

# Dual-listed Companies<sup>1</sup>

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## Introduction

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Last year, two Australian companies (BHP and Brambles) used a dual-listed company (DLC) structure to facilitate their international expansion. They joined CRA, which had entered into a similar arrangement with RTZ to form Rio Tinto in the mid 1990s.

DLC structures remain quite unusual in the international context, with only a few in existence in the major countries today. They involve a company linking with a foreign company in a way that allows each to retain its individual identity, but with the shareholders of the two separate companies receiving a claim on the combined earnings as though they had undertaken a conventional merger.

DLCs are an interesting phenomenon because even though in theory the share prices of the two companies, measured in a common currency, should be identical (since they represent identical claims on the future cash flows of the group) in practice substantial divergences in prices are observed. This raises the question of why different markets value the same cash flows differently. This note looks at this issue in relation to the experience of

the three Australian companies involved in such structures.

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## What are DLCs?

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DLC structures are effectively mergers between two companies in which the companies agree to combine their operations and cash flows, but retain separate shareholder registries and identities. In this respect, a dual listing is quite different to a cross listing. Whereas a dual listing involves the (quasi) merger of two separate entities, a cross listing occurs when an individual company establishes a secondary listing on a foreign exchange, the most prominent arrangement being via American Depositary Receipts (ADRs).

One form of DLC involves the two companies transferring their assets to one or more jointly owned subsidiary holding companies. The holding company then passes dividends back to the main companies, which distribute them to shareholders according to a predetermined ratio.<sup>2</sup>

Alternatively, instead of the transfer of assets, there may be contractual arrangements

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1. This article was prepared by Jaideep Bedi and Paul Tennant, International Department.

2. Further details of the different legal structures are given by Hancock, Phillips and Gray (1999).

to share the cash flows from each other's assets. This framework has been adopted in the Rio Tinto, BHP Billiton, and Brambles DLCs. Under this arrangement, the individual companies retain their separate assets but align their operations by having either a single board of directors or identical boards elected through a joint voting mechanism. The companies pay equal dividends to their shareholders, and shareholders have equivalent votes in the decisions regarding the two companies, in line with the relative 'weights' of the two companies established at the time of the creation of the DLC. In the event that one company does not have sufficient earnings to pay the agreed dividend to its shareholders, there are arrangements for an equalisation payment from the other company.<sup>3</sup>

Although the two companies in the DLC provide investors with exactly the same dividend streams, they are traded in different markets and different currencies, and their shares cannot be exchanged for each other. Hence, in the DLC case there is no avenue for pure riskless arbitrage to ensure that the price of equivalent cash flows and voting rights in the two companies should be exactly the same. The difference between the two valuations (expressed in a common currency) is referred to as the premium or discount between the companies. There are several examples where the prices of DLC twins have diverged significantly.

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## Why do Companies Choose DLC Structures?

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In practice, it appears that all DLCs have been the result of mergers between companies domiciled in different countries. The international experience suggests that

companies may choose DLC structures rather than conventional mergers for a number of reasons:<sup>4</sup>

- Tax or accounting factors. A DLC structure may avoid capital gains tax obligations that would result from a conventional merger. Alternatively, differences in national tax systems may favour a DLC structure whereby cross-border dividend payments to shareholders are minimised. Similarly, accounting regimes may favour a DLC over a conventional merger or acquisition if the latter would require recognising and amortising goodwill that results from the merger.
- National identity issues and foreign investment regimes. A conventional merger or takeover would result in the disappearance of one of the companies. Since complicated cross-border mergers typically require various forms of official approval, DLCs that preserve the existence of each company in each market may be the best way of ensuring that approval. In addition, in cases where the two companies are of similar size, the companies may both wish to avoid the appearance of having been taken over.
- Operational and corporate governance issues. The existing contractual arrangements of the companies may cause various types of rights to be triggered (e.g., options in debt contracts, rights of other companies involved in joint ventures) in the event of a takeover or conventional merger. However, these consequences may be avoided if the merger occurs in the form of a DLC arrangement.
- Perceptions of better access to capital markets. Since local investors are already familiar with their respective companies, management may believe that the merged company will have better access to capital

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3. A third type of structure involves shareholders in each company receiving an equity unit that consists of a share in each company. This type of structure was used in the case of the Anglo-Irish Wedgwood/Waterford merger, and in the creation of the Anglo/French EuroTunnel enterprise. In these cases the equity units cannot be split, so that – unlike the other cases discussed in this article – the shares of the two companies do not trade as separate securities.

4. See Hancock, Phillips and Gray (1999), Glanz and Sanderson (2001) and Smith and Cugati (2001) for further discussion of DLCs, and their advantages and disadvantages relative to conventional mergers.

markets if it maintains listings in each market.

- Concerns over ‘flow-back’. In a conventional merger with a stock swap, the merged company will have to choose one country for its domicile and primary listing, and the shareholders from the other country will receive equities in a company domiciled in a foreign market. The merged company will now be a larger company and will see a higher weight in the share market index of its country of domicile, but it will disappear from the index in the other market. A DLC may be chosen if it is thought that a merger would result in selling pressure in one market exceeding increased investor interest in the other market.

However, the fact that most cross-border mergers do not take the form of a DLC implies that there are also possible disadvantages to DLCs. These may include:

- Complexity of operations. The contractual arrangements of DLCs provide procedures for the treatment of the interests of the shareholders of the two companies in the case of capital raisings, asset sales and other events. Nonetheless, the existence of two sets of shareholders may at times constrain the flexibility of management and the full benefits of a more conventional merger may not in practice be realised.
- Regulatory issues. The ongoing operations of the separate companies means that the DLC must satisfy the accounting and regulatory frameworks of two countries. This is likely to be costly, and possibly constrain the ability of management to maximise the joint value of the two companies.
- Liquidity, transparency, and shareholder value issues. In practice, the existence of two separate companies may result in less share market liquidity than would result if there were a single larger company. In addition, investors may view the DLC

structure as somewhat complex and less transparent than a conventional single company. Hence they may value the two parts of the company less highly than they would a single larger company.

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## Analysis of Foreign DLCs

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DLC structures have a relatively long history, with one involving Royal Dutch Petroleum and Shell dating back to 1903. This was followed by the formation of Unilever NV/PLC in 1930. After that, however, there do not appear to have been well-known examples of DLCs until the late 1980s and the 1990s, when seven new DLCs (excluding Rio Tinto) were formed. However, six of these seven new DLCs have since been disbanded (Table 1). Accordingly, there remain in existence only six well-known DLCs, of which Australian firms account for three.<sup>5</sup>

The companies establishing DLC structures have generally cited similar reasons: the DLC structure was seen as a way of merging the two enterprises in a tax-effective manner, while maintaining the stock market listings on both home country markets and retaining the national identities of the firms.

In the cases of the six DLCs that have since abandoned this structure in favour of a single unified share, the decision to unify was typically motivated by a desire to have a less complex structure that is better understood by investors. In several of these cases, the elimination of the price differential between the listings was cited as a factor. Other reasons for unification included greater liquidity for the single share, and an increase in the weight in benchmark indices, particularly in the primary market listing of the company.

One finding in the published studies on DLCs has been that the price differences between the shares of DLC twins can be very large and highly variable.<sup>6</sup> For example, in

5. Another DLC, which is awaiting shareholder approval after gaining regulatory approval, is the proposed UK/US merger of P&O Princess Cruises PLC and Royal Caribbean Cruises Limited.

6. Rosenthal and Young (1990) and Froot and Dabora (1999).

**Table 1: Dual-listed Companies**

Company	Country	Period of DLC
Rio Tinto Limited	Australia	Since Dec 1995
Rio Tinto PLC	UK	
BHP Billiton Limited	Australia	Since Jun 2001
BHP Billiton PLC	UK	
Brambles Industries Limited	Australia	Since Aug 2001
Brambles Industries PLC	UK	
Shell Transport & Trading Co PLC	UK	Since 1903
Royal Dutch Petroleum	Netherlands	
Unilever PLC	UK	Since 1930
Unilever NV	Netherlands	
Reed Elsevier PLC	UK	Since Jan 1993
Reed Elsevier NV	Netherlands	
ABB AB	Sweden	Jan 1988 – Jul 1999
ABB AG	Switzerland	
SmithKline Beecham PLC	UK	Jul 1989 – Apr 1996
SmithKline Beecham	US	
Fortis (B)	Belgium	Jun 1990 – Dec 2001
Fortis (NL)	Netherlands	
Dexia Belgium	Belgium	Nov 1996 – Feb 2000
Dexia France	France	
Nordbanken	Sweden	Dec 1997 – Mar 2000
Merita	Finland	
Allied Zurich PLC	UK	Sep 1998 – Oct 2000
Zurich Allied	Switzerland	

cases like Royal Dutch Petroleum/Shell and Unilever NV/PLC, price differences of up to 30 per cent and large swings within one or two years have not been uncommon. Researchers have been unable to identify fundamental factors that provide a convincing explanation for the existence of such large and variable price differences between DLC twins.

One interesting finding by Froot and Dabora (1999) is that although the level of the premium or discount between twins may be hard to explain, it is possible to explain some of the changes in the price difference. In examining the cases of Royal Dutch Petroleum/Shell, Unilever NV/PLC, and SmithKline Beecham, Froot and Dabora find that prices of individual twins showed 'excess comovement' with the local stock market index in the country where most of the twins' trading occurs. For example, the price of Royal Dutch was affected relatively more by developments in the US stock market (where

it traded most actively, in the form of an ADR) while the price of Shell was influenced relatively more by movements in the UK stock market (where it traded most actively). Hence changes in the premium or discount between twins were partly explained by relative movements in the relevant national stock market indices. This finding has been widely interpreted as evidence that asset prices are partly determined by the sentiment in the markets where trading occurs.

Although it is hard to explain why different markets should attach different valuations to the same set of cash flows, there are other related examples of apparently anomalous asset pricing. For example, closed-end mutual funds or listed investment trust funds frequently trade at premia or discounts to their net asset value. A factor that is common to both the DLC and closed-end fund cases is that it is not possible to undertake pure arbitrage trading to take advantage of such

price differentials. Although an investor in principle can take a short position in the relatively expensive asset and a long position in the relatively cheap one, this is risky as price differentials may subsequently widen, resulting in losses for the investor. This was indeed the experience of Long-Term Capital Management (LTCM), which held ‘arbitrage’ positions in Royal Dutch/Shell that resulted in losses when the price differential widened.<sup>7</sup>

The six cases of unification of DLCs allow one to observe what happens to the prices of the individual twins when unification is announced. In all six cases, the unification involved the conversion of shares at the ratio implied by the distribution of voting power and dividends, rather than at a ratio implied by current market prices. Not surprisingly, the pricing of the twins converges in these cases, but it is of interest to ask if this occurs via an increase in the value of the company that is trading at a discount or a fall in the share price of the twin that is trading at a premium. Alternatively, both share prices might rise, or both might fall.

The limited number of events makes it difficult to draw firm conclusions about how the prices of each twin respond. However, some preliminary analysis suggests that the twin that was trading at a discount (four of the six cases were characterised by a significant price differential between the twins) on average saw price increases.<sup>8</sup> In some instances the premium company fell slightly in price, but the net result for the value of the combined company tended to be a modest increase in market value.

These findings are presumably a result of the particular way that the share unification occurs. In particular, unification typically

involves the company putting the new single primary listing on the market that had placed the higher valuation on the cash flows of the twin companies.<sup>9</sup> That is, management was undertaking a form of arbitrage by closing out the dual listing in the market that attached a lower valuation and moving the entire listing to the market which valued the company more highly.

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## The Three Australian/UK DLCs

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Three Australian companies are now part of DLCs as a result of mergers with UK-listed firms. The first DLC resulted from the 1995 merger of the Australian mining company CRA and UK-listed RTZ, which already held a 49 per cent stake in CRA. The two companies in the DLC have subsequently been renamed Rio Tinto Limited (which is traded on the ASX) and Rio Tinto PLC (which is traded on the London Stock Exchange). The reasons cited for implementing a DLC structure, rather than an outright merger, were the preservation of the franking of CRA’s dividends and the minimisation of capital gains tax liabilities. The voting rights and dividend flows of the group are divided approximately in the ratio of 77/23 between the shareholders of the UK and Australian companies, respectively.<sup>10</sup> The relative valuation of the two companies has shown significant variation, and each company has traded at a significant premium at different times. The Australian stock has traded at an average discount of around 2 per cent over the

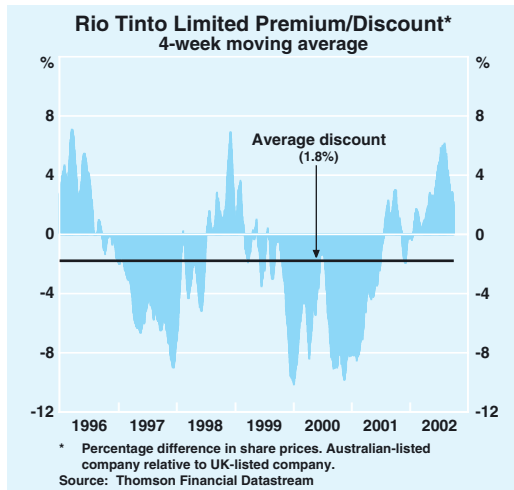
7. See Lowenstein (2000) for further details on LTCM’s US\$2.3 billion position in Royal Dutch and Shell.

8. The fact that the unification announcement was often also accompanied by other announcements that might have also affected the value of the companies means that the results should be regarded as tentative.

9. The case of Fortis – where there was little discount or premium – is an exception, since the single share structure that eventuated did not have a single primary listing but had a dual primary listing on the Belgian and Amsterdam exchanges.

10. Under the terms of the merger, in cases where the companies did not share a common interest, the 49 per cent of CRA held by RTZ would not be used to cast votes. The RTZ holding in CRA has since been reduced to about 37 per cent.

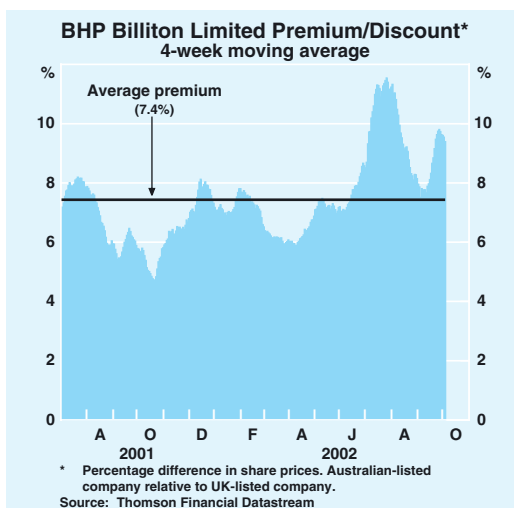
**Graph 1**



entire period, but at an average premium of 2 per cent over the past year (Graph 1).

BHP was the second Australian company to enter into a DLC structure when it merged with Billiton, a UK/South African firm, in June 2001. The reasons cited for choosing the DLC structure were similar to those cited in the Rio Tinto case, including taxation and accounting benefits. The voting rights and dividend payments in BHP Billiton are now divided 60/40 between the shareholders of BHP and Billiton, respectively. The Australian arm of the DLC has traded at a significant

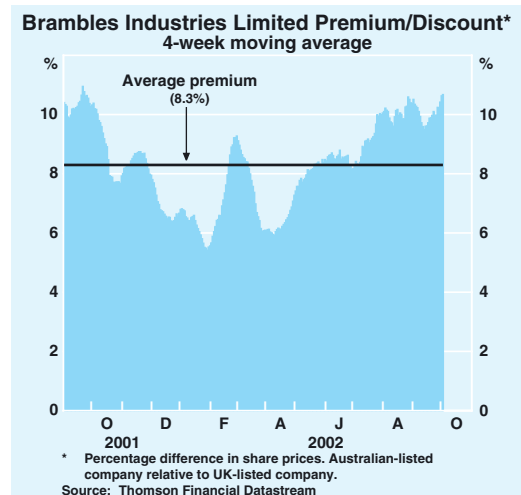
**Graph 2**



premium since the merger, averaging around 7 per cent (Graph 2).

Brambles became the third Australian company in a DLC when it merged with the industrial services arm of GKN in August 2001. Just as there had been pre-existing ownership links between the Rio Tinto companies, Brambles and GKN had an existing relationship, including joint ventures. In this case, management referred to a desire to avoid potential flow-back effects that might have resulted from a conventional merger. Brambles shareholders hold a 57 per cent voting interest in the combined group, and GKN shareholders 43 per cent. Similar to the BHP Billiton case, the Australian arm of Brambles has traded at a significant premium, which has averaged around 8 per cent (Graph 3).

**Graph 3**



The three Australian companies now involved in DLCs provide three new cases to test the ‘excess comovement’ phenomenon observed by Froot and Dabora (1999). Although the samples for BHP Billiton and Brambles are short, statistical tests suggest that the three Australian/UK DLCs are also subject to excess comovement. In particular, the results imply that a 10-day period when the Australian equity market outperformed the UK equity market (in a common currency) by 10 per cent would on average be



accompanied by an increase of about 3 per cent in the price of the Australian twin relative to the UK twin, and vice versa for periods of underperformance.

The implication of these tests is that although the future cash flows that are being traded on the Australian and UK markets are the same, the pricing of the cash flows in the different markets is apparently influenced in the short run by differences in the relative performance of the two national markets. This may be one explanation why the relative valuation of the Australian twins tended to increase in the first half of 2002 in line with the stronger performance of the Australian equity market during that period.

However, excess comovement appears to be largely a short-run phenomenon<sup>11</sup> and would not appear to be able to explain why the value of one particular twin might be persistently higher than the other over long periods of time. As noted earlier, academic research has yet to find any consistent explanation for such divergences. In the case of the Australian

DLCs, fundamental factors (such as tax or liquidity factors) also appear to be unable to explain either the magnitude or variability of the price divergences.<sup>12</sup>

The implication is that the price divergences reflect a range of behavioural factors affecting investors, such as their perceptions of the companies involved and the quality of the market infrastructure, including stock exchanges, that support trading in these companies' shares. For example, a company that has 'icon' status in a particular country may benefit disproportionately from the home-country bias of investors in that country. While the reasons for on-going price divergences remain unclear, the fact that two of the three DLCs involving Australian companies have persistently traded at a significant premium in the Australian market relative to the UK market tends to refute claims that Australian companies can increase shareholder value by shifting their listing to larger overseas exchanges.

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11. Indeed the statistical tests establishing excess comovement over 10-day periods also suggest that this result is unwound somewhat over future periods.

12. An alternative explanation that has been suggested is that divergences might reflect exchange rate expectations. This explanation seems highly unlikely, and it appears that the price differentials do not have any predictive power for the exchange rate.