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PR Banks vs. US Benchmarks: 3-4

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The positive momentum in the local banking industry continued to build in the third quarter of 2018, following the historic and highly disruptive 2017 Atlantic hurricane season. The industry-wide Pre-Tax ROE in Q3 2018 reached 13.7%, following a strong first half of 2018 (Pre-Tax ROE of 8.3% in Q1 2018 and 17.4% in Q2 2018), yielding a YTD 2018 Pre-Tax ROE of 13.1%. These profitability levels have not been seen since 2005, prior to the onset of the prolonged and deep economic downturn. Concerns over the deterioration of asset quality have further abated given the latest quarterly delinquency levels. The Q3 2018 industry-wide nonperforming loans ratio stood at 7.6% from a peak of 9.2% in the wake of the hurricanes. Furthermore, after the temporal and non-recurring impact of Hurricanes Irma and Maria on the banks' income and expenses, banking productivity levels improved materially, reaching a cost to income ratio of 56.5% in YTD 2018 from 63.8% in 2017. Capital buffers remain exceedingly strong, with a consolidated Tier 1 Risk-Based Capital ratio of 20.9%. Going forward, strong banking performance is expected to continue given the billions of dollars in public and private post-disaster reconstruction funds that will be increasingly flowing through the economy and financial system. Lastly, in this issue, we benchmarked the profitability performance of local banks against that of similar-sized United States peer banks since 2015, also breaking down profitability by income and expense levers to help explain what drove the differences in YTD 2018.

PROFITABILITY > "The industry-wide YTD 2018 Pre-Tax ROE reached 13.1%, double digit profitability levels not seen since prior to the beginning of the 2006 economic crisis" The local banking sector posted another strong quarter with a Pre-Tax ROE of 13.7% in Q3 2018 and a YTD 2018 Pre-Tax ROE of 13.1% (see Figure 1 and Annex 1). These are robust profitability levels buttressed by post-disaster reconstruction activity. If YTD 2018 profitability levels are maintained through the end of 2018, the industry will close the year with the highest level of profitability since 2005.

Key macroeconomic indicators have been showing mixed signals in recent months. The Economic Development Bank's Economic Activity Index (EDB-EAI) registered two consecutive year-over-year gains in September and October 2018, the first YoY gains since the end of 2012. It should be noted, however, that these increases are relative to the same months in 2017 when Hurricanes Irma and Maria wreaked havoc on the island and severely depressed economic activity.² Furthermore, the unemployment rate for October 2018 was 8.0%, the lowest level in decades.³ On the other hand, labor force participation rate remains roughly at 40% in October 2018 (US: 62.9%) and nonfarm employment stood at 853.2K, 40K less than two years ago. Improved economic numbers are expected to strengthen in the short- and medium-term given the historic post-disaster reconstruction that is underway. The banking sector is well positioned to meet the lending needs of households and businesses as they proceed with their rebuilding and restoring effort and take advantage of post-disaster funds.

When analyzing profitability by bank, Popular, which managed 58% of the sector-wide assets as of the end of Q3 2018, reported the highest Pre-Tax ROE in Q3 2018 (17.5%) (see

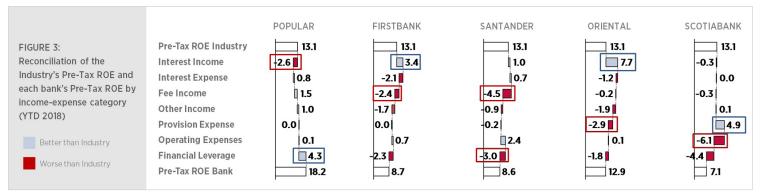
FIGURE 1: Industry Pre-Tax ROE Trend by Quarter* (Q1 2015 - Q3 2018)(1) 17.4% 13.7% 8.4% 7.1% 5.8% 8.6% 8.8% 8.3% 6.9% 3.9% -0.6% -4.1% Q3 Q4 Q1 Q2 Q3 Q4**! Q1 Q2 Q3 Q4 Q1 Q2 2018 2015 2016 2017 * Annualized quarterly Pre-Tax ROEs. **Excluding Scotia's \$145 million goodwill impairment losses would raise the Q4 2016 Pre-Tax ROE by close to 7 percentage points to 2.8%. FIGURE 2: Quarterly Pre-Tax ROE (%) by Bank (Q4 2017 - Q3 2018) Q417 Q118 Q218 Q318 26.1 7.8 10.5 13.3 14.9 8.4 11.1 5.6 7.6 8.5 9.9 10.5 8.7 8.2 8.8 -4.5 -4.5

SANTANDER

Figure 2) and the highest YTD 2018 Pre-Tax ROE with 18.2% (see Figure 3). Popular's relatively high financial leverage, registering an assets-to-equity ratio of 10.0 in YTD 2018 (see Annex 1), largely drove the bank's higher profitability vis-à-vis the industry (see Figure 3). This indicates that Popular has been more successful than its peers in finding ways of deploying its excess capital (e.g. Reliable Auto in 2018, Doral in 2015). Oriental posted the second highest profitability in YTD 2018 with a Pre-Tax ROE of 12.9%. When comparing Oriental's performance with that of the industry, we see that the higher interest income more than offset the negative impact from a higher provision expense. FirstBank and Santander posted similar levels of profitability, with Pre-Tax ROEs of 8.7% and 8.6%, respectively. Scotia reported the lowest profitability level in YTD 2018, with a Pre-Tax ROE of 7.1%. Scotia's results were adversely impacted by higher operating expenses and a lower financial leverage when compared to the industry.

POPULAR

FIRSTBANK



-35.6

SCOTIABANK

ORIENTAL



ASSET QUALITY > "The industry's nonperforming loans (NPL) ratio has largely returned to pre-hurricane levels, dropping to 7.6% in Q3 2018, after rising above 9%in the wake of the storms" The industry-wide NPL ratio, defined as loans past due 90 days and still accruing plus loans in nonaccrual status divided by total loans and leases, has largely returned to pre-hurricane levels after experiencing a sudden uptick in the aftermath of Hurricanes Irma and Maria. When the superstorms hit, the industry NPL ratio stood at 7.2% (see Figure 4), a sizable improvement when compared to 2012 when this asset quality ratio surpassed 12%. In Q4 2017, the first full quarter following the hurricanes, this key ratio surged to 9.1%, increasing slightly further to 9.2% in the first quarter of 2018. This increase raised concerns of even more pronounced asset quality deterioration. Fortunately, during the second guarter of 2018, the industry nonperforming loans ratio began its descent to pre-hurricane levels, slightly dropping to 8.8%, and decreasing more substantially in Q3 2018 to 7.6%. While local banks have made great strides in cleaning their balance sheets, current delinquency levels remain materially higher than pre-2006 levels (industry nonperforming loans ratio <2%).

When analyzing asset quality by bank, Oriental posted the lowest nonperforming loans ratio (5.8%), followed by FirstBank (6.2%), and Santander (6.3%) (see Figure 5). Popular, which manages a combined loan portfolio of \$19.6 billion (51% of industry total gross loans and leases), closed the third quarter with an NPL ratio of 7.9%, after a close to 4 percentage point uptick in Q4 2017. Furthermore, Scotiabank continues to exhibit the highest delinquency with an NPL ratio of 14.9%, an improvement vis-à-vis Q1 2018 (17.3%) and when compared to a peak reached in Q2 2016 (22.5%).

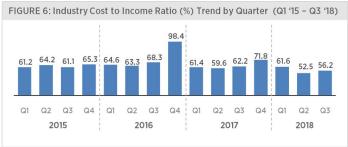
PRODUCTIVITY > "Industry-wide productivity levels in Q2 and Q3 2018 surpassed pre-hurricane levels, registering a cost to income ratio of 52.5% in Q2 2018 and 56.2% in Q3 2018" Producitivty levels of the local banking industry as a whole have been moving in the right in the past two quarters, driving double digit profitability in the post-hurricane context. The cost to income ratio increased from 62.2% in Q3 2017 to 71.8% in the quarter following Irma and Maria, driven by non-recurring hurricane-related expenses (e.g. fuel and equipment, post-disaster assistance to employees, building repairs) and constrained income generating capabilities. Once these effects tapered off, the cost to income ratio dipped down to 52.5% in Q2 2018 and to 56.2% in Q3 2018. This level of producivity had not been seen since prior to the beginning of the more than decade-long economic slump.

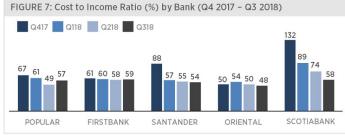
When comparing the productivity levels of local banks, Oriental boasts the highest level of productivity with a cost to income ratio of 47.5% in Q3 2018, followed by Santander (53.8%) and Popular (57.1%) (see Figure 7 and Annex 2 for YTD numbers). Scotia, which ended 2017 with a cost to income ratio of 90.5%, and experienced a dramatic uptick in its efficiency ratio in the quarter following the hurricanes (131.7%), brought down this indicator to industry level in Q3 2018 (58.3%). FirstBank posted a slightly higher cost to income ratio with 58.8%.

CAPITAL ADEQUACY > "Despite a slight decrease in the industry Tier 1 Risk-Based Capital (RBC) Ratio in Q3 2018 (20.9%), capital buffers remain exceedingly strong, far exceeding capital requirements" The Tier 1 RBC Ratio has been on an upward trajectory for some time, peaking at 21.8% in Q1 2018. In the past two quarters we have seen a change in direction in this capital ratio, decreasing to 21.5% in Q2 2018 and to 20.9% in Q3 2018, still more than 2.6 times the well-capitalized level of 8%. This strong capitalization enables banks to seize future asset-buying opportunities that may arise, in albeit a highly concentrated and competitive market. The purchase of Reliable Auto (Wells Fargo) by Popular, transaction which closed on August 1, is a great example of how local banks can engage in the opportunistic buying of assets at attractive prices which may yield strong returns. Popular acquired \$1.6 billion in retail auto loans and \$341 million in primarily auto-related commercial loans, generating \$11.7 million in net income during Q3 2018, 8.3% of the bank's total quarterly net income.











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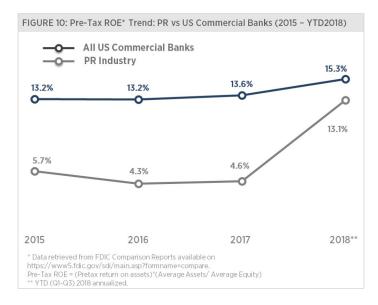
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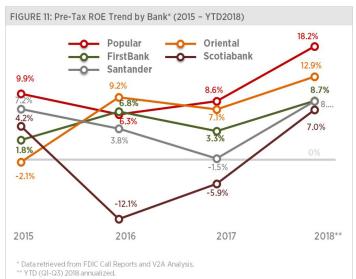
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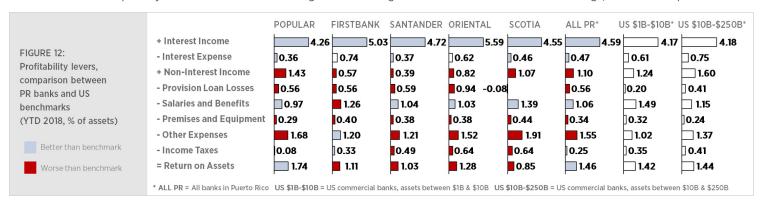


PROFITABILITY PERFORMANCE: PR BANKS VS. US BENCHMARKS > "The local banking industry has consistently reported lower profitability levels than its peers in the United States (US) during the last decade, while Popular outperformed its local peers" In this issue we benchmarked the profitability performance of local banks against that of comparable US mainland banks, breaking down profitability by income and expense levers to help explain what drove the differences. It is clear from Figure 10 that banks in Puerto Rico (PR), on a consolidated basis, registered lower Pre-Tax ROEs vis-à-vis US commercial banks from 2015 to YTD 2018. While we see a difference of 7 percentage points on average between PR and US commercial banks in the aggregate in this 4 year period, this gap became narrower in YTD 2018 driven by Popular's and Oriental's double digit profitability (see Figures 10 and 11). It should be highlighted that Popular, holding a dominant position in the local banking market with 57% of total assets, 61% of deposits, and 51% of loans as of the end of Q3 2018, outperformed its US peers in YTD 2018, with a Pre-Tax ROE of 18.2% vs. 15.3% for US commercial banks (see Figure 10). The subsequent analysis deep dives into the profitability levers of local banks and US peer groups to ascertain which income and expense categories explain the differences in performance.





PROFITABILITY LEVERS: PR BANKS VS. US BENCHMARKS > "Higher profitability levels of US commercial bank peer groups vis-à-vis PR banks in YTD 2018 were driven by higher non-interest income, lower provision loan losses, and lower operating expenses, despite higher net interest margins (NIM) of local banks" Figure 12 below provides a break down of return on assets (ROA) into component ratios (i.e. income- and expense-to-assets ratios) of local banks and their comparable US peers, pointing out when the different income and expense levers of local banks outperform or underperform their respective US peer groups. Popular and FirstBank are benchmarked with US commercial banks with assets between \$10 and \$250 billion, while Santander, Oriental, and Scotia are benchmarked with US commercial banks with assets between \$1 and \$10 billion. When analyzing the interest income-to-assets component of NIM, local banks performed better than their US benchmarks (see Figure 12). The higher interest income is not explained by the percent of loans and leases in the asset mix. The PR banks' loan and lease percent of total assets is in line or below the US benchmarks depending on the bank. However, the loan and lease mix is significantly different. The consumer and mortgage portfolios, which generally involve higher interest rates than commercial loans, represent 60% of loans in PR compared to between 36% and 47% in the case of US benchmarks. Another possible reason behind the higher PR interest rates is the highly concentrated nature of the local banking sector which reduces competitive pressures. Finally, another possible factor driving interest income differences is the fixed vs variable interest loan mix, but we not have enough data to assess the effect of this factor. The second component of the NIM, the interest expense-to-assets ratio, is lower for local banks when compared to their peers in the US. This confirms the conventional wisdom that in PR there is less competition for deposits, lowering funding costs for banks compared t

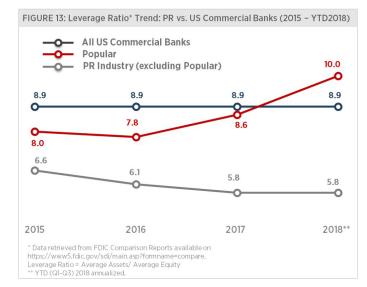


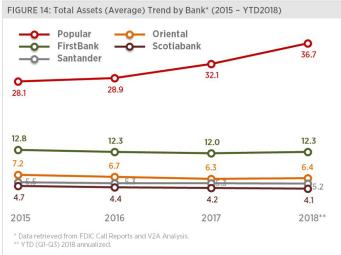


gap between US and PR could narrow. The provision for loan losses-to-assets ratio is higher in PR given that the 90+ days past due-non accruing ratio is significantly higher in PR. In terms of non-interest income, the US generally fares better than PR by either providing more fee-based services or by charging more for comparable services or products. It should be noted however that Popular does exhibit a higher noninterest income than its local peers. When analyzing noninterest expense components, as one might expect, we find salaries and benefits to be lower in PR than in the US. It should be noted that FirstBank and Scotia have higher salaries and benefits than their local peers, with salaries and benefits-toassets ratios of 1.26% and 1.39%, respectively, compared to a PR industry level of 1.06% (see Figure 12). The remaining components of noninterest expense, premises and equipments, and additional noninterest expense are materially higher in PR banks vis-à-vis their US peers.

LEVERAGE RATIO: PR BANKS VS. US BENCHMARKS > "Popular's total assets increased by \$8.6 billion from 2015 to YTD2018, driving its leverage ratio to 10.0, vs. 5.8 for other local banks and 8.9 for US commercial banks" Recapitalization, deleveraging, and de-risking efforts put into effect by local banks since the island's economic malaise began to surface have significantly impacted their leverage ratio. In 2005, the PR industry leverage ratio reached 15.5, decreasing to 7.6 in YTD 2018 (see Annex 4). When excluding Popular, the leverage ratio dips down further to 5.8 (see Figure 13). Popular has been diverging from its peers, and closed Q3 2018 with a leverage ratio of 10.0, surpassing US commercial banks (see Figure 13). The increase in Popular's leverage ratio can be mainly explained by the increase in total assets the bank has experimented during the past four years, from \$28.1 billion in 2015 to \$36.7 billion in YTD 2018. All other local banks have seen their total assets gradually decrease in this time period. The lower leverage can be explained by the lack of opportunities to deploy excess capital.

FINAL REMARKS > The local banking industry's profitability is on the upswing, following the devastating impact of Hurricanes Irma and Maria in September 2017, posting an industry level YTD 2018 Pre-Tax ROE of 13.1%. These levels of profitability for the industry have not been seen in more than a decade. Strong returns for local banks are expected to continue in the short- and medium-term driven by the billions of dollars in public and private reconstruction funds that will be increasingly flowing through the economy and financial system. This much needed boost to economic activity has been slowly reflected in monthly macroeconomic statistics, with the economic activity index returning to positive territory in year-over-year terms after 69 consecutive months of contraction and labor market indicators showing some improvement. Popular, managing more than half of all assets, deposits and loans of the banking sector, reported a Pre-Tax ROE of 18.2%, outperforming its peers in PR and even its US benchmark (US commercial banks with \$10 to \$250B in assets). Moreover, concerns over asset quality deterioration have further subdued at the close of Q3 2018, with the NPL ratio dipping down to 7.6% from above 9% in the wake of the storms.





SOURCES AND ENDNOTES

Figures 1-14: Federal Deposit Insurance Corporation (FDIC), Office of the Commissioner of Financial Institutions (OCFI), 10-Q SEC filings, quarterly results calls, analysis by "Financial Institutions Practice" V2A. (1) Citibank Puerto Rico financial data is not reported separately from Citibank US and, consequently, the bank is not included in the report analyses.

(2) Economic Development Bank for Puerto Rico (EDB) Economic Activity Index October 2018 report available at https://www.bde.pr.gov/BdeSite/PREDDOCS/EDB-EAI.pdf.

(3) Employment and Unemployment October 2018 report available at http://www.mercadolaboral.pr.gov/ lmi/pdf/Default/Grupo%20Trabajador/EMPLEO%20Y%20DESEMPLEO%20EN%20PUERTO%20RICO.pdf.

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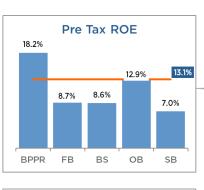
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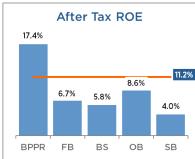
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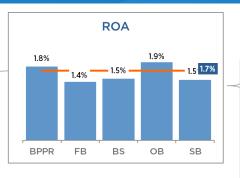




BPPR - Banco Popular de Puerto Rico FB - FirstBank of Puerto Rico BS - Banco Santander de Puerto Rico OB - Oriental Bank and Trust SB - Scotiabank de Puerto Rico

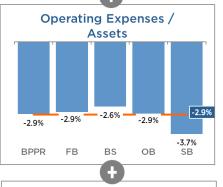
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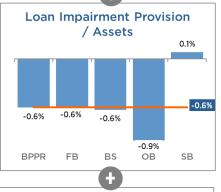
Note 1: Income and expense ratios are annualized. Source: Federal Deposit Insurance Corporation (FDIC)



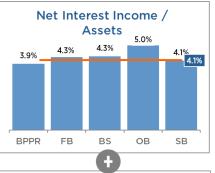


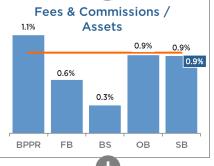


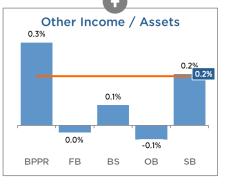




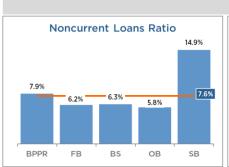


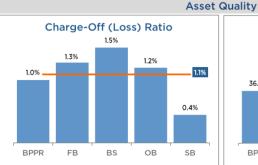




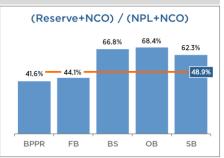




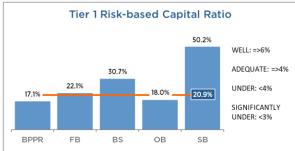






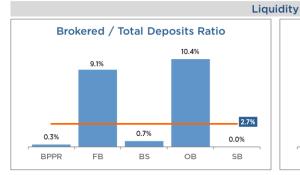


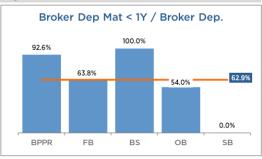




Capital Adequacy







Industry

BPPR - Banco Popular de Puerto Rico

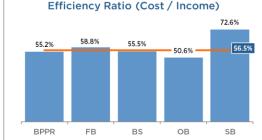
BS - Banco Santander de Puerto Rico

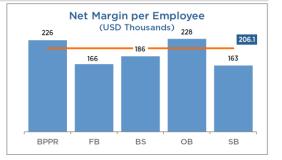
FB - FirstBank of Puerto Rico

OB - Oriental Bank and Trust

SB - Scotiabank de Puerto Rico







* Also referred to as Core Capital (leverage) Ratio by the FDIC

Note 1: Asset quality ratios are not adjusted for FDIC covered and available for sale portfolios.

Note 2: Income and expense ratios are annualized. Source: Federal Deposit Insurance Corporation (FDIC)



Personnel Costs / FTE (USD Thousands) Industry BPPR - Banco Popular de Puerto Rico 52.7 FB - FirstBank of Puerto Rico Note 1: Expense and income ratios are annualized. BS - Banco Santander de Puerto Rico Personnel Costs 2018 YTD Note 2: Bank offices as reported by the Office of (USD Mill) OB - Oriental Bank and Trust the Commissioner of Financial Institutions (OCFI) of Puerto Rico as of September 2018. -40 SB - Scotiabank de Puerto Rico -49 **FTEs** 7.081 FB BS ОВ 2,652 Expenses 2018 YTD 1,324 1,035 955 (USD Mill) BPPR FB BS ОВ SB -102 -140 -116 -262 Other Costs / Branch (USD Thousands) Expenses / Assets 4,407 4,251 **BPPR** FB BS OB 4,159.3 3,254 3.062 Other Costs 2018 YTD (USD Mill) -62 -90 -73 BPPR BS Assets (USD Bn) -147 **Branches** BPPR FB BS ОВ 164 FB BS ОВ SB 12.3 41 **BPPR** FB BS Cost / Income FB 58.8% 55.5% 56.5% Income / FTE (USD Thousands) Income / Branches (USD Thousands) 11,910.6 12,934.0 11,236.0 9,112.9 — 9,949.7 -BPPR 11,522.1 Income 2018 YTD (USD Mill) BPPR BS OB FTE / Branch 1,465 Income / Assets 276 160 **Branches** 164 5.2% FB BS OB 5.2% FB BS ОВ Assets (USD Bn) BPPR FB BS OB SB 36.7



