#### CHAPTER VI

#### MARKET PERFORMANCE OF GLUTINOUS RICE TRADER

This chapter will describe the performance of glutinous rice marketing system in the Mekong Delta. This chapter analyzes marketing costs, price margin and profitability among different glutinous rice marketing activities. Based on the primary and secondary data, the average at different market levels will be estimated, after that the average marketing cost and marketing margin and also profit margin will be calculated for each type of trader in the glutinous rice marketing channel. Lastly, it will measure the storage cost and also price performance for each type of trader.

#### 6.1 Marketing cost analysis

The cost of marketing includes all of the costs involved in the creation of place, time and form utilities. Such costs should be recovered plus a reasonable return in investment and costs vary depending upon the services rendered. The marketing cost usually includes wages in return for labor, interest in return for borrowed capital, rent in return for land and buildings, and the profit returned to the entrepreneurship and risk capital. An analysis of marketing cost would estimate how much expenses are incurred for each marketing activity. It would also compare marketing costs incurred by different actors in the channel of distribution (Hai, 2003). In this study, the marketing channel 1 (farmers – assemblers – dryers – millers – wholesalers – retailers – consumers) were measured. This is the main distribution channel in the domestic glutinous rice (GR) market.

In the total 47 GR assemblers, 39 GR dryers, 24 GR millers and 18 GR wholesalers who were surveyed, they have different types of marketing costs; dependent on traders who have different marketing cost elements. The data and information on marketing cost of each trader allows us calculate the average marketing cost for each trader.

#### 6.1.1 Marketing cost of assemblers

The marketing costs of assemblers include transportation costs, loading and unloading, materials (such as bag etc), communication and the internet, and others (others such as foods, drinks and parking fees, etc.). Total marketing costs for assemblers is 102,853 VND per ton, in that the transportation cost is the biggest with 76,277VND per ton (about 74.16% of total), the second is others costing 11.17% of the total (about 11,479VND per ton), the loading and unloading which is 9,191VND per ton (with 8.93% of total) and the last one being communication which is only 2,417 VND per ton (table 6.1).

Table 6.1: Average marketing cost of glutinous rice assemblers in Mekong Delta.

Items	Cost (VND/ton)	Percentage (%)	
Transportation cost	76,277	74.16	
Loading	4,085	3.97	
Unloading	5,106	4.96	
Material	3,489	3.39	
Communication and Internet	2,417	2.35	
Others	11,479	11.17	
Total	102,853	100	

Source: Survey, 2006

In general, the assemblers usually go to collect the products from the farmers and provide transportation of the products to the dryers or miller who sells it. Their business activities normally occur in the length of one day and the profit is determined after different price purchasing and price selling plus the marketing costs. But they play an important role among farmers and dryers and also with the miller. Some of the scientists suggested that should we omit the assemblers from the marketing channel, which would mean an increase in economic efficiency in the distribution channels, but until then they survive and play an important role in the marketing channel.

When we break it down to the scale level of business of assemblers, dependent on the total amount glutinous they do business with, less that 1,000 tons per year is small scale, from 1,000 tons to 2,000 tons per year is medium and more than 2,000 tons per year is large scale. The marketing costs are different among each group, the small scale will have the largest marketing cost (109,700 VND per ton), the large scale level has the lowest marketing cost (98,000 VND per ton) and medium level with 102,200 VND per ton (table 6.2).

Table 6.2: Marketing cost of glutinous rice assemblers by scale-level business

Unit: VND per tons Scale-assemblers Items Small Medium Large Transportation cost 82,000\*\* 75,500\*\* 72,000\*\* Loading 4,350<sup>ns</sup> 4,350<sup>ns</sup> 4,250<sup>ns</sup> Unloading  $5,150^{ns}$ 5,150<sup>ns</sup> 4,850<sup>ns</sup> Material 3,550<sup>ns</sup>  $3,500^{ns}$ 3,400<sup>ns</sup> Communication and Internet 2,500<sup>ns</sup> 2,350<sup>ns</sup> 2,500<sup>ns</sup> Others  $12,150^{ns}$ 11,350<sup>ns</sup> 11,300<sup>ns</sup> Total  $109,700^*$  $102,200^*$ 98,300\*

Source: Survey, 2006

Note: \*, \*\* and \*\*\* significant at 10%, 5% and 1%, respectively. ns: not significant.

Table 6.2 shows that only the transportation costs are different among the three groups and significant at 5%, others cost differences among small, medium and large scale are not significant. The total marketing cost has different significant at 10%. The large scale level business of assemblers has comparison advantage, because they can reduce transportation cost and also others cost.

#### 6.1.2 Marketing cost of dryers

The dryers have more marketing cost items than assemblers because they own dryer machines and also have warehouses for storage of their products, but the total marketing cost is less than the assemblers. Total marketing cost of dryers is 72,657 VND per ton (table 6.3).

Table 6.3: Average marketing cost of glutinous rice dryers in Mekong Delta.

Items	Cost (VND/ton)	Percentage (%)	
Loading	7,718	10.62	
Unloading	8,538	11.75	
Labor cost	25,000	34.41	
Fuel and electricity	7,010	9.65	
Depreciation of machinery and warehouse	10,000	13.76	
Prepare and maintenance	2,111	2.91	
Taxes and business license	1,536	2.11	
Communication and Internet	2,462	3.39	
Others	8,282	11.40	
Total	72,657	100	

Source: Survey, 2006

Table 6.3 presents that the marketing cost per ton for dryers such as labor cost is 25,000VND (34.41% of total), depreciation of machinery and warehouse is 10,000VND (13.76% of total), and loading and unloading is 16,256VND (23.37% of total). Other cost (such as interest borrowed capital, submits for commune and help to poor families in village etc) is 8,282VND (about 11.40% of total). Taxes and business licensing, preparing and maintenance are only 5.02% of total.

Table 6.4: Marketing cost of glutinous rice dryers by scale-level business

		Unit: VN	ND per tons		
Items	Scale-dryers				
	Small	Medium	Large		
Loading	7,900 <sup>ns</sup>	7,550 <sup>ns</sup>	7,900 <sup>ns</sup>		
Unloading	8,500 <sup>ns</sup>	8,450 <sup>ns</sup>	8,800 <sup>ns</sup>		
Labor cost	25,650*	24,950*	24,500 <sup>*</sup>		
Fuel and electricity	7,250 <sup>ns</sup>	6,500 <sup>ns</sup>	7,800 <sup>ns</sup>		
Depreciation of machinery and warehouse	9,500 <sup>ns</sup>	10,000 <sup>ns</sup>	10,000 <sup>ns</sup>		
Prepare and maintenance	2,250 <sup>ns</sup>	2,000 <sup>ns</sup>	2,350 <sup>ns</sup>		
Taxes and business license	2,000 <sup>ns</sup>	1,450 <sup>ns</sup>	1,350 <sup>ns</sup>		
Communication and Internet	2,500 <sup>ns</sup>	2,400 <sup>ns</sup>	2,700 <sup>ns</sup>		
Others	8,150 <sup>ns</sup>	7,900 <sup>ns</sup>	9,200 <sup>ns</sup>		
Total	73,700 <sup>*</sup>	71,200*	74,600*		

Source: Survey, 2006

Note: \*, \*\* and \*\*\* significant at 10%, 5% and 1%, respectively. ns: not significant.

With the dryers the medium scale has comparison advantage because the total marketing cost is lower than others scale, because with medium scale, they can maximize the machinery capacity. Total marketing cost of the medium group is 71,200 VND per ton, total marketing cost of small and large scale is 73,700 VND and 74,600 VND per ton. Differences among level scales have significant at 10%.

# 6.1.3 Marketing cost of millers

The miller has milling, polishing and also dryer machinery, so they have to expend a lot of money for marketing costs; some main aspects of marketing costs are labor, fuel and electricity, depreciation of machinery and warehouse and preparation and maintenance, and others costs (such as interest from borrowed capital, extra payments for labor etc) (table 6.5).

Table 6.5: Average marketing cost of glutinous rice miller in Mekong Delta.

Items	Cost (VND/ton)	Percentage (%)
Loading	5,875	3.89
Unloading	5,708	3.78
Labor cost	40,583	26.89
Fuel and electricity	41,417	27.45
Depreciation of machinery and warehouse	24,354	16.14
Prepare and maintenance	12,208	8.09
Taxes and business license	4,708	3.12
Communication and Internet	4,563	3.02
Others	11,483	7.61
Total	150,899	100

Source: Survey, 2006

Table 6.5 demonstrates that the labor cost and fuel and electricity are major cost items for millers; it is about 40,583VND and 41,417VND per ton (about 26.89% and 27.45% of total marketing cost), respectively. Next, the depreciation of machinery and warehouse is 24,354VND per ton (16.14% of total cost), because of the miller's high investment value associated with milling and polishing and also machinery, have the biggest warehouses. The total marketing cost of millers is 150,899VND per ton.

We can classify millers to three scales; those with less than 5,800 tons per year is small scale, from more that 5,800 tons to 12,000 tons per year is medium level and

more that 12,000 tons per year is large scale. Total marketing cost of small, medium and large levels are 150,800VND, 149,100VND and 150,600VND per ton (table 6.6).

Table 6.6: Marketing cost of glutinous rice millers by scale-level business

Unit: VND per tons Scale-millers Items Small Medium Large Loading 6,150<sup>ns</sup>  $5,700^{ns}$  $5,800^{ns}$ Unloading  $5,650^{ns}$  $5,850^{ns}$ 5,650<sup>ns</sup> Labor cost 40,750<sup>ns</sup> 40,550<sup>ns</sup> 40,450<sup>ns</sup> Fuel and electricity  $42,000^*$ 41,250\* 41,000\* Depreciation of machinery and warehouse 24,350\* 23,700\* 24,900<sup>\*</sup> Prepare and maintenance 12,700\*\*11,900\*\* 12,000\*\* Taxes and business license  $5,000^{ns}$ 4,400<sup>ns</sup> 4,650<sup>ns</sup> Communication and Internet 4,400<sup>ns</sup> 4,550<sup>ns</sup> 4,650<sup>ns</sup> Others 11,650<sup>ns</sup> 11,350<sup>ns</sup> 11,500<sup>ns</sup> Total 152,800\*\* 149,100\*\* 150,600\*\*

Source: Survey, 2006

Note: \*, \*\* and \*\*\* significant at 10%, 5% and 1%, respectively. ns: not significant.

Table 6.6 shows that preparation and maintenance costs difference among scale level is significant at 5%. Fuel and electricity and depreciation of machinery and warehouse are difference significant at 10% among scale. The total marketing cost of three scale levels has significant at 5%. The medium scale has comparison advantage.

### 6.1.4 Marketing cost of wholesalers

Total marketing cost of wholesalers is 113,028 VND per ton. The marketing cost for them include transportation cost, labor cost, fuel for truck, depreciation of truck or boat, preparation and maintenance, taxes and business license,

communication and internet, and others (others cost such as interest on borrowed capital, losses, quantity and quality of products) (table 6.7).

Table 6.7: Average marketing cost of glutinous rice wholesalers in Mekong Delta.

Items	Cost (VND/ton)	Percentage (%)	
Transportation cost	24,861	22.00	
Labor cost	33,667	29.79	
Fuel	12,056	10.67	
Depreciation of machinery	7,611	6.73	
Prepare and maintenance	4,917	4.35	
Taxes and business license	12,361	10.94	
Communication and Internet	5,722	5.06	
Others	11,833	10.47	
Total	113,028	100	

Source: Survey, 2006

In the total marketing cost of wholesalers, the labor cost and transportation cost are the highest cost items of the total; this is 33,667VND and 24,861VND (29.79% and 22.00% of total), respectively. The taxes and business license is third and this is 12,361VND per ton (about 10.94% of total), because they do business with the local market and also markets in other provinces. This means they pay a high amount for taxes. The fuel for the truck or boat is also high (about 12,056 VND per ton) because, normally, they have long distances for transporting.

When we break it down to a three scale level business, the small scale with total amount glutinous rice is less than 10,000 tons per year, medium scale from 10,000 tons to 20,000 tons per year and large scale is more than 20,000 tons per year. The total marketing cost of small scale is 116,200 VND per ton, medium level is 112,200 VND per ton and large scale is 111,300 VND per ton (table 6.8).

Table 6.8: Marketing cost of glutinous rice wholesalers by scale-level business

Unit: VND per tons Scale-wholesalers Items Small Medium Large Transportation cost 25,700\*\* 24,650\*\* 24,400\* Labor cost 34,000<sup>ns</sup> 33,750<sup>ns</sup> 33,200<sup>ns</sup> Fuel  $12,100^{ns}$ 11,950<sup>ns</sup> 12,200<sup>ns</sup> Depreciation of machinery 8.000<sup>ns</sup>  $7,500^{ns}$  $7,400^{ns}$ Prepare and maintenance  $5,200^{ns}$  $5,050^{ns}$ 4,400<sup>ns</sup> Taxes and business license 13,000\* 11,900\*  $12,500^*$ Communication and Internet 5,800<sup>ns</sup>  $5,750^{\rm ns}$ 5,600<sup>ns</sup> Others 12,400<sup>ns</sup> 11,650<sup>ns</sup> 11,600<sup>ns</sup> Total 116,200\* 112,200\* 111,300

Source: Survey, 2006

Note: \*, \*\* and \*\*\* significant at 10%, 5% and 1%, respectively. ns: not significant.

Table 6.8 shows that transportation cost is reduced from small scale to large scale from 25,700 VND per ton to 24, 400 VND per ton. This difference among group has a significant at 5%. Wholesalers in the large scale can reduce the transportation cost because they can maximize the transport means capacity. The taxes and business license also have difference significant at 10% among scale of wholesalers. Others cost have different among scale but no significant. Total marketing cost of wholesalers decrease by the larger scale with significant at 10%. The large scale business of wholesalers has the most comparison advantage about scale. At the large scale they can reduce marketing cost and maximize the machinery capacity.

## 6.2 Marketing margin and profit margin analysis

Marketing margin refers to the difference between prices at different levels in the marketing system. The total marketing margin is the difference between what the consumer pays and what the producers receives for their products, in other words, this is the difference between retail price and farm price. In the marketing channel the dryers have the highest profit margin (87,627VND per ton), the second is the wholesalers with 75,491VND per ton, after that is the millers with 63,608VND per ton. The lowest is the assembler at about 37,005VND per ton (table 6.9).

Table 6.9: Marketing cost, and profit margin of all agents in the marketing channel

503	Cost and	Total marketing	Total marketing	Profit m	
Items	price (VND/ton)	margin (1)	cost (2)	Amount (VND)	% of total cost
<u>Farmers</u>					<del></del>
1.Production costs	1,255,000				
2. Average selling price	2,511,064				
Assemblers	17.	139,858	102,853	37,005	1.42
1.Average buying price	2,511,064				
2. Total marketing cost	102,853				
3.Total cost (3=1+2)	2,613,917				
4. Average selling price	2,650,922				
Dryers	tC h	778,376	690,749	87,627	2.62
1.Average buying price	2,655,470				
2.Total marketing cost	72,657				
3. Losses by reduce	618,092				
moisture content (18%)					
4.Total cost (4=1+2+3)	3,346,219				
5. Average selling price	3,433,846				

Table 6.9: Marketing cost, and profit margin of all agents in the marketing channel (coun't)

Items	Cost and	Total marketing	Total marketing	Profit margin (1)-(2)	
	price (VND/ton)	margin (1)	cost (2)	Amount (VND)	% of total cost
Millers		2,214,375	2,150,767	63,608	1.03
1. Average buying price	4,035,208				
2.Total marketing cost	150,900				
3. Losses by conversion ratio (32%)	1,999,867				
4.Total cost (4=1+2+3)	6,185,975				
5. Average selling price	6,249,583				
Wholesalers		188,519	113,028	75,491	1.18
1.Average buying price	6,257,778		/T/\		1.10
2. Total marketing cost	113,028				
3.Total cost (3=1+2)	6,370,806				
4. Average selling price	6,446,296				

Source: Survey, 2006

Table 6.9 data shows that the total marketing margin (marketing margin = average selling price – average buying price) of the millers is the highest. This is 2,150,767 VND per ton, because the millers purchase the glutinous paddy and perform the milling, also polishing to glutinous rice and sell it, but the profit margin is only 63,608 VND per ton, the percentage of total cost is lowest with 1.03%. This means, that when the miller invests 100 VND, they will receive a 1.03 VND profit. The dryers have the highest profit margin at about 87,627 VND per ton; the percentage of total cost also is the highest (2.62%), when the dryer's expense is 100 VND they will have a 2.62 VND profit. The assemblers have the lowest profit margin with 37,005 VND per ton, with the percentage of total cost being 1.42%.

Table 6.10: Marketing cost and profit margin of all traders by scale-level business

		· · · · · · · · · · · · · · · · · · ·	Profit r	nargin	
	Total marketing	Total	(1)-(2)		
Items	margin (1)	marketing cost (2)	Amount (VND)	% of total cost	
Assemblers	7	N.U.	7-07	3	
1. Small	134,000	109,700	24,300 <sup>*</sup>	0.93	
2. Medium	140,000	102,200	37,800 <sup>*</sup>	1.45	
3. Large	141,000	98,300	42,700 <sup>*</sup>	1.64	
Dryers					
4. Small	776,000	691,640	84,360*	2.52	
5. Medium	779,000	689,320	89,680*	2.68	
6. Large	780,500	692,810	87,690*	2.62	
Millers		NU W	/ /		
7. Small	2,210,000	2,152,480	57,520**	0.93	
8. Medium	2,214,500	2,148,940	65,560**	1.06	
9. Large	2,215,500	2,150,600	64,900**	1.05	
Wholesalers		to to		<del>- ///</del>	
1. Small	187,000	116,200	70,800*	1.11	
2. Medium	189,000	112,200	76,800 <sup>*</sup>	1.21	
3. Large	190,500	111,300	79,200*	1.24	

Source: Survey, 2006

Note: \*, \*\* and \*\*\* significant at 10%, 5% and 1%, respectively. ns: not significant.

Table 6.10 shows that the large scale of assemblers and wholesalers has comparison advantage scale with the highest profit margin 42,700 VND and 79,200VND per ton, respectively. The different has significant at 10%. The dryers and millers have comparison advantage scale at medium level with highest profit margin at 89,680VND and 65,560VND per ton, respectively. The millers have significant at 5% and dryers significant at 10%. Because the medium dryers and millers can maximize machinery capacity more than the large scale

The chart in figure 6.1 presents data that shows the total of value added from assemblers to the final consumer. The dryers have the highest percentage and this is 33.23%. After that, the wholesalers are the second with 28.62%. The third is the millers with 24.12%. The assemblers have the lowest percentage of total value added (about 14.03%).

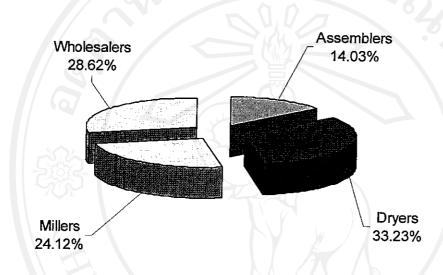


Figure 6.1: The percentage profit margin of the glutinous rice traders in total value added in the marketing channel.

Source: Survey, 2006

### 6.3 Analysis of price performance of glutinous rice traders in Mekong Delta

In this study, we calculate the average storage cost within four months. The traders store for two main reasons; they are continuously running their business and speculative purposes (more detail see chapter 5 parts 5.3). The storage costs are labor (carrying in and out), depreciation, opportunity and others (such as material, preparation and maintenance warehouse and preservative etc). The opportunity cost is biggest for all traders with 157,920 VND (dryers), 185,612 VND (millers) and 287,856 VND (wholesalers) per ton depending on the price of product storage (tables 6.11; 6.12 and 6.13). The price performance of traders was analyzed during a period of four months in 2006 (from Feb to Jun) (figures 6.2, 6.3 and 6.4).

Table 6.11: The storage cost per ton of glutinous rice dryers.

Unit: VND per ton

Items		Month			
	1	2	3	4	Total ·
Labor (loading and unloading)	2,250	2,250	2,250	2,250	9,000
Depreciation of warehouse	1,105	1,105	1,105	1,105	4,420
Opportunity cost	39,480	39,480	39,480	39,480	157,920
Other	1,720	1,720	1,720	1,720	6,880
Total	44,555	44,555	44,555	44,555	178,220

Source: Survey, 2006

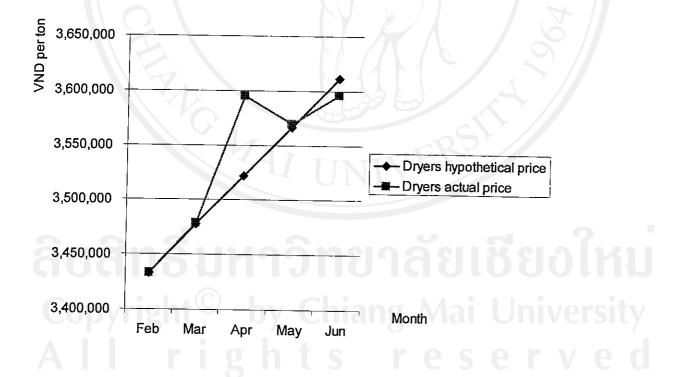


Figure 6.2: Price performance of glutinous rice dryers in 2006

Source: Survey, 2006

Table 6.12: The storage cost per ton of glutinous rice millers.

Unit: VND per ton

Items		Month			
	1	2	3	4	Total
Labor (loading and unloading)	1,950	1,950	1,950	1,950	7,800
Depreciation of warehouse	3,596	3,596	3,596	3,596	14,384
Opportunity cost	46,403	46,403	46,403	46,403	185,612
Other	2,150	2,150	2,150	2,150	8,600
Total	54,099	54,099	54,099	54,099	216,396

Source: Survey, 2006

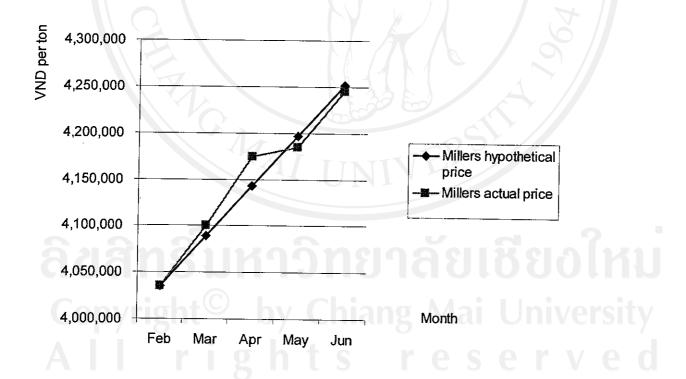


Figure 6.3: Price performance of glutinous rice millers in 2006

Source: Survey, 2006

Table 6.13: The storage cost per ton of glutinous rice wholesalers

Unit: VND per ton

•		Mo	nth		
Items	f	2	397	4	Total
Labor (loading and unloading)	2,500	2,500	2,500	2,500	10,000
Depreciation of warehouse	950	950	950	950	3,800
Opportunity cost	71,964	71,964	71,964	71,964	287,856
Other	1,540	1,540	1,540	1,540	6,160
Total	76,954	76,954	76,954	76,954	307,816

Source: Survey, 2006

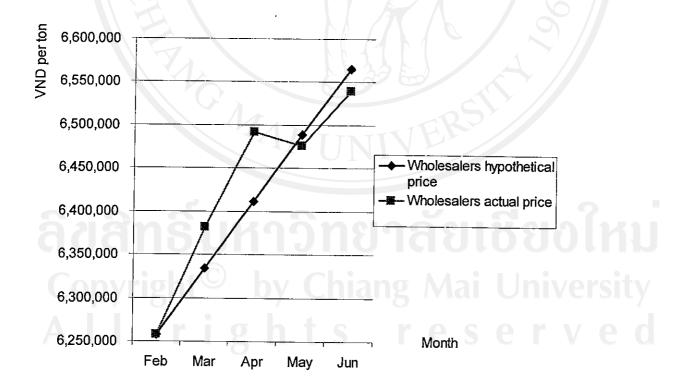


Figure 6.4: Price performance of glutinous rice wholesalers in 2006

Source: Survey, 2006

In the above tables, it is shown that when the dryers store their products, average storage cost for one month is 44,555 VND per ton in which; 2,250 VND for labor cost, 1,105 VND for depreciation cost; 39,480 VND for opportunity cost and 1,720 VND for other costs. The second, third and fourth month is same cost. The average storage cost of millers is 54,099 VND per ton for every month. The labor, depreciation, opportunity and other cost are 1,950 VND; 3,596 VND; 46,403 VND and 2,150 VND, respectively. The wholesalers store with an average cost of 76,954 VND per ton for one month. The storage costs include 2,500 VND (labor cost); 950 VND (depreciation cost); 71,964 VND (opportunity cost) and 1,540 VND (others cost). The wholesalers have the highest average storage cost because they store the GR when the price product is highest (6,257,778 VND per ton), so the opportunity cost also is highest. The dryers and millers only store paddy glutinous, so the price products is low (about 3,433,000 VND per ton and 4,035,000 VND per ton, respectively). Some others cost (labor, depreciation and others) are same with other for all traders. The average storing cost will increase by time depending on the length of time of storage (figure 6.2).

Figures 6.2, 6.3 and 6.4, show that the price performance of dryers, millers and wholesalers are perfect price performance at the first, second and third month of storage (on March, April and May 2006), because the actual price is higher than the hypothetical price, however, the fourth month, the price performance is imperfect, because then the hypothetical price is higher than actual price. When the time of storage is longer, the storage cost is higher, so the actual price is not high same as the hypothetical price.

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