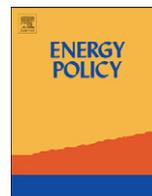




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Energy Policy

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Japanese investment in Australian coal assets through the demise of concessional financing

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HIGHLIGHTS

- ▶ Past foreign investment practices sacrificed profit to create oversupply of Australian coal.
- ▶ Only a small amount of equity capital was required to exert influence over coal output.
- ▶ Foreign investors can no longer exploit information advantages to obtain favourable prices.
- ▶ Information advantages from partial ownership do not influence supply costs.
- ▶ Foreign investors in Australian mining now achieve similar profits to domestic firms.

ARTICLE INFO

Article history:

Received 20 January 2011

Accepted 28 September 2012

Available online 22 October 2012

Keywords:

Mining

Foreign direct investment

Energy markets

ABSTRACT

The Australian coal industry has been described as being a perpetual case of 'profitless prosperity'. This implies that foreign companies invest in low-margin mining activities with motives other than profit. It is argued that foreign investors and Japanese trading companies in particular used government investment concessions and subsidies to help create oversupply in the seaborne coal market. The aim of this strategy is to depress contract prices at the cost of achieving reasonable profitability levels, which have historically been well below that of other investors in the Australian mining sector. This study shows that the quasi-integration via concessional funding arrangements is not a credible strategy employed by Japanese trading companies or the Japanese Government. The analysis rejects the hypothesis that via foreign direct investment, Japanese companies are securing coal at below average prices. Furthermore we find no clear evidence of Japanese trading companies using their information advantage as equity investors to secure coal at favourable prices during contract negotiations. Finally we examine the investment behaviour of new entrants in the Australian coal production sector to highlight the differences in investment strategy between Japanese companies and other foreign investors regarding the security of supply.

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1. Introduction

Black coal production in Australia has risen dramatically over 1997–2011. Production for both domestic consumption and export has doubled in fifteen years to around 420 million tonnes per annum in 2011. This is largely due to increased demand for raw materials needed for energy and steel production in Asia and the reversal of China as a coal exporting nation to a major coal importer coupled with static consumption levels in other major import centres such as Japan, South Korea, Taiwan and Western Europe. The growth has been partly driven by an increase in liquidly traded contracts for seaborne coal helped by the availability of

standardised contracts and common coal trading platforms. There has also been a shift from annual negotiations to quarterly or monthly index price fixing for coking coal supply contracts. This growth has also seen foreign ownership of Australian coal mining rise from 43 per cent in 1997 to around 75 per cent in 2010 with profitability levels steadily increasing over the same period. This has occurred despite a physically constrained supply chain.

Japanese investors comprise around 20 per cent of the Australian coal mining sector and Japanese interests have vastly dominated the interests of all other foreign investors in Australia since the 1970s. Given Japan's dominant position in the Asia-Pacific coal market it was shown by Colley (1997) that the production growth driven by Japanese trading companies, using concessional funding from Japanese Government agencies, created an oversupply in the market to depress coal supply contract prices. The cost of pursuing this strategy was a period of very low

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profitability, particularly during the 1990s. Koerner (1998) and Swan et al. (1999) showed that benefits of being a minority equity partner in a producing mine such as access to better information on marginal production costs and capital returns also assisted Japanese trading companies during contract price negotiations. They used hedonic regression to investigate behaviour in annual coking coal negotiations and showed that inefficient pricing consistently occurred in the coking coal market due to information advantages.

D'Cruz (1983) examined the impact of so-called quasi-integration resulting from Japanese trading companies' establishment of long-term purchasing agreements for coking coal supplies on the price and volumes purchased from producers over the 1970s. His hypothesis was that quasi-integration would assuage the influence of market power during cyclical phases of supply and demand imbalance. The results demonstrated that during periods of coal producer dominance (during periods of steel production growth), coking coal producers directly linked with Japanese consumers would receive lower prices and experience greater volume stability than independent coal producers, thereby benefiting from quasi-integration. Conversely during periods of industry downturns quasi-integrated coal producer contract prices were shown to be higher than for an independent coal producer, while also achieving superior off take volumes. D'Cruz concluded that any positive effects of quasi-integration on price were minor compared with the detrimental effects of price discrimination practised by the Japanese firms in the Pacific coal market. Colley (1997) updated this thesis to show the existence of oversupply was driven by low profitability targets of Japanese trading companies across both thermal and coking coal markets over the period 1986–1996.

Despite the boom in Australian coal production over 1975–1997 Colley (1997) showed that average profitability and return on capital in the coal mining industry were much lower than other extractive sectors. Since 1998 and more noticeably over 2005–2011, coal production and profitability have both grown at a much higher level than other extractive sectors. The characteristics of the mining industry globally have changed significantly over this period due to a surge in commodities demand from large emerging economies, and it is claimed that this has altered the investment behaviour of foreign trading companies looking to acquire ownership interest in Australian mining assets.

This study will analyse the use of concessional funding from government agencies by Japanese trading companies over 1998–2011 to determine if a quasi-integration strategy continues to achieve below average prices and volume stability, as well as information advantages for use in contract price negotiation. Furthermore we will also investigate whether such strategies continue to be employed at the expense of profitability and capital return when measured against peers in Australia. Finally we will examine the investment behaviour of new entrants to the market from South Korea, China and India to determine if price and cost information advantages serve as the main motive behind their acquisition strategies, or if other reasons such as the security of supply are driving foreign investment in coal assets.

2. Preliminaries

2.1. Current industry status

The majority of Australian coal production is lower quality thermal coal. In 2010 thermal coal was 56 per cent of total output representing 208 million tonnes for both domestic consumption and export (International Energy Agency (IEA), 2011). Metallurgical coal production in 2010 was 165 million tonnes (International

Energy Agency (IEA), 2011). Growth in coking coal production over this period has been driven by rising exports of hard coking coal (HCC) and coal suitable for pulverised coal injection (PCI) technologies, with a more modest growth in semi-soft coking coal.

Queensland accounted for 57 per cent of Australian black coal production in 2010 with over half of the state's output being metallurgical coal sold on the export market. New South Wales accounted for 40 per cent of Australian black coal production in 2010, the majority of which is thermal coal sold for export. Relatively small volumes of thermal coal are produced in South Australia and Western Australia driven by local power station demand with small exports. The Bowen Basin in Queensland is the largest coal producing basin in Australia, accounting for 49 per cent of total output in 2010. The second largest producing area is the Sydney Basin in New South Wales which accounted for 38 per cent of the total.

Infrastructure has been the main constraint on export volumes over 1998–2011. The utilisation of Australia's export infrastructure, as indicated by the ratio of actual exports to nominal port capacity has spiked to around 80–85 per cent of nominal port capacity. Expected growth in global demand is driving higher investment in coal mining operations in both Queensland and New South Wales with a total net capital expenditure of US\$6.6 bn per annum increasing to over US\$10.4 bn per annum over the 2007–2010 period (Australian Bureau of Statistics, 2010).

New grants for coal tenements in Australia have more than doubled over the period 2007–2011. New lease areas were dominated by exploration permits in Queensland, mostly in the well-established Bowen Basin due to the availability of high-quality and therefore high profit margin hard coking coal. Tenements with deeper coal seams that require more difficult extraction techniques have recently been shown to be profitable to mine, particularly with the recent advancement in underground mining technologies. Emerging coal basins such as the Galilee and Surat in Queensland are also attracting considerable exploration interest although they mostly contain lower margin thermal coal.

The rapid growth of investment has continued despite increases in state-based royalties and Federal resource taxes. Where the ownership of coal is vested in the State, the relevant State government receives a royalty payment for the right to mine that coal. Royalty charges are applied to the value of production after beneficiation (total revenue less allowable deductions). For resource taxes the allowable deductions are limited to beneficiation, port charges, despatch and demurrage and research and development costs, while freight and marketing costs are non-deductible. Australian mining operations are also subject to a number of other levies such as the coal research levy, the mine safety levy, the mine subsidence levy and the mines rescue levy. However, the imposition of royalties, levies and resource taxes appears to have had little impact on the investment growth in Australian coal mining over 1975–2011.

2.2. Industry structure and Japanese investment

The Australian coal industry has a high degree of foreign ownership with over 75 per cent of production generated from foreign-owned companies in 2009. The concentration of coal production is high and has been dominated by four major companies who account for 65 per cent of exports by value. But actual ownership within the industry continues to be diverse as mine-sites are typically incorporated under a variety of joint venture agreements among domestic operators and foreign investors. A useful measure of market concentration and therefore competition is the Herfindahl–Hirschman Index (HHI), defined as the sum of the squares of the market shares of all

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