

A PLS Quarterly Special Report

U.S. Energy Capital Markets – 2Q17 Review

- \$26.98 billion aggregate equity and debt raised in Q2, down 44% year-over-year and 35% sequentially
- \$7.08 billion in equity offerings in 2Q17, down 51% from 1Q17 and 40% year-over-year
- \$19.9 billion in debt offerings, down 27% from 1Q17 and 46% year-over-year
- Most active participants- Wells Fargo in 54% of all offerings in 2Q17, Citi in 58% of all equity offerings, Wells Fargo in 62% of all debt offerings
- \$60 billion in borrowing either launched or amended in Q2 across 81 agreements, up 59% from previous quarter and 170% year-over-year
- Wells Fargo was the most active lender with 62% participation in all credit facilities for an aggregate allocation approaching \$3.7 billion

U.S. Energy Capital Markets (Additional Market Observations)

2nd Quarter 2017 review

Follow-Up to 6 Major Observations on the Cover–

- Upstream equity financing of \$2.19 billion off 54% from Q1's \$4.8 billion, 61% from 2Q16's \$5.6 billion
- 8 IPOs in Q2 raised \$3.53 billion aggregate proceeds, 31% higher than Q1. No IPOs a year ago
- Services sector set a record for number of IPOs at four, highest since 2Q12's three
- Services sector raises \$1.46 billion between IPOs and follow-on, down 50% from Q1 but up 53% YOY
- Upstream sold the most debt in Q2 at \$9.1 billion of \$19.9 billion total energy sector debt issuances
- \$7.08 billion in equity offerings generated total fees of \$264.4 million for banks
- SPAC trend continues in Q2 with two more blank check IPOs raising a combined \$1.08 billion
 - Backed by private equity groups TPG Capital and NGP
 - Follows two SPAC IPOs in Q1 that raised \$1.25 billion
- Financing activity in Q2 helps to facilitate \$19.3 billion in US Upstream deal value
 - \$9.3 billion in Marcellus from two big deals puts it in first place among shale plays
 - \$1.2 billion in Delaware makes it top oil play, edging out second-place Eagle Ford with \$1.1 billion
 - Bakken, SCOOP/STACK and DJ quiet as companies re-evaluate outlook for crude prices
 - Private equity boosts its share of acquisitions, Rockies gas plays especially of interest

Top 2017 Q2 Market Events

Expanded Thoughts of Observations from PLS Capital Markets report

M&A Markets

- EQT's \$8.2 billion Rice buy creates largest US gas producer
- Parsley completes \$2.8 billion acquisition of Double Eagle Energy Permian
- Hilcorp & Carlyle pay \$2.7B for Conoco's San Juan assets
- Devon Energy pulling trigger on \$1.0 billion in non-core sales
- Linn divests \$1.0 billion of assets since return from bankruptcy

SPACs drive IPOs well through half the year

- 2017 IPO activity continues to be buoyed by new SPACs
- Blank check company TPG Pace Energy Holdings closes IPO at \$600 million
- Vantage Energy Acquisition raises \$480MM in IPO
- Already a new SPAC IPO in Q3- Osprey Energy Acquisition with \$250 million raise

Private equity groups active in variety of funding transactions

- EnCap commits \$500 million to Silverback II
- KKR's Gardner Denver Holdings launches \$826 million IPO
- Permian Resources equitizes \$600 million in debt to PE Onyx Point
- Blackstone backing Vine Resources IPO, Riverstone backing Vista IPO- both \$500 million
- Carlyle infusing \$400 million into EOG's Marmaton formation

Special Report (Index & Key Slides)

Coverage Universe (By Ticker Symbol) (>400 Firms)

UPSTREAM - AXAS AMZGQ ASENQ APC AR APA AREX AOIL ATHL ATLS BRN BROE BXE BRY BBG ANFC BSM BCEI BPZR BBEP COG CRC CPE CNQ CRZO CDEV CHK XEC COIL COP CWEI CIE CRK CXO CNX MCF CLR CBNR DRBM DNR DVN FANG DUNR EROC ESTE ECR EC EOX ECA ENDRQ EGN EXXIQ ENRJ EOG EPE EPL EQT ERN ESCR EVEP EPM XCO XOG FECCQ FPP FOR FCX FXEN GST GPRK GDP GTE GPOR HK HWKR HES HUSA HECC HDYN IOC ISRL JAG JYHW JONE KAACU KLREU KOG KOS KRP LPI LGCY LBYE LLEX LINE LNCO LRE LEI LVL MPET MHR MRO MTD R MMR MEMP MRD MXC MCEP MPO MILL MUR NSLP NWTR NFX NBL NOG OAS OXY ROYT PHX PE PDCE PED PVA PBR PQ PRHR PXD PSE PXP PSTR PRNG QEP QRE KWKA ROGI RRC RGFR RDMP REN REXX RICE REI BBLS ROSE ROYL RSPP SOGCQ SSN SN SPP SD SDR PER SARAQ SSL SM SWN SGY STUNU SWTF SYRG GMXRQ TTEN TRCH TENG TAT TPLM TPGE.UN UPL UNT USEG EGY VNR VEI VEAC VQ VYEV VNOM VOC WTI WRES WLL WHZ WRD WPX YUMA ZAZA ZN

MIDSTREAM - CAFD ACMP AMID AM AMGP ARCX APLP APL ATO AZUR BKEP BWP BPL CPGX CPPL CNNX CEQP CQH CMLP XTXI XTEX CCLP DAKP DPM DKL DM LPG EPB ENBL EEQ EEP ENB ETE ETP ENLC ENLK EPD EQGP EQM GEL GLOP GMLP HESM HEP KNOP NRG M JPEP KMP KMI KMR LNG MMP MWE MMLP MEP MPLX NAP NGL NKA NMM NVGS NS NSH OILT OKE OKS PBA PTXP PSXP PAA PAGP PVR QEPM STR RGP RMP RRMS SEMG SHLX SXE SOCGP SO SWX SE SEP SMLP SXL TEGP TEP TLP TRGP NGLS TCP TLLP TRP USAC USDP WGP WES WMB WPZ

DOWNSTREAM - ALJ ALDW APU BDCO CLMT CPLP CQP CAPL CVI UAN CVRR CELP DK DLNG FGP GLP HMLP HFC MPC NTI OCIP PARR PBF PBFX PDH PESX PSX RNF SRLP SGU SPH SUN SYMX TGP TOO TSO VLO VLP VTTI WNR WNRL WLKP WPT

INTEGRATED - BP CVE CVX CEO XOM HSE NFG REPHY RDSA STO SU TOT YPF

SERVICES - BHI BAS BRS CJES CDVIQ CAM CRR HELI CLH CLB DWSN DPDW DO DRC DRQ ESES EDG ENG ESV EMES ENSV EXTN FMSA FTK FMC FTI FET FI FRAC GDI GEOKQ GEOS GEGSQ GPP GIFL GLF HAL HNR HLX HP HERO HIIT HOS ICD IO FRAC KEGXQ MIC TUSK MTZ MDR MIND MRC NBR NOV NGS NR NE NBLX NAO NADL DNOW NCSM NES ORIG OII OIS PACD PGNPF PKD PTEN PHII PES PDS PUMP RCON RGCO RNET RDC RES SAEX SLB SDLP SOI SSE SND SND SDPI SPN TESO TTI TDW RIG RIGP SLCA VTG VTNR WFT WTRR INT

Quarterly Special Report-

Energy Equity Markets Review.....	Page 5
2Q17 Energy IPOs	Page 10
Bond Markets (Fixed Income Review).....	Page 11
Credit Facilities (Market Analysis).....	Page 17
Private Equity Markets.....	Page 19
International Observations.....	Page 21
Canadian Observations.....	Page 22



Capitalize includes 14 modules tracking various energy finance events. Email Chris George at cgeorge@plsx.com for a demo.

Energy Equity Review

- Equity market reported total deal value of \$7.08 billion, down 51% from 1Q17 and 40% year-over-year
- Average equity follow on offering was \$323 million during 2Q17
- Largest corporate equity raise in Q2 was the IPO of NYSE-listed Antero Midstream's for \$875.4 million
 - Second and third were Gardner Denver's \$826 million IPO and Targa Resources' \$783.7 million follow on offering
- Citigroup most active equity bookrunner in Q2, followed by Wells Fargo, Credit Suisse and Goldman Sachs (who lead the most deals with 4).
- Barclays led banks with \$1.3 billion in deal value (\$1B in Midstream). BAML came in 2nd with \$745 million (\$600 million in Upstream)
- Credit Suisse led the IPO market, leading 3 of the 8 deals launched in 2Q17. The eight IPOs include: Hess Midstream Partners, Vantage Energy Partners, Select Energy Services, NCS Multstage Holdings, Antero Midstream, TPG Pace Energy Holdings, Gardner Denver Holdings and Solaris Oilfield Infrastructure

2Q17 Energy Sector Equity Summary

Follow-on energy equity issuances \$3.55 billion

Midstream was the most active sector in 2Q17, with 7 deals and total deal amount of \$2.2 billion



**Equity
Upstream**

\$1.11 billion (31%)
 QOQ -63%
 3 Deals



**Equity
Midstream**

\$2.22 billion (62%)
 QOQ -55%
 7 Deals



**Equity
Downstream**

No Deals



**Equity
Integrated**

No Deals



**Equity
Services**

\$0.23 billion (6%)
 QOQ -84%
 1 Deal

Top banks for each sector by allocated deal amount



\$0.60 billion
**54% Market
Share**



\$0.78 billion
**35% Market
Share**

**No Banking
Activity**

**No Banking
Activity**



\$0.06 billion
**27% Market
Share**

Note: Does not include at-the-market equity offerings.
 QOQ= Quarter On Quarter

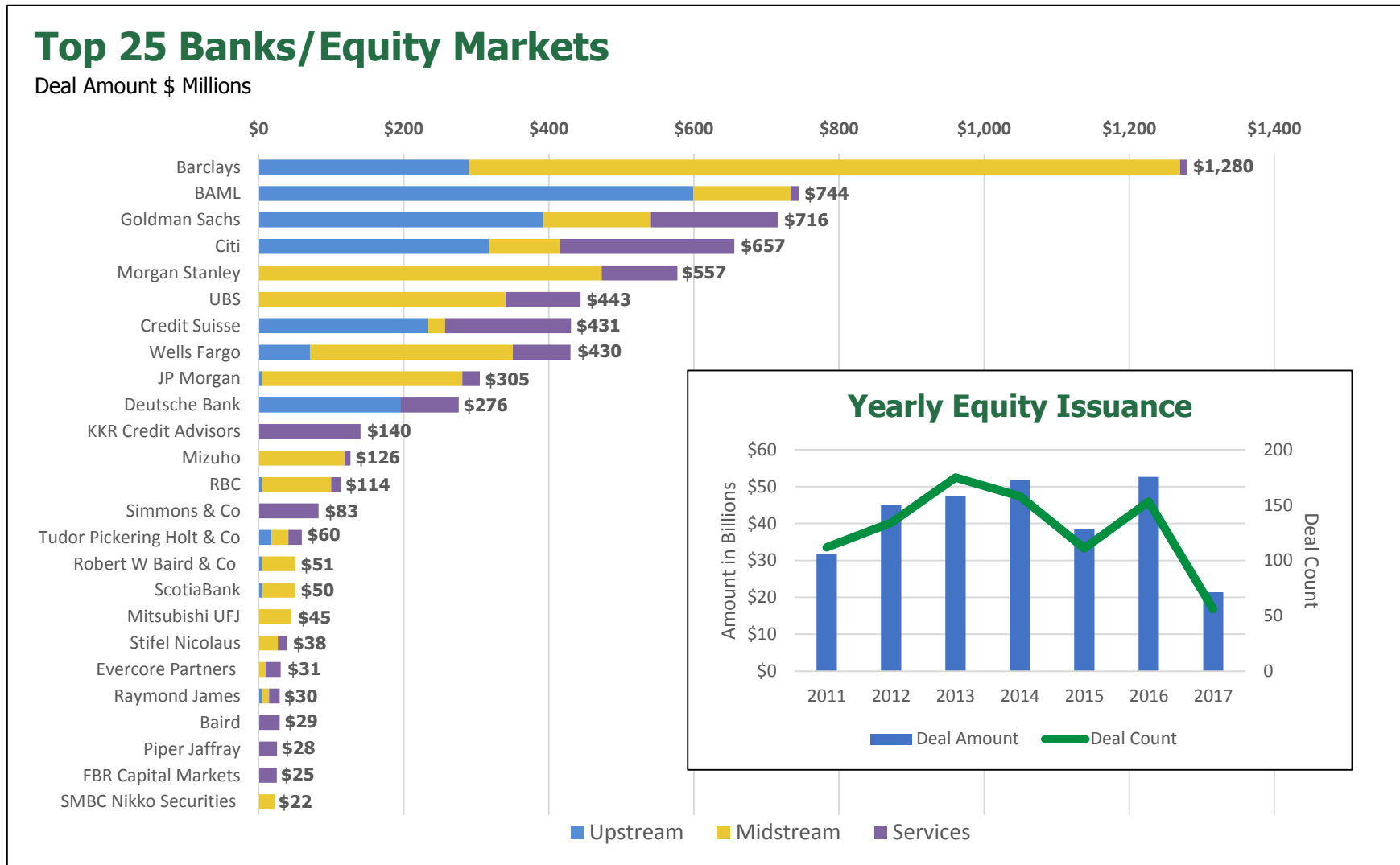
Energy Follow-on Top 11 Equity Issues 2Q17

The Top 11 deals resulted in \$3.55B, down 70% from 1Q17 and 2Q16, respectively

Announce Date	Company	Sector	Ticker	Deal Amount (\$MM)	Bank Fees (\$MM)	Underwriting Discount	Reoffer Discount	All In Rate	Lead Bookrunner	No. of Banks
05/30/17	Targa Resources Corp	Midstream	TRGP	\$ 784	\$ 6.12	0.78%	7.02%	7.75%	Barclays	1
05/22/17	RSP Permian Inc	Upstream	RSPP	\$ 594	\$ 12.00	2.02%	1.17%	3.17%	BAML	1
04/14/17	NuStar Energy LP	Midstream	NS	\$ 591	\$ 11.88	2.01%	1.66%	3.64%	UBS	13
04/26/17	NuStar Energy LP	Midstream	NS	\$ 350	\$ 11.03	3.15%	0.00%	0.00%	Wells Fargo	9
05/24/17	Kosmos Energy Ltd	Upstream	KOS	\$ 290	\$ 4.00	1.38%	-1.12%	0.28%	Barclays	1
06/30/17	Carrizo Oil & Gas Inc	Upstream	CRZO	\$ 228	\$ 4.99	2.19%	6.47%	8.52%	Goldman Sachs	18
04/07/17	C&J Energy Services Inc	Services	CJ	\$ 228	\$ 11.38	5.00%	10.81%	15.27%	Citi	11
06/07/17	NGL Energy Partners LP	Midstream	NGL	\$ 185	\$ 5.83	3.15%	0.00%	0.00%	UBS	4
06/26/17	Noble Midstream Partners LP	Midstream	NBLX	\$ 146	\$ 2.93	2.01%	0.00%	0.00%	N/A	1
05/10/17	GasLog Partners LP	Downstream	GLOP	\$ 125	\$ 3.94	3.15%	0.00%	0.00%	Morgan Stanley	6
06/09/17	USD Partners LP	Downstream	USDP	\$ 35	\$ 0.75	2.16%	9.02%	10.98%	Goldman Sachs	1
Top 11 Total Transactions:				\$ 3,554	\$ 75				Avg # of Banks:	6
2Q17 Total Follow-on Equity Issuance:				\$ 3,554	\$ 75					

Top 25 Equity Market Advisors & Facilitators

Citigroup participated in 58% of all equity deals in 2Q17 but Barclays was allocated the most

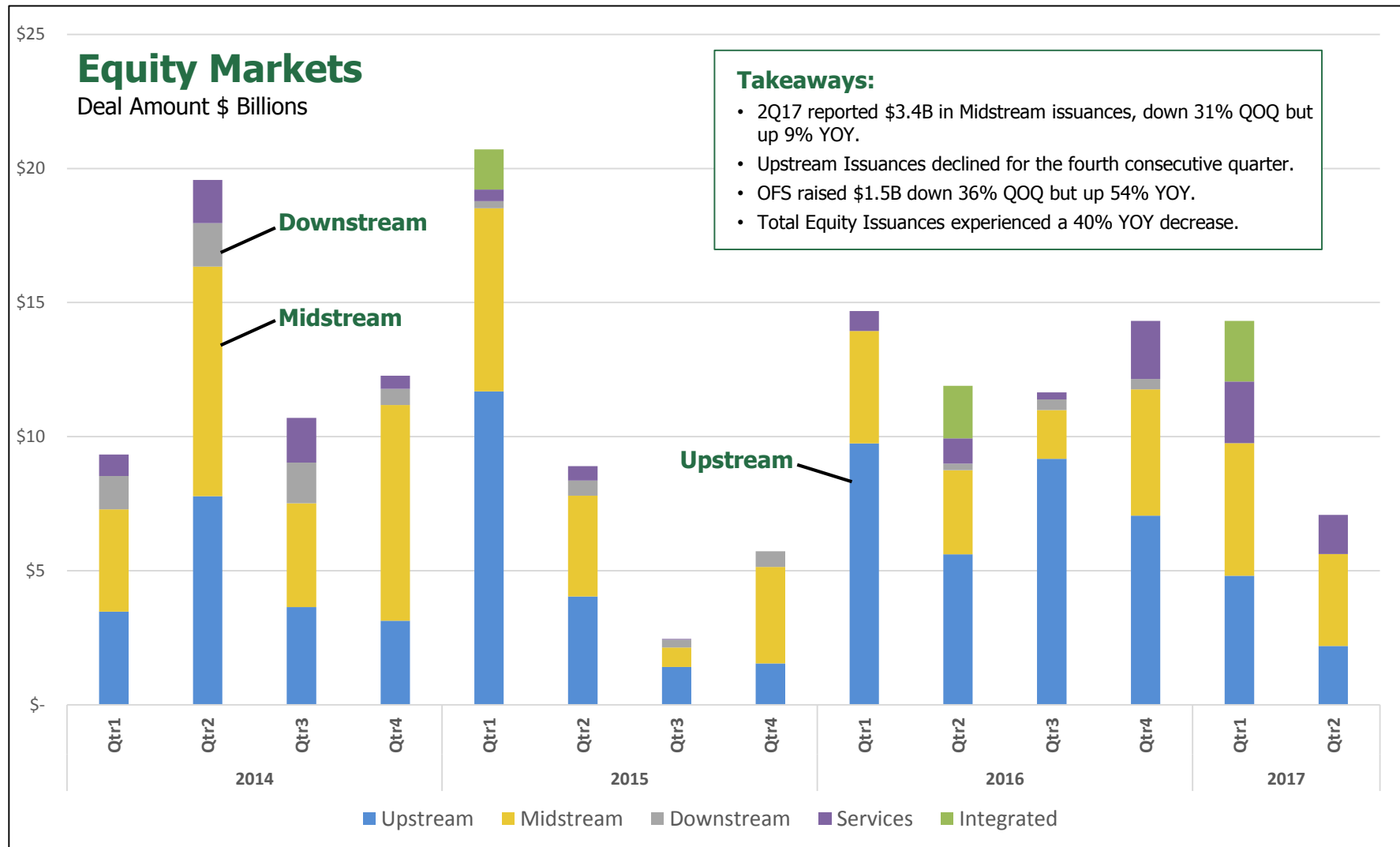


Note: Follow-on and IPO offerings.

Does not include at-the-market equity offerings.

U.S. Equity Deals by Quarter Q1 2014 to Q2 2017

Total transaction value decreased by a ~ 50% sequentially



Note: Follow-on and IPO offerings.

Does not include at-the-market equity offerings

QOQ= Quarter On Quarter

YOY = Year over Year.

2Q17 Energy IPOs

The IPO market continues to gain favor with 8 issuances this quarter: \$3.53B in transaction value is up 31% over 1Q17



IPO	Company	Sector	Ticker	Deal Amount (\$MM)	Bank Fees (\$MM)	Net Proceeds (\$MM)	Total Shares Issued (MM)	Public Reoffer Price Per Issue	Underwriting Discount	Lead Bookrunner*	No. of Banks
05/05/17	Antero Midstream GP	Midstream	AMGP	\$ 875	\$ 39.39	\$835.98	37.25	\$ 23.50	4.50%	Morgan Stanley (24.23%)	16
05/15/17	Gardner Denver Holdings Inc	Services	GDI	\$ 826	\$ 45.43	\$780.57	41.30	\$ 20.00	5.50%	Goldman Sachs (17.50%)	15
05/05/17	TPG Pace Energy Holdings Corp	Upstream	TPGE.UN	\$ 600	\$ 33.00	\$567.00	60.00	\$ 10.00	5.50%	Deutsche Bank (32.50%)	5
04/12/17	Vantage Energy Acquisition Corp	Upstream	VEAC	\$ 480	\$ 26.40	\$453.60	48.00	\$ 10.00	5.50%	Citi (40.00%)	3
04/06/17	Hess Midstream Partners LP	Midstream	HESM	\$ 340	\$ 20.40	\$319.54	14.78	\$ 23.00	6.00%	Goldman Sachs (20.00%)	12
05/01/17	NCS Multistage Holdings	Services	NCSM	\$ 162	\$ 10.09	\$151.41	9.50	\$ 17.00	6.25%	Credit Suisse (22.00%)	8
04/24/17	Select Energy Services LLC	Services	WTTR	\$ 122	\$ 7.61	\$114.19	8.70	\$ 14.00	6.25%	Credit Suisse (20.60%)	9
05/15/17	Solaris Oilfield Infrastructure	Services	SOI	\$ 121	\$ 7.27	\$113.93	10.10	\$ 12.00	6.00%	Credit Suisse (25.29%)	11
Totals:				\$ 3,526	\$ 190	\$ 3,336					

* Bank allocation percentage shown in parenthesis

Key Takeaways:

- Credit Suisse led the IPO market in 2Q17
- Lead banks took smaller allocation percentages when syndicating IPO deals in comparison to 1Q17
- 5.69% average underwriter discount (16 BPS lower than 1Q17 average)
- 8 IPOs saw an average of 10 bookrunners (21% higher than 1Q17 average)
- 25% - average allocation to lead bookrunner

Bond Markets

Energy Fixed Income Review

- 2Q17 bond market reported \$19.9 billion in deals, down 46% YOY and 27% from 1Q17
- Average principal amount was \$642 million in Q2, slightly down from 1Q17 average of \$679 million
- Wells Fargo was the most active bank, participating in 61% of all bond issuances
- PLS expects \$21.6 billion of bonds to mature in 2017, almost 80% coming due in 4Q17
- Investment Grade Bonds accounted for 51% of issuances during the quarter
- Petrobras and Canadian Natural were the most prolific issuers with \$4B and \$3B, respectively

2Q17 Energy Sector Bond Summary

\$19.9 billion in energy bond issuances

Midstream was the most active sector in Bond Issuances during 2Q17 with 15 deals raising \$8.9 billion. However, Upstream had the highest deal value with \$9.1B



Bonds Upstream
 \$9.1 billion (46%)
 QOQ +29%
 11 Deals



Bonds Midstream
 \$8.9 billion (44%)
 QOQ -22%
 15 Deals



Bonds Downstream
 \$1.3 billion (7%)
 QOQ 21%
 3 Deals



Bonds Integrated
 No Deals



Bonds Services
 \$0.63 billion (3%)
 QOQ -47%
 2 Deals

Top banks in the Bond Market by sector



\$1.17 billion
13% Market Share



\$1.43 billion
16% Market Share



BNP PARIBAS

\$0.14 billion
11% Market Share

No Banking Activity



\$0.38 billion
60% Market Share

Energy Top Bond Issues in 2Q17

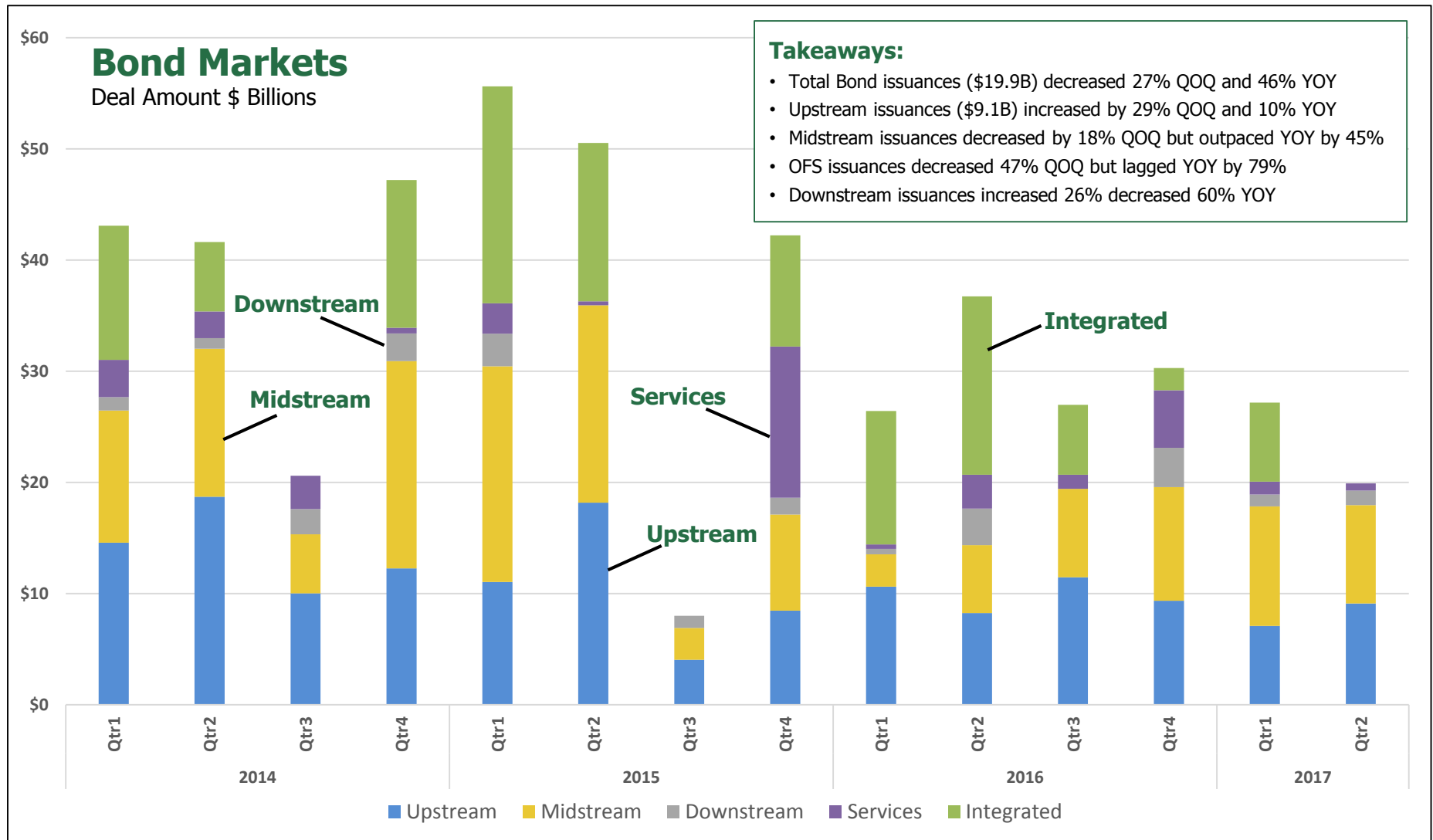
The Top 25 deals total \$18.6 billion, 93% of the total transaction value during the quarter

Announce Date	Company	Sector	Ticker	Deal Amount (\$MM)	Bank Fees (\$MM)	Coupon	Maturity	Underwriting Discount	Lead Bookrunner	No. of Banks	
05/17/17	Petroleo Brasileiro Petrobras SA	Upstream	PBR	\$ 2,000	\$ 6.00	7.375%	01/17/27	0.30%	BB Securities	6	
05/15/17	Cheniere Energy Inc	Midstream	LNG	\$ 1,500	\$ 30.00	5.125%	06/30/27	2.00%	RBC	23	
06/02/17	Williams Partners LP	Midstream	WPZ	\$ 1,450	\$ 9.43	3.750%	06/15/27	0.65%	Deutsche Bank	14	
05/25/17	Canadian Natural Resources	Upstream	CNQ	\$ 1,250	\$ 8.13	3.850%	06/01/27	0.65%	JP Morgan	13	
05/25/17	Canadian Natural Resources	Upstream	CNQ	\$ 1,000	\$ 6.00	2.950%	01/15/23	0.60%	JP Morgan	13	
05/17/17	Petroleo Brasileiro Petrobras SA	Upstream	PBR	\$ 1,000	\$ 3.00	7.250%	03/17/44	0.30%	BB Securities	6	
05/17/17	Petroleo Brasileiro Petrobras SA	Upstream	PBR	\$ 1,000	\$ 3.00	6.125%	01/17/22	0.30%	BB Securities	6	
05/25/17	Canadian Natural Resources	Upstream	CNQ	\$ 750	\$ 6.56	4.950%	06/01/47	0.88%	JP Morgan	13	
05/22/17	Chesapeake Energy Corp	Upstream	CHK	\$ 750	\$ 15.00	8.000%	06/15/27	2.00%	Citi	15	
04/05/17	Cimarex Energy Co	Upstream	XEC	\$ 750	\$ 4.88	3.90%	05/15/27	0.65%	JP Morgan	13	
05/30/17	PBF Energy Inc	Downstream	PBF	\$ 725	\$ 11.90	7.25%	06/15/25	1.64%	Citi	17	
06/28/17	Enbridge Inc	Midstream	ENB	\$ 700	\$ 4.20	2.90%	07/15/22	0.60%	JP Morgan	10	
06/28/17	Enbridge Inc	Midstream	ENB	\$ 700	\$ 4.55	3.70%	06/15/27	0.65%	JP Morgan	10	
04/21/17	NuStar Energy LP	Midstream	NS	\$ 550	\$ 5.50	5.625%	04/28/27	1.00%	Mizuho	13	
06/12/17	Enbridge Inc	Midstream	ENB	\$ 500	\$ 1.00	3M LIBOR + 70 bps	06/15/20	0.20%	BAML	1	
06/07/17	Atmos Energy Corp	Midstream	ATO	\$ 500	\$ 3.25	3.000%	06/15/27	0.65%	BNP Paribas	11	
05/23/17	TC Pipelines LP	Midstream	TCP	\$ 500	\$ 3.25	3.900%	05/25/27	0.65%	Mitsubishi UFJ	9	
05/05/17	EnLink Midstream Partners LP	Midstream	ENLK	\$ 500	\$ 4.38	5.450%	06/01/47	0.88%	Barclays	16	
05/05/17	Southern Company Gas	Midstream	Gas	\$ 450	\$ 3.94	4.400%	05/30/47	0.88%	BAML	11	
06/06/17	Spectra Energy Partners LP	Midstream	SEP	\$ 400	\$ 0.80	3M LIBOR + 70 bps	06/05/20	0.20%	BAML	1	
04/04/17	Exterran Corp	Services	EXTN	\$ 375	\$ 7.20	8.125%	05/01/25	1.92%	Wells Fargo	1	
05/11/17	Tallgrass Energy Partners LP	Midstream	TEP	\$ 350	\$ 7.00	5.50%	09/15/24	2.00%	Credit Suisse	7	
04/21/17	Phillips 66	Downstream	PSX	\$ 300	\$ 0.90	3M LIBOR + 65 bps	04/15/19	0.30%	Deutsche Bank	23	
04/21/17	Phillips 66	Downstream	PSX	\$ 300	\$ 1.05	3M LIBOR + 75 bps	04/15/20	0.35%	Deutsche Bank	23	
04/25/17	Bill Barrett Corp	Upstream	BBG	\$ 275	\$ 4.10	8.75%	06/15/25	1.49%	BAML	23	
Top 25 Issuances:				\$ 18,575	\$ 155					Avg # of Banks:	12
2Q17 Total Bond Issuances:				\$ 19,900							

Note: includes issuances registered with the SEC by foreign companies.

U.S. Energy Bond Deals by Quarter 1Q14 to 2Q17

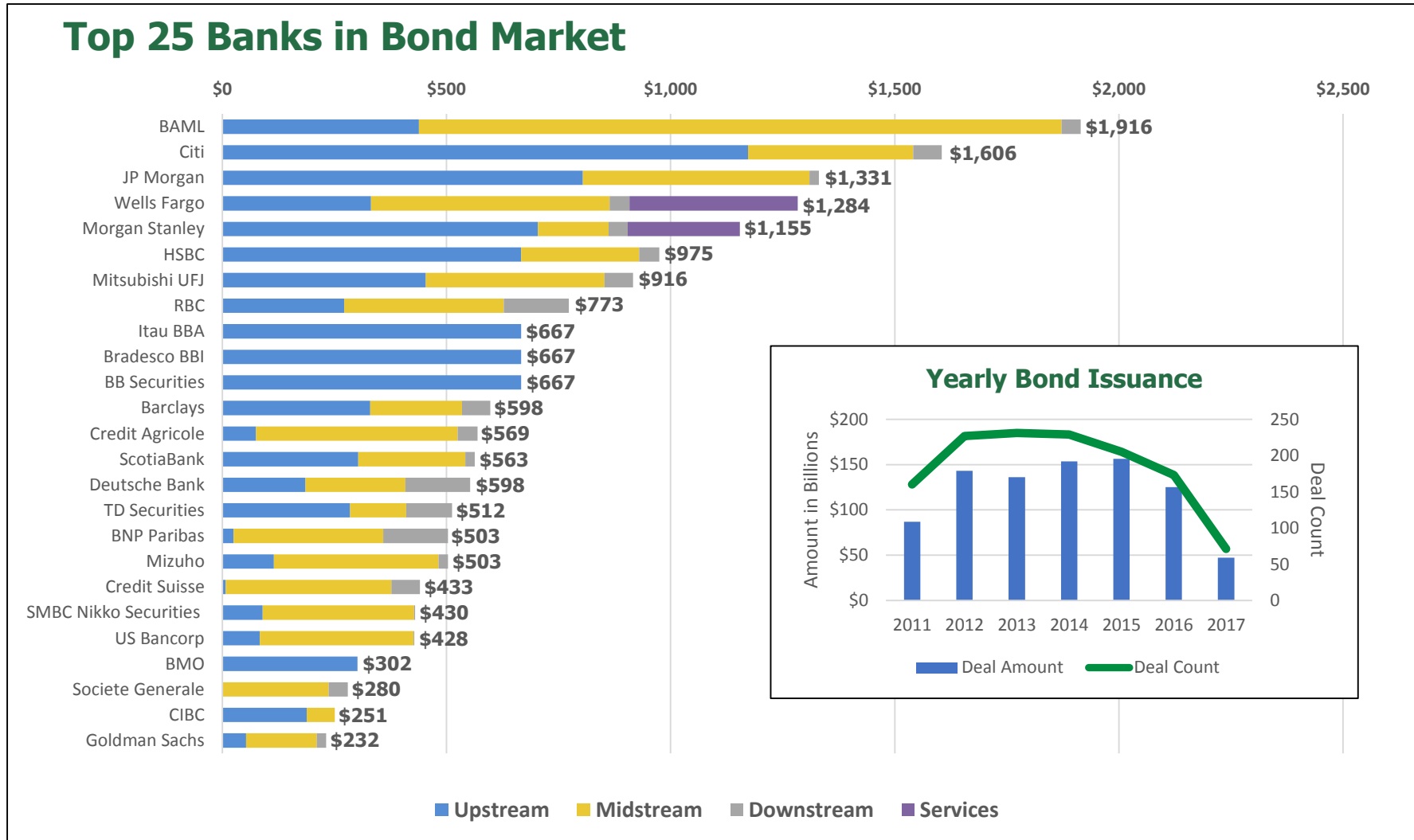
Upstream bond issuances in 2Q increased by 29% while OFS decreased by 47% QOQ



QOQ= Quarter On Quarter
YOY = Year over Year.

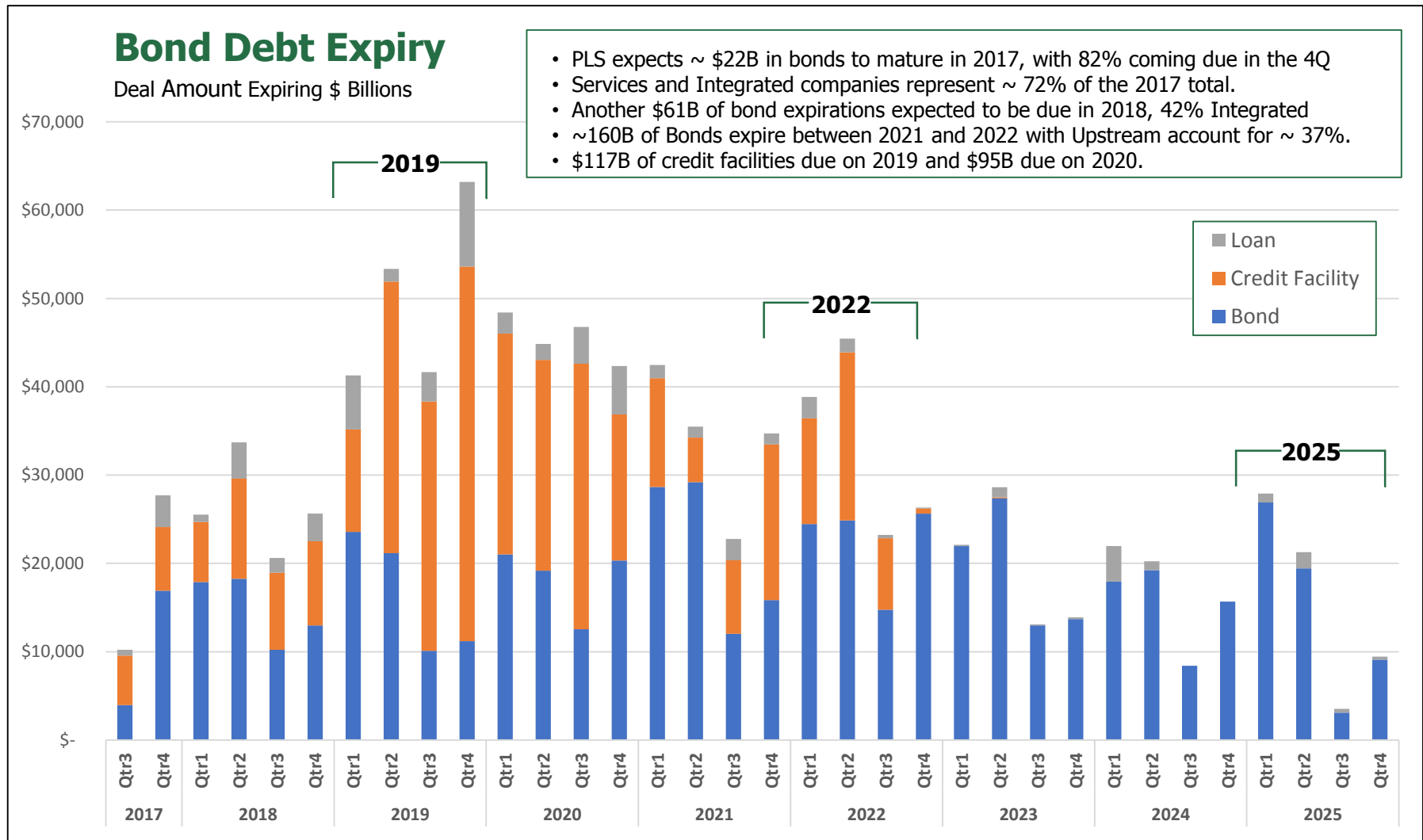
Top 25 Bond Market Advisors & Facilitators

Wells Fargo participated in 62% of all bond deals in 2Q17 but BAML won larger allocations



Bond Debt Expirations Schedule

Capitalize monitors over 400 companies within our coverage universe



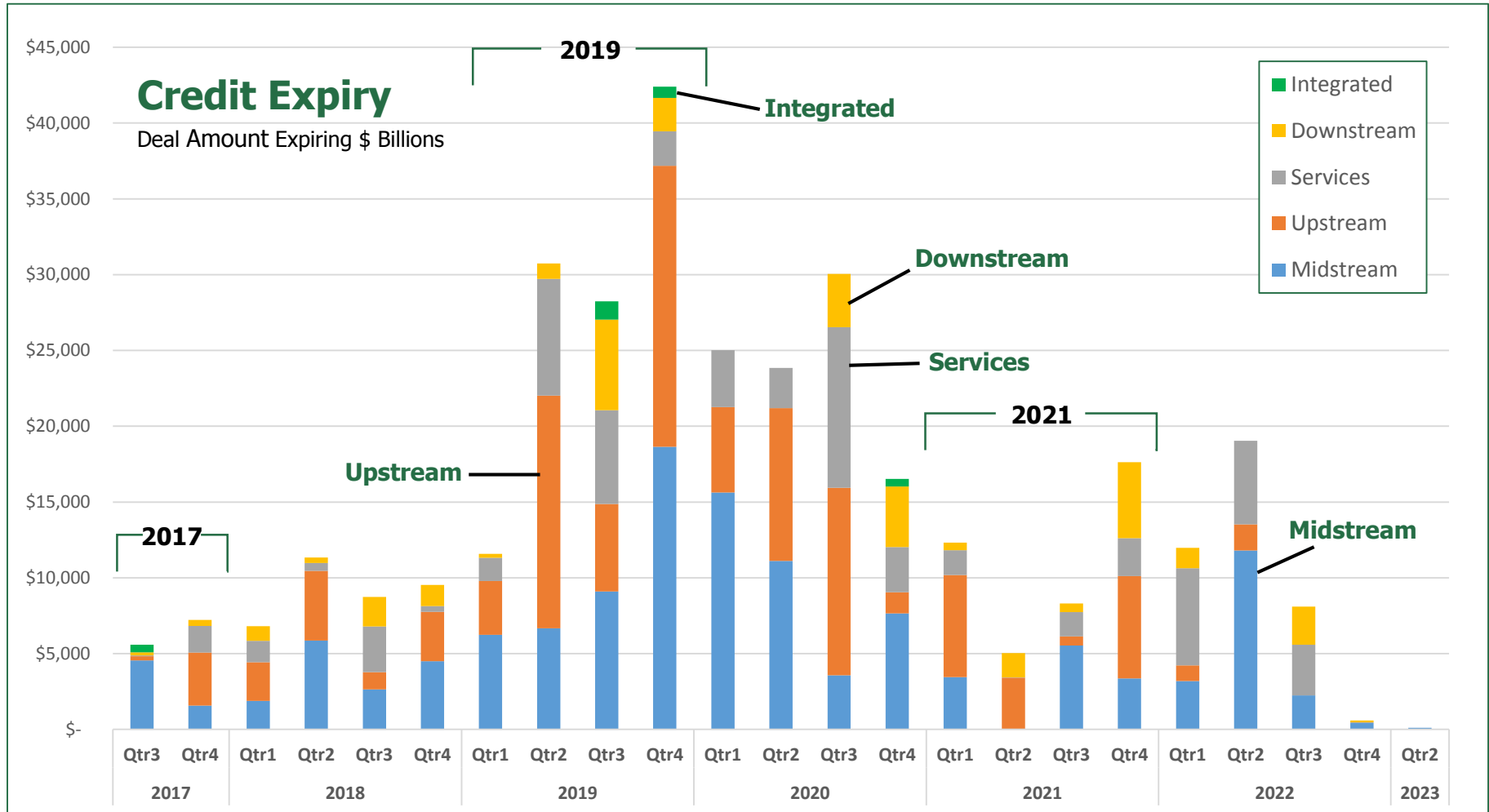
Credit

Energy Credit Facility Lending Review

- Over \$60 billion in facilities launched or amended in Q2 across 81 distinct agreements
 - 59% more borrowings than in 1Q17, 55% more than 4Q16
 - 67 of 81 were secured first lien agreements
- \$100B of Midstream Facilities are set to expire between 2017 - 2020
- Upstream & Midstream sectors accounted for 70% of facilities launched or amended in 2Q17
- OFS sector experienced a QOQ decrease while Integrated had no new or amended facilities

US Energy Credit Facility Expirations

Reporting Period: 3Q17 to 4Q23



Takeaways:

- Expirations will spike in 2019 (\$116B), majority are in Upstream (37%) and Midstream (35%) sectors
- Graphic presentation of credit facility deal expirations by quarter

Private Equity

Private Equity Markets

- In 2Q17, PLS identified at least 32 new portfolio commitments
- Upstream sector was the most active, accounting for 77% of P/E commitments
- Encap was most active P/E sponsor in 2Q17. Edge Natural Resources and Carnelian Energy Capital both closed 2nd funds of ~ \$600MM



- Select private equity backed companies with new mandates



Top Private Equity Commitments

2Q17 Snapshot – Top 10 Reported Commitments



Vintage	Company	Sponsor	Sector	Key Areas	Commitment (\$MM)
2017	HG Energy	Quantum Energy Partners	Upstream	Marcellus	\$1,500
2017	Chisholm Oil & Gas	Apollo Global Management	Upstream	Canadian, Garfield, Kingfisher, Logan	\$900
2017	Silverback Exploration II	EnCap Investments	Upstream	Permian	\$500
2017	Double Eagle Energy Holdings III	Apollo Global Management	Upstream	Powder River Basin, DJ Basin, Mid-Continent, Permian Basin, Eagle Ford	\$380
2017	Development Capital Resources	Ares Management	Upstream	North America	\$300
2017	Greenfield Midstream	EnCap Flatrock Midstream	Midstream	North America	\$300
2017	Staghorn Petroleum II	EnCap Investments LP	Upstream	Mississippian; Wolfberry; Bakken; Texas; Arkansas	\$300
2017	Valorem Energy	Kayne Anderson Capital Advisors	Upstream	Rockies and Mid-Continent	\$300
2017	Cardinal Midstream III	EnCap Flatrock Midstream	Midstream	North America	\$250
2017	Aspen Midstream	EnCap Flatrock Midstream	Midstream	North America	\$200

General Partner	2Q17 Commitments	Notes
Encap Flatrock Midstream	4	100% Midstream
EnCap Investments	3	100% Upstream
Quantum Energy Partners	2	100% Upstream
Kayne Anderson Capital Advisors	2	100% Upstream
Other Sponsors with 1 Commitment	21	75% Upstream
Total 2Q17 Commitments	32	71% Upstream

Select printout for some of the select larger private equity commitments. PLS Capitalize database offers significantly more granular data.



Capitalize Private Equity Statistics

- PLS tracks over 750+ private equity sponsors and over 2,000 of their P/E backed companies

For more details, call **713-600-0129**, email Chris George at cgeorge@plsx.com

www.plsx.com

PLS

International Capital Activity 2Q17

Observations from PLS International Capital Global Report

Private equity graduates to a larger world stage

- EIG backed Chrysaor paid \$3.0 billion for Shell's UK assets
- Carlyle Group & CVC Capital Partners form Neptune Oil & Gas, now buying Engie E&P
- Blackstone, HiTec Vision & Warburg Pincus back sizeable M&A in Q1
- Private equity-backed firms & former oil industry executives now eyeing energy assets in Southeast Asia

1Q17 did little to change supermajor reticence on big project spending

- Exxon, Chevron, Shell, BP & Total still spending 7% less this year at an aggregate of \$100.8B, or about half of their capex in 2013
- Megaprojects still not a major push, shorter time horizons favored
- Only Exxon raised full-year capex projection in Q1, to \$22B from \$19B
- Supermajors spending a combined \$10B in Permian Basin this year, up from nothing a few years ago, and involved in a combined \$5B in projects in Argentina's Vaca Muerta

Though a year away, Saudi Aramco IPO dominated equity headlines

- Saudi Arabia cut tax rate to 50% to optimize IPO value for potential investors
- Internal Aramco IPO team doesn't see \$2.0 trillion valuation that Saudi prince does
- Worldwide exchanges competing for listing- London, NYSE, Tokyo and more. Tadawul listing is a given

Trends taking shape & gaining speed in the quarter

- Strategic objectives emphasize 'sustainable profitability' – realignment of portfolios to propagate cost efficiency and profitability- Shell, BP, Chevron & more all shedding assets
- Capital deployed for new technology development- OFS companies and some E&Ps looking more closely at robotics & digitization
- Increased collaboration- to mitigate financial risk and share expertise



Canadian Capital Activity 2Q17

Observations from PLS Canadian Capital, PLS Canadian Coverage

Canadian capital markets focused on climbing interest rates, sliding equities

- Bank of Canada raises overnight rate by 25 basis points to 0.75%
- First increase in seven years comes amid cautious optimism for growth
- Largest banks follow by raising their prime rates 25 bps to 2.95%
- Oil sector concerned about cost of capital as oil prices remain constrained
- Canadian equity markets slide amid concern of interest rates, decline in oil stocks

Major midstream deals following pipeline consolidations

- TransCanada to raise up to \$1.0 billion in new equity
- TransCanada plans to invest \$1.5 billion through 2021 to expand Nova Gas Transmission system
- TC Pipelines issues \$500 million in senior debt to finance purchase in Iroquois Gas Transmission System
- Enbridge expected to offer \$1.4 billion in senior notes to refinance Spectra Energy debts

Weak oil prices weigh down smaller E&P firms

- Anterra Energy placed into receivership
- TSX-Venture listed Rooster Energy files for reorganization under Chapter 11
- Toronto Stock Exchange extends review process for Dundee Energy
- Bellatrix Exploration completes 5:1 reverse share split to keep listing
- Oil's recent decline threatens about \$19 billion in anticipated Canadian capital expenditures.

Canadian Oil Sands now focused on Canadian companies

- Cenovus Energy selling off its legacy portfolio of conventional assets to focus on Oil Sands
- CNRL sold an aggregate \$5.84 billion in debt to partially finance operations in Athabasca Oil Sands
- Growing oil sands production complicates OPEC plans to restrict global supplies, stabilize prices
- Canada 'open' to new Chinese capital after exit of majors from its oil sands



Canadian Capital Activity 2Q17 Continued

Observations from PLS Canadian Capital, PLS Canadian Coverage

Foreign capital exits the oil sands, domestic capital fills some of the gap

- CNRL pays Shell and Marathon Oil \$13 B for oil sands assets
- Cenovus doubles its size through \$18 B acquisition of Conoco's oil sands/ Deep Basin assets
- Chevron & BP reportedly mull multi-billion dollar oil sands sales to redeploy capital
- Market still recalibrating after downturn, Canada seems slower than US
- Canadians saw adequate investments in longer-term projects (oil sands)

Recuperation & revenue growth the major themes of Q1 report cards

- Suncor redeemed US\$1.3 B in notes as it shores up balance sheet ahead of 2 major projects
- Imperial spent \$255 MM less YOY but sees 37% revenue jump to \$7.1 B as oil prices recover
- Encana reversed a year-ago loss with USD \$431 MM profit as it gears up for growth this summer

Like the U.S., two Canadian OFS IPOs, but the soft market prompts timidity

- Fracking services provider Step Energy Services priced a \$100 MM offering, down from \$200 MM plan
- Peer Source Energy Services debuted after raising \$175 MM, down from initial \$300 MM target

O&G sector plans to invest twice as much in domestic LTO plays than oil sands

- Foreign investment now tops \$130 B in oil sands, more than doubled 2005's \$50 B investment
- 2017 improving. Canadian capital investment less oil sands, expected to rise 40% YOY to \$29 B
- Most of investments in shorter-cycle Duvernay, Montney akin to US capital magnets like the Permian



Capitalize

Opportunity is a reflection of information.

Capitalize is a powerful new product from PLS that brings transparency to a capital-intensive energy industry.

- Tracks All Industry Financings
- Equity Issuance
- Loans & Credit Facilities
- Bond Issuances
- Private Equity
- League Tables For Market Analysis
- Company & Bank Indexes
- Capital Markets News Index

The product allows borrowers and bankers to turn information into new business opportunities.

- Analyzes Market Activity
- Compare & Contrast Financings and Fees

For more details, call **713-600-0129**, email Chris George at cgeorge@plsx.com



Coming Soon 2H 2017
Credit Metrics for entire universe of companies.

- Capital Structure
- Quarterly Production
- Annual Reserves
- PV-10
- Financial Metrics

Capitalize

Analyze Market Activity.

www.plsx.com/capitalize



Opportunity is a reflection of information.

PLS' Global M&A Database is a powerful tool for tracking energy industry mergers and acquisitions.

- A user-friendly & highly accessible database
- Critical insight into deal metrics & analysis
- Stronger analysis & internal protocols
- Generate specific reports to suit individual needs
- Transparent & reliable data
- Continuously updated deal coverage
- Market insight & access to business intelligence

The product gives everyone in the oil & gas industry access to critical market information.

For more information or to schedule a demo, call **Ali Rizvi** at **713-600-0115** or email at **ali@plsx.com**.

Database includes Deals for Sale, MapIndex & Maps on Demand.



Global M&A Database

Deal Analysis Made Simple.

www.plsx.com/ma



Opportunity is a reflection
of information.

PetroScout is PLS' unique integrated E&P database that allows operators, bankers and oilfield service companies the ability to immediately track critical industry metrics including:

- Prospects For Sale** – Database of exploration deals for sale;
- Permits** – New drilling applications;
- Completions** – Well Information by operator and well name;
- Frac Index** – Searchable by frac job, size, well name and vendors;
- Frac Slides** – Searchable database of frac related industry presentations;
- DrillBits** – Quick abstracts analyzing market activity, capex, field results;
- Key Well Index** – PLS E&P content searchable by numerical data;
- Key Well Slides** – Industry presentations, searchable by numerical data;
- Well Volumes** – Individual well data by operator, lease, IP, cum;
- B-Factors** – Critical database of industry type curves;
- Corporate Intelligence** – Contact database of active E&P management teams, company metrics and key areas;
- MapIndex** – Platform allows quick portfolio & peer land positions.

For more information or to schedule a demo, call **Brad Jamison** at **713-600-0108** or email at **bjamison@plsx.com**.



PetroScout
The E&P Database

Bringing together all of PLS' relevant
E&P content into one module

PLS also offers QuickDecline a state of the art evaluation and economic tool that saves valuable time over traditional decline curve analysis software.

Internationally, PLS offers PetroWire a global product that tracks permits, projects, prospects, platforms, pipelines, petrochemical, power, plants, corporate partnerships and field production around the world.