

**Analysis of Uses for Surplus Equity and the Concept of Mid-Layer Pooling**

**Associate in Risk Pool Management 602 Research Project**

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## **Executive Summary:**

From time to time, Pool Managers may be tasked with the issue of what to do with a particular program's or a JPA's surplus equity. The purpose of this paper will be to explore one particular use of surplus equity, the creation of a mid-layer pool, as well as the analysis that took place that led to the creation of the mid-layer pool as the preferred choice.

Surplus equity often develops slowly over time, and typically arises due to a combination of prudent fiscal management and positive development in losses. One might not typically consider a surplus of funds an "issue"; however, in today's climate, where many public entities do not wish to receive a "check in hand" distribution of equity, pool managers may be tasked with looking at "outside of the box" alternative uses for equity that can potentially benefit the pool as a whole as opposed to just benefiting the individual Members. Some considerations a pool manager may need to analyze are:

- Do all JPA Members participate in the program from which the program equity is derived?
  - If not, should equity use be limited to only those Members who participate in this particular program?
- How do Members wish for the equity to be controlled?
  - Each Member controls their own share?
  - An Executive Committee or Board controls use of the funds?
- Does it benefit the JPA more to leave the equity within existing program years and within the realm of "claim funds" or to move those monies to a separate fund altogether?
- Should monies be used to fund something tangible, for example, alarm systems for all Members to prevent future theft issues?
- Would the JPA benefit from increasing its self-insured retention and thus becoming more autonomous from the commercial market?
  - What are the exposure risks to the JPA from increasing its self-insured retention?
- If a key issue for Members is reducing rates, should consideration be given to pre-funding an existing self-funded layer?
- If a key issue for Members is stability of premium, would the membership be best served by using monies to fund Member premium increases year-over-year?

A myriad of additional questions/considerations likely will, and should, be contemplated by any pool manager tasked with resolving this issue. Additional considerations will likely be derived from exactly how much equity can potentially be used, as well as the unique make-up and dynamics of that particular JPA.

**Summary:**

The outcome of this process can be considered to be positive and successful, if a majority of the membership is comfortable with, supports, and actively approves the solution presented. Ultimately, there can be many “right” solutions, but a pool manager’s experience and familiarity with the JPA and its particular financial situation will likely guide them to one or two solutions that appear to stand out as more appropriate or feasible than others. In addition, JPAs, their membership, goals, and opportunities change over time, so what may be the “right” solution today, may not remain the “right” solution years in the future. In light of this, pool managers should be conscious of designing solutions that can be easily modified if necessary, as well as incorporating into the written methodology or administrative procedures some sort of process to periodically monitor the success of the decision.

**Background and Analysis:**

As a pool manager, I have had the fortunate opportunity of being tasked with analyzing the “issue” of a declaration of surplus funds and how to use those funds for one particular JPA whom I shall call: JPA A. JPA A is a mono-line pool, comprised of 33 Members, formed in 1991 specifically to self-insure workers’ compensation coverage. At the time of this analysis, coverage was pooled from dollar one up to \$500,000, then commercial excess coverage was purchased above that and up to Statutory Limits.

As identified in JPA A’s dividend calculation, JPA A was in the fortunate position of being able to declare and distribute a dividend of \$4.5 million. Typically, JPA A’s dividends are distributed back to the membership as a pro-rata share of each Member’s original contribution to the program years from which the funds have come, in the form of a direct check to each Member. However, due to the size of this particular dividend, and the JPA’s unique opportunity to use these funds to significantly benefit the pool as a whole, a loss of control over the use of dividend funds, if distributed directly back to the Members, was of concern to the governing body, in that a pure distribution of funds via Member checks would prevent these funds from remaining under the control of the JPA, to be used for JPA-specific or JPA-beneficial needs. Alternatively, the Board had to contemplate the impact of *not* releasing dividends directly back to members. This decision could contain intrinsic risks to the governing body’s representatives and the perception of their commitment to their fiduciary responsibilities to their own organizations, Boards, and constituents, which these organizations serve, such as concern with a decision not to return funds, in a time of continued economic and financial difficulty. Members, and the JPA, must be cognizant of insuring that the use of these funds, if not returned, are used to strengthen the JPA and thus also serve the purpose of strengthening, at least one financial element of each underlying members’ organization. Thus the “issue” of what to do with declared dividends.

In light of this size of a potential dividend, a pool manager might ask, “How is a dividend of this size possible, especially in a workers’ compensation pool?” The answer lies in the extremely conservative criteria of JPA A’s Financial Stability Plan and dividend calculation. The dividend calculation is performed annually, and dividends are only eligible to be declared if the following criteria are met:

- The overall equity position of the pool, for all open years, after reserving for claims and Incurred But Not Reported (IBNR) expenses at the 90% confidence level, must be positive. The calculation evidenced these funds to be over \$10 million.
- \$2.5 million, or five times the pool's self-insured retention (SIR), is then subtracted from the equity balance above the 90% confidence level. The calculation evidenced these funds to be over \$7 million.
- If a positive balance remains after this subtraction, the most recent five years' equity is then subtracted from the equity balance above the 90% confidence level. The calculation evidenced these funds to be nearly \$4 million.
- If a positive balance remains after this subtraction, the remaining funds available, at the 70% confidence level, if also positive, are then eligible to be declared and distributed. Equity is distributed at the 70% confidence level as this is the minimum funding level required to be maintained for all open program years. The final fund balance at the 70% confidence level was over \$4.5 million.

In addition to the above conservative Plan and calculation, JPA A lacks extreme exposure issues, such as Safety exposure, which also serves to decrease the risk of high losses and negative claims development.

Upon being faced with the declared dividend and the unique opportunity presented to the governing body to use these funds to significantly benefit the JPA, I and the governing body began to contemplate possible solutions to JPA A's issue. Some of the major, potential solutions considered were:

- Not declare the dividend and re-visit the calculation next year.
- Declare the dividend and distribute part of the dividend back to the Members and retain part of the dividend with JPA A.
- Declare the dividend and retain all funds with JPA A.

The option of not declaring dividends and re-visiting the calculation next year was dismissed fairly quickly because the size of the dividend warranted that *something* be done with those monies, rather than to allow them to continue to sit and grow; both because of the myriad of potential beneficial uses as well as from a public perception standpoint. A risk of adverse development in known losses, and/or increases in reserves and/or IBNR were contemplated as reasons to not distribute but based on the level of conservatism of JPA A's Financial Stability Plan and dividend calculation, it was believed by myself and the governing body that it was extremely unlikely negative development could occur to the magnitude that this equity would be eradicated or needed to absorb that development.

Now, with the option of not declaring dividends removed from the equation, the analysis turned to how to use/distribute the declared dividends. While distributing the entire dividend directly back to the membership via checks could potentially provide some financial relief and flexibility to Members experiencing budget issues, this option was also eliminated for several key reasons:

- Fully distributing the funds may cause the pool to lose a unique and infrequent opportunity to creatively use the magnitude of monies available to potentially benefit the pool as a whole, rather than just benefitting the individual Members; and
- Returned monies can no longer be reserved solely for coverage or risk management purposes. Monies would go back into each Member's general fund and thus could be used for any purpose.

The governing body felt strongly that while distributing part of the monies back to the membership would be acceptable, some portion of the monies available should be retained for risk management/financing purpose that could benefit all Members and the JPA as a whole. With this in mind, the analysis clearly led to considering options of how to use at least some portion of the retained monies within the JPA. While there are any number of creative options for using retained monies, JPA A focused on considering three primary options:

- Hold a portion of the retained funds in trust with JPA A via a Member Contingency Fund (MCF) which would allow these funds to be within each individual Member's control;
- Hold a portion of the retained funds in trust with JPA A via a Rate Stabilization Fund (RSF) which would allow these funds to be within only the governing body's control; or
- Use a portion of the retained funds to create a fully-funded mid-layer pool.

Each of the three options had various strengths and weaknesses. An MCF would alleviate the problem of monies going into each Member's general fund. Monies would still be individually controlled by Members, but its use would be restricted to JPA A approved purposes, such as offsetting future premium increases, assessments, or to fund approved risk control initiatives. Conversely, an MCF would prevent the governing body from controlling how these funds are used; thus, they could no longer be used to benefit the pool as a whole.

With regard to an RSF, strengths and weaknesses are essentially reversed in that use of the retained funds would be controlled and limited to those things approved by JPA A's governing body, thus benefitting the pool as a whole, while Members would lose the ability to directly control how funds are used. If approved by the governing body, funds

could be used to fund an overall increase in risk control services, specific risk control initiatives, an offset against subsequent year's actuarial rate increases, increasing excess coverage attachment points, payment of assessments, establishing and funding new programs, payment of one-time risk-reducing projects, providing the Members with a greater risk margin, and/or to cover or offset the cost difference between premiums year over year to keep Member premiums flat and/or stable.

A third consideration was the creation of a fully-funded mid-layer pool. The primary benefit to this option is the reduction, potentially dramatically so, of pool premiums, if created within the existing pooled layer, or the reduction of excess premiums if created within the existing excess layer. Additionally, a mid-layer pool within the excess layer could also serve to gain autonomy from the commercial market, giving JPA A more control over its overall funding. For whichever layer chosen, assuming the mid-layer pool is fully pre-funded, a further benefit would be that premiums would no longer need to be collected for a period of several years for the chosen layer of coverage. With regard to weaknesses, the governing body considered that if the "wrong" layer is chosen, and funding is maintained for less time than anticipated, there could be a decrease in the return on investment as compared to other options. Additionally, once the pool is created, Members individually lose control of these funds, potentially inciting Member disappointment and concern if they themselves would not have chosen this option and/or offset costs are less than anticipated. Lastly, should substantial numbers of Board members change, or forget the analysis conducted and reasons agreed upon for creating the mid-layer pool, at the point in time when additional funds will need to be collected to replenish the pool, the pool manager may have to spend significant time educating the governing body on why additional premiums are necessary to collect and why the mid-layer pool was created, and continues, to assist in and benefit the financial stability of the JPA. Annual efforts will need to be made by the pool manager to ensure the membership remains aware of and educated on the mid-layer pool, its benefits, and potential future funding requirements.

Based on these three options and the analysis of each, the creation of a mid-layer pool was ultimately selected for the following reasons:

- A mid-layer pool is created for the benefit of the pool as a whole;
- A mid-layer pool is created with the purpose of reducing and stabilizing rates year over year and could be created to protect against rate fluctuations, infrequent but severe losses, and catastrophic losses;
- A mid-layer pool could be created to fully and pre-fund claims activity, for all Members, between a certain layer for all claims occurring on or after a certain date. If the mid-layer pool was created within the pooled layer, JPA A could pre-fund from existing equity, a certain number of losses within this layer thus reducing the amount of annual pooled premiums collected to just premiums for losses below this layer. If created above the pooled layer, the mid-layer pool could also be used to increase JPA A's pooled layer so as to make the pool less

dependent on commercially purchased excess coverage and fluctuating premiums from the excess market, as well as to potentially reduce overall excess premiums.

- The pool would not be subject to program years as the monies contributed could be co-mingled into a single fund that would pay losses without charging losses against any one program year.
- The pool could be maintained as a non-equity pool such that, upon withdrawal, a Member will forfeit all rights to these funds which would remain wholly with the pool; thus, providing a valuable incentive for current Members looking to “shop” for other coverage options to stay with JPA A.
- The pool could be structured to allow refunds of monies maintained in excess of a certain amount and at the discretion of the governing body.

For the above, as well as many other reasons, ultimately the governing body decided to approve the following solution to the “issue” of what to do with the pool’s dividend funds:

- Declare a dividend in the amount of \$4.5 million;
- Distribute \$2.25 million back to the membership in the form of a direct check; and
- Retain the remaining \$2.25 million within JPA A. Of the remaining \$2.25 million:
  - Hold \$1 million in reserve; and
  - Use \$1.25 million to fully-fund a mid-layer pool for the \$250,000-\$500,000 pooled layer of coverage.

\$2.25 million was returned to the membership as a compromise, to help relieve Members of budgetary issues, to provide the members an opportunity to ingratiate themselves to their Boards and constituents, and to reward them for effective risk management, without which dividends would not have been possible.

\$1 million was retained within the JPA to protect the program as a whole against adverse loss development and to offset any increases in reserves and/or IBNR or decreases in equity.

\$1.25 million was used to create a mid-layer pool to fully-fund the \$250,000-\$500,000 layer, as follows:

Annual Premiums Collected	Excess Coverage \$500,000-Statutory	
Pre-Funded (5-7 Years)	Pooled Coverage	Mid-Layer Pool - \$250,000-\$500,000
Annual Premiums Collected		Pooled Coverage - \$0-\$250,000

The \$250,000-\$500,000 layer was selected based on the following analysis:

- Staff developed a loss stratification analysis of incurred claims since inception of JPA A's program, which evidenced the following:
  - The portion of incurred claims that fell within the \$250,000-\$500,000 layer represented less than 1% of the total number of claims JPA A had incurred since inception and 8% of the total incurred dollar losses for the entire program.
  - Incurred claim losses over \$100,000 represented 52% of all dollar losses but only 3% of the number of total claims.
  - The portion of incurred claims over \$100,000 that fell within the \$250,000 - \$500,000 stratification layer represented:

- 19% of the total number of claims (26 claims) for a total incurred dollar loss of \$4,573,191.
- An average of 1.2 claims per year, an average dollar loss of \$217,770 per year, and 15% of the average total incurred dollar losses per year.
- Only four program years had ever had claims hit this layer for a total of 13 total claims. \$750,000 was the largest incurred total in this layer for a single program year.
- The results of the analysis indicated that with an average of \$217,770 required to fund this layer annually, an initial deposit of \$1.25 million should adequately cover losses for five to seven years and provide funding for five full hits.
- Additionally, actuarial indications were that by pre-funding the \$250,000-\$500,000 layer, pool rates would be decreased by 17.6%, for an anticipated reduction in pool premium of \$651,820, and an overall premium contributions decrease of 12.8%. Monitoring of the pool and its financial stability would be monitored by annual analysis by both the Finance Manager and the Actuary, thus incorporating both known, paid, and reserved losses, as well as IBNR losses in the annual analysis process.
- Lastly, indications from JPA A's Broker were that to move the excess attachment point from \$500,000 up to \$750,000 (i.e. pre-funding the \$500,000-\$750,000 layer) would only obtain JPA A an approximate \$100,000 reduction in excess premiums, versus a corresponding \$227,000 required to self-fund this layer, making it undesirable to pre-fund and pool, rather than simply transfer the risk to a guaranteed cost commercial insurer.

Upon thorough analysis, implementing this solution simply required the approval of JPA A's governing body. Approval was granted in conjunction with the overall consideration of that year's Operating Budget.

With regard to the logistical details of the implementation, upon the governing body's approval, JPA A's Finance Manager applied the appropriate paper funds transfer to pre-fund claims activity between \$250,000 and \$500,000 for all claims occurring on or after the selected start date, from an initial deposit of \$1.25 million. The Finance Manager will be responsible for ensuring claim payments for claims incurred on or after the selected start date are paid from this layer and that losses below this layer are segregated for actuarial projection purposes. Claims activity for this layer will be monitored by the Third Party Claims Administrator as well as Program Oversight staff and the governing body will be updated annually to monitor stability of the pool and any future needs to replenish funds or abilities to declare dividends from this layer. The authority to approve funding replenishment or to declare dividends will remain solely with the governing body via a majority vote.

In conclusion, a successful implementation of the mid-layer pool should garner the following results:

- The pool should maintain an approximate 13% discount in rates for the pooled layer of funding on a go-forward basis as benchmarked against ongoing actuarial rate projections for both the \$250,000 and \$500,000 funding layers.
- Initial deposit premiums contributed to the mid-layer pool should fully-fund any claim with an incurred date on or after the selected start date, with loss activity between \$250,000-\$500,000, for the next five to seven years.
- If activity falls below projections, dividends should be eligible for declaration based on each Member's pro rata share of initial and/or subsequent contributions.

Future benefits of the mid-layer pool, should losses develop positively and result in a dividend distribution from this layer, could be:

- Broaden the mid-layer pool to include a layer above \$500,000 or below \$250,000;
- Return funds directly to Members to offset budgetary issues or concerns;
- Directly offset rate/premium increases;
- Directly offset excess insurance costs;
- Create an MCF;
- Create a RSF;
- Increase overall risk control funding; and/or
- Fund a specific risk control initiative.