



Munich Personal RePEc Archive

CEO share compensation, incentives, and business cycle: Some evidence from BHP Billiton

Doojav, Gan-Ochir and Losol, Bayarmaa

2015

Online at <https://mpra.ub.uni-muenchen.de/107458/>
MPRA Paper No. 107458, posted 30 Apr 2021 07:15 UTC

CEO share compensation, incentives, and business cycle: Some evidence from BHP Billiton

Gan-Ochir Doojav¹

Bayarmaa Losol²

Abstract

The paper argues that the CEO compensation policy of a mining company should consider the business cycle when evaluating the CEO's performance of long-term incentive plan (LTIP). As an example, the case study of BHP Billiton supports the argument that the business cycle significantly affects the CEO compensation, specifically to LTIP remuneration. Therefore, the CEO compensation policy of a mining company should consider the business cycle when evaluating the CEO's performance of LTIP. There should be a qualitative judgment to adjust the impact of the business cycle and to ensure that vesting of share options is not simply obtained from a formula that may give unexpected or unintended remuneration outcomes.

JEL classification: E32, G34, J33, M51

Keywords: Corporate governance; CEO share compensation; incentives; business cycle

¹ Gan-Ochir Doojav, corresponding author, Chief Economist, Bank of Mongolia, Baga toiruu-3, 15160, Ulaanbaatar, Mongolia (Email: doojav_ganochir@mongolbank.mn).

² Bayarmaa Losol, Monitoring and Evaluation specialist, Strengthening Fiscal and Financial Stability Project (SFFSP), United Nations Street 8/2 4th khoroo Chingeltei district, 15160, Ulaanbaatar, Mongolia (Email: bayarmaalosol@yahoo.com).

1. Introduction

Corporate governance has been generally considered as the set of harmonizing mechanisms that help align actions and decisions of executives with the interests of shareholders. Monitoring and remunerating actions by the board of directors (or shareholders) have a crucial impact on the performance of the executives, thereby the success of the organization (Core et al., 2003). The compensation contract for providing remuneration to executives has been the important subject in the literature on corporate governance. Nowadays, share options have become the primary form of compensation for chief executive officers (CEOs) as they align the interests of CEOs with those of shareholders. General reviews on the issues are discussed in various studies (e.g., Murphy 1999 and Booth 2010), so that this paper will focus on the narrower topic of the effective use of CEO equity compensation in a large mining company.

This paper argues that the CEO compensation policy of a mining company should consider the business cycle when evaluating the CEO's performance of long-term incentive plan (LTIP). To complement this argument, I focus on the case study of BHP Billiton, a resource giant that has long been one of the largest mining companies on Australian stock exchange (ASX).

The remainder of the essay is structured as follows. Section 2 provides the literature review on how share options motivate CEO's incentive to perform better. Section 3 discusses how the share price, and the CEO compensation of the mining company can be influenced by the business cycle and offers some evidence from the case study of BHP Billiton. Finally, Section 4 delivers conclusion with some recommendations.

2. Share options as a compensation tool to motivate CEO's incentive

As commented by Berle and Means (1932), for publicly traded companies where ownership and management are separated, managers have little incentive to work in the interests of the shareholders when this means working against their own self-interest. Jensen and Meckling (1976) argue that corporate directors and senior executives are 'agents' of the company's shareholders. Therefore, the problem is referred as 'principal-agent problem'. According to the agency theory, the way the principal-agent problem is addressed is that the board of directors must align the agent's interests (or wealth) with the owners'. In particular, CEO's incentives must be tied to shareholder value, mostly measured by the company's share price and dividends per share (Lorsch and Khurana, 2010). As explained by Berk and DeMarzo (2009), the share price of the corporate is a barometer for corporate executives that continuously gives them feedback on their shareholder's view for their performance.

The dominant practice to remedy the principal-agent problem has been based on ‘the optimal contracting approach’, labelled by Bebchuk and Fried (2003). According to the approach, the boards should design compensation schemes to provide managers with efficient incentives to maximize shareholder value. In such way, the efficient contract between shareholders (as represented by the board of directors) and executives should maximize the net expected economic value to shareholders after contracting costs and payments to employees.

Equity incentives³ and share-based compensation (such as share and share options) are important features of the contracting environment. Nowadays, share options have been intensively used to provide CEO incentives and compensation as they align the interests of CEOs with those of diversified shareholders and hence encourage CEOs to maximize return and share prices (Core et al., 2003 and Booth, 2010). Main idea here is that the CEO’s ownership of share options will promote his or her incentives to increase the share price. Though the use of the options has been criticized, options remain as the primary form of compensation for CEOs (Equilar, 2009).

Booth (2010) argues that share options are not perfect, however it is not clear that there is any better form of incentive compensation to align the interests of the CEO and diversified shareholders. Diversified investor wants all portfolio companies to maximize return even if it entails more risk. Moreover, with the options, the CEOs get their incentive pay only if the share price increases. Therefore, share options encourage the CEO to maximize return and hence shareholder value. Due to the incentive, one of the criticisms raised at share options is that the options induce CEOs to take more risk to increase share price (see, Cohen et al. 2000 and Coles et al., 2006). However, some scholars (e.g., Booth, 2010, p. 291) argue that such behaviour of the CEO is exactly what diversified investors want.

3. A CEO compensation plan in the mining company and business cycle

3.1 Share price, CEO performance and business cycle

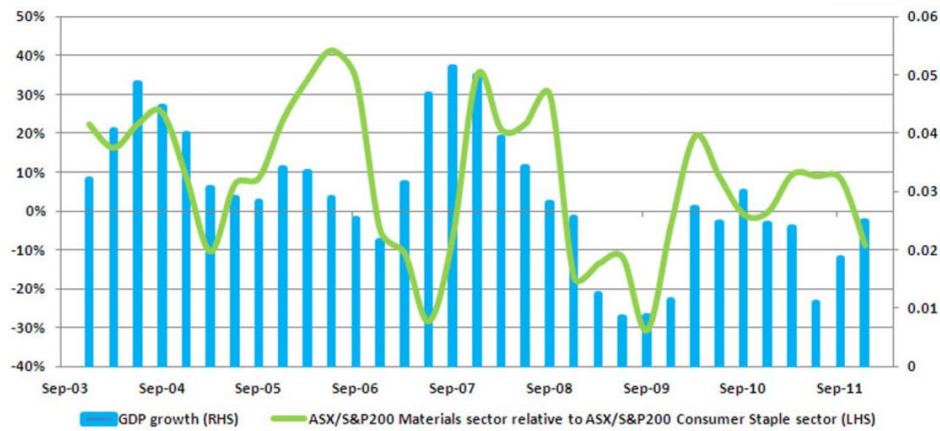
Tying the CEO compensation with the share price performance can be necessary condition to motivate the CEO’s incentive, however it is not sufficient to properly evaluate the CEO’s performance. For instance, the CEOs have only partial control over the factors that determine the value of their company’s share since a company’s past or future performance is only one determining factor of the current share price (Lorsch and Khurana, 2010). In practice, shareholder value is significantly affected by the general share market and broader economic conditions. Therefore, the CEO compensation policy based on share options

³ Incentives created by equity securities that motivate a manager to increase share price is referred as ‘equity incentives’ (Core et al., 2003, p. 29).

should also consider the influence of other factors (e.g., business cycle) in the share price when evaluating the CEO performance.

For given the focus of this essay, I will concentrate the influence of the business cycle in the share price. Performance of cyclical companies (such as operating in mining and retailing sectors), including earnings, profitability and share prices, is affected by the domestic and international business cycle. In case of Australia, the argument is clear from the Figure 1.

Figure 1. Australian GDP growth and ASX 200 materials sector relative to ASX 200 consumer staples sector



Source: Adapted from Arnhem (2012, p. 7).

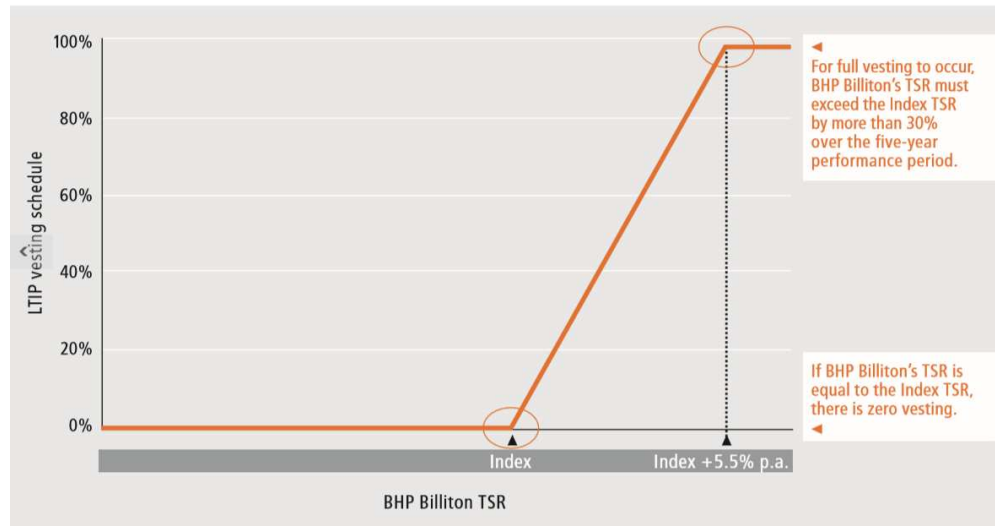
Therefore, tying the CEO compensation to share price performance in these companies is similar to that tying the compensation to the business cycle. As a result, the compensation is not reflection of the CEO’s actual performance, and hence the practice in the cyclical companies may fail to motivate the CEO incentive to perform better. For example, if the cyclical industry (e.g., mining) is around bottom of its business cycle, then low share price will automatically lead the lower value of the CEO remuneration even though the CEO has performed well in the last five years. If there is no quantitative judgement in CEO compensation policy of a mining company to consider the positioning in the business cycle, then the CEO may not have incentive to perform better as before.

3.2 The case study of BHP Billiton

BHP Billiton has been one of the oldest and the most significant companies in Australia as its capitalization has averaged 13 per cent of Australian equity market in 2002-2012 (Pottenger and Leigh, 2013).

BHP's remuneration package for the CEO⁴ includes base salary, pensions contributions, other benefits (health and other insurance), short term incentive plan (STIP) and LTIP. Performances of STIP and LTIP are evaluated in every 2 and 5 years, respectively. For the BHP Billiton, LTIP was first introduced in 2004 and is completely based on share (or performance) option. The performance of LTIP is measured based on BHP Billiton's Total Shareholder Return (TSR) relative to an index of peer companies. Vesting condition of share options in LTIP is illustrated in Figure 2.

Figure 2. BHP Billiton's vesting condition for LTIP



Source: BHP Billiton Annual Report 2009

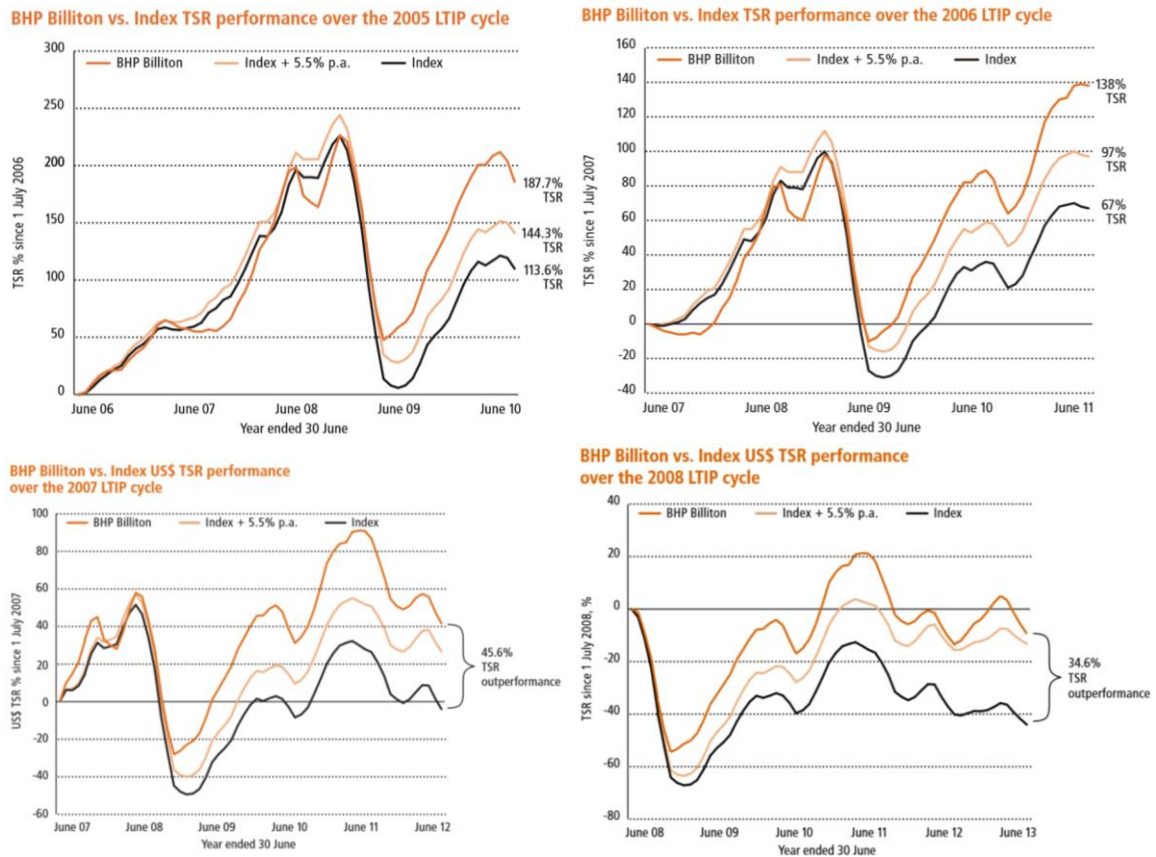
For all share options to vest, BHP Billiton's TSR must exceed the Index TSR by 5.5% per annum (equates to exceeding the average TSR over the five-year performance period by more than 30%). No Performance Shares vest if BHP Billiton's TSR is at or below the Index TSR. For performance between Index TSR and 5.5% per annum above the Index, vesting occurs on a sliding scale (BHP Billiton Annual Report, 2009, p. 151). The usage of the relative TSR index (BHP TSR index relative to an index of peer companies) in the measurement of the LTIP performance is appropriate for the cyclical mining company to

⁴ BHP Billiton has been managed by four CEOs (a position described as 'managing director' or 'general manager' during the company's earlier years) for last 10 years: Mr. Goodyer (2003-2008), Mr. Kloppers (2009-2013) and Mr. Mackenzie (2013-current).

compare the company's performance to its rivals by avoiding from the business cycle effect in the industry.

However, the evaluation methodology still has some weaknesses to appropriately evaluate the CEO's performance as the company is operating in the business cycle environment. For instance, it may be relatively easy to satisfy the condition that BHP's TSR must exceed the Index TSR by 5.5% per annum during the economic booming, but it could be difficult to achieve the same condition during the economic recession. In addition, the value of the vested LTIP remuneration also depends on the share price in the market, so that the value of the vested LTIP remuneration could be higher/lower in the economic booming/recession period. To investigate the arguments, evaluation of the vesting condition for BHP's LTIP over 2010-2013 is shown in Figure 3.

Figure 3. Evaluation of vesting condition for LTIP over 2010-2013



Source: BHP Billiton Annual Report 2010-2013

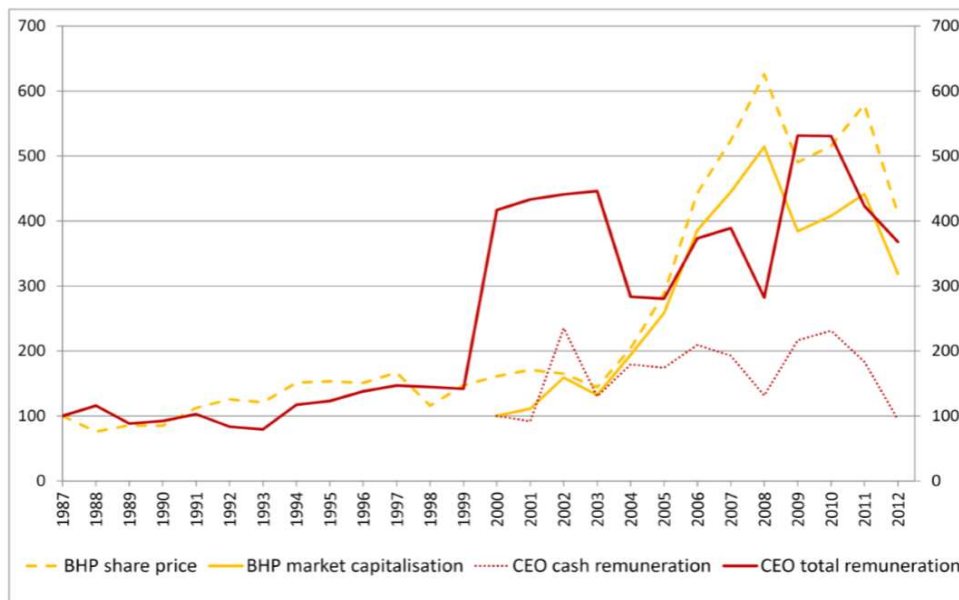
Figure 3 clearly shows that there was no noticeable difference between BHP share price index and an index of peer companies prior the 2008-2009 global financial crisis (GFC). However, the outperformance of BHP over the peer companies since 2008 can be explained

by the introduction of the LTIP in 2004. In particular, the LTIP remuneration of the share option is started to vest from 2009, which may intensify the executives' performance.

The most important result is that share prices of both BHP and peer companies in the same industry are highly influenced by the business cycle. After the GFC, share prices of both BHP and peer companies increased in 2010-2011, and BHP's TSR exceeds the average TSR over the five-year performance period by more than 70%. However, the share prices decreased in 2012-2013 due to the economic down-turn in Europe and slow growth in China, and BHP's TSR exceeds the average TSR over the five-year performance period by only 45.6% and 34.6% in 2012 and 2013, respectively. Therefore, LTIP part of the CEO remuneration can be affected by the business cycle. In what below, how the business cycle affects to the BHP's CEO remuneration is assessed.

Figure 4, displaying BHP's share price and CEO remuneration over the last 25 years, shows that the CEO total remuneration highly depends on the share price performance, which is mostly driven by the business cycle.

Figure 4. BHP Billiton's share price, market capitalisation, CEO cash remuneration and CEO total remuneration⁵



Source: Adapted from Pottenger and Leigh (2013).

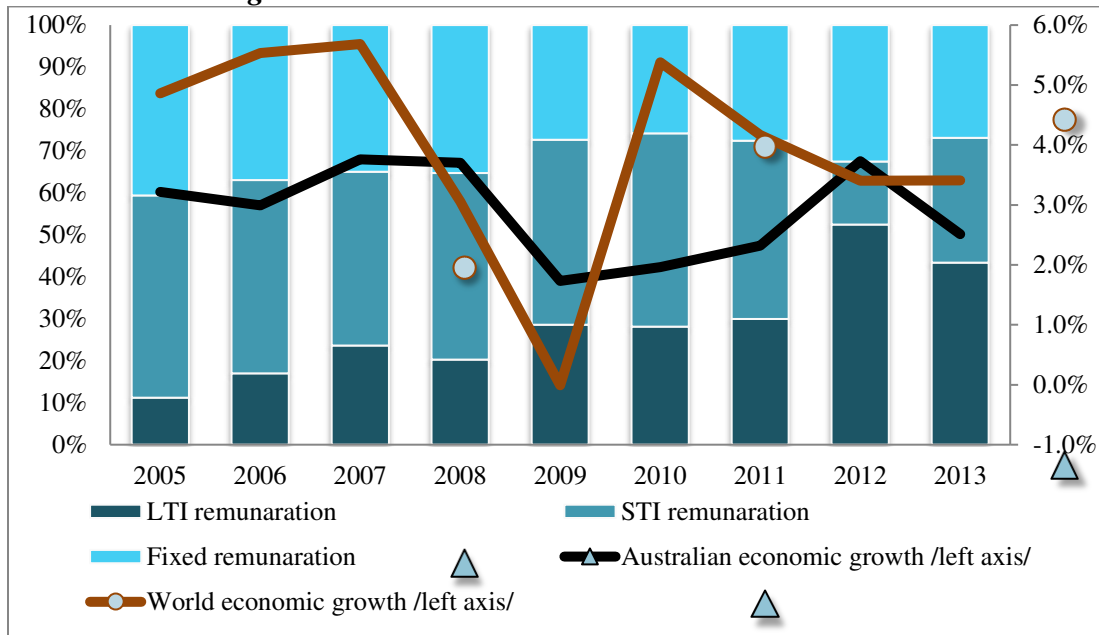
Sustainable, high economic growth in both Australia and World in the 2003-2008 years (see Figure 5) has contributed to continuous increase in BHP share price. The huge total compensation rise in 2009 (when the GFC was in peak) can be mainly explained by the

⁵ Indices of CPI-adjusted value of BHP CEO total remuneration (1987 = 100), cash remuneration (2000 = 100), BHP share price (1987 = 100), and BHP market capitalisation (2000 = 100).

LTIP remuneration since the share price in 2009 is three times higher than the price in 2004 when the LTIP-based share option is issued to the CEO.

Figure 5 shows the component of BHP’s CEO remuneration (as a per cent in the total remuneration) and the world and Australian economic.

Figure 5. BHP Billiton’s remuneration mix for the CEO, World and Australian Economic growth



Source: BHP Billiton Annual Reports 2005-2013, and IMF WEO Database (May 2015).

BHP’s TSR has exceeded the average TSR over the five-year performance period by more than 36% during 2010-2013 (see Figure 3), as a result, the share of LTI remuneration in the total remuneration has increased since the GFC. The sudden increase in 2012 is due to the high number of quantity of option under LTIP issued in 2007. The rising share of LTIP in the CEO’s total remuneration implies that the significant part of the CEO remuneration is at risk and is vulnerable to the business cycle.

4. Conclusion

Nowadays, share options have been used as the primary form of CEO compensation. The main reason behind the intensive use of share options is the desire of companies to link CEO’s wealth directly to changes in share price, hence providing CEOs with incentives to maximize shareholder wealth. Tying the CEO compensation with the share price performance can be necessary condition to motivate the CEO’s incentive, however it is not sufficient to properly evaluate the CEO’s performance. The fundamental example is that share price is not only affected by the CEO performance, but also influenced by the general

share market conditions and the business cycle fluctuations. Particularly, for cyclical companies (e.g., mining and retail companies), tying the CEO compensation to share price performance is similar to that tying the compensation to the business cycle. As a result, the compensation is not reflection of the CEO's actual performance, and hence the practice may fail to motive the CEO incentive to perform better.

As an example, the case study of BHP Billiton supports the argument that the business cycle significantly affects the CEO compensation, specifically to LTIP remuneration. Therefore, the CEO compensation policy of a mining company should consider the business cycle when evaluating the CEO's performance of LTIP. In particular, there should be a qualitative judgment to adjust the impact of the business cycle and to ensure that vesting of share options is not simply obtained from a formula that may give unexpected or unintended remuneration outcomes.

References

Arnhem 2012, 'Executive remuneration: A strategic approach to performance measurement,' Arnhem Investment Management Pty Ltd.

Bebchuk, L and Fried, J, 'Executive compensation as an agency problem,' *Journal of Economic Prospects*, vol. 17, no. 3, pp. 71-92.

Berk, J and DeMarzo, P 2009, *Corporate Finance: The Core*, Pearson Education, Inc, Boston.

Berle, A and Means, G 1932, *The modern corporation and private property*, Harcourt, Brace & World, New York.

BHP Billiton, *Annual Report 2005-2013*, BHP Billiton, Melbourne.

Booth, R 2010, 'Why stock options are the best form of executive compensation (and how to make the even better),' *NYU Journal of Law & Business*, vol. 6, no. 28, pp. 281-363.

Cohen, R, Hall, B and Viceira, L 2000, 'Do executive stock options encourage risk-taking?' Working Paper, Harvard Business School.

Core, J, Guay, W and Larcker, D 2003, 'Executive equity compensation and incentives: A survey,' *FRBNY Economic Policy Review*, April 2003, pp. 27-50.

Equiler 2009, '2009 CEO benefits & perquisites report,' Equiler, Inc. California.

Jensen, M and Meckling, W 1989, 'Theory of the firm: Managerial behavior, agency costs, and ownership structure,' *Journal of Financial Economics*, vol. 3, no. 4, pp. 305-360.

Lorsch, J and Khurana, R 2010, 'The pay problem: Time for a new paradigm for executive compensation,' *Harvard Magazine*, May-June 2010, pp. 30-35.

Murphy, K 1999, 'Executive compensation,' in O Ashenfelter and D Card, (eds), *Handbook of Labour Economics*, vol. 3, Amsterdam: North-Holland.

Pottenger, M and Leigh, A 2013, 'Long run trends in Australian executive remuneration: BHP 1887-2012,' Discussion Paper Series, Centre for Economic History, The Australian National University.