



Spotlight on structured finance

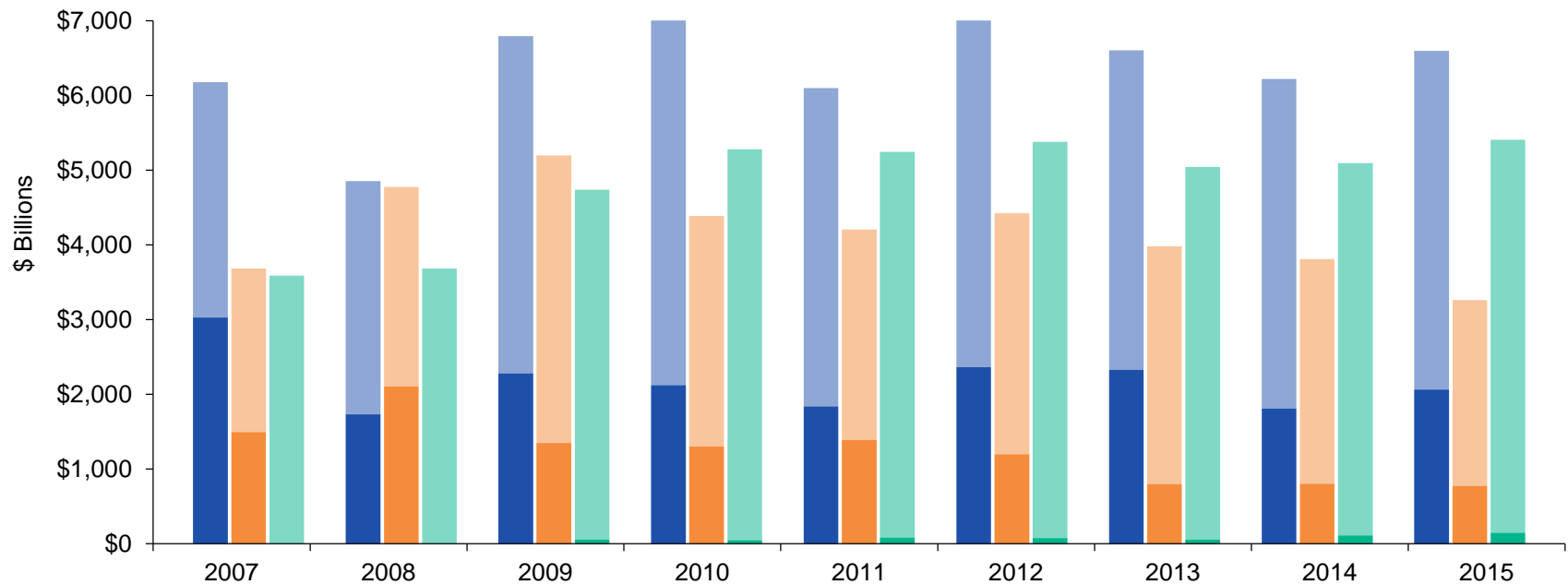
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Securitization-based products finance roughly 20% of global annual markets-based funding needs

Global Bond Market Annual Issuance, 2007 - 2015

■ US - Securitized ■ US - NonSecuritized ■ Europe - Securitized ■ Europe - NonSecuritized ■ Asia - Securitized ■ Asia - NonSecuritized



Securitization as a % of Global Issuance

34%

29%

22%

21%

21%

21%

20%

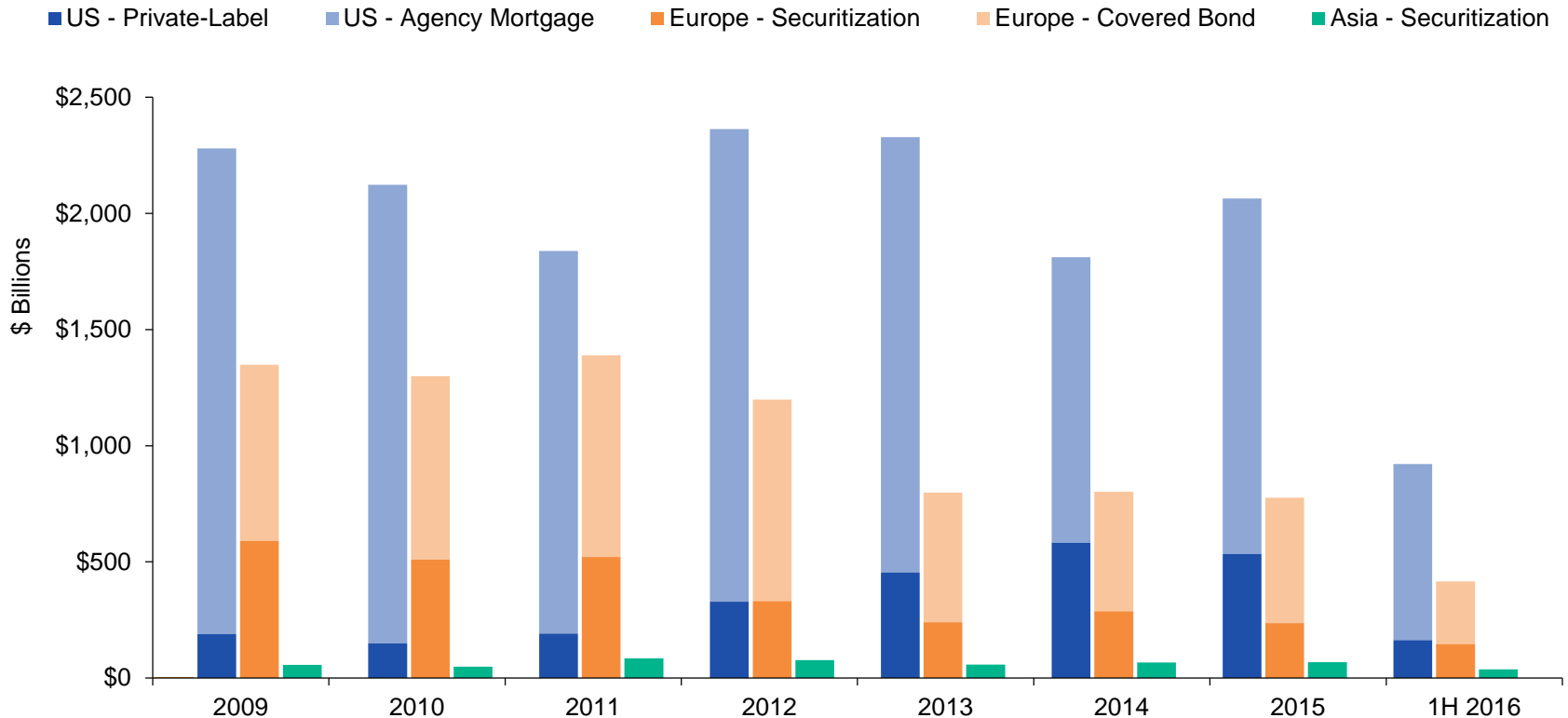
18%

20%

Source: SIFMA, Dealogic, European Central Bank, European Covered Bond Council, Asian Development Bank (Asian Bonds Online), Australian Office of Financial Management, China Central Depository & Clearing Co., Moody's Investors Service.

Securitization markets show post-crisis resilience... but divergent trends – US maturing, EU recovering, Asia expanding

Global Securities Market Annual Issuance, 2009 – 1H 2016



Note: 1H 2016 covered bond is an estimate.

Source: SIFMA, Dealogic, European Central Bank, European Covered Bond Council, Asian Development Bank (Asian Bonds Online), Australian Office of Financial Management, China Central Depository & Clearing Co., Moody's Investors Service.

Structured finance regional trends and cycles

United States	Europe	Asia Pacific
<p style="text-align: center;">Mature</p> <ul style="list-style-type: none"> » After 6 straight years of double digit growth, 2016 YTD issuance volume is in decline for the first time this decade » Contributing factors include slowing US economic growth, exacerbated by regulatory “indigestion” affecting some market sectors (see next slide) » Volume declines (YoY): <ul style="list-style-type: none"> – ABS: ↓ 5% – RMBS: ↓ 34% – CMBS: ↓ 42% – CLO: ↓ 33% 	<p style="text-align: center;">Recovering</p> <ul style="list-style-type: none"> » 2016 is seeing an upward trend in issuance volume after 8 years of decline following 2008 and 2011 financial crises <ul style="list-style-type: none"> – 87 SF deals in 1H 2016 vs. 157 for FY 2015 – Covered bonds: ↑ 26% – ECB long-term repo program continues to deliver efficient funding to bank issuers – SME ABS issuance grows on policy tailwinds – RMBS seems to be re-emerging – Limited Brexit impact 	<p style="text-align: center;">Expanding</p> <ul style="list-style-type: none"> » Securitization has potential to outstrip GDP growth rates in emerging capital markets of China, India and Southeast Asia » Steady volume growth in mature securitization markets such as Japan, Korea and Australia led by RMBS and ABS sectors » China now 2nd largest “investor-placed” securitization market » India securitization benefits from supportive regulatory policies

Source: Moody's Investors Service, SIFMA (data through October 2016).

Securitization Finances 30% of US Capital Markets Funding Needs Annually and 40% Historically

US Bond Market Annual Issuance, 1996 – 2016 H1
\$ Billions

