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Financial Guarantors

Hurricanes & PR Revised Budget Likely Mean Deeper Bond Losses

The Takeaway:

In early October, the PROMESA Financial Oversight and Management Board (FOMB) published a [letter](#) to Congressional leaders following the devastation in Puerto Rico (PR) due to Hurricanes Irma and Maria. FOMB stated that the hurricanes “have fundamentally changed Puerto Rico’s reality” and are expected to cause “lower revenues, higher costs, and delayed or reduced cost-saving measures that had been required by the FOMB’s fiscal plans.” It is widely expected that FOMB will revise the March 13 [Certified Budget](#) to reflect the hurricanes’ effect on the Commonwealth’s fiscal outlook. In this report, we make adjustments to the certified budget and estimate the potential increase in insured bond losses. We conclude that a 23% reduction in expected budgetary improvements would effectively erase PR’s ability to service any debt. We estimate that a reduction in the certified budget could reduce PR’s debt service capacity (DSC) by 20-60%, which would increase losses for creditors and bond insurers. We maintain our view that Assured Guaranty, Ltd. (AGO), MBIA Inc. (MBI), and Ambac Financial Group (AMBC) will incur significant losses under Title III of PROMESA. AMBC and MBI face the highest risk given their exposure to COFINA bonds.

- › **Conclusion – All outcomes went from bad to worse.** Puerto Rico’s March 13 Certified Budget (Figure 1) did not provide for sufficient funds to cover its debt obligations (Figure 2). Any revisions due to the hurricane damage are likely to further suppress cash flow available for debt service. We revisited the certified budget and estimated there will be no improvements in revenue or expenses in fiscal year (FY) 2018 and all projected improvements would be pushed out for 12 months. We also ran several sensitivity analyses on the budget and estimate a 14% reduction in projected improvements would eliminate the Commonwealth’s debt service capacity (DSC) prior to receiving any federal healthcare funds. After accounting for healthcare funds included in Congress’s Children’s Health Insurance Program (CHIP) [budget bill](#) (Section 106), PROMESA’s budget would have to decline by 23% to eliminate the island’s DSC.
- › **Meeting targets still results in lower cash flow.** We ran two sensitivity analyses of PR’s certified budget. In both we assumed no improvements from revenue or expense measures in FY2018. The first scenario assumes the targets in the certified budget are hit, but FY2018 improvements are pushed into FY2019, FY2019 improvements into FY2020, etc. We estimate the reduction in cash flow available for debt service could only support \$18 billion of debt (Figure 3), including federal healthcare funding, well below the \$72 billion of debt currently outstanding. We also estimated that only 90% of the targets are hit again starting in FY2019 (i.e. 90% of FY2018 improvements are achieved in FY2019). This

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scenario can only support about \$9 billion of debt. These estimates compare to DSC of \$23 billion under the certified budget and represent a decline in DSC of 21-61% (Figure 4). We note that if the certified budget is revised down by 23%, it will eliminate the debt service capacity of the Commonwealth.

- › **Growth bonds are a likely solution.** There are some expectations that a revised PROMESA budget will eliminate all cash flows available for debt service. This outcome is plausible based on our sensitivity analysis at 90% of projections. With little to no cash flow available to service the Commonwealth's \$72 billion of debt, FOMB may offer growth bonds to most, if not all, creditors. FOMB has not announced when it expects to certify a revised budget, but it is scheduled to meet [today](#). The agenda covers several notable items including a discussion of a revised Commonwealth Fiscal Plan process and timetable, a report on the PR government's financial and liquidity status, an independent debt investigation, and the contract review and approval process.
- › **Courts may make the final determination.** If creditors, FOMB, and the Commonwealth cannot reach a settlement, the courts will determine which series of bonds will be paid and how much creditors will receive. With input from FOMB and the potential for a revised budget that shows severely depleted cash flow expectations, we can envision the court eliminating the vast majority of PR's outstanding debt.
- › **COFINA poses a risk for AMBC and MBI.** Until the matter is resolved by the courts, it is difficult to determine the amount of loss each monoline will incur and on what series of insured bonds. We view GO bonds as better positioned for court-ordered repayments given PR's Constitution and the backing of the full faith and credit of the Commonwealth. We view the COFINA exposures of AMBC and MBI to pose the highest risk and this risk was elevated when bond payments were halted by the court. AMBC's COFINA gross par and net debt service insured exposures totaled \$809 million and \$7.3 billion, respectively, as of June 30, 2017. MBI's COFINA gross par and net debt service insured exposures were \$684 million and \$4.2 billion in 2Q17, respectively. By contrast, AGO had COFINA gross par exposure of \$271 million and net debt service exposure of \$619 million.

Upcoming events. Yesterday, the House Natural Resources Committee announced two hearings related to PR and disaster recovery efforts. On November 7, the committee will hold a [hearing](#) titled *Examining Challenges in Puerto Rico's Recovery and the Role of the Financial Oversight and Management Board*. Then, on November 14, the committee will hold a [hearing](#) titled *The Need for Transparent Financial Accountability in Territories' Disaster Recovery Efforts*, which is likely to focus on the PREPA and Whitefish Energy transaction, which was cancelled earlier this week.

AGO is [scheduled](#) to release its 3Q17 earnings after the market close on November 2 and will hold its call on November 3 at 8:00 a.m. On November 7, MBI is tentatively scheduled to [release](#) its 3Q17 earnings with a conference call on the morning of November 8. AMBC will [release](#) its 3Q17 earnings after the close on November 8 and will hold its conference call on the morning of November 9.

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Monoline PR loss estimates. After FOMB certified PR's budget, we moved our loss expectations to the adverse case. That outlook was confirmed when FOMB initiated Title III proceedings. After Hurricanes Irma and Maria, it is possible that our adverse case loss estimates will increase if, as expected, FOMB revises PR budget in manner that shows it will take longer for the Commonwealth to improve its fiscal condition and lowers its targeted improvements. We updated our loss scenarios and assume there will be no budgetary benefits in FY2018 and the benefits of restructure will affect the budget until FY2019. We project that revised budget will show the same revenue and expense improvements in FY2019 as was expected in FY2018 in the Certified Budget (100% achievement scenario). We also adjust the projected improvements down by 10% (90% achievement scenario). In the 100% achievement scenario, we raised our loss expectation for each debt issuance by 21%. We also estimate that if the revised budget is reduced by 23% from the Certified Budget, the Commonwealth will not have any cash flow available for debt service. In the 90% achievement scenario, we raised our loss expectation for each debt issuance by 61%. This resulted in a number of issuances becoming complete losses, including COFINA, Highway and Transportation Authority, convention center bonds, and PRIFA bonds (Figure 6).

Assured Guaranty, Ltd.: In the 100% achievement scenario, we estimate AGO's after-tax present value (ATPV) losses to be \$42.2 billion or \$17.85 per share (Figure 11). These losses increase to \$2.5 billion and \$20.44 per share in the 90% achievement scenario (Figure 13). The loss per share is equal to 57% of AGO's reported book value in 2Q17. These losses increased from our PR Certified Budget scenario losses \$1.8 billion or \$14.75 per share (Figure 9).

MBIA Inc.: We estimate MBI's ATPV losses in the 100% achievement scenario to be \$1.9 billion or \$14.77 per share. This represents over 95% of MBI's 2Q17 reported book value (Figure 18). In the 90% achievement scenario, our loss estimate is \$2.2 billion or \$17.58 per share, which is greater than MBI's reported book value of \$15.45 (Figure 20).

In the PR Certified Budget loss scenario for 2017 and beyond, we estimated MBI's insured PR payments to be \$1.5 billion or \$12.23 per share (Figure 16).

S&P downgraded National Public Finance Guarantee Corporation (NPFG) and MBI made the decision to stop writing new business and run the company as if it were in liquidation at least for the intermediate term. The downgrade and change in business outlook likely eliminates any likelihood that MBI will receive approval from New York Department of Financial Services (NYDFS) for a special dividend from NPFG. If FOMB significantly reduces cash flow available for debt service, it would increase the risk that NYDFS would halt dividends from NPFG to MBIA, Inc. This could put MBI on a path towards bankruptcy. Our assessment is that the Title III resolution will take three or more years to resolve. We do not expect NYDFS to stop the dividend payments until NPFG's PR loss content is identified and its effect on NPFG's capital position is assessed.

Ambac Financial Group: For AMBC, ATPV losses are projected to be \$1.2 billion or \$26.07 per share in the 100% achievement scenario (Figure 25). These losses increase to \$1.3 billion and \$28.71 per share (78% of book value) in the 90% achievement scenario (Figure 27). For comparison, we estimated AMBC's

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PR Certified Budget ATPV losses to be \$986 million. The estimated loss per share was \$21.55, which represents 58% of AMC's reported BV (Figure 23).

A revised budget could impact MBI the most. We updated our monoline PR loss models using the achievement of 100% and 90% of targeted improvements in PR's Certified Budget. We compared the updated estimated losses to MBI's, AMBC's and AGO's claim paying resources as well as the present value of each company's insured PR debt service payments. For MBI, its after-tax present value (ATPV) insured losses represent over 40% of its claims paying resources if the revised budget achieves 100% of the targeted revenue generation and expenses savings (Figure 17) and 48% if only 90% is achieved (Figure 19). This is up from our estimated 33% using the Certified Budget (Figure 15). MBI has \$4.6 billion of claims paying resources as of June 30, 2017 and updated loss estimates are \$1.8 billion in the 100% and \$2.2 billion in the 90% scenario. Our estimated losses under the Certified Budget were \$1.5 billion.

For AGO, we estimate the ATPV losses to be \$2.2 billion in the 100% achievement scenario and represent 18% of its \$12.2 billion of CPR (Figure 10). In the 90% achievement scenario, estimated ATPV losses are \$2.5 billion and equal 21% of its claims paying resources (Figure 12). These estimates are up from 15% of claims paying resources under the Certified Budget (Figure 8).

AMBC's claims paying resources excluding Ambac UK's resources total just under \$8.0 billion (Figure 22). Under the 100% achievement scenario, we estimate AMBC's ATPV losses to be \$1.2 billion and represent 15% of claims paying resources (Figure 24). AMBC's ATPV losses are estimated to be \$1.3 billion in the 90% achievement scenario and equal almost 17% of its claims paying resources. Our estimated losses under the Certified Budget were 12% of AMBC's adjusted CPR (Figure 22).

GO creditors have the edge over COFINA. In our view, the full faith and credit of PR stands behind general obligation (GO) bonds. The taxing authority of the Legislative Assembly stands behind obligations issued with the full faith of the PR government. The restructuring will determine the debt issuances that benefit from the full faith of the PR government, which could favor GO bonds over COFINA and put the COFINA trusts at serious risk. According to the Government Development Bank, "the good faith, credit and taxing power of the Commonwealth have been pledged" to GO bonds. Article VI Section 8 of PR's [Constitution](#) makes it clear that interest and debt amortization will be paid first. The real issue is how FOMB addresses GO and COFINA bondholder claims. All other debt issuances are at serious risk of significant, if not total, losses.

Our assessment of the counterproposal is that the full faith and credit stands behind GO bonds and not COFINA bonds. We reach this conclusion based on the following language in the counterproposal: "litigate with COFINA creditors to successful conclusion or settle within debt capacity." It is unclear what debt capacity is defined as, but it would seem to be the available capacity after settling with GO bondholders.

The counterproposal also stated, "closing would be subject to an acceptable settlement with COFINA or successful completion of COFINA litigation." We believe the repeated mention of litigation with regards to COFINA illustrates that the Commonwealth does not view COFINA bonds as having the full faith and credit of Commonwealth supporting them.

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MBI has insured COFINA debt service payments totaling \$4.2 billion and AMBC has exposure of \$7.3 billion, which represents 49% and 76%, respectively, of each company's total PR exposure (Figure 5). In addition, AMBC only has \$65 million of GO insured exposure and \$211 million of Public Building Authority (PBA) GO exposure, which represents 3% of its total PR exposure. MBI has GO exposure of \$898 million and PBA exposure of \$281 million or 14% of its total PR exposure. Conversely, GO and PBA exposures represent 32% of AGO's PR exposure and COFINAs only represent 8%.

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Figure 1. PROMESA Board March 13 Certified Budget

PROMESA Revised Certified Budget March 2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total 2017-26
PR Nominal GNP Growth	-2.8%	-2.4%	-0.5%	-0.4%	0.3%	1.0%	1.6%	2.1%	2.6%	
General Fund Revenues before Measures										
Individual Income Tax	\$ 1,760	\$ 1,718	\$ 1,709	\$ 1,703	\$ 1,708	\$ 1,725	\$ 1,752	\$ 1,789	\$ 1,836	\$ 17,511
Corporate Income Tax	\$ 1,473	\$ 1,437	\$ 1,430	\$ 1,424	\$ 1,429	\$ 1,443	\$ 1,466	\$ 1,497	\$ 1,536	\$ 14,650
Non-Resident Withholdings	\$ 666	\$ 650	\$ 647	\$ 644	\$ 646	\$ 652	\$ 663	\$ 677	\$ 694	\$ 6,624
Alcoholic Beverages	\$ 260	\$ 254	\$ 253	\$ 252	\$ 253	\$ 255	\$ 259	\$ 265	\$ 272	\$ 2,591
Cigarettes	\$ 109	\$ 106	\$ 106	\$ 105	\$ 106	\$ 107	\$ 108	\$ 111	\$ 114	\$ 1,084
Motor Vehicles	\$ 321	\$ 313	\$ 311	\$ 310	\$ 311	\$ 314	\$ 319	\$ 326	\$ 335	\$ 3,190
Excises on Off-shore Shipment Rum	\$ 173	\$ 175	\$ 176	\$ 178	\$ 179	\$ 180	\$ 182	\$ 183	\$ 184	\$ 1,782
Other Revenue	\$ 386	\$ 377	\$ 375	\$ 373	\$ 374	\$ 378	\$ 384	\$ 392	\$ 402	\$ 3,947
Total	\$ 5,148	\$ 5,030	\$ 5,007	\$ 4,989	\$ 5,006	\$ 5,054	\$ 5,133	\$ 5,240	\$ 5,373	\$ 51,379
General Fund Portion of SUT (10.5%)	\$ 1,655	\$ 1,596	\$ 1,553	\$ 1,511	\$ 1,484	\$ 1,472	\$ 1,474	\$ 1,487	\$ 1,512	\$ 15,462
New Act 154	\$ 1,556	\$ 1,038	\$ 1,038	\$ 1,038	\$ 1,038	\$ 1,038	\$ 1,038	\$ 1,038	\$ 1,038	\$ 11,935
General Fund Revenue	\$ 8,359	\$ 7,664	\$ 7,598	\$ 7,538	\$ 7,528	\$ 7,564	\$ 7,645	\$ 7,765	\$ 7,923	\$ 78,776
Additional SUT (COFINA, FAM, & Cine)	\$ 877	\$ 906	\$ 936	\$ 968	\$ 1,003	\$ 1,039	\$ 1,078	\$ 1,118	\$ 1,161	\$ 9,936
Other Tax Revenues	\$ 1,396	\$ 1,401	\$ 1,411	\$ 1,423	\$ 1,429	\$ 1,436	\$ 1,445	\$ 1,455	\$ 1,466	\$ 14,199
Other Non-Tax Revenues	\$ 576	\$ 582	\$ 594	\$ 622	\$ 630	\$ 635	\$ 642	\$ 649	\$ 665	\$ 6,174
Adj. Revenue before Measures	\$ 11,208	\$ 10,553	\$ 10,539	\$ 10,551	\$ 10,590	\$ 10,674	\$ 10,810	\$ 10,987	\$ 11,215	\$ 109,085
Federal Transfers	\$ 7,168	\$ 7,372	\$ 7,477	\$ 7,623	\$ 7,835	\$ 8,023	\$ 8,212	\$ 8,469	\$ 8,675	\$ 77,848
Loss of ACA Funding	\$ (865)	\$ (1,516)	\$ (1,582)	\$ (1,680)	\$ (1,833)	\$ (1,953)	\$ (2,069)	\$ (2,251)	\$ (2,382)	\$ (16,131)
Revenues before Measures	\$ 17,511	\$ 16,409	\$ 16,434	\$ 16,494	\$ 16,592	\$ 16,744	\$ 16,953	\$ 17,205	\$ 17,508	\$ 170,802
PROMESA Revised Certified Budget March 2017										
General Fund Expenditures before Measures										
Direct Payroll	\$ (3,309)	\$ (3,342)	\$ (3,375)	\$ (3,413)	\$ (3,458)	\$ (3,509)	\$ (3,563)	\$ (3,619)	\$ (3,675)	\$ (34,534)
Direct Operational Expenses	\$ (918)	\$ (926)	\$ (936)	\$ (946)	\$ (959)	\$ (973)	\$ (988)	\$ (1,003)	\$ (1,019)	\$ (9,575)
Utilities	\$ (332)	\$ (352)	\$ (360)	\$ (373)	\$ (372)	\$ (369)	\$ (374)	\$ (387)	\$ (395)	\$ (3,574)
Special Appropriations	\$ (4,037)	\$ (4,068)	\$ (4,068)	\$ (4,209)	\$ (4,140)	\$ (4,143)	\$ (4,136)	\$ (4,250)	\$ (4,147)	\$ (41,088)
General Fund Expenses	\$ (8,596)	\$ (8,688)	\$ (8,739)	\$ (8,941)	\$ (8,929)	\$ (8,994)	\$ (9,061)	\$ (9,259)	\$ (9,236)	\$ (88,771)
Other										
Paygo Contributions in Excess of Asset Balances	\$ (989)	\$ (1,014)	\$ (985)	\$ (964)	\$ (1,151)	\$ (1,177)	\$ (1,217)	\$ (1,251)	\$ (1,278)	\$ (10,026)
Run-Rate Capital Expenditures	\$ (400)	\$ (407)	\$ (415)	\$ (422)	\$ (429)	\$ (437)	\$ (445)	\$ (453)	\$ (462)	\$ (4,153)
Total Other	\$ (1,389)	\$ (1,421)	\$ (1,400)	\$ (1,386)	\$ (1,580)	\$ (1,614)	\$ (1,662)	\$ (1,704)	\$ (1,740)	\$ (14,179)
Component Units, Non-GF Funds and Ent. Funds										
Net Deficit of Special Revenue Funds	\$ (130)	\$ (146)	\$ (154)	\$ (162)	\$ (169)	\$ (173)	\$ (176)	\$ (176)	\$ (174)	\$ (1,570)
Independently Forecasted Non-Enterprise Cus	\$ (380)	\$ (433)	\$ (558)	\$ (639)	\$ (752)	\$ (859)	\$ (963)	\$ (1,109)	\$ (1,210)	\$ (7,355)
HTA Operational Expenses	\$ (234)	\$ (236)	\$ (238)	\$ (239)	\$ (243)	\$ (246)	\$ (250)	\$ (254)	\$ (258)	\$ (2,444)
Other	\$ (41)	\$ (30)	\$ (30)	\$ (30)	\$ (31)	\$ (31)	\$ (32)	\$ (32)	\$ (33)	\$ (334)
Other	\$ (785)	\$ (845)	\$ (980)	\$ (1,070)	\$ (1,195)	\$ (1,309)	\$ (1,421)	\$ (1,571)	\$ (1,675)	\$ (11,703)
Disbur of tax Revenues to Entities Outside of Plan	\$ (302)	\$ (304)	\$ (307)	\$ (313)	\$ (314)	\$ (316)	\$ (319)	\$ (322)	\$ (334)	\$ (3,166)
Adj. Expenses before Measures	\$ (11,072)	\$ (11,258)	\$ (11,426)	\$ (11,710)	\$ (12,018)	\$ (12,233)	\$ (12,463)	\$ (12,856)	\$ (12,985)	\$ (117,819)
Federal Programs	\$ (7,168)	\$ (7,372)	\$ (7,477)	\$ (7,623)	\$ (7,835)	\$ (8,023)	\$ (8,212)	\$ (8,469)	\$ (8,675)	\$ (77,848)
Reconciliation Adjustment	\$ (592)	\$ (598)	\$ (604)	\$ (610)	\$ (618)	\$ (627)	\$ (637)	\$ (647)	\$ (657)	\$ (6,175)
Other Non-Recurring	\$ (150)	\$ (5)	\$ (5)	\$ (5)	\$ (5)	\$ -	\$ -	\$ -	\$ -	\$ (663)
AP Paydown	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ (7,910)	\$ (7,975)	\$ (8,086)	\$ (8,238)	\$ (8,458)	\$ (8,650)	\$ (8,849)	\$ (9,116)	\$ (9,332)	\$ (84,686)
Noninterest Expense before Measures	\$ (18,982)	\$ (19,233)	\$ (19,512)	\$ (19,948)	\$ (20,476)	\$ (20,883)	\$ (21,312)	\$ (21,972)	\$ (22,317)	\$ (202,505)
PROMESA Revised Certified Budget March 2017										
Net Revenues before Measures	\$ (1,471)	\$ (2,824)	\$ (3,078)	\$ (3,454)	\$ (3,884)	\$ (4,139)	\$ (4,359)	\$ (4,767)	\$ (4,809)	\$ (32,785)
Revenue Measures	\$ 924	\$ 1,381	\$ 1,384	\$ 1,531	\$ 1,633	\$ 1,740	\$ 1,752	\$ 1,766	\$ 1,785	\$ 13,896
Expense Measures	\$ 951	\$ 2,012	\$ 2,415	\$ 2,983	\$ 3,156	\$ 3,255	\$ 3,357	\$ 3,724	\$ 3,830	\$ 25,683
Net Revenues post Measures	\$ 404	\$ 569	\$ 721	\$ 1,060	\$ 905	\$ 856	\$ 750	\$ 723	\$ 806	\$ 6,794
Debt Service Capacity @ 5%	\$ 8,080	\$ 11,380	\$ 14,420	\$ 21,200	\$ 18,100	\$ 17,120	\$ 15,000	\$ 14,460	\$ 16,120	\$ 15,098

Source: PROMESA FOMB [Certified Budget](#), Height Securities.

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Figure 2. Estimated Debt Service Coverage under March 13, 2017 Certified Fiscal Plan

PR Debt Service Payments by Issuer										
Issuer	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
GO	\$ 1,066	\$ 1,090	\$ 1,118	\$ 991	\$ 999	\$ 999	\$ 999	\$ 999	\$ 999	\$ 9,260
PBA	249	249	249	272	273	258	254	253	236	2,293
COFINA	709	738	768	786	816	861	911	962	1,006	7,557
HTA	355	291	317	362	340	275	254	280	347	2,821
PRIFA	127	127	126	126	130	151	125	130	127	1,169
PRCCDA	30	30	30	30	30	30	30	30	30	270
PFC	86	86	86	86	86	86	86	86	85	773
UPR	48	48	48	48	48	48	48	48	36	420
ERS	167	167	167	217	234	239	174	176	181	1,722
GDB	428	983	525	503	196	97	575	21	261	3,589
PRIDCO	18	18	18	16	18	18	18	18	18	160
Total	\$ 3,283	\$ 3,828	\$ 3,453	\$ 3,437	\$ 3,171	\$ 3,063	\$ 3,475	\$ 3,003	\$ 3,329	\$ 30,034
Cash Flow Available for Debt Service	\$ 404	\$ 567	\$ 722	\$ 1,059	\$ 903	\$ 857	\$ 751	\$ 722	\$ 808	\$ 7,873
Cash Flow as a % of Debt Service	12%	15%	21%	31%	28%	28%	22%	24%	24%	26%
Cash Flow to GO Debt Service	38%	52%	65%	107%	90%	86%	75%	72%	81%	85%
Cash Flow to GO & PBA Debt Service	31%	42%	53%	84%	71%	68%	60%	58%	65%	68%
Expected Healthcare Funding	\$ 387	\$ 387	\$ 387	\$ 387	\$ 387	\$ 387	\$ 387	\$ 387	\$ 387	\$ 3,483
Adjusted Cash Flow for Debt Service	\$ 791	\$ 954	\$ 1,109	\$ 1,446	\$ 1,290	\$ 1,244	\$ 1,138	\$ 1,109	\$ 1,195	\$ 10,276
Cash Flow as a % of Debt Service	24%	25%	32%	42%	41%	41%	33%	37%	36%	34%
Cash Flow to GO Debt Service	74%	88%	99%	146%	129%	125%	114%	111%	120%	111%
Cash Flow to GO & PBA Debt Service	60%	71%	81%	114%	101%	99%	91%	89%	97%	89%

Source: PROMESA FOMB [Certified Budget](#), [Children's Health Insurance Program budget bill](#), Height Securities estimates.

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Figure 3. Estimating DSC of Revised PROMESA Budget due to Hurricane Damage

Sensitivity Analysis of PROMESA Revised Certified Budget March 2017											Total	Average
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2018-26	DSC	
Scenario 1 - 100%												
Net Revenues before Measures	\$ (1,471)	\$ (2,824)	\$ (3,078)	\$ (3,454)	\$ (3,884)	\$ (4,139)	\$ (4,359)	\$ (4,767)	\$ (4,809)	\$ (32,785)		
100%												
Revenue Measures	\$ -	\$ 924	\$ 1,381	\$ 1,384	\$ 1,531	\$ 1,633	\$ 1,740	\$ 1,752	\$ 1,766	\$ 12,111		
Expense Measures	\$ -	\$ 951	\$ 2,012	\$ 2,415	\$ 2,983	\$ 3,156	\$ 3,255	\$ 3,357	\$ 3,724	\$ 21,853		
Net Revenues post Measures	\$ (1,471)	\$ (949)	\$ 315	\$ 345	\$ 630	\$ 650	\$ 636	\$ 342	\$ 681	\$ 1,179		
Debt Service Capacity @												
5%	n.a.	n.a.	\$ 6,300	\$ 6,900	\$ 12,600	\$ 13,000	\$ 12,720	\$ 6,840	\$ 13,620			\$ 10,283
Expected Healthcare Funding	\$ 387	\$ 387	\$ 387	\$ 387	\$ 387	\$ 387	\$ 387	\$ 387	\$ 387	\$ 3,483		
Net Rev post Measures w HC Funds	\$ (1,084)	\$ (562)	\$ 702	\$ 732	\$ 1,017	\$ 1,037	\$ 1,023	\$ 729	\$ 1,068	\$ 4,662		
Debt Service Capacity @												
5%	n.a.	n.a.	\$ 14,040	\$ 14,640	\$ 20,340	\$ 20,740	\$ 20,460	\$ 14,580	\$ 21,360			\$ 18,023
Scenario 2 - 90%												
Net Revenues before Measures	\$ (1,471)	\$ (2,824)	\$ (3,078)	\$ (3,454)	\$ (3,884)	\$ (4,139)	\$ (4,359)	\$ (4,767)	\$ (4,809)	\$ (32,785)		
90%												
Revenue Measures	\$ -	\$ 832	\$ 1,243	\$ 1,246	\$ 1,378	\$ 1,470	\$ 1,566	\$ 1,577	\$ 1,589	\$ 10,900		
Expense Measures	\$ -	\$ 856	\$ 1,811	\$ 2,174	\$ 2,685	\$ 2,840	\$ 2,930	\$ 3,021	\$ 3,352	\$ 19,668		
Net Revenues post Measures	\$ (1,471)	\$ (1,137)	\$ (24)	\$ (35)	\$ 179	\$ 171	\$ 137	\$ (169)	\$ 132	\$ (2,217)		
Debt Service Capacity @												
5%	n.a.	n.a.	n.a.	n.a.	\$ 3,572	\$ 3,422	\$ 2,730	n.a.	\$ 2,640			\$ 3,091
Expected Healthcare Funding	\$ 387	\$ 387	\$ 387	\$ 387	\$ 387	\$ 387	\$ 387	\$ 387	\$ 387	\$ 3,483		
Net Rev post Measures w HC Funds	\$ (1,084)	\$ (750)	\$ 363	\$ 352	\$ 566	\$ 558	\$ 524	\$ 218	\$ 519	\$ 1,266		
Debt Service Capacity @												
5%	n.a.	n.a.	\$ 7,254	\$ 7,042	\$ 11,312	\$ 11,162	\$ 10,470	\$ 4,362	\$ 10,380			\$ 8,855
Scenario 3 - Debt Service Capacity Elimination before Federal Healthcare Funding												
Net Revenues before Measures	\$ (1,471)	\$ (2,824)	\$ (3,078)	\$ (3,454)	\$ (3,884)	\$ (4,139)	\$ (4,359)	\$ (4,767)	\$ (4,809)	\$ (32,785)		
86%												
Revenue Measures	\$ -	\$ 795	\$ 1,188	\$ 1,190	\$ 1,317	\$ 1,404	\$ 1,496	\$ 1,507	\$ 1,519	\$ 10,415		
Expense Measures	\$ -	\$ 818	\$ 1,730	\$ 2,077	\$ 2,565	\$ 2,714	\$ 2,799	\$ 2,887	\$ 3,203	\$ 18,794		
Net Revenues post Measures	\$ (1,471)	\$ (1,212)	\$ (160)	\$ (187)	\$ (2)	\$ (20)	\$ (63)	\$ (373)	\$ (88)	\$ (3,576)		
Debt Service Capacity @												
5%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.			n.a.
Scenario 4 - Debt Service Capacity Elimination after Federal Healthcare Funding												
Net Revenues before Measures	\$ (1,471)	\$ (2,824)	\$ (3,078)	\$ (3,454)	\$ (3,884)	\$ (4,139)	\$ (4,359)	\$ (4,767)	\$ (4,809)	\$ (32,785)		
77%												
Revenue Measures	\$ -	\$ 711	\$ 1,063	\$ 1,066	\$ 1,179	\$ 1,257	\$ 1,340	\$ 1,349	\$ 1,360	\$ 9,325		
Expense Measures	\$ -	\$ 732	\$ 1,549	\$ 1,860	\$ 2,297	\$ 2,430	\$ 2,506	\$ 2,585	\$ 2,867	\$ 16,827		
Net Revenues post Measures	\$ (1,471)	\$ (1,380)	\$ (465)	\$ (529)	\$ (408)	\$ (451)	\$ (513)	\$ (833)	\$ (582)	\$ (6,633)		
Debt Service Capacity @												
5%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.			n.a.
Expected Healthcare Funding	\$ 387	\$ 387	\$ 387	\$ 387	\$ 387	\$ 387	\$ 387	\$ 387	\$ 387	\$ 3,483		
Net Rev post Measures w HC Funds	\$ (1,084)	\$ (993)	\$ (78)	\$ (142)	\$ (21)	\$ (64)	\$ (126)	\$ (446)	\$ (195)	\$ (3,150)		
Debt Service Capacity @												
5%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.			n.a.

Source: PROMESA FOMB [Certified Budget](#), [Children's Health Insurance Program budget bill](#), Height Securities estimates.

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Figure 4. Estimated Change in DSC based PROMESA Budget Sensitivity Analysis

	Total PR Debt	Avg. DSC 2018-26	Chg. from Cert Budget	High DSC 2018-26	Chg. from Cert Budget	Low DSC 2018-26	Chg. from Cert Budget
PR Outstanding Debt	\$ 72,000						
Pre-Healthcare Federal Fund DSC							
DSC March 2017 Certified Budget		\$ 15,098		\$ 21,200		\$ 8,080	
Estimated DSC Coverage at 100% of Cert Budget		\$ 10,283	-32%	\$ 13,620	-36%	\$ 6,300	-22%
Estimated DSC Coverage at 90% of Cert Budget		\$ 3,091	-80%	\$ 3,572	-83%	\$ 2,640	-67%
Post-Healthcare Federal Fund DSC							
DSC March 2017 Certified Budget		\$ 22,838		\$ 28,940		\$ 15,820	
Estimated DSC Coverage at 100% of Cert Budget		\$ 18,023	-21%	\$ 21,360	-26%	\$ 14,040	-11%
Estimated DSC Coverage at 90% of Cert Budget		\$ 8,855	-61%	\$ 11,312	-61%	\$ 4,362	-72%

Source: PROMESA FOMB [Certified Budget](#), [Children's Health Insurance Program budget bill](#), Height Securities estimates.

Figure 5. PR Insured Debt Service Exposure – AGO, MBI, & AMBC

Assured Guaranty, Ltd.				
Insured Puerto Rico Debt Service Payments				
	2Q17 Total PR Exposure	1Q17 Total PR Exposure	Change QoQ	2Q17 Exposure %
\$ in millions				
HTA - Transport	\$ 1,597	\$ 1,597	\$ -	19%
PREPA	\$ 1,109	\$ 1,111	\$ (2)	14%
PRASA	\$ 828	\$ 828	\$ -	10%
HTA- Highway	\$ 690	\$ 690	\$ -	8%
PR Convention Center	\$ 268	\$ 268	\$ -	3%
GO	\$ 2,373	\$ 2,373	\$ -	29%
Muni Finance Agency	\$ 434	\$ 434	\$ -	5%
COFINA	\$ 619	\$ 619	\$ -	8%
Public Bldg Authority	\$ 256	\$ 256	\$ -	3%
PRIFA	\$ 35	\$ 35	\$ -	0%
Univ of PR	\$ 1	\$ 1	\$ -	0%
Total	\$ 8,210	\$ 8,212	\$ (2)	100%

Source: AGO 1Q17 [Financial Supplement](#), AGO 2Q17 [Financial Supplement](#), MBI 2Q17 & 1Q17 [Selected Exposures](#), AMBC 2Q17 & 1Q17 [PR Exposure](#), Height, LLC.

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Figure 5. PR Insured Debt Service Exposure – AGO, MBI, & AMBC (continued)

MBIA Inc.				
Insured PR Debt Service Payments				
	2Q17	1Q17		2Q17
	Total PR	Total PR	QoQ	Total PR
\$ in millions	Exposure	Exposure	Change	Exposure
				%
PREPA	\$ 1,788.7	\$ 1,788.7	\$ 0.0	21%
GO	\$ 898.0	\$ 900.0	\$ (2.0)	11%
PBA - GO	\$ 281.2	\$ 279.2	\$ 2.0	3%
HTA Transport	\$ 981.1	\$ 1,053.0	\$ (71.8)	12%
HTA- 1998 Sub Transport	\$ 46.7	\$ 43.9	\$ 2.8	1%
COFINA	\$ 4,170.1	\$ 4,170.1	\$ -	49%
HTA Highway	\$ 117.0	\$ 120.0	\$ (3.0)	1%
Univ of PR	\$ 122.7	\$ 124.8	\$ (2.0)	1%
Inter American U of PR	\$ 32.7	\$ 33.3	\$ (0.5)	0%
PRIDCo	\$ -	\$ -	\$ -	0%
Total P&I	\$ 8,438.3	\$ 8,513.0	\$ (74.6)	100%

Ambac Financial Group				
Insured Puerto Rico Debt Service Payments				
	2Q17	1Q17		2Q17
	Total PR	Total PR	QoQ	Total PR
\$ in millions	Exposure	Exposure	Change	Exposure
				%
Commonwealth GO	\$ 65.4	\$ 65.4	\$ -	1%
Public Bldg - GO Guaranteed	\$ 211.1	\$ 211.1	\$ -	2%
Senior Highway (1968)	\$ 33.6	\$ 33.6	\$ -	0%
Senior Transportation (1998)	\$ 780.4	\$ 780.7	\$ (0.3)	8%
Rum Tax (PRIFA)	\$ 1,012.4	\$ 1,012.4	\$ -	11%
Hotel Occupancy Tax	\$ 198.7	\$ 198.7	\$ -	2%
Sales Tax (COFINA)	\$ 7,321.3	\$ 7,321.3	\$ -	76%
Total P&I	\$ 9,622.9	\$ 9,623.2	\$ (0.3)	100%

Source: AGO 1Q17 [Financial Supplement](#), AGO 2Q17 [Financial Supplement](#), MBI 2Q17 & 1Q17 [Selected Exposures](#), AMBC 2Q17 & 1Q17 [PR Exposure](#), Height, LLC.

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Figure 6. Estimated Loss Content Scenarios – AGO, MBI, & AMBC

Assured Guaranty				Cert	Sensitivity	
Loss Estimates				Budget	100% of	90% of
Scenario Number	Base	Moderate	Adverse	17-Mar	Budget	Budget
HTA - Transport	50%	70%	85%	80%	97%	100%
PREPA	15%	35%	55%	35%	42%	56%
PRASA	15%	40%	65%	35%	42%	56%
HTA- Highway	20%	35%	50%	75%	91%	100%
PR Convention Center	20%	45%	80%	80%	97%	100%
GO	10%	15%	20%	20%	24%	32%
Muni Finance Agency	15%	40%	60%	80%	97%	100%
COFINA	15%	45%	80%	70%	85%	100%
Public Bldg Authority	10%	15%	20%	20%	24%	32%
PRIFA	20%	40%	75%	80%	97%	100%
Univ of PR	15%	35%	60%	50%	61%	81%

MBIA Inc.				Cert	Sensitivity	
Loss Estimates				Budget	100% of	90% of
Scenario Number	Base	Moderate	Adverse	RSA No	Budget	Budget
PREPA	15%	35%	55%	35%	42%	56%
GO	10%	15%	20%	20%	24%	32%
PBA - GO	10%	15%	20%	20%	24%	32%
HTA Transport - 1998	50%	70%	85%	80%	97%	100%
HTA- 1998 Sub Transport	70%	85%	100%	100%	100%	100%
COFINA	15%	45%	80%	70%	85%	100%
HTA Highway -1968	20%	35%	50%	75%	91%	100%
Univ of PR	15%	35%	60%	50%	61%	81%
Inter American U of PR	15%	43%	70%	50%	61%	81%

Ambac Financial				0	Sensitivity	
Loss Estimates				90% of	100% of	90% of
Scenario Number	Base	Moderate	Adverse	Budget	Budget	Budget
Commonwealth GO	10%	15%	20%	32%	24%	32%
Public Bldg - GO Guaranteed	10%	15%	20%	32%	24%	32%
Senior Highway (1968)	20%	35%	50%	100%	91%	100%
Senior Transportation (1998)	50%	70%	85%	100%	97%	100%
Rum Tax (PRIFA)	20%	40%	75%	100%	97%	100%
Hotel Occupancy Tax	20%	45%	80%	100%	97%	100%
Sales Tax (COFINA)	15%	45%	80%	100%	85%	100%

Source: Height, LLC estimates.

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Figure 7. AGO Insured Debt Service Payments by PR Agency – 2017 to 2047

Assured Guaranty Insured Puerto Rico Debt Service Payments \$ in millions																
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027-31	2032-36	2037-41	2042-47	Total	
HTA - Transport	\$ 60	\$ 84	\$ 76	\$ 67	\$ 59	\$ 68	\$ 72	\$ 41	\$ 65	\$ 59	\$ 308	\$ 404	\$ 229	\$ 5	\$ 1,597	
PREPA	\$ 23	\$ 40	\$ 61	\$ 79	\$ 56	\$ 55	\$ 117	\$ 110	\$ 80	\$ 115	\$ 344	\$ 29	\$ -	\$ -	\$ 1,109	
PRASA	\$ 10	\$ 20	\$ 19	\$ 19	\$ 19	\$ 19	\$ 19	\$ 21	\$ 44	\$ 44	\$ 129	\$ 68	\$ 70	\$ 327	\$ 828	
HTA- Highway	\$ 11	\$ 42	\$ 42	\$ 42	\$ 45	\$ 23	\$ 24	\$ 24	\$ 24	\$ 16	\$ 145	\$ 252	\$ -	\$ -	\$ 690	
PR Convention Center	\$ 3	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 50	\$ 152	\$ -	\$ -	\$ 268	
GO	\$ 132	\$ 147	\$ 151	\$ 201	\$ 74	\$ 94	\$ 70	\$ 128	\$ 119	\$ 82	\$ 469	\$ 595	\$ 111	\$ -	\$ 2,373	
Muni Finance Agency	\$ 61	\$ 66	\$ 60	\$ 49	\$ 42	\$ 41	\$ 21	\$ 16	\$ 15	\$ 29	\$ 34	\$ -	\$ -	\$ -	\$ 434	
COFINA	\$ 6	\$ 13	\$ 13	\$ 13	\$ 13	\$ 12	\$ 16	\$ 15	\$ 13	\$ 12	\$ 68	\$ 103	\$ 162	\$ 160	\$ 619	
Public Bldg Authority	\$ 32	\$ 7	\$ 10	\$ 12	\$ 20	\$ 6	\$ 13	\$ 6	\$ 13	\$ 17	\$ 58	\$ 62	\$ -	\$ -	\$ 256	
PRIFA	\$ -	\$ 3	\$ 1	\$ 1	\$ 1	\$ 1	\$ 2	\$ 1	\$ 1	\$ 1	\$ 4	\$ 3	\$ 16	\$ -	\$ 35	
Univ of PR	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1	\$ -	\$ -	\$ 1	
Total P&I	\$ 338	\$ 429	\$ 440	\$ 490	\$ 336	\$ 326	\$ 361	\$ 369	\$ 381	\$ 382	\$ 1,609	\$ 1,669	\$ 588	\$ 492	\$ 8,210	

Source: AGO 2Q17 [Financial Supplement](#), Height Securities.

Figure 8. AGO Present Value of PR Insured Debt Service Payments to Claims Paying Resources – Certified Budget

Assured Guaranty PV of PR Insured Debt Service Payments																
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027-31	2032-36	2037-41	2042-47	Total	As a % of Claims Paying Resources
HTA - Transport	\$ 57.9	\$ 78.1	\$ 68.1	\$ 57.9	\$ 49.2	\$ 54.6	\$ 55.8	\$ 30.6	\$ 46.8	\$ 41.0	\$ 195.3	\$ 213.6	\$ 100.9	\$ 1.8	\$ 1,051.7	8.7%
PREPA	\$ 22.2	\$ 37.2	\$ 54.7	\$ 68.3	\$ 46.7	\$ 44.2	\$ 90.7	\$ 82.2	\$ 57.6	\$ 79.9	\$ 218.2	\$ 15.3	\$ -	\$ -	\$ 817.1	6.7%
PRASA	\$ 9.6	\$ 18.6	\$ 17.0	\$ 16.4	\$ 15.8	\$ 15.3	\$ 14.7	\$ 15.7	\$ 31.7	\$ 30.6	\$ 81.8	\$ 35.9	\$ 30.8	\$ 120.1	\$ 454.2	3.7%
HTA- Highway	\$ 10.6	\$ 39.0	\$ 37.7	\$ 36.3	\$ 37.5	\$ 18.5	\$ 18.6	\$ 17.9	\$ 17.3	\$ 11.1	\$ 92.0	\$ 133.2	\$ -	\$ -	\$ 469.7	3.9%
PR Convention Center	\$ 2.9	\$ 6.5	\$ 6.3	\$ 6.1	\$ 5.8	\$ 5.6	\$ 5.4	\$ 5.2	\$ 5.0	\$ 4.9	\$ 31.7	\$ 80.3	\$ -	\$ -	\$ 165.8	1.4%
GO	\$ 127.3	\$ 136.7	\$ 135.4	\$ 173.7	\$ 61.7	\$ 75.5	\$ 54.2	\$ 95.6	\$ 85.7	\$ 57.0	\$ 297.5	\$ 314.5	\$ 48.9	\$ -	\$ 1,663.8	13.7%
Muni Finance Agency	\$ 58.8	\$ 61.4	\$ 53.8	\$ 42.4	\$ 35.0	\$ 33.0	\$ 16.3	\$ 12.0	\$ 10.8	\$ 20.1	\$ 21.6	\$ -	\$ -	\$ -	\$ 365.0	3.0%
COFINA	\$ 5.8	\$ 12.1	\$ 11.7	\$ 11.2	\$ 10.8	\$ 9.6	\$ 12.4	\$ 11.2	\$ 9.4	\$ 8.3	\$ 43.1	\$ 54.4	\$ 71.4	\$ 58.8	\$ 330.3	2.7%
Public Bldg Authority	\$ 30.9	\$ 6.5	\$ 9.0	\$ 10.4	\$ 16.7	\$ 4.8	\$ 10.1	\$ 4.5	\$ 9.4	\$ 11.8	\$ 36.8	\$ 32.8	\$ -	\$ -	\$ 183.5	1.5%
PRIFA	\$ -	\$ 2.8	\$ 0.9	\$ 0.9	\$ 0.8	\$ 0.8	\$ 1.5	\$ 0.7	\$ 0.7	\$ 0.7	\$ 2.5	\$ 1.6	\$ 7.0	\$ -	\$ 21.1	0.2%
Univ of PR	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.5	\$ -	\$ -	\$ 0.5	0.0%
Total	\$ 398.9	\$ 394.4	\$ 423.6	\$ 280.1	\$ 262.0	\$ 279.7	\$ 275.7	\$ 274.5	\$ 265.4	\$ 1,020.5	\$ 882.3	\$ 259.1	\$ 180.7	\$ 5,522.6	45.4%	\$ 1,809.7
Claims Paying Resources																\$12,152.0

Source: AGO 2Q17 [Financial Supplement](#), Height Securities estimates.

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Figure 9. AGO FOMB Certified Budget PR Loss Scenario – 2017 to 2047

Assured Guaranty																	Per
After-tax PR Calculation																	Share
Loss by Insured Security	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027-31	2032-36	2037-41	2042-47	Total	Estimate	
Tax Rate	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%		
HTA - Transport	\$ 32.4	\$ 45.4	\$ 41.0	\$ 36.2	\$ 31.9	\$ 36.7	\$ 38.9	\$ 22.1	\$ 35.1	\$ 31.9	\$ 166.3	\$ 218.2	\$ 123.7	\$ 2.7	\$ 862.4		
PREPA	\$ 5.4	\$ 9.5	\$ 14.4	\$ 18.7	\$ 13.2	\$ 13.0	\$ 27.6	\$ 26.0	\$ 18.9	\$ 27.2	\$ 81.3	\$ 6.9	\$ -	\$ -	\$ 262.0		
PRASA	\$ 2.4	\$ 4.7	\$ 4.5	\$ 4.5	\$ 4.5	\$ 4.5	\$ 4.5	\$ 5.0	\$ 10.4	\$ 10.4	\$ 30.5	\$ 16.1	\$ 16.5	\$ 77.3	\$ 195.6		
HTA- Highway	\$ 5.6	\$ 21.3	\$ 21.3	\$ 21.3	\$ 22.8	\$ 11.6	\$ 12.2	\$ 12.2	\$ 12.2	\$ 8.1	\$ 73.4	\$ 127.6	\$ -	\$ -	\$ 349.3		
PR Convention Center	\$ 1.6	\$ 3.8	\$ 3.8	\$ 3.8	\$ 3.8	\$ 3.8	\$ 3.8	\$ 3.8	\$ 3.8	\$ 3.8	\$ 27.0	\$ 82.1	\$ -	\$ -	\$ 144.7		
GO	\$ 17.8	\$ 19.8	\$ 20.4	\$ 27.1	\$ 10.0	\$ 12.7	\$ 9.5	\$ 17.3	\$ 16.1	\$ 11.1	\$ 63.3	\$ 80.3	\$ 15.0	\$ -	\$ 320.4		
Muni Finance Agency	\$ 32.9	\$ 35.6	\$ 32.4	\$ 26.5	\$ 22.7	\$ 22.1	\$ 11.3	\$ 8.6	\$ 8.1	\$ 15.7	\$ 18.4	\$ -	\$ -	\$ -	\$ 234.4		
COFINA	\$ 2.8	\$ 6.1	\$ 6.1	\$ 6.1	\$ 6.1	\$ 5.7	\$ 7.6	\$ 7.1	\$ 6.1	\$ 5.7	\$ 32.1	\$ 48.7	\$ 76.5	\$ 75.6	\$ 292.5		
Public Bldg Authority	\$ 4.3	\$ 0.9	\$ 1.4	\$ 1.6	\$ 2.7	\$ 0.8	\$ 1.8	\$ 0.8	\$ 1.8	\$ 2.3	\$ 7.8	\$ 8.4	\$ -	\$ -	\$ 34.6		
PRIFA	\$ -	\$ 1.6	\$ 0.5	\$ 0.5	\$ 0.5	\$ 0.5	\$ 1.1	\$ 0.5	\$ 0.5	\$ 0.5	\$ 2.2	\$ 1.6	\$ 8.6	\$ -	\$ 18.9		
Univ of PR	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.3	\$ -	\$ -	\$ 0.3		
Total After-tax Loss Est.	\$ 105.3	\$ 148.8	\$ 145.8	\$ 146.3	\$ 118.2	\$ 111.5	\$ 118.1	\$ 103.4	\$ 112.9	\$ 116.5	\$ 502.3	\$ 590.1	\$ 240.4	\$ 155.6	\$ 2,715.0		
Period for PV Calculation	1	2	3	4	5	6	7	8	9	10	12.5	17.5	22.5	27.5			
Discount rate - Investment Yield	3.71%																
HTA - Transport	\$ 31.2	\$ 42.2	\$ 36.8	\$ 31.3	\$ 26.6	\$ 29.5	\$ 30.1	\$ 16.5	\$ 25.3	\$ 22.1	\$ 105.5	\$ 115.3	\$ 54.5	\$ 1.0	\$ 567.9	\$ 4.63	
PREPA	\$ 5.2	\$ 8.8	\$ 12.9	\$ 16.1	\$ 11.0	\$ 10.4	\$ 21.4	\$ 19.4	\$ 13.6	\$ 18.9	\$ 51.5	\$ 3.6	\$ -	\$ -	\$ 193.0	\$ 1.57	
PRASA	\$ 2.3	\$ 4.4	\$ 4.0	\$ 3.9	\$ 3.7	\$ 3.6	\$ 3.5	\$ 3.7	\$ 7.5	\$ 7.2	\$ 19.3	\$ 8.5	\$ 7.3	\$ 28.4	\$ 107.3	\$ 0.87	
HTA- Highway	\$ 5.4	\$ 19.8	\$ 19.1	\$ 18.4	\$ 19.0	\$ 9.4	\$ 9.4	\$ 9.1	\$ 8.8	\$ 5.6	\$ 46.6	\$ 67.4	\$ -	\$ -	\$ 237.8	\$ 1.94	
PR Convention Center	\$ 1.6	\$ 3.5	\$ 3.4	\$ 3.3	\$ 3.2	\$ 3.0	\$ 2.9	\$ 2.8	\$ 2.7	\$ 2.6	\$ 17.1	\$ 43.4	\$ -	\$ -	\$ 89.5	\$ 0.73	
GO	\$ 17.2	\$ 18.5	\$ 18.3	\$ 23.5	\$ 8.3	\$ 10.2	\$ 7.3	\$ 12.9	\$ 11.6	\$ 7.7	\$ 40.2	\$ 42.5	\$ 6.6	\$ -	\$ 224.6	\$ 1.83	
Muni Finance Agency	\$ 31.8	\$ 33.1	\$ 29.0	\$ 22.9	\$ 18.9	\$ 17.8	\$ 8.8	\$ 6.5	\$ 5.8	\$ 10.9	\$ 11.6	\$ -	\$ -	\$ -	\$ 197.1	\$ 1.61	
COFINA	\$ 2.7	\$ 5.7	\$ 5.5	\$ 5.3	\$ 5.1	\$ 4.6	\$ 5.9	\$ 5.3	\$ 4.4	\$ 3.9	\$ 20.4	\$ 25.7	\$ 33.7	\$ 27.8	\$ 156.0	\$ 1.27	
Public Bldg Authority	\$ 4.2	\$ 0.9	\$ 1.2	\$ 1.4	\$ 2.3	\$ 0.7	\$ 1.4	\$ 0.6	\$ 1.3	\$ 1.6	\$ 5.0	\$ 4.4	\$ -	\$ -	\$ 24.8	\$ 0.20	
PRIFA	\$ -	\$ 1.5	\$ 0.5	\$ 0.5	\$ 0.5	\$ 0.4	\$ 0.8	\$ 0.4	\$ 0.4	\$ 0.4	\$ 1.4	\$ 0.9	\$ 3.8	\$ -	\$ 11.4	\$ 0.09	
Univ of PR	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.2	\$ -	\$ -	\$ 0.2	\$ 0.00	
Total After-tax PV Loss Est.	\$ 101.5	\$ 138.3	\$ 130.7	\$ 126.4	\$ 98.5	\$ 89.6	\$ 91.5	\$ 77.2	\$ 81.4	\$ 81.0	\$ 318.5	\$ 311.9	\$ 105.9	\$ 57.1	\$ 1,809.7	\$ 14.75	
Shares																122.7	
Book Value per Share																\$ 56.40	
Book Value Adj for Est Losses																\$ 41.65	
Loss as a % of Book Value																35.4%	

Source: AGO 2Q17 [Financial Supplement](#), Height Securities estimates

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Figure 10. AGO PV of PR Insured Debt Service Payments to Claims Paying Resources – Sensitivity 100% of Budget

Assured Guaranty PV of PR Insured Debt Service Payments	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027-31	2032-36	2037-41	2042-47	Total	As a % of Claims Paying Resources	Estimated ATPV Losses	As a % of Claims Paying Resources
HTA - Transport	\$ 57.9	\$ 78.1	\$ 68.1	\$ 57.9	\$ 49.2	\$ 54.6	\$ 55.8	\$ 30.6	\$ 46.8	\$ 41.0	\$ 195.3	\$ 213.6	\$ 100.9	\$ 1.8	\$ 1,051.7	8.7%	\$ 687.2	5.7%
PREPA	\$ 22.2	\$ 37.2	\$ 54.7	\$ 68.3	\$ 46.7	\$ 44.2	\$ 90.7	\$ 82.2	\$ 57.6	\$ 79.9	\$ 218.2	\$ 15.3	\$ -	\$ -	\$ 817.1	6.7%	\$ 233.6	1.9%
PRASA	\$ 9.6	\$ 18.6	\$ 17.0	\$ 16.4	\$ 15.8	\$ 15.3	\$ 14.7	\$ 15.7	\$ 31.7	\$ 30.6	\$ 81.8	\$ 35.9	\$ 30.8	\$ 120.1	\$ 454.2	3.7%	\$ 129.8	1.1%
HTA- Highway	\$ 10.6	\$ 39.0	\$ 37.7	\$ 36.3	\$ 37.5	\$ 18.5	\$ 18.6	\$ 17.9	\$ 17.3	\$ 11.1	\$ 92.0	\$ 133.2	\$ -	\$ -	\$ 469.7	3.9%	\$ 287.7	2.4%
PR Convention Center	\$ 2.9	\$ 6.5	\$ 6.3	\$ 6.1	\$ 5.8	\$ 5.6	\$ 5.4	\$ 5.2	\$ 5.0	\$ 4.9	\$ 31.7	\$ 80.3	\$ -	\$ -	\$ 165.8	1.4%	\$ 108.3	0.9%
GO	\$ 127.3	\$ 136.7	\$ 135.4	\$ 173.7	\$ 61.7	\$ 75.5	\$ 54.2	\$ 95.6	\$ 85.7	\$ 57.0	\$ 297.5	\$ 314.5	\$ 48.9	\$ -	\$ 1,663.8	13.7%	\$ 271.8	2.2%
Muni Finance Agency	\$ 58.8	\$ 61.4	\$ 53.8	\$ 42.4	\$ 35.0	\$ 33.0	\$ 16.3	\$ 12.0	\$ 10.8	\$ 20.1	\$ 21.6	\$ -	\$ -	\$ -	\$ 365.0	3.0%	\$ 238.5	2.0%
COFINA	\$ 5.8	\$ 12.1	\$ 11.7	\$ 11.2	\$ 10.8	\$ 9.6	\$ 12.4	\$ 11.2	\$ 9.4	\$ 8.3	\$ 43.1	\$ 54.4	\$ 71.4	\$ 58.8	\$ 330.3	2.7%	\$ 188.8	1.6%
Public Bldg Authority	\$ 30.9	\$ 6.5	\$ 9.0	\$ 10.4	\$ 16.7	\$ 4.8	\$ 10.1	\$ 4.5	\$ 9.4	\$ 11.8	\$ 36.8	\$ 32.8	\$ -	\$ -	\$ 183.5	1.5%	\$ 30.0	0.2%
PRIFA	\$ -	\$ 2.8	\$ 0.9	\$ 0.9	\$ 0.8	\$ 0.8	\$ 1.5	\$ 0.7	\$ 0.7	\$ 0.7	\$ 2.5	\$ 1.6	\$ 7.0	\$ -	\$ 21.1	0.2%	\$ 13.8	0.1%
Univ of PR	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.5	\$ -	\$ -	\$ 0.5	0.0%	\$ 0.2	0.0%
Total		\$ 398.9	\$ 394.4	\$ 423.6	\$ 280.1	\$ 262.0	\$ 279.7	\$ 275.7	\$ 274.5	\$ 265.4	\$ 1,020.5	\$ 882.3	\$ 259.1	\$ 180.7	\$ 5,522.6	45.4%	\$ 2,189.7	18.0%
Claims Paying Resources																\$12,152.0		

Source: AGO 2Q17 [Financial Supplement](#), Height Securities estimates

ANALYST CERTIFICATION AND IMPORTANT DISCLOSURES BEGIN ON PAGE 30

Figure 11. AGO FOMB Sensitivity 100% of Budget PR Loss Scenario – 2017 to 2047

Assured Guaranty																	Per
After-tax PR Calculation																	Share
Loss by Insured Security																	Estimate
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026		2027-31	2032-36	2037-41	2042-47	Total	
Tax Rate	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	
HTA - Transport	\$ 39.2	\$ 54.9	\$ 49.7	\$ 43.8	\$ 38.6	\$ 44.4	\$ 47.0	\$ 26.8	\$ 42.5	\$ 38.6	\$ 201.2	\$ 264.0	\$ 149.6	\$ 3.3	\$ 1,043.5		
PREPA	\$ 6.6	\$ 11.4	\$ 17.4	\$ 22.6	\$ 16.0	\$ 15.7	\$ 33.4	\$ 31.4	\$ 22.9	\$ 32.9	\$ 98.3	\$ 8.3	\$ -	\$ -	\$ 317.0		
PRASA	\$ 2.9	\$ 5.7	\$ 5.4	\$ 5.4	\$ 5.4	\$ 5.4	\$ 5.4	\$ 6.0	\$ 12.6	\$ 12.6	\$ 36.9	\$ 19.4	\$ 20.0	\$ 93.5	\$ 236.7		
HTA- Highway	\$ 6.7	\$ 25.7	\$ 25.7	\$ 25.7	\$ 27.6	\$ 14.1	\$ 14.7	\$ 14.7	\$ 14.7	\$ 9.8	\$ 88.8	\$ 154.4	\$ -	\$ -	\$ 422.7		
PR Convention Center	\$ 2.0	\$ 4.6	\$ 4.6	\$ 4.6	\$ 4.6	\$ 4.6	\$ 4.6	\$ 4.6	\$ 4.6	\$ 4.6	\$ 32.7	\$ 99.3	\$ -	\$ -	\$ 175.1		
GO	\$ 21.6	\$ 24.0	\$ 24.7	\$ 32.8	\$ 12.1	\$ 15.4	\$ 11.4	\$ 20.9	\$ 19.4	\$ 13.4	\$ 76.6	\$ 97.2	\$ 18.1	\$ -	\$ 387.6		
Muni Finance Agency	\$ 39.9	\$ 43.1	\$ 39.2	\$ 32.0	\$ 27.4	\$ 26.8	\$ 13.7	\$ 10.5	\$ 9.8	\$ 18.9	\$ 22.2	\$ -	\$ -	\$ -	\$ 283.6		
COFINA	\$ 3.4	\$ 7.4	\$ 7.4	\$ 7.4	\$ 7.4	\$ 6.9	\$ 9.1	\$ 8.6	\$ 7.4	\$ 6.9	\$ 38.9	\$ 58.9	\$ 92.6	\$ 91.5	\$ 353.9		
Public Bldg Authority	\$ 5.2	\$ 1.1	\$ 1.6	\$ 2.0	\$ 3.3	\$ 1.0	\$ 2.1	\$ 1.0	\$ 2.1	\$ 2.8	\$ 9.5	\$ 10.1	\$ -	\$ -	\$ 41.8		
PRIFA	\$ -	\$ 2.0	\$ 0.7	\$ 0.7	\$ 0.7	\$ 0.7	\$ 1.3	\$ 0.7	\$ 0.7	\$ 0.7	\$ 2.6	\$ 2.0	\$ 10.5	\$ -	\$ 22.9		
Univ of PR	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.4	\$ -	\$ -	\$ 0.4		
Total After-tax Loss Est.	\$ 127.4	\$ 180.0	\$ 176.4	\$ 177.0	\$ 143.0	\$ 134.9	\$ 142.9	\$ 125.1	\$ 136.6	\$ 141.0	\$ 607.7	\$ 714.0	\$ 290.8	\$ 188.2	\$ 3,285.2		
Period for PV Calculation																	
	1	2	3	4	5	6	7	8	9	10		12.5	17.5	22.5	27.5		
Discount rate - Investment Yield	3.71%																
HTA - Transport	\$ 37.8	\$ 51.0	\$ 44.5	\$ 37.8	\$ 32.1	\$ 35.7	\$ 36.5	\$ 20.0	\$ 30.6	\$ 26.8	\$ 127.6	\$ 139.5	\$ 65.9	\$ 1.2	\$ 687.2	\$ 5.60	
PREPA	\$ 6.3	\$ 10.6	\$ 15.6	\$ 19.5	\$ 13.3	\$ 12.6	\$ 25.9	\$ 23.5	\$ 16.5	\$ 22.8	\$ 62.4	\$ 4.4	\$ -	\$ -	\$ 233.6	\$ 1.90	
PRASA	\$ 2.8	\$ 5.3	\$ 4.9	\$ 4.7	\$ 4.5	\$ 4.4	\$ 4.2	\$ 4.5	\$ 9.1	\$ 8.7	\$ 23.4	\$ 10.3	\$ 8.8	\$ 34.3	\$ 129.8	\$ 1.06	
HTA- Highway	\$ 6.5	\$ 23.9	\$ 23.1	\$ 22.2	\$ 23.0	\$ 11.3	\$ 11.4	\$ 11.0	\$ 10.6	\$ 6.8	\$ 56.3	\$ 81.6	\$ -	\$ -	\$ 287.7	\$ 2.34	
PR Convention Center	\$ 1.9	\$ 4.3	\$ 4.1	\$ 4.0	\$ 3.8	\$ 3.7	\$ 3.5	\$ 3.4	\$ 3.3	\$ 3.2	\$ 20.7	\$ 52.5	\$ -	\$ -	\$ 108.3	\$ 0.88	
GO	\$ 20.8	\$ 22.3	\$ 22.1	\$ 28.4	\$ 10.1	\$ 12.3	\$ 8.9	\$ 15.6	\$ 14.0	\$ 9.3	\$ 48.6	\$ 51.4	\$ 8.0	\$ -	\$ 271.8	\$ 2.21	
Muni Finance Agency	\$ 38.4	\$ 40.1	\$ 35.1	\$ 27.7	\$ 22.9	\$ 21.5	\$ 10.6	\$ 7.8	\$ 7.1	\$ 13.2	\$ 14.1	\$ -	\$ -	\$ -	\$ 238.5	\$ 1.94	
COFINA	\$ 3.3	\$ 6.9	\$ 6.7	\$ 6.4	\$ 6.2	\$ 5.5	\$ 7.1	\$ 6.4	\$ 5.4	\$ 4.8	\$ 24.7	\$ 31.1	\$ 40.8	\$ 33.6	\$ 188.8	\$ 1.54	
Public Bldg Authority	\$ 5.0	\$ 1.1	\$ 1.5	\$ 1.7	\$ 2.7	\$ 0.8	\$ 1.6	\$ 0.7	\$ 1.5	\$ 1.9	\$ 6.0	\$ 5.4	\$ -	\$ -	\$ 30.0	\$ 0.24	
PRIFA	\$ -	\$ 1.8	\$ 0.6	\$ 0.6	\$ 0.5	\$ 0.5	\$ 1.0	\$ 0.5	\$ 0.5	\$ 0.5	\$ 1.7	\$ 1.0	\$ 4.6	\$ -	\$ 13.8	\$ 0.11	
Univ of PR	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.2	\$ -	\$ -	\$ 0.2	\$ 0.00	
Total After-tax PV Loss Est.	\$ 122.9	\$ 167.4	\$ 158.2	\$ 153.0	\$ 119.2	\$ 108.4	\$ 110.8	\$ 93.5	\$ 98.4	\$ 98.0	\$ 385.4	\$ 377.4	\$ 128.1	\$ 69.1	\$ 2,189.7	\$ 17.85	
Shares																	122.7
Book Value per Share																	\$ 56.40
Book Value Adj for Est Losses																	\$ 38.55
Loss as a % of Book Value																	46.3%

Source: AGO 2Q17 [Financial Supplement](#), Height Securities estimates

ANALYST CERTIFICATION AND IMPORTANT DISCLOSURES BEGIN ON PAGE 30

Figure 12. AGO PV of PR Insured Debt Service Payments to Claims Paying Resources – Sensitivity 90% of Budget

Assured Guaranty PV of PR Insured Debt Service Payments	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027-31	2032-36	2037-41	2042-47	Total	As a % of Claims Paying Resources	Estimated ATPV Losses	As a % of Claims Paying Resources
HTA - Transport	\$ 57.9	\$ 78.1	\$ 68.1	\$ 57.9	\$ 49.2	\$ 54.6	\$ 55.8	\$ 30.6	\$ 46.8	\$ 41.0	\$ 195.3	\$ 213.6	\$ 100.9	\$ 1.8	\$ 1,051.7	8.7%	\$ 709.9	5.8%
PREPA	\$ 22.2	\$ 37.2	\$ 54.7	\$ 68.3	\$ 46.7	\$ 44.2	\$ 90.7	\$ 82.2	\$ 57.6	\$ 79.9	\$ 218.2	\$ 15.3	\$ -	\$ -	\$ 817.1	6.7%	\$ 310.8	2.6%
PRASA	\$ 9.6	\$ 18.6	\$ 17.0	\$ 16.4	\$ 15.8	\$ 15.3	\$ 14.7	\$ 15.7	\$ 31.7	\$ 30.6	\$ 81.8	\$ 35.9	\$ 30.8	\$ 120.1	\$ 454.2	3.7%	\$ 172.7	1.4%
HTA- Highway	\$ 10.6	\$ 39.0	\$ 37.7	\$ 36.3	\$ 37.5	\$ 18.5	\$ 18.6	\$ 17.9	\$ 17.3	\$ 11.1	\$ 92.0	\$ 133.2	\$ -	\$ -	\$ 469.7	3.9%	\$ 317.1	2.6%
PR Convention Center	\$ 2.9	\$ 6.5	\$ 6.3	\$ 6.1	\$ 5.8	\$ 5.6	\$ 5.4	\$ 5.2	\$ 5.0	\$ 4.9	\$ 31.7	\$ 80.3	\$ -	\$ -	\$ 165.8	1.4%	\$ 111.9	0.9%
GO	\$ 127.3	\$ 136.7	\$ 135.4	\$ 173.7	\$ 61.7	\$ 75.5	\$ 54.2	\$ 95.6	\$ 85.7	\$ 57.0	\$ 297.5	\$ 314.5	\$ 48.9	\$ -	\$ 1,663.8	13.7%	\$ 361.6	3.0%
Muni Finance Agency	\$ 58.8	\$ 61.4	\$ 53.8	\$ 42.4	\$ 35.0	\$ 33.0	\$ 16.3	\$ 12.0	\$ 10.8	\$ 20.1	\$ 21.6	\$ -	\$ -	\$ -	\$ 365.0	3.0%	\$ 246.4	2.0%
COFINA	\$ 5.8	\$ 12.1	\$ 11.7	\$ 11.2	\$ 10.8	\$ 9.6	\$ 12.4	\$ 11.2	\$ 9.4	\$ 8.3	\$ 43.1	\$ 54.4	\$ 71.4	\$ 58.8	\$ 330.3	2.7%	\$ 222.9	1.8%
Public Bldg Authority	\$ 30.9	\$ 6.5	\$ 9.0	\$ 10.4	\$ 16.7	\$ 4.8	\$ 10.1	\$ 4.5	\$ 9.4	\$ 11.8	\$ 36.8	\$ 32.8	\$ -	\$ -	\$ 183.5	1.5%	\$ 39.9	0.3%
PRIFA	\$ -	\$ 2.8	\$ 0.9	\$ 0.9	\$ 0.8	\$ 0.8	\$ 1.5	\$ 0.7	\$ 0.7	\$ 0.7	\$ 2.5	\$ 1.6	\$ 7.0	\$ -	\$ 21.1	0.2%	\$ 14.2	0.1%
Univ of PR	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.5	\$ -	\$ -	\$ 0.5	0.0%	\$ 0.3	0.0%
Total		\$ 398.9	\$ 394.4	\$ 423.6	\$ 280.1	\$ 262.0	\$ 279.7	\$ 275.7	\$ 274.5	\$ 265.4	\$ 1,020.5	\$ 882.3	\$ 259.1	\$ 180.7	\$ 5,522.6	45.4%	\$ 2,507.7	20.6%
Claims Paying Resources																\$12,152.0		

Source: AGO 2Q17 [Financial Supplement](#), Height Securities estimates

ANALYST CERTIFICATION AND IMPORTANT DISCLOSURES BEGIN ON PAGE 30

Figure 13. AGO FOMB Sensitivity 90% of Budget PR Loss Scenario – 2017 to 2047

Assured Guaranty																	Per
After-tax PR Calculation																	Share
Loss by Insured Security	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027-31	2032-36	2037-41	2042-47	Total		Estimate
Tax Rate	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%		
HTA - Transport	\$ 40.5	\$ 56.7	\$ 51.3	\$ 45.2	\$ 39.8	\$ 45.9	\$ 48.6	\$ 27.7	\$ 43.9	\$ 39.8	\$ 207.9	\$ 272.7	\$ 154.6	\$ 3.4	\$ 1,078.0		
PREPA	\$ 8.7	\$ 15.2	\$ 23.2	\$ 30.0	\$ 21.3	\$ 20.9	\$ 44.5	\$ 41.8	\$ 30.4	\$ 43.7	\$ 130.8	\$ 11.0	\$ -	\$ -	\$ 421.8		
PRASA	\$ 3.8	\$ 7.6	\$ 7.2	\$ 7.2	\$ 7.2	\$ 7.2	\$ 7.2	\$ 8.0	\$ 16.7	\$ 16.7	\$ 49.1	\$ 25.9	\$ 26.6	\$ 124.4	\$ 314.9		
HTA- Highway	\$ 7.4	\$ 28.4	\$ 28.4	\$ 28.4	\$ 30.4	\$ 15.5	\$ 16.2	\$ 16.2	\$ 16.2	\$ 10.8	\$ 97.9	\$ 170.1	\$ -	\$ -	\$ 465.8		
PR Convention Center	\$ 2.0	\$ 4.7	\$ 4.7	\$ 4.7	\$ 4.7	\$ 4.7	\$ 4.7	\$ 4.7	\$ 4.7	\$ 4.7	\$ 33.8	\$ 102.6	\$ -	\$ -	\$ 180.9		
GO	\$ 28.7	\$ 32.0	\$ 32.8	\$ 43.7	\$ 16.1	\$ 20.4	\$ 15.2	\$ 27.8	\$ 25.9	\$ 17.8	\$ 101.9	\$ 129.3	\$ 24.1	\$ -	\$ 515.8		
Muni Finance Agency	\$ 41.2	\$ 44.6	\$ 40.5	\$ 33.1	\$ 28.4	\$ 27.7	\$ 14.2	\$ 10.8	\$ 10.1	\$ 19.6	\$ 23.0	\$ -	\$ -	\$ -	\$ 293.0		
COFINA	\$ 4.1	\$ 8.8	\$ 8.8	\$ 8.8	\$ 8.8	\$ 8.1	\$ 10.8	\$ 10.1	\$ 8.8	\$ 8.1	\$ 45.9	\$ 69.5	\$ 109.4	\$ 108.0	\$ 417.8		
Public Bldg Authority	\$ 7.0	\$ 1.5	\$ 2.2	\$ 2.6	\$ 4.3	\$ 1.3	\$ 2.8	\$ 1.3	\$ 2.8	\$ 3.7	\$ 12.6	\$ 13.5	\$ -	\$ -	\$ 55.6		
PRIFA	\$ -	\$ 2.0	\$ 0.7	\$ 0.7	\$ 0.7	\$ 0.7	\$ 1.4	\$ 0.7	\$ 0.7	\$ 0.7	\$ 2.7	\$ 2.0	\$ 10.8	\$ -	\$ 23.6		
Univ of PR	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.5	\$ -	\$ -	\$ 0.5		
Total After-tax Loss Est.	\$ 143.4	\$ 201.4	\$ 199.7	\$ 204.4	\$ 161.7	\$ 152.5	\$ 165.6	\$ 149.2	\$ 160.2	\$ 165.7	\$ 705.5	\$ 797.2	\$ 325.5	\$ 235.8	\$ 3,767.7		
Period for PV Calculation	1	2	3	4	5	6	7	8	9	10	12.5	17.5	22.5	27.5			
Discount rate - Investment Yield	3.71%																
HTA - Transport	\$ 39.1	\$ 52.7	\$ 46.0	\$ 39.1	\$ 33.2	\$ 36.9	\$ 37.7	\$ 20.7	\$ 31.6	\$ 27.7	\$ 131.9	\$ 144.2	\$ 68.1	\$ 1.2	\$ 709.9	\$ 5.79	
PREPA	\$ 8.4	\$ 14.1	\$ 20.8	\$ 26.0	\$ 17.8	\$ 16.8	\$ 34.5	\$ 31.3	\$ 21.9	\$ 30.4	\$ 83.0	\$ 5.8	\$ -	\$ -	\$ 310.8	\$ 2.53	
PRASA	\$ 3.7	\$ 7.1	\$ 6.5	\$ 6.2	\$ 6.0	\$ 5.8	\$ 5.6	\$ 6.0	\$ 12.1	\$ 11.6	\$ 31.1	\$ 13.7	\$ 11.7	\$ 45.7	\$ 172.7	\$ 1.41	
HTA- Highway	\$ 7.2	\$ 26.4	\$ 25.4	\$ 24.5	\$ 25.3	\$ 12.5	\$ 12.6	\$ 12.1	\$ 11.7	\$ 7.5	\$ 62.1	\$ 89.9	\$ -	\$ -	\$ 317.1	\$ 2.58	
PR Convention Center	\$ 2.0	\$ 4.4	\$ 4.2	\$ 4.1	\$ 3.9	\$ 3.8	\$ 3.7	\$ 3.5	\$ 3.4	\$ 3.3	\$ 21.4	\$ 54.2	\$ -	\$ -	\$ 111.9	\$ 0.91	
GO	\$ 27.7	\$ 29.7	\$ 29.4	\$ 37.8	\$ 13.4	\$ 16.4	\$ 11.8	\$ 20.8	\$ 18.6	\$ 12.4	\$ 64.7	\$ 68.4	\$ 10.6	\$ -	\$ 361.6	\$ 2.95	
Muni Finance Agency	\$ 39.7	\$ 41.4	\$ 36.3	\$ 28.6	\$ 23.6	\$ 22.2	\$ 11.0	\$ 8.1	\$ 7.3	\$ 13.6	\$ 14.6	\$ -	\$ -	\$ -	\$ 246.4	\$ 2.01	
COFINA	\$ 3.9	\$ 8.2	\$ 7.9	\$ 7.6	\$ 7.3	\$ 6.5	\$ 8.4	\$ 7.6	\$ 6.3	\$ 5.6	\$ 29.1	\$ 36.8	\$ 48.2	\$ 39.7	\$ 222.9	\$ 1.82	
Public Bldg Authority	\$ 6.7	\$ 1.4	\$ 1.9	\$ 2.3	\$ 3.6	\$ 1.0	\$ 2.2	\$ 1.0	\$ 2.0	\$ 2.6	\$ 8.0	\$ 7.1	\$ -	\$ -	\$ 39.9	\$ 0.33	
PRIFA	\$ -	\$ 1.9	\$ 0.6	\$ 0.6	\$ 0.6	\$ 0.5	\$ 1.0	\$ 0.5	\$ 0.5	\$ 0.5	\$ 1.7	\$ 1.1	\$ 4.8	\$ -	\$ 14.2	\$ 0.12	
Univ of PR	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.3	\$ -	\$ -	\$ 0.3	\$ 0.00	
Total After-tax PV Loss Est.	\$ 138.2	\$ 187.3	\$ 179.1	\$ 176.7	\$ 134.8	\$ 122.5	\$ 128.3	\$ 111.4	\$ 115.4	\$ 115.1	\$ 447.5	\$ 421.4	\$ 143.4	\$ 86.6	\$ 2,507.7	\$ 20.44	
Shares																	122.7
Book Value per Share																	\$ 56.40
Book Value Adj for Est Losses																	\$ 35.96
Loss as a % of Book Value																	56.8%

Source: AGO 2Q17 [Financial Supplement](#), Height Securities estimates

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Figure 14. MBI Insured Debt Service Payments by PR Agency – 2017 to 2043+

MBIA Inc. \$ in millions	2017	2018	2019	2020	2021	2022	2023-2027	2028-2032	2033-2037	2038-2042	2043+	Total
PREPA	\$ 152.1	\$ 120.3	\$ 176.7	\$ 114.8	\$ 140.1	\$ 140.0	\$ 456.8	\$ 304.1	\$ 183.7	\$ -	\$ -	\$ 1,788.7
GO	\$ 48.0	\$ 95.9	\$ 153.6	\$ 223.0	\$ 82.4	\$ 19.2	\$ 225.6	\$ 50.3	\$ -	\$ -	\$ -	\$ 898.0
PBA - GO	\$ 5.6	\$ 17.1	\$ 23.6	\$ 10.1	\$ 25.2	\$ 9.3	\$ 152.3	\$ 37.9	\$ -	\$ -	\$ -	\$ 281.2
HTA Transport - 1998	\$ 14.5	\$ 32.6	\$ 26.5	\$ 26.5	\$ 26.5	\$ 26.5	\$ 175.2	\$ 232.0	\$ 265.2	\$ 155.7	\$ -	\$ 981.1
HTA- 1998 Sub Transport	\$ 4.1	\$ 4.9	\$ 1.3	\$ 1.3	\$ 1.3	\$ 9.0	\$ 4.7	\$ 19.9	\$ -	\$ -	\$ -	\$ 46.7
COFINA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,326.4	\$ 2,843.7	\$ 4,170.1
HTA Highway -1968	\$ 19.1	\$ 5.4	\$ 15.8	\$ 15.8	\$ 3.6	\$ 2.0	\$ 16.5	\$ 37.8	\$ 0.9	\$ -	\$ -	\$ 117.0
Univ of PR	\$ 4.6	\$ 6.7	\$ 7.2	\$ 6.7	\$ 6.7	\$ 6.7	\$ 50.0	\$ 28.5	\$ 5.7	\$ -	\$ -	\$ 122.7
Inter American U of PR	\$ 2.0	\$ 2.6	\$ 2.6	\$ 2.6	\$ 2.6	\$ 2.6	\$ 12.8	\$ 5.1	\$ -	\$ -	\$ -	\$ 32.7
PRIDCo	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total P&I	\$ 249.9	\$ 285.5	\$ 407.3	\$ 400.9	\$ 288.5	\$ 215.3	\$ 1,094.0	\$ 715.6	\$ 455.5	\$ 1,482.1	\$ 2,843.7	\$ 8,438.3

Source: MBI's 2Q17 [Selected Exposures](#), MBI's 2Q17 [Operating Supplement](#) Height Securities.

Figure 15. MBI Present Value of PR Insured Debt Service Payments to Claims Paying Resources

MBIA Inc. PV of PR Insured Debt Service Payments	2017	2018	2019	2020	2021	2022	2023-2027	2028-2032	2033-2037	2038-2042	2043+	Total	As a % of Claims Paying Resources	Estimated ATPV Losses	As a % of Claims Paying Resources
PREPA	\$ 147.4	\$ 113.0	\$ 160.7	\$ 101.2	\$ 119.7	\$ 115.9	\$ 349.5	\$ 198.8	\$ 102.6	\$ -	\$ -	\$ 1,408.8	30.6%	\$ 288.5	6.3%
GO	\$ 46.5	\$ 90.1	\$ 139.8	\$ 196.6	\$ 70.4	\$ 15.9	\$ 172.6	\$ 32.9	\$ -	\$ -	\$ -	\$ 764.7	16.6%	\$ 89.5	1.9%
PBA - GO	\$ 5.4	\$ 16.1	\$ 21.5	\$ 8.9	\$ 21.6	\$ 7.7	\$ 116.5	\$ 24.8	\$ -	\$ -	\$ -	\$ 222.5	4.8%	\$ 26.0	0.6%
HTA Transport - 1998	\$ 14.0	\$ 30.6	\$ 24.1	\$ 23.4	\$ 22.7	\$ 22.0	\$ 134.1	\$ 151.6	\$ 148.1	\$ 74.3	\$ -	\$ 644.7	14.0%	\$ 301.7	6.5%
HTA- 1998 Sub Transport	\$ 4.0	\$ 4.6	\$ 1.2	\$ 1.2	\$ 1.1	\$ 7.5	\$ 3.6	\$ 13.0	\$ -	\$ -	\$ -	\$ 36.2	0.8%	\$ 21.2	0.5%
COFINA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 632.7	\$ 1,158.8	\$ 1,791.5	38.9%	\$ 733.6	15.9%
HTA Highway -1968	\$ 18.5	\$ 5.0	\$ 14.4	\$ 14.0	\$ 3.1	\$ 1.7	\$ 12.6	\$ 24.7	\$ 0.5	\$ -	\$ -	\$ 94.5	2.1%	\$ 41.5	0.9%
Univ of PR	\$ 4.4	\$ 6.3	\$ 6.5	\$ 5.9	\$ 5.7	\$ 5.5	\$ 38.2	\$ 18.6	\$ 3.2	\$ -	\$ -	\$ 94.5	2.1%	\$ 27.6	0.6%
Inter American U of PR	\$ 1.9	\$ 2.4	\$ 2.3	\$ 2.2	\$ 2.2	\$ 2.1	\$ 9.8	\$ 3.4	\$ -	\$ -	\$ -	\$ 26.4	0.6%	\$ 7.7	0.2%
Total	\$ 242.2	\$ 268.1	\$ 370.6	\$ 353.4	\$ 246.4	\$ 178.2	\$ 837.0	\$ 467.7	\$ 254.4	\$ 707.0	\$ 1,158.8	\$ 5,083.8	110.3%	\$ 1,537.3	33.4%
Claims Paying Resources													\$4,607.0		

Source: MBI's 2Q17 [Selected Exposures](#), MBI's 2Q17 [Operating Supplement](#), Height Securities estimates.

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Figure 16. MBI FOMB Certified Budget Loss Scenario – 2017 to 2043+

MBIA Inc.													Per Share Estimate
After-tax PR Calculation													
Loss by Insured Security	2017	2018	2019	2020	2021	2022	2023-2027	2028-2032	2033-2037	2038-2042	2043+	Total	
Tax Rate	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%		
PREPA	\$ 31.1	\$ 24.6	\$ 36.2	\$ 23.5	\$ 28.7	\$ 28.7	\$ 93.5	\$ 62.3	\$ 37.6	\$ -	\$ -	\$ 366.2	
GO	\$ 5.6	\$ 11.2	\$ 18.0	\$ 26.1	\$ 9.6	\$ 2.3	\$ 26.4	\$ 5.9	\$ -	\$ -	\$ -	\$ 105.1	
PBA - GO	\$ 0.7	\$ 2.0	\$ 2.8	\$ 1.2	\$ 3.0	\$ 1.1	\$ 17.8	\$ 4.4	\$ -	\$ -	\$ -	\$ 32.9	
HTA Transport - 1998	\$ 6.8	\$ 15.2	\$ 12.4	\$ 12.4	\$ 12.4	\$ 12.4	\$ 82.0	\$ 108.6	\$ 124.1	\$ 72.9	\$ -	\$ 459.2	
HTA- 1998 Sub Transport	\$ 2.4	\$ 2.9	\$ 0.8	\$ 0.8	\$ 0.8	\$ 5.3	\$ 2.8	\$ 11.6	\$ -	\$ -	\$ -	\$ 27.3	
COFINA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 543.2	\$ 1,164.5	\$ 1,707.7	
HTA Highway -1968	\$ 8.4	\$ 2.3	\$ 6.9	\$ 6.9	\$ 1.6	\$ 0.9	\$ 7.2	\$ 16.6	\$ 0.4	\$ -	\$ -	\$ 51.3	
Univ of PR	\$ 1.3	\$ 2.0	\$ 2.1	\$ 2.0	\$ 2.0	\$ 2.0	\$ 14.6	\$ 8.3	\$ 1.7	\$ -	\$ -	\$ 35.9	
Inter American U of PR	\$ 0.6	\$ 0.7	\$ 0.7	\$ 0.7	\$ 0.7	\$ 0.7	\$ 3.7	\$ 1.5	\$ -	\$ -	\$ -	\$ 9.6	
PRIDCo	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Est. After-tax Loss Exposure	\$ 56.9	\$ 61.0	\$ 79.9	\$ 73.6	\$ 58.8	\$ 53.3	\$ 248.1	\$ 219.2	\$ 163.8	\$ 616.0	\$ 1,164.5	\$ 2,795.1	
Period for PV Calculation	1	2	3	4	5	6	8.5	13.5	18.5	23.5	28.5	Total	
Discount rate	3.20%												
PV of Payments													
PREPA	\$ 30.2	\$ 23.1	\$ 32.9	\$ 20.7	\$ 24.5	\$ 23.7	\$ 71.6	\$ 40.7	\$ 21.0	\$ -	\$ -	\$ 288.5	\$ 2.30
GO	\$ 5.4	\$ 10.5	\$ 16.4	\$ 23.0	\$ 8.2	\$ 1.9	\$ 20.2	\$ 3.8	\$ -	\$ -	\$ -	\$ 89.5	\$ 0.71
PBA - GO	\$ 0.6	\$ 1.9	\$ 2.5	\$ 1.0	\$ 2.5	\$ 0.9	\$ 13.6	\$ 2.9	\$ -	\$ -	\$ -	\$ 26.0	\$ 0.21
HTA Transport - 1998	\$ 6.6	\$ 14.3	\$ 11.3	\$ 10.9	\$ 10.6	\$ 10.3	\$ 62.7	\$ 71.0	\$ 69.3	\$ 34.8	\$ -	\$ 301.7	\$ 2.40
HTA- 1998 Sub Transport	\$ 2.3	\$ 2.7	\$ 0.7	\$ 0.7	\$ 0.7	\$ 4.4	\$ 2.1	\$ 7.6	\$ -	\$ -	\$ -	\$ 21.2	\$ 0.17
COFINA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 259.1	\$ 474.5	\$ 733.6	\$ 5.84
HTA Highway -1968	\$ 8.1	\$ 2.2	\$ 6.3	\$ 6.1	\$ 1.4	\$ 0.7	\$ 5.5	\$ 10.8	\$ 0.2	\$ -	\$ -	\$ 41.5	\$ 0.33
Univ of PR	\$ 1.3	\$ 1.8	\$ 1.9	\$ 1.7	\$ 1.7	\$ 1.6	\$ 11.2	\$ 5.4	\$ 0.9	\$ -	\$ -	\$ 27.6	\$ 0.22
Inter American U of PR	\$ 0.6	\$ 0.7	\$ 0.7	\$ 0.7	\$ 0.6	\$ 0.6	\$ 2.9	\$ 1.0	\$ -	\$ -	\$ -	\$ 7.7	\$ 0.06
PRIDCo	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total After-tax PV Est. Losses	\$ 55.1	\$ 57.3	\$ 72.7	\$ 64.9	\$ 50.2	\$ 44.1	\$ 189.8	\$ 143.3	\$ 91.5	\$ 293.8	\$ 474.5	\$ 1,537.3	\$ 12.23
Shares													125.7
Book Value per Share													\$ 15.45
Book Value Adj for Est Losses													\$ 3.22
Loss as a % of Book Value													79.2%

Source: MBI's 2Q17 [Selected Exposures](#), MBI's 2Q17 [Operating Supplement](#), Height Securities estimates.

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Figure 17. MBI PV of PR Insured Debt Service Payments to Claims Paying Resources – Sensitivity 100% of Budget

MBIA Inc. PV of PR Insured Debt Service Payments													As a % of Claims Paying Resources	Estimated ATPV Losses	As a % of Claims Paying Resources
	2017	2018	2019	2020	2021	2022	2023-2027	2028-2032	2033-2037	2038-2042	2043+	Total			
PREPA	\$ 147.4	\$ 113.0	\$ 160.7	\$ 101.2	\$ 119.7	\$ 115.9	\$ 349.5	\$ 198.8	\$ 102.6	\$ -	\$ -	\$ 1,408.8	30.6%	\$ 349.0	7.6%
GO	\$ 46.5	\$ 90.1	\$ 139.8	\$ 196.6	\$ 70.4	\$ 15.9	\$ 172.6	\$ 32.9	\$ -	\$ -	\$ -	\$ 764.7	16.6%	\$ 108.3	2.3%
PBA - GO	\$ 5.4	\$ 16.1	\$ 21.5	\$ 8.9	\$ 21.6	\$ 7.7	\$ 116.5	\$ 24.8	\$ -	\$ -	\$ -	\$ 222.5	4.8%	\$ 31.5	0.7%
HTA Transport - 1998	\$ 14.0	\$ 30.6	\$ 24.1	\$ 23.4	\$ 22.7	\$ 22.0	\$ 134.1	\$ 151.6	\$ 148.1	\$ 74.3	\$ -	\$ 644.7	14.0%	\$ 365.1	7.9%
HTA- 1998 Sub Transport	\$ 4.0	\$ 4.6	\$ 1.2	\$ 1.2	\$ 1.1	\$ 7.5	\$ 3.6	\$ 13.0	\$ -	\$ -	\$ -	\$ 36.2	0.8%	\$ 21.2	0.5%
COFINA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 632.7	\$ 1,158.8	\$ 1,791.5	38.9%	\$ 887.7	19.3%
HTA Highway -1968	\$ 18.5	\$ 5.0	\$ 14.4	\$ 14.0	\$ 3.1	\$ 1.7	\$ 12.6	\$ 24.7	\$ 0.5	\$ -	\$ -	\$ 94.5	2.1%	\$ 50.2	1.1%
Univ of PR	\$ 4.4	\$ 6.3	\$ 6.5	\$ 5.9	\$ 5.7	\$ 5.5	\$ 38.2	\$ 18.6	\$ 3.2	\$ -	\$ -	\$ 94.5	2.1%	\$ 33.4	0.7%
Inter American U of PR	\$ 1.9	\$ 2.4	\$ 2.3	\$ 2.2	\$ 2.2	\$ 2.1	\$ 9.8	\$ 3.4	\$ -	\$ -	\$ -	\$ 26.4	0.6%	\$ 9.3	0.2%
Total	\$ 242.2	\$ 268.1	\$ 370.6	\$ 353.4	\$ 246.4	\$ 178.2	\$ 837.0	\$ 467.7	\$ 254.4	\$ 707.0	\$ 1,158.8	\$ 5,083.8	110.3%	\$ 1,855.7	40.3%
Claims Paying Resources												\$4,607.0			

Source: MBI's 2Q17 [Selected Exposures](#), MBI's 2Q17 [Operating Supplement](#), Height Securities estimates.

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Figure 18. MBI FOMB Sensitivity 100% of Budget PR Loss Scenario – 2017 to 2043+

MBIA Inc. After-tax PR Calculation Loss by Insured Security													Per Share Estimate
	2017	2018	2019	2020	2021	2022	2023-2027	2028-2032	2033-2037	2038-2042	2043+	Total	
Tax Rate	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%		
PREPA	\$ 37.7	\$ 29.8	\$ 43.8	\$ 28.5	\$ 34.7	\$ 34.7	\$ 113.2	\$ 75.3	\$ 45.5	\$ -	\$ -	\$ 443.2	
GO	\$ 6.8	\$ 13.6	\$ 21.7	\$ 31.6	\$ 11.7	\$ 2.7	\$ 31.9	\$ 7.1	\$ -	\$ -	\$ -	\$ 127.1	
PBA - GO	\$ 0.8	\$ 2.4	\$ 3.3	\$ 1.4	\$ 3.6	\$ 1.3	\$ 21.6	\$ 5.4	\$ -	\$ -	\$ -	\$ 39.8	
HTA Transport - 1998	\$ 8.2	\$ 18.4	\$ 15.0	\$ 15.0	\$ 15.0	\$ 15.0	\$ 99.2	\$ 131.4	\$ 150.2	\$ 88.2	\$ -	\$ 555.6	
HTA- 1998 Sub Transport	\$ 2.4	\$ 2.9	\$ 0.8	\$ 0.8	\$ 0.8	\$ 5.3	\$ 2.8	\$ 11.6	\$ -	\$ -	\$ -	\$ 27.3	
COFINA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 657.2	\$ 1,409.0	\$ 2,066.3	
HTA Highway -1968	\$ 10.2	\$ 2.8	\$ 8.4	\$ 8.4	\$ 1.9	\$ 1.1	\$ 8.8	\$ 20.1	\$ 0.5	\$ -	\$ -	\$ 62.1	
Univ of PR	\$ 1.6	\$ 2.4	\$ 2.5	\$ 2.4	\$ 2.4	\$ 2.4	\$ 17.7	\$ 10.1	\$ 2.0	\$ -	\$ -	\$ 43.4	
Inter American U of PR	\$ 0.7	\$ 0.9	\$ 0.9	\$ 0.9	\$ 0.9	\$ 0.9	\$ 4.5	\$ 1.8	\$ -	\$ -	\$ -	\$ 11.6	
Total Est. After-tax Loss Exposure	\$ 68.3	\$ 73.3	\$ 96.5	\$ 88.9	\$ 70.9	\$ 63.3	\$ 299.7	\$ 262.8	\$ 198.2	\$ 745.4	\$ 1,409.0	\$ 3,376.4	
Period for PV Calculation	1	2	3	4	5	6	8.5	13.5	18.5	23.5	28.5	Total	
Discount rate	3.20%												
PV of Payments													
PREPA	\$ 36.5	\$ 28.0	\$ 39.8	\$ 25.1	\$ 29.7	\$ 28.7	\$ 86.6	\$ 49.2	\$ 25.4	\$ -	\$ -	\$ 349.0	\$ 2.78
GO	\$ 6.6	\$ 12.7	\$ 19.8	\$ 27.8	\$ 10.0	\$ 2.3	\$ 24.4	\$ 4.7	\$ -	\$ -	\$ -	\$ 108.3	\$ 0.86
PBA - GO	\$ 0.8	\$ 2.3	\$ 3.0	\$ 1.3	\$ 3.1	\$ 1.1	\$ 16.5	\$ 3.5	\$ -	\$ -	\$ -	\$ 31.5	\$ 0.25
HTA Transport - 1998	\$ 7.9	\$ 17.3	\$ 13.7	\$ 13.2	\$ 12.8	\$ 12.4	\$ 75.9	\$ 85.9	\$ 83.8	\$ 42.0	\$ -	\$ 365.1	\$ 2.91
HTA- 1998 Sub Transport	\$ 2.3	\$ 2.7	\$ 0.7	\$ 0.7	\$ 0.7	\$ 4.4	\$ 2.1	\$ 7.6	\$ -	\$ -	\$ -	\$ 21.2	\$ 0.17
COFINA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 313.5	\$ 574.2	\$ 887.7	\$ 7.06
HTA Highway -1968	\$ 9.8	\$ 2.7	\$ 7.6	\$ 7.4	\$ 1.6	\$ 0.9	\$ 6.7	\$ 13.1	\$ 0.3	\$ -	\$ -	\$ 50.2	\$ 0.40
Univ of PR	\$ 1.6	\$ 2.2	\$ 2.3	\$ 2.1	\$ 2.0	\$ 2.0	\$ 13.5	\$ 6.6	\$ 1.1	\$ -	\$ -	\$ 33.4	\$ 0.27
Inter American U of PR	\$ 0.7	\$ 0.8	\$ 0.8	\$ 0.8	\$ 0.8	\$ 0.7	\$ 3.5	\$ 1.2	\$ -	\$ -	\$ -	\$ 9.3	\$ 0.07
Total After-tax PV Est. Losses	\$ 66.2	\$ 68.8	\$ 87.8	\$ 78.4	\$ 60.6	\$ 52.4	\$ 229.3	\$ 171.8	\$ 110.7	\$ 355.6	\$ 574.2	\$ 1,855.7	\$ 14.77
Shares													125.7
Book Value per Share													\$ 15.45
Book Value Adj for Est Losses													\$ 0.68
Loss as a % of Book Value													95.6%

Source: MBI's 2Q17 [Selected Exposures](#), MBI's 2Q17 [Operating Supplement](#), Height Securities estimates.

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Figure 19. MBI PV of PR Insured Debt Service Payments to Claims Paying Resources – Sensitivity 90% of Budget

MBIA Inc. PV of PR Insured Debt Service Payments													As a % of Claims Paying Resources	Estimated ATPV Losses	As a % of Claims Paying Resources
	2017	2018	2019	2020	2021	2022	2023-2027	2028-2032	2033-2037	2038-2042	2043+	Total			
PREPA	\$ 147.4	\$ 113.0	\$ 160.7	\$ 101.2	\$ 119.7	\$ 115.9	\$ 349.5	\$ 198.8	\$ 102.6	\$ -	\$ -	\$ 1,408.8	30.6%	\$ 464.4	10.1%
GO	\$ 46.5	\$ 90.1	\$ 139.8	\$ 196.6	\$ 70.4	\$ 15.9	\$ 172.6	\$ 32.9	\$ -	\$ -	\$ -	\$ 764.7	16.6%	\$ 144.0	3.1%
PBA - GO	\$ 5.4	\$ 16.1	\$ 21.5	\$ 8.9	\$ 21.6	\$ 7.7	\$ 116.5	\$ 24.8	\$ -	\$ -	\$ -	\$ 222.5	4.8%	\$ 41.9	0.9%
HTA Transport - 1998	\$ 14.0	\$ 30.6	\$ 24.1	\$ 23.4	\$ 22.7	\$ 22.0	\$ 134.1	\$ 151.6	\$ 148.1	\$ 74.3	\$ -	\$ 644.7	14.0%	\$ 377.2	8.2%
HTA- 1998 Sub Transport	\$ 4.0	\$ 4.6	\$ 1.2	\$ 1.2	\$ 1.1	\$ 7.5	\$ 3.6	\$ 13.0	\$ -	\$ -	\$ -	\$ 36.2	0.8%	\$ 21.2	0.5%
COFINA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 632.7	\$ 1,158.8	\$ 1,791.5	38.9%	\$ 1,048.0	22.7%
HTA Highway -1968	\$ 18.5	\$ 5.0	\$ 14.4	\$ 14.0	\$ 3.1	\$ 1.7	\$ 12.6	\$ 24.7	\$ 0.5	\$ -	\$ -	\$ 94.5	2.1%	\$ 55.3	1.2%
Univ of PR	\$ 4.4	\$ 6.3	\$ 6.5	\$ 5.9	\$ 5.7	\$ 5.5	\$ 38.2	\$ 18.6	\$ 3.2	\$ -	\$ -	\$ 94.5	2.1%	\$ 44.5	1.0%
Inter American U of PR	\$ 1.9	\$ 2.4	\$ 2.3	\$ 2.2	\$ 2.2	\$ 2.1	\$ 9.8	\$ 3.4	\$ -	\$ -	\$ -	\$ 26.4	0.6%	\$ 12.4	0.3%
Total	\$ 242.2	\$ 268.1	\$ 370.6	\$ 353.4	\$ 246.4	\$ 178.2	\$ 837.0	\$ 467.7	\$ 254.4	\$ 707.0	\$ 1,158.8	\$ 5,083.8	110.3%	\$ 2,209.0	47.9%
Claims Paying Resources													\$4,607.0		

Source: MBI's 2Q17 [Selected Exposures](#), MBI's 2Q17 [Operating Supplement](#), Height Securities estimates.

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Figure 20. MBI FOMB Sensitivity 90% of Budget PR Loss Scenario – 2017 to 2043+

MBIA Inc.													Per Share Estimate
After-tax PR Calculation													
Loss by Insured Security	2017	2018	2019	2020	2021	2022	2023-2027	2028-2032	2033-2037	2038-2042	2043+	Total	
Tax Rate	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%		
PREPA	\$ 50.2	\$ 39.7	\$ 58.2	\$ 37.9	\$ 46.2	\$ 46.1	\$ 150.6	\$ 100.2	\$ 60.6	\$ -	\$ -	\$ 589.7	
GO	\$ 9.0	\$ 18.1	\$ 28.9	\$ 42.0	\$ 15.5	\$ 3.6	\$ 42.5	\$ 9.5	\$ -	\$ -	\$ -	\$ 169.2	
PBA - GO	\$ 1.0	\$ 3.2	\$ 4.5	\$ 1.9	\$ 4.8	\$ 1.8	\$ 28.7	\$ 7.1	\$ -	\$ -	\$ -	\$ 53.0	
HTA Transport - 1998	\$ 8.5	\$ 19.0	\$ 15.5	\$ 15.5	\$ 15.5	\$ 15.5	\$ 102.5	\$ 135.7	\$ 155.1	\$ 91.1	\$ -	\$ 574.0	
HTA- 1998 Sub Transport	\$ 2.4	\$ 2.9	\$ 0.8	\$ 0.8	\$ 0.8	\$ 5.3	\$ 2.8	\$ 11.6	\$ -	\$ -	\$ -	\$ 27.3	
COFINA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 776.0	\$ 1,663.6	\$ 2,439.5	
HTA Highway -1968	\$ 11.2	\$ 3.1	\$ 9.2	\$ 9.3	\$ 2.1	\$ 1.2	\$ 9.6	\$ 22.1	\$ 0.5	\$ -	\$ -	\$ 68.4	
Univ of PR	\$ 2.2	\$ 3.2	\$ 3.4	\$ 3.1	\$ 3.1	\$ 3.2	\$ 23.5	\$ 13.4	\$ 2.7	\$ -	\$ -	\$ 57.8	
Inter American U of PR	\$ 0.9	\$ 1.2	\$ 1.2	\$ 1.2	\$ 1.2	\$ 1.2	\$ 6.0	\$ 2.4	\$ -	\$ -	\$ -	\$ 15.4	
Total Est. After-tax Loss Exposure	\$ 85.4	\$ 90.4	\$ 121.8	\$ 111.7	\$ 89.2	\$ 77.8	\$ 366.3	\$ 302.2	\$ 218.9	\$ 867.0	\$ 1,663.6	\$ 3,994.2	
Period for PV Calculation													
	1	2	3	4	5	6	8.5	13.5	18.5	23.5	28.5	Total	
Discount rate	3.20%												
PV of Payments													
PREPA	\$ 48.6	\$ 37.2	\$ 53.0	\$ 33.4	\$ 39.5	\$ 38.2	\$ 115.2	\$ 65.5	\$ 33.8	\$ -	\$ -	\$ 464.4	\$ 3.70
GO	\$ 8.8	\$ 17.0	\$ 26.3	\$ 37.0	\$ 13.3	\$ 3.0	\$ 32.5	\$ 6.2	\$ -	\$ -	\$ -	\$ 144.0	\$ 1.15
PBA - GO	\$ 1.0	\$ 3.0	\$ 4.1	\$ 1.7	\$ 4.1	\$ 1.5	\$ 21.9	\$ 4.7	\$ -	\$ -	\$ -	\$ 41.9	\$ 0.33
HTA Transport - 1998	\$ 8.2	\$ 17.9	\$ 14.1	\$ 13.7	\$ 13.3	\$ 12.8	\$ 78.4	\$ 88.7	\$ 86.6	\$ 43.4	\$ -	\$ 377.2	\$ 3.00
HTA- 1998 Sub Transport	\$ 2.3	\$ 2.7	\$ 0.7	\$ 0.7	\$ 0.7	\$ 4.4	\$ 2.1	\$ 7.6	\$ -	\$ -	\$ -	\$ 21.2	\$ 0.17
COFINA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 370.1	\$ 677.9	\$ 1,048.0	\$ 8.34
HTA Highway -1968	\$ 10.8	\$ 2.9	\$ 8.4	\$ 8.2	\$ 1.8	\$ 1.0	\$ 7.4	\$ 14.5	\$ 0.3	\$ -	\$ -	\$ 55.3	\$ 0.44
Univ of PR	\$ 2.1	\$ 3.0	\$ 3.1	\$ 2.8	\$ 2.7	\$ 2.6	\$ 18.0	\$ 8.8	\$ 1.5	\$ -	\$ -	\$ 44.5	\$ 0.35
Inter American U of PR	\$ 0.9	\$ 1.1	\$ 1.1	\$ 1.1	\$ 1.0	\$ 1.0	\$ 4.6	\$ 1.6	\$ -	\$ -	\$ -	\$ 12.4	\$ 0.10
Total After-tax PV Est. Losses	\$ 82.7	\$ 84.9	\$ 110.8	\$ 98.5	\$ 76.2	\$ 64.4	\$ 280.2	\$ 197.5	\$ 122.2	\$ 413.6	\$ 677.9	\$ 2,209.0	\$ 17.58
Shares													125.7
Book Value per Share													\$ 15.45
Book Value Adj for Est Losses													\$ (2.13)
Loss as a % of Book Value													113.8%

Source: MBI's 2Q17 [Selected Exposures](#), MBI's 2Q17 [Operating Supplement](#), Height Securities estimates.

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Figure 21. AMBC Insured Debt Service Payments by PR Agency – 2017 to 2054

Ambac Financial Insured Puerto Rico Debt Service Payments															
\$ in millions	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030+	Total
Commonwealth GO	\$ 1.4	\$ 2.8	\$ 34.1	\$ 7.8	\$ 7.8	\$ 7.7	\$ 3.8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 65.4
Public Bldg - GO Guaranteed	\$ 24.2	\$ 27.7	\$ 9.3	\$ 5.4	\$ 5.4	\$ 4.6	\$ 4.6	\$ 4.6	\$ 4.6	\$ 4.6	\$ 4.6	\$ 4.6	\$ 4.6	\$ 102.3	\$ 211.1
Senior Highway (1968)	\$ 13.1	\$ 10.2	\$ -	\$ -	\$ 1.3	\$ -	\$ -	\$ -	\$ 1.0	\$ 1.0	\$ 7.0	\$ -	\$ -	\$ -	\$ 33.6
Senior Transportation (1998)	\$ 34.3	\$ 42.2	\$ 27.2	\$ 37.5	\$ 19.3	\$ 18.8	\$ 19.8	\$ 19.4	\$ 19.4	\$ 20.9	\$ 47.2	\$ 47.5	\$ 48.5	\$ 378.4	\$ 780.4
Rum Tax (PRIFA)	\$ 42.6	\$ 52.1	\$ 15.2	\$ 15.2	\$ 15.2	\$ 15.2	\$ 60.8	\$ 60.9	\$ 60.8	\$ 60.8	\$ 60.9	\$ 60.8	\$ 68.7	\$ 423.2	\$ 1,012.4
Hotel Occupancy Tax	\$ 15.2	\$ 18.6	\$ 18.6	\$ 18.6	\$ 4.4	\$ 4.4	\$ 4.4	\$ 4.4	\$ 4.4	\$ 4.4	\$ 4.4	\$ 24.4	\$ 24.4	\$ 48.1	\$ 198.7
Sales Tax (COFINA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,321.3	\$ 7,321.3
Total P&I	\$ 130.8	\$ 153.6	\$ 104.4	\$ 84.5	\$ 53.4	\$ 50.7	\$ 93.4	\$ 89.3	\$ 90.2	\$ 91.7	\$ 124.1	\$ 137.3	\$ 146.2	\$ 8,273.3	\$ 9,622.9

Source: AMBC 2Q17 [PR Exposure](#), AMBC 2Q17 [Quarterly Operating Supplement](#), Height Securities.

Figure 22. AMBC Present Value of PR Insured Debt Service Payments to Claims Paying Resources

Ambac Financial PV of PR Insured Debt Service Payments															
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030+	Total
Commonwealth GO	\$ 1.3	\$ 2.5	\$ 28.6	\$ 6.2	\$ 5.8	\$ 5.4	\$ 2.5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 52.3
Public Bldg - GO Guaranteed	\$ 22.8	\$ 24.6	\$ 7.8	\$ 4.3	\$ 4.0	\$ 3.2	\$ 3.1	\$ 2.9	\$ 2.7	\$ 2.6	\$ 2.4	\$ 2.3	\$ 2.1	\$ 37.6	\$ 122.5
Senior Highway (1968)	\$ 12.4	\$ 9.1	\$ -	\$ -	\$ 1.0	\$ -	\$ -	\$ -	\$ 0.6	\$ 0.6	\$ 3.7	\$ -	\$ -	\$ -	\$ 27.2
Senior Transportation (1998)	\$ 32.3	\$ 37.5	\$ 22.8	\$ 29.7	\$ 14.4	\$ 13.2	\$ 13.1	\$ 12.1	\$ 11.4	\$ 11.6	\$ 24.8	\$ 23.5	\$ 22.6	\$ 136.0	\$ 405.2
Rum Tax (PRIFA)	\$ 40.2	\$ 46.3	\$ 12.7	\$ 12.0	\$ 11.3	\$ 10.7	\$ 40.3	\$ 38.1	\$ 35.9	\$ 33.8	\$ 31.9	\$ 30.1	\$ 32.1	\$ 115.5	\$ 491.0
Hotel Occupancy Tax	\$ 14.3	\$ 16.5	\$ 15.6	\$ 14.7	\$ 3.3	\$ 3.1	\$ 2.9	\$ 2.8	\$ 2.6	\$ 2.4	\$ 2.3	\$ 12.1	\$ 11.4	\$ 20.6	\$ 124.6
Sales Tax (COFINA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 964.3	\$ 964.3
Total	\$ 123.3	\$ 136.6	\$ 87.6	\$ 66.8	\$ 39.8	\$ 35.7	\$ 62.0	\$ 55.9	\$ 53.2	\$ 51.0	\$ 65.1	\$ 67.9	\$ 68.2	\$ 1,274.0	\$ 2,187.1
Claims Paying Resources															\$ 7,961.4

Source: AMBC 2Q17 [PR Exposure](#), AMBC 2Q17 [Quarterly Operating Supplement](#), Height Securities estimates.

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Figure 23. AMBC FOMB Certified Budget PR Loss Scenario – 2017 to 2054

Ambac Financial After-tax PR Calculation																Per Share Estimate
Loss by Insured Security	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030+	Total	
Tax Rate	2%	2%	2%	2%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%		
Commonwealth GO	\$ 0.2	\$ 0.5	\$ 6.0	\$ 1.4	\$ 0.9	\$ 0.9	\$ 0.4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10.4	
Public Bldg - GO Guaranteed	\$ 4.3	\$ 4.9	\$ 1.6	\$ 1.0	\$ 0.6	\$ 0.5	\$ 0.5	\$ 0.5	\$ 0.5	\$ 0.5	\$ 0.5	\$ 0.5	\$ 0.5	\$ 12.0	\$ 28.7	
Senior Highway (1968)	\$ 8.7	\$ 6.8	\$ -	\$ -	\$ 0.6	\$ -	\$ -	\$ -	\$ 0.4	\$ 0.4	\$ 3.1	\$ -	\$ -	\$ -	\$ 20.0	
Senior Transportation (1998)	\$ 24.2	\$ 29.9	\$ 19.3	\$ 26.6	\$ 9.0	\$ 8.8	\$ 9.3	\$ 9.1	\$ 9.1	\$ 9.8	\$ 22.1	\$ 22.2	\$ 22.7	\$ 177.1	\$ 399.1	
Rum Tax (PRIFA)	\$ 30.0	\$ 36.9	\$ 10.8	\$ 10.8	\$ 7.1	\$ 7.1	\$ 28.5	\$ 28.5	\$ 28.5	\$ 28.5	\$ 28.5	\$ 28.5	\$ 32.2	\$ 198.1	\$ 503.8	
Hotel Occupancy Tax	\$ 10.7	\$ 13.2	\$ 13.2	\$ 13.2	\$ 2.1	\$ 2.1	\$ 2.1	\$ 2.1	\$ 2.1	\$ 2.1	\$ 2.1	\$ 11.4	\$ 11.4	\$ 22.5	\$ 110.0	
Sales Tax (COFINA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,998.1	\$ 2,998.1	
Total Est. After-tax Loss Exposure	\$ 78.1	\$ 92.2	\$ 50.9	\$ 52.9	\$ 20.3	\$ 19.4	\$ 40.8	\$ 40.2	\$ 40.6	\$ 41.3	\$ 56.3	\$ 62.6	\$ 66.8	\$ 3,407.7	\$ 4,070.0	
Period for PV Calculation	1	2	3	4	5	6	7	8	9	10	11	12	13			
Discount rate	6.04%															
PV of Payments																
Commonwealth GO	\$ 0.2	\$ 0.4	\$ 5.1	\$ 1.1	\$ 0.7	\$ 0.6	\$ 0.3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8.4	\$ 0.18
Public Bldg - GO Guaranteed	\$ 4.0	\$ 4.4	\$ 1.4	\$ 0.8	\$ 0.5	\$ 0.4	\$ 0.4	\$ 0.3	\$ 0.3	\$ 0.3	\$ 0.3	\$ 0.3	\$ 0.3	\$ 4.4	\$ 17.9	\$ 0.39
Senior Highway (1968)	\$ 8.2	\$ 6.0	\$ -	\$ -	\$ 0.4	\$ -	\$ -	\$ -	\$ 0.3	\$ 0.2	\$ 1.6	\$ -	\$ -	\$ -	\$ 16.7	\$ 0.37
Senior Transportation (1998)	\$ 22.8	\$ 26.6	\$ 16.2	\$ 21.0	\$ 6.7	\$ 6.2	\$ 6.1	\$ 5.7	\$ 5.4	\$ 5.4	\$ 11.6	\$ 11.0	\$ 10.6	\$ 63.7	\$ 219.0	\$ 4.78
Rum Tax (PRIFA)	\$ 28.3	\$ 32.8	\$ 9.0	\$ 8.5	\$ 5.3	\$ 5.0	\$ 18.9	\$ 17.8	\$ 16.8	\$ 15.8	\$ 15.0	\$ 14.1	\$ 15.0	\$ 54.1	\$ 256.4	\$ 5.60
Hotel Occupancy Tax	\$ 10.1	\$ 11.7	\$ 11.1	\$ 10.4	\$ 1.5	\$ 1.4	\$ 1.4	\$ 1.3	\$ 1.2	\$ 1.1	\$ 1.1	\$ 5.6	\$ 5.3	\$ 9.6	\$ 73.0	\$ 1.59
Sales Tax (COFINA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 394.9	\$ 394.9	\$ 8.63
Total After-tax PV Est. Losses	\$ 73.6	\$ 82.0	\$ 42.7	\$ 41.8	\$ 15.2	\$ 13.7	\$ 27.0	\$ 25.1	\$ 23.9	\$ 23.0	\$ 29.5	\$ 31.0	\$ 31.2	\$ 526.6	\$ 986.3	\$ 21.55
Shares																45.8
Book Value per Share																\$ 37.00
Book Value Adj for Est Losses																\$ 15.45
Loss as a % of Book Value																58.2%

Source: AMBC 2Q17 [PR Exposure](#), AMBC 2Q17 [Quarterly Operating Supplement](#), Height Securities estimates.

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Figure 24. AMBC PV of PR Insured Debt Service Payments to Claims Paying Resources– Sensitivity 100% of Budget

Ambac Financial PV of PR Insured Debt Service Payments																As a % of Claims Paying Resources	Estimated ATPV Losses	As a % of Claims Paying Resources
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030+	Total			
Commonwealth GO	\$ 1.3	\$ 2.5	\$ 28.6	\$ 6.2	\$ 5.8	\$ 5.4	\$ 2.5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 52.3	0.7%	\$ 10.2	0.1%
Public Bldg - GO Guaranteed	\$ 22.8	\$ 24.6	\$ 7.8	\$ 4.3	\$ 4.0	\$ 3.2	\$ 3.1	\$ 2.9	\$ 2.7	\$ 2.6	\$ 2.4	\$ 2.3	\$ 2.1	\$ 37.6	\$ 122.5	1.5%	\$ 21.6	0.3%
Senior Highway (1968)	\$ 12.4	\$ 9.1	\$ -	\$ -	\$ 1.0	\$ -	\$ -	\$ -	\$ 0.6	\$ 0.6	\$ 3.7	\$ -	\$ -	\$ -	\$ 27.2	0.3%	\$ 20.2	0.3%
Senior Transportation (1998)	\$ 32.3	\$ 37.5	\$ 22.8	\$ 29.7	\$ 14.4	\$ 13.2	\$ 13.1	\$ 12.1	\$ 11.4	\$ 11.6	\$ 24.8	\$ 23.5	\$ 22.6	\$ 136.0	\$ 405.2	5.1%	\$ 265.0	3.3%
Rum Tax (PRIFA)	\$ 40.2	\$ 46.3	\$ 12.7	\$ 12.0	\$ 11.3	\$ 10.7	\$ 40.3	\$ 38.1	\$ 35.9	\$ 33.8	\$ 31.9	\$ 30.1	\$ 32.1	\$ 115.5	\$ 491.0	6.2%	\$ 310.3	3.9%
Hotel Occupancy Tax	\$ 14.3	\$ 16.5	\$ 15.6	\$ 14.7	\$ 3.3	\$ 3.1	\$ 2.9	\$ 2.8	\$ 2.6	\$ 2.4	\$ 2.3	\$ 12.1	\$ 11.4	\$ 20.6	\$ 124.6	1.6%	\$ 88.3	1.1%
Sales Tax (COFINA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 964.3	\$ 964.3	12.1%	\$ 477.8	6.0%
Total	\$ 123.3	\$ 136.6	\$ 87.6	\$ 66.8	\$ 39.8	\$ 35.7	\$ 62.0	\$ 55.9	\$ 53.2	\$ 51.0	\$ 65.1	\$ 67.9	\$ 68.2	\$ 1,274.0	\$ 2,187.1	27.5%	\$ 1,193.5	15.0%
Claims Paying Resources																\$ 7,961.4		

Source: AMBC 2Q17 [PR Exposure](#), AMBC 2Q17 [Quarterly Operating Supplement](#), Height Securities estimates.

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Figure 25. AMBC FOMB Sensitivity 100% of Budget PR Loss Scenario – 2017 to 2054

Ambac Financial After-tax PR Calculation																Per Share Estimate
Loss by Insured Security	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030+	Total	
Tax Rate	2%	2%	2%	2%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%		
Commonwealth GO	\$ 0.3	\$ 0.6	\$ 7.3	\$ 1.7	\$ 1.1	\$ 1.1	\$ 0.5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12.6	
Public Bldg - GO Guaranteed	\$ 5.2	\$ 5.9	\$ 2.0	\$ 1.2	\$ 0.8	\$ 0.7	\$ 0.7	\$ 0.7	\$ 0.7	\$ 0.7	\$ 0.7	\$ 0.7	\$ 0.7	\$ 14.5	\$ 34.7	
Senior Highway (1968)	\$ 10.5	\$ 8.2	\$ -	\$ -	\$ 0.7	\$ -	\$ -	\$ -	\$ 0.5	\$ 0.5	\$ 3.7	\$ -	\$ -	\$ -	\$ 24.1	
Senior Transportation (1998)	\$ 29.3	\$ 36.2	\$ 23.3	\$ 32.2	\$ 10.9	\$ 10.6	\$ 11.2	\$ 11.0	\$ 11.0	\$ 11.8	\$ 26.7	\$ 26.9	\$ 27.5	\$ 214.3	\$ 482.9	
Rum Tax (PRIFA)	\$ 36.3	\$ 44.7	\$ 13.0	\$ 13.0	\$ 8.6	\$ 8.6	\$ 34.4	\$ 34.5	\$ 34.4	\$ 34.4	\$ 34.5	\$ 34.4	\$ 38.9	\$ 239.6	\$ 609.5	
Hotel Occupancy Tax	\$ 13.0	\$ 16.0	\$ 16.0	\$ 16.0	\$ 2.5	\$ 2.5	\$ 2.5	\$ 2.5	\$ 2.5	\$ 2.5	\$ 2.5	\$ 13.8	\$ 13.8	\$ 27.2	\$ 133.1	
Sales Tax (COFINA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,627.7	\$ 3,627.7	
Total Est. After-tax Loss Exposure	\$ 94.5	\$ 111.6	\$ 61.6	\$ 64.0	\$ 24.6	\$ 23.5	\$ 49.3	\$ 48.6	\$ 49.1	\$ 49.9	\$ 68.1	\$ 75.8	\$ 80.8	\$ 4,123.3	\$ 4,924.7	
Period for PV Calculation	1	2	3	4	5	6	7	8	9	10	11	12	13			
Discount rate	6.04%															
PV of Payments																
Commonwealth GO	\$ 0.3	\$ 0.5	\$ 6.1	\$ 1.3	\$ 0.8	\$ 0.8	\$ 0.4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10.2	\$ 0.22
Public Bldg - GO Guaranteed	\$ 4.9	\$ 5.3	\$ 1.7	\$ 0.9	\$ 0.6	\$ 0.5	\$ 0.4	\$ 0.4	\$ 0.4	\$ 0.4	\$ 0.3	\$ 0.3	\$ 0.3	\$ 5.3	\$ 21.6	\$ 0.47
Senior Highway (1968)	\$ 9.9	\$ 7.3	\$ -	\$ -	\$ 0.5	\$ -	\$ -	\$ -	\$ 0.3	\$ 0.3	\$ 1.9	\$ -	\$ -	\$ -	\$ 20.2	\$ 0.44
Senior Transportation (1998)	\$ 27.6	\$ 32.2	\$ 19.6	\$ 25.4	\$ 8.2	\$ 7.5	\$ 7.4	\$ 6.9	\$ 6.5	\$ 6.6	\$ 14.0	\$ 13.3	\$ 12.8	\$ 77.0	\$ 265.0	\$ 5.79
Rum Tax (PRIFA)	\$ 34.3	\$ 39.7	\$ 10.9	\$ 10.3	\$ 6.4	\$ 6.1	\$ 22.8	\$ 21.6	\$ 20.3	\$ 19.2	\$ 18.1	\$ 17.0	\$ 18.2	\$ 65.4	\$ 310.3	\$ 6.78
Hotel Occupancy Tax	\$ 12.2	\$ 14.2	\$ 13.4	\$ 12.6	\$ 1.9	\$ 1.8	\$ 1.7	\$ 1.6	\$ 1.5	\$ 1.4	\$ 1.3	\$ 6.8	\$ 6.4	\$ 11.6	\$ 88.3	\$ 1.93
Sales Tax (COFINA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 477.8	\$ 477.8	\$ 10.44
Total After-tax PV Est. Losses	\$ 89.1	\$ 99.2	\$ 51.7	\$ 50.6	\$ 18.3	\$ 16.5	\$ 32.7	\$ 30.4	\$ 29.0	\$ 27.8	\$ 35.7	\$ 37.5	\$ 37.7	\$ 637.2	\$ 1,193.5	\$ 26.07
Shares																45.8
Book Value per Share																\$ 37.00
Book Value Adj for Est Losses																\$ 10.93
Loss as a % of Book Value																70.5%

Source: AMBC 2Q17 [PR Exposure](#), AMBC 2Q17 [Quarterly Operating Supplement](#), Height Securities estimates.

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Figure 26. AMBC PV of PR Insured Debt Service Payments to Claims Paying Resources– Sensitivity 90% of Budget

Ambac Financial PV of PR Insured Debt Service Payments																As a % of Claims Paying Resources	Estimated ATPV Losses	As a % of Claims Paying Resources
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030+	Total			
Commonwealth GO	\$ 1.3	\$ 2.5	\$ 28.6	\$ 6.2	\$ 5.8	\$ 5.4	\$ 2.5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 52.3	0.7%	\$ 13.6	0.2%
Public Bldg - GO Guaranteed	\$ 22.8	\$ 24.6	\$ 7.8	\$ 4.3	\$ 4.0	\$ 3.2	\$ 3.1	\$ 2.9	\$ 2.7	\$ 2.6	\$ 2.4	\$ 2.3	\$ 2.1	\$ 37.6	\$ 122.5	1.5%	\$ 28.8	0.4%
Senior Highway (1968)	\$ 12.4	\$ 9.1	\$ -	\$ -	\$ 1.0	\$ -	\$ -	\$ -	\$ 0.6	\$ 0.6	\$ 3.7	\$ -	\$ -	\$ -	\$ 27.2	0.3%	\$ 22.3	0.3%
Senior Transportation (1998)	\$ 32.3	\$ 37.5	\$ 22.8	\$ 29.7	\$ 14.4	\$ 13.2	\$ 13.1	\$ 12.1	\$ 11.4	\$ 11.6	\$ 24.8	\$ 23.5	\$ 22.6	\$ 136.0	\$ 405.2	5.1%	\$ 273.7	3.4%
Rum Tax (PRIFA)	\$ 40.2	\$ 46.3	\$ 12.7	\$ 12.0	\$ 11.3	\$ 10.7	\$ 40.3	\$ 38.1	\$ 35.9	\$ 33.8	\$ 31.9	\$ 30.1	\$ 32.1	\$ 115.5	\$ 491.0	6.2%	\$ 320.6	4.0%
Hotel Occupancy Tax	\$ 14.3	\$ 16.5	\$ 15.6	\$ 14.7	\$ 3.3	\$ 3.1	\$ 2.9	\$ 2.8	\$ 2.6	\$ 2.4	\$ 2.3	\$ 12.1	\$ 11.4	\$ 20.6	\$ 124.6	1.6%	\$ 91.2	1.1%
Sales Tax (COFINA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 964.3	\$ 964.3	12.1%	\$ 564.1	7.1%
Total	\$ 123.3	\$ 136.6	\$ 87.6	\$ 66.8	\$ 39.8	\$ 35.7	\$ 62.0	\$ 55.9	\$ 53.2	\$ 51.0	\$ 65.1	\$ 67.9	\$ 68.2	\$ 1,274.0	\$ 2,187.1	27.5%	\$ 1,314.3	16.5%
Claims Paying Resources																\$ 7,961.4		

Source: AMBC 2Q17 [PR Exposure](#), AMBC 2Q17 [Quarterly Operating Supplement](#), Height Securities estimates.

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Figure 27. AMBC FOMB Sensitivity 90% of Budget PR Loss Scenario – 2017 to 2054

Ambac Financial After-tax PR Calculation																Per Share Estimate
Loss by Insured Security	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030+	Total	
Tax Rate	2%	2%	2%	2%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%		
Commonwealth GO	\$ 0.4	\$ 0.8	\$ 9.7	\$ 2.2	\$ 1.5	\$ 1.5	\$ 0.7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16.8	
Public Bldg - GO Guaranteed	\$ 6.9	\$ 7.9	\$ 2.7	\$ 1.5	\$ 1.0	\$ 0.9	\$ 0.9	\$ 0.9	\$ 0.9	\$ 0.9	\$ 0.9	\$ 0.9	\$ 0.9	\$ 19.3	\$ 46.2	
Senior Highway (1968)	\$ 11.5	\$ 9.0	\$ -	\$ -	\$ 0.8	\$ -	\$ -	\$ -	\$ 0.6	\$ 0.6	\$ 4.1	\$ -	\$ -	\$ -	\$ 26.6	
Senior Transportation (1998)	\$ 30.2	\$ 37.4	\$ 24.1	\$ 33.2	\$ 11.3	\$ 11.0	\$ 11.6	\$ 11.3	\$ 11.3	\$ 12.2	\$ 27.6	\$ 27.8	\$ 28.4	\$ 221.4	\$ 498.9	
Rum Tax (PRIFA)	\$ 37.5	\$ 46.2	\$ 13.5	\$ 13.5	\$ 8.9	\$ 8.9	\$ 35.6	\$ 35.6	\$ 35.6	\$ 35.6	\$ 35.6	\$ 35.6	\$ 40.2	\$ 247.6	\$ 629.7	
Hotel Occupancy Tax	\$ 13.4	\$ 16.5	\$ 16.5	\$ 16.5	\$ 2.6	\$ 2.6	\$ 2.6	\$ 2.6	\$ 2.6	\$ 2.6	\$ 2.6	\$ 14.3	\$ 14.3	\$ 28.1	\$ 137.5	
Sales Tax (COFINA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,283.0	\$ 4,283.0	
Total Est. After-tax Loss Exposure	\$ 100.0	\$ 117.8	\$ 66.4	\$ 66.9	\$ 26.0	\$ 24.8	\$ 51.3	\$ 50.4	\$ 50.9	\$ 51.8	\$ 70.8	\$ 78.5	\$ 83.7	\$ 4,799.3	\$ 5,638.6	
Period for PV Calculation	1	2	3	4	5	6	7	8	9	10	11	12	13			
Discount rate	6.04%															
PV of Payments																
Commonwealth GO	\$ 0.4	\$ 0.7	\$ 8.2	\$ 1.8	\$ 1.1	\$ 1.0	\$ 0.5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13.6	\$ 0.30
Public Bldg - GO Guaranteed	\$ 6.5	\$ 7.0	\$ 2.2	\$ 1.2	\$ 0.8	\$ 0.6	\$ 0.6	\$ 0.5	\$ 0.5	\$ 0.5	\$ 0.5	\$ 0.4	\$ 0.4	\$ 7.1	\$ 28.8	\$ 0.63
Senior Highway (1968)	\$ 10.9	\$ 8.0	\$ -	\$ -	\$ 0.6	\$ -	\$ -	\$ -	\$ 0.3	\$ 0.3	\$ 2.1	\$ -	\$ -	\$ -	\$ 22.3	\$ 0.49
Senior Transportation (1998)	\$ 28.5	\$ 33.2	\$ 20.2	\$ 26.3	\$ 8.4	\$ 7.7	\$ 7.7	\$ 7.1	\$ 6.7	\$ 6.8	\$ 14.5	\$ 13.7	\$ 13.2	\$ 79.6	\$ 273.7	\$ 5.98
Rum Tax (PRIFA)	\$ 35.4	\$ 41.0	\$ 11.3	\$ 10.7	\$ 6.6	\$ 6.3	\$ 23.6	\$ 22.3	\$ 21.0	\$ 19.8	\$ 18.7	\$ 17.6	\$ 18.8	\$ 67.6	\$ 320.6	\$ 7.00
Hotel Occupancy Tax	\$ 12.6	\$ 14.7	\$ 13.8	\$ 13.0	\$ 1.9	\$ 1.8	\$ 1.7	\$ 1.6	\$ 1.5	\$ 1.4	\$ 1.4	\$ 7.1	\$ 6.7	\$ 12.0	\$ 91.2	\$ 1.99
Sales Tax (COFINA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 564.1	\$ 564.1	\$ 12.32
Total After-tax PV Est. Losses	\$ 94.3	\$ 104.7	\$ 55.7	\$ 52.9	\$ 19.4	\$ 17.4	\$ 34.0	\$ 31.5	\$ 30.1	\$ 28.8	\$ 37.1	\$ 38.8	\$ 39.1	\$ 730.4	\$ 1,314.3	\$ 28.71
Shares																45.8
Book Value per Share																\$ 37.00
Book Value Adj for Est Losses																\$ 8.29
Loss as a % of Book Value																77.6%

Source: AMBC 2Q17 [PR Exposure](#), AMBC 2Q17 [Quarterly Operating Supplement](#), Height Securities estimates.

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Ambac Financial Group (AMBC)
Assured Guaranty, Ltd. (AGO)
MBIA, Inc. (MBI)

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None

Disclosures for AGO
None

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Disclosures for MBI
None