Sinopec Corporation: Two Billion Yuan Question*

China Petroleum & Chemical Corporation ("Sinopec") is listed on stock exchanges in Hong Kong, London, New York, and Shanghai.[1] Sinopec is an integrated energy and chemical company comprising businesses in five segments:

- Exploration for and production of crude oil and natural gas;
- Refining crude oil;
- Distributing and marketing of refined oil products;
- Manufacture, distribution, and marketing of petrochemical and inorganic chemical products; and
- Trading and research and development.

At the time of writing, Sinopec was China's second largest producer of petroleum and natural gas and the largest manufacturer of petrochemicals. Its BBB credit rating was Standard & Poor's highest among Chinese enterprises.

Sinopec's 2002 Annual Report (p. ..) declared: "The Company has been focusing on capturing profit growth and expanding opportunities, optimizing its capital allocation and investment activities ... thereby increasing shareholders' value and returns. In the year to come, the Company strives to achieve new breakthroughs in expanding resources and markets, reducing cost, improving efficiency and disciplining investments."

A major challenge for a vertically integrated company is the management of internally produced items that are used as inputs into downstream operations. Sinopec's refining segment's principal input is crude oil. In 2002, the refining segment acquired 28.98 million tons of crude oil from Sinopec's exploration and production segment, while purchasing 75.17 million tons from external sources. The external purchases comprised 53.81 million tons from imports, 14.96 million tons from PetroChina (China National Petroleum Corporation), and 6.4 million tons from CNOOC (China National Offshore Oil Corporation).

The government of China considers oil to be an important strategic resource. In 1959, China's first major oil field was discovered at Daqing in the northeast of the country. By the mid-1990s, with rapid economic growth and the eventual decline of production from onshore fields, China became a net importer of oil.

The government controls imports and exports of crude oil through licensing. Only Unipec (a 70% subsidiary of Sinopec), China National United Oil Corporation (a 70% subsidiary of PetroChina), Sinochem (China National

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[1] The following corporate review is based on Sinopec's 2002 Annual Report.

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Chemicals Import & Export Corporation), and Zhuhai Zhenrong have been granted licenses to import crude oil.

In 2001, China joined the World Trade Organization. Under the terms of accession, the Chinese Government agreed to raise its crude oil import quota by 15 per cent annually until eventual phase out in 2004.[2] In 2002, China imported 60.26 million tons of crude oil.

Historically, the Chinese government regulated the domestic price of crude oil. In June 1998, the government relaxed its policy to allow buyers and sellers to negotiate prices. Until March 2001, the government published monthly benchmark prices for several crude oil grades to guide price negotiations between Sinopec and PetroChina. The two companies negotiated adjustments to the benchmarks according to transportation costs, oil quality, and prevailing market conditions.

In March 2001, the government ceased publication of the monthly crude oil benchmark prices. However, the two companies agreed to continue adhering to the benchmark price system. The prices of crude supplied by CNOOC and importers are set freely without government intervention. (Sinopec, Form 20-F, Financial Year 2001, p. 42).

The Table reports operating information for Sinopec's exploration and production and refining segments over the period 1999-2002.

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[2] *Peoples Daily*, "China's Import Quotas for Oil to Rise 15 Percent", Friday, August 02, 2002.

Sinopec, 1999-2002

			1999	2000	2001	2002
Exploration and Production Segment	Inter-segment Sales	Price (RMB/ton)	901	1640	1385	1360
		Volume (mill tons)	27.41	27.19	31.27	28.98
	External Sales	Price (RMB/ton)	1444	1664	1256	1189
		Volume (mill tons)	4.50	4.90	4.74	6.55
	Operating Profit (RMB bill)		3.9	24.7	23.2	14.8
Refining Segment	Inter-segment Purchases	Price (RMB/ton)	see E&P segment sales			
		Volume (mill tons)				
	External Purchases	Price (RMB/ton)	1113	1825	1663	1574
		Volume (mill tons)	61.00	77.40	69.77	75.17
	Operating Profit (RMB bill)		6.1	1.4	2.1	5.9
	Percent of input from external suppliers		69%	74%	69%	72%
	External suppliers					
		Imports		58.9	49.0	53.8
		PetroChina		16.5	14.1	15.0
		CNOOC		5.2	6.7	6.4
		Others		0.2	0.0	0.0
		Sub-total		80.8	69.8	75.2
PetroChina	External sales	Unit sales (mill. Tons)	31.8	28.4	24.4	27.1
		Price (RMB/ton)	1104	1745	1538	1517

Sources:
Sinopec, Annual Reports, various years;
PetroChina, Annual Reports, various years.

In January 2000, the company revised its transfer pricing policy for crude oil such that "sales of similar grades of crude oil are to be made at substantially the same prices as those for external sales of the same products" (Sinopec, 2000 Annual Report, page 29). Accordingly, the exploration and production segment's price for inter-segment sales leapt from RMB 901 per ton in 1999 to RMB 1640 per ton in 2000. Meanwhile, it received an average price of RMB 1664 from selling 4.90 million tons to external customers.

Curiously, however, in the same year, Sinopec's refining segment was purchasing crude from external sources at an average price of RMB 1825 per ton. That is, the refining segment was paying almost 10% *more* to *buy* crude oil from

third parties than the exploration and production segment was *receiving* from external sales.

Why did this happen? Prior to the change in the transfer pricing policy, the exploration and production segment certainly had an incentive to sell to outside customers. Referring to the Table, in 1999, the segment received an average price of RMB 1444 per ton from external sales as compared with RMB 901 per ton from inter-segment sales.

But the anomalous behavior persisted after the change in the transfer pricing policy. Indeed, the scale of the disparity increased rather than diminished with the passing years. By 2002, the price that the refining segment was paying to buy crude from third parties exceeded the price that the exploration and production segment was receiving from external sales by over 32%.

Two factors could explain why Sinopec's refining segment bought crude from third parties at a higher price than Sinopec's exploration and production segment received from external sales. One is quality differences. The difference in the price of crude from Sinopec's largest oil field, Shengli, and PetroChina's largest field, Daqing, is about 12%.[3] Another factor is the cost of inland transportation, which can range up to RMB 300 per ton, depending on the mode and distance.

[3] In December 2003, prices of crude oil, ex-oilfield and excluding value-added tax, were: RMB 1641 per ton at Shengli and RMB 1831 per ton at Daqing.

Discussion Questions

1. Discuss the impact of Sinopec's new transfer pricing policy on inter-segment vis-à-vis external sales of crude before and after the year 2000.

2. The disparity between the price that Sinopec paid to buy crude and the price it received for selling crude *increased* with each year. Between 2000-2002, the price that Sinopec paid to buy crude fell 14% from RMB 1825 per ton to RMB 1574 per ton. But the price that Sinopec received for external sales fell 29% from RMB 1664 per ton to RMB 1189 per ton. To what extent could this be explained by quality differences and transportation costs?

3. What recommendations would you make to Sinopec regarding its transfer pricing policy?