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A new approach to interim incentive fee payments

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Introduction

One of the most important and heavily negotiated elements of manager compensation has been, and will continue to be, the incentive fee or 'promote'. There are many factors that get baked into a promote structure, and these factors are summarised in Chapter 4, *Crafting carried interest provisions: Legal issues related to current market trends in compensation* by John H. Kuhl and Amy H. Wells of Cox, Castle and Nicholson LLP. This chapter focuses in detail on just one of those factors – whether a general partner or manager should receive incentive fee payments prior to the full realisation of an investment programme, and if so, how should such interim incentive payment(s) be structured.

The pros and cons of interim incentive fee payments

Institutional investment vehicles can be divided into two general types. The first is a closed-end fund structure wherein there is an investment period and a harvest period. Although there might be some ability for a manager to reuse capital, particularly early in the life of a fund, this structure generally is characterised by a finite life, one turn of capital, and an exit from the investment vehicle within a (more or less) defined period, typically in the range of seven to ten years. The issue of interim incentive fee payments may or may not arise in these structures.

The second type of structure comes with more variations and includes open-ended funds, programmatic joint ventures, separate accounts (with or without co-investment) as well as other options that do not have a finite life.¹ Some of these investment vehicles do not have an incentive fee component. For example, often, although not always, there will be no incentive fee in a closed-end fund or a separate account with no co-investment. However, some do have an incentive fee and, because there is no obvious 'end of the deal' as there is with closed-end funds, the question of when to pay, and how to calculate, interim incentive fee payments arises quite frequently.

Irrespective of the type of structure, the argument against an interim incentive fee payment is fairly straightforward and is an argument that comes from the investors' perspective: until assets are sold, there are no realised profits and managers should not earn incentive payments until investors have received all of their capital back and received all of their preferred return. In addition, allowing interim payments opens up the possibility that if future performance is not as good as projected, the manager

¹ There may be legal limits on the life of these investment vehicles, but from an economic perspective, the termination dates are so remote that they are managed as though they will go on forever, at least early in their term.

**Interim incentive
fee payment
from the investor
perspective**

may receive incentive payments even if the investors do not, ultimately, receive all of their capital and/or preferred return.²

The arguments from a general partner's or investment manager's perspective in favour of interim incentive fee payments are both more numerous and more nuanced. Some of the more common ones are summarised as follows:

- Limited partners are often pension funds, foundations/endowments, sovereign wealth funds and the like. These entities have very long investment time horizons and have financial mandates that transcend the economic horizons of the 'mere mortals' that comprise general partners and investment managers.
- Paying investment managers only on realised profits will create an incentive from the manager's perspective to sell assets even when the most appropriate approach for the real estate may be to hold an asset.
- Investment managers working for institutions with a long time horizon need to compete for investment talent with other firms that work for non-institutional investors, with contracts that allow these other firms to compensate their people based on the performance of an individual's deals. In order to compete with these firms for the best talent, it is necessary to have some mechanism for paying investment professionals before a fund ends or an institutional investor decides to liquidate an asset.

Institutional investors have not been unsympathetic to the arguments above and generally have been willing to consider some form of interim incentive fee payment system for very long-duration funds or investment management relationships with no fixed termination date. However, introducing the concept of interim incentive fee payments into a compensation system creates two problems for investors.

First, there is the obvious risk alluded to above that a portfolio will experience degraded performance in the future and the prior incentive fee payments will prove to have been excessive.

Second, there is a less obvious problem, and it is that, in most interim payment systems currently seen in the market, interim incentive fee payments tend to unduly degrade investor performance (as measured by the internal rate of return (IRR)) even if future fund performance meets *pro forma* expectations.

The remainder of this chapter introduces a new approach to interim incentive fee payments that allows investment managers to potentially secure some compensation as each asset is realised while accomplishing two key goals for investors: a) minimising the possibility of the need for a clawback, and b) ensuring that the investors' IRR is not negatively impacted by virtue of having allowed the investment manager to receive some of its compensation early.

² The discussion here often digresses into discussions of clawbacks, which would allow investors to recoup any overpayment.

**Introducing
a protocol for
interim promote
payments (PIPP)**

Approaches
to determining
interim incentive
fee amounts

There are two key elements to PIPP, and these two elements are severable, that is, either element of PIPP could be used even if the other were jettisoned. These two elements are: 1) the approach to calculating the interim incentive fee payments and 2) the mechanism for later 'true-up' interim incentive fee payments after subsequent performance is accounted for.

There are three common methodologies used to compute the amount of an interim incentive fee payment, two of which are simple, but the third one, the one recommended here, is more complex.

The first of the simple approaches is to pay interim incentive fees based solely on the performance of an individual asset as it is realised. This is a manager-friendly approach because none of the incentive fee paid to the manager from a well-performing asset is returned to the investor if and when other assets perform poorly.

The second of the simple approaches is based on the actual cash flows of a portfolio in its entirety. Once there has been sufficient cash flow to return all capital and pay all preferred return, incentive payments begin. This is an investor-friendly approach although the degree of friendliness can decrease if it is still possible that the investor may be required to contribute additional capital after interim incentive payments have started.

The third approach is more complex, but offers elements that make it appealing to both managers and investors. It provides an investment manager early compensation, but provides a degree of protection to the investor by self-correcting the interim incentive payment as each asset is realised, unlike the first approach. This rolling-realised approach involves calculating an interim incentive fee payment based on the 'sub-portfolio' of projects that have been realised to-date.

Table 5.1 illustrates the individual asset, and rolling-realised portfolio, cash flows for a scenario where the first and third assets overperform the hurdle, but the second asset underperforms it. This type of scenario will result in an initial incentive fee payment, after sale of the first asset; followed by no incentive fee payment at the sale of the second asset; followed by a final incentive fee payment that is reduced, possibly even to zero, in order to correct for the fact that the second asset did not even meet the hurdle. The bottom of Table 5.1 indicates the likely pattern of interim payouts for this scenario of assets. The exact amounts of the incentive fee payments will depend on the particulars of the true-up mechanism, which is to be discussed in the next section.

There are substantial degrees of sophistication that can be incorporated into a rolling-realised methodology, which include a) payment to the manager of only a portion of the amount calculated, with the remainder retained by the investor or placed in a reserve account as a contingency against poor performance of not-yet-realised

Table 5.1: **Rolling realised portfolio illustration (all \$ values in millions)**

Asset cash flows			
	Asset #1	Asset #2	Asset #3
Asset IRR	11.6%	6.2%	16.8%
Year #1	-\$100.0	-\$50.0	
Year #2	\$6.0	\$4.0	-\$75.0
Year #3	\$6.0	\$4.0	\$6.0
Year #4	\$125.0	\$4.0	\$6.0
Year #5		\$50.0	\$6.0
Year #6			\$115.0
Rolling realised portfolio cash flows			
	Asset #1 only	Assets #1 and #2	Assets #1, #2, and #3
Portfolio IRR	11.6%	9.6%	12.3%
Year #1	-\$100.0	-\$150.0	-\$150.0
Year #2	\$6.0	\$10.0	-\$65.0
Year #3	\$6.0	\$10.0	\$16.0
Year #4	\$125.0	\$129.0	\$135.0
Year #5		\$50.0	\$56.0
Year #6			\$115.0
Likely result:	Generates an interim fee payment	Generates no interim fee payment	Generates a small self-correcting interim fee payment

Source: Bard Consulting.

assets; b) making payments contingent on projected performance being satisfactory; and c) clawbacks and guarantees. Generally, these additional provisions would serve to protect investors from poor performance of as-yet unrealised assets.

Approaches to
true-up interim
incentive fee
payments

There are multiple approaches that could be envisioned to true-up later incentive fee payments in order to properly adjust for payments that have been made earlier, three of which will be examined herein. For purposes of comparison, a hurdle rate of 10 per cent and a promote rate of 20 percent are assumed.

The most popular approach to a portfolio true-up is to simply compute the 'ending promote amount' that would be payable on liquidation of the latest asset in a

Table 5.2: **Example of first approach (all \$ values in millions)**

Approach: Subtract prior payments from computed 'ending incentive fee' amount

	Without considering mid-term payment			Considering interim payment		
	Cash flow before incentive fee	Incentive fee if paid at end	Cash flow after incentive fee	Interim incentive fee payment	Final incentive fee payment	Cash flow after incentive fee
IRR	15.00%		14.13%			13.86%
Year #0	(300.0)		(300.0)			(300.0)
Year #1	(285.0)		(285.0)			(285.0)
Year #2	35.0		35.0			35.0
Year #3	36.8		36.8			36.8
Year #4	38.6		38.6	(\$34.0)		4.6
Year #5	40.5		40.5			40.5
Year #6	42.5		42.5			42.5
Year #7	44.7		44.7			44.7
Year #8	46.9		46.9			46.9
Year #9	1,422.9	(104.3)	1,318.6		(70.3)	1,352.6

Source: Bard Consulting.

portfolio³ and simply subtract any prior interim incentive fee payments from that amount. While this seems quite intuitive, the result of such a scheme would be to lower the investor's IRR considerably, with the degree of significance being a function of the timing and the amount of the interim incentive compensation payments.

As an example, the left-hand side of Table 5.2 illustrates a scenario where the investor would receive a 14.13 percent IRR if the manager were to agree to wait until the realisation of the final investment before getting paid its incentive fee (which, in this case, would be \$104.3 million). The right-hand side of Table 5.2 shows the amount of the final payment and resultant investor IRR for a scenario where there is only one interim incentive fee payment, assumed to be \$34.0 million, in year four. The investor's IRR is 13.86 percent, about 27 basis points less by virtue of paying some incentive fee early; and the total fee paid is, of course, still \$104.3 million.

A second approach (not illustrated), which is a modification of the first approach above, is, in essence, to charge the manager interest on any interim incentive fee

³ The true-up could also occur at some fixed interval if an investor desires to have an indefinite hold period and is willing, on occasion, to true-up based on unrealised assets.

payments received by determining the future value of payments received and then deducting that amount from the final incentive fee calculation. The particular 'interest rate' or 'future value rate' in a deal would be subject to negotiation. Using the same data as shown in Table 5.2, and applying a 10 percent interest rate would change the final payment from \$70.3 million to \$49.6 million which in turn increases the investor's IRR to 14.04 percent, but is still about nine basis points less than the 14.13 percent IRR that would result if no interim incentive fee payments were allowed.

We prefer a third approach which, in some respects, is a special case of the second approach, and, in other respects, is unique. Our suggested approach is decidedly investor-friendly. The theory is that, if an investor commits capital to a portfolio, it is reasonable for that investor to expect that the manager investing the capital should be compensated based on the performance of that capital in its totality: that is, on a portfolio basis. While, as discussed above, a manager may have some good arguments as to why the investor should acquiesce to paying that manager some incentive fees before all of the portfolio assets are realised, there is no reason that the investor's rate of return should suffer as a result of making such a concession.

Therefore, we propose that the truing-up of interim incentive fees should be based on the principle that the investor should realise the same IRR whether or not there have been any interim incentive fee payments. This approach is illustrated in Table 5.3.

As noted earlier in this example, the investor would receive a 14.13 percent IRR if they were to wait until the realisation of the final investment before paying the manager an incentive fee (which in this case would be \$104.3 million). However, in our example we have hypothesised an interim incentive fee payment of \$34.0 million in year four. After taking into account that \$34.0 million interim payment, when the final assets are realised in year nine, a final incentive fee payment of \$38.5 million would be made to the manager, as this is the payment that results in the investor achieving the same 14.13 percent IRR that they would have received if there had been no interim incentive fee payment.

The manager, in this example, receives promote payments of \$34.0 million in year four and \$38.5 million in year nine for a total of \$72.5 million. This is lower than the \$104.3 million that would have been paid to the manager if the entire payment were to be made in year nine, in essence, because dollars paid in year four are more valuable than dollars paid in year nine.

Additionally, this total of \$72.5 million is \$31.8 million less than the amount paid in the first approach, where interim payments are simply deducted in nominal dollars; and it is also \$11.1 million less than the amount paid in the second approach where the manager is charged interest at a 10 percent rate.

**PIPP: An
integrated
example**

What follows is a detailed example of both elements of PIPP delineated via Tables 5.4 through 5.9. Specifically, PIPP uses a rolling-realised portfolio and, each time an additional interim promote payment is being considered, PIPP trues up the prior payments

Table 5.3: **Example of third approach (all \$ values in millions)**

Approach: Charge the manager interest at the rate of return that the investor would earn if the 'ending incentive fee' were paid at the end

	Step A Without considering mid-term payment			Step B and Step C Considering interim payment		
	Cash flow before incentive fee	Incentive fee if paid at end	Cash flow after incentive fee	Interim incentive fee payment	Final incentive fee payment (2)	Cash flow after incentive fee
IRR	15.00%		14.13%			14.13%
Year #0	(300.0)		(300.0)			(300.0)
Year #1	(285.0)		(285.0)			(285.0)
Year #2	35.0		35.0			35.0
Year #3	36.8		36.8			36.8
Year #4	38.6		38.6	(34.0)		4.6
Year #5	40.5		40.5			40.5
Year #6	42.5		42.5			42.5
Year #7	44.7		44.7			44.7
Year #8	46.9		46.9			46.9
Year #9	1,422.9	(104.3)	1,318.6		(38.5)	1,384.4

Step A:
Calculate the IRR that the investor would receive if no interim incentive payments were made.

Step B:
Subtract any interim incentive fee payments from the cash flows but ignore the incentive fee calculated in Step A.

Step C:
Solve for the final incentive fee payment that results in the investor achieving the same IRR as achieved in Step A.

Source: Bard Consulting.

by using the after fee IRR of the 'to-date' rolling-realised portfolio cash flows. The example is based on a deal structure where the manager earns a 25 percent promote over a 12 percent hurdle for the investor.

Table 5.4 details the computations associated with the first asset realised in the portfolio. It is assumed to have generated a 20 percent IRR before incentive fees. At this point, there is a rolling realised portfolio of one asset. For simplicity, we have assumed that the investor has received all prior distributions from this asset. There are \$31 million dollars of excess proceeds above the assumed 12 percent hurdle and, with an assumed promote rate of 25 percent, the manager is entitled to about \$7.7 million. This amount is paid to the manager, as shown in Step 1. Step 2 shows the resultant cash flows and IRR earned by the investor so far.

Table 5.4: **First-asset sale computations (all \$ values in millions)**

				Hurdle rate	12%	Promote	25%
First asset		Step 1: Promote computation	Analysis after sale of first asset	Step 2: IRR to investor			
Computed IRR	20.00%			Computed IRR	18.10%		
Year #1	-\$100.0			Year #1	-\$100.0		
Year #2	\$5.0			Year #2	\$5.0		
Year #3	\$5.0			Year #3	\$5.0		
Year #4	\$159.6			Year #4	\$151.9		
Totals	\$69.6			Totals	\$61.9		

Source: Bard Consulting.

Table 5.5: **Second-asset cash flows (all \$ values in millions)**

	Second asset	Portfolio cash flows (ignoring promote)	
		First asset	First two assets
Computed IRR	15.00%	20.00%	17.26%
Year #1	-\$100.0	-\$100.0	-\$200.0
Year #2	\$7.0	\$5.0	\$12.0
Year #3	\$7.0	\$5.0	\$12.0
Year #4	\$7.0	\$159.6	\$166.6
Year #5	\$146.9		\$146.9
Totals	\$67.9	\$69.6	\$137.5

Note: These are pre-incentive fee cash flows for all assets, with no deductions taken for prior promote payments.

Source: Bard Consulting.

Table 5.5 details the sequence of cash flows associated with the second realised asset, which is assumed sold one year later, in year five, resulting in a before incentive fee IRR of 15 percent. The right-hand side of Table 5.5 shows that the rolling-realised portfolio associated with the two assets combined has generated an overall before fee IRR of 17.26 percent.

Table 5.6 seeks to answer the two specific questions:

1. If these two assets comprised the entire portfolio and if the investor paid a promote only at the ending date associated with a portfolio containing only these two assets (year five), how much would the promote payment be?
2. If the manager was paid only that amount in year five, what would the resultant IRR to the investor be?

Table 5.6: Second-asset sale analysis (all \$ values in millions)

Cumulative cash flows (ignoring promote)		Step 1: Compute ending promote on 'rolling realised portfolio' basis		Analysis after sale of second asset		Step 2: Compute IRR to investor based on promote in Step #1		Hurdle rate	12%	Promote	25%
First two assets		Step 3: Array actual investor cash flows through to the next-to-last period		With interim promote payments		Ignore all 'prior' promote payments					
Computed IRR	17.26%	Year #1	Year #2	Year #3	Year #4	Year #5	Totals				
Year #1	-\$200.0	Year #1	Year #2	Year #3	Year #4	Year #5	Totals				
Year #2	\$12.0	Year #2	Year #3	Year #4	Year #5	Year #5	Totals				
Year #3	\$12.0	Year #3	Year #4	Year #5	Year #5	Year #5	Totals				
Year #4	\$166.6	Year #4	Year #5	Year #5	Year #5	Year #5	Totals				
Year #5	\$146.9	Year #5	Year #5	Year #5	Year #5	Year #5	Totals				
Totals	\$137.5	Totals	Totals	Totals	Totals	Totals	Totals				

Step 3: Array actual investor cash flows through to the next-to-last period		Step 4: Compute final investor cash flow so investor IRR equals that of Step 2		Future value formula	
With interim promote payments		Ignore all 'prior' promote payments			
Computed IRR	16.03%	Computed IRR	16.03%		
Year #1	Year #1	Year #1	Year #1		
Year #2	Year #2	Year #2	Year #2		
Year #3	Year #3	Year #3	Year #3		
Year #4	Year #4	Year #4	Year #4		
Year #5	Year #5	Year #5	Year #5		
Totals	Totals	Totals	Totals		

Reduced by the first asset's promote payment		Future value formula	
Year #1	Year #1	Year #1	Year #1
Year #2	Year #2	Year #2	Year #2
Year #3	Year #3	Year #3	Year #3
Year #4	Year #4	Year #4	Year #4
Year #5	Year #5	Year #5	Year #5
Totals	Totals	Totals	Totals

Source: Bard Consulting.

Step 1 of Table 5.6 shows that the answer to the first question is \$12.7 million, and Step 2 shows that the answer to the second question is 16.03 percent. This latter result is referred to as the PIPP IRR Bogey. Steps 3 and 4 recognise that, in fact, the investor has not received all of the distributions assumed in Steps 1 and 2. In particular, the year-four cash flow reflects the fact that the investor did not receive the \$7.7 million interim incentive fee amount previously paid out to the manager at the realisation of the first asset. Hence, these two steps seek to compute the proper amount of promote to be paid in year five such that there is 'IRR maintenance', that is, the investor achieves the same IRR (16.03 percent) that it would have received if the entire incentive fee were paid in year 5.

Through use of a formula that computes the future value of all prior actual investor cash flows, Step 4 derives the additional amount that the investor needs to receive, in year five in order to achieve this PIPP IRR Bogey of 16.03 percent. That value is \$143.2 million, which implies that there is ($\$146.9 - 143.2$) \$3.7 million left over for another interim promote payment to the manager.

Note that Step 1 indicated that the 'ending promote amount' value should be \$12.7 million, but the manager has received only ($\$7.7 + \3.7) \$11.4 million from these first two sold assets. The ($\$12.7 - 11.4$) \$1.3 million difference is 'interest' or 'future value' accruing, at the portfolio IRR rate of 16.03 percent, on the \$7.7 million which the manager received earlier.

Table 5.7 details the sequence of cash flows associated with the third asset, which is assumed sold one year later, in year six, resulting in a before incentive fee IRR of 13.0 percent. The right-hand side of Table 5.7 shows the rolling-realised portfolio associated with the three assets combined has generated an overall before fee IRR of 15.93 percent.

Table 5.7: **Third-asset cash flows (all \$ values in millions)**

	Third asset	Portfolio cash flows (ignoring promote)	
		First two assets	All three assets
Computed IRR	13.00%	17.26%	15.93%
Year #1		-\$200.0	-\$200.0
Year #2	-\$100.0	\$12.0	-\$88.0
Year #3	\$8.0	\$12.0	\$20.0
Year #4	\$8.0	\$166.6	\$174.6
Year #5	\$8.0	\$146.9	\$154.9
Year #6	\$132.2		\$132.2
Totals	\$56.2	\$137.5	\$193.8

Note: These are pre-incentive fee cash flows for all assets, with no deductions taken for prior promote payments.

Source: Bard Consulting.

Table 5.8: Third-asset sale analysis (all \$ values in millions)

		Hurdle rate	12%	Promote	25%
Cumulative cash flows (ignoring promote)					
Computed IRR	15.93%				
Year #1	-\$200.0				
Year #2	-\$88.0				
Year #3	\$20.0				
Year #4	\$174.6				
Year #5	\$154.9				
Year #6	\$132.2				
Totals	\$193.8				
Step 1: Compute ending promote on 'rolling realised portfolio' basis					
Sales proceeds	\$132.2				
Less: Cumulative IRR deficiency	-\$70.3				
Excess proceeds over deficiency	\$62.0				
Warranted portfolio promote	\$15.5				
Analysis after sale of third asset					
Step 2: Compute IRR to the investor based on promote in Step #1					
Ignore all 'prior' promote payments					
Computed IRR	15.01%				
Year #1	-\$200.0				
Year #2	-\$88.0				
Year #3	\$20.0				
Year #4	\$174.6				
Year #5	\$154.9				
Year #6	\$116.8				
Totals	\$178.3				
Step 3: Array actual investor cash flows through to the next-to-last period					
Year #1	-\$200.0				
Year #2	-\$88.0				
Year #3	\$20.0				
Year #4	\$166.9				
Year #5	\$151.2				
Year #6	?				
Totals	?				
Reduced by the promote payments of the first two assets					
Step 4: Compute final investor cash flow so investor IRR equals that of Step 2					
With interim promote payments					
Computed IRR	15.01%				
Year #1	-\$200.0				
Year #2	-\$88.0				
Year #3	\$20.0				
Year #4	\$166.9				
Year #5	\$151.2				
Year #6	\$131.3				
Totals	\$181.4				
Future value formula					

Source: Bard Consulting.

Analogous to what was done in Table 5.6, Table 5.8 now seeks to answer the two questions:

1. If these three assets comprised the entire portfolio and if the investor paid a promote only at the end of the portfolio containing these three assets (year six), how much would the promote payment be?
2. If the manager was paid only that amount in year six, what would the resultant IRR to the investor be?

Step 1 of Table 5.8 shows that the answer to the first question is \$15.5 million, and Step 2 shows that the answer to the second question is 15.01 percent.

From here the mathematics is identical to the mathematics as shown in Table 5.6 but, in the case of Table 5.8, the resultant interim incentive fee payment to the manager is about \$1.0 million (after rounding).

This rolling-realised process can continue for as many assets as may exist in a portfolio. The process simply continues, in identical fashion, as more and more assets 'join' the rolling realised portfolio, until the end, when the last asset is sold.⁴ Table 5.9 summarises the various steps shown in Tables 5.4 through 5.8.

PIPP: Additional elements

This chapter presents a fairly simple discussion and example of PIPP and does not address what happens if assets at the end of a portfolio perform poorly. In such a situation it is possible that, even using the 'self-correcting' rolling-realised approach, an investment manager could receive more incentive fee through interim payments than they are actually entitled to when all of the results are in. There are a variety of additional elements that could be added to this basic version of PIPP which would reduce the chances that successful early projects followed by less successful later projects could create a situation in which a clawback of interim incentive fees is needed. However, such a discussion is beyond the scope of this chapter. □

References

Overpayment of Manager Incentive Fees – When Preferred Returns and IRR Hurdles Differ, Dean Altshuler and Roy Schneiderman, Volume 17, Number 2, 2011, *Journal of Real Estate Portfolio Management*.

Real Estate JV Promote Calculations: Recycling Profits, Stevens A. Carey, Summer 2006 issue of *The Real Estate Finance Journal*.

⁴ 'The end' implies a date by which all of the assets have been sold although parties may agree to fix the end date and assume a constructive sale. In addition, 'the end' could also be defined as the date upon which the investors have had a complete return of their capital and preferred return and have no obligation to contribute any additional capital.

Table 5.9: Summary of result in Tables 5.4 to 5.8 (all \$ values in millions)

										Hurdle rate		
										12%	Promote	25%
					Cumulative cash flows			Cumulative analysis after two assets		Cumulative analysis after all three assets		
					First asset	Second asset	Final asset	No interim payments	With interim payments	No interim payments	With interim payments	
Computed IRR	20.00%	20.00%	13.00%		20.00%	15.00%	13.00%	16.03%	16.03%	15.01%	15.01%	15.01%
Year #1	-\$100.0	-\$100.0			-\$100.0	-\$100.0		-\$200.0	-\$200.0	-\$200.0	-\$200.0	-\$200.0
Year #2	\$5.0	\$7.0	-\$100.0		\$5.0	\$7.0	-\$100.0	\$12.0	\$12.0	-\$88.0	-\$88.0	-\$88.0
Year #3	\$5.0	\$7.0	\$8.0		\$5.0	\$7.0	\$8.0	\$12.0	\$12.0	\$20.0	\$20.0	\$20.0
Year #4	\$159.6	\$7.0	\$8.0		\$159.6	\$7.0	\$8.0	\$166.6	\$166.6	\$174.6	\$174.6	\$166.9
Year #5		\$146.9	\$8.0			\$146.9	\$8.0	\$134.3	\$134.3	\$154.9	\$154.9	\$151.2
Year #6			\$132.2				\$132.2			\$116.8	\$116.8	\$131.3
Totals	\$69.6	\$67.9	\$56.2		\$69.6	\$137.5	\$193.8	\$124.9	\$126.1	\$178.3	\$181.4	

Promote computations	Analysis after sale of first asset	Analysis after sale of second asset	Analysis after sale of third asset	Manager receipts	
				Total promote paid	
				Promote that would have been paid if there were no interim payments	
Sales proceeds	\$159.6	\$146.9	\$132.2	\$12.4	
Less: Cumulative IRR hurdle deficiency	-\$128.6	-\$96.2	-\$70.3	\$15.5	
Excess proceeds over hurdle	\$31.0	\$50.7	\$62.0		
Promote paid upon sale of additional asset	\$7.7	\$3.7	\$1.0		

Source: Bard Consulting.

Roy Schneiderman, CRE, FRICS is a principal with Bard Consulting LLC. Bard Consulting is a boutique consulting firm based in San Francisco, California that provides strategic real estate consulting services to institutional investors including the California State Teachers Retirement System, the York State Common Retirement Fund, the California Public Employees Retirement System and a major Middle Eastern sovereign wealth fund. Prior to founding Bard Consulting in 2001, Roy's career included stops at Deloitte & Touche and Sedway Group/CBRE Consulting. Roy has a BA in Philosophy from Beloit College, an MA in Philosophy from Yale University and an MBA from the University of California at Berkeley. He is a member of both the National Council of Real Estate Investment Fiduciaries and the Pension Real Estate Association.

Dean Altshuler, PhD, CFA, has provided real estate consulting services as an independent consultant since 1994. Clients have included investment managers, REIT analysis firms, investment bankers, pension funds, developers and universities. Prior to starting his own practice, Dean was the director of real estate research with TCW Realty Advisors. Dean has been affiliated with Bard Consulting LLC since 2006, and leads Bard Consulting's quantitative analysis practice.

Dean has developed a niche area of specialisation in performance measurement and reporting, including the development of sophisticated financial models for both asset-level due diligence and optimising portfolios. He has served as a member of the faculty of the NCREIF Academy as an instructor for the Performance Measurement and Client Reporting module.

Dean has published in several *Institutional Real Estate Inc* publications, where he was formerly a technical adviser, as well as in the *Journal of Real Estate Portfolio Management*, and has guest lectured at the MIT Center for Real Estate.