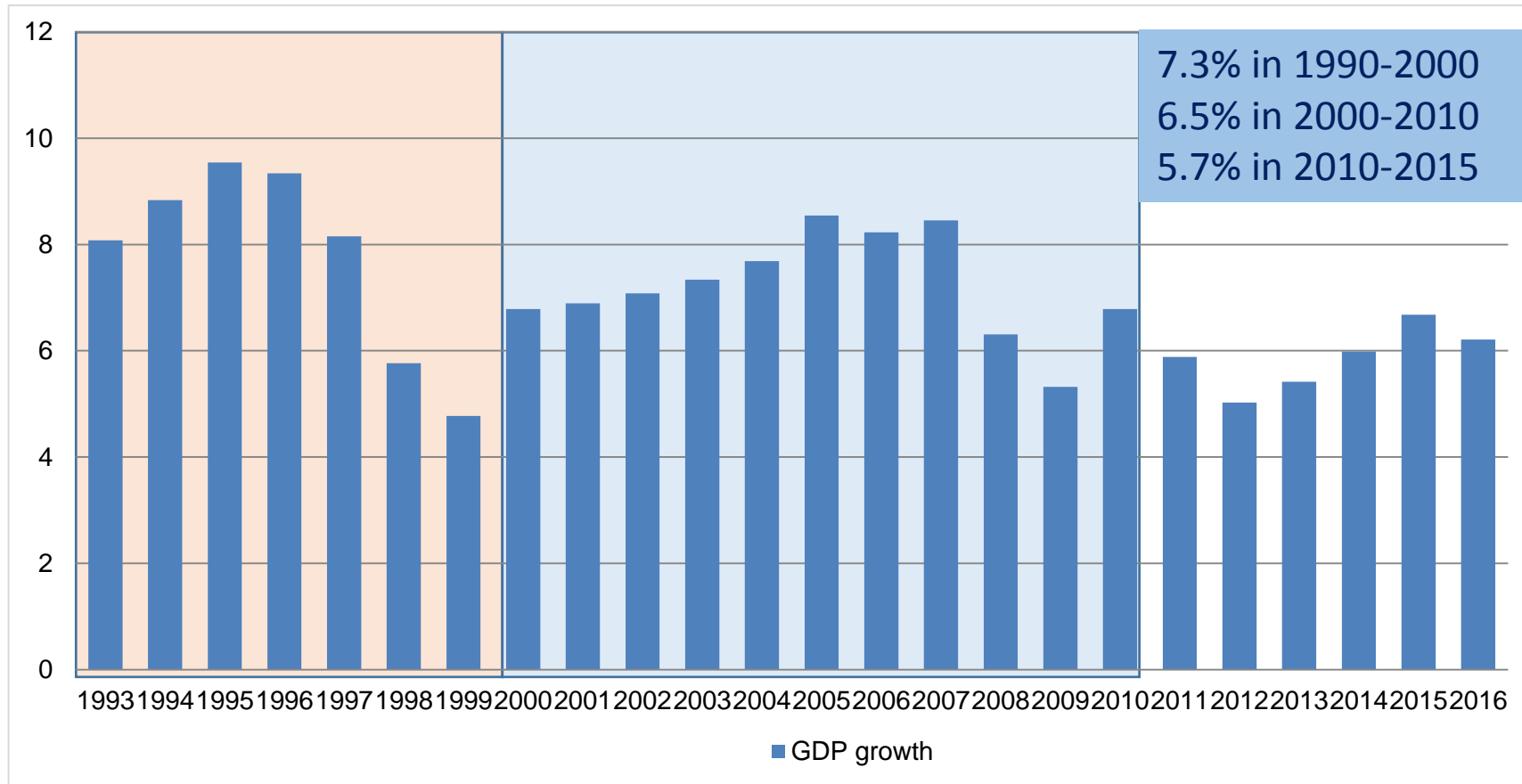


Source: General Statistics Office (2016)

Early Middle Income Trap: Productivity Challenges

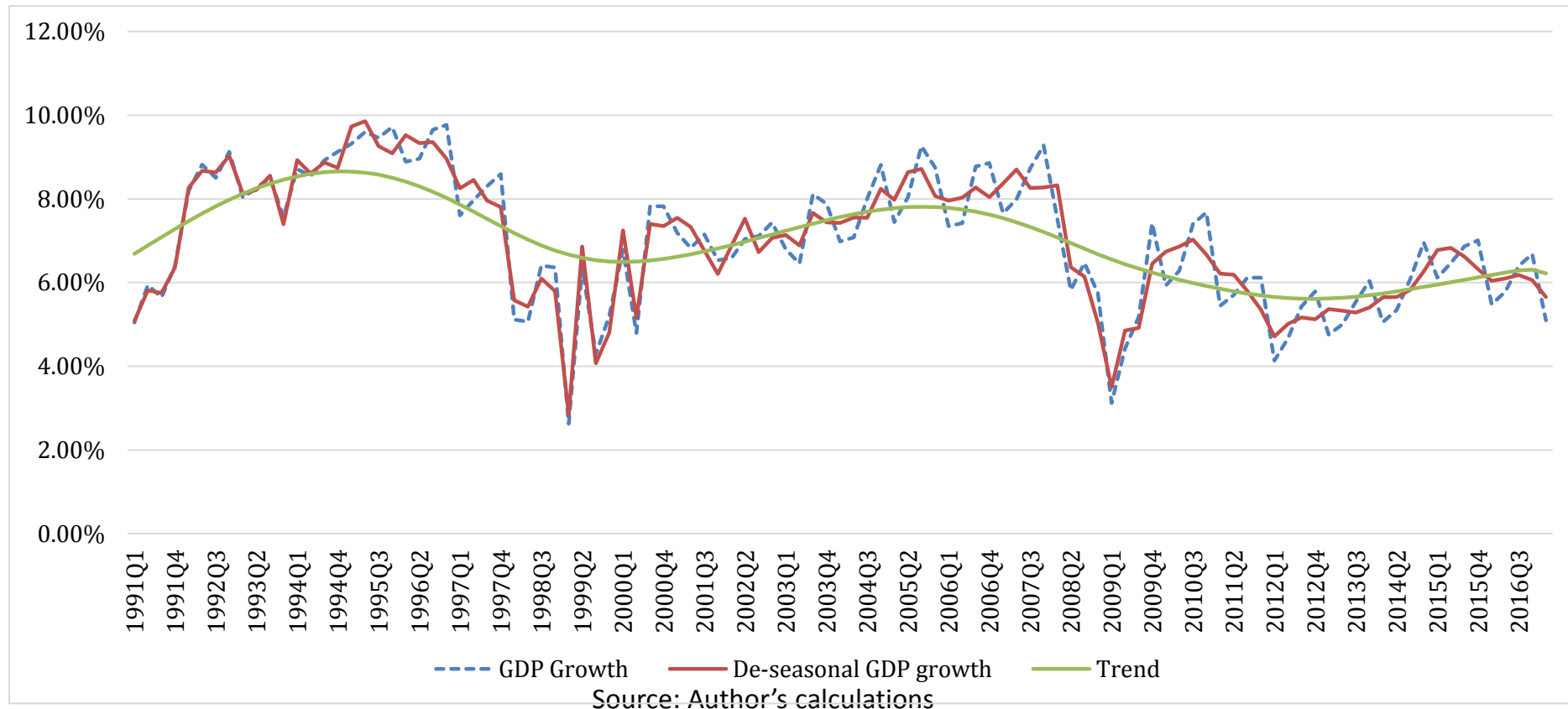
- Economic growth rate declines
- Productivity challenges: Data analysis
- Factors:
 - Structural issues
 - Labor supply
 - Institutions and governance

A Closer Look at Economic Growth Rate, 1990-2015 (%)



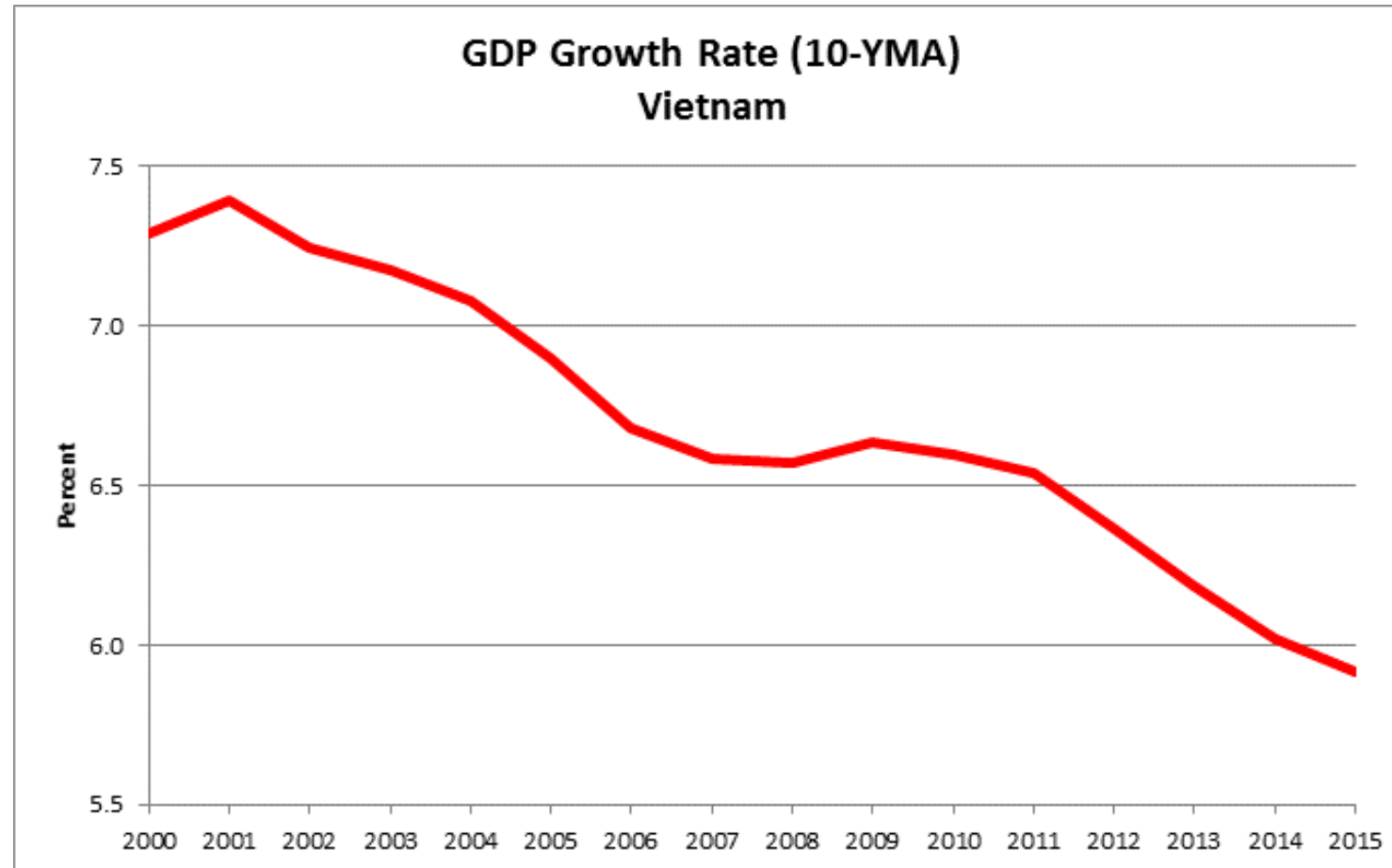
Source: GSO (2017)

The trend of economic growth in Vietnam, 1991-2016 (%)



The long-term trend of the economy's growth has declined remarkably over the past years. The main cause of this was the decreasing total factor productivity (TFP) rather than factors like capital, investment or labor. Thus, macro policies in the future should aim at creating a healthy business environment with equality and stability.

Vietnam's GDP growth has followed a declining trend since 2001



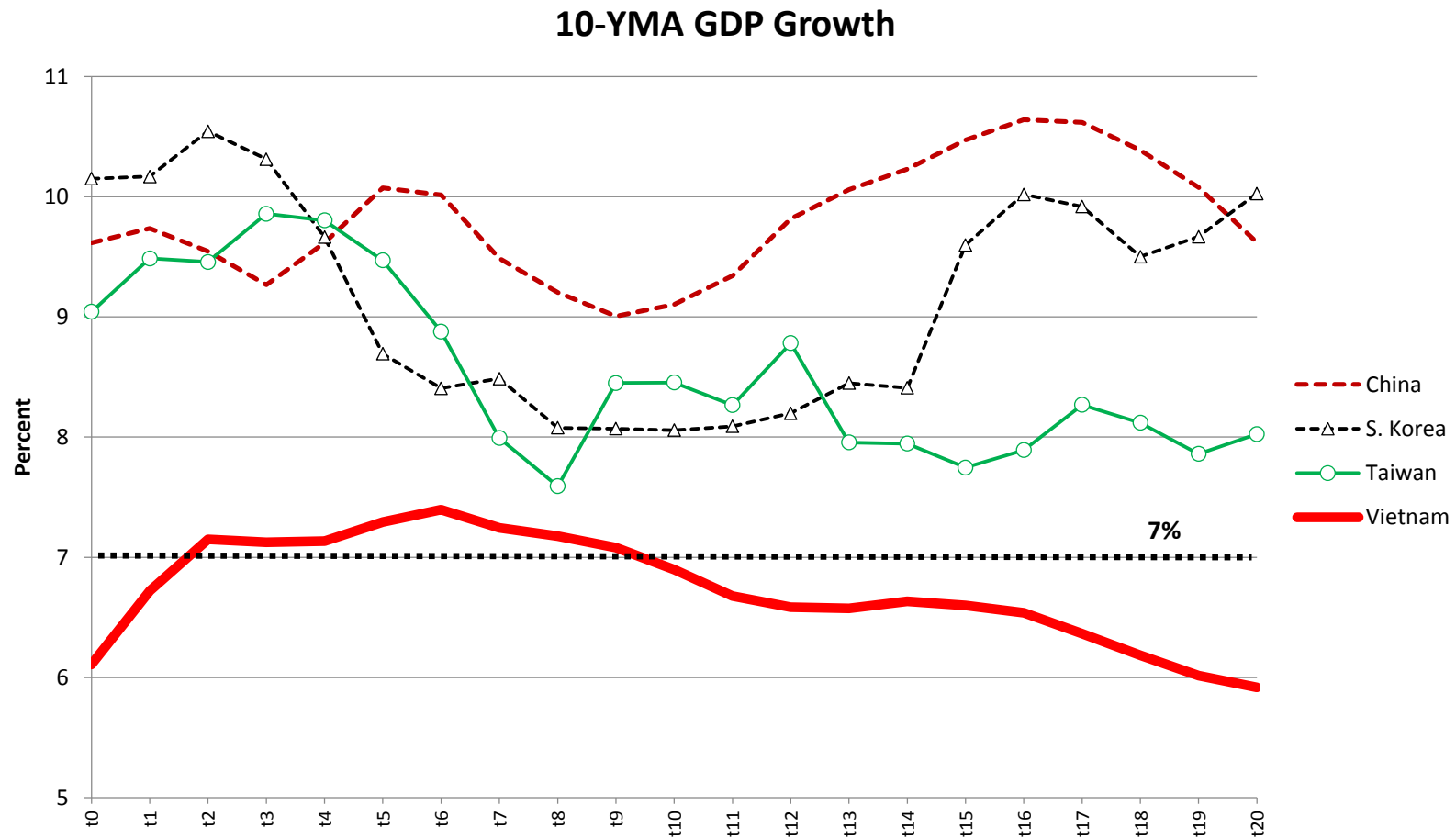
Source: Conference Board Total Economy Dataset

Vietnam is no longer a stellar performer

Quốc gia	2012	2013	2014	2015	2016*	Average 2012-2016
China	7.7	7.8	7.3	6.9	6.6	7.3
Cambodia	7.3	7.4	7.1	7.0	7.0	7.2
Laos	7.8	7.5	6.7	6.8	6.8	7.1
India	5.1	6.6	7.2	7.6	7.4	6.8
Philippines	6.8	7.1	6.2	5.9	6.4	6.5
Bangladesh	6.5	6.0	6.1	6.6	7.1	6.5
Vietnam	5.2	5.4	6.0	6.7	6.0	5.9
Indonesia	6.0	5.6	5.0	4.8	5.0	5.3
Malaysia	5.6	4.7	6.0	5.0	4.1	5.1
Sri Lanka	6.3	3.4	4.9	4.8	5.0	4.9
Pakistan	3.8	3.7	4.1	4.0	4.7	4.1
Thailand	6.5	2.7	0.8	2.8	3.2	3.2
Singapore	3.4	4.7	3.3	2.0	1.8	3.0
Hong Kong	1.7	3.1	2.7	2.4	1.5	2.3

Source: ADO 2016 (Recited from Vu Minh Khuong (2016))

GDP Growth: Vietnam vs. Miracle Economies



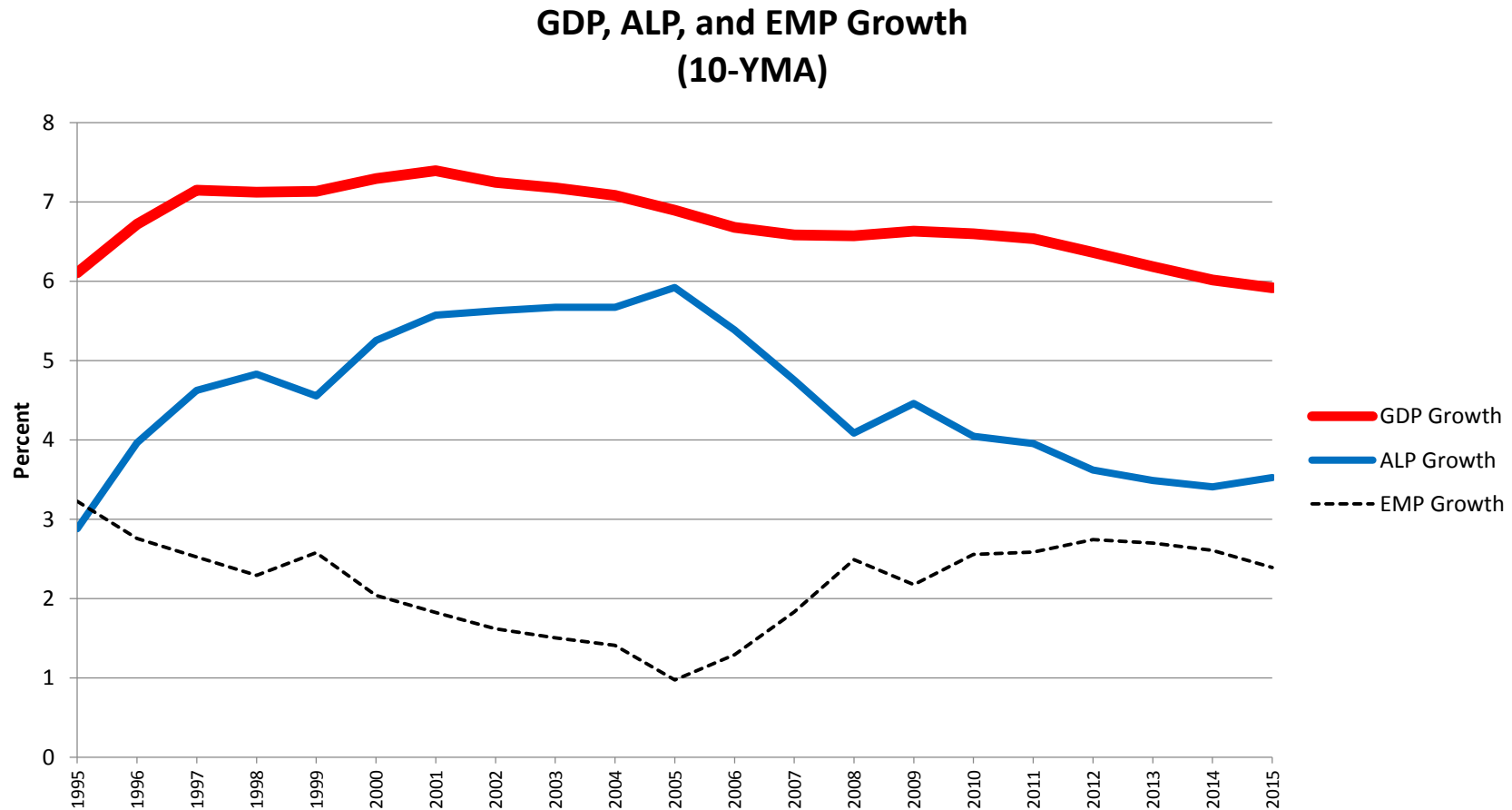
Source: Vu Minh Khuong (2016)

Growth Accounting Decomposition

- $g_{GDP_t} = g_{ALP_t} + g_{EMP_t}$ (1)

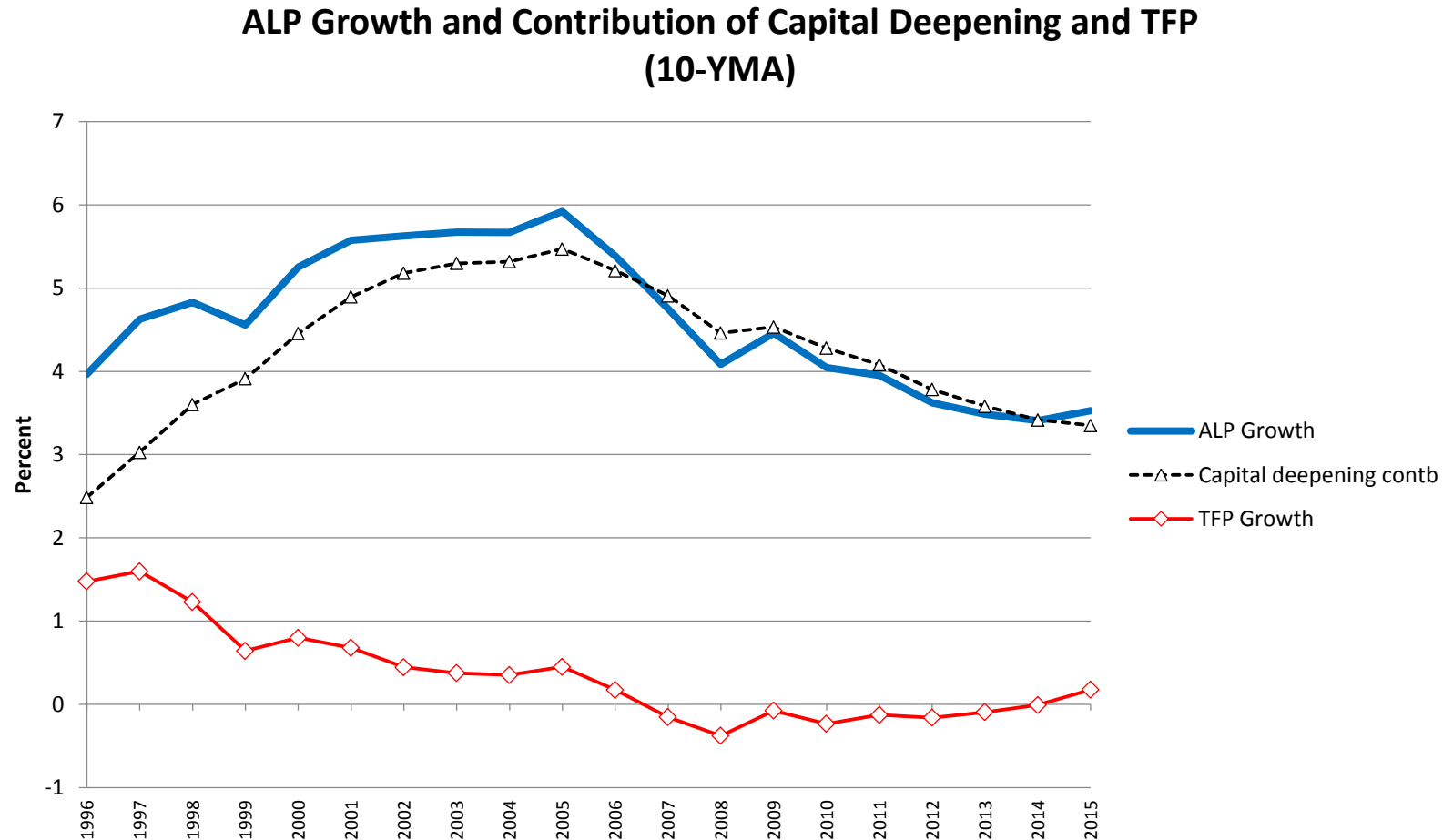
- $g_{ALP_t} = k_{contb_t} + g_{TFP_t}$ (2)

GDP slowdown since 2005 was driven by ALP growth decline



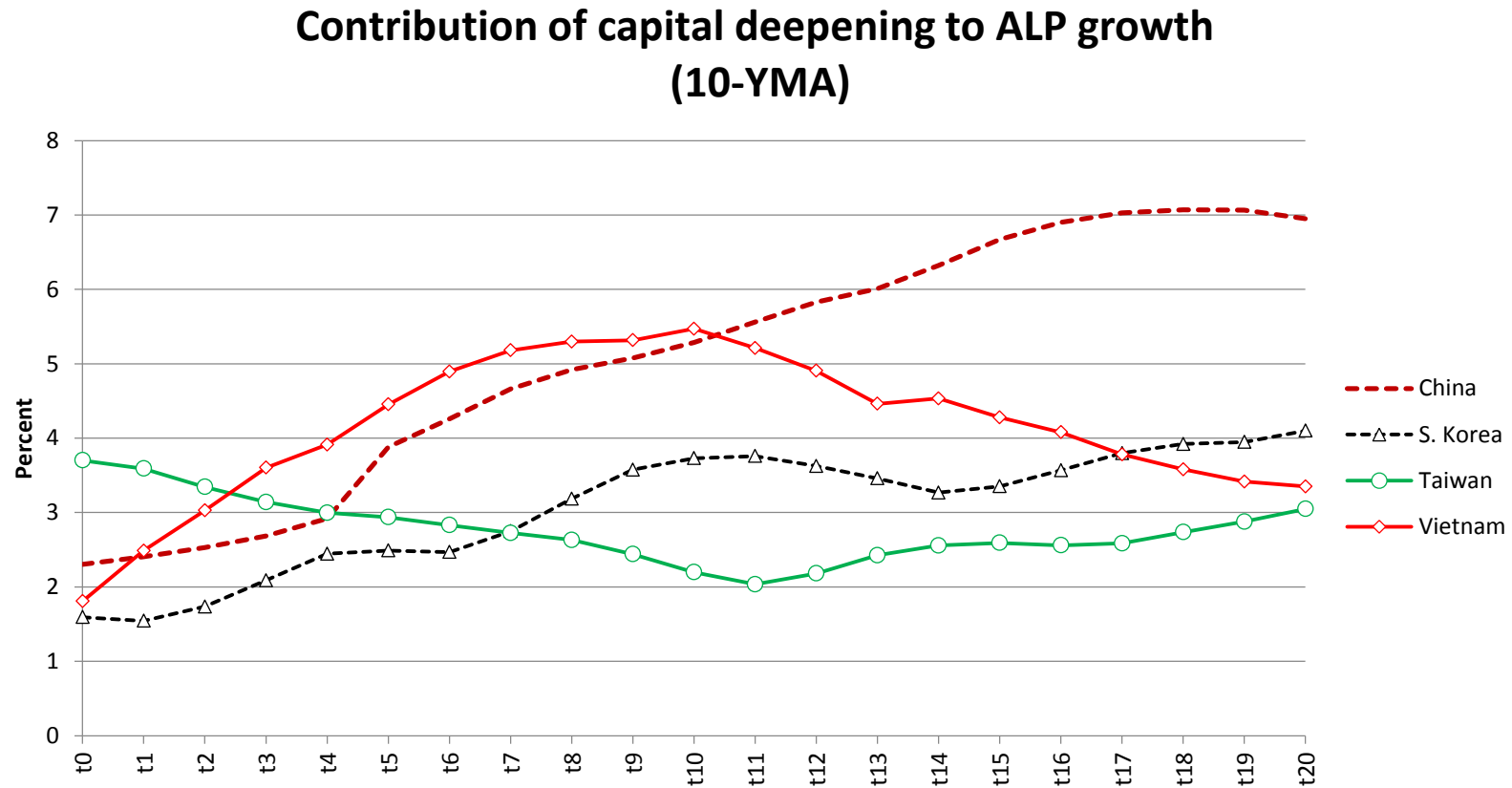
Source: Vu Minh Khuong (2016)

ALP growth slowdown since 2005 was due to declining capital deepening growth and poor TFP growth



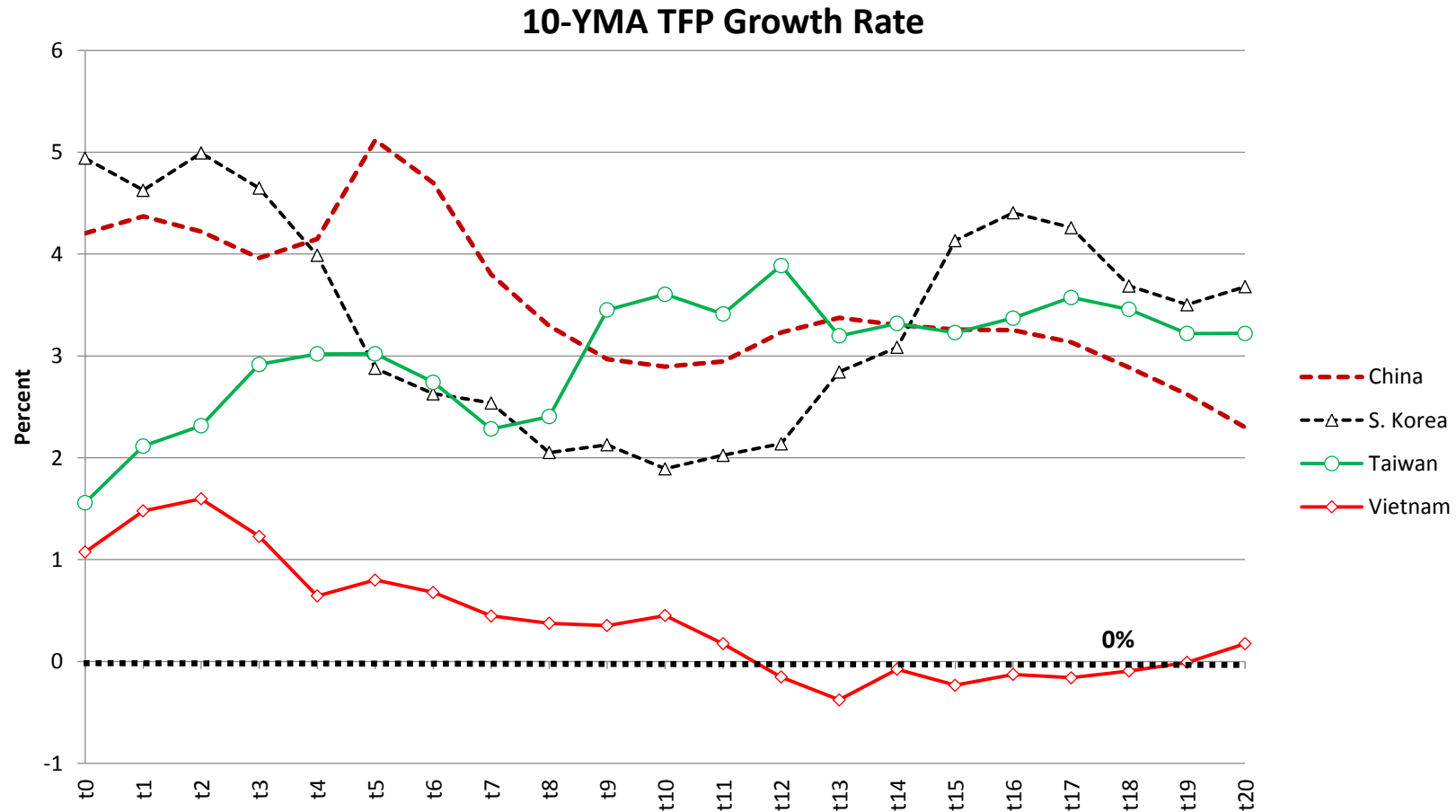
Source: Vu Minh Khuong (2016)

Contribution of capital deepening to ALP growth (10-YMA) Vietnam vs. Miracle Economies



Source: Vu Minh Khuong (2016)

TFP Growth: Vietnam vs. Miracle Economies



Source: Vu Minh Khuong (2016)

GDP growth decomposition by sector

Sector	2000-14			2000-07			2007-2014		
	Vietna m	China	VN-CN	Vietna m	China	VN-CN	Vietna m	China	VN-CN
	(1)	(2)	(1)-(2)	(3)	(4)	(3)-(4)	(5)	(6)	(5)-(6)
Overall Economy									
GDP growth (%)	6.7	9.4	-2.7	7.7	10.3	-2.6	5.7	8.5	-2.8
ALP Growth (%)	4.5	8.9	-4.4	5.4	9.7	-4.3	3.5	8.1	-4.6
EMP Growth (%)	2.2	0.5	1.8	2.3	0.6	1.7	2.2	0.4	1.8
Agriculture									
GDP growth (%)	4.7	6.0	-1.4	4.4	5.4	-1.0	4.9	6.7	-1.8
ALP Growth (%)	4.2	9.4	-5.2	4.8	7.7	-2.8	3.5	11.2	-7.6
EMP Growth (%)	0.5	-3.4	3.9	-0.4	-2.3	1.9	1.3	-4.5	5.8
Mining									
GDP growth (%)	7.8	8.9	-1.1	7.3	12.1	-4.8	8.3	5.8	2.6
ALP Growth (%)	5.4	7.8	-2.3	1.0	10.5	-9.6	9.9	5.0	4.9
EMP Growth (%)	2.4	1.1	1.2	6.3	1.5	4.8	-1.6	0.8	-2.3
Manufacturing			0.0						
GDP growth (%)	4.9	8.6	-3.7	9.7	10.3	-0.6	0.1	6.8	-6.7
ALP Growth (%)	-1.5	6.2	-7.6	2.3	7.4	-5.1	-5.2	5.0	-10.2
EMP Growth (%)	6.4	2.4	4.0	7.4	2.9	4.5	5.3	1.8	3.5
Utility									
GDP growth (%)	7.9	7.3	0.6	8.6	11.5	-3.0	7.2	3.1	4.1
ALP Growth (%)	-0.3	6.9	-7.1	-2.3	8.7	-11.1	1.8	5.0	-3.2
EMP Growth (%)	8.2	0.4	7.7	10.9	2.8	8.1	5.4	-1.9	7.4

GDP growth decomposition by sector

Sector	2000-14			2000-07			2007-2014		
	Vietnam	China	VN-CN	Vietnam	China	VN-CN	Vietnam	China	VN-CN
	(1)	(2)	(1)-(2)	(3)	(4)	(3)-(4)	(5)	(6)	(5)-(6)
Construction									
GDP growth (%)	6.7	11.0	-4.4	10.9	10.7	0.2	2.4	11.4	-9.0
ALP Growth (%)	-1.5	7.3	-8.8	-0.3	6.9	-7.1	-2.8	7.8	-10.6
EMP Growth (%)	8.2	3.7	4.5	11.1	3.8	7.3	5.2	3.6	1.6
Trade									
GDP growth (%)	6.0	10.1	-4.1	8.7	9.6	-0.9	3.4	10.6	-7.2
ALP Growth (%)	2.8	6.2	-3.4	4.6	6.7	-2.1	0.9	5.7	-4.7
EMP Growth (%)	3.3	3.9	-0.7	4.1	2.9	1.2	2.5	5.0	-2.5
Transport, Storage, and Telecomm									
GDP growth (%)	6.2	7.9	-1.7	9.4	9.4	0.0	3.1	6.4	-3.4
ALP Growth (%)	5.2	5.7	-0.5	8.9	6.9	2.0	1.4	4.4	-3.0
EMP Growth (%)	1.1	2.2	-1.1	0.5	2.5	-1.9	1.7	2.0	-0.3
Financial, Real Estate, Business Services									
GDP growth (%)	5.0	12.1	-7.1	6.2	12.8	-6.6	3.8	11.4	-7.6
ALP Growth (%)	-5.4	9.4	-14.8	-9.8	10.0	-19.8	-1.1	8.8	-9.9
EMP Growth (%)	10.4	2.7	7.7	16.0	2.8	13.2	4.8	2.6	2.3
Public, Community, Social, and Personal Services									
GDP growth (%)	6.7	11.5	-4.8	6.6	12.6	-6.0	6.8	10.3	-3.6
ALP Growth (%)	3.2	8.3	-5.1	-0.5	9.5	-10.0	6.9	7.2	-0.3
EMP Growth (%)	3.5	3.1	0.4	7.1	3.1	4.0	-0.2	3.1	-3.3

Source: APO Productivity Database 2016

Labor Productivity in Agriculture Vietnam vs. Asian Peers

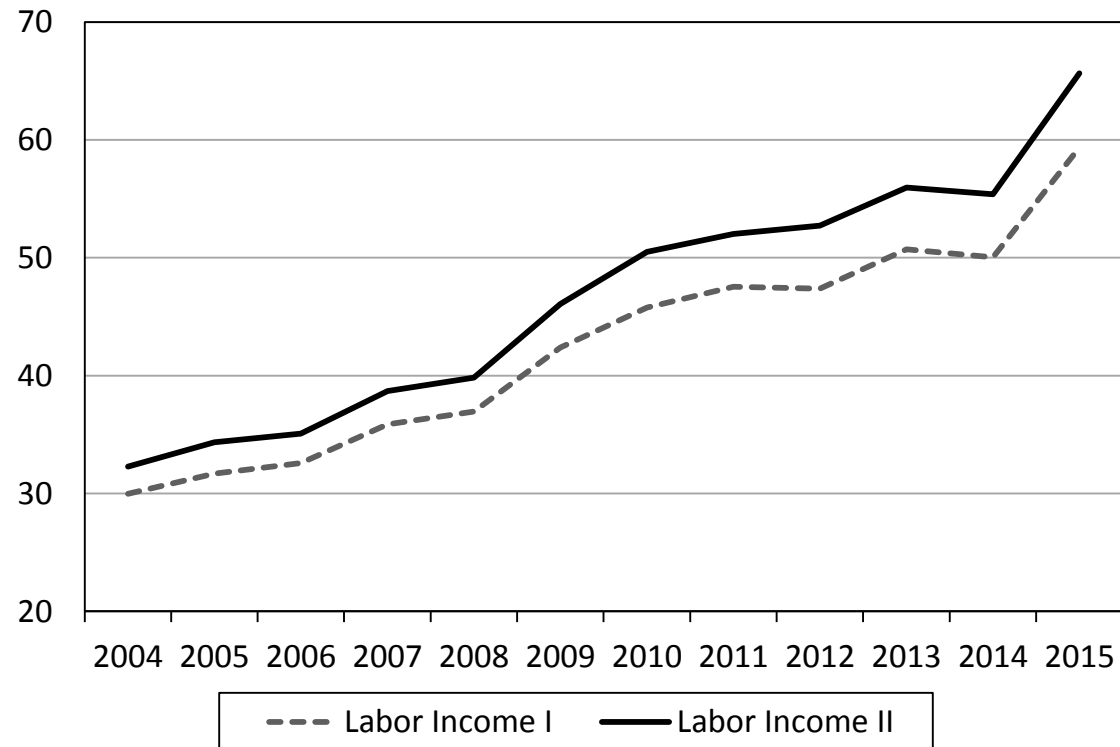
Country	2000	2005	2010	2015
Value-added/Worker (2010 US\$)				
Vietnam	585	661	719	806
S. Korea	9674	13067	19213	26500
Malaysia	10426	12910	15962	19818
Indonesia	1545	1777	2124	2629
Thailand	1446	1643	1860	2106
China	774	930	1160	1465
Cambodia	575	652	767	798
Vietnam Standardized to 1.0				
S. Korea	16.5	19.8	26.7	32.9
Malaysia	17.8	19.5	22.2	24.6
Indonesia	2.6	2.7	3.0	3.3
Thailand	2.5	2.5	2.6	2.6
China	1.3	1.4	1.6	1.8
Cambodia	1.0	1.0	1.1	1.0

Source: World Development Indicators Database 2016

Average Real Wage Increases Quickly

- Average real wage doubled during the 2004-2015 period.
- Increasing payments on social insurance, health insurance, and unemployment insurance.

Annual Real Wage, 2004-2015
(deflated by GDP deflator, 2010 as base year, million VND)



Labor income I consists of wages, bonus and subsidies.
Labor incomes II consists of all components of labor income I and payments on social insurance, health insurance and unemployment insurance.

Source: VEPR (2017)

Average Wage and Productivity Growth An International Comparison

- Productivity growth in Vietnam is significant (4.4%).
- However, the average wage growth rates (5.8%) outpaced the productivity growth rate.
- Calculation using Vietnam Enterprise Surveys show that during the 2004-2009 period, wage grew less than labor productivity but wage growth exceeded productivity growth since 2009.

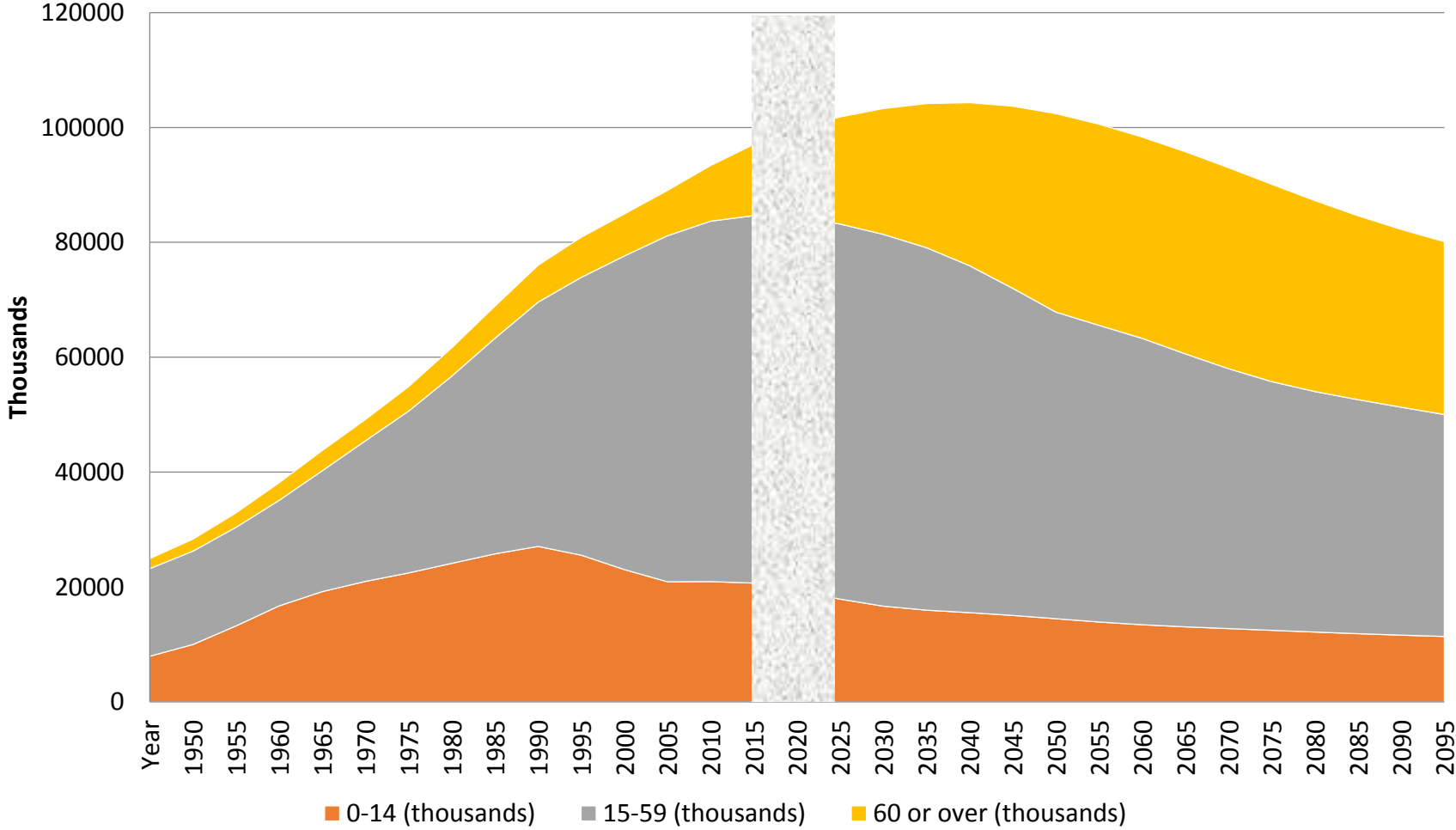
**Wage and Productivity Growth
in Viet Nam and Asian Countries 2004-2015**
(Average annual real wage growth deflated by the CPI, %)

Country	Productivity Growth Rates	Average Wage Growth Rates
China	9.1	8.8
Indonesia	3.6	2.6
Malaysia	2.1	2.5
Philippines	2.6	0.4
Singapore	1.8	1.2
Thailand	2.7	3.5
Viet Nam	4.4	5.8

Notes: Monthly earning is in 2014 for Thailand and 2015 for other countries.

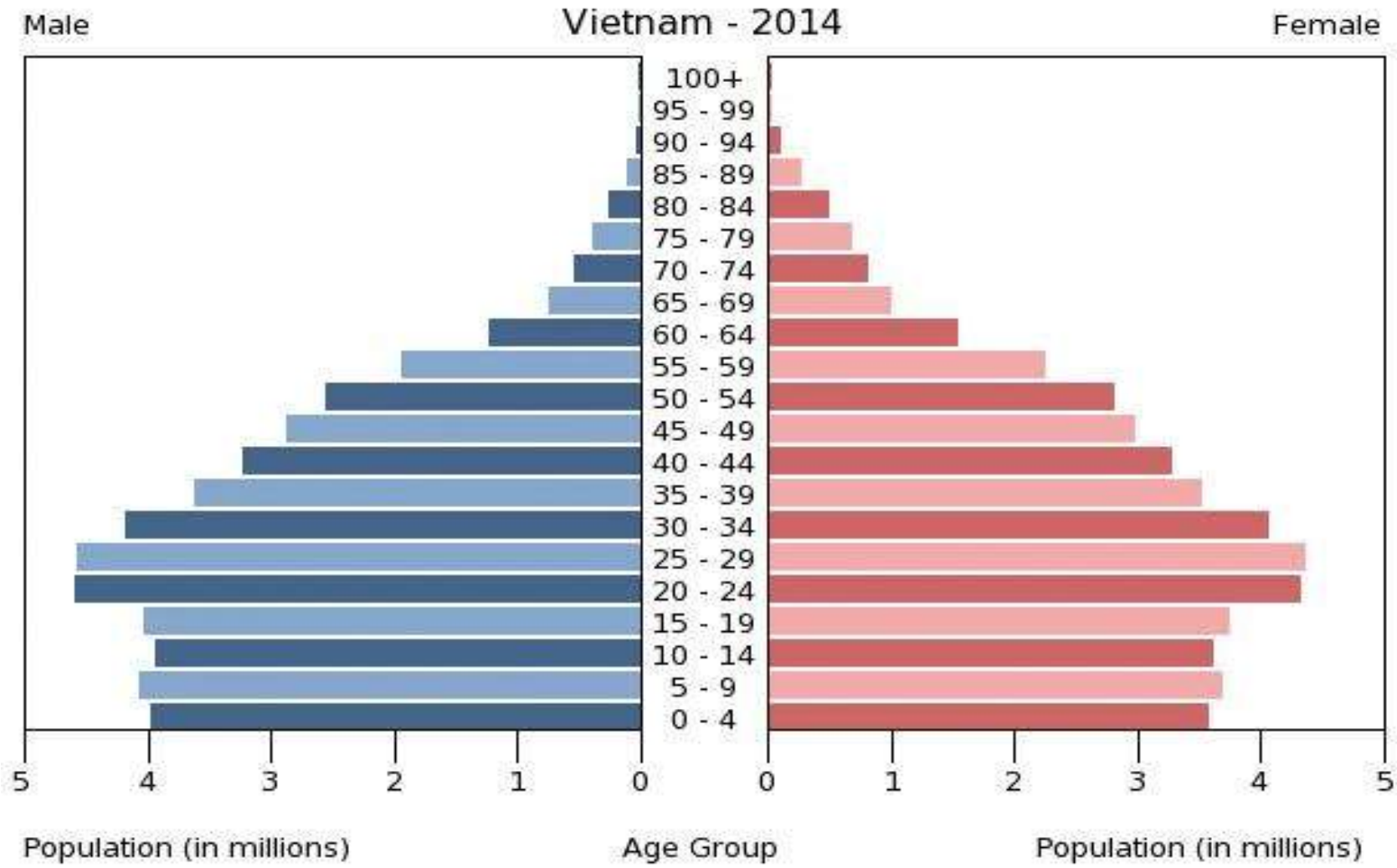
Source: VEPR's Calculation from International Labor Organization (ILO) Database

Young population but soon ending the demographic dividend



Source: GSO (2014)

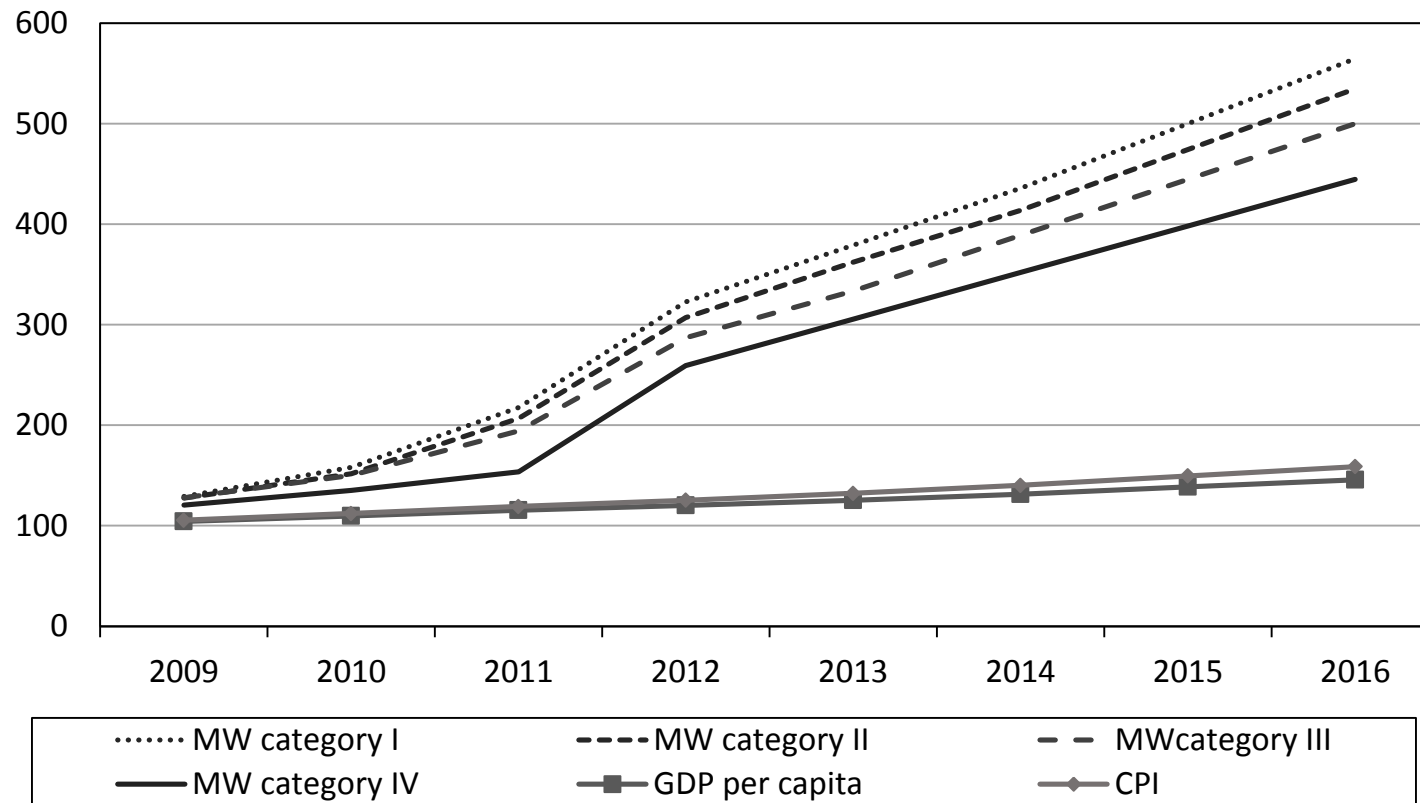
Population Pyramid, 2014



Minimum Wage Growth Trend

- **Regional Minimum Wage Growth:** much higher than that of CPI and GDP per capita.

Growth Pattern of Regional Minimum Wages, CPI, and per-capita GDP, 2009-2016 (2008=100)



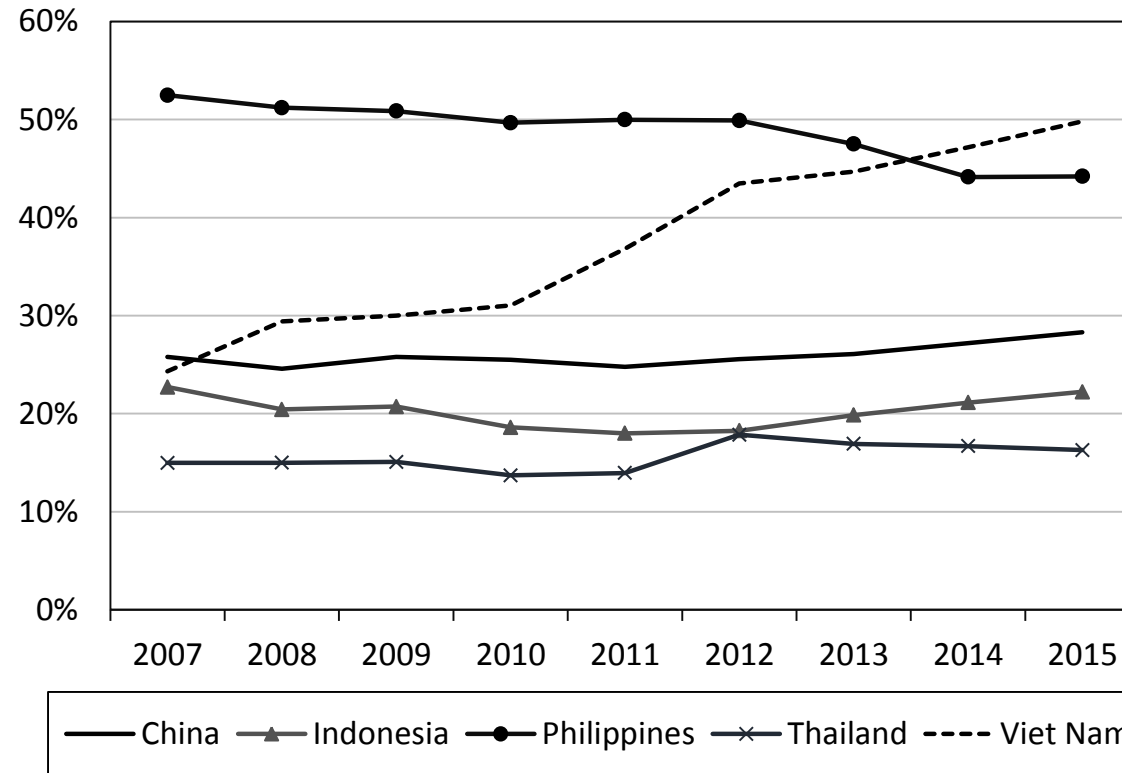
Notes: Before October 2011, regional minimum wage applicable to domestic enterprises.

Source: VEPR (2017)

Minimum Wage and Productivity Growth An International Comparison

- Rapid increase in ratio of minimum wage to labor productivity: from 25% in 2007 to 50% in 2015.
- Labor productivity in this comparison is measured as GDP/total number of workers.

Ratio of Minimum Wage to Labor Productivity, 2007-2015



Notes: ^a Minimum wage before 2005 applicable to Beijing. ^b Monthly minimum wage computed from hourly minimum wage (8 hours x 23 days); ^c Minimum wage rate applicable to Non-Agricultural; ^d Minimum wage rate in Bangkok; ^e Minimum wage rate of category I, for domestic firms. Productivity is calculated as GDP/Labor force.

Business Climate Indices

INDICES	2017	2016	2015	2014	2013
TI Corruption Perceptions		113	119	119	116
Heritage Foundation Index of Economic Freedom (points)	147 (52,4)	131 (54)	148 (51,7)	148 (51,7)	140 (51,0)
WB Doing Business	82	90	78	99	99
WEF Global Competitiveness (points)	55 (4,36)	60 (4,31)	56 (4,3)	68	70 (4,18)

Source: Transparency International, Heritage Foundation, World Bank, World Economic Forum

World Bank's Doing Business Index

Rank	2018 (China)	2017 (China)	2016 (China)	2015 (China)	2014 (China)
Overall rank	68 (78)	82 (78)	90 (84)	78 (90)	99 (96)
Starting a business	123 (93)	121 (127)	119 (136)	125 (128)	109 (158)
Construction permits	20 (172)	24 (177)	12 (176)	22 (179)	29 (185)
Registering property	63 (41)	59 (42)	58 (43)	33 (37)	51 (48)
Getting electricity	64 (98)	96 (97)	108 (92)	135 (124)	156 (119)
Getting credit	29 (68)	32 (62)	28 (79)	36 (71)	42 (73)
Protecting investors	81 (119)	87 (123)	122 (134)	117 (132)	157 (98)
Paying taxes	86 (130)	167 (131)	168 (132)	173 (120)	149 (120)
Trading across borders	94 (97)	93 (96)	99 (96)	75 (98)	65 (74)
Enforcing contracts	66 (5)	69 (5)	74 (7)	47 (35)	46 (19)
Resolving insolvency	129 (56)	125 (53)	123 (55)	104 (53)	149 (78)

Source: World Bank (2017)

Policy Discussion

- Weak TFP growth was the main culprit of Vietnam's GDP growth slowdown.
- Weak TFP growth is due to several factors:
 - lack of vigorous efforts in knowledge acquisition and innovation;
 - Ineffective control of corruption, which causes inefficiency in resources allocation and management
 - Ineffective coordination in promoting structural change, shifting resources from lower to higher value activity.
- The private sector to take a lead in productivity movement.
- Opportunities from the ICT revolution and the strong presence of FDI in the country's productivity drive.

Way Ahead

- Set forth the productivity targets.
 - The minimum labor productivity level of OECD countries can be used the benchmark, for the overall economy as well as for individual sectors.
- Establish a Vietnam National Productivity Council (VNPC), comprising representatives from government, business, industrial associations, unions, and academia.
- Create a productivity fund to promote productivity improvement, technology acquisition, and R&D activities.
- Launch Vietnam's Productivity Movement.
- Monitor the nation's progress in narrowing productivity gaps with the strategic benchmarks, making this information public and accessible to all people through the internet and mobile technologies.
- Vigorously disseminate international best practices on productivity.

Japanese and International Experiences-Based Policy Measures

- VDF/GRIPS – JICA – MPAC to promote the policy ideas and develop contents.
- Introduction and classification of policy measures; identifying key factors for success extracted from international experiences and cautious applications to Vietnam.
- Introducing: Five S, Keizen, Shindan and handholding, Kosetsushi,
- TVET-industry linkage, FDI-local firm linkage, Benchmarking, Twinning,
- Ginno Jisshusei (technical internship abroad),
- Productivity institute (or center),
- Funds, subsidies and support for productivity enhancement,
- Mindset change,
- National productivity movement

Thank you!

Q&A

Contact:

Nguyen Duc Thanh, PhD.

Email: nguyen.ducthanh@vepr.org.vn

Vietnam Institute for Economic and Policy Research (VEPR),
University of Economics and Business -Vietnam National University, Hanoi.
R.707, Building E4, 144, Xuân Thủy Street, Cầu Giấy District, Hanoi.

Email: info@vepr.org.vn

Tel: 04.37547506 ext 714/ 0975608677

Fax: 04.37549921