

Typical Case Studies (various dates, multiple clients: specific examples below)

Case Study Name	I: Effective Risk Quantification	II: Asset-Liability Management
Client problem requiring Actuarial Thought	<ul style="list-style-type: none"> ○ Reduce Insurance Premium Spend at acceptable level of risk 	<ul style="list-style-type: none"> ○ Reduce Insurance Premium Spend at acceptable level of risk
Current Client Insurance Issues	<ul style="list-style-type: none"> ○ Current insurance premium spend c£1m p.a. (+IPT, c10%) ○ Insurance broker says that cannot negotiate premiums lower ○ Very few insurers interested in the risks, lack of competition ○ Current insurance buying process controlled by broker ○ Substantial internal unused relevant risk data ○ Substantial Insurer profit (premiums less claims): c85% of premium 	<ul style="list-style-type: none"> ○ Very risk averse for insurance purchase (excesses <£25k per claim) ○ Insurance manager unaware of balance sheet asset mix/risks ○ Insurance (liability) risk managed separately from asset risk ○ No account of strong balance sheet when buying insurance ○ Substantial risk quantification expertise – but only for assets ○ Substantial internal unused relevant risk data ○ Substantial Insurer profit (premiums less claims): c80% of premium
Client Profile	<ul style="list-style-type: none"> ○ In existence for over 40 years ○ Very long-term time horizon (existing loans of 40+ years) ○ Annual Revenue: c£400m, Net Assets: c£30m ○ Typical Cash: 10% of annual revenue, Investments: mostly A rated ○ Loans (creditors): c£150m ○ Loans duration: 75% of loans due more than 10 years ○ Not covered by FSCS in event of insurer failure 	<ul style="list-style-type: none"> ○ In existence for over 40 years ○ Surplus funds (c£200m+) all invested in equities ○ Client in-house asset management philosophy: <ul style="list-style-type: none"> ○ content with short-term equity risk (e.g. potential 25% drop in single day and long-term (probable recovery of short-term losses/outpace inflation) ○ preferred capital growth assets (accepting market movements/volatility) ○ aimed to minimise cash outgo (to maximise investible cash) ○ Not covered by FSCS in event of insurer failure
Results of Holistic Insurance Approach	<ul style="list-style-type: none"> ○ Insurance premiums reduced to c£0.2m pa +IPT (80% reduction) ○ New internal insurance fund set up, conservatively funded@ c£0.4m pa ○ New insurers quoted for the risk ○ Complete ownership of insurance submission by client, not broker ○ Independent actuarial advice on premiums before risk was submitted ○ Forecast Net Savings <ul style="list-style-type: none"> ○ Year 1: £0.3m (c30% of original premium) ○ Year 2+: Net: savings: £0.4m p.a. ○ Actual net savings after 5 years: £3.5m, £1.5m more than plan ○ Additional review of broker advice over many years opened the way to litigation for failure to give best advice, indicative estimate c£10m+ loss (consistent with actual 5-year savings) 	<ul style="list-style-type: none"> ○ Asset-liability analysis showed insurance risks <ul style="list-style-type: none"> ○ much lower than substantial balance sheet asset risks ○ uncorrelated with substantial balance sheet asset risks ○ Transformed insurance programme, some covers no longer required (well below risk appetite) ○ Other covers transformed to high excess backed by equity funding to cover tail/inflationary risks ○ Dramatic transformational/cultural change: <i>managing all risks together</i> ○ Premiums dramatically reduced (c80% reduction) ○ Premium cash-outgo dramatically reduced = more retained cash ○ New insurers ○ New brokers appointed following stringent “beauty parade” tender
Premium Savings	<ul style="list-style-type: none"> ○ c80% of original premium, per year 	<ul style="list-style-type: none"> ○ c80% of original premium, per year
Net Savings <i>(after new retained risks, fees etc)</i>	<ul style="list-style-type: none"> ○ Expected: c30% of original premium, per year ○ Actual: c60% of original premium, per year, after 5 years 	<ul style="list-style-type: none"> ○ Expected: c30% of original premium, per year ○ Actual: c50% of original premium, per year, after 2 years
Net Savings: AvE reasons	<ul style="list-style-type: none"> ○ Excessive historic insurer pricing / profit and expense loadings ○ Insurance fund funding more conservative than actual claims out-turn 	<ul style="list-style-type: none"> ○ Excessive historic insurer pricing / profit and expense loadings ○ Insurance fund funding more conservative than actual claims out-turn
How are large claims funded?	<ul style="list-style-type: none"> ○ Before: By Insurers (large claims <15% of total premiums paid, over 25 years) ○ After: From substantial net savings; no large claims since new strategy ○ New strategy led to more focussed, improved, holistic risk management 	<ul style="list-style-type: none"> ○ Before: By Insurers (large claims <25% of total premiums paid, over 25 years) ○ After: From net savings/net assets; no large claims since new strategy ○ New strategy led to more focussed, improved, holistic risk management
Actuarial Fees <i>(Project Cost)</i>	<ul style="list-style-type: none"> ○ Less than the £0.1m saved in IPT alone 	<ul style="list-style-type: none"> ○ Less than the £0.1m saved in IPT alone