
B Remuneration data

This appendix describes the data sources used by the Commission to investigate trends in director and executive remuneration and presents some further evidence of trends that were identified in chapter 3.

B.1 Data sources

The Commission used a number of data sources to investigate trends in director and executive remuneration. Most of the sources are publicly available, however some of the data were supplied to the Commission by remuneration consultants using data drawn from their private databases. The data cover various spans over the period 1988–2009.

The most comprehensive source of data that the Commission was able to access was the Financial Review Executive Salary Database. This database, and the adjustments applied to the data are described in detail below. Other, less-detailed, sources of time-series data on director and executive remuneration are also described.

The Financial Review Executive Salary Database

The Financial Review Executive Salary Database contains publicly-disclosed data from the remuneration reports of ASX300 companies for each financial year over the period 2003-04 to 2008-09. The database includes remuneration data for all executives named in the remuneration reports, including chief executive officers (CEOs) and other executives. For each executive, the database includes the following information:

- the executive's name and position
- the name of the company, its market capitalisation and number of employees in 2008-09, and its industry classification under the Global Industry Classification Standard (GICS)

-
- the executive's base salary, superannuation, retirement benefits and other payments (which could include costs such as car allowances, life insurance, legal and tax advice)
 - the executive's 'base total' salary, which includes all of the above elements of remuneration
 - the value of any short-term incentives paid during the year
 - the estimated value of any long-term incentives granted.

In some cases the database includes commentary on the nature of any performance hurdles that the executive was subject to. However, this information is not presented for all executives, or in any consistent format. The database does not describe the nature of long-term incentives or the payment vehicles used (such as options, shares or performance rights).

In order to construct a consistent set of data, it was necessary to make a number of alterations to the data, and to exclude some records. The adjustments used are described briefly below.

Only full year employees were included

The database included records of executives who were appointed during the year, and others who departed before serving the full year. The remuneration of executives who did not serve a full year could have included accrued entitlements that were paid out on departure, and it was not possible to reliably estimate the pro-rata annual remuneration that the executive would have received for a full year of service. For these reasons, all records of executives who did not serve a full year were excluded from the sample.

Executives were broken down into CEOs and non-CEOs

For the purposes of the analysis, executives were divided into two categories: CEOs and non-CEO executives. This was done because CEOs generally receive significantly higher levels of remuneration than other executives, have more responsibilities and ability to influence company performance, and are subject to greater scrutiny.

The division of executives into CEOs and others was based on a consideration of position titles. Company annual reports were consulted to confirm decisions as necessary. CEOs were defined as the most senior (and generally highest-paid) executive employed by a company. Aside from a small number of cases where

executives were designated as joint CEOs, only one executive was designated as a CEO for each company.

Generally, executives whose title was ‘Chief Executive Officer’, ‘CEO’ or ‘Managing Director’ were classified as CEOs. Some other position titles were also classified as CEOs, including some executives whose title was ‘Executive Chairman’ and some combined roles, such as ‘Chief Executive Officer and Chairman of the Board’. Where job titles designated executives as divisional CEOs (such as ‘CEO Sugar’ or ‘CEO Victoria’), the executive was designated as a non-CEO.

All executives who were not classified as CEOs were classified as non-CEO executives. The data set also included some non-executive directors and non-executive chairs. These records were excluded from the analysis of executive remuneration.

Remuneration was converted into Australian dollars

A small number of executives were reported as being paid in currencies other than Australian dollars. The most common alternative currency was US dollars, with a few executives being paid in Pounds sterling, New Zealand dollars, Singapore dollars and Euros.

Where executives were paid in currencies other than Australian dollars, their remuneration was converted into Australian dollars using conversion factors that are included in the Financial Review Executive Salary Database.

Descriptive statistics

Descriptive statistics for the data sets drawn from the Financial Review Executive Salary Database for each year from 2003-04 to 2008-09 are set out in tables B.1 and B.2. The statistics are based on the samples that were derived using the adjustments described above.

Table B.1 Descriptive statistics: ASX300 CEOs

Data from the Financial Review Executive Salary database

Year	Number	Paid foreign currency	Not full year ^a	Average remuneration (nominal)				
				Base salary	Base total ^b	STI ^c	LTI ^d	Total ^e
				\$'000	\$'000	\$'000	\$'000	\$'000
2003-04	247	7	26	654	1 094	552	194	1 673
2004-05	229	9	28	741	967	664	352	1 980
2005-06	249	12	49	744	925	664	430	2 019
2006-07	222	12	47	884	1 127	971	732	2 830
2007-08	233	13	46	949	1 263	848	807	2 917
2008-09	228	12	66	991	1 194	583	594	2 371

Median remuneration (nominal)					
	Base salary	Base total ^b	STI ^c	LTI ^d	Total ^f
					\$'000
2003-04	497	724	150	11	979
2004-05	550	630	200	90	1 149
2005-06	538	622	207	123	1 090
2006-07	627	732	307	248	1 439
2007-08	694	792	300	380	1 700
2008-09	717	794	133	216	1 322

^a The number of CEOs that were excluded from the sample because they did not serve a full year. ^b Includes base salary, superannuation, retirement benefits and other payments. ^c Short-term incentive. ^d Long-term incentive. ^e Does not necessarily equal the sum of average base total, STI and LTI, because total remuneration can also include other payments that are not included in the other three categories. ^f Does not equal the sum of the medians of base total, STI and LTI, because medians are not additive.

Sources: Financial Review Executive Salary Database; Productivity Commission estimates.

Table B.2 Descriptive statistics: ASX300 non-CEO executives

Data from the Financial Review Executive Salary database

Year	Number	Paid foreign currency	Not full year ^a	Average remuneration (nominal)				
				Base salary \$'000	Base total ^b \$'000	STI ^c \$'000	LTI ^d \$'000	Total ^e \$'000
2003-04	1 062	27	78	342	554	186	81	740
2004-05	1 135	35	150	360	473	280	109	864
2005-06	1 256	60	219	363	458	297	148	903
2006-07	1 241	91	288	418	544	396	280	1 220
2007-08	1 212	47	386	415	512	329	305	1 146
2008-09	1 281	87	489	447	554	203	208	965

Year	Median remuneration (nominal)				
	Base salary \$'000	Base total ^b \$'000	STI ^c \$'000	LTI ^d \$'000	Total ^f \$'000
2003-04	252	356	57	11	433
2004-05	277	336	58	24	463
2005-06	293	349	80	39	475
2006-07	338	400	123	79	663
2007-08	325	383	101	81	612
2008-09	357	410	54	74	610

^a The number of executives that were excluded from the sample because they did not serve a full year.

^b Includes base salary, superannuation, retirement benefits and other payments. ^c Short-term incentive.

^d Long-term incentive. ^e Does not necessarily equal the sum of average base total, STI and LTI, because total remuneration can also include other payments that are not included in the other three categories. ^f Does not

equal the sum of the medians of base total, STI and LTI, because medians are not additive.

Sources: Financial Review Executive Salary Database; Productivity Commission estimates.

Division of data into industry sectors

The Financial Review Executive Salary Database specifies the industry sector in which each executive is employed, according to the Global Industry Classification Standard (GICS). In total, 11 industry sectors are identified in the database.

The Commission used these definitions as the basis of an analysis of trends in executive remuneration across industry sectors (chapter 3). To simplify the analysis, the 11 industry sectors were combined into 8 categories (table B.3).

Table B.3 Definition of industry sectors

<i>Industry sector used by Productivity Commission</i>	<i>GICS industry sectors included and activities carried out in the sector</i>
Financial	<p>Financials</p> <ul style="list-style-type: none"> • banks; diversified financials; insurance. <p>A-REIT</p> <ul style="list-style-type: none"> • real estate investment trusts.
Industrial	<p>Industrials</p> <ul style="list-style-type: none"> • capital goods (aerospace and defence; building products; construction and engineering; electrical equipment; industrial conglomerates; machinery; trading companies and distributors) • commercial and professional services • transportation.
Consumer	<p>Consumer staples</p> <ul style="list-style-type: none"> • food and staples retailing; food, beverage and tobacco; household and personal products. <p>Consumer discretionary</p> <ul style="list-style-type: none"> • automobiles and components; consumer durables and apparel; consumer services; media; retail.
Materials and energy	<p>Materials</p> <ul style="list-style-type: none"> • metals and mining • paper and forest products • containers and packaging • construction materials • chemicals. <p>Energy</p> <ul style="list-style-type: none"> • oil and gas exploration, drilling, production, refining, marketing, storage and transportation; manufacturing of equipment for the oil and gas sector • mining and production of coal.
Health care	<p>Health care</p> <ul style="list-style-type: none"> • health care equipment, technology, providers and services • pharmaceuticals; biotechnology; and life sciences.
Information technology	<p>Information technology</p> <ul style="list-style-type: none"> • software; internet services; information technology services • technology, hardware and equipment.
Utilities	<p>Utilities</p> <ul style="list-style-type: none"> • electric, gas, water and other utilities.
Telecommunications	<p>Telecommunications services</p> <ul style="list-style-type: none"> • fixed-line, wireless and high-bandwidth cable service providers.

Source: ASX (2008c).

Random sample of companies outside the ASX300

There are close to 2000 entities listed on the Australian Securities Exchange (ASX), most of them significantly smaller than ASX100 or ASX300 companies. Many of the smaller entities are disclosing entities for the purposes of section 111AC of the Corporations Act, and therefore fall within the terms of reference of this inquiry.

To gain an understanding of executive remuneration practices outside the ASX300, the Commission took a random sample of companies outside the ASX300 and examined their remuneration practices for 2008-09. The procedure for generating the data was:

- The Commission obtained a list of all companies listed on the ASX as of 27 June 2009, and their market capitalisation.
- Companies outside the ASX300 were divided into four groups according to their market capitalisation: 301–500, 501–1000, 1001–1500, and 1501–1871.
- For each of the groups, each company in the group was assigned a random number using the Microsoft Excel random number generator. The companies were sorted by the random number, in ascending order.
- Working through the list, the first 20 companies in each group (as ranked by the random number) that had released remuneration reports for 2008-09 were selected, and their remuneration reports examined (companies are listed in table B.4).
- As with the Financial Review Executive Salary Database, executives were divided into CEOs and non-CEO executives on the basis of their job titles. Executives who did not serve a full year were excluded from the analysis.

The data show that executives at companies outside the ASX300 generally received lower average remuneration than ASX300 company executives. On average, the smaller the market capitalisation of the company, the lower the average remuneration and the smaller the proportion of that remuneration that was paid in the form of incentive-based payments (table B.5).

Table B.4 Companies included in sample of companies outside the ASX300

Companies were randomly selected

<i>Group (ranked by market capitalisation on 27 June 2009)</i>	<i>Companies in group</i>
301–500	Aditya Birla (ABY), Aspen Group Stapled (APZ), Austbrokers Holdings (AUB), Biota Holdings (BTA), Crescent Gold (CRE), CSG (CSV), Data#3 (DTI), Finbar Group (FRI), Horizon Oil (HZN), Infomedia (IFM), Integra Mining (IGR), Inet (IIN), Mitchell Communication Group (MCU), Patties Foods (PFL), Redflex Holdings (RDF), Retail Food Group (RFG), Templeton Global (TGG), Talent2 International (TWO), United Overseas Australia (UOS), Wilson HTM Investment Group (WIG).
501–1000	Austin Engineering (ANG), Apex Minerals (AXM), Centrebet International (CIL), Clinuvel Pharmaceuticals (CUV), Cedar Woods (CWP), Forte Energy (FTE), HFA Holdings (HFA), Iron Ore Holdings (IOH), Liquefied Natural (LNG), Metgasco (MEL), MEO Australia (MEO), M2 Telecommunication (MTU), Norton Gold Fields (NGF), Norseman Gold (NGX), Oaks Hotels and Resort (OAK), Probiotec (PBP), Phosphagenics (POH), RR Australia (RRA), Select Harvests (SHV), Tutt Bryant Group (TBG).
1001–1500	Adcorp Australia (AAU), Autron Corporation (AAT), Austex Oil (AOK), CBD Energy (CBD), Chalmers (CHR), Coalworks (CWK), Copper Strike (CSE), Cogstate (CGS), Everest Financial (EFG), Gage Roads Brewing (GRB), GME Resources (GME), Indo Mines (IDO), Krucible Metals (KRB), Morning Star Gold (MCO), Netcomm (NTC), Phosphate Aus. (POZ), PPK Group (PPK), Ross Human Direction (RHD), Silver Chef (SIV), Tranzact Financial Services (TFS).
1501–1871	Ashburton Minerals (ATN), Avanco Resources (AVB), Brand New Vintage (BNV), Buccaneer Energy (BCC), Carbon Conscious (CCF), Cobar Consolidated (CCU), Cockatoo Ridge Wines (CKR), Connexion (CXN), Cool Or Cosy (COS), Dart Mining (DTM), Freshtel Holdings (FRE), Gulf Mines (GLM), India Resources (IRL), Midas Resources (MDS), Mount Burgess Mining (MTB), Resource Base (RBX), Sirius Corp (SIU), Syndicated Metals (SMD), Telezon (TLZ), Westralian Gas And Power (WGP).

Table B.5 Average executive remuneration outside the ASX300, 2008-09

<i>Company rank (by market capitalisation)</i>	<i>Base salary</i>	<i>Base total</i>	<i>STI^a</i>	<i>LT^b</i>	<i>Total remuneration</i>	<i>Number of observations</i>
CEOs	\$'000	\$'000	\$'000	\$'000	\$'000	No.
301–500	335	397	91	100	595	20
501–1000	386	426	50	180	651	20
1001–1500	228	250	58	31	350	20
1501–1871	213	231	1	24	264	20
Non-CEO executives						
301–500	222	256	42	42	340	92
501–1000	193	222	23	52	299	80
1001–1500	148	173	36	22	232	50
1501–1871	133	145	2	13	160	28

^a Short-term incentive. ^b Long-term incentive

Sources: Company annual reports; Productivity Commission estimates.

Time-series remuneration data

The Commission obtained other sources of data on trends in executive remuneration. These sources present time series of data on executive remuneration over various periods. They do not include company-by-company breakdowns of remuneration practices, and only two of the sources (Kryger (1999) and Hay Group (2009)) are presented in a way that enables analysis of trends in incentive-based remuneration separately from fixed (base) remuneration.

Kryger (1999)

Kryger (1999) published a research note on private sector executive remuneration for the Parliamentary Library. The note reported data on the average annual base salary, allowances and benefits, and incentive bonuses of CEOs from 1988 to 1998. The data were drawn from a survey conducted by remuneration consultants Mercer Cullen Egan Dell. Kryger did not disclose the identity of the companies included in the sample, or any information about their size or the industry sector they operated in.

Crichton / Remuneration Planning Corporation

Crichton (of the Remuneration Planning Corporation) published annual reports on director and executive remuneration in Australia's top 350 public companies over the period 1994 to 1998. The reports were intended for use by people responsible

for making recommendations on the remuneration of directors and executives (such as board remuneration committees).

Crichton reported the remuneration of executives in bands (for example, the number of executives earning between \$240 000 and \$250 000). Based on this information, it was possible to estimate the median remuneration of directors and executives. Because the data were reported in bands, it was assumed that the median executive salary was equal to the mid point of the median band. For example, in 1994, the median remuneration band for CEOs was \$340 000 to \$360 000 (Crichton 1995, p. 12). For the purposes of this report, it was assumed that the median remuneration of CEOs in that year was \$350 000. This might over or understate the true median of the data, but the error is likely to be relatively small.

Egan Associates

Egan Associates is a consultancy company that advises on director and executive remuneration. A predecessor of Egan Associates (Mercer Cullen Egan Dell) was the source of the data used by Kryger (1999). The Commission used three other data sources published by Egan Associates or its predecessors.

Korn/Ferry International and Egan Associates (2005) included a graph of the annual average and median remuneration of CEOs, the second highest paid executives and the top three executives in the top 50 companies in Australia over the period 1993 to 2004. The underlying data were captured using a process described by Harding (2008) (box B.1).

Egan (2009) included a graph of the median remuneration of CEOs, the second highest-paid executive and the top five executives at the top 100 companies over the period 1998 to 2008. The data were captured using the process described by Harding (2008) (box B.1).

Egan Associates (sub. 105) included graphs of remuneration in the top 100 companies (by market capitalisation) from 1988 to 2008, including:

- average remuneration of CEOs, ‘top 5’ executives, chairs and ‘top 5’ non-executive directors
- median remuneration of chairs and ‘top 5’ non-executive directors.

Egan Associates provided the Commission with the data underlying these graphs for 1993–2008. In addition, Egan Associates separately provided the Commission with data for 2009 (Egan Associates, pers. comm., 3 December 2009).

Box B.1 Capturing data from graphs

Some data series were only available in graphical form. To capture the underlying data the Commission used a process detailed in Harding (2008). This involved using the widely-available computer program 'Paint', which allows users to determine the coordinates of each data point on a graph. These data points can then be adjusted using a simple linear process to derive the original values of the data. This process was used to capture data from Korn/Ferry International and Egan Associates (2005), Egan (2009), Peetz (sub. 50), Frydman (2005), and Frydman and Saks (2007).

Using this process admits the possibility of measurement error. However, given the characteristics of the graphs and the nature of the underlying data, it is likely that any errors are small and would not have a significant influence on the conclusions reached from the data.

Hay Group

Hay Group is a consultancy company that provides advice on a range of organisational, management and performance matters, including executive remuneration. Hay Group provided the Commission with data on the level and growth rates of the remuneration of CEOs and other senior executives over the period 1995 to 2009. Executives' remuneration was broken down into:

- Fixed Annual Reward — 'the sum of base salary plus all allowances and benefits including medical, telephone, company cars, loans, club fees, car allowances plus employer and occupational superannuation' (Hay Group 2009, p. 15)
- Aggregate Reward — the sum of fixed annual reward, actual short-term incentive payments and 'total long-term incentive' (Hay Group 2009, p. 15). The value of long-term incentives are 'calculated using Hay's proprietary long-term incentive valuation methodology and are annualized and reported as a cash equivalent' (Hay Group 2009, p. 16). Hay Group does not include one-off equity grants, such as sign-on or retention awards, in its calculations of annual long-term incentive value.

The CEOs in the sample were categorised by the Hay Group into three groups according to the difficulty of the role they perform and the skills needed to carry it out. The Hay Group also provided data on the remuneration of 'seasoned professionals' (table B.6).

Table B.6 Hay Group role definitions

<i>Role</i>	<i>Definition (2009)</i>
CEO level 'A'	<p>CEO of a diversified company utilising related technologies, with multiple product lines usually serving multiple, but related, markets. At the smaller end will involve a fully integrated and functionally complete business, utilising common or related technologies, products and markets. May involve international activities, but the main focus will be domestic. May include subsidiaries of overseas multi-nationals with significant activities in Australia or the Asia Pacific region. Typical dimensions are as follows:</p> <ul style="list-style-type: none"> • Revenue: \$750 million–\$2.5 billion • Employees: 1500–8000.
CEO level 'B'	<p>CEO of a diversified company utilising several unrelated technologies, products and markets within diverse business segments. Typically will involve significant R&D for product driven companies or significant marketing budgets for marketing driven companies. Usually will have significant international activities and a diverse shareholder base. Typical dimensions are:</p> <ul style="list-style-type: none"> • Revenue: \$2.5 billion–\$8 billion • Employees: 5000–15 000.
CEO level 'C'	<p>CEO of a complex, multinational business in which the company has taken on leadership characteristics in products and markets. Also diversified companies utilising several unrelated technologies, products and markets. Would typically involve significant research and development or significant marketing budgets. A diverse shareholder base. Typical dimensions are:</p> <ul style="list-style-type: none"> • Revenue: \$8 billion–\$15 billion • Employees: In excess of 15 000 staff.
Senior executive	<p>Typical roles in this grade:</p> <ul style="list-style-type: none"> • Line managers responsible for a major business, typically reporting two levels below a CEO level C or directly to a CEO level B. • The functional roles at this level include Chief Financial Officers reporting to a CEO level B and Finance Directors of larger and more complex companies with a CEO level A. Covers human resources roles for the largest companies and major business development and strategy development roles.
Seasoned professional	<p>Extensive professional knowledge about theoretical concepts and principles in a specialist field normally associated with a professional or academic qualification or considerable experience.</p> <p>Typically manages broadly similar sub-functions and integrates and coordinates relationships with other parts of the organization over a one year horizon. Interaction with others requires highly developed skills to motivate, inspire and persuade.</p> <p>Decision-making involves the use of judgment and there is an emphasis on the development of new/improved procedures and on the translation of policy into operational plans. The focus is on the delivery of medium-term results within functional policy and precedent and outputs are subject to periodic review against targets. Jobs typically have a direct and controlling impact on a key aspect of performance of a very small/small organisation.</p>

Source: Hay Group (2009), pp. 17–19.

FinAnalysis database

Aspect Huntley's FinAnalysis database is a commercial online database that includes information from companies' annual reports and other disclosures, as well as share price data. The FinAnalysis database was used to obtain data on the market capitalisation of the companies in the Financial Review Executive Salary Database, as well as indicators of corporate performance, including total shareholder return, profits, return on equity and return on assets.

Deflation of time-series data

All time-series data on executive remuneration were adjusted to account for inflation. Nominal data were deflated using the Gross Domestic Product (GDP) implicit price deflator. The GDP implicit price deflator was preferred to other indexes of price changes (such as the consumer price index) because it relates to the prices that producers (companies) face for their outputs (ABS 2006). The same approach was used by Gabaix and Landier (2008).

Average weekly earnings across sectors

The Commission investigated the relationship between executive remuneration and average weekly earnings, including the relationship between the remuneration of executives in particular sectors with the average earnings of other employees in those sectors. To make the comparison, it was necessary to estimate the average weekly earnings (AWE) of employees in particular industry sectors.

The Australian Bureau of Statistics (ABS) publishes data on average weekly earnings across a range of industries. The ABS industry categories were used to compare the earnings of executives and other employees in some sectors (table B.7). Although the GICS classifications do not align perfectly with the industry classifications used by the ABS (which are based on the Australian and New Zealand Standard Industrial Classification), there is sufficient common ground between the two classification systems in the industries selected to allow comparison of executive remuneration and average earnings.

No comparison with average earnings was made for the information technology sector because no suitable comparator group could be found in the average weekly earnings statistics.

No comparison with average earnings was made for the telecommunications sector because the sector consists of only a small number of companies (either 3 or 4

depending on the year under consideration) and is dominated by Telstra, leading to a heavily-skewed estimate of average executive earnings.

Table B.7 Industry comparisons of executive remuneration and average weekly earnings

<i>Executive sector^a</i>	<i>ABS industry for comparison</i>
Materials and energy	Mining
Financials	Finance and insurance
Health care	Health and community services
Utilities	Electricity, gas and water
Industrials	Average of: <ul style="list-style-type: none"> • Manufacturing • Wholesale trade • Transport and storage
Consumer	Average of: <ul style="list-style-type: none"> • Retail trade • Communication services • Culture and recreation services

^a Sector as defined in table B.3.

Source: ABS (*Average Weekly Earnings, Australia*, Cat. no. 6302.0).

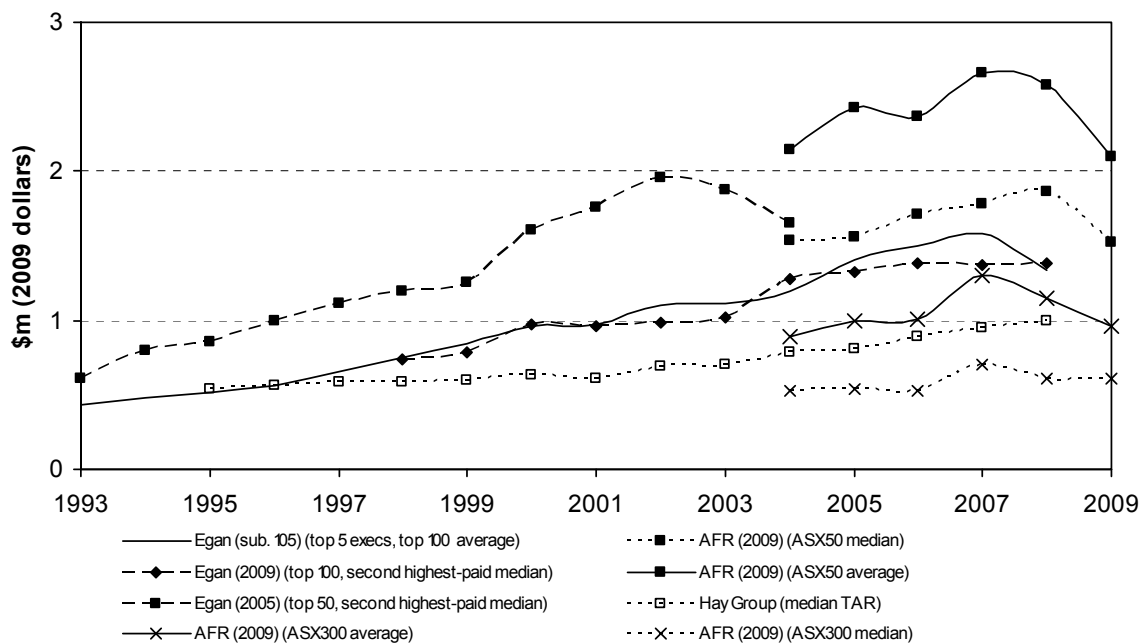
B.2 Further evidence on trends in executive remuneration

This section adds to the evidence presented in chapter 3 on trends in the size and structure of executive remuneration packages, and the relationships between executive remuneration and job complexity, company size and industry sector.

Trends in the remuneration of non-CEO executives

The longest-running time series of non-CEO executive remuneration data (Egan Associates, sub. 105) suggests that non-CEO executive remuneration followed similar trends to CEO remuneration. Average non-CEO executive remuneration grew at around 12 per cent per year in real terms over the period 1993–99, and by around 7 per cent per year for 2000–07. Average and median remuneration of non-CEO executives peaked in 2006-07, and has declined significantly since then (figure B.1). There is anecdotal evidence that the trend toward lower executive remuneration will continue in the coming year as companies announce freezes on executive remuneration in 2009-10 (chapter 3).

Figure B.1 **Non-CEO executive total remuneration, 1993–2009^a**
2009 dollars (millions)



^a Hay Group data refers to the median total annual reward (fixed remuneration plus short-term incentives, not including long-term incentives).

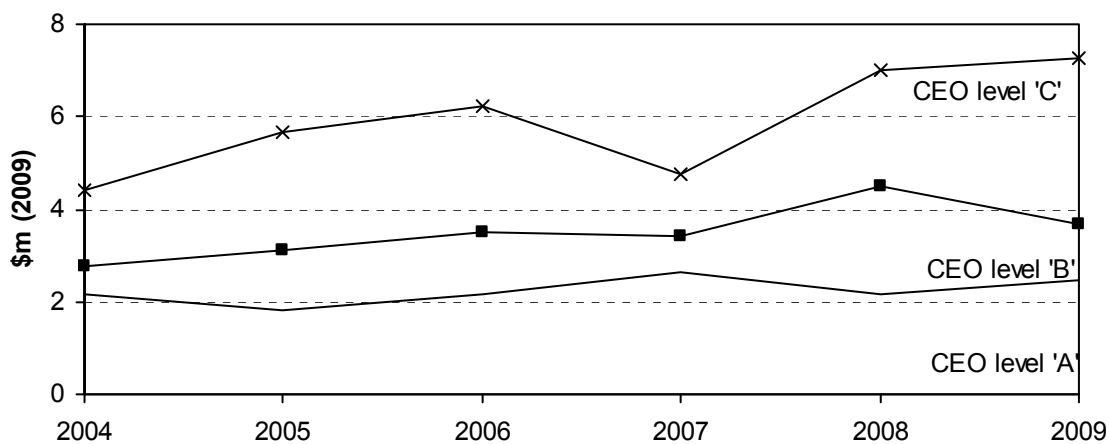
Sources: ABS (*Australian National Accounts: National Income, Expenditure and Product*, Cat. no. 5206.0); Kryger (1999); Crichton (various years); Egan (2009); Egan Associates (sub. 105); Financial Review Executive Salary Database; Korn/Ferry International and Egan Associates (2005); Productivity Commission estimates.

CEO remuneration and job complexity

The Hay Group data were used to analyse trends in the remuneration of CEOs performing jobs of different ‘levels’ (table B.6). The data show that:

- over the period 2004–2008, aggregate reward was higher for CEOs of higher levels (figure B.2)
- over the period 2001–2008 there was a slowly-growing difference between the fixed remuneration of CEOs of different levels (figure B.3).

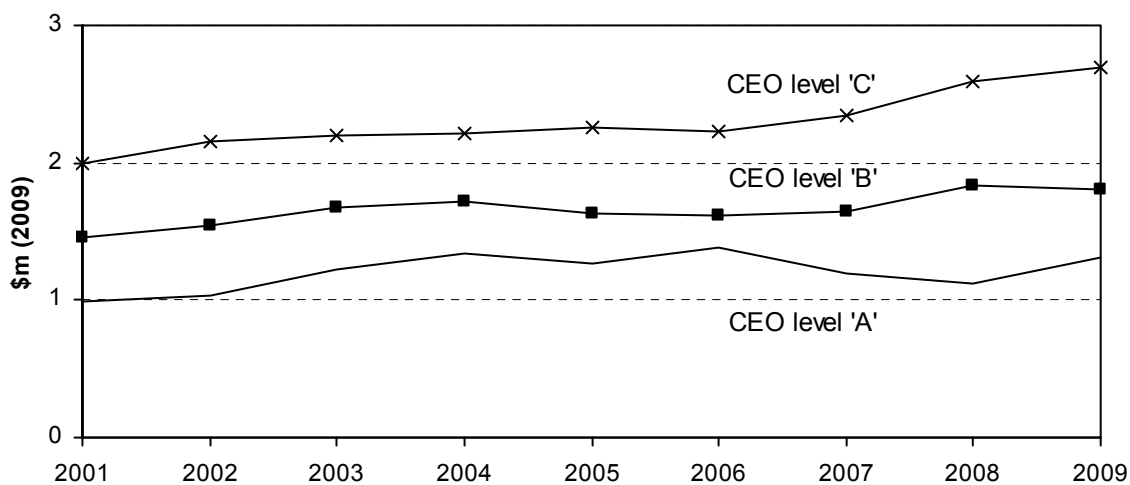
Figure B.2 CEO median aggregate annual reward by CEO 'level'^a



^a CEO level determined according to the Hay Group job evaluation methodology (table B.6).

Source: Hay Group (2009).

Figure B.3 CEO median fixed annual reward by CEO 'level'^a



^a CEO level determined according to the Hay Group job evaluation methodology (table B.6).

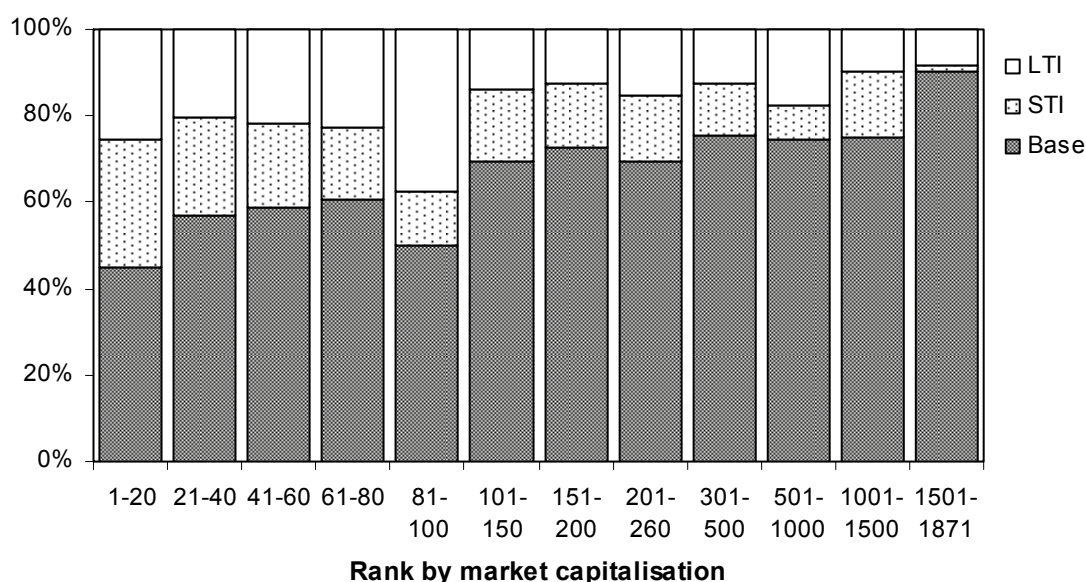
Source: Hay Group (2009).

The structure of executive remuneration

Evidence presented in chapter 3 shows that CEOs of larger companies receive a greater proportion of their remuneration as incentive-based remuneration. This is also generally the case for non-CEO executives (figure B.4).

For example, at the 20 largest companies in the sample, incentive-based remuneration accounted for over half of the average total remuneration of non-CEO executives. For companies ranked between 100 and 1500 by market capitalisation, incentive-based remuneration accounted for approximately 25–30 per cent of average total remuneration. For the smallest companies (ranked 1500 to 1871), incentive-based remuneration accounted for less than 10 per cent of total remuneration.

Figure B.4 Structure of non-CEO executive average remuneration packages by company size, 2008-09



Sources: Financial Review Executive Salary Database; Productivity Commission estimates.

Remuneration and company size

Chapter 3 included graphical and statistical evidence of the positive relationship between remuneration and company size. This section goes into further detail on the techniques used to derive that evidence.

Data underlying the graphs of remuneration and company size

Chapter 3 included a graph of the remuneration of CEOs and non-CEO executives in 2007-08 ranked in market capitalisation groups. The following process was followed to generate those data (tables B.8 and B.9):

- Each company in the Financial Review Executive Salary Database was assigned a rank, based on its market capitalisation. The largest company in the sample was ranked 1, and the smallest was assigned a rank of 242–261 (depending on the number of companies for which data were available each year).
- The companies were then divided into groups according to their ranks. The 100 largest companies were divided into groups of 20, and the remaining companies into three groups: 101–150, 151–200, and 201 to the lowest ranked company in the sample.
- In addition to these data, the remuneration of executives outside the ASX300 was plotted using data from the Commission’s random sample of companies outside the ASX300.
- The number of CEOs in each group is typically smaller than the number of companies in the group. The reason for this is that some executives were excluded from the sample because they did not serve a full year, or because no CEO could be identified for a particular company in a given year.
 - For example, in 2007-08, there were 19 CEOs in the ‘1 to 20’ group. Gail Kelly, the CEO of the Westpac Banking Group — one of the 20 largest companies by market capitalisation — was excluded from the sample because she did not serve the full year (she commenced on 1 February 2008).

The data clearly show a positive relationship between company size and executive remuneration for ASX300 company executives for every year over the period 2003-04 to 2008-09. This relationship is evident for CEOs (table B.8) and non-CEO executives (table B.9).

Table B.8 CEO average nominal remuneration by company size, 2003-04 to 2008-09

<i>Company rank (by market capitalisation)</i>	<i>Base salary</i>	<i>Base total</i>	<i>ST^a</i>	<i>LT^b</i>	<i>Total remuneration</i>	<i>Number of observations</i>
<i>2003-04</i>	\$'000	\$'000	\$'000	\$'000	\$'000	No.
1 to 20	1 648	3 194	2 210	642	5 629	19
21 to 40	1 116	2 046	1 416	525	3 462	19
41 to 60	947	1 411	1 086	196	2 497	19
61 to 80	736	1 185	300	108	1 530	19
81 to 100	599	899	322	208	1 265	19
101 to 150	514	697	254	79	958	48
151 to 200	355	618	55	106	673	46
201 to 253	370	649	72	122	730	47
<i>2004-05</i>						
1 to 20	1 781	2 274	3 559	1423	7 256	19
21 to 40	1 161	1 576	921	644	3 140	19
41 to 60	1 143	1 667	1 021	591	3 217	17
61 to 80	893	1 376	1 239	272	2 888	18
81 to 100	838	966	431	309	1 706	18
101 to 150	583	697	292	192	1 181	47
151 to 200	417	495	122	102	720	44
201 to 261	380	451	54	132	637	46
<i>2005-06</i>						
1 to 20	1 814	2 503	2 833	1 810	7 145	19
21 to 40	1 370	1 634	1 069	680	3 384	19
41 to 60	816	1 025	1 242	662	2 929	19
61 to 80	810	1 043	618	512	2 173	16
81 to 100	856	929	109	228	1 266	19
101 to 150	615	699	495	290	1 484	47
151 to 200	439	528	147	160	834	47
201 to 259	400	483	129	106	719	47
<i>2006-07</i>						
1 to 20	2 215	3 112	4 300	2 299	9 711	19
21 to 40	1 225	1 414	1 773	852	4 040	19
41 to 60	1 354	2 221	1 100	1 755	5 076	16
61 to 80	1 159	1 342	764	824	2 930	19
81 to 100	775	908	750	563	2 221	16
101 to 150	673	765	381	506	1 653	39
151 to 200	506	614	457	263	1 335	42
201 to 242	450	516	321	201	1 038	39
<i>2007-08</i>						
1 to 20	2 313	2 645	4 508	2 216	9 368	19
21 to 40	1 488	2 714	1 065	1 371	5 150	18
41 to 60	1 307	1 513	1 068	1 420	4 001	18
61 to 80	1 201	2 120	947	1 323	4 389	20
81 to 100	832	962	476	512	1 950	18
101 to 150	858	1 109	616	775	2 499	45
151 to 200	561	644	208	244	1 096	48
201 to 256	475	582	177	177	1 044	47

(Continued next page)

Table B.8 (continued)

<i>Company rank (by market capitalisation)</i>	<i>Base salary</i>	<i>Base total</i>	<i>STI^a</i>	<i>LTI^b</i>	<i>Total remuneration</i>	<i>Number of observations</i>
<i>2008-09</i>						
1 to 20	2 461	3 101	2 223	1 869	7 193	19
21 to 40	1 796	2 021	1 332	1 377	4 729	19
41 to 60	1 332	1 597	799	964	3 360	16
61 to 80	1 266	1 690	909	883	3 481	18
81 to 100	819	964	329	523	1 816	19
101 to 150	800	1 007	290	305	1 602	44
151 to 200	654	734	188	268	1 190	43
201 to 260	433	481	188	150	820	49

^a Short-term incentive. ^b Long-term incentive.

Sources: Financial Review Executive Salary Database; FinAnalysis; Productivity Commission estimates.

Table B.9 Non-CEO executive average nominal remuneration by company size, 2003-04 to 2008-09

<i>Company rank (by market capitalisation)</i>	<i>Base salary</i>	<i>Base total</i>	<i>STI^a</i>	<i>LTI^b</i>	<i>Total remuneration</i>	<i>Number of observations</i>
<i>2003-04</i>	<i>\$'000</i>	<i>\$'000</i>	<i>\$'000</i>	<i>\$'000</i>	<i>\$'000</i>	<i>No.</i>
1 to 20	916	1 562	707	415	2 362	90
21 to 40	529	832	637	135	1 475	93
41 to 60	454	665	284	141	1 022	92
61 to 80	338	1 002	138	31	919	80
81 to 100	293	407	100	42	509	94
101 to 150	293	421	89	26	510	203
151 to 200	211	306	38	35	344	204
201 to 253	176	251	32	31	283	206
<i>2004-05</i>						
1 to 20	956	1 343	1 828	543	3 729	89
21 to 40	547	729	302	219	1 250	74
41 to 60	599	764	317	199	1 279	76
61 to 80	404	613	546	106	1 265	92
81 to 100	345	449	117	72	638	90
101 to 150	266	334	117	49	500	224
151 to 200	253	300	51	35	385	202
201 to 261	199	241	30	28	299	231
<i>2005-06</i>						
1 to 20	819	1 157	1 412	639	3 208	120
21 to 40	522	659	357	206	1 223	99
41 to 60	459	531	732	294	1 556	101
61 to 80	370	485	221	79	784	85
81 to 100	352	428	193	124	745	97
101 to 150	285	346	103	64	513	218
151 to 200	247	302	52	55	409	231
201 to 259	219	260	40	33	333	232

(Continued next page)

Table B.9 (continued)

<i>Company rank (by market capitalisation)</i>	<i>Base salary</i>	<i>Base total</i>	<i>ST^a</i>	<i>LT^b</i>	<i>Total remuneration</i>	<i>Number of observations</i>
<i>2006-07</i>						
1 to 20	900	1 233	1 575	1 075	3 882	127
21 to 40	539	712	1 041	378	2 131	120
41 to 60	473	688	268	235	1 191	142
61 to 80	480	623	271	243	1 136	117
81 to 100	380	440	277	173	890	91
101 to 150	323	392	139	140	671	208
151 to 200	254	306	84	64	454	206
201 to 242	246	309	81	183	573	163
<i>2007-08</i>						
1 to 20	898	1151	1 483	998	3 632	138
21 to 40	552	703	324	348	1 375	141
41 to 60	484	596	290	307	1 192	136
61 to 80	410	503	382	563	1 448	152
81 to 100	335	389	145	98	631	114
101 to 150	332	407	156	162	725	292
151 to 200	259	307	57	60	423	274
201 to 256	226	260	58	92	410	296
<i>2008-09</i>						
1 to 20	942	1 320	875	758	2 953	124
21 to 40	678	827	327	298	1 452	125
41 to 60	517	643	211	235	1 089	129
61 to 80	518	609	164	227	1 000	104
81 to 100	370	468	120	350	938	92
101 to 150	339	401	96	79	576	244
151 to 200	305	360	73	63	495	231
201 to 256	267	304	67	67	438	225

^a Short-term incentive. ^b Long-term incentive.

Sources: Financial Review Executive Salary Database; FinAnalysis; Productivity Commission estimates.

Econometric analysis of the relationship between company size and executive remuneration

Chapter 4 included some evidence of the elasticity of executive remuneration with respect to company market capitalisation. This section describes the econometric technique that was used to derive the estimates for CEOs and non-CEO executives.

The elasticity of remuneration with respect to company size is a measure of how executive remuneration varies according to company size. It describes the average effect of a given increase in company size on the level of executive remuneration. A number of studies have attempted to estimate the elasticity of remuneration with respect to company size, both in Australia and overseas (appendix D). For example, Merhebi et al. (2006) estimated that the elasticity of CEO remuneration with respect to company size (using company revenue as a proxy for size) was 0.27. This implies

that for every 10 per cent increase in the revenue of a company, the remuneration of a CEO in the sample increased by, on average, 2.7 per cent.

The Commission carried out some simple linear regression analysis of executive remuneration in Australia using a similar approach to Merhebi et al. (2006).

The model

To estimate the elasticity of remuneration with respect to company size (using market capitalisation as a proxy for size), the Commission estimated the following equation:

$$\log_e (\text{REM}_{i,t}) = \alpha + \beta_1 \log_e (\text{SIZE}_{i,t}) + \varepsilon_{i,t}$$

where: REM = the total remuneration of an executive

SIZE = the size of the company, proxied by its market capitalisation

ε = error term

Subscripts i and t denote the company that employs the executive, and the year in which they were employed.

In this context, the estimated value of the coefficient β_1 can be interpreted as the elasticity of remuneration with respect to market capitalisation.

The data

The data on executive remuneration and market capitalisation were drawn from the Financial Review Executive Salary Database. The model was estimated using observations from 2003-04 to 2008-09 for CEOs and 2003-04 to 2007-08 for non-CEO executives. Remuneration and market capitalisation were both deflated using the GDP implicit price deflator.

Results

The results of the estimation show that market capitalisation has a statistically significant positive relationship with the remuneration of CEOs and non-CEO executives (table B.10). The results imply that:

- each 10 per cent increment in market capitalisation is associated with:
 - a 4.2 per cent increment in average CEO total remuneration
 - a 3.8 per cent increment in average non-CEO executive total remuneration
- variation in market capitalisation explains approximately:
 - 28 per cent of variation in average CEO total remuneration
 - 49 per cent of variation in average non-CEO executive total remuneration.

Table B.10 Estimated elasticity of executive remuneration with respect to market capitalisation

	<i>CEOs</i>	<i>Non-CEO executives</i>
Intercept	5.29***	5.44***
β_1 (estimated size elasticity coefficient)	0.42***	0.38***
Standard error	0.019	0.005
95 per cent confidence interval		
Lower bound	0.39	0.37
Upper bound	0.46	0.39
Adjusted R ²	0.28	0.49
Observations	1 356	5 576

*** Significant at the 1 per cent level.

Sources: Financial Review Executive Salary Database; FinAnalysis; Productivity Commission estimates.

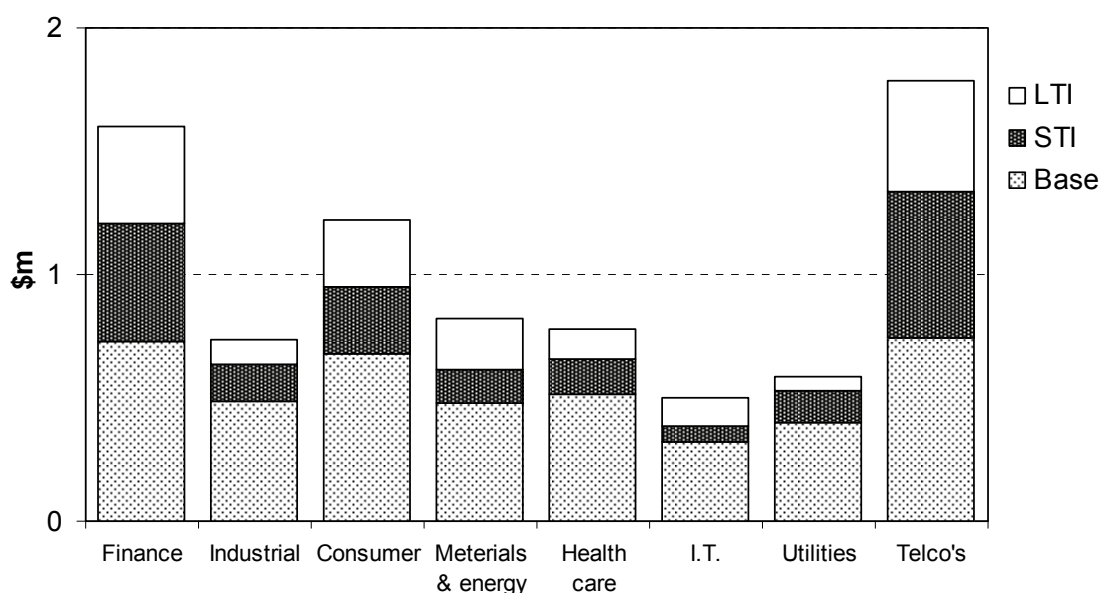
Remuneration and sector — non-CEO executives

As is the case with CEOs, the quantum and structure of remuneration packages paid to non-CEO executives varies across sectors (figure B.5, tables B.11–B.13). Key trends are that:

- as is the case with CEOs, non-CEO executive remuneration is highest in the telecommunications, finance and consumer sectors, and lowest in the information technology and utilities sectors
- executives in the finance, telecommunications and consumer sectors receive more of their remuneration in the form of incentive-based remuneration than executives in other sectors

- over the period 2003-04 to 2008-09, average total executive remuneration grew fastest in the health care, telecommunications and utilities sectors.

Figure B.5 **Structure of ASX300 company non-CEO executive average total remuneration, 2008-09**



Source: Financial Review Executive Salary Database.

Table B.11 **Average ASX300 company non-CEO executive remuneration by market sector, 2003-04 to 2008-09**

Sector	Average remuneration (2008-09)				Growth rates (2003-04 to 2008-09)			
	Base ^a	STI ^b	LTI ^c	Total	Base ^a	STI ^b	LTI ^c	Total
	\$'000	\$'000	\$'000	\$'000	%	%	%	%
Financial	729	481	391	1 601	-34	-5	78	4
Industrial	488	147	101	736	-21	-5	30	-5
Consumer	679	274	267	1 220	-19	-10	185	4
Materials and energy	480	132	208	820	-11	-24	153	15
Health care	513	145	119	776	24	90	57	59
Information technology	324	59	117	501	-16	38	158	16
Utilities	402	127	59	589	2	39	97	21
Telecommunications	741	593	455	1 788	-9	69	.. ^d	53

^a Includes base salary, superannuation and other allowances and benefits. ^b Short-term incentive. ^c Long-term incentive. ^d Growth rate of LTIs cannot be calculated because no LTI was paid in 2003-04. .. Not applicable.

Sources: ABS (Australian National Accounts: National Income, Expenditure and Product, Cat. no. 5206.0); FinAnalysis; Financial Review Executive Salary Database; Productivity Commission estimates.

Table B.12 CEO average nominal remuneration by sector, 2003-04 to 2008-09

<i>Sector</i>	<i>Base salary</i>	<i>Base total</i>	<i>STI^a</i>	<i>LTI^b</i>	<i>Total remuneration</i>	<i>Number of observations</i>
<i>2003-04</i>	\$'000	\$'000	\$'000	\$'000	\$'000	No.
Financial	800	1387	906	330	2437	36
Industrial	612	1234	466	144	1700	36
Consumer	877	1302	763	162	2080	51
Materials and energy	589	1051	324	269	1385	67
Health care	476	735	253	97	990	24
Information technology	352	473	105	79	578	14
Utilities	502	730	322	84	1052	7
Telecommunications	476	1128	432	0	1560	3
<i>2004-05</i>						
Financial	753	972	1302	408	2 657	43
Industrial	813	1231	543	419	2 193	35
Consumer	987	1239	940	347	2 526	48
Materials and energy	664	814	382	297	1 493	60
Health care	561	639	300	401	1 340	23
Information technology	406	506	187	66	759	13
Utilities	526	744	267	144	1 155	5
Telecommunications	1 082	1 189	1 076	1 036	3 301	3
<i>2005-06</i>						
Financial	846	1 027	1 650	685	3 362	48
Industrial	801	990	468	428	1 886	33
Consumer	910	1 149	484	500	2 134	46
Materials and energy	661	796	414	363	1 574	78
Health care	604	707	320	376	1 403	19
Information technology	447	664	360	77	1 101	15
Utilities	418	480	243	25	748	8
Telecommunications	1 651	3 095	1 316	160	4 571	2
<i>2006-07</i>						
Financial	1 078	1 327	2 559	1 378	5 264	41
Industrial	901	1 295	648	602	2 545	33
Consumer	1 234	1 622	1 033	535	3 191	38
Materials and energy	694	443	443	546	1 846	73
Health care	684	801	369	832	2 002	16
Information technology	395	435	213	221	870	13
Utilities	960	1 102	675	1 361	3 138	5
Telecommunications	2 987	3 696	5 314	2 772	11 782	1
<i>2007-08</i>						
Financial	1 012	1 314	1 961	1 388	4 663	30
Industrial	1 022	1 173	695	620	2 488	38
Consumer	1 350	2 305	1 051	576	3 931	41
Materials and energy	744	932	456	722	2 111	85
Health care	804	932	439	1 112	2 483	11
Information technology	451	499	177	496	1 173	9
Utilities	464	536	366	400	400	7
Telecommunications	1 886	2 128	3 468	2 454	8 050	2

(Continued next page)

Table B.12 (continued)

<i>Sector</i>	<i>Base salary</i>	<i>Base total</i>	<i>ST^a</i>	<i>LTI^b</i>	<i>Total remuneration</i>	<i>Number of observations</i>
<i>2008-09</i>						
Financial	1 298	1 462	1 098	764	3 324	20
Industrial	1 015	1 137	675	342	2 154	42
Consumer	1 387	1 798	766	824	3 388	32
Materials and energy	812	1 038	348	665	2 051	93
Health care	938	1 050	539	484	2 073	12
Information technology	472	520	156	379	1 055	8
Utilities	693	797	383	300	1 479	8
Telecommunications	898	1 041	1 485	564	3 089	3

^a Short-term incentive. ^b Long-term incentive.

Sources: Financial Review Executive Salary Database; Productivity Commission estimates.

Table B.13 **Non-CEO executive average nominal remuneration by sector, 2003-04 to 2008-09**

<i>Sector</i>	<i>Base salary</i>	<i>Base total</i>	<i>ST^a</i>	<i>LTI^b</i>	<i>Total remuneration</i>	<i>Number of observations</i>
<i>2003-04</i>	<i>\$'000</i>	<i>\$'000</i>	<i>\$'000</i>	<i>\$'000</i>	<i>\$'000</i>	<i>No.</i>
Financial	397	911	417	182	1 275	149
Industrial	308	510	127	64	641	167
Consumer	483	695	253	77	969	257
Materials and energy	298	445	142	68	588	297
Health care	223	341	63	63	403	130
Information technology	224	321	35	37	356	69
Utilities	217	327	76	25	403	31
Telecommunications	545	674	289	0	963	8
<i>2004-05</i>						
Financial	441	629	773	195	1 597	140
Industrial	342	462	173	114	748	169
Consumer	447	578	347	71	996	140
Materials and energy	316	414	140	105	663	201
Health care	284	334	96	62	492	94
Information technology	256	289	68	62	419	37
Utilities	220	334	63	67	464	20
Telecommunications	600	691	288	390	1 369	13
<i>2005-06</i>						
Financial	450	547	958	292	1 796	279
Industrial	340	430	165	99	693	22
Consumer	402	526	159	120	805	263
Materials and energy	333	424	142	142	709	331
Health care	321	417	99	80	597	57
Information technology	233	268	104	94	466	159
Utilities	254	312	92	49	453	75
Telecommunications	663	890	636	280	1 807	10

(Continued next page)

Table B.13 (continued)

<i>Sector</i>	<i>Base salary</i>	<i>Base total</i>	<i>ST^a</i>	<i>LT^b</i>	<i>Total remuneration</i>	<i>Number of observations</i>
<i>2006-07</i>						
Financial	498	617	1 083	539	2 240	263
Industrial	405	601	181	163	945	173
Consumer	516	621	337	269	1 227	216
Materials and energy	354	482	170	241	894	372
Health care	352	436	117	167	720	91
Information technology	258	287	102	94	483	58
Utilities	306	421	139	62	622	43
Telecommunications	566	842	655	248	1 745	25
<i>2007-08</i>						
Financial	474	580	827	730	2 136	232
Industrial	390	468	183	162	813	263
Consumer	441	546	289	213	1 047	279
Materials and energy	318	384	110	174	667	510
Health care	351	428	144	187	761	75
Information technology	248	275	80	110	465	57
Utilities	277	314	151	69	534	40
Telecommunications	569	1 022	714	323	2 059	22
<i>2008-09</i>						
Financial	569	729	481	391	1 601	144
Industrial	420	488	147	101	736	265
Consumer	516	679	274	267	1 220	211
Materials and energy	388	480	132	208	820	441
Health care	426	513	145	119	776	67
Information technology	301	324	59	117	501	38
Utilities	358	402	127	59	589	34
Telecommunications	581	741	593	455	1 788	18

^a Short-term incentive. ^b Long-term incentive.

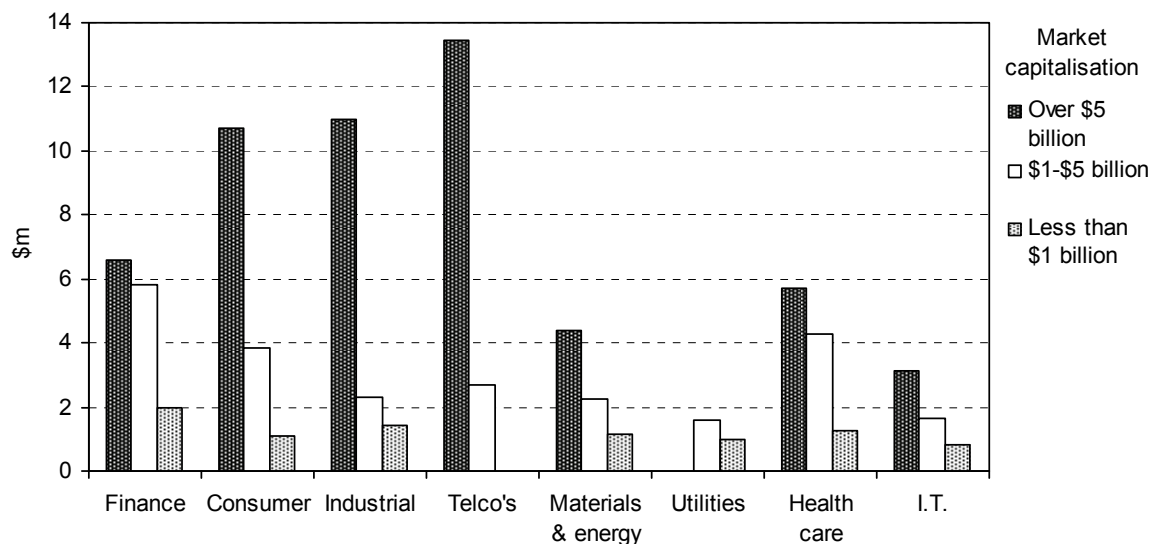
Sources: Financial Review Executive Salary Database; Productivity Commission estimates.

Remuneration varies within sectors according to company size

The positive relationship between executive remuneration and company size is also evident across sectors (figures B.6 and B.7). In most sectors there is a large difference between the average total remuneration of executives at companies with a market capitalisation of over \$5 billion and the remuneration of executives of companies with a market capitalisation of between \$1 billion and \$5 billion. Executives of companies with a market capitalisation of less than \$1 billion earn less again. This relationship appears to hold for CEOs and non-CEO executives.

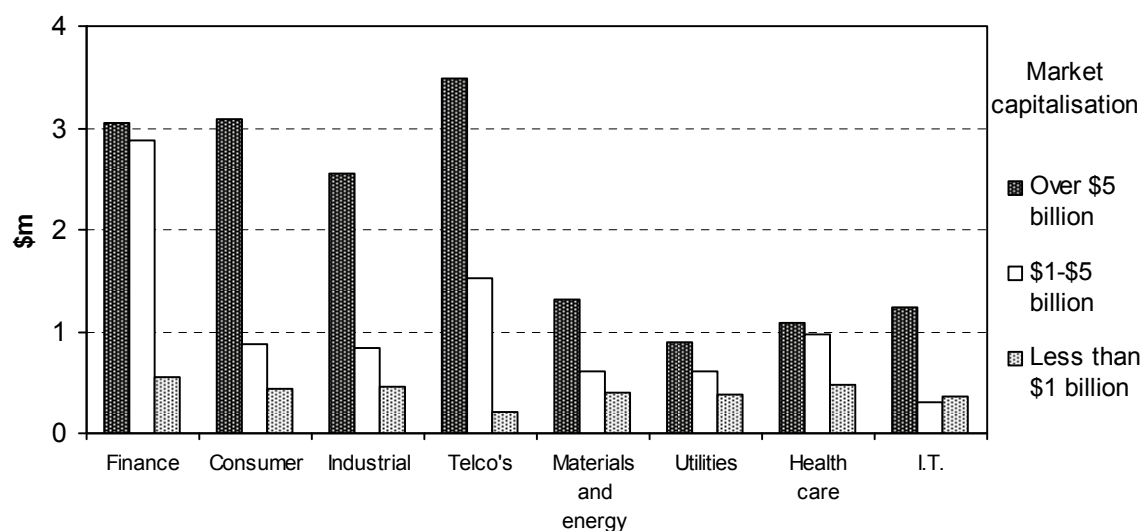
The exceptions appear to be the finance sector, where there is a smaller difference in average remuneration between companies with market capitalisation over \$5 billion and companies with a market capitalisation between \$1 billion and \$5 billion. This is the case for CEOs and non-CEO executives in this sector.

Figure B.6 Average total remuneration of ASX300 company CEOs, by sector and market capitalisation, 2007-08



Source: Financial Review Executive Salary Database.

Figure B.7 Average total remuneration of ASX300 company non-CEO executives, by sector and market capitalisation, 2007-08

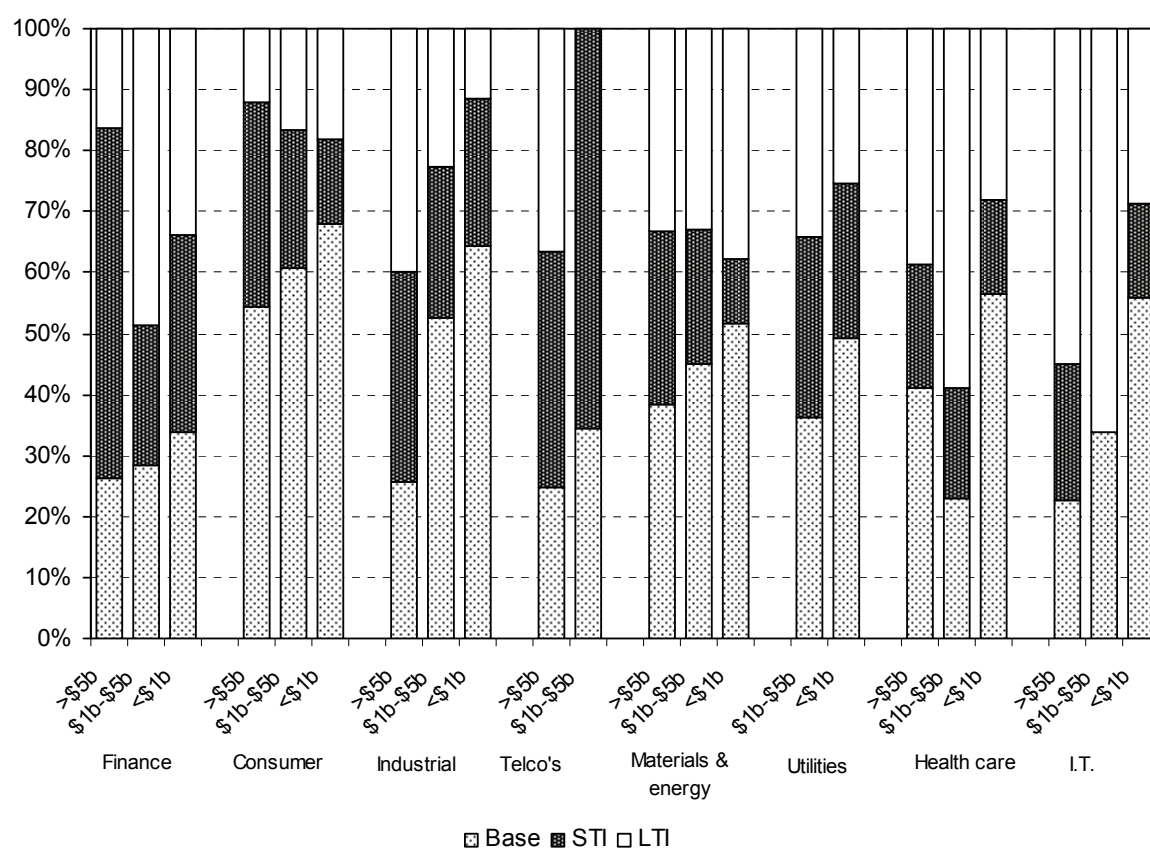


Source: Financial Review Executive Salary Database.

The structure of executive remuneration packages also varies across sectors according to company size (figures B.8 and B.9). Across all sectors in 2007-08, CEO remuneration at larger companies generally included a lower proportion of base remuneration than at smaller companies. This was also the case for non-CEO executives in most sectors, although there are exceptions. Remuneration packages

in some sectors included a greater proportion of incentive-based pay than others at all levels. For example, in 2007-08 base remuneration constituted a lower proportion of CEO remuneration at the smallest finance sector companies than at most large and medium-sized companies in other sectors. In general, CEO remuneration included a greater proportion of long-term incentives than non-CEO remuneration.

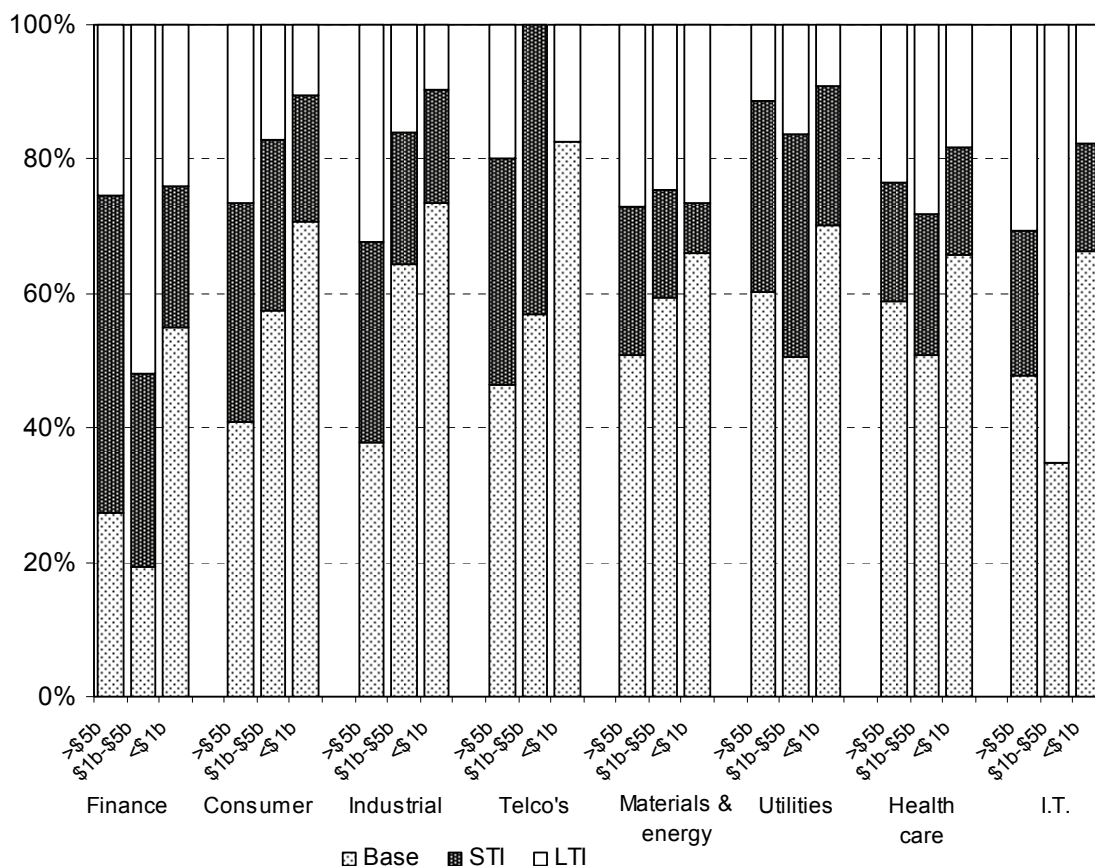
Figure B.8 Structure of ASX300 CEO average remuneration packages by sector and market capitalisation, 2007-08^a



^a There were no full-year CEOs employed at ASX300 telecommunications companies with a market capitalisation of less than \$1 billion. Nor were there any full-year CEOs employed at utilities companies with a market capitalisation of over \$5 billion.

Source: Financial Review Executive Salary Database.

Figure B.9 Structure of ASX300 non-CEO executive average remuneration packages by sector and market capitalisation, 2007-08



Source: Financial Review Executive Salary Database.

B.3 Further evidence on non-executive directors' remuneration

In general, the remuneration of non-executive directors is relatively straightforward. Directors normally receive a cash fee for their board services, and incentive-based remuneration is uncommon. One complicating factor can be the extra payments that some non-executive directors are granted for service on board committees, such as the remuneration, nomination and audit committees. A sample of ten ASX100 companies demonstrates the wide variation in board committee fees (table B.14).

Table B.14 **Payments to non-executive directors for selected companies^a, 2008**

Company	Fee pool	Base payments for non-executive directors ^b		Payments for service on board committees ^b	
		Chair	Director	Chair	Member
	\$	\$	\$	\$	\$
Alumina	950 000	350 000	140 000	None	None
AMP ^c	3 000 000	550 000	166 000	15 000– 127 500	7 500– 85 000
Arrow Energy ^d	450 000	107 500	50 000– 69 997	Not specified	Not specified
Boral ^e	1 250 000	316 250	115 000	18 750	12 500
Commonwealth Bank ^f	3 000 000	650 000	210 000	10 000– 50 000	10 000– 25 000
ConnectEast Group ^{d, e, g}	Not specified	210 000	100 000– 112 500	Not specified	Not specified
Metcash	1 000 000	200 000 ^h	100 000	20 000– 25 000	10 000
Suncorp-Metway ^{c, i}	3 500 000	550 000	220 000	20 000– 30 000	10 000– 20 000
Transurban Group ^d	2 100 000	385 000	110 000– 165 000	Not specified	Not specified
WorleyParsons ^{e, j}	1 750 000	437 500	175 000	20 000– 35 000	12 000– 17 500

^a These 10 companies were randomly selected from the ASX100. ^b Excludes superannuation, unless otherwise noted. ^c 'Board committees' include boards of subsidiary companies. ^d Reported directors' fees are likely to include membership of board committees. However, no breakdown of figures is provided in the company's annual report. ^e Figures provided for individual payments inclusive of superannuation contributions. ^f The chair of the Commonwealth Bank's 'board performance and renewal' committee receives the same fee payment as the committee's other members (\$10 000). ^g Not all non-executive directors of ConnectEast are paid by the group due to its ownership structure, as some directors serve on behalf of (and are paid by) other companies (Macquarie Group, Thiess and John Holland). ^h The Deputy Chair of Metcash received \$150 000. ⁱ Directors' fees at Suncorp-Metway include membership of either the risk or audit committees. Hence reported board committee fees are relevant only for service on the remuneration committee or on the boards of the company's New Zealand subsidiaries. ^j WorleyParsons' directors are not paid additional fees for serving on the nomination committee (either as a member or as a committee chair).

Sources: Company annual reports.

B.4 Further evidence on remuneration and corporate performance

As part its analysis of the relationship between remuneration and corporate performance, the Commission used regression analysis to estimate some statistical models of the relationship. The analytical approach extended the modelling

framework used to estimate the relationship between remuneration and market capitalisation (as described above). The approach taken was comparable with several other analyses of remuneration, including Merhebi et al. (2006) and Rankin (2007).

The model

The model estimated was a linear model of the relationship between various types of remuneration and a set of variables that were hypothesised to be related to remuneration. The model specification was:

$$\text{REM}_{i,t} = \alpha + \beta_1 \text{SIZE}_{i,t} + \beta_2 \text{PERFORMANCE}_{i,t} + \varepsilon_{i,t}$$

where: REM = a measure of the remuneration of an executive

SIZE = the size of the company, proxied by the natural logarithm of its market capitalisation

PERFORMANCE = a vector of accounting-based and market-based variables relating to the performance of the company

ε = error term

Subscripts i and t denote the company that employs the executive, and the year in which they were employed

Data and variables

The model was estimated for CEOs using data from 2003-04 to 2007-08. Only CEOs who had served a full year were included in the sample.

Six measures of remuneration were used to determine whether there was a relationship between corporate performance and the level of remuneration, or between corporate performance and the proportion of total remuneration that was paid as incentive-based remuneration. Remuneration variables were:

- the natural logarithms of base salary, short- and long-term incentives and total remuneration
- the value of short-term incentives as a proportion of base salary (calculated as short-term incentives divided by base salary)
- the estimated value of long-term incentives as a proportion of base salary (calculated as long-term incentives divided by base salary)

-
- the value of all incentive-based remuneration as a proportion of base salary (calculated as short-term plus long-term incentives divided by base salary).

Indicators of corporate performance that were included in the vector of performance variables included accounting and market-based measures of performance. The indicators that were included in the analysis were:

- total shareholder return for the company's stock (incorporating capital growth and dividends)
- return on equity
- growth of net profit after tax over the previous year.

The model was estimated with performance indicators for the current year, and lagged one and two years. Lagged variables were incorporated to capture the possible effects of historical performance on the level and structure of executive remuneration.

Results

Results of the estimation are reported in table B.15. In most cases, there is no statistically significant relationship between indicators of corporate performance and various measures of CEO remuneration. However, the model does yield some statistically significant results, including:

- Higher total shareholder return in the current year is associated with lower remuneration in several cases. However, higher shareholder returns in the previous year are associated with higher remuneration in some cases (particularly with higher long-term incentives).
- The growth of net profits (whether in the current year or when lagged one year) has a statistically significant positive relationship with some measures of short- and long-term incentives. Under one model specification, it has a negative relationship with total remuneration.
- Return on equity has a statistically significant positive relationship with long-term incentives.

Table B.15 Regression results — CEO remuneration and corporate performance, 2003-04 to 2007-08

Remuneration variable	Corporate performance indicators										R ²	
	Intercept	Log market cap _t	TSR _t	NPAT growth _t	ROE _t	TSR _{t-1}	NPAT growth _{t-1}	ROE _{t-1}	TSR _{t-2}	NPAT growth _{t-2}		ROE _{t-2}
Log base salary	7.842***	0.259***										0.12
	7.382***	0.285***	-0.089*	-0.001	-0.078							0.15
	7.477***	0.282***	-0.127**	-0.012	-0.067	0.005	-0.004	0.034				0.16
	7.520***	0.281***	-0.160**	-0.011	-0.067	-0.014	-0.011	0.095	0.000	-0.008	-0.173	0.15
Log STI ^a	1.756***	0.528***										0.40
	0.931*	0.573***	-0.100*	0.016**	-0.522							0.47
	0.905*	0.575***	-0.098	-0.007	-0.219	0.053	0.001	-0.569				0.46
	0.919	0.576***	-0.110	-0.005	-0.061	-0.011	-0.003	-0.589	-0.009	0.002	-0.150	0.47
Log LTI ^b	2.948***	0.459***										0.25
	1.223	0.541***	-0.344***	-0.012	0.217*							0.36
	0.817	0.557***	-0.424***	-0.002	0.196*	0.083**	0.006	0.363				0.38
	0.783	0.560***	-0.482***	0.000	0.197*	0.052	0.047**	0.220	0.001	-0.017	-0.104	0.38
Log total remuneration	5.844***	0.391***										0.19
	4.570***	0.455***	-0.114**	-0.002	-0.059							0.25
	4.428***	0.462***	-0.162**	-0.017*	-0.053	0.044	0.008	-0.040				0.28
	4.322***	0.467***	-0.205***	-0.015	-0.055	0.025	0.028	-0.072	-0.006	0.001	0.020	0.27
STI ^a /base salary	-6.637***	0.360***										0.04
	-8.316***	0.441***	-0.036	0.021	-0.052							0.04
	-8.387***	0.446***	-0.024	-0.006	-0.022	0.032	0.011	-0.750				0.12
	-8.860***	0.461***	-0.024	-0.005	0.011	0.039	-0.001	-1.248	-0.016	0.068***	1.106	0.05
LTI ^b /base salary	-0.476	0.054										0.00
	-2.762***	0.156***	-0.072	-0.004	0.008							0.06
	-3.516***	0.188***	-0.087	-0.005	-0.013	0.137***	0.014*	0.060				0.10
	-3.687***	0.195***	-0.113*	-0.003	-0.016	0.196***	0.025	-0.069	0.012	0.013	0.115	0.11

* Significant at the 10 per cent level. ** Significant at the 5 per cent level. *** Significant at the 1 per cent level. ^a Short-term incentives. ^b Long-term incentives.

Sources: Financial Review Executive Salary Database; FinAnalysis; Productivity Commission estimates.

Analysis of the value of the coefficient of determination (R^2) under different model specifications gives an indication of the extent to which the performance indicators increase the explanatory power of the models. The results suggest that:

- the single most significant factor in explaining the quantum of remuneration over the period under analysis is market capitalisation
- adding performance indicators to the model does not significantly increase its power to explain variations in base salary
- adding performance indicators for the current year does slightly increase the power of the model to explain variation in short- and long-term incentives and total remuneration.

Adding performance indicators lagged one year increases the ability of the models to explain variation in the proportion of remuneration that consists of incentives.