

Mr XXX
A & B Solicitors

Ms YYY
C & D Solicitors

22 October 2008

Dear Mr XXX and Ms YYY

**Actuarial report on the valuation and sharing of
Mr ZZZ's Company Pension Scheme
Mr ZZZ's Insurer Self Invested Personal Pension**

Transaction Number: A000000

Acting as an independent expert witness we attach a report on the actuarial valuation of the above pension(s) and how the pension(s) might be shared. This report is done on the basis of the information provided and on information discovered from the pension scheme(s). It is for use in helping understanding the financial matters on divorce or dissolution.

The basis of valuation is specifically for use in the divorce or dissolution process. The pension value therefore differs from the Cash Equivalent Transfer Value (CETV) which is set for a different purpose.

We believe that this valuation and sharing calculation meets the required standards for court proceedings.

Please note the caveats to the report and who can rely upon it.

Yours sincerely,



N.H.Bradshaw FIA
Director
On behalf of Bradshaw, Dixon and Moore Limited



**Actuarial report on the valuation and sharing of
Mr ZZZ's Company Pension Scheme
Mr ZZZ's Insurer Self Invested Personal Pension**

1 Instructions

- 1.1 We have been jointly instructed to provide a report which provides the following:
- 1.1.1 What is the appropriate value to use for the purposes of offsetting the pension against other capital assets?
 - 1.1.2 Is the CETV figure an appropriate value to use?
 - 1.1.3 What percentage pension sharing order would be required in favour of our client in order to equalise income at earliest date all pensions become payable?
- 1.2 This report answers all those questions.
- 1.2.1 In respect of 1.1.1. and 1.1.2 we do not believe that the CETV is an appropriate value for a final salary pension. Our reasons are given in the Appendix in section 7. In this report we have produced an actuarial valuation which overcomes these issues and we believe is an appropriate value for the purpose of valuing the pension.
 - 1.2.2 We are aware of legal questions over whether it is appropriate to allow for the full value of the pension in an offsetting against other capital assets. We are not able to provide a legal opinion on this point. However we believe that our valuation is market-consistent, in line with the valuation basis of other capital assets.
 - 1.2.3 Our valuation of the pension is provided in section 4.
 - 1.2.4 In respect of 1.1.3 we have produced the percentage required in section 5.
- 1.3 The report is for the use of Mr XXX and Ms YYY and should not be relied upon by others. Mr XXX and Ms YYY may, if wished, release copies of this advice to third parties, but we cannot be held liable for any course of action (or inaction) that the third party takes. Third parties always need their own actuarial advice.
- 1.4 This report calculates the values for pension value for use in divorce settlements and is not useable for other purposes.
- 1.5 Where this report is on the behalf of the Court I understand my duty to the Court to assist the Court on matters within my own expertise, that this duty is owed exclusively to the Court and overrides any obligation to the person(s) from whom I have received my instructions or by whom I have been paid.



- 1.6 I qualified as a Fellow of the Institute of Actuaries in 1989, and have expertise in the assessment of pension benefits.
- 1.7 I confirm that insofar as the facts stated in my report are within my own knowledge I have made clear which they are and I believe them to be true, and that the opinions I have expressed represent my true and complete professional opinion.
- 1.8 The report relies upon the information provided to us, and we cannot be responsible if the information is incorrect, or there is other relevant information which has not been disclosed.



N.H.Bradshaw MA (Oxon), FIA
Director
For and on behalf of Bradshaw Dixon and Moore Limited

EXAMPLE



2 Summary of Main Results

2.1 **Valuation date** 01/10/2008, We have assumed as a short period after valuation date

Pension	Best-estimate value	Reasonable range ¹
Mr ZZZ's Company Pension Scheme	£698,000	£625,000 to £784,000
Mr ZZZ's Insurer Self Invested Personal Pension ²	£152,000	
Total for Mr ZZZ	£850,000	£777,000 to £936,000
Total value of pension assets	£850,000 (range £777,000 to £936,000)	

2.2 Pension sharing

Objective of sharing is to equalise income at earliest date all pensions become payable

Mr ZZZ keeps his Insurer Self Invested Personal Pension

Mr ZZZ shares to Mrs ZZZ 46% of his Company Pension Scheme
46% is in the reasonable range 46% to 47%

Post-share values³

Mr ZZZ's pension	£23,300pa (£22,700pa to £24,100pa)
Mrs ZZZ's pension	£23,300pa (£22,700pa to £24,100pa)

Mr ZZZ's value	£407,000 (£367,000 to £455,000)
Mrs ZZZ's value	£429,000 (£427,000 to £427,000)
Total	£837,000 (£794,000 to £882,000)

Difference in value due to sharing	-£13,000 (-£54,000 to £17,000)
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¹ See Section 4.3

² No range is given for money purchase benefits as their value at valuation date is not dependent on future assumptions. Their valuation at the valuation date may still be incorrect as it relied on our assumptions on the assets and their performance still the last known valuation information.

³ Pension income amounts as at Mrs ZZZ's 60th birthday



3 Issues to be noted

There are a number of issues to which we feel appropriate to draw attention.

3.1 Client specific assumptions

The appropriate valuation basis uses actuarial assumptions which we would apply to all current reports, and client specific assumptions which might be determined by the parties involved.

Date of calculation

3.1.1 The Final Arrangement will be made at some date in the future. For the purpose of this Report we have used a date of calculation of 01/10/2008.

3.1.2 In all of the calculations, we have not allowed for any accrued benefits after this date. Where future service is referred to it is only for the purpose of projecting the final salaries.

3.2 Allowance for no CETV value at calculation date

As part of calculating the pension share we have had to estimate the CETV or current fund values on shared pensions as at our calculation date of 01/10/2008. Our estimates are Mr ZZZ's Company Pension Scheme to be £442,700. If the CETV(s) available or actual fund value(s) are materially different from this amount, then the results will need recalculation.

3.3 Other matters

We are professionally obliged to mention significant related matters.

Reduction in total asset value due to pension sharing

3.3.1 No significant loss.

Risk through pension sharing arrangement

3.3.2 The approach does not raise extra risks



4 Valuation of the pension(s)

- 4.1 This report uses actuarial techniques to value the above pensions. It includes allowances for a number of features specific to the individuals and the purpose of the valuation.

Appropriateness of the CETV

- 4.2 The Cash Equivalent Transfer Value (CETV) statutorily quoted by pension providers does not generally make these adjustments and therefore may not be appropriate for the purpose of valuing pension assets in the Ancillary Relief process.

Our valuation basis for the pension

- 4.3 There is not one right value for a pension, rather a range of possible values. This is because the amount and value of pension payments to be made in the future depend on a range of factors which we cannot predict with certainty.
- 4.4 Therefore when we provide a numeric answer for an uncertain value we have provided our best-estimate value and a reasonable range within which the answer might lie. The limits of the range do not represent the absolute maximum or minimum possible values of the pension in all possible future circumstances. Rather they represent a range within which most valuations of the pension may sit.
- 4.5 The best-estimate value makes a series of assumptions about the future experience of a range of economic factors and demographic factors. The aim is to arrive at a value of the benefits without any bias one way or the other in the choice of assumptions. At any time Bradshaw Dixon and Moore use the same assumptions for all its bespoke reports regardless of whether the report has been instructed jointly or solely on behalf of the main pension holder or on behalf of their spouse.
- 4.6 Our value differs from CETVs because CETVs do not value all the appropriate benefits, do not value benefits in the right way and do not normally value on best-estimate assumptions. Further detail is given in the Appendix.

Result

4.7 **Valuation date** 01/10/2008

4.8 Mr ZZZ's Company Pension Scheme

Best-estimate value £698,000 (reasonable range £625,000 to £784,000)

Valuation allows pension accrued from start of service of 21/04/1981 and valuation date of 01/10/2008

Last CETV provided was for £400,000 as at 19/09/2007



4.9 Mr ZZZ's Insurer Self Invested Personal Pension

£152,000

Last valuation was transfer value of £150,000 on 13/06/2008

Valuation allows for no contributions to the plan after 13/06/2008

EXAMPLE



5 Potential Pension sharing order

- 5.1 We were advised to calculate the pension sharing assuming the objective was to equalise income at earliest date all pensions become payable.
- 5.1.1 Due to the relative sizes of the two pensions it will be necessary to share part of Mr ZZZ's pension to Mrs ZZZ to achieve the desired objective.
- 5.1.2 Mr ZZZ's pension includes Guaranteed Minimum Pension benefits, which have to be shared with Mrs ZZZ. In her shared pension these are converted into safeguarded rights.
- 5.2 If Mrs ZZZ were to take up her own membership with the Company Pension Scheme upon implementation of any pension share then our understanding of the scheme is that her benefits would be:
- 5.2.1 A pension payable from age 60, that increases in line with RPI.
- 5.2.2 The ability to commute some of that pension to a lump sum subject to limitations depending on what lump sum Mr ZZZ has already taken

Result

5.3 Valuation date 01/10/2008

5.4 Pension sharing

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⁴ Pension income amounts as at Mrs ZZZ's 60th birthday



6 Information used

6.1 We show the source of our information for this case in the following tables. Where we have had to make some assumptions in the client and scheme sections we would ask you to check them carefully as any error here could have a material impact on the value of benefits.

6.2 General Details:

6.2.1 Client 1

		Source
Name	Mr ZZZ	
Sex	Male	
Date of Birth	01/12/1957	Pension Scheme CETV
NI number	AA000000A	
Health	Average mortality	No instruction to review health, so used an average expectation
Future salary expectations	National average future salary increases, 2.0% above inflation	Our assumption based on client occupation
Solicitor	Mr XXX A & B Solicitors	

6.2.2 Client 2

		Source
Name	Mrs ZZZ	
Sex	Female	
Date of Birth	14/02/1958	Client
NI number	AA000000A	
Health	Average mortality	No instruction to review health, so used an average expectation
Solicitor	Ms YYY C & D Solcitors	



6.3 Mr ZZZ's Company Pension Scheme

		Source
Firm or Pension Scheme	Company Pension Scheme	Instruction
Accrual period	Valuation allows pension accrued from start of service of 21/04/1981 and valuation date of 01/10/2008	
Service start date	21/04/1981	Pension scheme CETV statement
Service end date	01/10/2011	3 years after valuation date, our standard for members still in service
Pensionable salary	£80,000.00pa at 19/09/2007	Pension scheme CETV statement
Employment	Full-time	
CETV	£400,000 as at 19/09/2007	Pension scheme
Scheme Retirement Age	60	Pension scheme literature, for less significant matters some reasonable assumptions were made.
Benefit accrual	80th of Final Pensionable Salary for each year exactly	
Final Pensionable Salary	Best consecutive average of 1 year's pensionable earnings from the last 3 years	
Lump sum at retirement	Lump sum at retirement of 50% of annual pension at retirement	
Contracting in/out status	Contracted out of additional state pension.	
Increase in benefits up to retirement	In deferment, pensions escalate in line with statutory requirements of compound 5% or the increase in the Retail Price Index if lower.	
Increase in pensions in payment	In line with the Retail Price Index (RPI)	
Death benefit⁵	Member's pension guaranteed to be paid for at least 5 years, plus if dies in service 50% of prospective annual pension at retirement, else if dies in deferment 50% of annual pension accrued to date of leaving, else if dies in retirement 50% of annual pension at retirement.	

⁵ Lump sum death in service benefits are not accrued benefits and so are not valued.



Method of pension sharing

- 6.3.1 We believe that the Company Pension Scheme for Mrs ZZZ will permit a pension credit within the scheme to be set up. We have sourced from the pension scheme what we believe are their latest calculation methods and factors. We have applied these within our calculation of the effect of the pension share.
- 6.3.2 The scheme will apply a pension debit to Mr ZZZ as a deduction calculated from the full pension benefit at date of retirement. The pension credits and debits are adjusted for the date of payment of benefits and the age and sex of the pension holder.

6.4 Mr ZZZ's Insurer Self Invested Personal Pension

		Source
Transfer value	£150,000.00 on 13/06/2008	Pension Scheme Tele-quote
Fund value	The transfer value has been used in the calculation	Not provided
Contributions	Valuation allows for no contributions to the plan after 13/06/2008	

Method of pension sharing

- 6.4.1 Any transfer from a money purchase pension must be taken away and we have assumed that the share of the transfer value at the valuation date is transferred in a personal pension plan. We have applied our standard assumptions about charges to the personal pension. In practice depending on the choice of personal pension the actual charges may differ. We do not advise on the implementation of a transfer to a personal pension, or other alternatives that might be available, and if advice is required we recommend the use of a Financial Advisor.
- 6.4.2 If a transfer is taken then the remaining fund will be reduced proportionately.



6.5 Best-Estimate Assumptions

6.5.1 Economic Data and Assumptions

Historic values for Retail Price Inflation and other values have been used up to the latest available date.

The following are the key economic assumptions for future experience:

Retail Price Inflation	3.60%
Limited Price Inflation	3.40%
SSA	3.50%
Increase in Average Earnings	5.60%
Return on assets backing annuities in payment	5.40%

The assets in a pension fund are assumed hypothecated on a mix of fixed-interest and equity assets that varies with the time to retirement. The longer the time to retirement the greater the percentage of equity assets. The aggregate investment return therefore varies with the time to retirement

Years to retirement	Investment return assumption
1	5.50%
5	5.70%
10	6.10%
20+	6.50%

Therefore different scheme retirement ages may result in different interest rates in deferment from case to case.

On all individual pension plans, including personal pensions and annuities, we assume 4% expenses on new monies and 1%pa of fund annual charge.

6.5.2 Demographic Assumptions

We have allowed for mortality prior to retirement reflecting the AM/F92 tables which are suitable for the mortality of the working population.

After retirement, we have used the PMAFA92 ultimate tables with mortality improvement factors reflecting the actuarial professions "medium" improvement on a cohort basis but subject to a minimum improvement year on year of 2.5% per annum.

6.5.3 Reasonable range assumptions

The reasonable range assumptions make the following main variations to the best estimate assumptions.

Retail Price Inflation	3.20% to 4.10%
Return on assets backing annuities in payment	4.70% to 6.00%
Return on aggregate investment for 20+ years	5.60% to 8.00%
Mortality after retirement	-10% to +20%



7 Appendix - Reasons why CETV is inappropriate in a divorce or dissolution

There are a number of general reasons why a CETV for defined benefit (final salary) schemes may not be appropriate for divorce cases. The Express Pension Valuation does not identify which reasons apply for particular schemes, nor does it allow for the health of the pension holder.

7.1 CETVs can ignore discretionary benefits

A scheme can ignore discretionary benefits in calculating CETVs, even if the scheme intends to provide such benefits whenever possible. Examples of discretionary benefits include pension increases when in payment, generous early retirement terms or ill-health benefits.

7.2 Schemes can offer different benefits for active members and leavers

Some schemes offer worse benefits for leavers than active members. The assumption of leaving the scheme used by the CETV triggers a step-down to the worse benefits. For example most uniformed service schemes offer immediate pensions subject to minimum length of service requirements. However earlier leavers only get their deferred pension at a later age between 55 and 65 depending on the scheme.

7.3 Active members lose the loyalty benefit of future salary increases

Active members are assumed to leave at the date of the CETV. This loses them the loyalty benefit of future salary increases.

The pension accrued to date is based on a multiple of the years of service times the final pensionable salary of the member. The CETV assumes the member leaves service at the valuation date and calculates the final pensionable salary at retirement based on the current salary increased at the statutory valuation rate.

However the reality is that for as long as the member remains in service his salary will increase at a rate expected to be higher than the statutory valuation rate. Therefore the final pensionable salary is lower for the CETV than that actually expected and so the pension accrued is lower.

7.4 Under-funded schemes

The CETV can allow for the funding state of the scheme and can depress the value payable on transfer by the proportion of the scheme's full value that is not funded. As the CETV is for calculating assets to be taken from a scheme this is reasonable. However schemes now need to have plans to eliminate under-funding and a divorcee need not reduce their pension by taking a transfer and so it is inappropriate in a valuation for a divorce.



7.5 CETV assumptions need only be reasonable, not best-estimate

The assumptions of future experience used in CETV calculations need only be reasonable and consistent with those for setting benefits on transfers in. It is not unreasonable within this range for schemes to veer towards lower valuations for CETVs which are for members leaving the scheme.

For example we have found that scheme CETVs tend to ignore the improvement in mortality in retirement that has been allowed for in even the best rates available in the market (for example, from the FSA website).

7.6 CETVs normally ignore the health of the individuals

CETVs are normally calculated assuming the member and their partner are in good health. However, the pension value should be reduced if either of the partners are in ill-health and their life expectancies are reduced, as the length of time pensions will be paid will be reduced.

If the member is in such ill-health that an ill-health early retirement pension is likely to be triggered then this will increase the value again as the pension might be paid earlier and on more generous terms.

