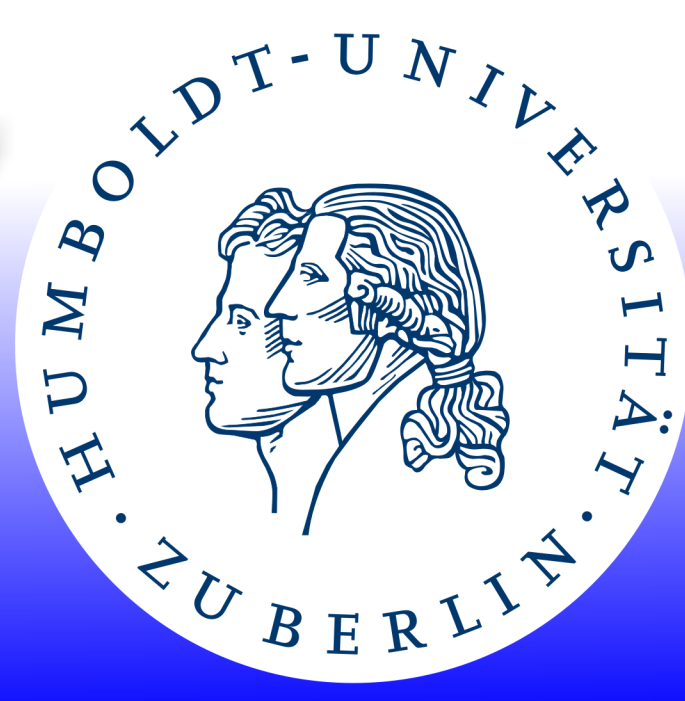


# EFFECTS OF VIETNAMESE RICE PRICE CONTROLS POLICY ON COMPETITION WITH THAILAND



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## INTRODUCTION

Currently, the strongest and most frequent impact on the Vietnamese rice industry is the Price controls policy that regulates the competition in the rice market. The aim of the policy is to ensure national food security but many researchers and businesses suppose that the policy keeps Vietnamese rice production under its full potential compared with the Thai rice industry. They suggest that Vietnam has put more attention on national food security than necessary. This causes market distortion and weakens the Vietnamese competition with Thailand.

## REFERENCE

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 Greenville J. and MacAulay T. G. (2005), 'Tariffs and Steel: US safeguard Actions', *Australian Journal of Agricultural and Resource Economics*, Vol. 49, No. 3, pp. 321-338  
 Takayama, T. and Judge, G. (1971), *Spatial and Temporal Price and Allocation Models*, North-Holland Publishing Co., Amsterdam  
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## METHODOLOGY

Applying Spatial Equilibrium Model with 3 different hypotheses:

- (1) **Scenario 1:** Controlled-price policy updated every week; corresponding export volume is 5 million tonnes
  - (2) **Scenario 2:** Controlled-price policy updated every month; corresponding export volume is 6 million tonnes
  - (3) **Scenario 3:** Controlled-price policy updated every 3 months; corresponding export volume is 8 million tonnes or more
- The full constrained maximization problem is developed and can be written by McAulay (2008):

Objective function :

$$\text{Maximize } NSR = p'Y - p'X - T'X$$

Subject to three conditions:

Firstly, the supply and demand must hold:

$$p_m \leq \lambda_{m0} - \omega_{mn} y_m \quad \text{or} \quad -\omega_{mn} y_m - p_m \leq -\lambda_{m0} \quad (m=1;5 \text{ and } n=1;5 \text{ and } i=0;4)$$

$$p_m \leq v_{m0} + \eta_{mn} x_m \quad \text{or} \quad -\eta_{mn} x_m + p_m \leq v_{m0}$$

Secondly, the supply and demand quantity must balance

$$y_i \leq \sum x_{(n+i)m} \quad \text{or} \quad y_m - \sum x_{(n+i)m} \leq 0$$

$$x_m \geq \sum x_{m(n+i)} \quad \text{or} \quad -x_m + \sum x_{m(n+i)} \leq 0$$

Thirdly, prices are related between markets taking into account the transfer cost (Samuelson, 1952)

to meet the condition of perfect competition

$$p_m - p^n \leq 0$$

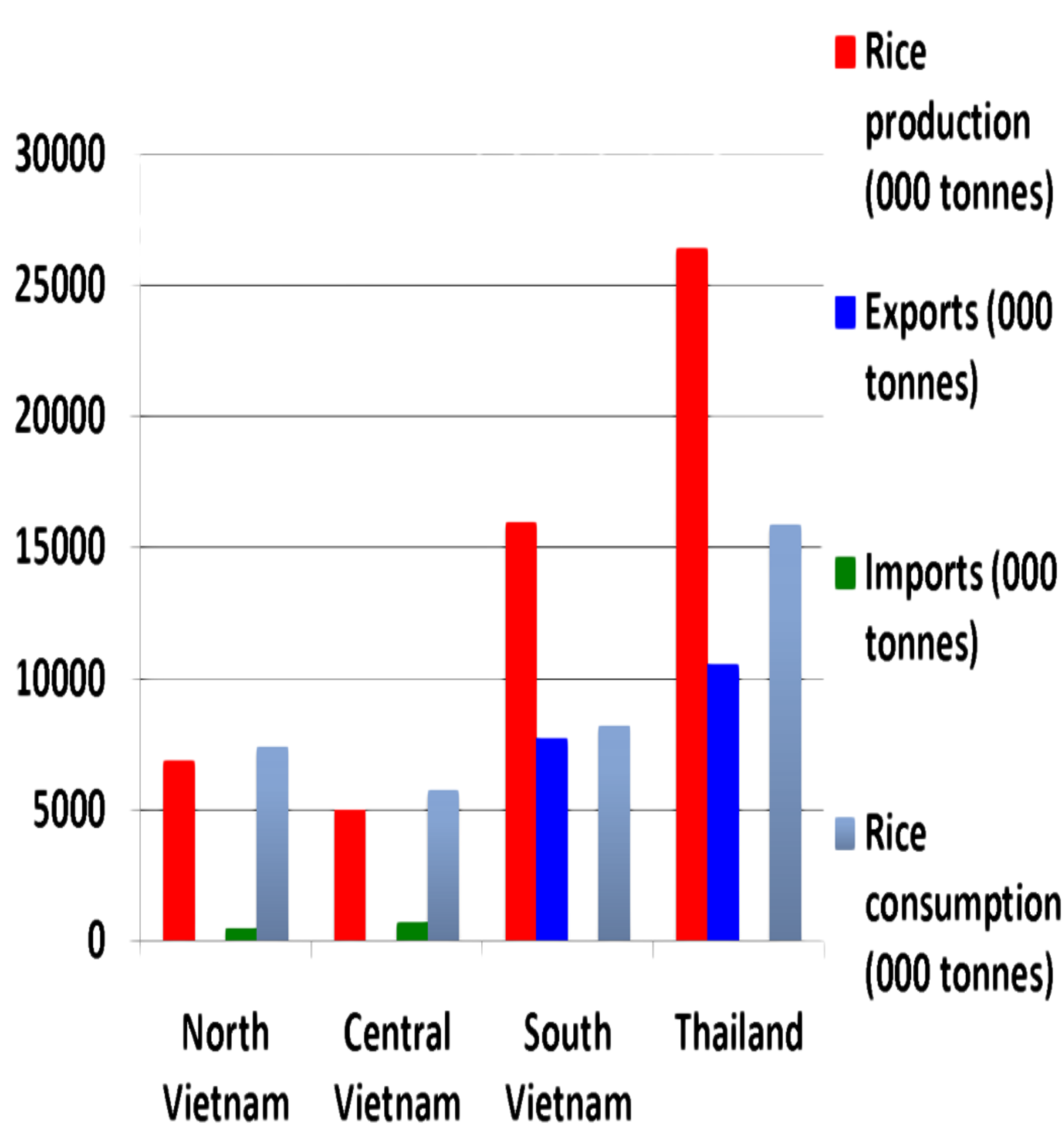
$$p_m - p^i \leq t_{mn}$$

## OBJECTIVES

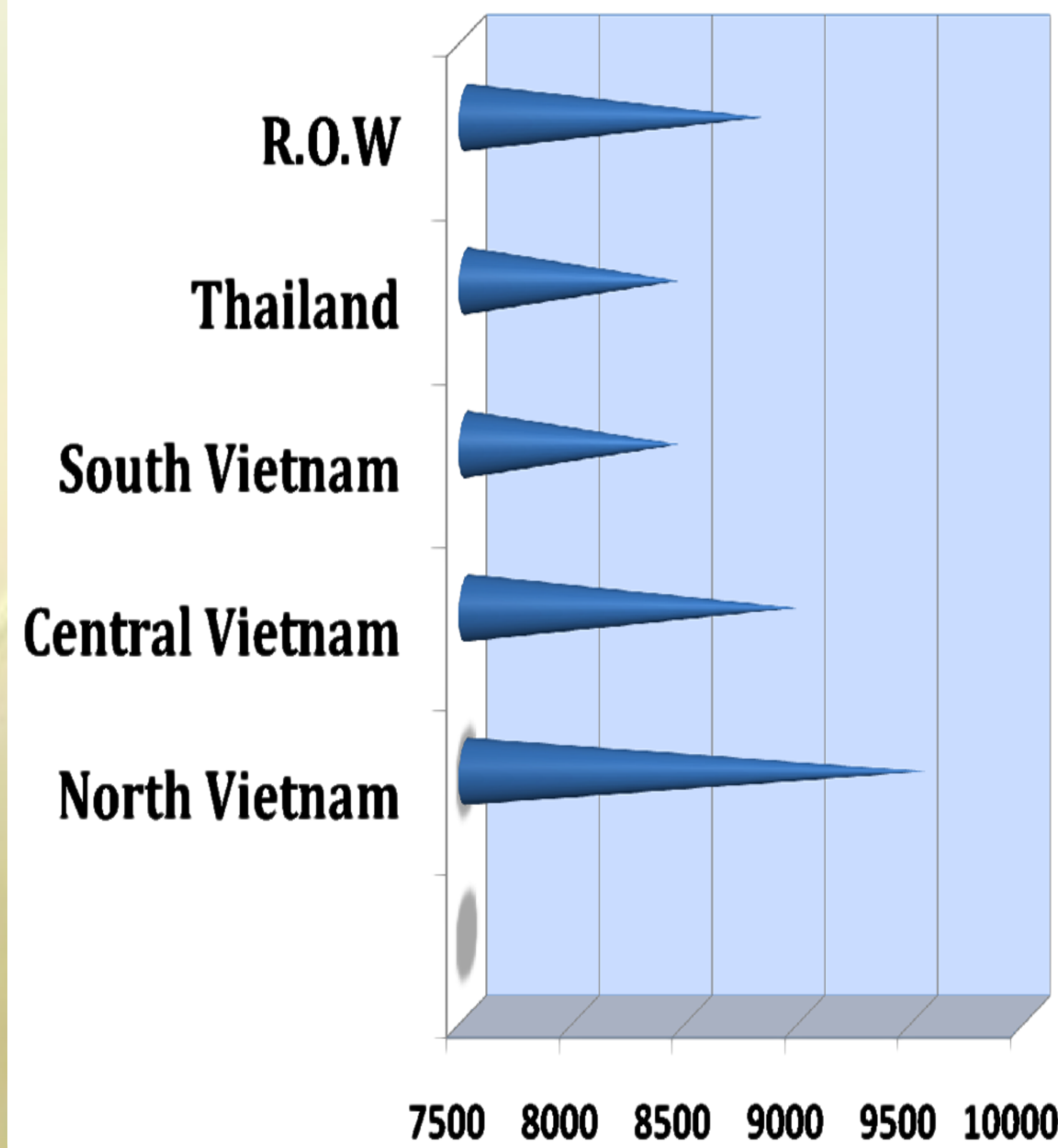
- To examine the impacts of price controls policy on rice markets by observing changes in trade flows when applying different price controls policy on Vietnamese rice.
- To figure out which region has an advantage with different policy settings.
- To enrich the policy makers' information set in evaluating the previous and future policies

## RESULTS

### Overall effect



### Effects on rice price (VND/kg)



### Trade flows ('000tonnes)

From/To	North	Central	South	Thailand	R.O.W	Total supply
North	6,882	0	0	0	0	6,882
Central	0	5,014	0	0	0	5,014
South	504	0	8,218	0	7,221	15,943
Thailand	0	0	0	15,856	10,545	26,402
R.O.W	0	726	0	0	489,592	490,319
Total demand	7,386	5,740	8,218	15,856	507,359	544,559

Source: Results of the Spatial Equilibrium Model Scenario 3

### Regional effects in Vietnam

	Scenario 1 and 2	Scenario 3	Change	
			+/-	%
Rice price in the North (VND/kg)	9,490	9,534	44	0.46
Rice price in the Central (VND/kg)	8,919	8,963	44	0.49
Rice price in the South (VND/kg)	8,398	8,441	44	0.52
Rice producer revenue (\$US billion)	243,513	245,127	1,613	0.66
Shadow price (VND/tonne)	45.56	0		

Source: Results of the Spatial Equilibrium Model, Scenario 3

### Effects on Thai rice

	Change	
	+/-	%
Export volume (million tonnes)	-366	-3.35
Rice price (VND/kg)	-2	-0.02
Rice production (million tonnes)	-1.67	-0.01
Producer revenue (\$US million)	-3.60	-0.03

Source: Results of the Spatial Equilibrium Model

### Comparison between Vietnam and Thailand

	Vietnam	Thailand	Difference
Rice price (VND/kg)	8,441	8,444	-2.2
Rice production (000 tonnes)	27,839	26,402	-1,437
Rice producer revenue (VND billion)	245,127	222,926	-22,201
Rice producer revenue (\$US billion)	12.96	11.78	-1.17

Source: Results of the Spatial Equilibrium Model Scenario 3

## CONCLUSION

- The less control on export rice price, the more benefit on the Vietnamese economy
- The North Vietnam and the Central Vietnam are two deficit region. The South Vietnam is the surplus region
- The direct beneficiaries are the Vietnamese rice farmers and the rice export enterprises because of increase in the domestic price
- The losers could be the urban poor and rural householders who do not farm rice
- The effects of price controls policy are quite small on its competitor and the rest of the world
- Scenario 3 could raise the volume of Vietnamese rice exports to 7.221 million tonnes that reflects the Vietnamese rice competitive power in terms of export quantity
- Less controlling in price will clear away the trade flow in any black market which could occur in scenario 1 and 2 (45.56 VND/tonne)

## CONTACT