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Exploring The Differences And Similarities Of Auto ABS In China And Other Developed Markets

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Exploring The Differences And Similarities Of Auto ABS In China And Other Developed Markets

Vehicle sales have been increasing in China, the U.S., and Europe in recent years. Meanwhile, auto asset-backed securities (ABS) issuance has grown rapidly in China, while annual issuance volumes have stabilized in the U.S. and Europe, albeit at higher levels than those immediately following the financial crisis. The U.S. market currently has \$1.1 trillion in outstanding auto loans--the highest ever--while China has now reached the top spot in global auto sales. China's auto loan ABS issuance volume reached an all-time high of 60 billion Chinese renminbi (RMB) in 2016, while U.S. auto loan ABS issuance was about \$67 billion during the same period and European auto ABS issuance was about \$30 billion. Chinese, U.S., and European deals typically feature different loan terms, vehicle types, and collateral types--with Chinese and European deals only including prime borrowers. Auto financing in China specifically is also a bit stricter, requiring a higher down payment and using more conservative underwriting standards than the U.S. and Europe. As part of a new series of articles providing globally comparative information on China's auto ABS market, S&P Global Ratings looked at what these three major markets have in common--and where they differ. We also examined some high-level similarities and differences in auto financing characteristics in the three areas.

Overview

- China's auto loan ABS issuance reached an all-time high of RMB60 billion in 2016. U.S. auto loan ABS issuance was about US\$67 billion during the same period, while European auto ABS issuance was about US\$30 billion.
- Some of the main differences in China's and U.S./European auto loan ABS deals include loan term, collateral type (Chinese and European deals have only included prime borrowers), and vehicle type included in the pools.
- Auto financing is one area where China and other global players differ—financing in China requires a higher down payment and underwriting standards are generally more conservative than in the U.S. and Europe.
- China's auto loan ABS market could evolve depending on factors such as demand for financing and the entrance of new players into the market.

China's Auto ABS Market

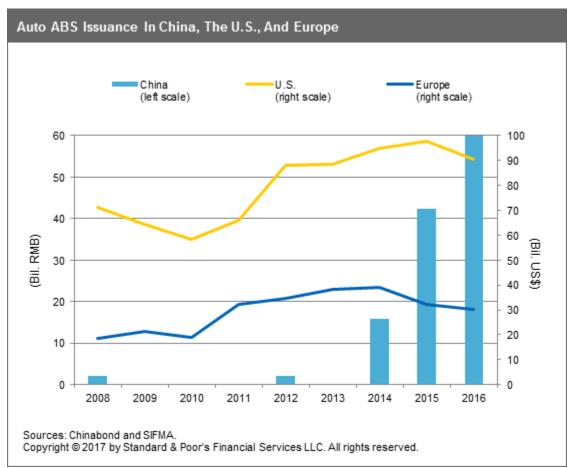
China's auto loan ABS debuted in 2008. Following limited issuance in 2008 and 2012 of about RMB2 billion each, issuance shot up to RMB16 billion in 2014 and RMB42 billion in 2015. In 2016, issuance growth slowed somewhat, although the aggregate offering has easily surpassed 2015's figure and reached RMB60 billion (about US\$9 billion-US\$10 billion equivalent), see chart 1).

From 2008 to 2016, issuance of new auto loan ABS transactions, which are regulated under the credit assets securitization (CAS) scheme managed by the China Banking Regulatory Commission (CBRC) and The People's Bank of China, exceeded RMB122 billion. Most issuers are captive auto finance companies related to various manufacturers; among the 26 auto finance companies in China, 13 have issued at least one transaction and six have issued at least two transactions. Such repeated issuance is a promising sign that securitization has become a regular part of financiers'

ongoing funding strategies. New auto loan ABS entrants in 2016 included Beijing Hyundai Auto Finance Co. Ltd., Mercedes Benz Financial, and Dongfeng Peugeot Citroen Auto Finance Co. Ltd. Another observation is that even though the highest issuance volumes only occurred in the past two years, China auto financiers' issuance programs are very similar to how auto ABS financing is utilized in Europe and the U.S.

In comparison, U.S. and European auto loan ABS issuance have a much longer track record, with over 25 years of history for both. As the U.S. economy recovered following the financial crisis, issuance increased, but has plateaued in recent years, with substantial growth in the amount of outstanding auto loans (nearly \$400 billion) during 2011-2016. European issuance has been steady of late, remaining in roughly a US\$30 billion-US\$40 billion range.

Chart 1



Comparing Auto ABS And Auto Financing In The U.S., Europe And China

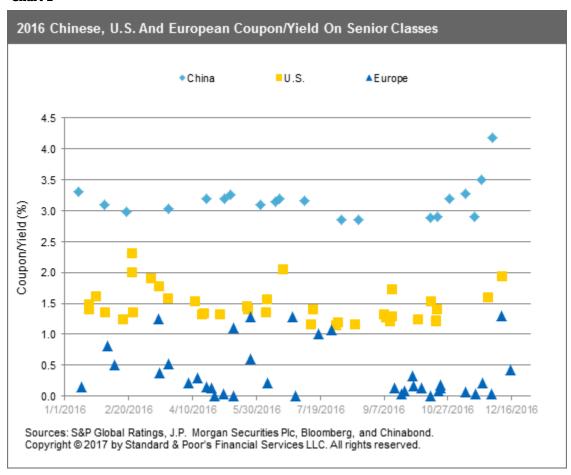
ABS markets

Retail auto loan ABS issuance in the U.S. in 2016 was about US\$67 billion, with roughly 58% (US\$39 billion) backed by prime receivables, while overall auto ABS issuance was over US\$90 billion. In general, prime deals tend to be larger than subprime deals, although there are some exceptions. In Europe, auto ABS issuance was about US\$30 billion (including retained transactions), all backed by what are considered prime receivables. The senior bonds in U.S. prime

deals are typically time-tranched into a short-term money market class, and a few long-term bond classes with the same credit priority. Within the appendix, we summarized the 2016 prime retail auto loan ABS priced in the U.S., showing issuance size, rating, and the tight 'AAA' and 'BBB' coupons that issuers have been able to achieve in the market. Additionally, we've added similar information for deals closed in China and Europe during the year.

In China's auto ABS market, most deals tend to be about RMB3 billion or RMB4 billion (roughly US\$400 million-US\$600 million at current exchange rates), with some exceptions (see appendix for 2016 deal list). China's auto loan ABS issues to date are backed only by borrowers classified as prime. In addition, China's auto ABS deals are nearly all backed by new vehicles, while the U.S. and European counterparts generally contain a mix of new and used vehicle loans (on the European side, we've noticed a shift towards increasing shares of used cars since this is typically the main area where captives can grow). Unlike in the U.S. market, there is sometimes only one international credit rating agency utilized in China. Most European deals have two or more agencies providing ratings, but a small percentage only have one. In China, senior tranche ratings have been in the 'AA' rating category due to the market's shorter operating history. Chart 2 shows some tightening of coupons in 2016, although deals priced recently have been affected by the general rate hike in China's debt capital market. We show the coupon/yield for the Chinese, U.S., and European deals in chart 2 below. We utilized the coupon/yield rather than spread because it is somewhat confusing to compare the different regions. U.S. prime A3 classes (typically two- to three-year weighted average lives) averaged about swaps plus 40 basis points (some were as tight as swaps plus 17 bps-18 bps), while 'BBB' rated class spreads generally priced in the swaps plus 225 bps-250 bps range. The senior classes in European deals have priced at one-month EURIBOR (or GBP LIBOR) plus a spread of 23 bps-95 bps (Europe is mostly a floating-rate note market for auto ABS when placed with investors; retained deals typically have fixed coupons to avoid the costs from the fixed-floating swaps unless otherwise needed). With currently negative benchmark rates, coupons/yields on the European deals are quite low, as shown in the chart. On the other hand, China's deals saw their most senior classes price, on average, at the one-year prime lending rate minus 115 bps, and the class Bs were at prime minus 30 bps.

Chart 2



The yields in the graph generally move with similar trends, but do reflect the different geographic yield environments, secondary market liquidity, and expectations for currency movements during the bonds' lives. For instance, Chinese issuance appears to offer the most yield, but has reflected the market's debt rate and requires international investors to enter in currency swap transactions to convert interest and principal out of RMB. On the other hand, most bond products in Europe have been receiving European Central Bank buying support, creating what is an overall tighter bond yield environment.

Auto financing

We have seen several repeat ABS issuances for China-based auto financing companies, as is the case in the U.S. and Europe, where most issuers regularly tap the securitization market for funding. In addition, there is a similar market structure, where captive finance companies support auto financing while also facing competition from banks.

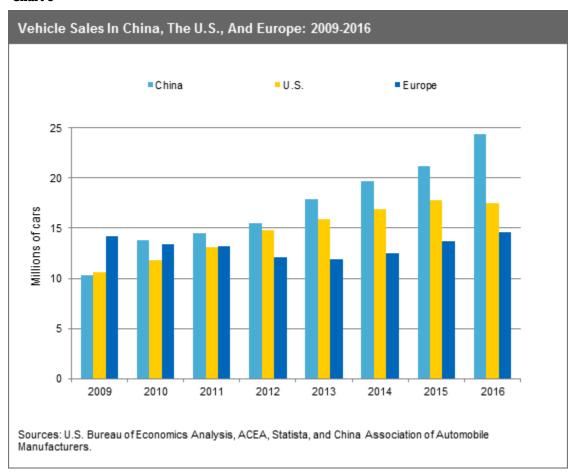
Origination practices are also generally the same, with dealerships originating the auto loans at the point of sale and using a central approval mechanism. All three major markets rely on automobiles for transportation, and auto loans are full-recourse to consumers.

The relative age of the markets and regulation show some notable differences between the U.S./Europe and China's auto financing markets. These include:

- In China, borrowers usually must maintain an account with one of China's largest banks, and payments are typically
 made by direct-debit. This is not nearly as common with U.S. auto loans, but does happen with Canadian auto
 issuance. In Europe, while there is no requirement to have an account with a large bank, direct debit is also the
 standard way of collecting installments.
- Down payments are much higher for China's auto loans, and average near 40% (60% loan-to-value [LTV]). Many U.S. auto loans are made at or near 100% LTV, and subprime auto loan ABS deals typically have LTVs well over 100%. European auto loans are generally in between the two, with typical down payments between 15% and 20%.
- China's auto loans typically have shorter terms than U.S. loans. Where the most common loan term in the U.S. is 72 months and a greater percentage of U.S. loans are now up to 84 months in tenor, Chinese regulators cap loan terms at 60 months. Most auto ABS loan pools in China feature even shorter remaining loan terms, ranging from 20-30 months. In Europe, 36 and 48 months are the typical initial terms; remaining terms in actual deals typically range from 30-45 months.
- Chinese regulations do not allow the origination of nonprime or nonconforming auto loans, in contrast to the U.S.
 Like China, Europe also doesn't have a subprime market, but it is not regulatory driven; rather, it is based on originators' lending preferences.
- The auto loan penetration rate, defined as the percentage of vehicles purchased through loans or acquired by leases, is around 25% in China. A Federal Reserve Bank report indicated that some two-thirds of new or used vehicle purchases in the U.S. in 2015 were financed. In Europe, that figure is approximately 60%.
- The severe delinquency rates of auto loans supporting China's auto loan ABS have been as low as 0.2%-1.0%, which is lower than the U.S. counterparts. Similarly, 90-plus-day delinquencies in European auto ABS are at around 0.15%.
- Recovery assumptions are generally much lower in China due to the different legal procedures around repossession and less market liquidity for second-hand cars. Observed recoveries in Europe are typically meaningful, but also depend on country/jurisdiction. Where the special-purpose vehicle (SPV) has access to the car's sale proceeds, actual recoveries range from 60%-80%.

Overall, the terms of China's auto loans appear more conservative than their global counterparts. However, we note that China's auto finance sector is relatively new and still evolving. New players, especially those not constrained by the CBRC regulations, could enter and underwriting practices could change. This is especially the case as auto sales continue to increase, albeit at lower percentage rates versus 2009-2010. China now leads the world in terms of annual new car sales, which will likely continue to support higher levels of ABS issuance.

Chart 3



Current Conditions In China, The U.S., And Europe Auto ABS Markets

In table 1 we highlight some current conditions/characteristics for auto markets in China, the U.S., and Europe with a side-by-side comparison. Compared to the more mature U.S. and European markets, China is already the number one car sales market, and we expect that the number of auto finance companies will continue to rise. Additionally, we expect more auto loans, and in turn auto ABS issuance, in China, while we continue to forecast active auto issuance in the U.S. and Europe.

Table 1

Comparison Of C	urrent Conditions In The Chinese, U.S., And	European Markets	
	China	U.S.	Europe
Industry environment	Growing. Already no. 1 car sales market, number of auto finance companies rising, etc.	Mature. Outstanding loan amount of \$1.1 trillion highest ever. Annual car sales running at or near recent highs.	Mature. Car markets recovering, overall saturated markets with limited growth potential in core Europe.
Product and customer targeting	Mainly prime quality borrowers.	Mix of prime and subprime borrowers.	Mainly prime quality borrowers.
Deal structure	Simple, two or three tranches in most deals.	A bit more complex, deals have three to seven tranches. Prime structures cut off at investment grade or 'AAA'.	Typically one or two tranches.
Asset characteristics	Low LTV, shorter tenors.	High LTVs, longer tenors, mix of new and used vehicles.	Medium LTVs, medium tenors of typically 3-4 years; mix of new and used vehicles.
Performance	Deals have performed well in past years, with low defaults (mostly 0.2%-1.0%) and losses to date.	Performance has begun to deteriorate somewhat on a year over year basis coming off historical lows.	Very good and very stable performance over the last years.
Future market development	Car sales and auto loan origination expected to grow further, but the auto finance sector is relatively new and still evolving. New players could enter and underwriting practices could change. Uncertainty hangs over securitization counterparties' transitions under stress scenarios.	Car sales and auto loan growth expected to plateau. ABS issuance should remain active.	Car sales and auto loan growth limited; ABS well established as funding source and should remain active.

LTV--Loan to value.

Appendix: Full 2016 Deal Lists In China, The U.S., And Europe

Table 2

Deal name	Seller	Pricing date	Amount (bil. RMB) (issuance amount)	Coupon/yield (senior) (%)	Coupon/yield (class B) (%)
Bavarian Sky China 2016-2	BMW	12/1/2016	4.0	4.18/ 4.16	4.19
Driver China Five	Volkswagen	11/22/2016	4.0	3.5	4
SAIC 2016-1	SAIC	11/17/2016	3.0	2.9/ 3.15	N/A
Silver Arrow China 2016-2	Mercedes-Benz	11/10/2016	4.2	3.27	N/A
Jincheng 2016-2	Jincheng Bank	10/28/2016	1.7	3.20/ 3.35	3.79
Toyota Glory 2016-1	Toyota	10/19/2016	3.0	2.9	3.29
VINZ 2016-2	Dongfeng Nissan	10/13/2016	4.0	2.88/ 2.95	N/A
Fuyuan 2016-2	Ford	8/18/2016	3.0	2.85	3.3
Autopia 2016-2	Beijing Hyundai	8/5/2016	3.0	2.86/ 2.89	3.5
Driver China Four	Volkswagen	7/7/2016	3.0	3.16	4.69
Rongteng 2016-2	SAIC-GMAC	6/17/2016	4.0	3.2	N/A
Bavarian Sky China 2016-1	BMW	6/14/2016	4.0	3.15/ 3.25	3.7
VINZ 2016-1	Dongfeng Nissan	6/2/2016	3.0	3.1/ 3.2	N/A

Table 2

2016 China Aut	2016 China Auto Loan ABS Deals (cont.)									
Deal name	Seller	Pricing date	Amount (bil. RMB) (issuance amount)	Coupon/yield (senior) (%)	Coupon/yield (class B) (%)					
Shenrong 2016-1	Peugeot Citroen	5/10/2016	1.0	3.25	4.93					
Jincheng 2016-1	Jincheng Bank	5/5/2016	0.9	3.2/ 3.6	3.99					
Fuyuan 2016-1	Ford	4/21/2016	3.0	3.2	3.95					
Silver Arrow China 2016-1	Mercedes-Benz	3/22/2016	2.5	3.03	N/A					
Rongteng 2016-1	SAIC-GMAC	2/18/2016	3.0	2.99/ 3.34	N/A					
Autopia China 2016-1	Beijing Hyundai	2/1/2016	1.5	3.09/ 3.25	N/A					
Driver China Three	Volkswagen	1/12/2016	3.0	3.3	5.1					

Source: Chinabond. N/A--Not applicable.

Table 3

2016 U.S. Prime Auto Lo	oan ABS Deals				
Deal name	Pricing date	Amount (mil. \$)	Rated by S&P Global Ratings?	A-1+/AAA or equivalent coupon/yield (%)	BBB or equivalent coupon/yield (%)
TCF Auto Receivables Owner Trust 2016-PT1	12/9/2016	505	Y	1.93	4.2
Huntington Auto Trust 2016-1	11/28/2016	1500	Y	1.59	2.96 (BBB+)
CarMax Auto Owner Trust 2016-4	10/19/2016	1300	N	1.4	2.91
Honda Auto Receivables 2016-4 Owner Trust	10/18/2016	950	Y	1.21	N/A
Ford Credit Auto Owner Trust 2016-C	10/18/2016	1317	N	1.22	N/A
Securitized Term Auto Receivables Trust 2016-1	10/14/2016	500	Y	1.52	N/A
Toyota Auto Receivables 2016-D Owner Trust	10/4/2016	1250	Y	1.23	N/A
TCF Auto Receivables Owner Trust 2016-1	9/14/2016	502	Y	1.72	3.53
Hyundai Auto Receivables Trust 2016-B	9/14/2016	1200	Y	1.29	N/A
USAA Auto Owner Trust 2016-1	9/12/2016	500	Y	1.21	N/A
Mercedes-Benz Auto Receivables Trust 2016-1	9/9/2016	1500	Y	1.27	N/A
World Omni Auto Receivables Trust 2016-B	9/7/2016	941	Y	1.31	N/A
Honda Auto Receivables 2016-3 Owner Trust	8/16/2016	1500	Y	1.16	N/A
Nissan Auto Receivables 2016-C Owner Trust	8/2/2016	1250	N	1.18	N/A
Toyota Auto Receivables 2016-C Owner Trust	8/1/2016	1250	Y	1.14	N/A
CarMax Auto Owner Trust 2016-3	7/14/2016	1250	Y	1.39	2.94

Table 3

Deal name	Pricing date	Amount (mil. \$)	Rated by S&P Global Ratings?	A-1+/AAA or equivalent coupon/yield (%)	BBB or equivalent coupon/yield (%)
BMW Vehicle Owner Trust 2016-A	7/12/2016	1250	N	1.16	N/A
Ford Credit Auto Owner Trust 2016-REV2	6/20/2016	1351	Y	2.05 (5-year)	N/A
California Republic Auto Receivables Trust 2016-2	6/8/2016	400	Y	1.56	3.51
Harley-Davidson Motorcycle Trust 2016-A	6/7/2016	300	Y	1.35	2.73 (BBB+)
Honda Automobile Receivables 2016-2 Owner	5/24/2016	1500	N	1.39	N/A
Ally Auto Receivables Trust 2016-3	5/23/2016	513	Y	1.44	2.96
Toyota Auto Receivables 2016-B Owner Trust	5/2/2016	1600	Y	1.31	N/A
Ford Credit Auto Owner Trust 2016-B	4/19/2016	1317	Y	1.33	N/A
Nissan Automobile Receivables 2016-B Owner Trust	4/18/2016	1500	N	1.32	N/A
CarMax Auto Owner Trust 2016-2	4/12/2016	1175	Y	1.53	3.28
Hyundai Auto Receivables Trust 2016-A	3/22/2016	977	Y	1.57	N/A
World Omni Auto Receivables Trust 2016-A	3/15/2016	859	Y	1.77	N/A
California Republic Auto Receivables Trust 2016-1	3/9/2016	440	Y	1.89	4.56
Ally Auto Receivables Trust 2016-2	2/24/2016	1019	Y	1.35	2.99
Ford Credit Auto Owner Trust 2016-REV1	2/23/2016	1081	Y	2.31 (5-year)	N/A
Toyota Auto Receivables 2016-A Owner Trust	2/23/2016	1250	Y	1.26	N/A
Honda Auto Receivables 2016-1 Owner Trust	2/16/2016	1000	Y	1.23	N/A
Nissan Auto Receivables 2016-A Owner Trust	2/2/2016	1000	N	1.35	N/A
CarMax Auto Owner Trust 2016-1	1/26/2016	1140	Y	1.61	3.11
Ford Credit Auto Owner Trust 2016-A	1/20/2016	1053	Y	1.39	N/A
Ally Auto Receivables Trust 2016-1	1/20/2016	1050	N	1.47	N/A

Sources: S&P Global Ratings, ASR, and Bloomberg. N/A--Not applicable.

Table 4

Deal name	Pricing date	Amount (mil. €)	Rated by S&P Global Ratings?	AAA note coupon/yield(%)	AA note coupon/yield(%)	A note coupon/yield(%)	BBB note coupon/yield(%)
Indigo Lease Srl 2016	12/15/16	504	N	N/A	1-month EURIBOR + 0.8	N/A	N/A
Motor 2016-1 PLC	12/8/16	711	Y	Class A 1.3, class B 1.8	N/A	3.75	5.25
Red & Black Auto Lease Germany 2 S.A.	11/30/16	730	Y	1-month EURIBOR + 0.4	N/A	N/A	N/A
Turbo Finance 7 PLC	11/23/16	675	Y	Class A1 1-month LIBOR + 0.6; class A2 1-month EURIBOR + 0.45	N/A	Class B 1-month LIBOR + 1.5; class C-Dfrd 3.0	N/A
Bavarian Sky France Compartment French Auto Leases 2	11/18/16	522	N	1-month EURIBOR + 0.4	N/A	1.00	N/A
E-CARAT 7 PLC	11/10/16	548	Y	1-month LIBOR + 0.45	1-month LIBOR + 1.0	N/A	N/A
Driver UK Four	10/21/16	832	Y	1-month LIBOR + 0.57	N/A	1-month LIBOR + 1.25	N/A
Kimi (SCF Rahoituspalvelut Ltd) 5	10/21/16	607	N	1-month EURIBOR + 0.5	0.17	1.60	2.40
Globaldrive Auto Receivables UK 2016-A PLC	10/20/16	608	Y	1-month LIBOR + 0.47	N/A	N/A	N/A
VCL Multi-Compartment SA VCL 24	10/13/16	1,251	Y	1-month EURIBOR + 0.25	1-month EURIBOR + 0.65	N/A	N/A
Red & Black Auto Germany 4 S.A.	10/6/16	1,000	N	1-month EURIBOR + 0.5	N/A	N/A	N/A
Auto ABS Spanish Loans FT 2016	9/30/16	690	N	N/A	1-month EURIBOR + 0.53	N/A	N/A
ROOF Leasing Austria Compartment 2016	9/29/16	438	N	N/A	N/A	1-month EURIBOR + 0.7	N/A
E-CARAT Compartment 9	9/23/16	486	Y	1-month EURIBOR + 0.45	1-month EURIBOR + 0.65	N/A	N/A
Bavarian Sky Compartment German Auto Loans 5	9/21/16	1,075	N	1-month EURIBOR + 0.40	N/A	N/A	N/A
Globaldrive Auto Receivables 2016-B	9/15/16	652	N	1-month EURIBOR + 0.50	1-month EURIBOR + 0.70	N/A	N/A
SC Germany Auto 2016-2 UG	7/28/16	1,500	Y	1.07	N/A	N/A	N/A
BBVA Consumo 8	7/18/16	700	N	N/A	N/A	1.00	N/A
Silver Arrow SA Compartment 7	6/30/16	1,100	Y	1-month EURIBOR + 0.29	N/A	N/A	N/A

Table 4

Deal name	Pricing date	Amount (mil. €)		AAA note coupon/yield(%)	AA note coupon/yield(%)	A note coupon/yield(%)	BBB note coupon/yield(%)
Driver UK Multi-Compartment SA Comp Private Driver UK 2016-1	6/27/16	764	N	1.29	N/A	1.85	N/A
Swiss Auto Lease ABS 2016-1	6/8/16	194	N	0.22	N/A	N/A	N/A
Driver UK Master Compartment 3	5/25/16	510	N	1.29	N/A	1.85	N/A
Orbita Funding plc 2016-1	5/25/16	573	N	1-month LIBOR + 0.95	N/A	N/A	N/A
A-Best 14	5/12/16	963	N	N/A	1.10	2.15	3.65
SC Germany Auto 2016-1 UG	5/12/16	600	Y	1-month EURIBOR + 0.32	N/A	N/A	N/A
Cars Alliance Auto Loans Germany V 2016-1	5/4/16	761	N	1-month EURIBOR + 0.37	1-month EURIBOR + 0.80	N/A	N/A
Bavarian Sky Compartment German Auto Loans 4	4/27/16	1,070	N	1-month EURIBOR + 0.33	N/A	N/A	N/A
VCL Multi-Compartment SA VCL Compartment Private VCL 2016-1	4/25/16	495	Y	0.13	0.93	N/A	N/A
Swiss Car ABS AG 2016-1	4/21/16	469	N	Class 1A 0.15; class 2A 0.30	N/A	1.13	N/A
Bumper 7	4/14/16	721	Y	1-month EURIBOR + 0.63	1-month EURIBOR + 1.0	N/A	N/A
VCL Multi-Compartment SA VCL 23	4/7/16	721	Y	1-month EURIBOR + 0.55	1-month EURIBOR + 1.35	N/A	N/A
E-CARAT 6 PLC	3/22/16	446	Y	1-month LIBOR + 0.85	N/A	1-month LIBOR + 1.3	N/A
RevoCar 2016 (UG)	3/15/16	550	Y	0.37	N/A	N/A	N/A
FTA Santander Consumer Spain Auto 2016-1	3/14/16	780	N	N/A	1.25	1.65	3.25
Turbo Finance 6	2/9/16	510	Y	1-month LIBOR + 0.75	1-month LIBOR + 1.4	N/A	N/A
Driver Espana 3	2/3/16	887	Y	N/A	1-month EURIBOR + 1.05	1.48	N/A
Globaldrive Auto Receivables 2016-A	1/14/16	686	N	1-month EURIBOR + 0.37	0.97	N/A	N/A

Sources: S&P Global Ratings, J.P. Morgan, and Bloomberg. N/A--Not applicable.

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