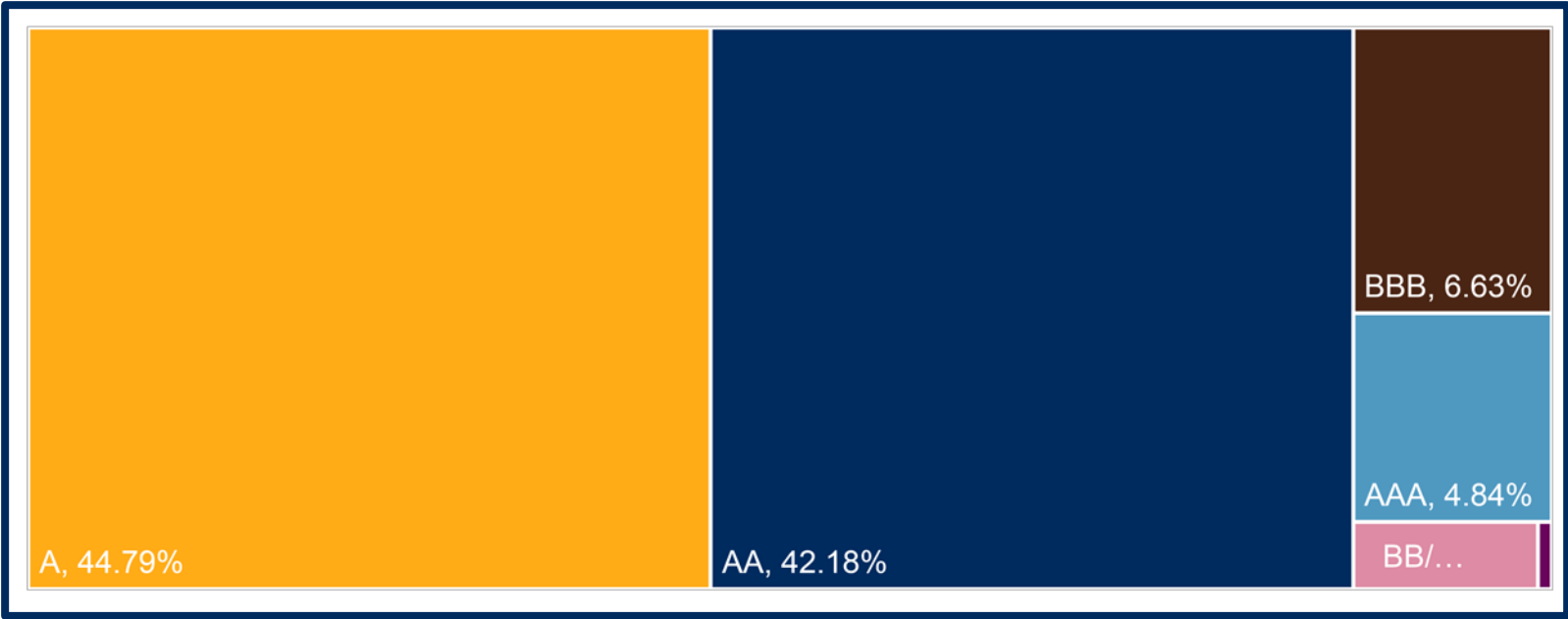


U.S. Muni Market by the Numbers

- Total Muni Bonds Outstanding \$3.8 Trillion
- Total Muni Bonds Issued in 2017 \$408.4 Billion
- Forecast Muni Bond Issuance in 2018 \$315-350 Billion
- 70% of bond related ballot measures passed Nov 6th
(according to Bloomberg)
- Roughly 80,000 total possible municipal issuers
- Over 31,000 different muni bond issuers with bonds outstanding through 2018Q2
- US Public Finance rates over 21,000 issuers

Over 91% of Municipal Debt is Rated by S&P Global as A- or Higher

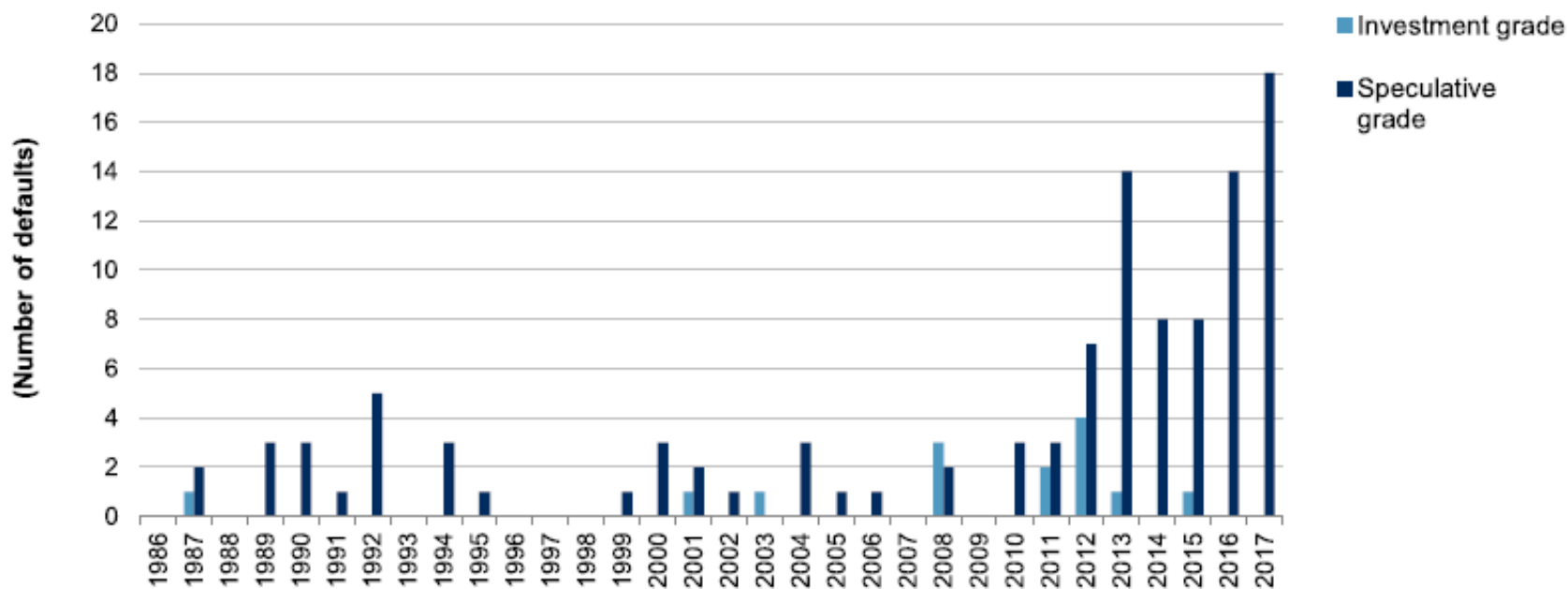


Source: S&P Global, Global Fixed Income Research – August 2018

U.S. Public Finance 2017 Annual Default Study

May 8, 2018

USPF Defaults*



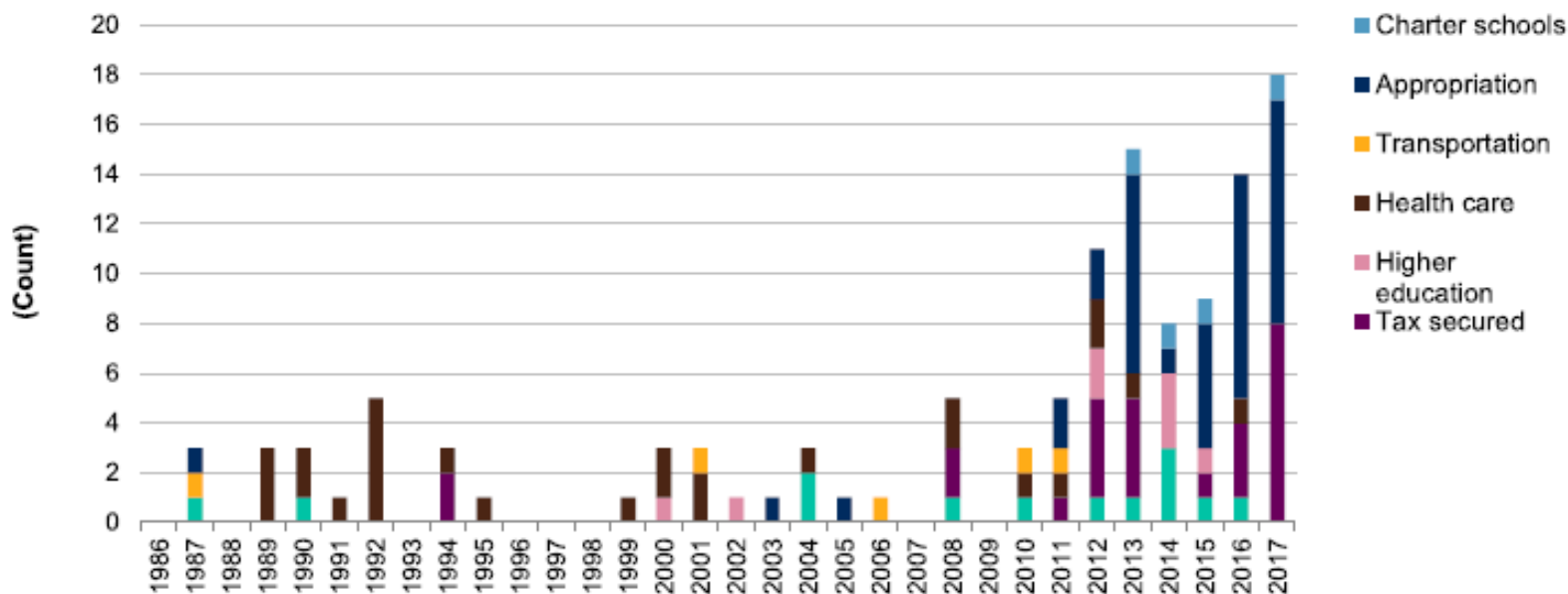
*Excludes housing. Source: S&P Global Fixed Income Research.

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U.S. Public Finance 2017 Annual Default Study

May 8, 2018

Annual USPF Defaults By Sector (1986-2017)*

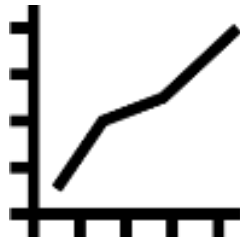


*Excludes housing. Source: S&P Global Fixed Income Research.

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S&P Global has observed these **Markers of Distress** that May Help Indicate Fiscal Struggles

ECONOMY



FINANCES



MANAGEMENT

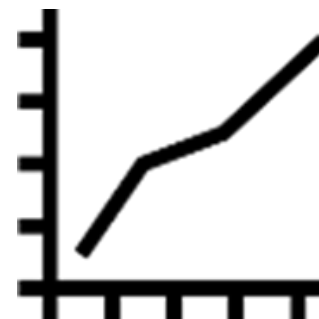


DEBT & LIABILITIES



Markers of Distress: Economy

- Demographic Trends
- Loss of Major Employer or Sector
- Unable to Capture Primary Economic Strengths
- Structural Economic Issues
 - Housing Affordability
- Assessed Valuation/ Market Value Per Capita
- Sustained Recession



Markers of Distress: Management

- Planning Deficiencies
- State Oversight/ Institutional Framework Changes
 - Financial Flexibility (tax caps, negative intervention)
- Lack of Political Will/ Restructuring Through Bankruptcy



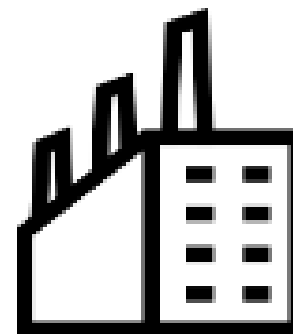
Markers of Distress: Finances

- Contributions to Long-term Liabilities
- Underfunding Infrastructure
- Liquidity
- Regular Use of Non-Recurring Revenues to Close Deficit Operations
- High Fixed Labor Costs



Markers of Distress: Debt & Liabilities

- Debt Structure
- Unsustainable Debt Service Carrying Charge and Pension/ OPEB Costs
- Overleveraged Debt Structures
- Lack of Active Debt Management



What was Stockton Facing?

- Persistent revenue gap compared to pre-recession
- Significant reduction in staffing after Great Recession
- Limited ability to deal with future recessions
- Large pension cost increases
- Labor market pressures
- Playing catch-up on infrastructure maintenance and internal service needs

Stockton's Actions/Approaches to Improve

- Bankruptcy process restructured large bond issues and eliminated retiree medical obligations
- City developed long-range fiscal planning model
- Taxpayers supported recovery with revenue increases
 - Measure M funding to restore services (library & rec)
 - Measure A funding augmented essential police services and financial recovery
- City developed comprehensive reserve strategy
- City shored up internal controls/policies/procedures

Putting It All Together

- What does credit analysis look like today?
- How does that lead to an investor's decision?
- What risks are looming in 2019 and beyond?
- How can you help tell your story to the market?

Q&A

For commentaries on this topic, please visit:

www.spratings.com/en_US/u.s.-public-finance

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