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Mergers and Acquisitions Quarterly

Fourth Quarter 2019



U.S. M&A Activity

In Q4'19, total M&A volume decreased 5.1% YoY to 3,564 transactions while total transaction value increased 11.0% YoY to \$454 million. Compared to Q3'19, transaction volume declined 3.1% QoQ while transaction value increased 14.2% QoQ. In contrast to mid-2019, Q4'19 included multiple large transactions, resulting in 9.2% YoY growth for transactions greater than \$1 billion in value. Industrial and Real Estate outperformed all other sectors as strong economic fundamentals continue to support a compelling backdrop for corporate earnings and M&A activity. The Federal Reserve continues to be highly accommodative and committed to supporting U.S. competitiveness on a global scale. As a result, interest rates remained near historic lows, corporate earnings have flourished and consumer confidence remains robust. Equity markets finished the year at record highs with compelling strength as the S&P 500 rose 9.1% in Q4'19 and 31.5% for the full year, marking the best annual performance since 2013. This optimism has propelled a renewed appetite for M&A activity, underpinned by an extensive pipeline as buyers and sellers act opportunistically to capitalize on current market tailwinds. In addition, private equity fundraising remains highly active with funds now holding nearly \$1.6 trillion of dry powder reserves ⁽¹⁾, in addition to non-financial U.S. companies holding an estimated \$1.7 trillion of cash on hand. ⁽²⁾ This generous supply of capital, combined with a compelling economy and supportive financing conditions, will continue to drive fierce demand and strong valuations as buyers compete for quality assets. Thus, it remains an attractive environment for M&A activity.

U.S. M&A Activity By Value

	2015	2016	2017	2018	2019	Q4'18	Q4'19	YoY Change
Over \$1 billion	309	312	315	352	296	76	83	9.2%
\$500 million - \$1 billion	226	227	225	251	237	67	63	(6.0%)
\$250 million - \$500 million	350	339	342	371	343	102	85	(16.7%)
\$100 million - \$250 million	586	597	705	668	663	181	158	(12.7%)
Under \$100 million / not disclosed	12,432	13,155	15,106	14,504	12,868	3,331	3,175	(4.7%)
\$100 million - \$1 billion	1,162	1,163	1,272	1,290	1,243	350	306	(12.6%)
All Announced Transactions	13,903	14,630	16,693	16,146	14,407	3,757	3,564	(5.1%)
Aggregate Transaction Value (\$ in billions)	\$2,071	\$1,919	\$1,652	\$2,093	\$2,008	\$409	\$454	11.0%

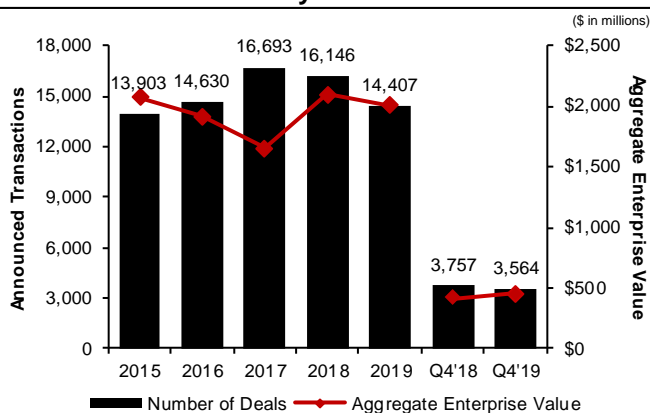
Source: Thomson Reuters
(1) Moody's; (2) Preqin

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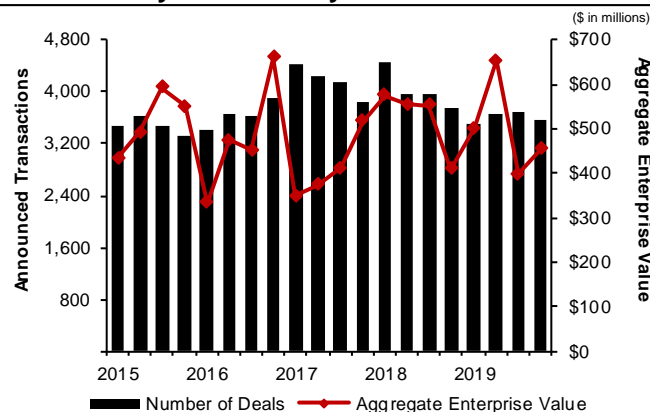
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U.S. Annual M&A Activity



U.S. Quarterly M&A Activity

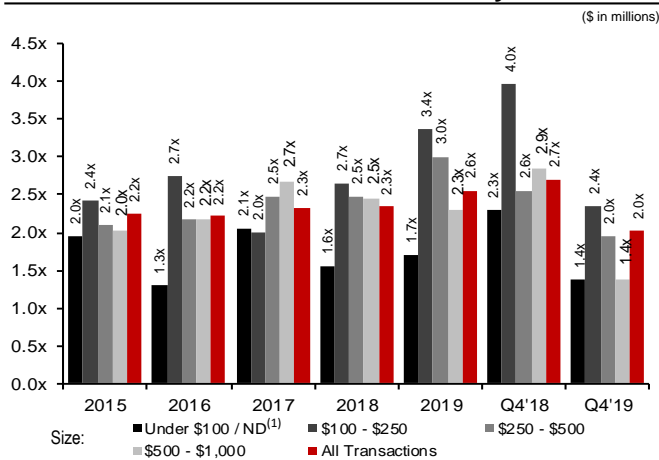


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U.S. M&A Valuation

Disclosed U.S. middle-market M&A valuation multiples (transactions under \$1 billion) declined 18.0% from 11.3x trailing EBITDA in Q4'18 to 9.3x in Q4'19. Trailing revenue multiples fell by 25.4% from 2.7x in Q4'18 to 2.0x in Q4'19. In Q4'19, transaction multiples remained strong but generally softened to levels more in line with the historical average. The one notable outlier was significant outperformance in transactions ranging from \$100 to \$250 million, as EV / EBITDA multiples in this group surged 33.6% YoY from 8.9x in Q4'18 to 11.9x in Q4'19. In contrast, multiples declined the most for larger transactions above \$250 million in value. Nonetheless, strength in underlying economic fundamentals coupled with low financing conditions and heightened buyer appetite continue to create an encouraging backdrop for M&A valuations. Record-breaking fundraising continues to increase pressure to deploy funds, providing a solid floor support for valuation multiples. Fortunately, corporate tax reform, a more relaxed regulatory environment and technological innovation continue to drive enhanced efficiency and accelerated growth for opportunistic buyers. Thus, market participants remain active on both sides of the market, deploying capital in new attractive investment opportunities as well as exiting successful portfolio companies.

Middle-Market M&A EV / Revenue Analysis



Transaction Size (\$ in millions)	2015	2016	2017	2018	2019	Q4'18	Q4'19	YoY Change
\$500 - \$1,000	2.0x	2.2x	2.7x	2.5x	2.3x	2.9x	1.4x	(51.4%)
\$250 - \$500	2.1x	2.2x	2.5x	2.5x	3.0x	2.6x	2.0x	(23.4%)
\$100 - \$250	2.4x	2.7x	2.0x	2.7x	3.4x	4.0x	2.4x	(40.5%)
Under \$100 / ND ⁽¹⁾	2.0x	1.3x	2.1x	1.6x	1.7x	2.3x	1.4x	(40.3%)
All Transactions	2.2x	2.2x	2.3x	2.3x	2.6x	2.7x	2.0x	(25.4%)

Source: Thomson Reuters

(1) Analysis for transactions under \$100 million can show distortion because of the select sample size of published M&A EV / EBITDA multiples

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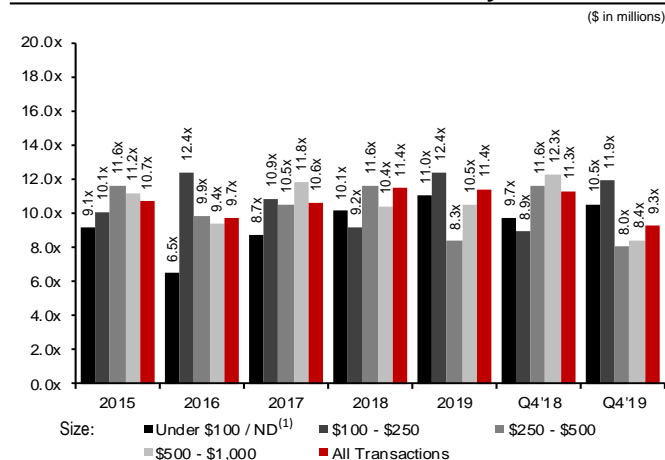
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Analysis of Premiums Paid

	2015	2016	2017	2018	2019	Q4'18	Q4'19
1-Day Premium							
Average	31.7%	32.4%	28.7%	26.0%	30.2%	26.7%	27.3%
Median	27.2%	27.6%	22.5%	21.2%	25.9%	23.6%	23.4%
5-Day Premium							
Average	31.1%	33.7%	29.0%	26.3%	31.1%	27.9%	29.0%
Median	27.7%	31.2%	23.9%	23.0%	27.1%	24.2%	24.7%
30-Day Premium							
Average	34.4%	36.1%	30.8%	27.9%	32.7%	27.9%	31.6%
Median	29.6%	31.7%	25.6%	23.3%	28.5%	22.7%	27.6%

Public equity markets began 2019 with a substantial rebound that continued through Q4. The Dow Jones increased 24.9%, the S&P 500 climbed 31.5% and the Nasdaq Composite surged 36.4% over the course of 2019. Average transaction premiums paid (30-day) increased to 31.6% in Q4'19 as compared to 27.9% in Q4'18 demonstrating the willingness of buyers to pay up for quality assets.

Middle-Market M&A EV / EBITDA Analysis



Transaction Size (\$ in millions)	2015	2016	2017	2018	2019	Q4'18	Q4'19	YoY Change
\$500 - \$1,000	11.2x	9.4x	11.8x	10.4x	10.5x	12.3x	8.4x	(31.2%)
\$250 - \$500	11.6x	9.9x	10.5x	11.6x	8.3x	11.6x	8.0x	(30.8%)
\$100 - \$250	10.1x	12.4x	10.9x	9.2x	12.4x	8.9x	11.9x	33.6%
Under \$100 / ND ⁽¹⁾	9.1x	6.5x	8.7x	10.1x	11.0x	9.7x	10.5x	8.4%
All Transactions	10.7x	9.7x	10.6x	11.4x	11.4x	11.3x	9.3x	(18.0%)

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Activity by Industry

In Q4'19, Industrial and Real Estate M&A activity increased as compared Q4'18, whereas the Consumer, Energy, Healthcare and Technology sectors saw slight declines in activity. Consumer M&A remains a significant benefactor of robust consumer spending coupled with ever-changing preferences that propel companies to constantly reevaluate and reinvent their product portfolio. Q4'19 included the \$16.8 billion acquisition of Tiffany & Co. by French multinational luxury goods conglomerate LVMH, adding another premier brand to the LVMH portfolio. Energy M&A activity has benefited from the stabilization of commodity prices along with a surge in interest for environmental assets with further consolidation expected in as leading platforms look to add scale. Healthcare M&A activity continues to be driven by demand for service-oriented providers who can not only improve patient care but also drive productivity across the value chain and maximize shareholder returns on approved therapies.

Consumer

	2015	2016	2017	2018	2019	Q4'18	Q4'19
Median EV/Revenue	1.7x	1.4x	1.4x	1.4x	1.6x	1.2x	1.2x
Median EV/EBITDA	9.5x	10.8x	10.2x	10.8x	11.5x	10.4x	16.8x
Transaction Count	2,856	3,151	3,854	3,418	3,031	757	745

Prominent Announced Deals Q4'19 (Announced Date)

- \$16.8B LVMH Moët Hennessy Louis Vuitton SE Inc. to acquire Tiffany & Co. (10/28)
- \$4.1B Viagogo AG to acquire StubHub (11/25)

Energy

	2015	2016	2017	2018	2019	Q4'18	Q4'19
Median EV/Revenue	3.8x	3.2x	3.1x	3.1x	2.6x	3.9x	2.5x
Median EV/EBITDA	10.4x	10.8x	10.4x	10.9x	11.1x	11.0x	9.2x
Transaction Count	869	1,024	953	996	779	238	201

Prominent Announced Deals Q4'19 (Announced Date)

- \$2.6B WPX Energy Inc. to acquire Felix Energy II LLC (12/16)
- \$3.9B Apergy Corp. to acquire Ecolab's Nalco ChampionX business (12/19)

Healthcare

	2015	2016	2017	2018	2019	Q4'18	Q4'19
Median EV/Revenue	3.0x	2.9x	3.1x	2.5x	4.3x	4.0x	5.0x
Median EV/EBITDA	10.5x	12.0x	11.0x	11.5x	14.7x	16.5x	15.1x
Transaction Count	1,399	1,482	1,603	1,609	1,358	420	316

Prominent Announced Deals Q4'19 (Announced Date)

- \$33.5B International Flavors & Fragrances to acquire Dupont-Nutrition & Biosciences (11/24)
- \$9.7B Novartis to acquire The Medicines Company (12/15)

Source: Thomson Reuters

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Industrial M&A activity remains strong as companies position for resilient performance through the next market cycle by increasing efficiency and optimizing their ability to swiftly scale operations up or down. Furthermore, as manufacturing embraces the digital age, manufacturers are now crossing a threshold as they seek new ways to commercialize not only their traditional products, but also new digital and IoT-enabled services stacked upon those products. Real estate M&A activity was aided by a rebound in U.S. homebuilding, as permits for future home construction jumped in October to the highest since 2005, pointing to strength in the housing market amid historically low interest rates. Likewise, REIT dividend income remains very attractive relative to alternative income investments. Technology M&A remains strong, driven in part by increased interest in consolidation across financial technology as market leaders pursue add-on opportunities to improve decision-making capabilities and further optimize B2B transactions.

Industrial

	2015	2016	2017	2018	2019	Q4'18	Q4'19
Median EV/Revenue	1.3x	1.0x	1.6x	1.6x	1.2x	2.3x	1.2x
Median EV/EBITDA	10.3x	8.4x	10.3x	11.3x	9.4x	10.8x	8.6x
Transaction Count	2,277	2,425	2,609	2,473	2,284	574	601

Prominent Announced Deals Q4'19 (Announced Date)

- \$1.7B Leidos Holdings Inc. to acquire Dynetics Inc. (12/17)
- \$1.1B Culligan International Co. to acquire AquaVenture Holdings Ltd. (12/23)

Real Estate

	2015	2016	2017	2018	2019	Q4'18	Q4'19
Median EV/Revenue	8.2x	5.0x	5.4x	6.6x	3.8x	7.2x	6.4x
Median EV/EBITDA	13.6x	13.6x	13.0x	12.7x	13.8x	14.3x	11.2x
Transaction Count	1,397	1,430	1,804	1,414	1,256	300	303

Prominent Announced Deals Q4'19 (Announced Date)

- \$12.2B Prologis, Inc. to acquire Liberty Property Trust (10/27)
- \$8.0B Softbank Group Corp. to acquire 80% stake in We Co. (10/22)

Technology

	2015	2016	2017	2018	2019	Q4'18	Q4'19
Median EV/Revenue	2.1x	2.1x	2.2x	2.1x	2.5x	2.5x	1.6x
Median EV/EBITDA	11.1x	9.0x	10.0x	10.8x	9.5x	10.7x	7.3x
Transaction Count	3,633	3,619	4,155	4,524	3,994	1,066	974

Prominent Announced Deals Q4'19 (Announced Date)

- \$33.4B Xerox Holdings to acquire HP Inc. (11/06)
- \$8.8B Digital Realty Trust to acquire Interxion Holdings NV (10/29)

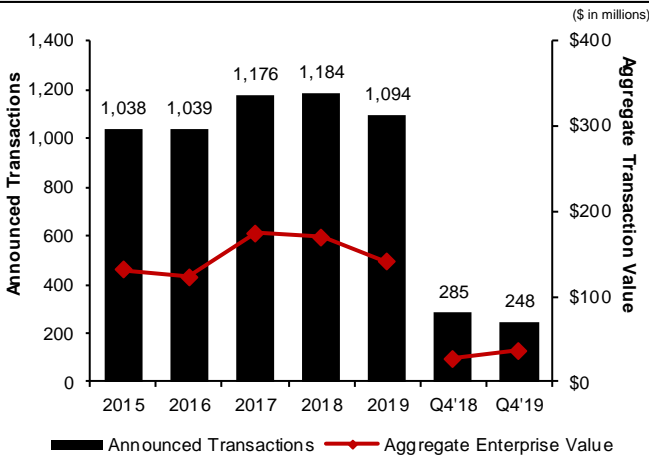
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Leveraged Buyout Activity

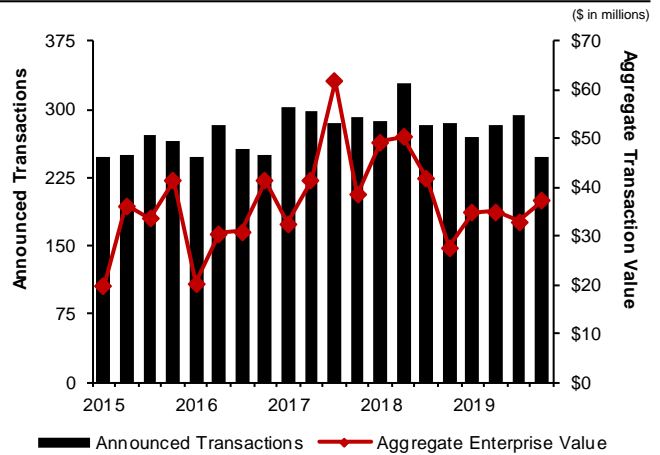
Financial sponsors announced 248 leveraged buyouts (LBOs) comprising \$37.3 billion in Q4'19 representing a 13.0% decline YoY in volume but a 34.1% increase in aggregate transaction value. Lenders remain highly supportive with YTD '19 middle-market LBOs averaging 5.2x total leverage to trailing EBITDA, versus a 5.5x average in 2018. Robust leverage multiples can be attributed to a limited deal supply and a rise in competition among credit funds. Historically low interest rates continue to keep borrowing costs in check and help drive greater free cash flow. As a result, private equity remains a compelling investment for institutional capital who continue to benefit from these attractive dynamics.

The supply of capital for financial sponsors seems to be limitless as investors continue to experience outsized returns. This massive deployment of capital and attractive returns has led to a proliferation of new funds often started by partners of larger firms. Large institutional investors such as insurance companies and pension funds have poured capital into these new funds based on previous success with the partners. Institutional investors have the opportunity to directly invest alongside financial sponsors in 'sidecar' arrangements that avoid the typical 2 & 20 cost structure on fund investments. This structure allows for significant additional capital deployment while allowing the financial sponsor to pursue larger transactions.

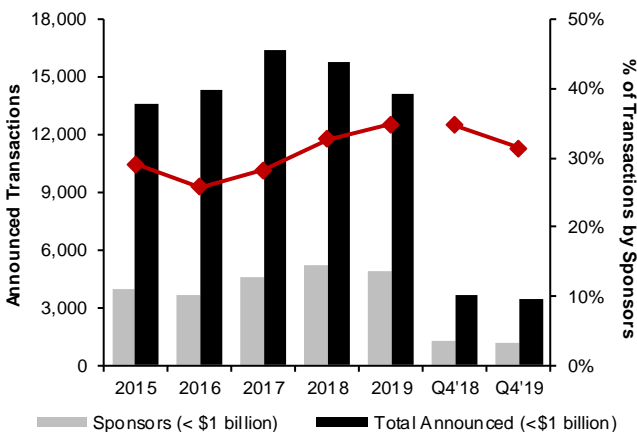
Annual LBO Activity



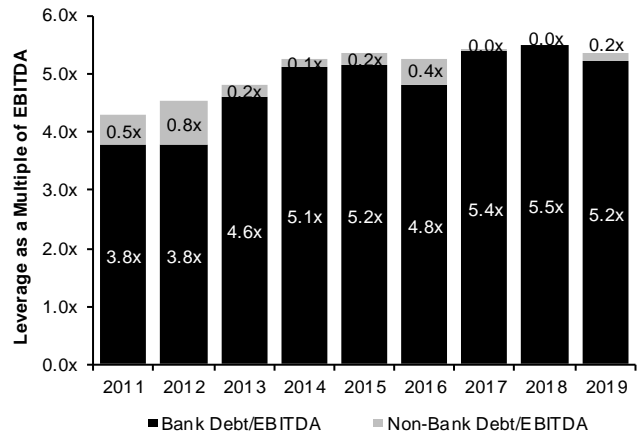
Quarterly LBO Activity



Middle-Market Deals Conducted by Sponsors



Leverage Multiples of Middle-Market LBOs



Sources: Thomson Reuters, Standard & Poor's Leveraged Quarterly Review, Pitchbook

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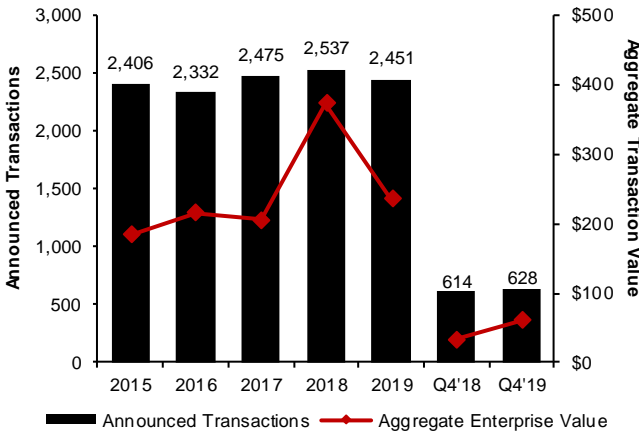
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U.S. / Foreign Cross-Border M&A Activity

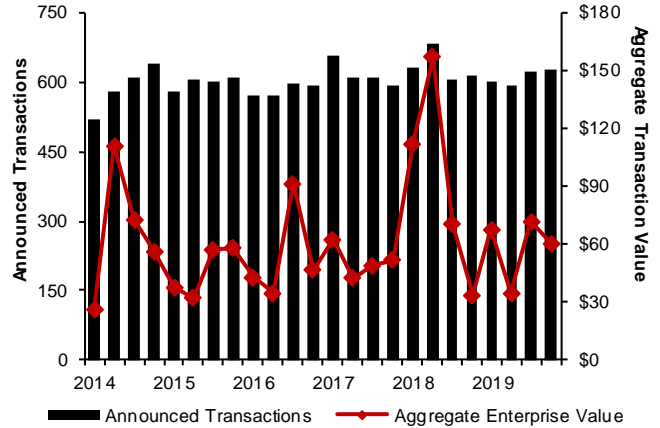
U.S. acquisition of foreign targets increased 2.3% in volume versus Q4'18 with aggregate enterprise value surging 79.5% to \$60.5 billion in Q4'19. This accounted for 17.6% of total U.S. deal volume and 13.3% of total U.S. deal value. Corporate executives are now acting with renewed optimism and willingness after months of postponing large deals due to geopolitical uncertainty. Globalization continues to be the top driver of cross-border M&A as companies seek to penetrate new markets, technologies, capabilities and products in order to drive growth, innovation and transformation. With proper execution, cross-border transactions have the potential to opportunistically create new and maintain existing competitive advantages on a global scale.

Cross-border M&A continues to be very attractive for ambitious buyers who seek expedited time to market, increased access, scale and brand recognition. In addition, cross-border M&A can be used to mitigate competitive pressures from abroad. Notable Q4 cross-border transactions include Viagogo AG's \$4.1 billion acquisition of Stubhub, along with LVMH's \$16.8 billion acquisition of Tiffany & Co. These transactions, like many cross-border deals, brought immediate access to new geographies and customers. Furthermore, the U.S. market remains highly attractive on a global scale, drawing strong interest from a diverse group of well-funded foreign buyers looking to expand market presence in North America.

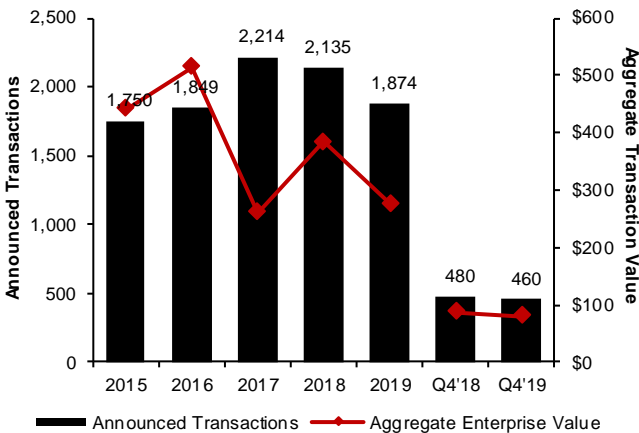
Annual U.S. Acquisitions of Foreign Targets



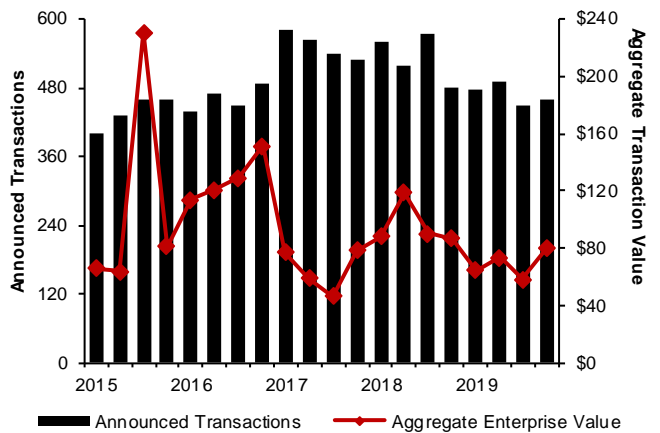
Quarterly U.S. Acquisitions of Foreign Targets



Annual Foreign Acquisitions of U.S. Targets



Quarterly Foreign Acquisitions of U.S. Targets



Source: Thomson Reuters

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