

Sizing the Prize: Assets and Earnings in Large JVs

Macro analysis of corporate assets and untapped earnings in material joint ventures

JOINT VENTURES account for far more value and untapped financial upside than almost anyone appreciates. Based on our analysis, the material joint ventures that are partially owned by at least one publicly-traded company alone account for \$1.7-2.0 trillion in corporate assets today¹.

Because joint ventures tend to underperform wholly owned assets, this conservatively translates into \$15-36 billion in incremental annual earnings. For the eight largest integrated international oil companies, for example, this represents more than \$1 billion in added annual profits per company.

It is time for public investors to take notice. A decade after being awakened to the importance of corporate governance, it is now time for public investors, and the corporate boards who represent them, to pay more attention to the performance and health of large joint ventures.

Summary of our analysis

To assess the value that could be restored to public company shareholders through improved joint venture governance and shareholder management, our approach hinged on two estimates: 1) the overall value in joint ventures of public companies, and 2) the untapped upside potential in joint ventures.

Because there are tens of thousands of joint ventures around the world with public company shareholders, we chose to limit our analysis to material joint ventures with at least one public company owner. Our approach initially focused on two joint venture-intensive industries: petroleum and mining.

In dimensioning the petroleum and mining industries, we conducted a detailed, bottom-up review of the individual joint venture portfolios of the 8 majors in petroleum and 6 majors in mining. For these 14 companies alone, we identified \$503 billion in assets and \$72 billion in annual earnings wrapped up in large joint ventures (Exhibit 1). It is worth underlining the relative importance of large joint ventures to major oil and mining companies. The average petroleum major has 40 material joint ventures, while the average mining major has 17 such entities. If we include smaller joint ventures of the petroleum majors, our research and analysis suggests that the figure is much higher, with 70-80% of upstream, 40-50% of midstream, and 10-30% of downstream assets in joint ventures.

How much value can be restored? To calculate the value improvement potential in joint ventures, we divided the material joint ventures into four performance categories:

¹ As a general rule of thumb, joint ventures with at least \$500 MN in revenue, investment or assets are deemed material. However, material joint ventures also include smaller joint ventures that are strategically significant and have significant growth potential. Also, please note that a broader accounting for all – not just material – joint ventures of public companies would likely increase this number by 2-3 fold.

good performers, mild underachievers, performance challenged, and gross underperformers (Exhibit 2). Each category was defined by its relative placement on three dimensions:

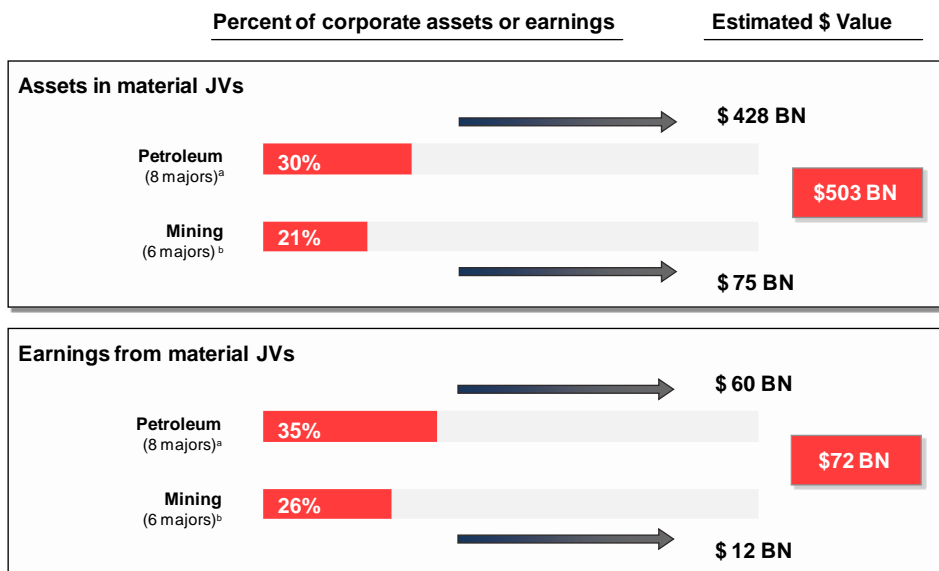
- Current financial, strategic and operational performance (i.e., outcome performance)
- Longer-term outcome performance trend (i.e., was performance/underperformance a sustained phenomenon or a temporary blip)
- Extent to which governance and other shareholder issues were a cause (as opposed to wider market forces, operational issues, etc.)

Each of the four categories was then awarded an “improvement potential” score – i.e., a reasonable percentage improvement in annual earnings that would come from adopting strong governance and shareholder

management practices. The largest improvement areas typically relate to: decision making processes and speed; better access to parent company resources, expertise and data; upgrades to company and individual financial incentives to make the joint venture succeed; reductions in the “tax” that parent companies are placing on the joint venture management team through excessive reporting requirements and information requests. The base earnings were calculated from corporate level return on asset numbers.

Performance improvement percentage allocations (ranging from 0% to 35%) were based on our direct experience in some 100 large joint venture restructuring situations, interviews with several hundred joint venture Board members and CEOs, and a meta-analysis of our research and that of others on joint ventures².

Exhibit 1
Assets and annual earnings in material JVs for majors in petroleum and mining



^aPetroleum majors = Exxon Mobil, Shell, BP, Chevron, ConocoPhillips, Total, Eni, Statoil
^bMining majors = BHP Billiton, Rio Tinto (including Alcan), Anglo American, CVRD, Xstrata, Alcoa

²For instance, according to an analysis by Gomes-Casseres and Jenkins of US Commerce Department foreign investment data, the return on assets on a large sample of joint ventures and other non-controlling interests in foreign companies was 4.4 percent, far below the 6.4 percent for wholly-owned or controlled-businesses. See Benjamin Gomes-Casseres and Mauricio Jenkins, “Value destruction in joint ventures? Why US JVs abroad are less profitable than wholly-owned ventures,” Working Paper, July 2003.

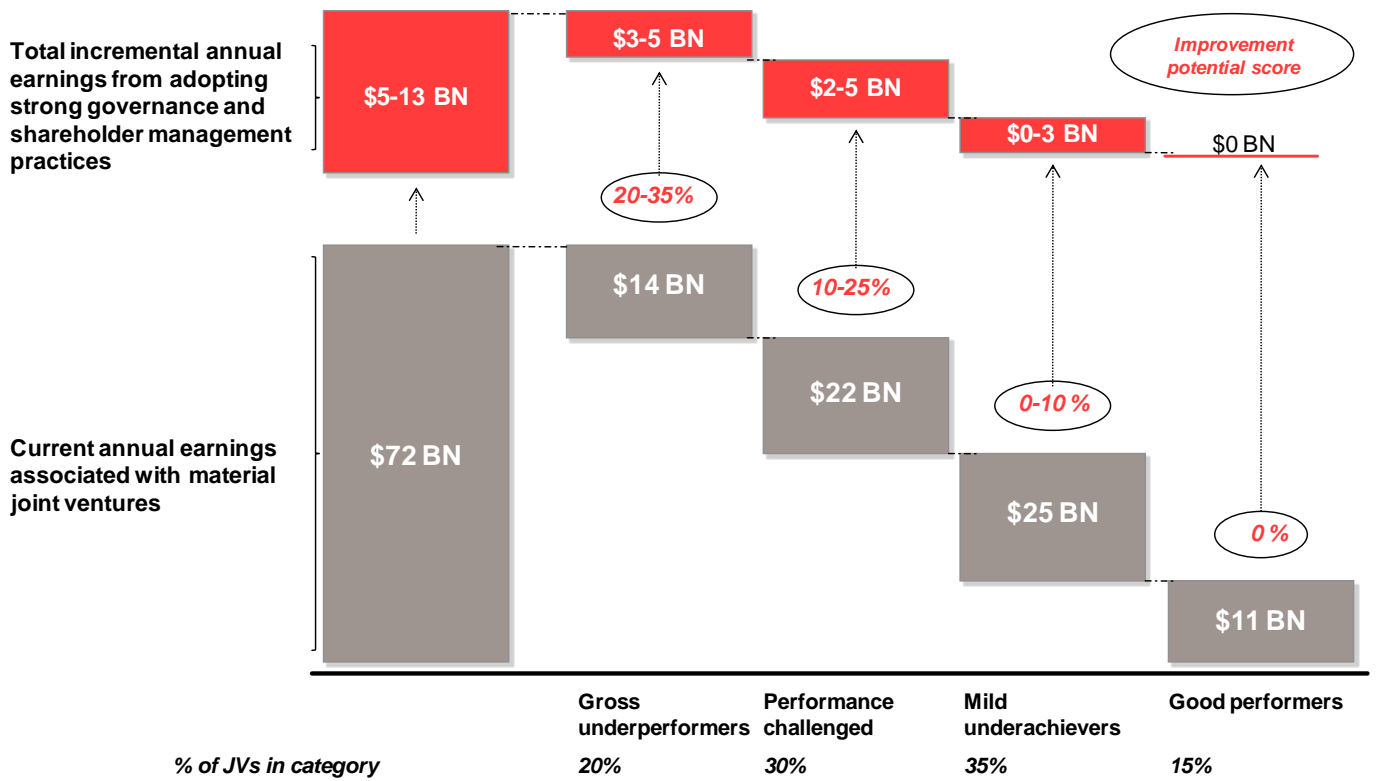
We then allocated a proportion of large joint ventures to each category. This analysis generated an overall joint venture improvement potential of \$5-13 billion in the petroleum and mining majors.

In extending this analysis to non-majors in petroleum and mining, and then to public companies in other industries (Exhibit 3), we leveraged our proprietary cross-industry database and detailed records of more than 1,200 material joint ventures, and our understanding of the respective nature and volume of joint ventures in each industry. This analysis shows that there is an additional \$1.2-1.5 trillion in assets in material joint ventures in the corporate portfolios of other companies and industries. Assuming performance improvement profiles similar to petroleum

and mining, and base earnings calculated from industry level return on asset numbers, we conclude that there is *at minimum* an additional \$10-23 billion in value restoration available to companies, and by extension, their public shareholders.

Limitations of this analysis: This analysis is not perfect. For instance, our asset calculations make no adjustments for the current value of historical investments; similarly, earnings calculations do not account for differences in the scope, return and risk profiles of individual joint ventures. But it is a very conservative estimate overall, and we believe that a true bottom-up analysis that aggregates data from individual joint ventures will produce much higher figures.

Exhibit 2
Potential incremental annual earnings from material JVs for majors in petroleum and mining



- Gross underperformers: Characteristics**
- Poor current outcome performance (strategic, financial, operational)
 - Underperformance over a longer period (i.e., >2 performance cycles)
 - Primary cause – shareholder and/ or governance issues, and not factors beyond the control of management, Board, parents

- Good performers: Characteristics**
- Good current outcome performance (strategic, financial, operational)
 - If underperformance, temporary (i.e., not more than 2 performance cycles)
 - Primary cause – factors beyond the control of management, Board, parents, rather than shareholder/ governance issues

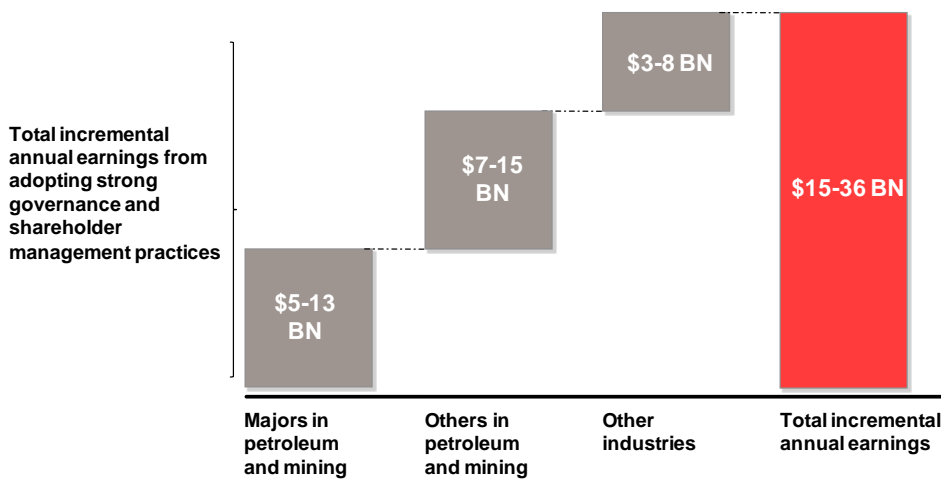
Source: Water Street Partners

Implications for investors and boards

This data – including that there are some 2,000 billion-dollar joint ventures in the world (Exhibit 4) – has tremendous implications. For starters, it means:

- ¶ Public investors need to pay more attention to large joint ventures – and demand greater transparency on the performance of and practices within these ventures³.
- ¶ Joint venture Boards should put in place a regular process for evaluating – and proactively improving – the governance and other aspects of the working relationship between these ventures and their corporate shareholders⁴.
- ¶ Parent companies need to reward top talent for working inside joint ventures and serving on joint venture boards. For context, less than 10 percent of the 40 most joint-venture intensive companies in the world – i.e., companies that have invested tens of billions of dollars in joint ventures – have any explicit expectation that high-potential employees should spend time during their careers working in a joint venture environment. As a result, the proportion of top-talent in joint ventures is generally far lower than wholly-owned businesses⁵.

Exhibit 3
Total value improvement potential – material joint ventures of public companies
 Annual earnings



Source: Water Street Partners

³A few companies are starting to disclose more information about their largest joint ventures. For instance, Dow Chemical recently released a whitepaper on its joint ventures, providing the public and investors additional transparency into its largest joint ventures and their financial impact. See Dow Chemical, “Joint Venture Whitepaper”, April 2008.

⁴Water Street Partners has developed a highly structured analytical tool and underlying approach for assessing joint venture performance and health from a joint venture perspective. This tool is designed to quickly help joint venture Boards identify gaps and improvement opportunities – and to benchmark themselves in relation to other large joint ventures. This tool – *The Independent Venture Assessment* – complements other reviews (operational, financial, risk management, etc.) that the Board would sponsor as part of its oversight of the business, and is focused on a detailed set of joint venture-specific features.

⁵For an earlier view of our thinking on the sources of value in, and process for, restructuring and improving the performance of large joint ventures, please see our article in *Harvard Business Review*, “Your Alliances Are Too Stable,” (David Ernst and James D. Bamford), June 2005.

Further, joint venture Boards and CEOs need to better understand what good practices look like – and how the unique structural attributes of joint ventures affect these practices. In fact, this is the reason why we created *The JV Exchange*.


Subsequent issues will explore different practical approaches to managing unique features of large joint ventures – whether that is about compensation plans for secondees, streamlining capex review processes, or novel approaches to exercising influence as a minority partner. Stay tuned. 

Exhibit 4
Examples of some material joint ventures in publicly listed companies

Joint venture name	Est. size	Partners	Stakes	Description
<i>Joint ventures in petroleum & metals/mining</i>				
Motiva	\$ 31 BN ¹	Shell, Saudi Aramco	50:50	Refining and marketing in eastern-south eastern US
Syncrude	\$ 30 BN	Imperial/ Exxon, Conoco, others	25:9:66	Crude oil production from Canadian oil sands
GS Caltex	\$ 20 BN ¹	GS Holdings, Chevron	50:50	Refining and petrochemical operations in South Korea
Escondida	\$ 8 BN ¹	BHP Billiton, Rio Tinto, others	58:30:12	Copper mining in Chile
BP-Husky	\$ 6 BN	BP, Husky Energy	50:50	Integrated oil sands – up and downstream – in N. America
Cerrejon	\$ 5 BN	Xstrata, Anglo American, BHP	33 each	Production and sale of coal in Columbia
Sapa AB	\$ 4 BN ¹	Alcoa, Orkla	46:54	Downstream aluminium (extrusions) in Europe
Trans Adriatic Pipeline	\$ 3 BN	Statoil, EGL	50:50	Gas transportation pipeline across the Adriatic Sea
Darwin LNG	\$ 3 BN	Conoco, Eni, others	57:12:31	Production and sale of LNG in Australia
California Steel	\$ 1 BN ¹	Vale, JFE	50:50	Steel manufacturing in the US
<i>Joint ventures in other industries</i>				
Vodafone Essar	\$ 19 BN ²	Vodafone, Essar, others	52:33:15	Cellular operator in India
MillerCoors	\$ 7 BN ¹	SABMiller, Molson Coors	50:50	North American brewer
Shanghai Volkswagen	\$ 7 BN ¹	Volkswagen, SAIC	50:50	Automobile manufacturing in China
Transrapid	\$ 4 BN ³	Siemens, ThyssenKrupp	50:50 ⁴	Commercialization of magnetic levitation technology in rail
RBS Sempra	\$ 3 BN ²	RBS, Sempra	51:49	Commodity trading
ING Australia	\$ 3 BN ²	ING, ANZ	51:49	Fund management in Australia
United Space	\$ 2 BN ¹	Lockheed, Boeing	50:50	Operates multi-purpose space systems
Merck-Schering Plough	\$ 2 BN ¹	Merck, Schering Plough	50:50	Development and marketing of cholesterol mgt. products
IM Flash	\$ 2 BN	Intel, Micron	51:49	Nand flash development and manufacturing
Dairy Partners	\$ 1 BN ¹	Nestlé, Fonterra	50:50	Manufacturing and sales of dairy products in N. America

1. Revenue; 2. Capitalization/ valuation; 3. Value of one (of many) projects; 4. Estimate

Source: Water Street Partners

THE JOINT VENTURE EXCHANGE

The Joint Venture Exchange is a forum that connects senior joint venture practitioners, including joint venture Board members and CEOs, through the sharing of ideas, practices and experiences unique to joint ventures. It was conceptualized, and is managed by Water Street Partners, a boutique consulting, research and information services company focused exclusively on joint ventures and partnerships.

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