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RE: CAS-2007-02S

We have prepared this letter in response to the request for public comments by the Cost Accounting Standards Board ("the Board") as posted in the *Federal Register* on July 3, 2007.[1] We appreciate the opportunity to provide comments to the Board as it reviews and revises the current Cost Accounting Standards to develop the CAS Pension Harmonization Rule required under the Pension Protection Act (PPA) of 2006.

Watson Wyatt Worldwide is a global human capital and financial management consulting firm specializing in employee benefits, human capital strategies and technology solutions. Founded in 1878 as an actuarial consulting firm, Watson Wyatt combines human capital and financial expertise to deliver business solutions that drive shareholder value. Watson Wyatt has more than 6,000 associates in 88 offices in 30 countries and corporate offices in Arlington, Virginia and Reigate, England.

Our main comments and recommendations are summarized in this letter. In Appendix A, we provide specific responses to the questions posted in the Staff Discussion Paper.

The legislative intent of the PPA should be adhered to and reflected in defining the CAS Pension Harmonization Rule. To paraphrase the prelude to Question 6 in the Federal Register notice, CAS, if not properly harmonized with the PPA, *"may create a disincentive for government contractors to continue their defined benefit plans if the pattern of cash outlays for pension contributions are not matched by the reimbursements for pension costs under Government contracts."*

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[1] *Federal Register*: July 3, 2007 (Volume 72, Number 127), pp. 36508-36511.

By incorporating Section 106 in the PPA, we believe that the legislative intent for requiring the CAS Pension Harmonization Rule is to avoid creating a disincentive for government contractors to maintain their defined benefit plans. The Administration proposed, Congress passed, and the President signed landmark pension reform legislation to make participants' benefits more secure and to establish a stable and more supportive environment for the sponsorship of defined benefit retirement plans than existed under prior law. We believe the Board should implement a CAS Pension Harmonization Rule consistent with these goals. Creating a disincentive for defined benefit plan sponsorships would be inconsistent with Congress and the Administration's goal of protecting retirement security.

The Financial Account Standards (FAS) and funding rules now have a common view of the basis for measuring pension plan liabilities. It is appropriate for CAS to reflect the view now shared by the FAS and funding rules. For funding and accounting of their defined benefit pension plans, government contractors have to follow the IRS pension funding rules, FAS, and CAS.

Since the 1980's, measuring pension liabilities under FAS has required the use of discount rates based on current yields for high quality corporate bonds. The Financial Accounting Standards Board (FASB) has believed that the selection of discount rates should be based on current prices for settling the pension obligation, and that if two employers have made the same benefit promise, "the present value of the [pension] obligation should be the same even if one expected to earn an annual return of 15 percent on its plan assets and the other had an unfunded plan"[2]. In other words, the value of pension liabilities has nothing to do with expectations on plan asset returns.

In contrast, prior to the PPA, the discount rate used for valuing liabilities under the IRS pension funding rules reflected the expected long-term rate of return on plan assets. Those funding rules resulted in liabilities that were farther from the amount at which the liabilities could be currently settled than liabilities measured under the FAS approach.

While the IRS funding rules have diverged from the FAS perspective in the past, funding

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[2] See Statement of Financial Accounting Standards No. 87, paragraph 198.

under the PPA now reflects a similar view of valuing pension liabilities. Given that the IRS funding rules and FAS now have similar views, valuation discount rates based on high quality corporate bonds, such as prescribed under the PPA, are also appropriate for CAS purposes.

We recommend that the Board develop a CAS Pension Harmonization Rule that would ensure that the differences between the minimum required contributions and the contract costs are reconciled within a reasonable period of time. While there have been some differences, historically, CAS 412 has closely mirrored the minimum funding requirements. This is an indication that the Government has recognized that it is appropriate for the Government to reimburse at least the amounts it is requiring all defined benefit plan sponsors to put into their plans. While pension funding rules have changed with the enactment of the PPA, this principle of equity – where the Government does not excuse itself from requirements it is imposing on all plan sponsors – remains.

Thus, revisions to CAS under the CAS Pension Harmonization Rule should lead to minimizing the differences between the PPA minimum required contributions and CAS assignable costs, and ensuring that any differences are reconciled within a reasonable period of time.

As it is today, Prepayment Credits[3] are common. In a recent survey[4] we have conducted, 16 out of 19 contractors (84%) reported having Prepayment Credits. Prepayment Credits are the result of one or both of the following: (1) the direct result of minimum funding requirements exceeding CAS assignable costs; or (2) the contractor making voluntary contributions in excess of current minimum funding requirements to lessen future funding requirements.

In Appendix B, we present both deterministic and stochastic projections of Prepayment Credits and CAS assignable costs for plans at different funded levels. In our projections,

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[3] The Prepayment Credit represents the accumulation of amounts funded in excess of the pension cost assigned to a cost accounting period. The Prepayment Credit is carried forward for future cost recognition. In other words, the Prepayment Credit represents deferred reimbursements.

[4] See Appendix C.

we assume that the contractor will contribute to its pension plan no more than the minimum required to satisfy both the PPA pension funding rules and CAS.

The projections indicate that the discrepancies between the funding requirements and CAS assignable costs can be significant. The projections also show that unless current CAS is changed, it could take many years for Prepayment Credits to be fully recovered (i.e., for Prepayment Credits to become zero).

Note that even if CAS 412 and 413 are fully harmonized with the PPA funding requirements, it is still possible for Prepayment Credits to remain non-zero, though at substantially reduced levels compared to levels that would result if current CAS 412 and 413 are not modified.

The CAS Pension Harmonization Rule should apply uniformly to all government contractors subject to CAS 412 and 413. Section 106 of the PPA requires the Board to harmonize the PPA funding requirements and CAS assignable costs only for certain "eligible contractors." Eligible contractors are defined to be those whose primary source of revenues is Department of Defense contract awards *and* with at least $5 billion in revenues from such awards.

Because equity, uniformity and consistency in cost accounting practices are fundamental CAS principles, we believe the CAS Pension Harmonization Rule should apply to all CAS-covered government contractors.

Due focus needs to be given to setting transition rules and the CAS Pension Harmonization Rule should be implemented sooner than later. The Staff Discussion Paper did not include any comments or questions about "transition." Because CAS assignable costs could significantly increase, and recognizing that such increases could be hard to absorb "overnight," we believe it is extremely important for the Board to come up with transition rules that would ease the impact of the PPA funding requirements on contractors, and the impact to the Government of higher CAS assignable costs. The PPA includes several significant transition rules that ease its impact on plan sponsors. The CAS Pension Harmonization Rule should provide for a similar transition. It is also important to address equitable adjustments under existing contracts.

While the Board is not required to come up with the CAS Pension Harmonization Rule until January 1, 2010, we recommend that the Board come up with the rules sooner rather than later. When done in conjunction with transition rules, this will allow contractors and the Government to plan for the implications earlier. In addition, government contractors that are not "eligible contractors" will be affected by the difference between CAS and the PPA beginning in 2008. The longer it takes to issue the new rules, the bigger the issues that need to be addressed will become, and the more expensive it might be for the Government overall. In addition, inevitable equitable adjustments would be higher the greater the number of contracts entered prior to the rule being issued.

Constraints and issues facing contractors differ. Companies with significant revenues coming from government contracts, and those whose sole (or primary) source of revenue is government contracts, will be burdened the most. Some contracts and some contractors can withstand the resulting cash flow issues longer than others. As such, we recommend that the Board offer options or alternatives regarding allowable transitions.

However, we note that "voluntary" actions on the contractor's part could invalidate their ability to ask for equitable cost adjustments. Because transition alternatives would be beneficial for both contractors and the Government, we believe transition alternatives should not be construed as voluntary actions that would prevent equitable adjustments for existing contracts.

Once again, we appreciate the opportunity to submit these comments and recommendations.

Sincerely,

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cc: Judy C. Ocaya

APPENDIX A
RESPONSES TO QUESTIONS

APPENDIX A

RESPONSES TO QUESTIONS

Harmonization of Cost Accounting Standards 412 and 413 with the Pension Protection Act of 2006

Question 1: Should the Board apply any revisions to all cost-based contracts and other Federal awards that are subject to full CAS coverage, or only to "eligible government contractors" as defined in Section 106?

As indicated in our letter, we believe that the CAS Pension Harmonization Rule should apply to all contracts and contractors subject to CAS 412 and 413 considering that equity, uniformity and consistency in cost accounting practices are fundamental CAS principles.

There would be significant administrative issues and complexities if different standards apply to those who are eligible and those who are not eligible. For example,

- What standards would apply when a contractor goes in and out of eligibility?
- What standards would be applied for forward pricing purposes considering potential changes in eligibility status?
- What standards would apply to companies that are subcontractors to both eligible contractors and non-eligible contractors?
- What if the business mix of a current eligible contractor changes due to increased commercial business, would the contractor become ineligible though revenues from government contracts continue to exceed the $5 billion dollar threshold?

Question 2: Does the current CAS 412 and 413 substantially meet the Congressional intent of the PPA to protect retirement security, to strengthen funding and ensure PBGC solvency?

Current CAS 412 is closely tied to pre-PPA minimum funding rules. Congress and the Administration overhauled and strengthened the pension funding rules as they were deemed insufficient for protecting retirement security and PBGC solvency. Thus, if CAS 412 remains to be based on pre-PPA funding rules, it will likely not substantially meet the Congressional intent.

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The prelude to this Question 2 states the following:

> *"CAS 413.50(c)(12) currently provides for an adjustment of previously determined pension cost in the event of a segment closing, a plan termination, or a curtailment of benefits. The adjustment is computed as the difference between the market value of the assets and the actuarial accrued liability for the segment. If there is a pension plan termination, the actuarial accrued benefit is measured as the amount paid to irrevocably settle all benefit obligations or paid to the PBGC. In this way, it could be argued that CAS 413–50(c)(12) already satisfies the purpose of the PPA to protect employee retirement security or to ensure the PBGC solvency, at least for the contractor's segments that perform Government contracts."*

This line of reasoning must not be considered as it could unnecessarily lead to situations that could be disadvantageous to participants, the contractor and the Government. Relying solely on CAS 413.50(c)(12) will not meet Congressional intent. If a segment closing occurs, the segment closing adjustment will be based on ongoing valuation assumptions unless the plan is terminated and the liabilities are settled or turned over to the PBGC. To eliminate future risks, it will be to the contractor's financial advantage to terminate the plan, incur the higher costs of terminating a plan and charge those higher costs to the Government as such costs are allowable. To rely on CAS 413.50(c)(12) for "harmonizing" CAS and the PPA would imply that the Board encourages government contractors to terminate plans and stop defined benefit coverage for their participants, which is contrary to the intent of the PPA. No one wins in this situation: participants' would lose plan coverage, the contractor would get "bad press" for terminating the plan, and the Government would incur the higher costs associated with a plan termination.

It should be noted that, with the PPA, funding rules moved towards a "termination approach" only for plans that are "at risk" (i.e., plans that are very poorly funded). For all other plans, the funding rules moved toward a "settlement approach" to determine pension plan liabilities. Liabilities under a "termination approach" are significantly higher than liabilities under the "settlement approach." This difference is due to more

conservative assumptions and profit/expense loads charged by annuity and insurance companies.

It should also be noted that, while the PPA moved the funding rules towards a termination approach for poorly funded plans and a settlement approach for all other plans, actual termination and settlement liabilities would be higher than those measured under the PPA. We elaborate on this point in our response to question 4(a).

Question 3: Should CAS harmonization be focused only on the relationship of the PPA minimum required contribution and the contract cost determined in accordance with CAS 412 and 413?

For equity between the contractor and the Government, CAS harmonization should result in ensuring that the differences between the PPA minimum required contributions and the contract costs are reconciled within a reasonable period of time.

Certain restrictions would apply to nonqualified pension plans when a qualified pension plan of the employer becomes "at risk." Interest, taxes and penalties would apply to any amounts used to fund nonqualified benefits. CAS needs to recognize such restrictions with respect to nonqualified pension plans accounted for on an accrual basis. Compliance with CAS should not lead to penalties under the tax law.

Question 3(a): Do the measurement and assignment provisions of the current CAS 412 and 413 result in a contractor incurring a penalty under ERISA in order to receive full reimbursement of CAS computed pension costs under Government contracts?

If a contractor funds only the CAS assignable cost and the CAS assignable cost is lower than the minimum required contribution after taking into account any existing Credit Balance, then the contractor would incur penalties under ERISA.

Current CAS does not require funding higher than the maximum deductible contribution, so in this regard the contractor would not incur penalties under ERISA.

Question 3(b): To what extent, if any, should the Board revise CAS 412 and 413 to harmonize within the contribution ranges defined by the minimum required contribution and the tax-deductible maximum contribution?

It is appropriate for CAS to continue to cap CAS assignable costs by reference to the tax-deductible maximum contribution; compliance with CAS should not lead to penalties due to another legal requirement. Note that PPA significantly increased the tax-deductible limit to make it less likely for CAS assignable costs to be limited by the tax-deductible maximum. Nonetheless, the Assignable Cost Deficit concept under the current CAS, which addresses situations when the computed CAS cost exceeds the maximum deductible contribution, should be retained.

The Board does not need to ensure that the CAS assignable costs are at least as much as the PPA minimum required contribution. However, it is equitable for differences between CAS assignable costs and the minimum required contribution to be reconciled in a reasonable period of time. To help achieve this, the Board could consider imposing a limit to the level of Prepayment Credits that are a direct result of minimum funding requirements in excess of CAS assignable costs. For example, if the Prepayment Credits exceed 1% of assets, then the excess Prepayment Credits could be amortized over 7 years and the amortization amount would be included in the CAS assignable cost for the year.

Question 3(c): To what extent, if any, should ERISA credit balances (carryover and prefunding balances) be considered in revising CAS 412 and 413?

Credit Balances represent amounts funded in excess of minimum required contributions and unrelated to CAS assignable costs. Just as Credit Balances were neither considered

nor reflected in CAS prior to the PPA, CAS should continue to not take into account Credit Balances under the PPA.

Question 3(d): To what extent, if any, should revisions to CAS be based on the measurement and assignment methods of the PPA?

To minimize differences between minimum funding requirements and CAS assignable costs, CAS should reflect the measurement and assignment methods under the PPA as much as possible. This includes recognizing the target liability and normal cost as defined under the PPA as the CAS actuarial liability and normal cost, respectively, and adopting the seven-year period for amortizing the unfunded liability.

Question 3(d)(i): To what extent, if any, should the Board revise the CAS based on rules established to implement tax policy?

As indicated in our letter, for government contractors, there are three sets of pension rules to consider – pension funding rules (i.e., what the Staff Discussion Paper implies as the "rules established to implement tax policy"), FAS and CAS. Pension funding rules and FAS now both have the same view of the basis for measuring pension plan liabilities. We believe CAS should move to same view and be consistent with the two other standards.

Also, while pension funding rules are established to implement tax policy and the Board should not concern itself with tax policy, it would be inappropriate for the Government to exempt itself from paying pension costs it is imposing upon plan sponsors.

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Question 3(d)(ii): To what extent, if any, should the Board consider concerns with either the solvency of either the pension plan or the PBGC?

The Board should not concern itself with the solvency of either the pension plan or the PBGC. The PPA addresses these issues and government contractors will have to abide by the PPA rules. The PPA requires the Board to come up with harmonizing the PPA and CAS. We believe that a "do nothing" approach (i.e., essentially staying with current CAS 412 and 413) would not be in accordance with the PPA Section 106 mandate.

Question 4(a): For Government contract costing purposes, should the Board (i) retain the current "going concern" basis for the measurement and assignment of the contract cost for the period, or (ii) revise CAS 412 and 413 to measure and assign the period cost on the liquidation or settlement cost basis of accounting?

While the funding rules under PPA *moved towards* a termination approach for poorly funded plans and a settlement approach for all other plans, the PPA is not requiring plan sponsors to fund their plans on a termination or settlement basis. The funding rules continue to recognize pension plans as "going concerns." Under the PPA,

- *The minimum required contribution reflects a normal cost component.* The PPA recognizes normal costs, i.e., the cost of benefits that will be accrued in the coming year. Thus, the PPA recognizes pension plans as "going concerns."
- *Unfunded liabilities are amortized*. If the PPA was based on a liquidation or a settlement cost basis, there would be no amortizations of underfunded liabilities. Any underfunding would immediately be required to be funded.
- *Smoothing of assets is allowed.* If the PPA was based on a liquidation or a settlement cost basis, smoothing of assets would not be allowed. Assets would reflect current market values.
- *Discount rates are based on average yields on corporate bonds over a two-year period.* If the PPA was based on a liquidation or a settlement cost basis, averaging

over historical yields would not be allowed. Discount rates would have to reflect only the current yields on corporate bonds.

- *Decrements reflecting an ongoing plan will continue to be required*. While there are certain assumptions required for at-risk plans, rates of retirement and termination suitable for an ongoing plan will continue to be reflected.

All these features point to the fact that the PPA has not required companies to fund their benefits on a liquidation basis. As such, it would not be appropriate for CAS to require the use of a liquidation basis.

When a plan is "at risk," the PPA requires the plan to be treated as a plan that has a likelihood of no longer being a going concern and is about to be terminated. As a result, the minimum funding requirements are higher to reflect the higher costs associated with plan termination. However, it should be noted that while the funding rules under PPA *moved towards* a termination approach for poorly funded plans, actual termination costs would be higher than those measured under the PPA. And for plans that are not poorly funded, while the funding rules *moved towards* a settlement approach, actual settlement costs would be higher than those measured under the PPA.

For the measurement and assignment of government contract costs, the Board should reflect the same basis under the PPA. This basis reflects a "going concern" view of measuring pension plan costs.

Question 4(b): For contract cost measurement, should the Board (i) continue to utilize the current CAS requirements which incorporate the contractor's long term best estimates of anticipated experience under the plan, or (ii) revise the CAS to include the PPA minimum required contribution criteria, which include interest rates based on current corporate bond yields, no recognition of future period salary growth, and use of a mortality table determined by the Secretary of the Treasury?

For measurement of plan liabilities and costs, option (ii) is appropriate given our opinion that CAS harmonization should lead to a reconciliation of CAS assignable costs and PPA minimum funding requirements in a reasonable amount of time.

It should be noted that by adopting these PPA provisions, consistency and uniformity in cost accounting would be enhanced given that contractors will use essentially the same key valuation assumptions (i.e., interest rate, mortality rates and non-reflection of future salary increases) and the same actuarial cost method (i.e., the Unit Credit Cost method).

In a survey of government contractors[6], we have found a spread of 150 basis points between the lowest and highest valuation interest rates used by the contractors for CAS purposes. In contrast, the spread is only 65 basis points under FAS. As previously mentioned, FAS valuation interest rates are based on corporate bond yields. Under the PPA, valuation interest rates would be based on corporate bond yields as well. By adopting PPA assumptions, the differences in CAS valuation interest rates among contractors should be less than under FAS and definitely lesser than under current CAS.

For plan assets, in forward pricing we believe that it is appropriate for the contractor to reflect the expected asset return based on the contractor's long-term asset mix, and not corporate bond yields.

We note that if current CAS rules are not changed, government contractors could get close to aligning the PPA funding requirements to the current CAS rules by adjusting their asset mix. Since the current CAS requires contractors to set the CAS valuation interest rate based on the long-term asset mix of the plan, a plan sponsor could adopt a much more conservative asset mix (e.g., move from a 70% equity/30% fixed income asset allocation to a 30% equity/70% fixed income asset allocation) and thus justify the use a lower valuation interest rate. This would result in a long-term cost increase for the

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[6] See Appendix C.

Government (over what would happen if the asset mix was unchanged), because the plan would likely have less actual investment return to offset future costs.

Question 4(c)(i)(1): For measuring the pension obligation, what basis for setting the interest rate assumptions would best achieve uniformity and/or matching costs to benefits earned over the working career of plan participants?

Uniformity will be achieved by having all contractors abide by the same methodology and the same basis for setting assumptions. If CAS adopts the PPA methodology and basis for setting the assumptions for valuing liabilities, uniformity will be enhanced, if not ensured.

Note that contractors will not have the same valuation discount rates. Under the PPA methodology, the discount rate will reflect the timing of benefit payouts which will vary according to the participant demographics and provisions of each plan.

With respect to matching the incurrence of costs to benefits earned, to the extent that contractors fund towards an amount closer to the cost for settling the obligation at retirement (as under the PPA) and then actually settles the liability (e.g., allow lump sum payouts), then costs would be close to matching the benefit accrual. If the plan doesn't settle the liability, though it funds toward the settlement liability, any future asset gains or losses will respectively decrease or increase the plan's future costs.

Question 4(c)(i)(2): To what extent, if any, should the interest rate assumption reflect the contractor's investment policy and the investment mix of the pension fund?

As mentioned above, for forward pricing purposes the rate used to project plan assets should reflect the contractor's investment policy and investment mix. However, for

valuing pension liabilities, the interest rate should reflect the market rates for valuing long-term obligations (i.e., the discount rate under the PPA).

These assumptions are consistent with current economic and financial views of pension plan assets and liabilities.

Question 4(c)(ii): For measuring the pension obligation, should the CAS exclude, permit, or require recognition of future period salary increases?

Consistent with our response to Question 4(b), CAS should exclude recognition of future period salary increases, as is the case under the PPA.

Question 4(c)(iii) For measuring the pension obligation, should the CAS exclude, permit, or require use of a (1) standardized mortality table, (2) company-specific mortality table, or (3) mortality table that reflects plan-specific or segment-specific experience?

Most plan valuations are based on standardized mortality tables, except for very large plans with credible experience. The PPA recognizes this by providing a "safe harbor" mortality table that all companies can use, but allowing larger plans to use a mortality table based on their own experience. For consistency and simplification, the Board should allow companies to use the same mortality table that is used for determining minimum required contributions under the PPA.

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Question 4(d) For contract cost measurement, should the Board (i) retain the current amortization provisions, (ii) expand the range from 7 to 30 years for all sources including experience gains or losses, (iii) adopt a fixed 7 year amortization period consistent with the PPA, or (iv) adopt some other amortization provisions?

We recommend that the Board adopt a fixed period amortization for all sources that is sufficiently short to align the incurrence of cost with the assignment of costs. A 7-year amortization would meet this requirement and be consistent with the PPA.

Question 4(e)(i) For contract cost measurement, should the Board restrict the corridor of acceptable actuarial asset values to the range specified in the PPA (90 to 110% of market value)?

The range the PPA provides, i.e., 90% to 110%, allows for a sufficient amount of variance. For consistency and to avoid unnecessary complexity, we recommend for the Board to use the same corridor.

Question 4(e)(ii) For contract cost measurement, should the Board adopt the PPA's two year averaging method for asset smoothing?

For consistency and to avoid unnecessary complexity, the Board should allow contractors to use the asset smoothing method allowed under the PPA.

Question 5: To what extent, if any, should the Board revise the CAS to include special funding rules for "at-risk" plans?

We note that a plan can have a funded status under the PPA different from the funded status reflecting CAS assets. As such, a plan that is "at risk" for minimum funding purposes may not necessarily be "at risk" under CAS. The "at risk" rules are in the PPA

to make sure that poorly funded plans are funded sufficiently. CAS does not need to address it in the same way that CAS did not have provisions similar to the "deficit reduction contribution" requirements under pre-PPA funding rules.

"At risk" provisions could cause costs to spike up temporarily. *Ongoing* CAS costs should have additional stability if "at risk" provisions are not reflected.

In lieu of incorporating "at risk" provisions for ongoing CAS costs, the Board should consider including a cost element that would limit the level of Prepayment Credits resulting from minimum required contributions in excess of CAS costs. For example, the components of the annual CAS assignable cost would be (a) the Normal Cost, (b) the 7-year amortization of the unfunded target liability, and (c) a 7-year amortization of any Prepayment Credit greater than 1% of assets (or some other threshold). Such an additional cost component would address the increased difference in funding requirements over CAS assignable costs for "at risk" plans.

However, if a contractor has a formal resolution to terminate the plan in the very near future, and has formal plans to settle plan liabilities or turn over the liabilities to the PBGC, then reflecting the PPA "at risk" liability provisions could ease the inevitable segment closing adjustment.

Question 6(a): To what extent, if any, should the measurement and assignment provisions of CAS 412 and 413 be revised to address contractor cash flow issues?

Contractor cash flow issues should be taken into account. Otherwise, companies that are primarily government contractors and that sponsor defined benefit plans will be in a worse cash flow position than companies that are primarily non-governmental or do not sponsor a defined benefit plan. This could affect the competitiveness of some contractors and the desirability of providing goods and services to the Government.

Question 6(b): To what extent, if any, do the current prepayment provisions mitigate contractor cash flow concerns?

Prepayment Credits mitigate contractors' cash flow concerns to a limited extent. While Prepayment Credits take into account the funding contributions in excess of currently assignable costs so that such excess contributions could be reimbursed in the future, the excess contributions deferred into future years may not have eligible contracts to charge the costs against. Our projections show that Prepayment Credits could grow indefinitely into the future; it could take many years before they could be recovered.

The current Prepayment Credit provisions are insufficient in aligning the incurrence of cost with the assignment of costs.

Question 6(c): To what extent, if any, should the prepayment credit provision be revised to address the issue of potential negative cash flow?

As mentioned in our response to Question 5, we recommend that the Board consider including a cost element that would limit the level of the Prepayment Credit. The example we provided previously is as follows: The components of the annual CAS assignable cost would be (a) the Normal Cost, (b) the 7-year amortization of the unfunded target liability, and (c) a 7-year amortization of any Prepayment Credit greater than 1% of assets (or some other threshold).

Such a component would ensure that the differences between the minimum required contributions and the contract costs are reconciled within a reasonable period of time.

We note that, even if CAS reflects the assumptions, actuarial cost method, and amortization period under the PPA, Prepayment Credits could exist indefinitely unless an additional cost element to address the level of the Prepayment Credits is incorporated in CAS. This has occurred under pre-PPA rules even though CAS mirrored the minimum funding rules, but did not set the CAS cost *equal to* the minimum funding requirement.

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Question 7(a)(i) and 7(a)(ii): To what extent, if any, would adoption of some or all of the PPA provisions impact the volatility of cost projections? Are there ways to mitigate this impact? Please explain.

Adopting the PPA provisions would generally lead to more volatile CAS assignable costs. Primarily, the PPA interest rate will increase the volatility of costs as the interest rates will vary each valuation date subject to changes in yields on corporate bonds. Also, as explained in our response to question 7(b), the PPA formula for overfunded plans will increase the volatility of cost projections for plans that are near full-funding.

It is important to note that there is fundamental volatility in cost projections for pension plans that cannot be managed through accounting (CAS and FAS) or funding rules. Contractors can reduce the volatility of costs through investment policy (e.g., by adopting liability-driven investment approaches) and through plan design (by changing plan design features that contribute to volatility).

Question 7(b): To what extent, if any, should the CAS assignable cost limitation be revised as part of the efforts to harmonize the CAS with the PPA?

We note that the CAS assignable cost limitation[7] (ACL) is built-in under the PPA minimum funding formula for overfunded plans. For plans where assets exceed the sum of the Actuarial Liability and Normal Cost, the minimum required contribution would be the ACL as defined under current CAS. We illustrate this in the following example:

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[7] The Assignable Cost Limitation is the excess, if any, of the actuarial accrued liability plus the current normal cost over the actuarial value of the assets of the pension plan.

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(1)	Assets	$112,000,000
(2)	Actuarial Liability	$110,000,000
(3)	Unfunded Actuarial Liability (UAL), (2) – (1)	None
(4)	7-Year Amortization of UAL	None
(5)	Normal Cost	$5,000,000
(6)	Minimum funding requirement, (5) minus (1) – (2)	$3,000,000

Note that the ACL is $3,000,000, i.e., equal to the minimum funding requirement.

The ACL is restrictive and contributes to the volatility of costs. Plans at or near full funded status have volatile CAS costs because of the ACL. As such, we recommend that the Board eliminate or modify the ACL. If stability of costs is desired, CAS should allow for the amortization of surplus, just as deficits (or unfunded actuarial liabilities) are amortized.

We illustrate this by example below. By adopting the PPA formula for overfunded plans (in essence retaining the current definition of the ACL), in we have:

		Year 1	Year 2	Year 3
(1)	Assets	$110,000,000	$118,000,000	$118,000,000
(2)	Actuarial Liability	$110,000,000	$115,000,000	$120,000,000
(3)	UAL or Outstanding Deficit, (2) – (1)	None	None	$2,000,000
(4)	7-Year Amortization of UAL	None	None	$360,000
(5)	Additional UAL, (2) – (1) – (3)	None	None	None
(6)	7-Year Amortization of Additional UAL	None	None	None
(7)	Normal Cost	$5,000,000	$5,000,000	$5,000,000
(8)	Assignable Cost Limitation, (2) + (7) – (1)	$5,000,000	$2,000,000	$7,000,000
(9)	CAS Assignable Cost, (4) + (6) + (7)	$5,000,000	$2,000,000	$5,360,000

The CAS costs would be $5 million in year 1, significantly reduced to $2,000,000 in year two, then jumps up to $5,360,000 in year 3.

As CAS adopts many of the PPA principles for measuring pension liabilities, we expect that more plans would get close to and hover around a fully funded status a few years after reflecting the new rules. If the ACL concept is not eliminated and the PPA formula for overfunded plans is adopted for CAS, we expect CAS costs to be more volatile and forward pricing "surprises" to increase for plans at or near full-funding.

If surpluses are amortized just as deficits are amortized and the ACL concept is eliminated, here are the resulting CAS costs:

	Year 1	Year 2	Year 3
(1) Assets	$110,000,000	$118,000,000	$120,460,000[8]
(2) Actuarial Liability	$110,000,000	$115,000,000	$120,000,000
(3) Outstanding deficit/(surplus)	None	($3,000,000)	($2,460,000)
(4) 7-Year Amortization of deficit/(surplus)	None	($540,000)	($540,000)
(5) Additional deficit/(surplus), (2) – (1) – (3)	None	None	$2,000,000
(6) 7-Year Amortization of additional deficit/(surplus)	None	None	$360,000
(7) Normal Cost	$5,000,000	$5,000,000	$5,000,000
(8) Assignable Cost Limitation	eliminated	eliminated	eliminated
(9) CAS Assignable Cost, (4) + (6) + (7)	$5,000,000	$4,460,000	$4,820,000

The CAS assignable costs would be $5 million in year 1, then $4,460,000 in year 2, then $4,820,000 in year 3. Clearly, the CAS assignable costs under this example are less volatile than in the first example.

[8] Because the CAS assignable cost for year 2 is $2,460,000 higher than the first example ($4,460,000 versus $2,000,000), we assume that the assets at the beginning of year 3 is $2,460,000 higher.

It is also clear that in the short period shown, the total CAS assignable cost in the second example is higher than in the first example. However, we believe that in the long run, the total CAS assignable cost for the second example would be about equal, if not less, than in the first example.

Alternatively, instead of totally eliminating the ACL concept, it could be modified. For example, it could be changed

- from (Accrued Liability plus Normal Cost), less Assets;
- to [110% x (Accrued Liability plus Normal Cost)], less Assets.

Question 7(c): To what extent, if any, should the CAS be revised to address negative pension costs in the context of cost volatility?

Unless pension assets revert to the contractor, a floor of zero should be maintained for CAS costs. The otherwise-negative CAS cost should be set as an Assignable Cost Credit as under current CAS.

Question 8(a): To what extent, if any, would adoption of some or all of the PPA provisions affect the measurement of a segment closing adjustment in accordance with CAS 413.50(c)(12)?

We believe that it is appropriate and equitable for the PPA liability, as defined for plans that are not at-risk, to be reflected in segment closing adjustments. We note that the Government (or the PBGC) itself would accept no less, and in fact require more, than the PPA liability as payment for taking over a pension plan.

If the contractor is terminating the plan, and settling plan liabilities or turning over the liabilities to the PBGC, then the actual termination liability should be used in segment

closing adjustments (consistent with current CAS) and roughly equal to the PPA "at-risk" liability provisions.

Question 8(b): To what extent, if any, should the CAS 413 criteria for a curtailment of benefits be modified to address the PPA mandatory cessation of benefit accruals for an "at risk" plan?

Pension assets do not revert to the contractor upon curtailment of benefits and plans do not necessarily cease to exist when benefits are curtailed. Thus, the cessation of benefit accruals, whether voluntarily or because the plan becomes "at risk" under the PPA, should not trigger segment closing adjustments under CAS 413 unless the cessation of benefit accruals is in conjunction with (a) a plan termination; or (b) contract termination and there are no other applicable contracts to which future costs can be assigned.

Question 9(a): Should prepayment credits be adjusted based on the CAS valuation rate or the PPA requirement to use the pension fund's actual "return on plan assets" for the period?

If CAS adopts the PPA basis for setting valuation rates for liabilities, it would be inappropriate to adjust Prepayment Credits with rates designed for measuring liabilities as Prepayment Credits are not liabilities.

Prepayment Credits are part of total plan assets. We believe it is appropriate for Prepayment Credits to be adjusted using the actual return on total plan assets.

APPENDIX A

RESPONSES TO QUESTIONS

Harmonization of Cost Accounting Standards 412 and 413 with the Pension Protection Act of 2006

Question 9(b): Should the interest adjustment for contributions made after the end of the plan year be computed as if the deposit was made on the last day of the plan year or on the actual deposit as now required by the PPA?

Considering the time value of money and basic financial mathematics, contributions should be adjusted for interest and should reflect the actual contribution dates. In addition, the interest adjustment should be made on a compound basis (rather than on a simple interest basis).

Question 9(c)(i): To what extent, if any, should the CAS be revised to address the PPA provision that allows the recognition of established patterns of collectively bargained benefits?

While companies are able to reflect an established pattern of benefit increases for collectively bargained benefits in measuring plan liabilities under FAS, we are not aware of similar provisions under the PPA.

We believe that CAS should continue to follow the IRS funding rules that allow companies to reflect negotiated benefit increases in their liabilities, but not allow patterns of increases to be reflected in the liabilities.

Question 9(c)(ii): Are there criteria that should be considered in determining what constitutes an established pattern of such changes?

Since we do not believe that these benefits should be reflected, there is no need to establish the criteria.

APPENDIX A

RESPONSES TO QUESTIONS

Harmonization of Cost Accounting Standards 412 and 413 with the Pension Protection Act of 2006

Question 10: The Board would be very interested in obtaining the results of any studies or surveys that examine the pension cost determined in accordance with the CAS and the PPA minimum required contributions and maximum tax-deductible contributions.

In Appendix B, we have included various cost projections assuming no harmonization (i.e., no changes in the current CAS) and assuming full harmonization (i.e., CAS is modified to adopt most of the PPA minimum funding provisions).

Question 11: In light of the changes to the PPA, should the Board consider including specific requirements in CAS 412 and 413 regarding the records required to support the contractor's proposed and/or claimed pension cost?

Our CAS reports will continue to provide details that support the development of the CAS assignable costs, liabilities, assets and Prepayment Credits. We are not aware of any specific PPA provisions that would necessitate records to support the contractor's proposed and/or claimed pension cost other than documentation currently provided by contractors.

APPENDIX B
COST PROJECTIONS

COMPARISON OF PENSION COSTS UNDER THE COST ACCOUNTING STANDARDS AND THE PENSION PROTECTION ACT

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I. INTRODUCTION

Government contractors must follow the Cost Accounting Standards (CAS) in measuring pension plan[1] costs assignable to their government contracts.[2] While pension rules under CAS are similar to the IRS minimum funding rules, CAS costs are not equal to minimum funding requirements. Cashflow and related business issues occur when CAS pension costs differ from funding requirements. Such issues may or may not be material to the contractor depending on the magnitude of the disparity.

With the enactment of the Pension Protection Act of 2006 (PPA), there is concern that the disparity between CAS pension costs and PPA funding requirements will significantly increase. Under Section 106 of Title I of the PPA, the law requires the Cost Accounting Standards Board (CASB) to come up with a CAS Pension Harmonization Rule. While the PPA did not define "harmonization," the range of possibilities is bound by two extremes:

- effectively no harmonization, i.e., there will be no changes to current CAS; and
- full harmonization, i.e., CAS rules will be modified to match assumptions, methods and amortization periods under the PPA minimum funding rules.

In this paper, we present a comparison of CAS pension costs and PPA funding requirements under the two extreme scenarios of no harmonization and full harmonization. While the costs presented are based on hypothetical plans, the illustrations should help the reader have a better understanding why contractors are concerned and/or have a significant interest in the harmonization of CAS 412 and 413 with the PPA minimum funding requirements.

[1] For purposes of this paper, we use the term "pension plan" to mean a qualified defined benefit pension plan.

[2] Some contracts/contractors are exempt from CAS requirements. For example, if the contract award is less than $7.5 million or the contract price is set by law or regulation.

II. DESCRIPTION OF METHODOLOGY AND ILLUSTRATED SCENARIOS

Deterministic and Stochastic Forecasts

In this paper, we present deterministic as well as stochastic projections of pension costs over a 10-year period, 2007 thru 2016 inclusive.

Under a deterministic method, costs are forecasted under one single investment and economic scenario. There is no randomness assumed with respect to asset returns, discount rates and economically-related factors such as cost-of-living increases, increases in taxable wage bases, growth in salaries, etc. For example, in a deterministic forecast, it will be assumed that the asset return will be exactly 8% each year and there will be no liability gains or losses. Though inherently unrealistic, the deterministic method is the most commonly used method for budgeting for future costs, including forward pricing of government contract costs.

The assumptions we used for the deterministic forecasts in this paper are as follows:

- "Actual" return on assets 8.0%
- Pre-PPA discount rate 7.5%
- PPA effective discount rate 6.0%

The stochastic approach is in direct contrast to the deterministic approach. Instead of assuming only one possible set of economic factors (e.g., asset returns, discount rates, etc.), multiple possibilities are considered. For example, one scenario might reflect an 8% asset return for year one, 0% return for year 2, 6% for year 3 and so on. Because asset returns are related to real rates of return, which are in turn related to cost-of-living, varying growths in salaries are also assumed.

The results for the five thousand scenarios modeled are then sorted in increasing magnitudes and grouped into percentiles which indicate the likelihood of a particular result happening. For example, the 50th percentile would indicate that there is an equal likelihood that the actual result will be higher than that 50th percentile as it could be lower. The 95th percentile would indicate that the actual result has a 95% likelihood of being lower than the 95th percentile, and 5% likelihood of being higher than that percentile.

The stochastic method is typically used in asset and liability modeling (ALM) studies when investment policy is being set. It is also used to evaluate potential risks and setting policy to withstand such risks.

Liabilities, Assets and Contribution Policy

The liabilities modeled in our forecasts reflect liabilities for actual plan participants in an actual plan.

With respect to assets, we assumed that there will be no changes in the investment policy mix during the forecast period; the mix is 60% equities and 40% fixed income. In reality, plan

sponsors conduct periodic ALM studies and the investment policy mix could vary within the 10-year forecast period that we have reflected. However, studying investment policy is not within the scope of this particular paper.

With respect to the contribution policy, we assumed that the contractor's policy is to deposit the minimum amount required to satisfy PPA minimum funding standards as well as CAS funding requirements.

CAS Harmonization

We modeled no CAS harmonization (i.e., current CAS will not be changed) as well as full CAS harmonization. For purposes of this paper, by full CAS harmonization, we assumed the following in projecting the CAS assignable costs:

- Actuarial Liabilities and Normal Costs will be measured using the PPA discount rates, i.e., reflecting yields on corporate bonds.
- Future salary increases will not reflected.
- Mortality rates will be based on a standard table.
- Unfunded liabilities will be amortized over seven years.
- CAS assignable costs will be equal to the following:
  - if CAS assets are equal to or less than the Actuarial Liability, the CAS cost is equal to the Normal Cost plus the amortization bases;
  - if CAS assets exceed the Actuarial Liability, the CAS cost is equal to the Normal Cost, offset by the excess of the Assets over the Actuarial Liability.
- The PPA target liability phase-in percentages for the years 2008 through 2010 would be reflected in determining CAS costs

For simplification, we assumed that the CAS asset valuation method sets the CAS assets equal to the market value of assets less any Prepayment Credits. Also, we assumed that Prepayment Credits will be adjusted using the actual return on the plan assets.[3]

We assumed that CAS harmonization will be effective as of January 1, 2008. We did not reflect any transition provisions for CAS (other than the phase-in of the target liability) but we have reflected the transition provisions for PPA minimum funding purposes.

[3] Under current CAS, the Prepayment Credit is adjusted for interest reflecting the CAS valuation discount rate.

Scenarios Illustrated

We describe below the various projections we performed, specifying plan values as of January 1, 2007 (amounts in millions). Accrued Liabilities and Normal Costs in 2007 are based on the Entry Age Normal cost method at 7.5% discount rate.

Scenario 1 – 100% Funded, No Prepayment Credit

- Market Value of Assets $4,875
- Accrued Liability $4,875
- Normal Cost $84
- Prepayment Credit none

Scenario 2 – 100% Funded, 3% Prepayment Credit

- Market Value of Assets $4,875
- Accrued Liability $4,875
- Normal Cost $84
- Prepayment Credit $146

Scenario 3 – 120% Funded, 3% Prepayment Credit

- Market Value of Assets $5,850
- Accrued Liability $4,875
- Normal Cost $84
- Prepayment Credit $175

Scenario 4 – 80% Funded, 3% Prepayment Credit

- Market Value of Assets $3,900
- Accrued Liability $4,875
- Normal Cost $84
- Prepayment Credit $117

In three out of the four scenarios we modeled, we reflected existing Prepayment Credits because we believe actual Prepayment Credits are common. In a recent Watson Wyatt survey, 16 out of 19 contractors (84%) reported having Prepayment Credits.

For each scenario, we present the projected Prepayment Credits and CAS assignable costs showing the following:

1. Assuming no harmonization
2. Assuming full harmonization
3. Comparing 50th percentile and 95% percentile results under no harmonization and full harmonization

Descriptions of Graphs

There are two different graphs shown. The first type of graph (e.g., Exhibit 1A-1) is a floating bar chart that is typically used to present results of a stochastic analysis.

The green bar represents the range of results between the 5th and 25th percentiles for that given year. In other words, if we sorted from lowest to highest the resulting 2009 Prepayment Credits for the 5,000 scenarios, the top of the green bar would be the 1,250th result (25% of 5,000) and the bottom of the green bar would be the 250th result (5% of 5,000).

The blue bar represents the range of results between the 25th percentiles and the 50th percentiles. The yellow bar represents the range of results between the 50th and the 75th percentiles. And finally, the pink bar represents the range of results between the 75th and 95th percentiles.

It is important to note that each bar is determined independently. As a result, the scenario that produced the 95th percentile result in 2008 is not likely the same scenario that produced 95th percentile result in the following year.

With each of the floating bar graphs is a line that represents the results from the deterministic forecast. As mentioned previously, a deterministic forecast is the methodology most commonly used for forward pricing forecasts.

The second type of graph (e.g., Exhibit 1A-3) shows a comparison of the 50th and 95th percentile results for both the "No Harmonization" and "Full Harmonization" scenarios. The "filled-in boxes" represent the results under "Full Harmonization". The "empty boxes" represent the results under "No Harmonization". The red boxes represent the 95th percentile results and the blue boxes represent the 50th percentile results.

In this second type of graph, we show the 50th percentile results because there is a 50/50 chance that actual results will be higher or lower than these percentile results. We also show the 95th percentile because, while highly unlikely, in the last decade we have experienced "95th percentile-like" economic scenarios. As such, it is conceivable for a 95th percentile event to occur in the next decade as well. We are highlighting the 95th percentile as a caution; for plan sponsors to ask themselves questions such as:

- "If this result occurs, can I withstand it and its implications?"
- "What options are available to me now to mitigate such result?"
- "If this result occurs, what alternative courses of action would I be willing to consider taking at that time?"

III. OBSERVATIONS AND LIMITATIONS

In this section we present our observations based on the graphs that begin on page 14.

Deterministic vs. Stochastic Results

There are more instances when the deterministic result is lower than the 50th percentile. For example, in Exhibit 1A-1, in six out of ten years the deterministic result is lower than the 50th percentile result. Only two out of the ten years is the deterministic result higher than the 50th percentile result.

When a deterministic result is lower than the 50th percentile, it has less than 50% likelihood of occurring. This implies that deterministic forecasts may be on the aggressive side, and results that are worse than forecasted or budgeted should be expected.

Prepayment Credits

Without any changes in CAS, higher PPA-required contributions will result in the build-up of significant Prepayment Credits. As can be seen in Exhibits 1A-1, 2A-1, 3A-1 and 4A-1, in general Prepayment Credits continue to grow from their original levels. Only in the best case scenarios (5th percentiles) do the Prepayment Credits become lower than their original levels at the end of the forecast period.

In Scenario 1, while there is no existing Prepayment Credit in the beginning of the forecast period, by the end of the forecast period the Prepayment Credit would range from $229 million to $1.6 billion in the "more likely range" of scenarios, i.e., between the 25th to 75th percentiles. Based on the deterministic forecast, the Prepayment Credit will exceed $0.5 billion by year 2016. (See Exhibit 1A-1)

Scenario 2 differs from Scenario 1 in that there is an existing Prepayment Credit in year 2007. However, the results are quite similar for these scenarios. By 2016, the Prepayment Credit would range from $286 million to $1.7 billion in the "more likely range" of scenarios and the deterministic forecast also shows that the Prepayment Credit will exceed $0.5 billion. (See Exhibit 2A-1)

The above results suggest that, all other things being equal, the initial level of Prepayment Credits does not have a significant impact on the ultimate level of the Prepayment Credits if the CAS rules are not harmonized with PPA.

Scenario 3 differs from Scenario 2 in that the plan in Scenario 3 is 120% funded in 2007, while the plan in Scenario 2 is 100% funded. In both scenarios, at the beginning of the forecast period a Prepayment Credit exists equal to 3% of assets. Thus, the Prepayment Credit under Scenario 3 starts out higher since assets are greater. However, the Prepayment Credits under Scenario 3 end up lower. By 2016, under the 50th percentile the Prepayment Credit would be $559 million under Scenario 3 compared to $876 million under Scenario 3. Under the deterministic forecast, by 2016

the Prepayment Credit would be $336 million in Scenario 3 compared to $538 million in Scenario 2. (See Exhibit 3A-1 compared to Exhibit 2A-1)

Scenario 4 differs from Scenario 2 in that the plan in Scenario 4 is 80% funded in 2007. In both scenarios, at the beginning of the forecast period a Prepayment Credit exists equal to 3% of assets. Thus, the Prepayment Credit under Scenario 4 starts out lower since assets are lower. However, the Prepayment Credits under Scenario 4 end up higher. By 2016, under the 50th percentile the Prepayment Credit would be slightly above $1 billion under Scenario 4 compared to $876 million under Scenario 3. Under the deterministic forecast, by 2016 the Prepayment Credit would be $535 million in Scenario 4 but in the preceding years, the Prepayment Credit grew to over $1 billion. In comparison, under Scenario 2 the Prepayment Credit in year 2016 is $538 million and the Prepayment Credit in each of the years before this was lower. (See Exhibit 4A-1 compared to Exhibit 2A-1)

The above results suggest that, all other things being equal, a better funded plan may ultimately have lower Prepayment Credits than a less funded plan. This is due to the fact that better funded plans will have lower PPA contribution requirements and, as a result, will not have the large disparity between CAS costs and PPA required contributions that are the cause of the Prepayment Credits in these forecasts.

Considering all four scenarios, under the 50th percentile the Prepayment Credits will range from about $500 million to about $1 billion after 10 years. Under the 95th percentile, Prepayment Credits can grow to over $3 billion. It will take many years, perhaps decades, to be able to recoup Prepayment Credits of these magnitudes.

In contrast to the significant Prepayment Credits that develop under the "No Harmonization" scenarios, the "Full Harmonization" scenarios result in only modest Prepayment Credits. Under the 50th percentile for all scenarios, the Prepayment Credits grow in the intermediate years but subsequently decrease in the out years. (See Exhibits 1A-2, 2A-2, 3A-2 and 4A-2)

It should be noted that the Prepayment Credits do not become zero by 2016 in any of the four scenarios considering the 50th percentile. This does occur (i.e., the Prepayment Credits become zero after 10 years) in the best of situations, i.e., considering the 5th percentile results.

These results imply that, if there is no change to the CAS rules, contractors who sponsor pension plans could be subject to significant cashflow issues. Exhibits 1A-3, 2A-3, 3A-3 and 4A-3 show the magnitude of the disparity in Prepayment Credits under "No Harmonization" and "Full Harmonization." In all cases, the Prepayment Credits without harmonization are significantly higher than with harmonization considering the 50th percentile results and enormously higher considering the 95th percentile results.

Due to changes brought on by the PPA, contractors will be forced to increase their funding to their plans, but will not be able to recover these costs for a significant period of time under the current rules. Changes in CAS are necessary to close the gap between the incurrence of costs and the assignment of such costs.

CAS Assignable Costs

The CAS assignable costs with harmonization are much higher than without harmonization, as can be expected, particularly in the earlier years. In the later years, the CAS assignable costs with harmonization could be lower than without harmonization. This can be seen by looking at the 50th percentile results for all four scenarios, as shown in Exhibits 1B-3, 2B-3, 3B-3 and 4B-3. In each of these cases, the 50th percentile results under Full Harmonization drop below the 50th percentile results for No Harmonization between years 2012 and 2013.

Also note that the 50th percentile CAS assignable cost goes to zero quicker under the "Full Harmonization" scenarios; in all four scenarios, the 50th percentile CAS assignable cost in year 2016 is zero. Only in Scenario 3, where the plan starts out 120% funded, does the 50th percentile result become zero in 2016 without harmonization.

That costs are lower in the later years under Full Harmonization is a logical outcome. By putting more money into the plan earlier, the plan becomes "fully funded" sooner.

Exhibits 1B-3, 2B-3, 3B-3 and 4B-3 illustrate the fact that the CAS assignable costs dramatically increase when switching from "No Harmonization" to "Full Harmonization" considering the worst cases, i.e., at the 95th percentile. What can also be seen is that under the worst case scenarios, the general trend of the CAS cost under the "No Harmonization" graphs are increases in costs at a faster pace than is seen under "Full Harmonization."

Another observation from these forecasts is that the CAS assignable costs under the current CAS rules are more stable than under "Full Harmonization," in that the range of more likely results are narrower. For example, in Exhibit 4B-1 the spread between the 25th percentile and 75th percentile CAS costs for 2008 and 2009 is very small, i.e., $14 million and $36 million, respectively. Under "Full Harmonization," that corresponding spreads are $154 million and $193 million, respectively, as shown in Exhibit 4B-2.

A key reason behind this is that current CAS allows contractors to smooth assets over a 5-year period and then smooth overall gains and losses over 15 years. This means that it will take 20 years for an asset gain or loss to be fully reflected in the pension costs. Under "Full Harmonization," assets will be averaged over a two-year period and overall gains and losses will be amortized over seven years. Thus, asset gains and losses will be recognized quicker.

We would like to note that there is a higher variability in asset returns than the variability in CAS discount rates under "Full Harmonization." On the following page, we show the distribution of asset returns and the distribution of CAS discount rates under "Full Harmonization" beginning in 2008 that were used in our forecasts.

Return on Plan Assets

Percentile	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Deterministic	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
5th	-8.39%	-8.54%	-8.55%	-8.48%	-8.79%	-8.75%	-9.03%	-8.76%	-8.87%	-8.55%
25th	1.46%	1.09%	1.21%	1.07%	1.22%	0.90%	1.14%	1.05%	1.18%	1.03%
50th	7.90%	7.66%	7.89%	7.68%	7.73%	7.71%	7.76%	7.75%	7.64%	7.70%
75th	14.34%	14.57%	14.61%	14.70%	14.71%	14.56%	14.67%	14.47%	14.56%	14.72%
95th	24.53%	25.32%	25.09%	25.07%	25.18%	25.37%	25.24%	25.49%	25.15%	25.39%

CAS Valuation Discount Rate

Percentile	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Deterministic	7.50%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
5th	7.50%	4.27%	3.81%	3.54%	3.27%	3.15%	3.09%	3.02%	3.04%	3.00%
25th	7.50%	5.28%	5.06%	4.95%	4.85%	4.78%	4.74%	4.70%	4.62%	4.61%
50th	7.50%	5.96%	5.97%	5.94%	5.96%	5.95%	5.94%	5.95%	5.93%	5.89%
75th	7.50%	6.65%	6.82%	6.97%	7.06%	7.12%	7.14%	7.13%	7.16%	7.19%
95th	7.50%	7.71%	8.16%	8.48%	8.65%	8.83%	8.89%	9.04%	9.14%	9.23%

Thus, while CAS discount rates will be more volatile under "Full Harmonization," as they will be based on yields on corporate bonds, the volatility in CAS assignable costs could be driven more by the shorter period for recognizing asset (as well as liability) gains and losses.

Limitations

We have prepared our analysis for four hypothetical scenarios. These forecasts show the difference in results for plans at different funded levels and comparing a plan with an existing Prepayment Credit to one without. There are a number of other factors that also need to be taken into account but are not considered in this study given its limited scope. Below we discuss some of the other factors that will affect the results.

Credit Balances. Our scenarios assume that plans do not have any Credit Balances as of the beginning of the forecast. Contractors with Credit Balances (that will convert to carryover balances under the PPA) will have a temporary reprieve from the higher PPA contributions. However, that is likely to be a temporary condition and when the carryover balances are exhausted, the Prepayment Credits would likely begin to accumulate.

Segment Accounting. Our scenarios are based on a plan that consists of a single segment. Plans with multiple segments, especially those with commercial segments that are funded at a different level than the government segments, can be affected in different ways. For example, for an actual plan of one contractor, the increase in the maximum deductible contribution due to PPA has resulted in sudden, unanticipated CAS assignable costs. In this situation, while the government segments were underfunded, the commercial segments were very well-funded and the plan as whole was well funded. The plan's maximum deductible contribution under the pre-PPA rules was $0, which resulted in zero CAS assignable costs for the underfunded government segments. When PPA increased the maximum deductible contribution, the plan's maximum deductible contribution became greater than zero and this resulted in CAS assignable costs for the government segments.

Transition. It will be important to have transition rules to help contractors shift from the current CAS rules to the new CAS rules. Our analysis does not include any transition rules other than the PPA's phase-in of the target liability. The transition rules, assuming they would result in a phase-in of the higher contributions, would result in additional build-up of Prepayment Credits.

Effective Date. Our analysis used a January 1, 2008 effective date for Full Harmonization. Any delay in the effective date would results in a build-up on Prepayment Credits.

We would recommend that contractors and the government – in its efforts to develop the CAS Pension Harmonization Rule required under the Pension Protection Act (PPA) of 2006 – consider such factors in cost projections.

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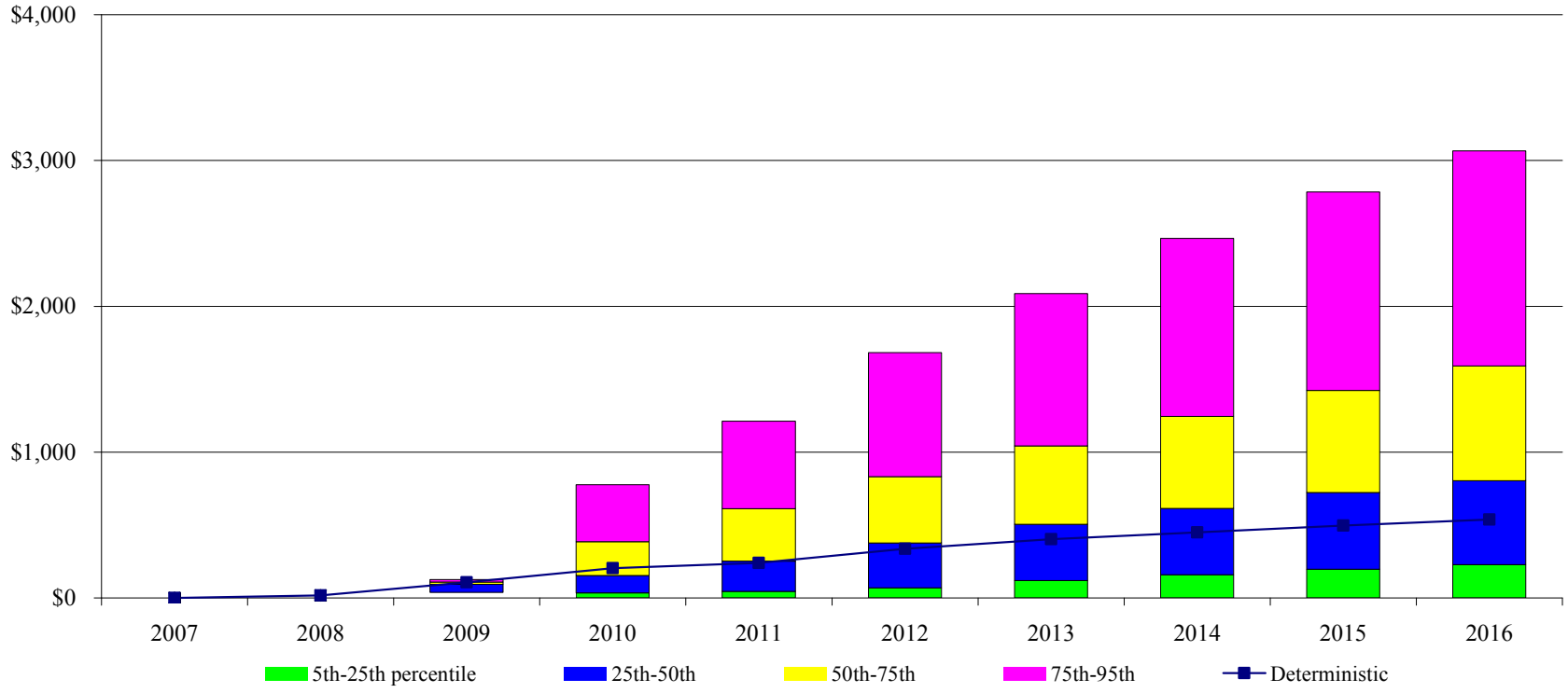
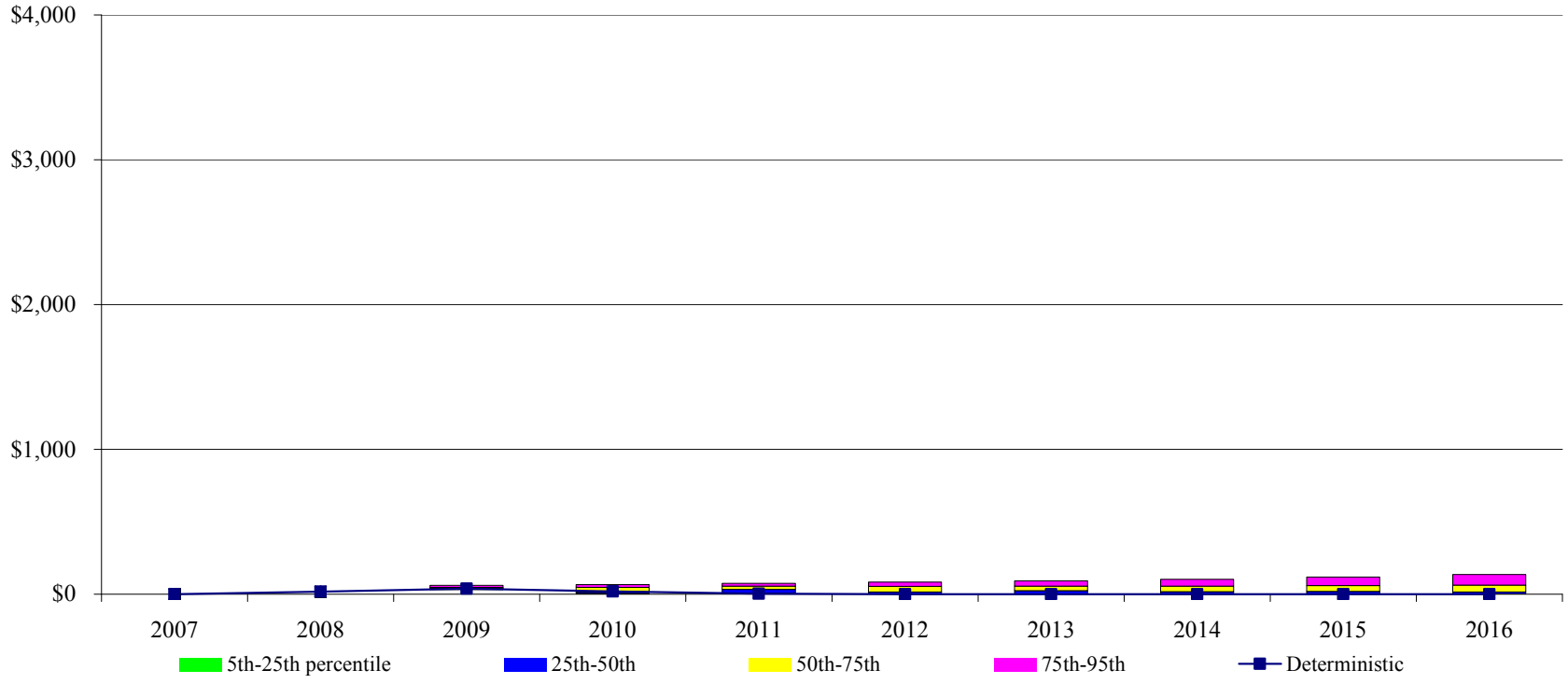
Scenario 1: 100% Funded, No Prepayment Credit
Prepayment Credit (BOY) -- No Harmonization ($M)



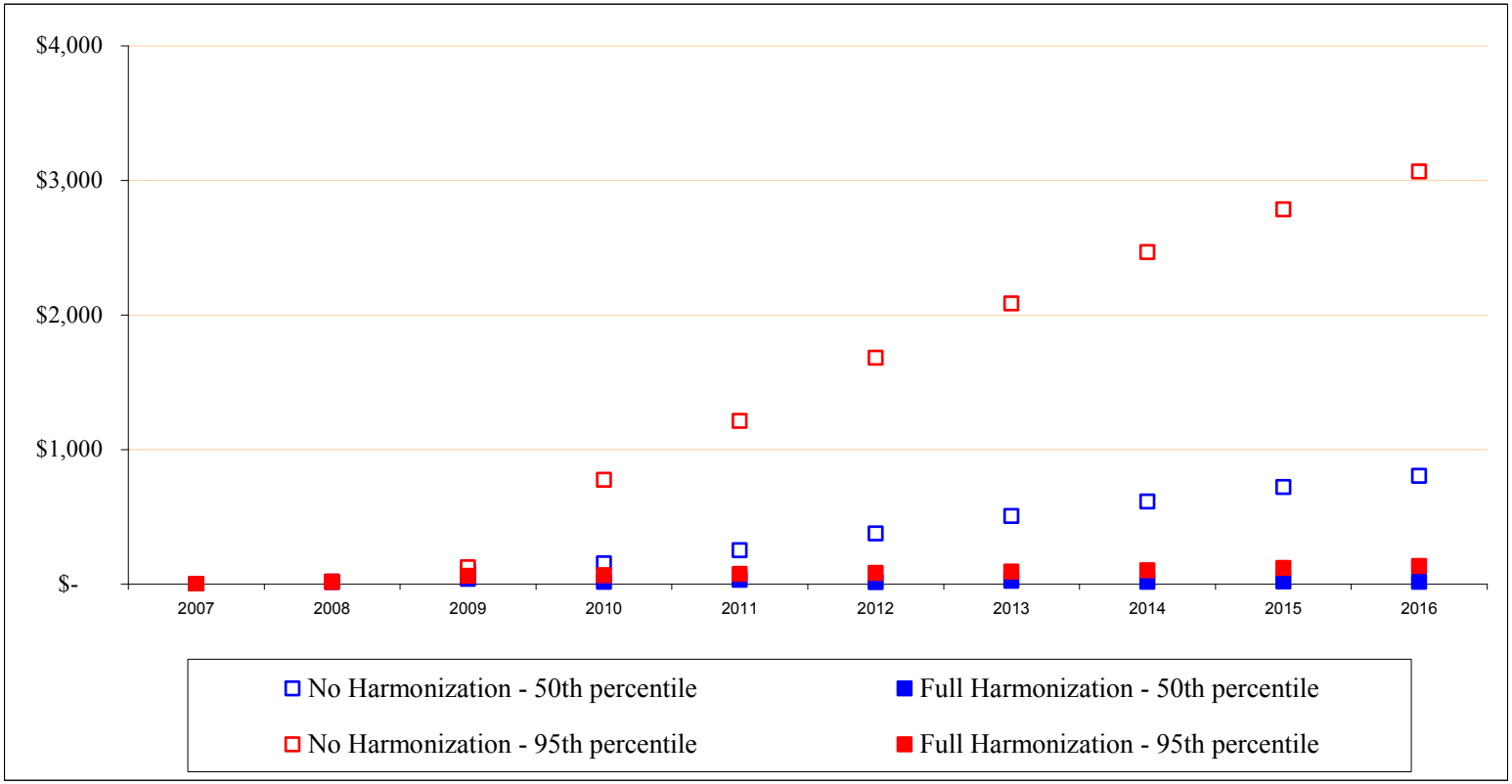
Percentile	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Deterministic	$0	$17	$106	$204	$240	$337	$403	$450	$496	$538
5th	$0	$17	$38	$0	$0	$0	$0	$0	$0	$0
25th	$0	$17	$38	$34	$44	$70	$120	$159	$197	$229
50th	$0	$17	$93	$153	$253	$376	$505	$613	$722	$804
75th	$0	$17	$110	$385	$613	$831	$1,043	$1,245	$1,424	$1,592
95th	$0	$17	$126	$776	$1,212	$1,682	$2,087	$2,466	$2,785	$3,065

Scenario 1: 100% Funded, No Prepayment Credit
Prepayment Credit (BOY) -- Full Harmonization ($M)



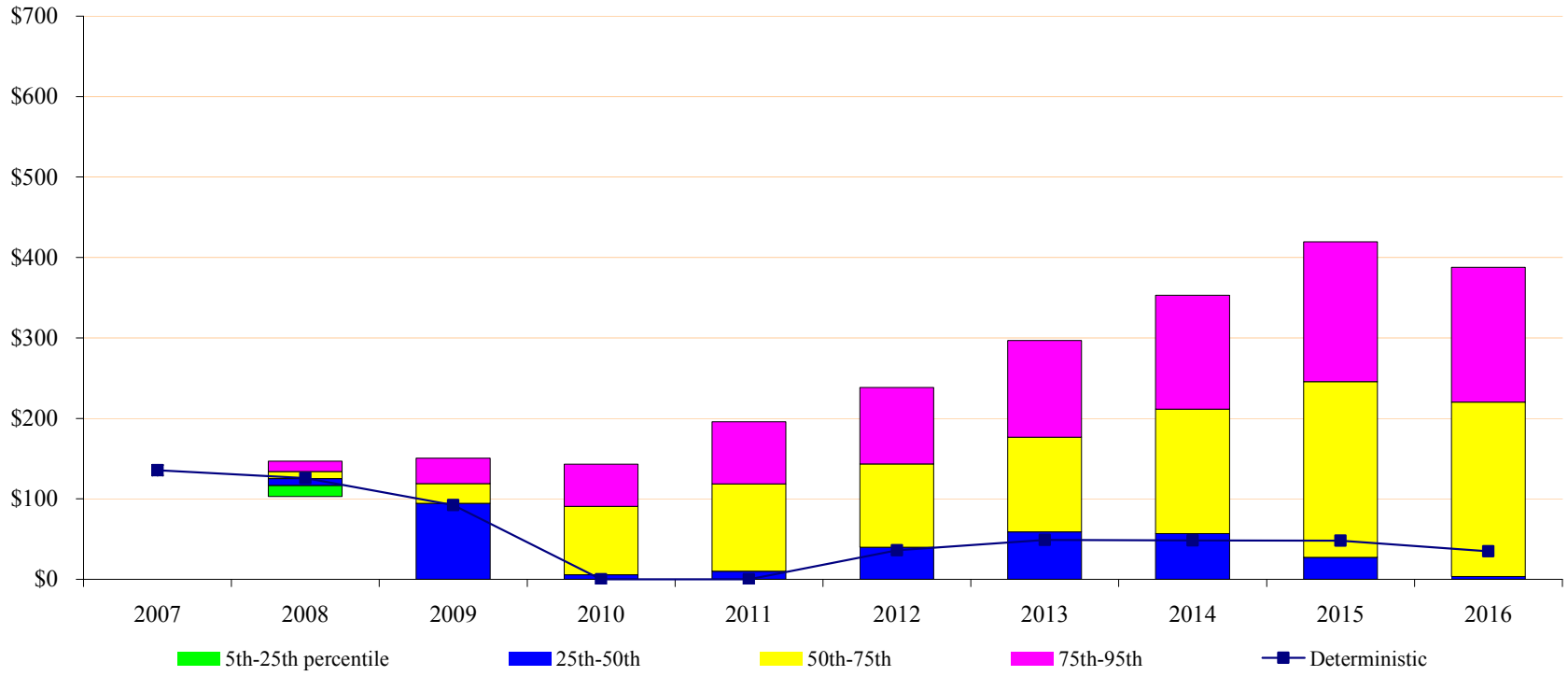
Percentile	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Deterministic	$0	$17	$38	$19	$3	$0	$0	$0	$0	$0
5th	$0	$17	$31	$0	$0	$0	$0	$0	$0	$0
25th	$0	$17	$36	$6	$6	$0	$1	$0	$0	$0
50th	$0	$17	$40	$18	$33	$15	$24	$17	$19	$16
75th	$0	$17	$47	$47	$55	$54	$55	$56	$59	$63
95th	$0	$17	$60	$67	$75	$83	$93	$103	$119	$135

Scenario 1: 100% Funded, No Prepayment Credit
Prepayment Credit (BOY) ($M)



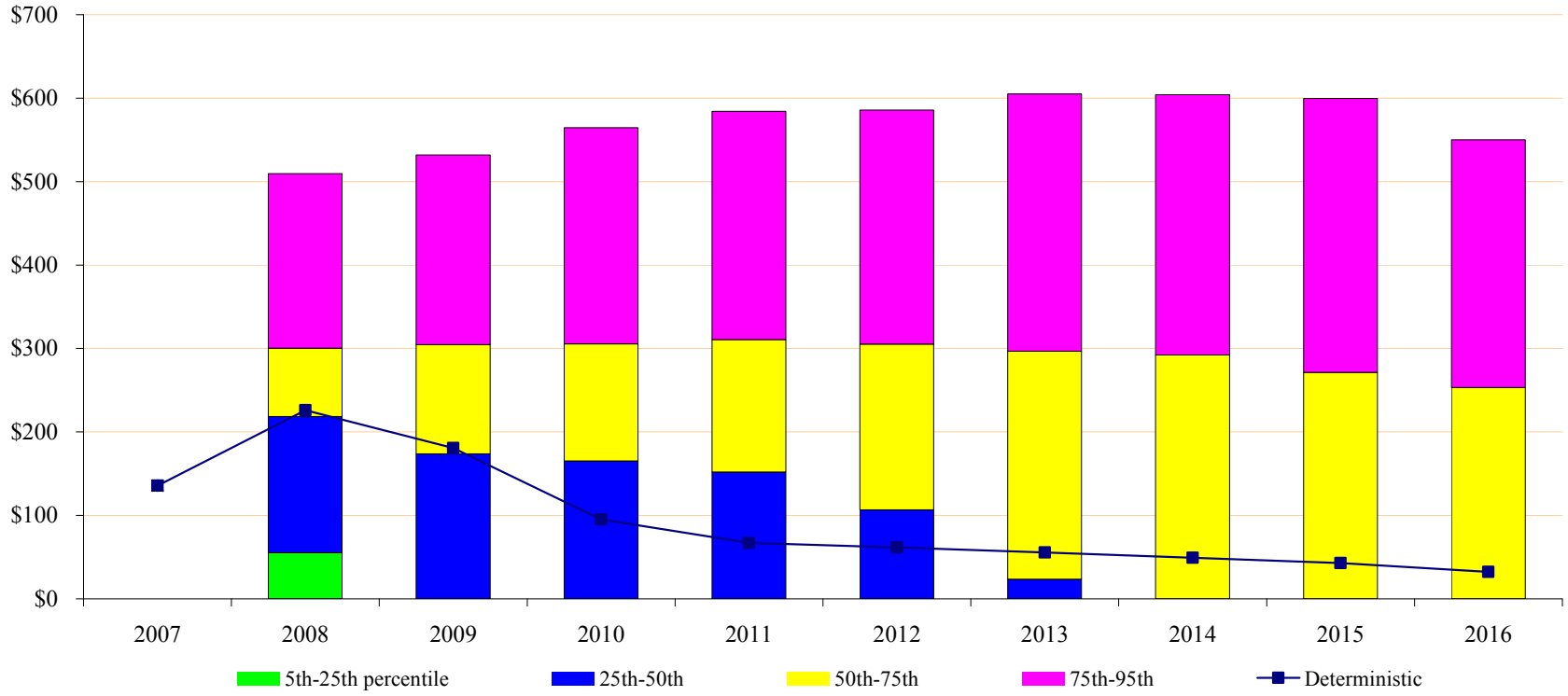
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
No Harmonization - 50th percentile	$ -	$ 17	$ 93	$ 153	$ 253	$ 376	$ 505	$ 613	$ 722	$ 804
Full Harmonization - 50th percentile	$ -	$ 17	$ 40	$ 18	$ 33	$ 15	$ 24	$ 17	$ 19	$ 16
No Harmonization - 95th percentile	$ -	$ 17	$ 126	$ 776	$ 1,212	$ 1,682	$ 2,087	$ 2,466	$ 2,785	$ 3,065
Full Harmonization - 95th percentile	$ -	$ 17	$ 60	$ 67	$ 75	$ 83	$ 93	$ 103	$ 119	$ 135

Scenario 1: 100% Funded, No Prepayment Credit
CAS Assignable Cost -- No Harmonization ($M)



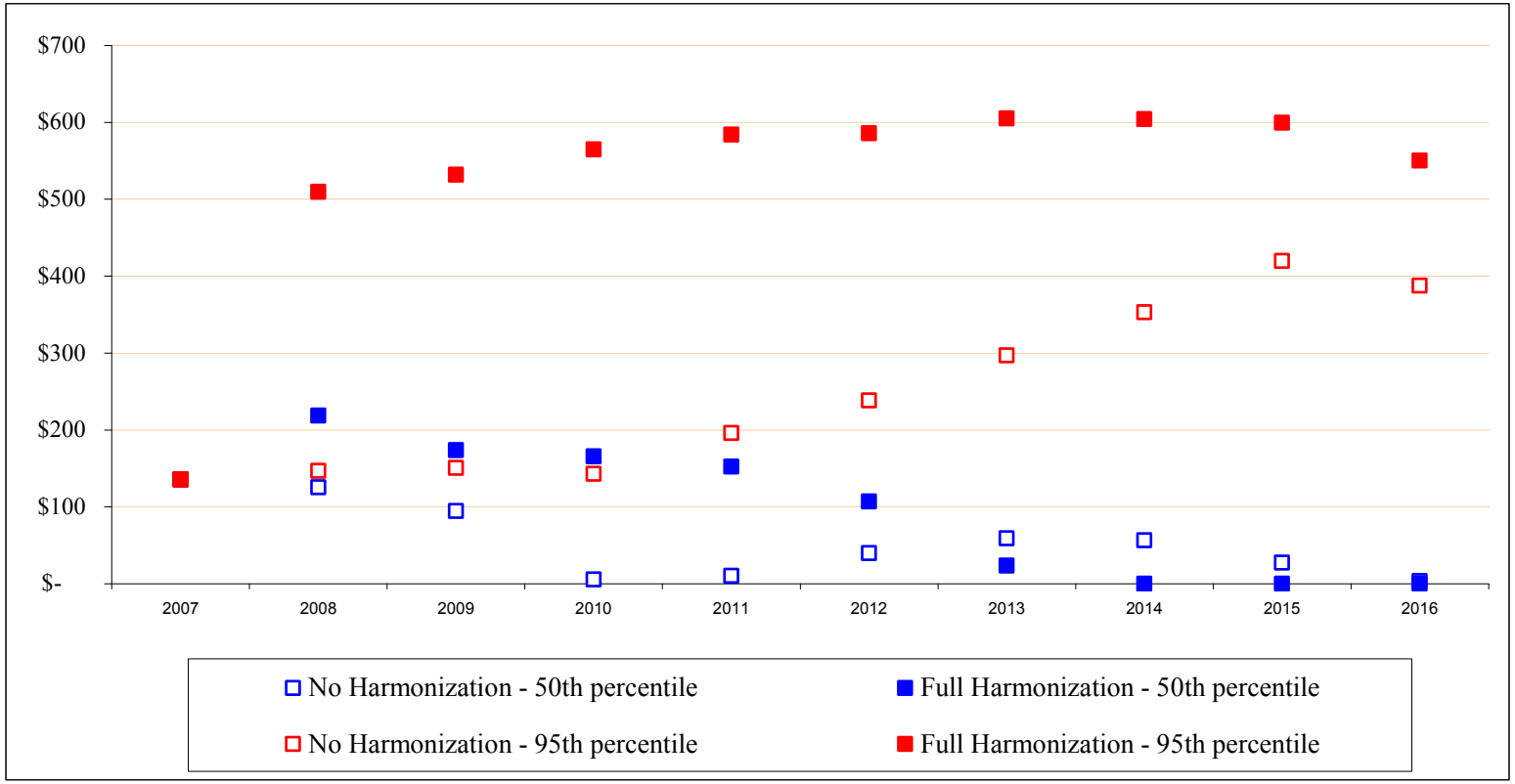
Percentile	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Deterministic	$136	$126	$92	$0	$0	$36	$49	$48	$48	$35
5th	$136	$103	$0	$0	$0	$0	$0	$0	$0	$0
25th	$136	$117	$0	$0	$0	$0	$0	$0	$0	$0
50th	$136	$125	$94	$6	$10	$40	$59	$57	$27	$4
75th	$136	$134	$119	$91	$118	$143	$177	$211	$246	$220
95th	$136	$147	$150	$143	$196	$238	$297	$353	$420	$388

Scenario 1: 100% Funded, No Prepayment Credit
CAS Assignable Cost -- Full Harmonization ($M)



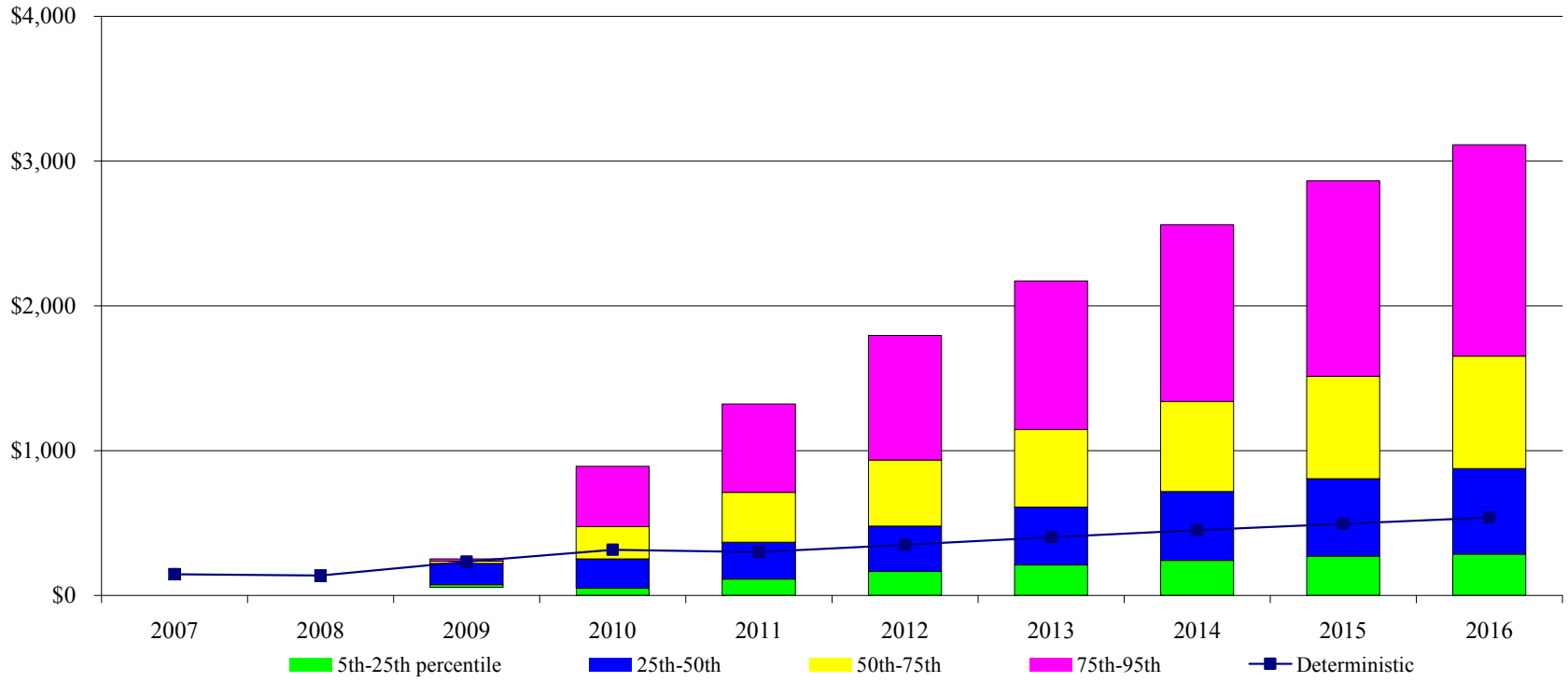
Percentile	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Deterministic	$136	$226	$181	$95	$67	$62	$56	$49	$43	$32
5th	$136	$0	$0	$0	$0	$0	$0	$0	$0	$0
25th	$136	$55	$0	$0	$0	$0	$0	$0	$0	$0
50th	$136	$219	$174	$165	$152	$107	$24	$0	$0	$0
75th	$136	$300	$305	$306	$311	$305	$297	$292	$271	$253
95th	$136	$510	$532	$565	$584	$586	$605	$604	$600	$550

Scenario 1: 100% Funded, No Prepayment Credit
CAS Assignable Cost ($M)



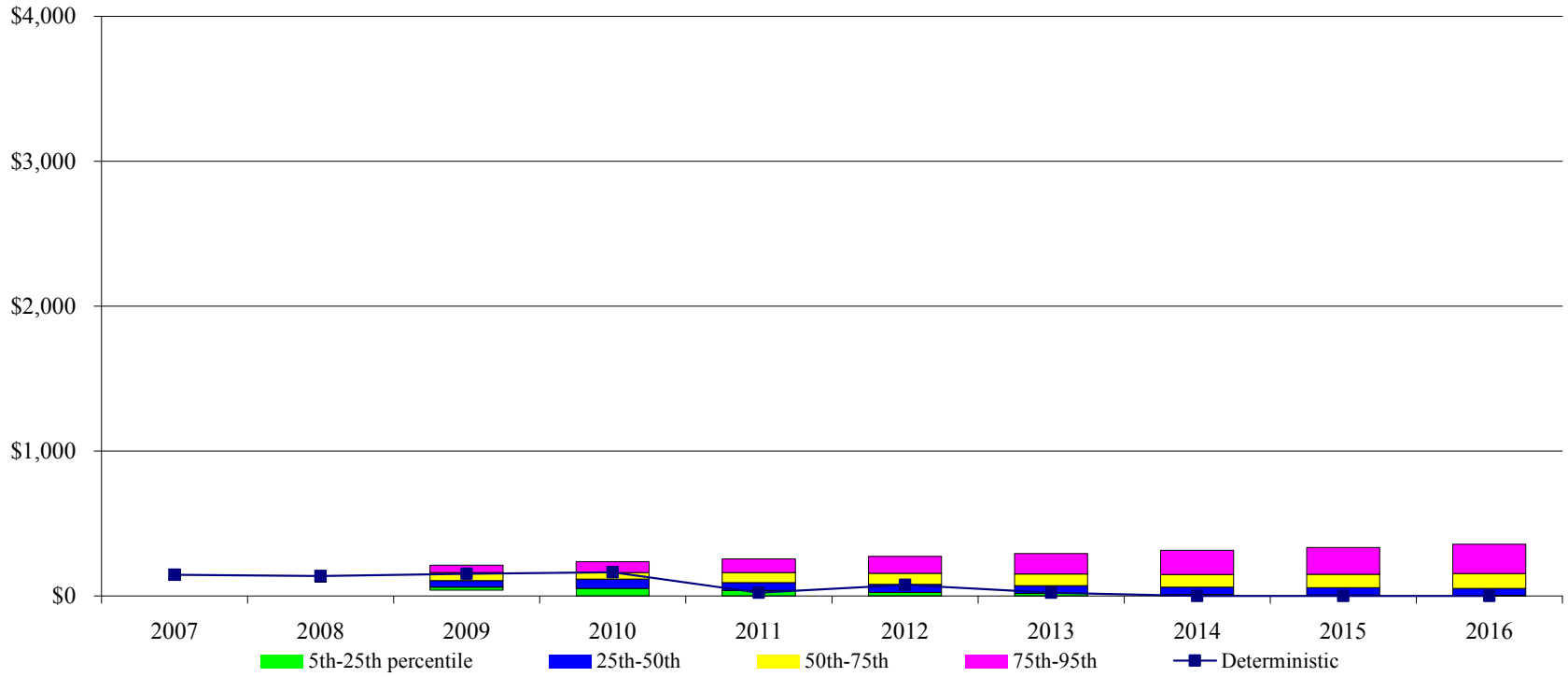
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
No Harmonization - 50th percentile	$ 136	$ 125	$ 94	$ 6	$ 10	$ 40	$ 59	$ 57	$ 27	$ 4
Full Harmonization - 50th percentile	$ 136	$ 219	$ 174	$ 165	$ 152	$ 107	$ 24	$ -	$ -	$ -
No Harmonization - 95th percentile	$ 136	$ 147	$ 150	$ 143	$ 196	$ 238	$ 297	$ 353	$ 420	$ 388
Full Harmonization - 95th percentile	$ 136	$ 510	$ 532	$ 565	$ 584	$ 586	$ 605	$ 604	$ 600	$ 550

Scenario 2: 100% Funded, 3% Prepayment Credit
Prepayment Credit (BOY) -- No Harmonization ($M)



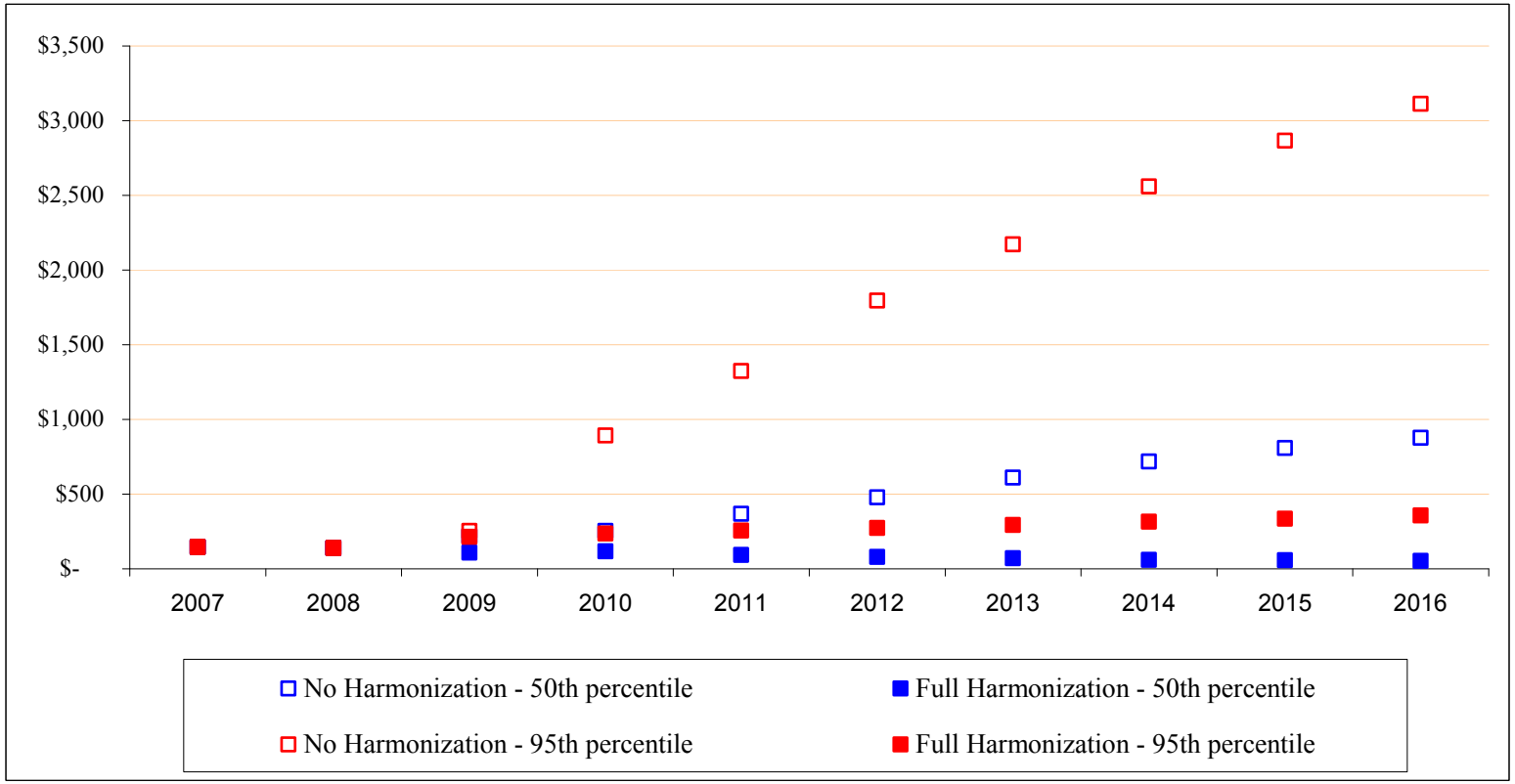
Percentile	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Deterministic	$146	$138	$234	$315	$300	$351	$402	$450	$496	$538
5th	$146	$138	$55	$0	$0	$0	$0	$0	$0	$0
25th	$146	$138	$75	$50	$114	$165	$210	$242	$272	$286
50th	$146	$138	$221	$252	$368	$478	$609	$718	$807	$876
75th	$146	$138	$237	$476	$713	$936	$1,147	$1,340	$1,514	$1,653
95th	$146	$138	$253	$892	$1,323	$1,796	$2,173	$2,560	$2,865	$3,113

Scenario 2: 100% Funded, 3% Prepayment Credit
Prepayment Credit (BOY) -- Full Harmonization ($M)



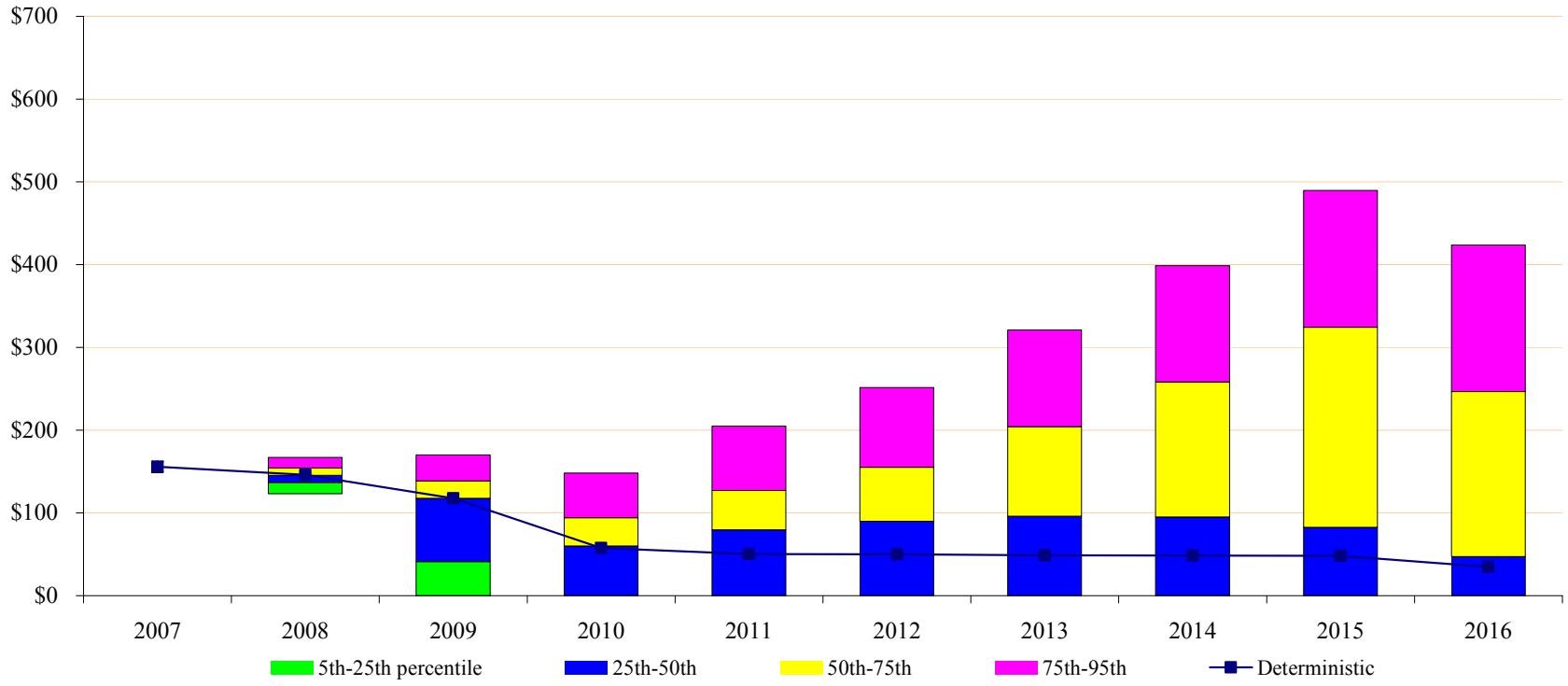
Percentile	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Deterministic	$146	$138	$152	$164	$22	$77	$22	$0	$0	$0
5th	$146	$138	$40	$0	$0	$0	$0	$0	$0	$0
25th	$146	$138	$61	$52	$38	$24	$18	$11	$7	$4
50th	$146	$138	$107	$117	$93	$79	$71	$60	$57	$52
75th	$146	$138	$162	$162	$162	$156	$152	$147	$150	$155
95th	$146	$138	$213	$236	$255	$273	$293	$315	$335	$357

Scenario 2: 100% Funded, 3% Prepayment Credit
Prepayment Credit (BOY) ($M)



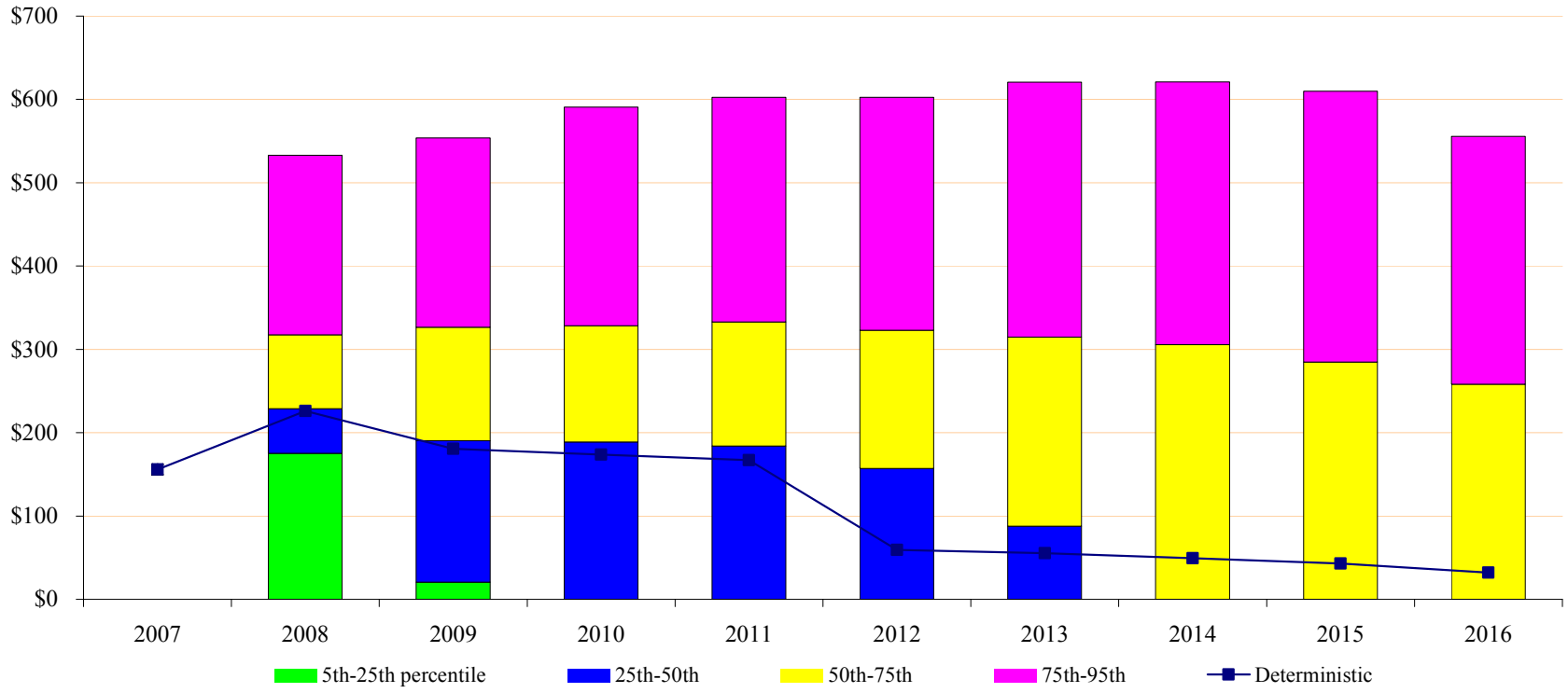
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
No Harmonization - 50th percentile	$ 146	$ 138	$ 221	$ 252	$ 368	$ 478	$ 609	$ 718	$ 807	$ 876
Full Harmonization - 50th percentile	$ 146	$ 138	$ 107	$ 117	$ 93	$ 79	$ 71	$ 60	$ 57	$ 52
No Harmonization - 95th percentile	$ 146	$ 138	$ 253	$ 892	$ 1,323	$ 1,796	$ 2,173	$ 2,560	$ 2,865	$ 3,113
Full Harmonization - 95th percentile	$ 146	$ 138	$ 213	$ 236	$ 255	$ 273	$ 293	$ 315	$ 335	$ 357

Scenario 2: 100% Funded, 3% Prepayment Credit
CAS Assignable Costs -- No Harmonization ($M)



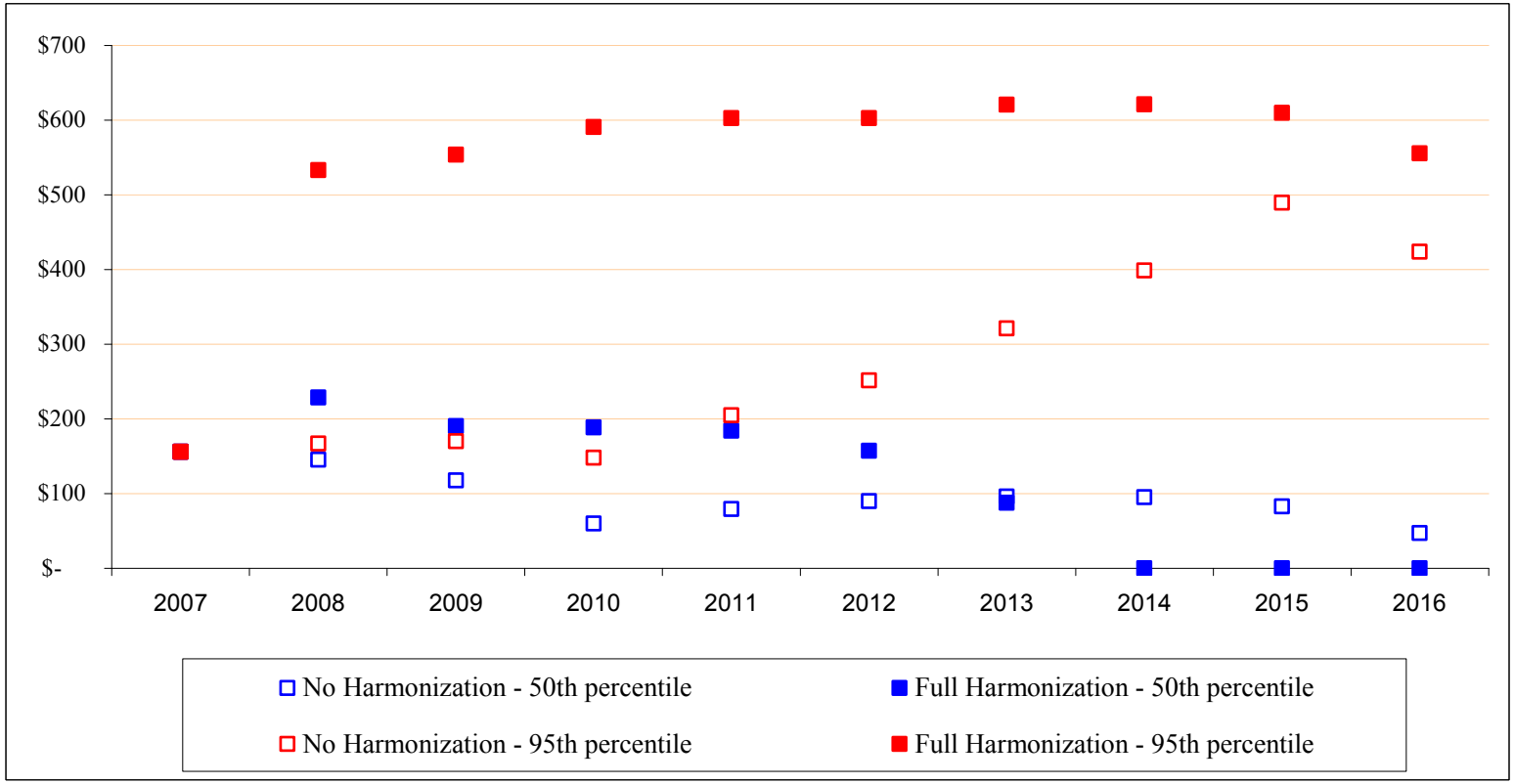
Percentile	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Deterministic	$156	$146	$118	$57	$50	$50	$49	$48	$48	$35
5th	$156	$123	$0	$0	$0	$0	$0	$0	$0	$0
25th	$156	$137	$41	$0	$0	$0	$0	$0	$0	$0
50th	$156	$146	$118	$60	$80	$90	$96	$95	$83	$47
75th	$156	$154	$139	$94	$127	$155	$204	$258	$324	$247
95th	$156	$167	$170	$148	$205	$251	$321	$399	$490	$424

Scenario 2: 100% Funded, 3% Prepayment Credit
CAS Assignable Cost -- Full Harmonization ($M)



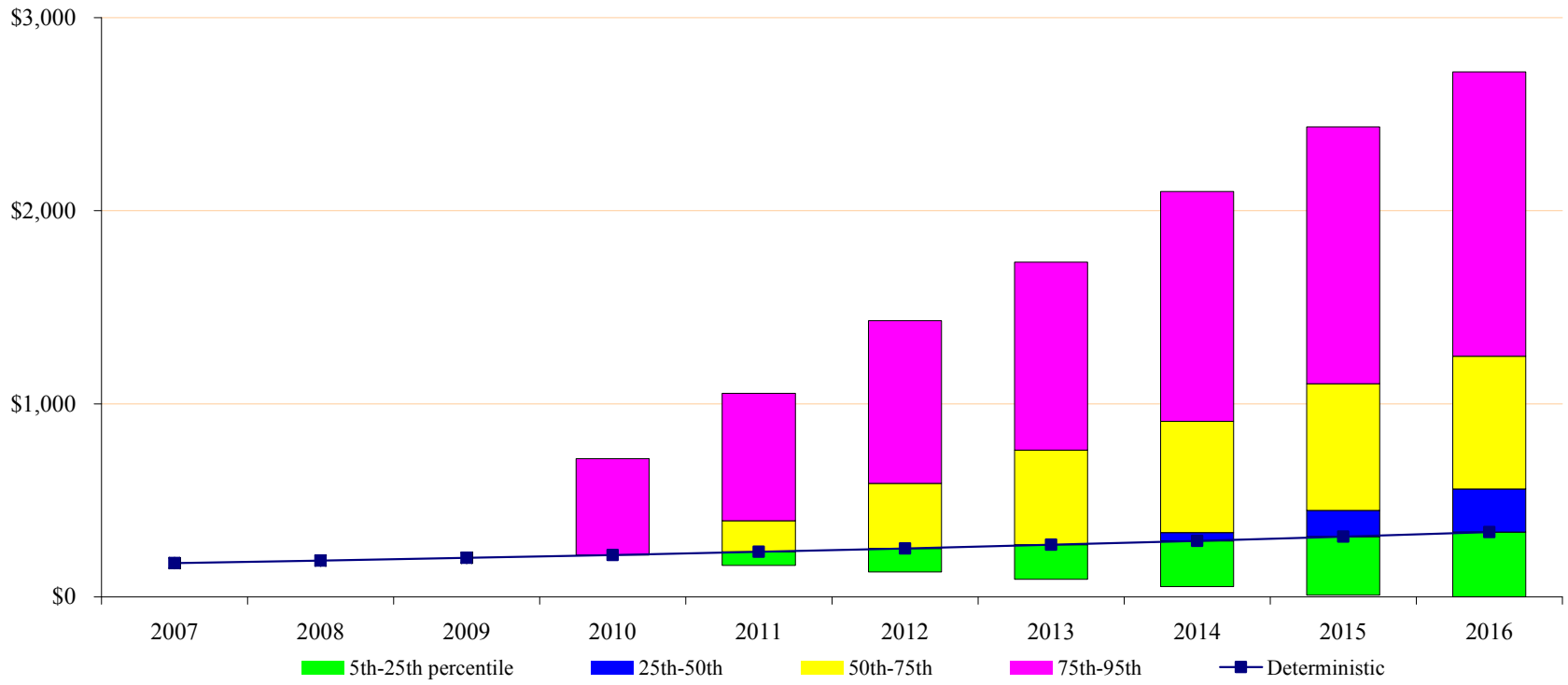
Percentile	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Deterministic	$156	$226	$181	$174	$167	$59	$56	$49	$43	$32
5th	$156	$0	$0	$0	$0	$0	$0	$0	$0	$0
25th	$156	$175	$21	$0	$0	$0	$0	$0	$0	$0
50th	$156	$229	$190	$189	$184	$157	$88	$0	$0	$0
75th	$156	$318	$327	$329	$333	$323	$315	$306	$285	$258
95th	$156	$533	$554	$591	$603	$603	$621	$621	$610	$556

Scenario 2: 100% Funded, 3% Prepayment Credit
CAS Assignable Cost ($M)



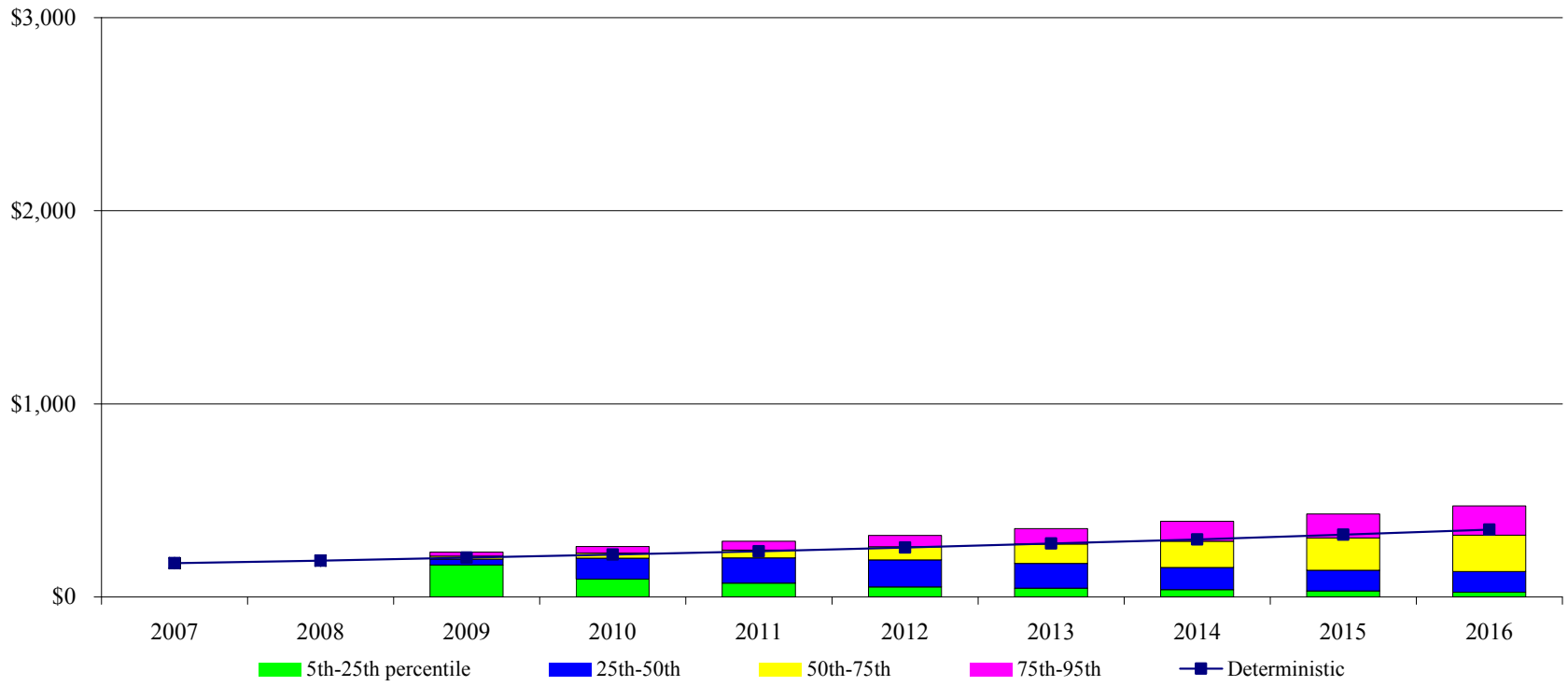
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
No Harmonization - 50th percentile	$ 156	$ 146	$ 118	$ 60	$ 80	$ 90	$ 96	$ 95	$ 83	$ 47
Full Harmonization - 50th percentile	$ 156	$ 229	$ 190	$ 189	$ 184	$ 157	$ 88	$ -	$ -	$ -
No Harmonization - 95th percentile	$ 156	$ 167	$ 170	$ 148	$ 205	$ 251	$ 321	$ 399	$ 490	$ 424
Full Harmonization - 95th percentile	$ 156	$ 533	$ 554	$ 591	$ 603	$ 603	$ 621	$ 621	$ 610	$ 556

Scenario 3: 120% Funded, 3% Prepayment Credit
Prepayment Credit (BOY) -- No Harmonization ($M)



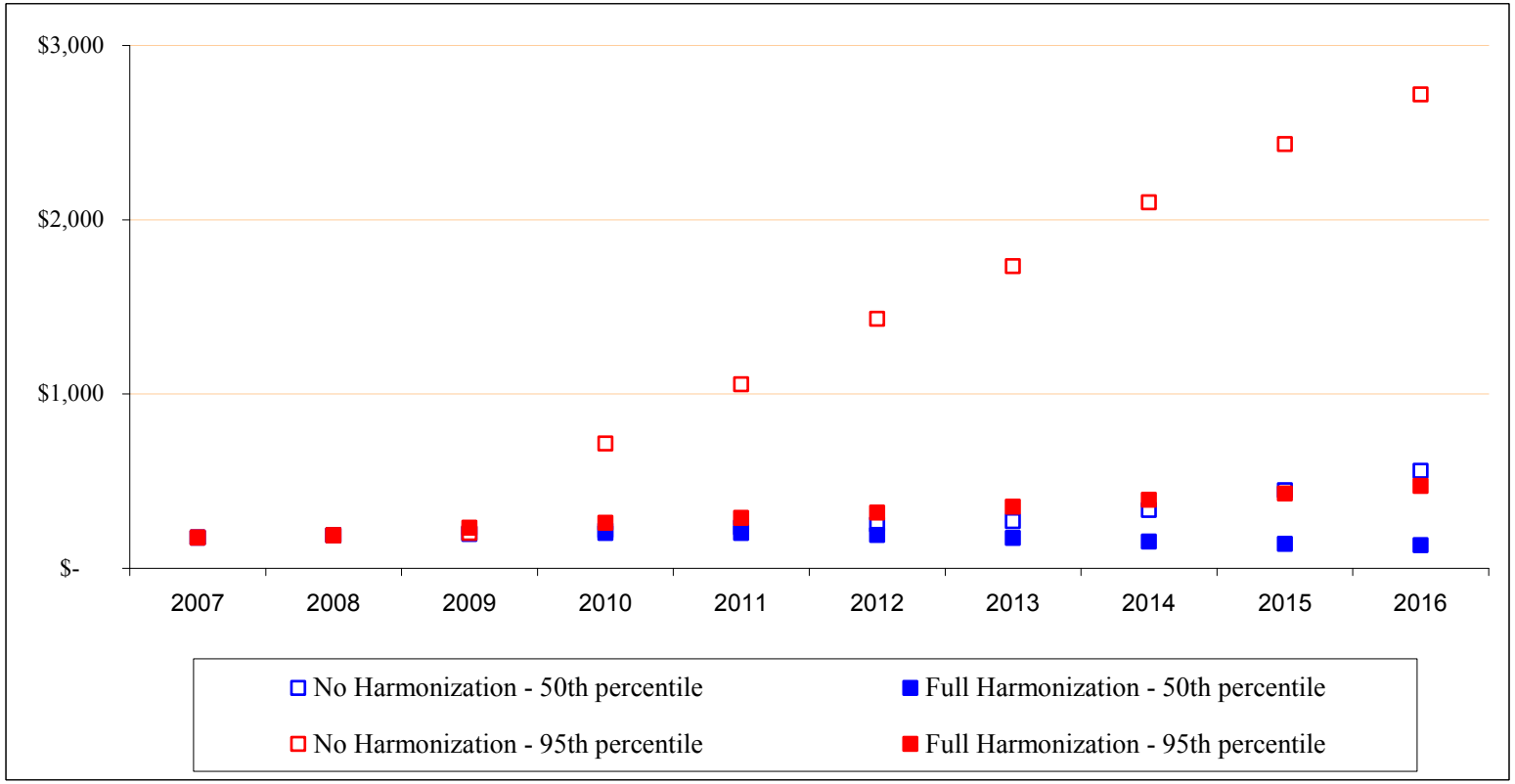
Percentile	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Deterministic	$175	$188	$202	$217	$234	$251	$270	$290	$312	$336
5th	$175	$188	$202	$217	$164	$130	$91	$53	$9	$0
25th	$175	$188	$202	$217	$234	$251	$270	$290	$312	$336
50th	$175	$188	$202	$217	$234	$251	$270	$334	$448	$559
75th	$175	$188	$202	$217	$395	$588	$760	$909	$1,104	$1,247
95th	$175	$188	$202	$716	$1,055	$1,431	$1,733	$2,100	$2,434	$2,719

Scenario 3: 120% Funded, 3% Prepayment Credit
Prepayment Credit (BOY) -- Full Harmonization ($M)



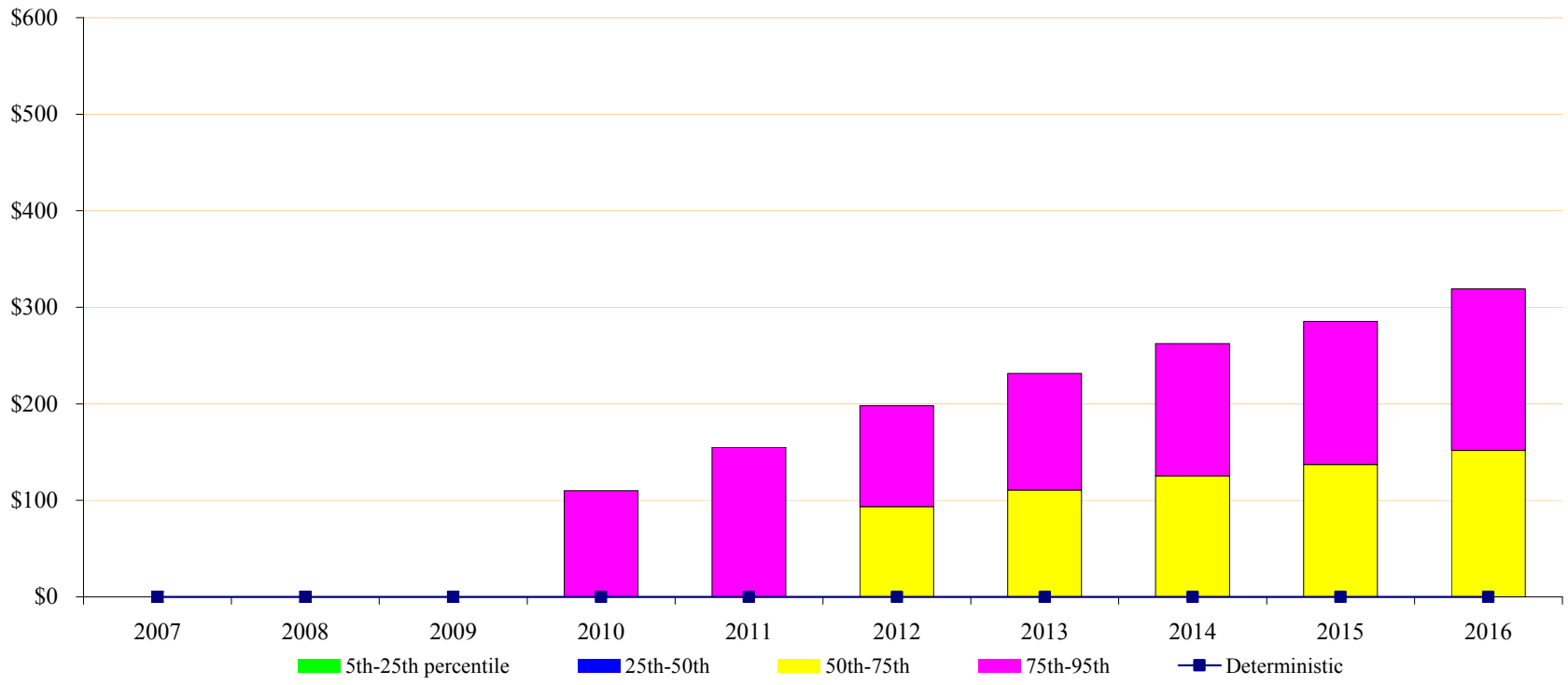
Percentile	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Deterministic	$175	$188	$203	$219	$237	$256	$276	$299	$322	$348
5th	$175	$188	$0	$0	$0	$0	$0	$0	$0	$0
25th	$175	$188	$166	$93	$71	$52	$46	$38	$32	$25
50th	$175	$188	$196	$201	$203	$192	$173	$153	$139	$132
75th	$175	$188	$211	$228	$243	$259	$275	$289	$305	$321
95th	$175	$188	$233	$261	$289	$319	$354	$392	$429	$471

Scenario 3: 120% Funded, 3% Prepayment Credit
Prepayment Credit (BOY) ($M)



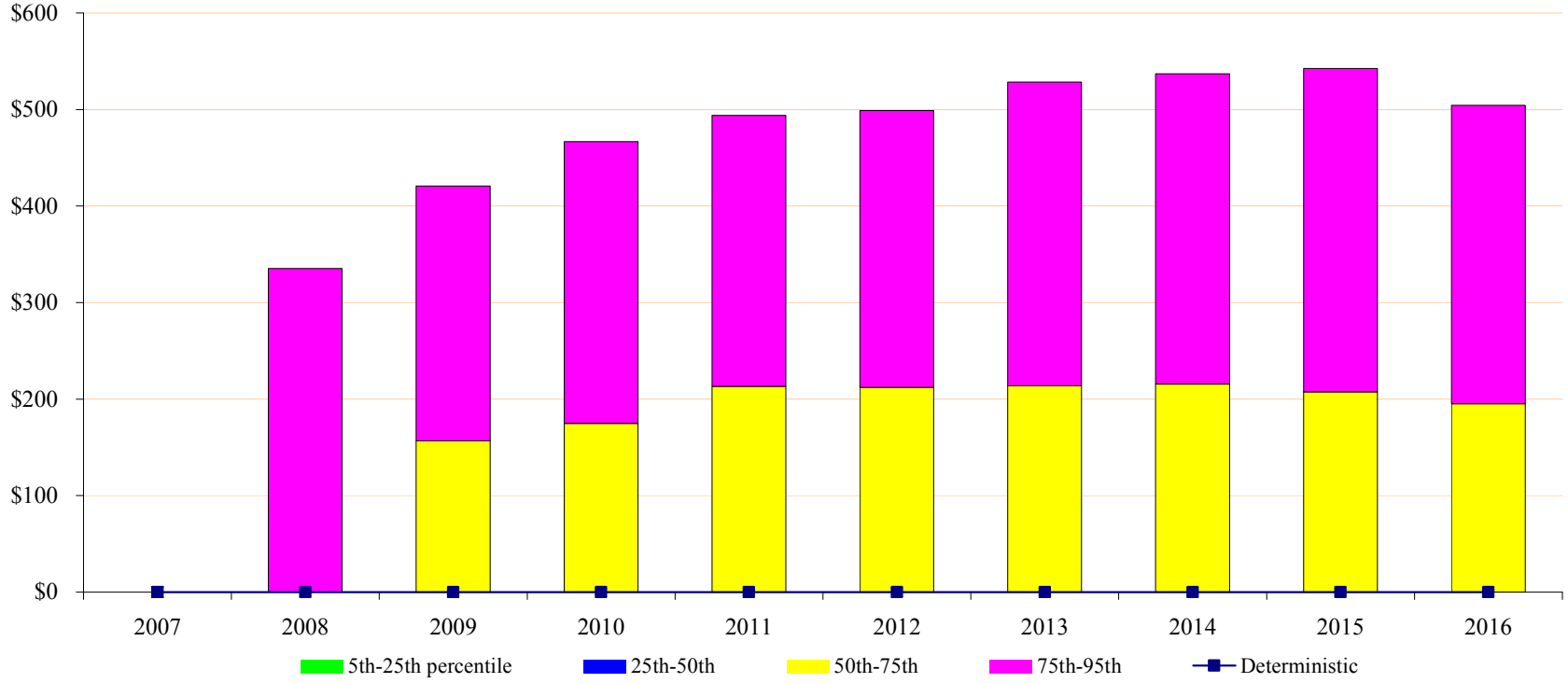
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
No Harmonization - 50th percentile	$ 175	$ 188	$ 202	$ 217	$ 234	$ 251	$ 270	$ 334	$ 448	$ 559
Full Harmonization - 50th percentile	$ 175	$ 188	$ 196	$ 201	$ 203	$ 192	$ 173	$ 153	$ 139	$ 132
No Harmonization - 95th percentile	$ 175	$ 188	$ 202	$ 716	$ 1,055	$ 1,431	$ 1,733	$ 2,100	$ 2,434	$ 2,719
Full Harmonization - 95th percentile	$ 175	$ 188	$ 233	$ 261	$ 289	$ 319	$ 354	$ 392	$ 429	$ 471

Scenario 3: 120% Funded, 3% Prepayment Credit
CAS Assignable Cost -- No Harmonization ($M)



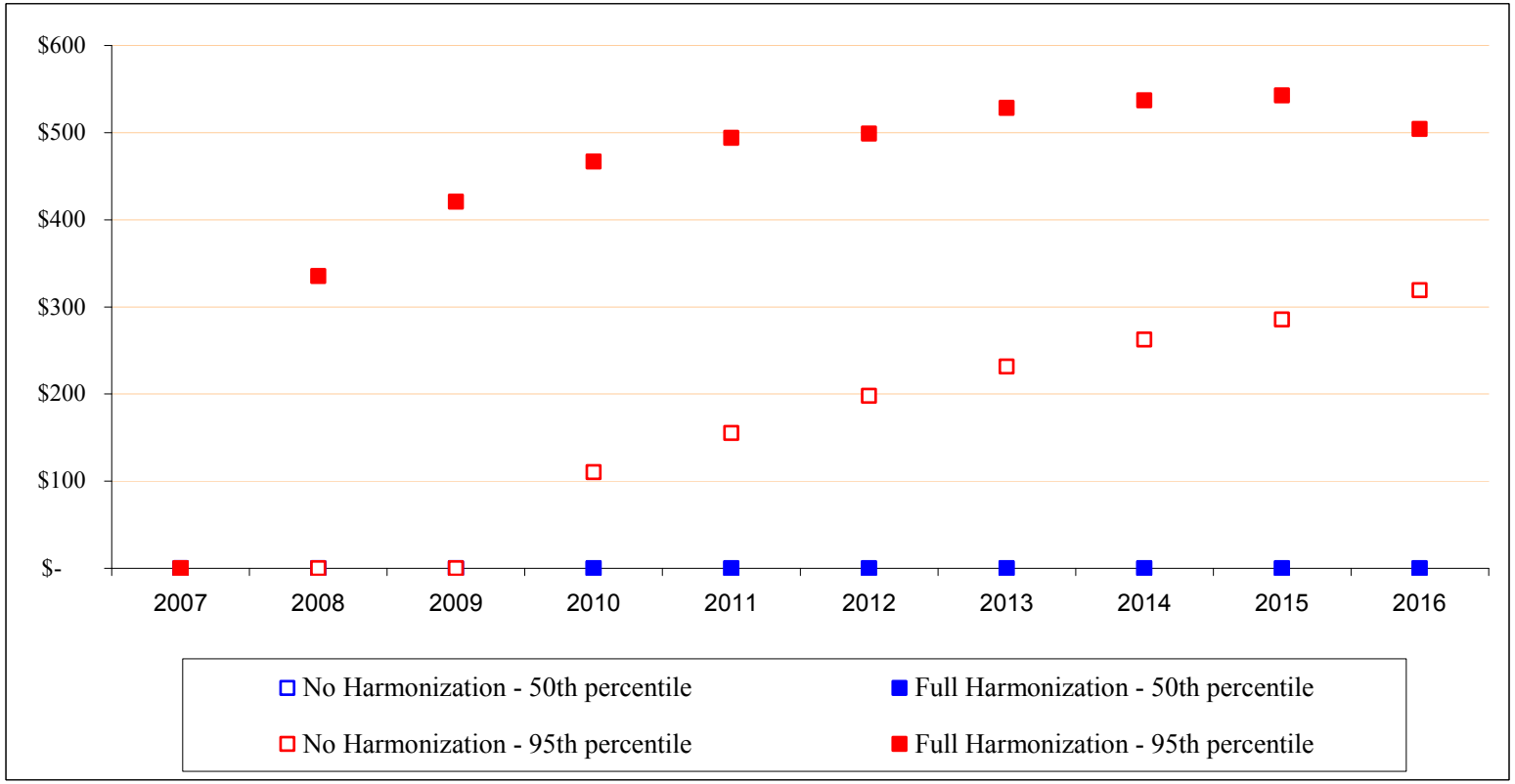
Percentile	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Deterministic	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5th	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
25th	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
50th	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
75th	$0	$0	$0	$0	$0	$94	$111	$125	$137	$152
95th	$0	$0	$0	$110	$155	$198	$231	$262	$285	$319

Scenario 3: 120% Funded, 3% Prepayment Credit
CAS Assignable Cost -- Full Harmonization ($M)



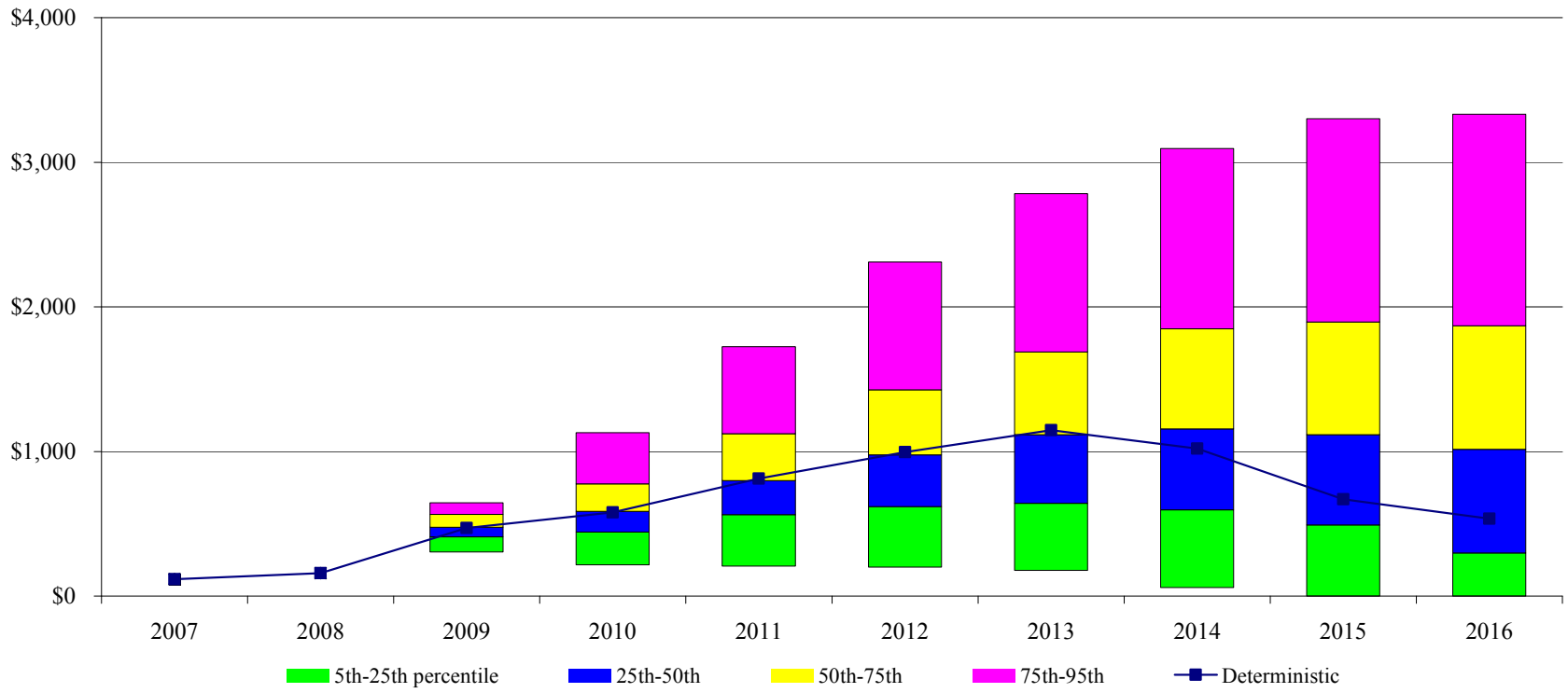
Percentile	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Deterministic	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5th	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
25th	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
50th	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
75th	$0	$0	$157	$175	$213	$212	$214	$216	$208	$195
95th	$0	$335	$421	$467	$494	$499	$528	$537	$543	$504

Scenario 3: 120% Funded, 3% Prepayment Credit
CAS Assignable Cost ($M)



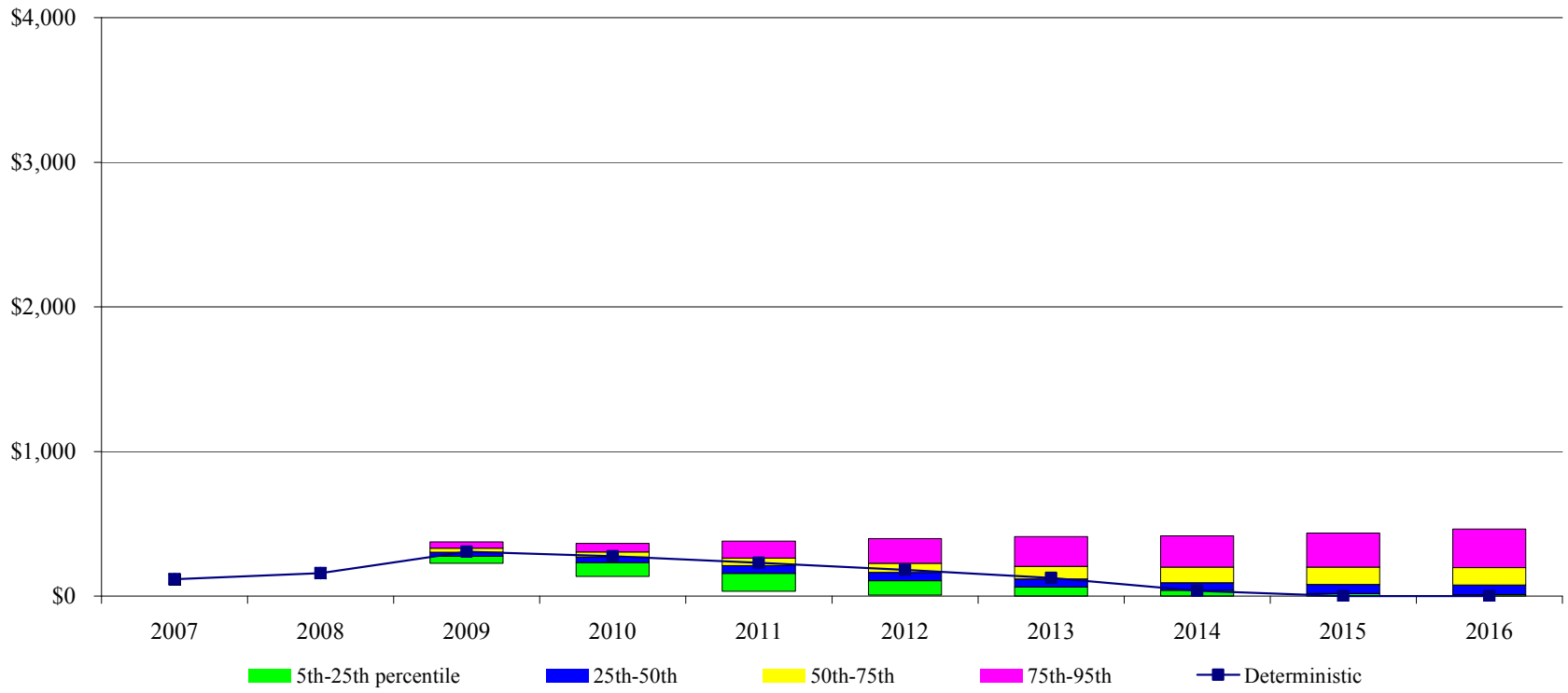
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
No Harmonization - 50th percentile	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Full Harmonization - 50th percentile	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
No Harmonization - 95th percentile	$ -	$ -	$ -	$ 110	$ 155	$ 198	$ 231	$ 262	$ 285	$ 319
Full Harmonization - 95th percentile	$ -	$ 335	$ 421	$ 467	$ 494	$ 499	$ 528	$ 537	$ 543	$ 504

Scenario 4: 80% Funded, 3% Prepayment Credit
Prepayment Credit (BOY) -- No Harmonization ($M)



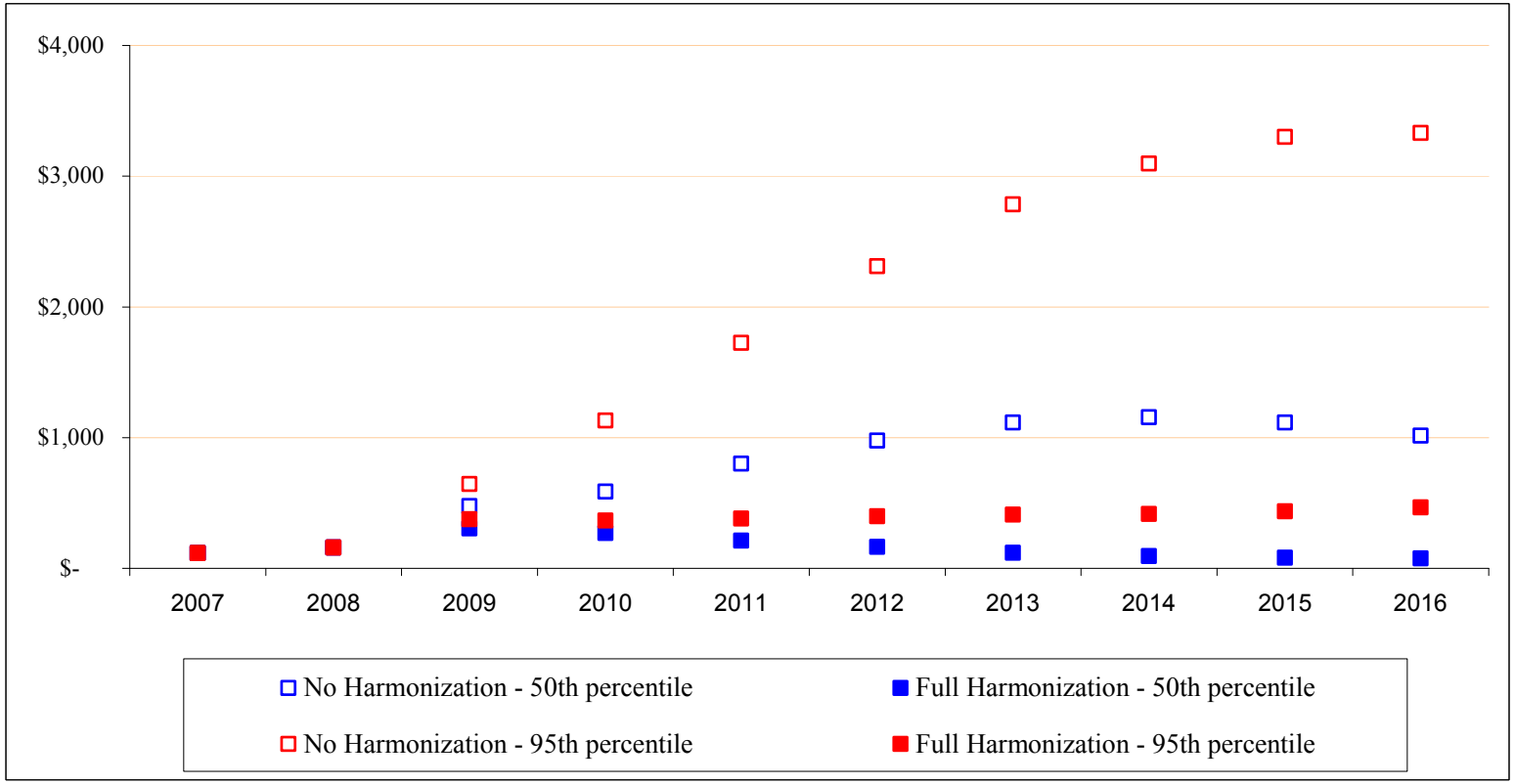
Percentile	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Deterministic	$117	$158	$471	$579	$812	$996	$1,147	$1,019	$669	$535
5th	$117	$158	$305	$216	$208	$201	$178	$60	$0	$0
25th	$117	$158	$410	$442	$562	$618	$642	$597	$491	$298
50th	$117	$158	$476	$585	$799	$977	$1,115	$1,156	$1,116	$1,016
75th	$117	$158	$565	$775	$1,122	$1,426	$1,688	$1,848	$1,895	$1,870
95th	$117	$158	$646	$1,130	$1,725	$2,311	$2,783	$3,095	$3,300	$3,331

Sceanrio 4: 80% Funded, 3% Prepayment Credit
Prepayment Credit (BOY) -- Full Harmonization ($M)



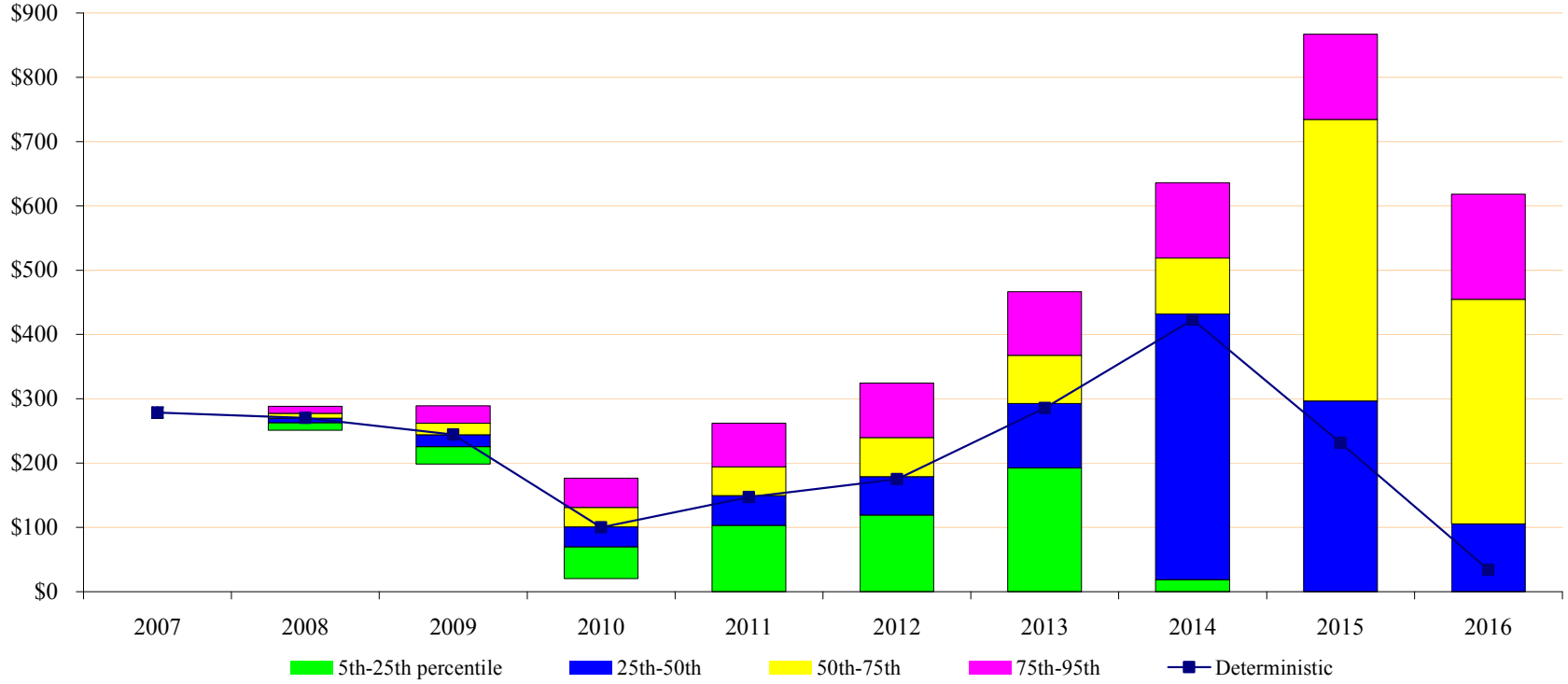
Percentile	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Deterministic	$117	$158	$307	$275	$231	$181	$126	$36	$0	$0
5th	$117	$158	$227	$136	$34	$8	$1	$0	$0	$0
25th	$117	$158	$276	$232	$157	$106	$62	$40	$18	$11
50th	$117	$158	$304	$270	$212	$165	$118	$93	$81	$76
75th	$117	$158	$331	$305	$263	$227	$206	$200	$201	$198
95th	$117	$158	$374	$365	$381	$398	$411	$416	$435	$465

Scenario 4: 80% Funded, 3% Prepayment Credit
Prepayment Credit (BOY) ($M)



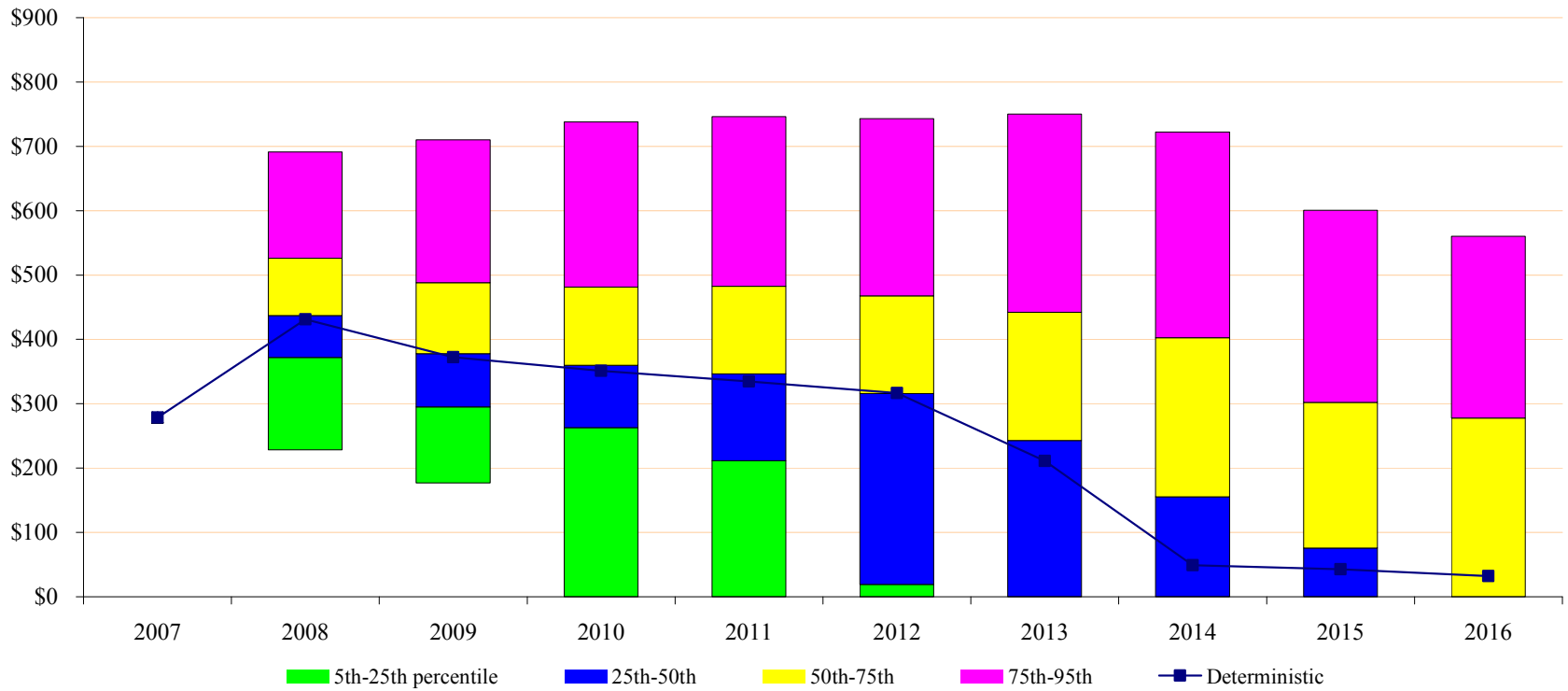
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
No Harmonization - 50th percentile	$ 117	$ 158	$ 476	$ 585	$ 799	$ 977	$ 1,115	$ 1,156	$ 1,116	$ 1,016
Full Harmonization - 50th percentile	$ 117	$ 158	$ 304	$ 270	$ 212	$ 165	$ 118	$ 93	$ 81	$ 76
No Harmonization - 95th percentile	$ 117	$ 158	$ 646	$ 1,130	$ 1,725	$ 2,311	$ 2,783	$ 3,095	$ 3,300	$ 3,331
Full Harmonization - 95th percentile	$ 117	$ 158	$ 374	$ 365	$ 381	$ 398	$ 411	$ 416	$ 435	$ 465

Scenario 4: 80% Funded, 3% Prepayment Credit
CAS Assignable Cost -- No Harmonization ($M)



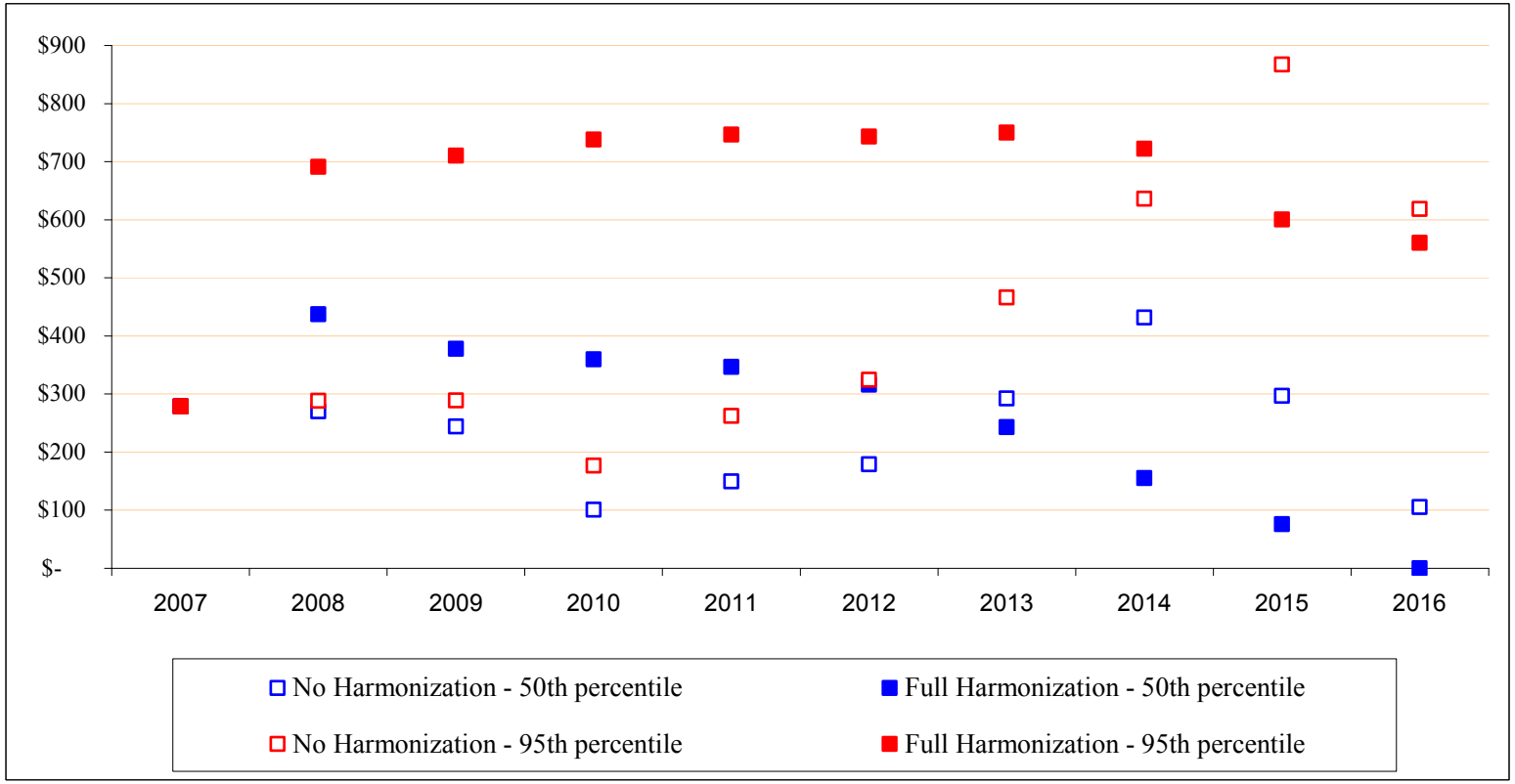
Percentile	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Deterministic	$279	$270	$244	$100	$147	$175	$286	$423	$231	$34
5th	$279	$251	$199	$20	$0	$0	$0	$0	$0	$0
25th	$279	$263	$226	$70	$103	$119	$193	$19	$0	$0
50th	$279	$270	$244	$101	$149	$179	$293	$432	$297	$105
75th	$279	$277	$262	$131	$194	$240	$367	$519	$734	$455
95th	$279	$288	$289	$177	$262	$324	$466	$636	$867	$618

Scenario 4: 80% Funded, 3% Prepayment Credit
CAS Assignable Cost -- Full Harmonization ($M)



Percentile	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Deterministic	$279	$431	$372	$351	$335	$316	$211	$49	$43	$32
5th	$279	$228	$177	$0	$0	$0	$0	$0	$0	$0
25th	$279	$372	$295	$263	$211	$19	$0	$0	$0	$0
50th	$279	$437	$378	$360	$346	$316	$243	$155	$76	$0
75th	$279	$526	$488	$481	$482	$468	$442	$403	$302	$278
95th	$279	$691	$710	$738	$746	$743	$750	$722	$601	$560

Scenario 4: 80% Funded, 3% Prepayment Credit
CAS Assignable Cost ($M)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
No Harmonization - 50th percentile	$ 279	$ 270	$ 244	$ 101	$ 149	$ 179	$ 293	$ 432	$ 297	$ 105
Full Harmonization - 50th percentile	$ 279	$ 437	$ 378	$ 360	$ 346	$ 316	$ 243	$ 155	$ 76	$ -
No Harmonization - 95th percentile	$ 279	$ 288	$ 289	$ 177	$ 262	$ 324	$ 466	$ 636	$ 867	$ 618
Full Harmonization - 95th percentile	$ 279	$ 691	$ 710	$ 738	$ 746	$ 743	$ 750	$ 722	$ 601	$ 560

APPENDIX C
SURVEY OF GOVERNMENT CONTRACTOR ASSUMPTIONS

Watson Wyatt Government Contractor Assumptions Survey
August 2007

Company	ERISA Valuation Rate	CAS Valuation Rate	FAS Discount Rate	FAS Expected Return on Assets	Asset Return Assumption Used for CAS Forward Pricing	Basis for Asset Return Assumption Used for CAS Forward Pricing	Are there existing Prepayment Credits?	Comments on difference between PPA funding and CAS costs under current rules
1	8.25%	8.25%	5.65%	8.75%			No	
2	7.00%	7.00%	6.10%	8.75%	7.00%	CAS valuation rate	No	Segmented; ERISA/CAS costs not easily comparable
3	8.00%	7.75%	weighted	8.00%	7.75%	CAS valuation rate	No	
4	8.00%	8.00%	6.30%	8.50%	8.00%	CAS valuation rate	Yes	Contribution policy not driven by CAS costs; plan in surplus
5	8.00%	8.00%	5.75%	8.00%	8.00%	CAS valuation rate	Yes	PPA minimum required contribution and CAS assignable costs equal $0 in next three years
6	7.75%	7.75%	5.95%	8.50%	7.75%	CAS valuation rate	Yes	PPA minimum required contribution equals $0
7	8.50%	8.50%	5.875%	8.50%	8.50%	CAS valuation rate	Yes	Funding requirement exceeds CAS cost by over $0.5B by 2011
8	8.00%	8.00%	6.00%	8.00%			Yes	
9	8.50%	7.75%	5.90%	8.50%	7.75%	CAS valuation rate	Yes	
10	8.00%	8.00%	5.90%	8.00%	8.00%	CAS valuation rate	Yes	
11	8.00%	8.00%	6.00%	9.00%	8.00%	CAS valuation rate	Yes	
12	8.00%	7.50%	5.80%	8.00%	7.50%	CAS valuation rate	Yes	
13	7.25%	7.25%	6.00%	8.50%	7.25%	CAS valuation rate	Yes	
14	7.50%	7.50%	6.00%	8.50%	7.50%	FAS EROA	Yes	Segmented, contributions driven by CAS costs
15	8.00%	8.00%	6.10%	9.00%	8.00%	CAS valuation rate	Yes	
16	8.50%	7.75%	6.00%	8.25%	7.75%	CAS valuation rate	Yes	Prepayment Credit exists. PPA projection shows $0 contributions required. CAS costs would be assignable due to Prepayment Credit.
17	7.50%	7.50%	6.25%	7.50%	7.50%	CAS valuation rate	Yes	Company currently funds more than the minimum. If Company were to contribute the minimum, PPA contributions would exceed CAS cost.
18	7.50%	7.50%	6.00%	8.50%	7.50%	CAS valuation rate	Yes	Funding requirement exceeds CAS cost by over $0.5B by 2011
19	8.25%	8.25%	5.75%	8.25%	8.25%	CAS valuation rate	Yes	Prepayment credit exists. PPA projection shows $0 contributions required. CAS costs would be assignable due to Prepayment Credit.
Average (Mean)	7.92%	7.80%	5.96%	8.37%	7.76%			
Minimum	7.00%	7.00%	5.65%	7.50%	7.00%			
Maximum	8.50%	8.50%	6.30%	9.00%	8.50%			
Mode (greatest frequency)	8.00%	8.00%	6.00%	8.50%	8.00%	CAS valuation rate	Yes	
Minimum/Maximum Spread	1.50%	1.50%	0.65%	1.50%	1.50%			
Distribution								
Under 6%	0	0	8	0	0			
At least 6.0% but less than 6.5%	0	0	10	0	0			
At least 6.5% but less than 7.0%	0	0	0	0	0			
At least 7.0% but less than 7.5%	2	2	0	0	2			
At least 7.5% but less than 8.0%	4	8	0	1	8			
At least 8.0% but less than 8.5%	10	8	0	7	6			
At least 8.5% but less than 9.0%	3	1	0	9	1			
9.0% and over	0	0	0	2	0			
Total	19	19	18	19	17			