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Executive compensation among Australian mining and non-mining firms: Risk taking, long and short-term incentives



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ABSTRACT

How firms determine the pay of their executive employees is a vital research area. In the Australian context, mining firms form a large portion of listed companies. These miners tend to have more volatile earnings, operate with less certainty and higher risk in relation to capital investment. We look at a sample of ASX listed miners and non-miners from 2005 to 2013. We note that miners pay their CEOs less (AUD 1 m vs AUD 1.5 m for non-miners) overall. However, we also note that miners tend to use enhanced contingent long-term remuneration arrangements to significantly boost the pay-performance relationship compared to non-miners particularly during the pre-GFC period. Curiously, non-miners tend to have more generous short-term contingent arrangements linking executive pay and performance. The GFC, as an event, has adversely impacted these arrangements, lessening the generosity of pay-performance miners, while enhancing these arrangements among non-miners. Overall, the results of the study provide support for optimal contracting theory and do not generally support the managerial power approach for both mining and non-mining firms.

1. Introduction

Executive pay continues to attract the attention of both the general public and policy makers. Old questions relating to the alignment of shareholder and managerial interests have been expanded to take into account how to achieve the best alignment of the risk preferences of these stakeholders (Rustam et al., 2013). The Global Financial Crisis (GFC), as an event, crystallised the concerns of many that executives were over-incentivised to take risks with shareholder owned assets. Hence, the effective design of compensation policies was seen as an important means of reining in pay structures and incentives that led to excessive risk-taking by chief executive officers (CEOs) (Bahaji and Casta, 2016; Chiara et al., 2016; Citci and Inci, 2016; Yeoh, 2015).

A significant body of literature exists relating to CEO compensation and risk preference (Coles et al., 2006; Guay, 1999), with much of this work focusing on banking and manufacturing firms. Guay (1999) contends that firms with growth opportunities can gain more if executive compensation can be designed to motivate the risk-averse managers to undertake investments in high risk but positive net present value projects. Consistent with this, (Coles et al., 2006) find that compensation linked to higher sensitivity to stock price volatility encourages managers to undertake investments that are risky. Many other studies find important differences in pay structures in Australia, the US and other Organisation of Economic Cooperation and Development (OECD) countries (Chalmers et al., 2006; Izan et al., 1998; Matolcsy and Wright, 2007, 2011; Matolcsy, 2000; Merhebi et al., 2006). An example is that fixed pay continues to be a larger part of total pay in the Australian corporate sector compared to the US, where incentive pay - particularly in the form of options - has been more widely employed. Most of the earlier studies on the Australian context analyse executive compensation prior to the onset of Global Financial Crisis (GFC). This study fills the gap in the literature by considering a more recent period of 2005 to 2013 when many Australian firms started including short and long-term incentives in their pay structures.

Other sources of variance in executive compensation relate to the nature and economic context of the Australian corporate landscape. Australia's economy hosts a greater proportion of resource and mining firms compared to most other markets (Roarty, 2010). Such resource firms represent a significant proportion of the Australian Securities Exchange (ASX). Generally, the products of these firms have greater price volatility than manufactured good, accentuating the earnings volatility of the sector which includes very large firms such as BHP Billiton and Rio Tinto, two of the largest resources firms globally.

According to the Australian Bureau of Statistics (ABS), the mining sector contributes over 8 percent to the GDP of Australia. As resource exports are a significant component of Australia's total exports (accounting for over 40 percent of total exports according to the

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ABS), the sector often exerts a significant impact on Australia's financial and foreign exchange markets. Driven by stronger resource prices before the onset of the GFC, Australia's economy experienced significant economic growth. The resources sector generated considerable trade and budget surpluses during this period. The mining sector has also made contributions to the development of physical infrastructure in remote areas of Australia and has also made significant investments for community welfare in the form of indigenous health and well-being and many parts of the country. Foreign investment in the mining sector is considerable and the foreign direct investment (FDI) from China alone stood at \$11 billion in 2011 (Huang, 2015).

During the greatest part of the period examined here, the Australian resources sector did relatively well financially. Key export prices for coal and iron ore (two major exports) rebounded from GFC lows due to policies, especially in China, aimed at enhancing infrastructure investment. This allowed the mining sector to thrive until resource prices eventually fell sharply from mid-2013 onwards. Hosseinzadeh et al. (2016), for example, find that the majority of mining firms in Australia have improved their overall efficiencies during recent years and suggest that there is scope for efficiency gains for the remaining firms.

Australia is often described as having a two-speed economy (Jayasuriya and Cannon, 2015) where the fortunes of mining and non-mining firms are often countercyclical. This is partially explained by the *Dutch Disease* conundrum (Corden, 2012), where high commodity prices drive the currency up, reducing the competitiveness of other sectors of the economy. Given this, and also given the innate risk involved in exploration and extraction of mining reserves, executive pay structures and their relationship to risk are likely to differ significantly between mining and non-mining firms.

Corporate taxation in Australia differs from other major OECD countries in relation to the presence of a tax imputation system. This arrangement allows firms to declare franked dividends to domestic investors who then are not subject to double taxation. The tax imputation may be of particular importance as companies have the ability to pay franked dividends and thereby the ability to attract equity investors. This particular feature is of considerable interest to resident investors who could use franking credits to offset their tax obligations. Similarly, given the relative tax-advantage of dividends, executives in Australia may derive more benefits from compensation arrangements that include shares. Corporate disclosure and financial reporting has undergone changes in the last two decades particularly with the adoption of Australian version of International Financial Reporting Standards from the beginning of 2005. Australia also boasts one of the most transparent executive compensation disclosure regimes based on the introduction of AASB 1046 Director and Executive Disclosures by Disclosing Entities in January 2004 and the release of AASB 124 Related Party Disclosures in 2009 (Walker, 2010).

The Corporate Law and Economic Reform Program (CLERP) 9 introduced in 2004 has further strengthened executive compensation disclosures in Australia. The Australian financial markets are in general broad, deep and highly efficient with active participation of institutional investors as well as investor associations. Australia's corporate sector is highly professionalized with boards of directors generally appropriately trained and often professionally qualified. The ASX issued Principles of Good Governance and Best Practice Recommendations in 2003, with subsequent amendments made in 2007, 2009, 2010 and 2014 further strengthening the governance provisions in the Australian corporate sector. The highly developed nature of the financial markets and corporate disclosure regimes makes Australia an ideal context to analyse the levels and structure of pay. Further given the significance of the resource sector, it is important to consider separately the executive compensation issues in mining and non-mining firms in Australia.

Despite this structural variance relating to risk and financial performance between the mining and non-mining sectors in Australia there has been scant attention paid to the issue of executive pay in mining firms in the literature. This study therefore examines the executive pay of mining firms and compares it with non-mining firms in the Australian context. The findings of this study help inform corporate finance theory particularly in terms of designing compensation policies and identifies if there are differences in the pay levels and structure of pay of firms operating in resources and non-resources sectors of the economy.

For a sample of 129 mining firms and 332 non-mining firms for the study period of 2005 to 2013, this study finds that mining firms on average pay their CEOs approximately \$1 million dollar a year as total salary compared to \$1.5 million paid in non-mining firms. While twothirds or more of the total compensation is fixed in nature there are important differences in the incentive pay structures of mining and non-mining firms. While mining firms pay a relatively higher proportion of long-term incentives, non-mining firms pay a relatively higher level of short-term incentive pay. Mining firms also show higher payperformance sensitivity in terms of long-term incentive pay, nonmining firms show higher sensitivity of short-term incentive pay. We find that the economic variables identified in previous literature have significant influences on the pay levels of Australian mining and nonmining firms. Overall, our results do not provide a strong evidence in favour of managerial power approach in Australia for both mining and non-mining firms.

The rest of the paper is organized as follows. In the next section a review of relevant literature on executive compensation is provided followed by empirical analysis and discussion of findings in section three. The last section summarises and concludes the study.

2. Literature review and theoretical framework

Jensen and Murphy (1990), in their pioneering study on executive compensation, estimate the pay-performance sensitivities for US firms. They conclude that CEOs of US firms were paid like bureaucrats during the duration of their study – essentially remuneration was a function of scale. Subsequent studies found that pay-performance sensitivities generally increased in the US before the GFC (Murphy, 2013) with greater contingent rewards made available for corporate performance above expectations.

Broadly there are two strands of literature dealing with executive compensation. Supporters of optimal contracting theory contend that the market for managerial labour market is competitive and executive compensation is determined by a set of economic factors relating to the businesses and individual CEOs (Core et al., 1999; Core and Larcker, 2002; Gabaix and Landier, 2008; Jensen and Murphy, 1990; Murphy, 1985, 1997, 2013). Supporters of the managerial power approach, on the other hand, argue that CEOs control the nomination process of boards of directors and as such often exert indirect influence on their own compensation levels (Bebchuk et al., 2011; Bebchuk and Fried, 2003; Yermack, 2006). Chalmers et al. (2006) find evidence of both approaches in Australia. They find that fixed salary component and share-based incentive components are explained by optimal contracting theory, while bonus payments and options grants are explained by the managerial power approach. As such, Murphy (2013) suggests that both the optimal contracting theory and managerial power approaches are relevant explanators for the compensation levels and structure observed in corporate firms.

Prior literature identifies a variety of economic and governance factors that influence the compensation levels and structure of corporate firms. For example, the size of a firm and the nature of its business activity may influence the compensation levels as increased complexity requires sophisticated functional and managerial skills for executives (Core et al., 1999). Similarly, the performance of a firm is likely to influence the pay levels given the ability to attract high quality executives. Merhebi et al. (2006) find positive influence of size and performance on pay levels of CEOs in Australia. Lee (2009) also finds that size has a significant positive effect on pay levels of CEOs. For the

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