

Selecting Comparator Groups

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Introduction

Selecting the companies to be included in a comparator group represents a significant challenge for many companies. The primary criterion for selecting companies is that the comparator group should be “fit for purpose”. There are three main purposes that arise in relation to key management personnel (KMP) remuneration and they are:

1. External market benchmarking of KMP remuneration against a comparator group selected to represent market practice of comparable companies for use by the remuneration committee and the board,
2. Internal database composition for market KMP remuneration analysis for use by internal managers and HR resources, and
3. Long term incentive performance purposes which mainly arises for companies that use relative total shareholder return (TSR) and compare their company’s TSR with the TSRs achieved by companies in a comparator group over a specified measurement period.

Each of these is discussed in the following.

External Market KMP Remuneration Benchmarking

Similar Roles in Comparator Group

An early step in any project to obtain information on KMP remuneration practice from an external remuneration consultant (ERC) is to agree a comparator group of companies. Since the purpose for which the comparator group will be used is to assess the market competitiveness of remuneration for KMP roles the underlying criterion for selecting comparator group companies is that they disclose remuneration data for KMP roles that are similar as possible to the roles in the company for which the analysis is being undertaken.

Non-Industry Specific Roles

When recruiting for KMP roles, industry specific experience often will not be seen as an essential requirement. For these roles the companies in the comparator group would not need to be from a specific industry or sector. However, the companies in the comparator group should have broad similarities to the company for which the analysis is being undertaken in the expectation that roles in companies with similar operating characteristics would face similar challenges.

GRG’s experience indicates that many KMP roles fall into this category e.g. CFO, Company Secretary, CIO etc.

Industry Specific Roles

When recruiting for some roles industry knowledge and experience will be essential prerequisites.

For these roles, the companies in the comparator group should, to the extent possible, be from a specific relevant industry or sector so that the market data on KMP remuneration is for roles that have similar prerequisites. GRG’s experience indicates that there can be differences in pay practices between companies in the Resources, Financial and Industrial & Services sectors however within these sectors it is relatively rare for roles requiring industry knowledge and experience to attract total remuneration packages that are inconsistent with remuneration packages for other comparable KMP roles.

Unique Roles

A small minority of roles will be either unique to a company or a sector. An example may be a medical specialist heading research in a biotechnology company looking into innovative treatments for a medical condition. Because of the nature of these types of roles there will generally be insufficient market practice data from any comparator group to be useful in guiding market competitive KMP remuneration practices for these roles. Alternative methods such as data mining (searching whole databases for remuneration information on similar roles) and banding models (using internal relativities as a guide) need to be used to develop recommendations on appropriate total remuneration packages.

Selection of Companies

Size Envelope

A truism of KMP remuneration is that there is a correlation between company size and the quantum of remuneration for KMP roles i.e. KMP in larger companies tend to receive higher remuneration than KMP in smaller companies. This is because roles in larger companies tend to be more complex than similarly titled roles in smaller companies and this additional complexity attracts additional remuneration.

This truism needs to be taken into account when considering the statistics to be extracted from the comparator group remuneration data. The following illustration covers the main statistics typically used for remuneration analysis and in KMP remuneration policies. If the range of companies is too wide in terms of size then the P25 and P75 statistics will be pulled further away from the P50. In these circumstances the P25 and P75 will be reflecting the fact that smaller companies pay less and larger companies pay more. The purpose of the P25 and P75 statistics should be to identify variances in pay practices of companies that are of similar size. If a small group is not balanced, even P50 will be skewed away from the most relevant companies in the sample, eroding the validity of the analysis.

Rank	Value in Decending Order		
1	\$900		
2	\$875		
3	\$870		
4	\$850		
5	\$844	P75	75% of the data falls below this point in the ordered list
6	\$825		
7	\$805		
8	\$790		
9	\$782		
10	\$782	P50/ Median	50% of the data falls below this point in the ordered list
11	\$779		
12	\$760		
13	\$754		
14	\$751		
15	\$748	P25	25% of the data falls below this point in the ordered list
16	\$730		
17	\$725		
18	\$721		
19	\$719		
20	\$711		

A means of minimising the impact of company size on percentiles is to apply a company size limitation on those that may be included in comparator groups. A typically applied size envelope is half to double the company's size. It is noted that this produces a larger range above the target size than below it, however this is often necessary as there tend to be fewer larger companies than smaller companies. It should also be noted that the target size has the same relationship with the bottom of the range, as the top of the range has with the target.

It should be noted that "average" is a statistic that is not shown in the above illustration. This is because it is susceptible to being skewed by abnormally high or low data in the sample for any role. In this regard it should also be noted that not all companies in a comparator group will have disclosed usable KMP remuneration data for each and every role and therefore sample sizes will vary between roles.

Medians on the other hand are not so affected by movements in extreme values or outliers since there is no sum of all values taken as part of the calculation. Therefore medians tend to produce very stable and reliable statistics. Quartiles, the P25 and P75 statistics, are slightly more impacted by changes in extreme values if the order of numbers changes as a result, however even these are generally more stable and reliable than average values.

Ideally, for the reasons outlined, a comparator group should therefore be composed of companies from as tight a range as possible in terms of company size, to support the relevance of the resulting statistics to the target company size and therefore support the validity of the decision making process.

For completeness, it should be noted that mode, as a statistical calculation, has little relevance in remuneration analysis and should not be used.

Size Metrics

There are six main size metrics that may be used and they are outlined below.

Size Metric	Comments
Total Market Capitalisation	This is calculated by multiplying the number of issued shares by the share price. It can be different from ASX Market Capitalisation which only relates to shares that are listed on the ASX and can be less than the total number of issued shares. This metric may be measured at any point in time and therefore can reflect recent changes such as the impact of raising capital via new issues. Analysis indicates that this metric has the strongest correlation with pay levels.
Revenue	This metric is taken from the most recent annual report and therefore relates to a prior year.
Profit	This metric is taken from the most recent annual report and therefore relates to a prior year. Not always a reliable indicator of size.
Assets	This metric is taken from the most recent annual report and therefore relates to a prior year. The relevance of this metric varies with the nature of the company's business.
Employees	This metric is taken from the most recent annual report and therefore relates to a prior year. This metric can be useful as a secondary consideration but is less relevant as a primary company sizing factor. It is not always disclosed.
Enterprise Value	It is calculated as Total Market Capitalisation plus debt. It combines a current metric with a prior year metric and therefore is less reliable/accurate than other metrics. GRG does not favour its use as it can result in pay increases for increasing debt which may not be in the best interests of shareholders.

Industry and Sector

Clearly industry and sector are important considerations in selecting a comparator group. However, selecting sector and industry groups can be challenging. The Appendix to this GRG Remuneration Insight contains a matrix of all companies listed on the ASX after exclusion of Exchange Traded Funds. Of the 67 GICS Industry Classifications only 21 have 20 or more companies. Thus, 46 Industry Classifications do not have sufficient companies to form a comparator group if 20 companies is seen as the minimum acceptable number to form a comparator group. While the minimum number of companies to form an acceptable comparator group may be open to discussion it would be difficult to imagine such a group being much smaller than 20, noting that not all roles will be available from each company and therefore most if not all role samples will be smaller than 20 even when a comparator group is composed of 20 companies. Generally speaking a role sample should have at least 5 points in the sample in order for the statistics to have any degree of reliability, and where the samples are smaller than this they should be supplemented with alternative reference points. Ideally all role samples would be composed of at least 20 points such that a single rank step change in a data point does not change the associated percentile positioning by more than 5%. In samples smaller than 20 the percentile change of a single step in rank is greater than 5%, and in a sample of 5 it would be 20% per rank step indicating that the statistics may become

volatile over time. Stability, reliability and validity are all features that are essential considerations when relying upon statistical analysis to underpin decision making.

If company size as measured by Total Market Capitalisation is used as the envelope within which companies may be selected from an Industry Classification, then out of 670 combinations of size and industry there are only 7 with 20 or more companies. 4 of the 7 are composed of companies with sizes of less than \$25 million Total Market Capitalisation and the other 3 are larger but less than \$250 million. This means that for the vast majority of companies seeking to undertake benchmarking it will not be possible to select a comparator group composed of companies in the same industry and within a reasonable size envelope.

To overcome this impediment an approach that may be used is to:

1. Select the company size envelope based on current Total Market Capitalisation,
2. Exclude companies in irrelevant Industry Groups e.g. for an Industrial & Services company exclude resources and financial services companies,
3. From the remainder select companies that have operating characteristics or business challenges that are similar until a sample of 20 is reached, and
4. Check the availability of data from each of the Companies in the sample in relation to the roles to be benchmarked so as to ensure the samples for those roles is as large as possible in support of the validity, reliability and stability of the analysis.

Evenly Balanced Samples

To the extent possible each sample of companies used to extract and analyse remuneration data for a KMP role should be evenly balanced with an equal number of companies larger and smaller than the company for which the analysis is being undertaken. If the sample is not evenly balanced and of sufficient size then it may produce statistics that are skewed and therefore of little use in assessing market remuneration practice for the role.

Internal Database Composition

Internal databases would be used to assess the market competitiveness of KMP remuneration practice and would not be used to assess relative TSR performance. Thus it would be the equivalent of external market benchmarking but for use by internal remuneration professionals.

The composition of the comparator group would be subject to similar considerations to those discussed earlier in relation to external KMP remuneration benchmarking but with additional requirements to be catered for including:

- a) If significant growth is being pursued or is expected then the comparator groups could be expanded to include larger companies comparable to the company's expected future size,
- b) If the company is considering acquiring or moving into new businesses than it may wish to include companies that already operate such businesses,
- c) If the company is experiencing intense competition for senior executive talent from specific types of companies or clear direct competitors then it may wish to include those companies in the comparator group so that the remuneration practices of particular peers can be examined in detail and to identify industry specific practices.

Relative TSR Comparator Group

Total Shareholder Return

Total shareholder return (TSR) is calculated as the percentage growth of an investment in a company's shares over a period of time assuming that dividends are reinvested into the company's shares.

Relative TSR

As TSR is a percentage, the size of the company in terms of Total Market Capitalisation does not affect the calculation. In theory this allows the TSR's of companies of different sizes to be compared and thereby to judge their relative performance. This theory ignores the fact that a fixed amount of improvement for a small company

will have a larger TSR impact than the same fixed amount of improvement for a larger company. It focuses more on the need for management in each company to achieve proportional returns for shareholders appropriate to their risk profiles.

Relative TSR requires a comparator group of companies to be selected against which the company's TSR will be compared at the end of the measurement period to assess relative performance. The main reason for companies preferring relative TSR performance conditions over absolute TSR performance conditions (company's TSR compared to a yardstick of expected TSR) is to neutralise the possibility of windfall gains from broad market movements caused by changes in economic sentiment or broad sector factors for example.

When selecting comparator groups it is common practice to preferentially include companies from the same industry or to even limit comparator group companies to those in the same industry. Such approaches aim to better reflect the performance of management, as opposed to the market or sector overall, as all companies in industry based comparator groups should be subject to similar industry forces.

Comparator Group Size

Given the comments made above there is no obvious need to constrain the comparator group by reference to company size considerations. However, it should be noted that research has shown that larger companies tend to produce lower TSRs than do smaller companies due to the difficulty in producing proportional changes from a large base. GRG generally recommends a balanced group with an equal number larger and smaller than the client company so as to not disadvantage the client should it arise that smaller comparators on average produce larger TSRs than larger comparators. If the group is skewed towards smaller companies, then this will likely disadvantage management in terms of the difficulty of producing a P50 TSR result. On the other hand if the group is skewed towards larger companies, this may advantage management in that it may be easier for them to produce larger proportional returns than for larger company peers.

Most measurement periods for determining relative TSR performance are 3 or more years. To measure a company's TSR over the measurement period it needs to be listed on the ASX at both the beginning and end of the measurement period. In this regard it should be noted that it is not uncommon for up to 30% of the companies in a comparator groups to cease to be listed on the ASX each year. After 30% per annum loss from a comparator group each year for 3 years there will be only 35% of the original companies left at the end of the 3 years. This has significant implications for the initial size of comparator groups. If 20 to 30 companies is seen as the minimum acceptable residual comparator group at the end of the measurement period then the initial group will need to be between 60 and 85 companies. Ideally the final group would be composed of at least 100 companies such that the change in rank of a single company was equivalent to a single percentile change, strengthening the statistical validity and reliability of the link between performance and reward.

Between the issues of small group size, shrinking group size over time, small numbers of directly comparable businesses and the lack of consideration of relative size in TSR group selection, many executives describe relative TSR performance conditions as a "total lottery", and it is easy to see why. Careful consideration of these factors may limit the lottery effect, however it is generally not possible to eliminate it completely given the size of the Australian market.

Industry Sample Availability

The matrix in the Appendix reveals that there are 21 industry groups with 20 or more companies represented. It constitutes less than one-third of the 67 industry groups. The mix of company sizes in the industry groups indicates that all groups are more heavily populated by smaller companies which could be a problem if it occurs that smaller companies have a tendency to produce higher TSRs than larger companies.

Deeper analysis of the companies in each of these industry groups reveals that the types of businesses represented are not homogeneous. For example, the 30 companies in the Metals & Mining Industry Group in the \$100m to \$250m Total Market Capitalisation range are composed of 3 iron ore miners, 14 gold miners and 13 diversified miners. Clearly the TSR performance of each of these companies will be affected by changes in the prices of different commodities therefore finer grades of industry classification should arguably be used to undertake this analysis prior to the selection of a group.

Appendix – Matrix of Industry & Company Size Ranges

GICS Industry	<\$25 million	\$25 to \$50 million	\$50 to \$100 million	\$100 to \$250 million	\$250 to \$500 million	\$500 million to \$1 billion	\$1 to \$2 billion	\$2 to 5 billion	\$5 to \$10 billion	>\$10 billion	Grand Total
Aerospace & Defense	2	2	0	1	0	0	0	0	0	0	5
Air Freight & Logistics	0	1	3	2	0	0	0	1	1	0	8
Airlines	0	0	0	0	0	0	1	1	1	0	3
Auto Components	4	0	1	0	0	1	0	0	0	0	6
Automobiles	0	1	0	0	0	0	0	0	0	0	1
Banks	0	0	1	1	1	0	0	0	2	4	9
Beverages	5	1	0	1	0	0	0	1	1	0	9
Biotechnology	21	10	7	4	1	0	1	1	0	1	46
Building Products	6	0	0	1	0	1	0	1	0	0	9
Capital Markets	12	7	12	9	3	1	0	0	0	0	44
Chemicals	4	2	1	1	0	1	1	1	2	0	13
Commercial Services & Supplies	18	6	5	7	6	6	5	3	1	1	58
Communications Equipment	3	1	1	0	0	0	0	0	0	0	5
Construction & Engineering	10	7	8	7	3	2	0	0	1	0	38
Construction Materials	1	0	0	0	1	0	1	3	2	0	8
Consumer Finance	3	2	1	1	0	1	0	1	0	0	9
Containers & Packaging	1	1	0	1	0	0	1	1	0	1	6
Distributors	1	0	0	0	1	1	0	0	0	0	3
Diversified Consumer Services	6	4	2	4	2	1	5	0	0	0	24
Diversified Financial Services	33	12	12	16	10	5	2	7	3	1	101
Diversified Telecommunication Services	6	0	2	2	1	2	3	0	2	2	20
Electric Utilities	1	0	0	1	0	0	0	4	0	0	6
Electrical Equipment	8	0	2	0	0	0	0	0	0	0	10
Electronic Equipment, Instruments & Components	8	2	2	3	0	0	0	0	0	0	15
Energy Equipment & Services	11	3	3	2	0	1	1	1	0	0	22
Food & Staples Retailing	2	0	0	0	0	0	1	0	0	2	5
Food Products	6	2	4	4	3	6	1	1	0	0	27
Gas Utilities	1	0	0	1	0	0	0	0	0	2	4
Health Care Equipment & Supplies	13	5	1	5	2	0	1	2	1	1	31
Health Care Providers & Services	6	1	3	3	2	4	4	1	2	1	27
Health Care Technology	0	0	2	0	0	1	0	0	0	0	3
Hotels, Restaurants & Leisure	4	1	2	3	2	2	2	6	1	1	24
Household Durables	1	2	4	1	2	1	0	0	0	0	11
Household Products	0	0	1	0	0	0	1	0	0	0	2
Independent Power and Renewable Electricity Producers	7	1	0	1	0	1	1	0	0	0	11
Industrial Conglomerates	4	1	0	0	0	1	0	1	0	0	7
Insurance	0	1	0	0	1	3	2	0	1	4	12
Internet & Catalog Retail	1	0	1	0	3	0	0	0	0	0	5
Internet Software & Services	3	2	1	5	2	0	0	1	0	0	14
IT Services	5	3	4	4	5	0	1	0	1	0	23
Leisure Products	1	2	1	0	0	0	0	0	0	0	4
Life Sciences Tools & Services	2	0	0	0	1	0	0	0	0	0	3
Machinery	3	3	4	4	1	1	0	0	0	0	16
Marine	2	0	0	0	1	0	0	0	0	0	3
Media	9	3	4	2	4	5	3	2	1	1	34
Metals & Mining	518	60	43	30	12	11	6	3	2	3	688
Multiline Retail	0	0	0	1	1	0	1	1	0	0	4
Multi-Utilities	0	0	0	0	0	0	1	1	1	0	3
Oil, Gas & Consumable Fuels	145	18	19	6	6	4	3	2	2	3	208
Paper & Forest Products	2	0	0	0	0	1	0	0	0	0	3
Personal Products	1	0	0	0	0	1	0	0	0	0	2
Pharmaceuticals	12	5	1	4	0	1	0	0	0	0	23
Professional Services	1	2	0	3	0	1	0	0	0	0	7
Real Estate	0	0	0	1	0	0	0	0	0	0	1
Real Estate Investment Trusts (REITs)	9	0	5	5	13	5	5	1	3	1	47
Real Estate Management & Development	7	3	1	9	3	3	2	1	2	4	35
Road & Rail	0	0	0	1	0	0	0	0	0	1	2
Semiconductors & Semiconductor Equipment	0	0	2	1	0	0	0	0	0	0	3
Software	16	4	1	10	4	2	1	1	0	0	39
Specialty Retail	6	2	2	6	6	1	5	0	0	0	28
Grand Total	963	185	172	178	103	80	63	51	35	36	1866

Red cells: Industries with available samples greater than 20 when company scale is ignored

Green cells: Available samples greater than 20 when both industry and company scale is considered