

SHALLOT MARKET INTEGRATION BETWEEN PRODUCER MARKET IN BREBES AND NGANJUK WITH CONSUMER MARKET IN KRAMATJATI CENTRAL MARKET JAKARTA (KCMJ) DURING 2009-2016

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INTRODUCTION

Shallot production centre in Indonesia to be exact at Brebes, Nganjuk, Cirebon, and Bantul. Shallot supplies to KCMJ come from Brebes and Nganjuk. Shallot is interesting to researched, because its price fluctuate and it may cause unrest in the community. At the same time a very striking price differences may occur in the producer and consumer market, as well as Brebes, Nganjuk, and KCMJ.

OBJECTIVES

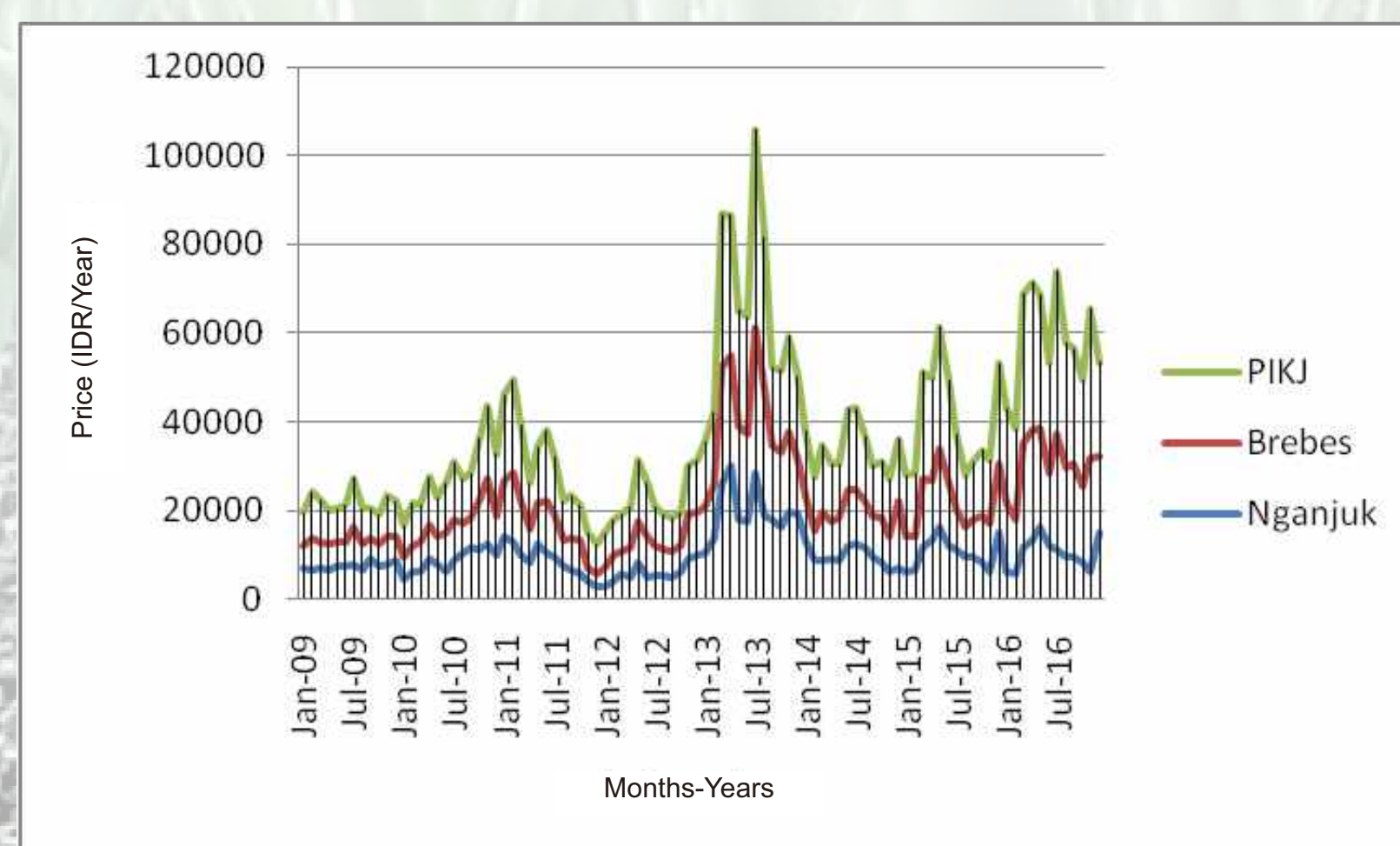
1. Price behavior in Brebes, Nganjuk, and KCMJ during 2009-2016
2. Market integration between Brebes and Nganjuk with KCMJ.
3. Leading market of shallot.

DATA ANALYSIS

The secondary data is monthly shallot price during 2009-2013 at Brebes, Nganjuk production centres and KCMJ. Shallot price behavior was analyzed by coefficient of variation, while market integration was analyzed by Engle-Granger model of co-integration. Granger causality test was used to identify the leading market.

RESEARCH RESULT

Price Behavior



Shallot price behavior in Brebes, Nganjuk, and KCMJ during 2009-2016 show a similar movement. Each year the high shallot price occurs on April to August and November. Tend to be low on January, February, September, October, and Desember. In the average, coefficient of variation value of producer market is greater than consumer market. The value of coefficient of variation in Nganjuk is greater than Brebes. Each year, the mean value of coefficient of variation is low occurs on April, May, and October, while coefficient of variation is high occurs on January February, June, and Desember.

Market Integration

Unit Root Analysis with ADF test at First Difference I(1) during 2009-2016

Pasar	Intersep		Intersep dan tren		Tanpa intersep dan tren	
		ADF test		ADF test		ADF test
Nganjuk	-1.575401 ***	-8.24205	-1.582402 ***	-8.208727	-1.563472 ***	-8.244953
Brebes	-1.561413 ***	-8,900445	-1,561038 ***	-8,806 924	-1,554783 ***	-8,950769
PIKJ	-1,502808 ***	-8,579997	-1,503302 ***	-8,501395	-1,498657 ***	-8,634146

*** confidence interval at 99%.

Cointegration test of Shallot Market during 2009-2016

Combination	Nganjuk		Brebes		KCMJ	
		ADF tes		ADF tes		ADF tes
Nganjuk			-1.665666 ***	-7.306853	-1,583340 ***	-7,289435
Brebes	-1.619468 ***	-7.228698			-1,564645 ***	-6,779786
KCMJ	-1,552678 ***	7,287046	-1,540314 ***	6,761177		

*** confidence interval at 99%.

Cointegration test of Shallot Market during 2009-2016

Combination	Nganjuk		Brebes		KCMJ	
	F stat	Prob	F stat	Prob	F stat	Prob
Nganjuk			5.69786	0.02039	4.54967	0.03732
Brebes	5.69786	0.02039			0.00922	0.92387
KCMJ	4.54967	0.03732	1.31946	0.25557		

→/←= one-way relationship

Shallot price in Nganjuk, Brebes, and KCMJ has no unit root or stationary on first difference. Nganjuk, Brebes, and KCMJ already integrated or have a long run relationship on a confidence interval of 99%. A one-way relationship occur between Nganjuk with KCMJ and Brebes with Nganjuk, so leading market of shallot price in Nganjuk is KCMJ and Brebes. There is no causal relationship between Brebes and KCMJ.

CONCLUSION AND SUGGESTION

Conclusion :

1. Shallot price behavior in Nganjuk, Brebes, and KCMJ show a similar movement. Each year the high shallot price occurs on April to August and November. Tend to be low on January, February, September, October, and Desember.

2. Shallot price fluctuation in Brebes is higher than Nganjuk. Shallot price fluctuation between places a high profile occurs on January, February, June, July, and Desember. Tend to be low on April, May, and October. Brebes, Nganjuk, and KCMJ market already integrated.

Nganjuk, Brebes, and KCMJ already integrated or has a long run relationship. A one-way relationship occur between Nganjuk with KCMJ, and Brebes with Nganjuk. Leading market of shallot in Nganjuk is KCMJ and Brebes. There is no causal relationship between Brebes and KCMJ.

Suggestion :

The role of relevant agencies should be improved especially in production and post harvest sector because shallot price fluctuation in producer market are higher than consumer level. In case of shallot price fluctuation is high in Nganjuk, the government can intervene directly to KCMJ and producer market in Brebes. If shallot price fluctuation occur in Brebes and KCMJ, the government can make purchase instantly in Brebes and market operations at KCMJ.