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Executive Summary

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Puerto Rico's little discussed pension crisis is an important piece of the Commonwealth's current fiscal puzzle.

Puerto Rico's pension systems are exhausted: The Commonwealth's pension woes are acute and present a daunting obstacle to repairing a fiscal position choked by debt.

- Relatively simple math suggests the Employee Retirement System (ERS) is running on fumes and may already be depleted.

As is often the case with analyzing Puerto Rico's credit risk, we believe the story at face value is bad, but what lurks behind the scenes is worse.

The Commonwealth's reform efforts rely heavily on making additional payments from its General Fund – the same General Fund that cannot meet its current demands.

"Puerto Rico's public pensions have essentially collapsed and are no longer comparable to even the most stressed public pension plans in the United States. We have written extensively on pension woes in Illinois and New Jersey, which are both struggling to implement solutions to long-festering and self-inflicted pension wounds. However, these states have the benefit of a modest amount of time before the crisis arrives as they still have assets in their pension funds that can be used to pay benefits. In fact, most estimates suggest that despite having beleaguered pensions that are in far worse shape than their peers, Illinois and New Jersey still have assets that will not be exhausted for at least 5 to 10 years at a minimum and will likely last much longer into the future. Conversely, Puerto Rico's pension crisis has already arrived."

Beyond the crisis at the ERS, Puerto Rico must also solve its failing Teachers Retirement System (TRS) which is only marginally stronger than the ERS.

Many are focused on Puerto Rico's efforts to achieve debt relief through restructuring. We would suggest the more important question is whether short term fixes can be sufficient to cure the assortment of other serious fiscal crises that require immediate attention.

In the months following Governor Alejandro Garcia Padilla's June assertion that Puerto Rico's debts are not payable[1], the municipal market has appeared singularly fixated on whether or not Puerto Rico would achieve debt restructuring and what the impact would be on different classes of securities. Though the market's narrow focus on Puerto Rico's ongoing struggle to service its unsupportable debt load is understandable, we believe this focus comes at the cost of granular and holistic analysis on the array of credit risks that plague the Commonwealth. We are highly dubious that any short-term relief from its debt expenses will be sufficient to mend a deeply battered budget. There would appear a short-sighted sentiment amongst some that even modest debt restructuring will provide the Commonwealth with the breathing room it needs to put its house back in order. However, this optimistic view ignores a variety of serious ills beyond its debt obligations that must be cured before we believe Puerto Rico's fiscal crisis can be remedied in a sustainable fashion.

[1] "Puerto Rico's Governor Says Island's Debts are 'Not Payable'", New York Times, June 28, 2015.

Puerto Rico's pension crisis is an important component of the Commonwealth's current fiscal puzzle.

We believe that Puerto Rico's forlorn pensions are an essential segment of the overall analytic puzzle that many are attempting to piece together. We would propose that the Commonwealth's urgent efforts to restructure its debt may be caused at least in part by an inability to meet pension benefit payments in the near term under current budgetary constraints. By reducing debt payments, the Commonwealth may be seeking to free up resources to keep benefits flowing to retirees.

Secondly, we would suggest that understanding Puerto Rico's pension predicament is crucial given that even if debt restructuring is successful, resolving the pension system's fate will require significant budget resources and political will. In many respects, mending the Commonwealth's pensions is a more onerous task than restructuring its debt obligations. After all, restructuring debt primarily causes pain to investors on the U.S. mainland while righting the pension system will require pain on both retirees who may face the prospect of benefit reductions, and residents who may be asked to pay more in taxes to ensure the systems' long term solvency. Puerto Rico must confront the same unenviable choices as New Jersey and Illinois, which must decide whether to raise taxes on already strained economic bases, or to cut popular government services such as public education in order to devote a larger proportion of revenues towards deteriorating pension plans. We posit that the policies that must be implemented to stabilize the Commonwealth's pensions are anathema to elected officials given that practical austerity limits have arguably already been reached and dramatic tax and fee increases have already been imposed across the island.

Puerto Rico's pension systems are exhausted: the Commonwealth's pension woes are acute and present a daunting obstacle to repairing a fiscal position already choked by debt.

Puerto Rico's pensions have arguably been destined for failure since they were created given what we see as questionable stewardship of the systems by the government. The Commonwealth admits that the system has not been properly funded since its inception in 1951.[2] In fact, Puerto Rico has never once made the contribution that was recommended by its actuaries, and despite the chronic underfunding, politicians have repeatedly layered on "special laws" which granted additional benefits coupled with attractive early retirement packages that resulted in a shrinking base of active employees paying into the system.[3]

Puerto Rico's public pensions have essentially collapsed and are no longer comparable to even the most stressed public pension plans in the United States. We have written extensively on pension woes in Illinois and New Jersey, which are both struggling to implement solutions to long-festering and self-inflicted pension wounds. However, these states have the benefit of a modest amount of time before the crisis arrives as they still have assets in their pension funds that can be used to pay benefits. In fact, most estimates suggest that despite having beleaguered pensions that are in far worse shape than their peers, Illinois and New Jersey still have assets that will not be exhausted for at least 5 to 10 years at a minimum and will likely last much longer into the future.[4] Conversely, Puerto Rico's pension crisis has already arrived.

Figure 1 compares Puerto Rico's pensions to those in Illinois and New Jersey using the most recent audited data available – which is a year behind in the case of Puerto Rico given that as of publication they have been unable to complete an audit for a fiscal year that ended over 15 months ago. The data illustrate that Puerto Rico's funded ratio is already far worse, with scarce assets remaining relative to is liabilities. Additionally, the Commonwealth is in a similar predicament as Illinois and New Jersey in respect to chronically shorting its required annual contribution.

The data is bleak; however, preliminary 2014 data from the Government Development Bank for Puerto Rico (GDB) suggests it is much worse. Though the systems have yet to release audited 2014 data, which represents a material concern given that fiscal 2015 is already complete and we have moved into fiscal year 2016, the GDB reports that the Employee Retirement System (ERS) has a 0.7% funded ratio as of fiscal 2014, and the Teachers' Retirement System (TRS) has an 11.7% funded ratio as of the same year – both significantly down from the data available in the most recent commonwealth audit which is used below. [5] Together, the two systems now have unfunded liabilities of over

[2] Employees' Retirement System of the Government of the Commonwealth of Puerto Rico, Audited Fiscal Year 2013 financial statement, pg. 12.

[3] Government Development Bank for Puerto Rico "The Numbers Speak for Themselves: We Must Reform Our Retirement Systems Now," pg. 6. Retrieved on 9/2/15 from http://www.gdbpur.com/documents/TheNumbersSpeakforThemselves 02.25.13-FINAL.pdf

[4] Munnell, Alicia H,. Jean-Pierre Aubry, Josh Hurwitz, and Laura Quinby. "Can State and Local Pensions Muddle Through?" Center for Retirement Research at Boston College. Number 15, March 2011.

[5] Government Development Bank for Puerto Rico, Quarterly Report (May 7, 2015), pgs. 43-44.

$23 billion. Given the disclosure from the GDB, we can safely assume that the measures below are actually even worse given preliminary 2014 data and have likely deteriorated even further in 2015.

Figure 1: Pension Data of Puerto Rico versus Illinois and New Jersey

Obligor	Funded Ratio	Unfunded Liabilities as % of Budget	% of Actuarial Required Contribution Made
Puerto Rico	7%	221%	31%
Illinois	39%	252%	89.5%
New Jersey	54%	110%	18.9%

Relatively simple math suggests the ERS is running on fumes and may already be depleted.

The ERS' current position is untenable, and leaves the Commonwealth's General Fund with a large and growing responsibility to patch annual holes. The ERS' 2013 financial statement provides a stark imbalance between the system's assets and contributions (inflows into the system from employees and employers) relative to its liabilities and benefit payments to retirees. The GDB's disclosure that the ERS has a dismal funded ratio of 0.7% suggests Puerto Rico faces a very near term switch to becoming a "pay-go" pension system, where the Commonwealth has no assets to liquidate and must instead pay benefits with current contributions and appropriations from the Commonwealth's General Fund. This is unprecedented for a major public pension plan as the largest 150 public pension systems in the United States have a very solid aggregate funded ratio of 74% in 2014, evidence of large asset bases that can be liquidated if needed.[6]

Our analysis of the ERS' most recent reporting vividly paints a picture of a pension system with a massive gap between contributions and annual expenses which suggests that the conversion to "pay-go" funding will be anything but smooth. In 2013, ERS paid out approximately $1.4 billion in benefits, yet received only $951 million in contributions from employers and employees – a structural imbalance of approximately $450 million. The system additionally had another $300 million of expenses which include the cost to run the system and interest payments on outstanding debt. Therefore, cumulatively, ERS had expenses that exceeded recurring revenues (which net out investment income) by $750 million. It closed this gap in part through investment income of $250 million and the remainder was raised by liquidating a portion of ERS' dwindling assets.[7] Figure 2 illustrates this imbalance and how deep ERS' problems are once its investment income is gone and there are no assets that can be liquidated to mask the negative cash flow of the system.

The Commonwealth may already be in a position where it is trying to determine how to close the gap between contributions net of expenses (benefits, debt service and administrative costs). Given that we do not have disclosure from ERS since 2013, we cannot be confident that they have already reached pay-go status, but we can be certain that ERS is running on fumes given that there has been no infusion of new revenues.

[6] Data from Center for Retirement Research at Boston College's "The Funding of State and Local Pensions: 2014-2018", Number 45, June 2015.

[7] Employees' Retirement System of the Government of the Commonwealth of Puerto Rico, audited Fiscal Year 2013 financial statement, pg. 17.

Figure 2: Puerto Rico Employees Retirement System – Statement of Net Position FY 2013 (dollars in thousands)[8]

Employee Contributions:	$322,528
Employer Contributions:	$628,647
Investment Income:	*$248,575*
Total Annual Income:	**$1,199,750**
Benefits Paid:	$1,430,712
Administrative Expenses/Other:	$101,480
Debt Service:	$192,230
Total Expenditures:	**$1,724,422**
Operating Deficit:	**$-524,672**
Deficit if investment income is gone	***$-773,247***

As is often the case with analyzing Puerto Rico's credit risk, the story at face value is bad, but what lurks behind the scenes is worse.

A recurring trend in our analysis of Puerto Rico in recent years is that credit metrics are consistently worse than they appear at face value – which is shocking given that most of the measures are decidedly feeble even at first glance. Whether it is the Commonwealth's economy, demographics or liquidity disclosure, we have consistently found that when you peel back the layers of the onion, the story is often more alarming than surface level research would suggest.[9]

The Commonwealth's pensions are no exception. The most startling example is the weak nature of the assets that the ERS claimed in recent disclosure. In recent years, the ERS has liquidated its assets in order to pay benefits and cover the costs of administering the system which has resulted in the aforementioned funded ratio of 0.7%. What remained were illiquid assets comprised in large part by loans that were made to employees covered by ERS. The ERS offers personal loans, mortgage loans and loans for cultural travel for plan participants up to a maximum of $15,000 – though recent reforms have reduced this amount to $5,000. Retirees took out over $1 billion in new loans between 2003 and 2011, which left the retirement system with personal loans to retirees representing around half of its total assets.[10] Unfortunately, to make these loans, the system had to liquidate marketable assets in recent years that would have otherwise been available to make pension payments.

Pension obligation bonds sold in 2007 continue to haunt the ERS' future solvency.

Beyond the immediate concern of illiquid assets and an inability to fund benefits, the pension system's future is also heavily impacted by the Commonwealth's decision to issue pension obligation bonds that are structured to further siphon off future contributions into ERS. In 2007, Puerto Rico issued nearly $3 billion in pension obligation bonds in the hopes of boosting the ailing system's poor funding levels. It did not work – Puerto Rico's actuarial obligations and unfunded liabilities have continued their consistent climb upwards since the issuance. In addition to providing no sustained boost to ERS' health, the pension obligation bonds are secured by Puerto Rico's future contributions to the system. Instead of making payments into the retirement system to improve funding levels or to provide pay-go

[8] All data taken from Employee's Retirement System of the Government of the Commonwealth of Puerto Rico, audited Fiscal Year 2013 financial statement.

[9] For an example of this trend, please see our July 2014 "House of Cards" report which details the alarming nature of the Commonwealth's liquidity disclosure. The report can be accessed at: http://www.gurtin.com/UserPages/1015989.pdf

[10] Government Development Bank for Puerto Rico "The Numbers Speak for Themselves" pg. 7.

funding for benefits, these future payments from the employer (be it the Commonwealth or one of its agencies) will instead go to bondholders, further depriving ERS from desperately needed cash infusions. Debt service on the pension obligation bonds runs through 2058 and will result in between $170 million to $430 million in annual funds that otherwise would have been contributed to ERS going to pay off what appears to have been a very poor investment.[11]

ERS would appear to be having difficulty collecting pension contributions from its members – a flaw that may be gaining momentum as all levels of government within the Commonwealth struggle with liquidity strains.

Given all of the concerns we have thus far presented, we would suggest that it is readily apparent that the ERS needs every dollar of income that it can possibly generate in order to stay solvent. Unfortunately, the ERS would appear to be struggling to collect on its bills, which is unsurprising given the distressed nature of many of the employers that pay into the system. In its financial statements, the ERS acknowledges that it currently has approximately $131 million in accounts receivables from employers. While member governments (the Commonwealth, its instrumentalities and municipalities) are supposed to make their pension contributions on a monthly basis, the ERS states that many employers are having difficulty making their payments and that "most receivables from employers are delinquent past established payment dates and/or installment plan due dates."[12] It also acknowledges that past due payments are frequently renegotiated to later dates, and that the current fiscal condition of the Commonwealth is putting further strain on the ability of employers to fund their contributions.

The Commonwealth's reform efforts rely heavily on making additional payments from its General Fund – the same General Fund that cannot meet its current demands.

In recent years, the Commonwealth has enacted a flurry of reforms that reduced benefits and increased employer contributions in efforts to prop up the flailing system. Unfortunately, reforms that look good on paper may not look as good in reality if the solutions are not realistic and achievable. In June 2013, the Commonwealth passed Act 32, which was enacted with the goal of ensuring long term solvency of the pension system. Unfortunately, the identified route to solvency requires incrementally higher annual contributions from Puerto Rico's General Fund and from other employers (municipalities and public corporations) beginning in 2014 and continuing through 2033. The increased contribution in 2014 and 2015 was expected to be $120 million ($78 million of which was supposed to come from the Commonwealth), however, in reality, the employers contributed only $33 million in FY14 – or 27% of the additional expected payments, with the Commonwealth entirely skipping the payment.[13] In 2015, less than 5% of the additional contributions were paid, with only $5.8 million of the $120 million being

[11] Official statement from Employees Retirement System of the Government of the Commonwealth of Puerto Rico, Senior Pension Funding Bonds, Series C (2007), pg. 18.

[12] Employees' Retirement System, audited FY2013 financial statement, pg. 41.

[13] Government Development Bank for Puerto Rico, Quarterly Report (May 7, 2015), pg. 23.

paid into the system, with the Commonwealth again contributing nothing.[14]

Beyond the crisis at the ERS, Puerto Rico must also solve its failing Teachers Retirement System (TRS) which is only marginally stronger than the ERS.

Thus far, we have focused solely on the ERS given that it appears likely to be exhausted first – if it is not already exhausted. While the ERS is facing crisis in spite of significant reforms that were enacted in recent years, the Puerto Rico Teachers Retirement System is facing crisis at least in part due to enacted reforms being struck down by the courts in 2014. So how does the Commonwealth expect to rescue a plan that appears hurtling towards the same troublesome fate as the ERS? You guessed it, pass reforms that rely on additional contributions from the Commonwealth's General Fund. In 2017 and 2018, the Commonwealth has "committed" to contribute an additional $30 million annually, and $60 million annually starting in 2019 and continuing through 2042. Additionally, the Commonwealth has promised that starting in 2019 it will contribute whatever amount is needed to keep gross assets at no less than $300 million – at this point, an annual payment amount that is expected to be no less than $450 million. Teachers are relying on the Commonwealth finding an additional $500 million, at a minimum, in its beleaguered General Fund to prop up the Teachers Retirement System over the next 20 years. We would suggest that the Commonwealth's recent inability to find any additional resources for the ERS reforms and entirely skipping its additional contributions in 2014 and 2015 is uncomfortably predictive for what will likely happen for teachers starting in 2017.

Conclusion

As the headlines regarding Puerto Rico's debt implosion continue to proliferate and some in the market profess certainty about the path that the Commonwealth's restructuring will take, we continue to counsel caution. We have long opined that uncertainty rules the day in Puerto Rico. The Commonwealth's unraveling financial condition requires more than simply short-term debt relief, as Puerto Rico's unpayable debt load is merely one piece of a larger puzzle. Unfortunately, as we have outlined above, investors are left without key pieces of the puzzle when attempting to understand the risks that confront officials who are seeking a sustainable way forward. Pensions that are depleted, cannot release timely disclosure, and are reliant on non-existent contributions from the Commonwealth are merely one of the larger policy quagmires that await the Commonwealth once it moves past the current debate on debt restructuring. In addition to pensions, Puerto Rico still must find a way to stem the accelerating tide of migration to the U.S. mainland and find a way to access capital from a rightfully skeptical market to repair aging and obsolete infrastructure throughout the island. Given all of these issues, we believe Puerto Rico's way forward is still blocked by a variety of hulking obstacles that extend well beyond merely reducing debt expenses.

[14] Government Development Bank for Puerto Rico, Quarterly Report (May 7, 2015), pg. 23.

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