

JANUARY 2018

2018 Global M&A Outlook

Navigating consolidation and disruption

J.P.Morgan

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1. Executive summary

2017 – The year in review

The global M&A market remained strong in 2017 with announced transaction volumes reaching \$3.7 trillion. It was the fifth most active year on record in terms of volumes, vying with 2006 (\$3.9 trillion) and 2016 (\$3.8 trillion), the third and fourth best M&A markets. Total volume declined 4% from 2016, mainly due to a 5% decrease in the number of megadeals of over \$10 billion in size. Despite a slight decrease in overall volume, total deal count (for transactions greater than \$250mm in size) remained roughly consistent with 2016, with 2,183 and 2,197 deals announced globally in 2017 and 2016, respectively. North America targeted volume accounted for 44% of global volume compared to 48% in 2016, while EMEA targeted activity represented 28% of volume, an increase from 26% in 2016.

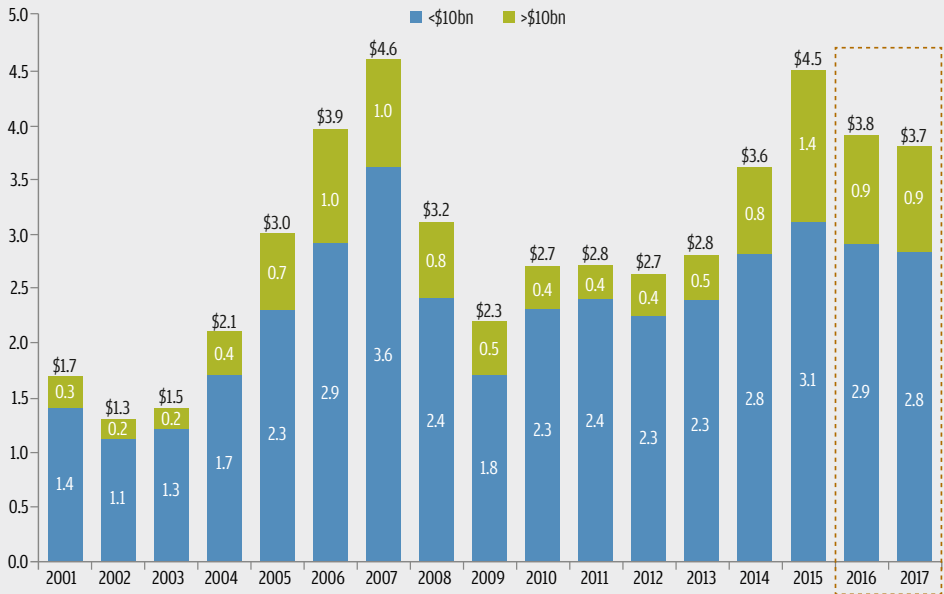
The M&A market in 2017 maintained its momentum. Companies across sectors leveraged M&A to boost growth and access new markets while benefiting from a continued low cost of capital. Notable transactions include Broadcom's proposed merger with Qualcomm, Disney's acquisition of Twenty-First Century Fox, CVS Health's merger with Aetna, United Technologies' acquisition of Rockwell Collins, the Bain Capital-led consortium's acquisition of Toshiba Memory, Discovery Communications' acquisition of Scripps Networks Interactive, Alstom's merger with Siemens' Mobility division and Amazon's acquisition of Whole Foods.

Cross-border M&A remained strong, accounting for 30% of total volume despite China putting new measures in place to curb outbound investments, resulting in a 32% decline in outbound Chinese M&A activity. Cross-border M&A had been 36% of total volume in 2016 and 31% in 2015.

The decline in megadeals reflected continued regulatory uncertainty as evidenced by a number of key transactions. AT&T's acquisition of Time Warner was officially contested by the U.S. Department of Justice, Bayer's acquisition of Monsanto is going through a two-year approval process, and T-Mobile's merger with Sprint faced anticipated antitrust constraints that may have contributed to calling off merger discussions.

The year ended with U.S. equity markets experiencing an unprecedented rally, achieving record-setting price levels and valuations. The approval of U.S. tax reform in late December drove additional gains across sectors and set the scene for an active market in 2018.

Global M&A volumes 2001-2017 (US\$tn)



Source: Dealogic as of 01/04/18

2017 takeaways

- **A resilient M&A market:** The 2017 global M&A market posted \$3.7 trillion in announced volumes, notwithstanding substantial global geopolitical uncertainty
- **Cross-border activity:** Cross-border transactions accounted for 30% of overall volume, meaningfully lower than 36% in 2016 and roughly in line with 31% in 2015
- **Megadeals slow down:** The number of \$10+ billion deals was down 5% (35 deals in 2017 versus 37 deals in 2016), in part reflecting an uncertain regulatory environment
- **Transformative and disruptive deals:** A number of highly strategic transactions occurred in 2017, as companies looked for opportunities to innovate core business models and mitigate technology disruption
- **Material level of withdrawals:** The volume of withdrawn deals in 2017 was \$658 billion, 23% lower than 2016 and 15% higher than 2015 volume, partly reflecting continued pressure from regulators
- **U.S. tax reform:** The sweeping tax reform bill Congress passed in December 2017 lowered the U.S. corporate tax rate to 21%, and may lead to U.S. companies to change some behaviors, including repatriating cash to buy other U.S. assets and selling rather than spinning off some subsidiaries
- **Leading sectors:** Diversified industries was the most active sector by dollar volume in 2017, followed by technology, real estate and healthcare

2018 – The year ahead

We expect solid GDP growth in all major economies and healthy equity and debt markets to continue to provide companies with confidence to pursue innovative and transformative M&A transactions. Shareholders have demonstrated receptivity to smart and synergistic strategic deals, motivating boards to look for initiatives to bolster a modest organic growth outlook and drive shareholder value.

The rate of technology-driven changes will continue to accelerate and disrupt industries. M&A will be instrumental as companies look to acquire technologies, capabilities and scale needed to differentiate and compete.

At the same time, U.S. companies are expecting more clarity on potentially pro-business policy changes and are focusing more on long-term fundamentals. While several aspects of U.S. regulatory reform remain open, opportunities from the passing of U.S. tax reform are expected to positively impact M&A activity.

Alongside regulatory uncertainty, the greatest threat to M&A activity is equity market valuations, which ended 2017 at all-time highs. Investors continue to be very focused on the risk of overpaying for assets. The likely result is a larger stock component in deal offerings to bring some balance to valuations.

In addition, we expect increased activity from private equity funds, which, notwithstanding a record \$1.0 trillion in “dry powder” capital available for investment purposes, did not feature prominently in the 2017 M&A market. These funds are likely to come under pressure to deploy their substantial available capital in the months ahead. This pressure will likely be partially offset by the impact of tax reform, given the limitations on interest tax deductibility.

2018 key themes
<ul style="list-style-type: none">• Active M&A environment continues: We expect strong deal volume in 2018 as companies continue to look for opportunities to bolster modest organic growth• Sector consolidation: Continued sector consolidation fueled by strong equity currency• Disruption driving M&A: Rate of technological change accelerates disruption across sectors and drives cross-sector M&A• Regulatory and geopolitical challenges will remain: Efforts by the U.S. Department of Justice to block AT&T’s acquisition of Time Warner, coupled with increasing scrutiny around Chinese investments in the U.S., demonstrates that the regulatory environment may remain challenging• U.S. tax reform: U.S. companies will benefit from a lower tax rate and the ability to repatriate cash to the U.S.• Private equity activity: Private equity funds will actively be seeking to deploy capital• Return of activism: The resurgence of shareholder activism, particularly from campaigns targeting large-cap companies and those outside of North America

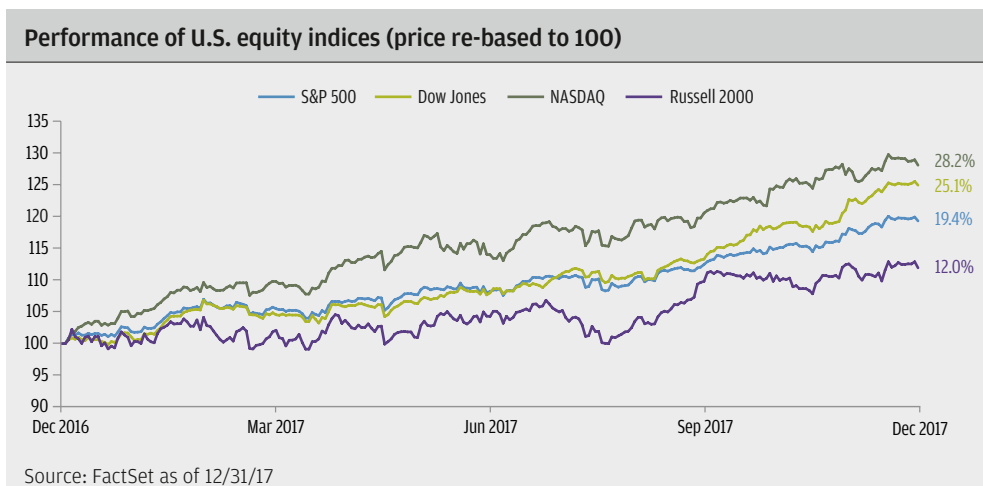
2. Investor confidence will continue fueling M&A activity

Over the course of 2017, the second longest bull market in U.S. history steadily continued its march upward, with major indices repeatedly reaching all-time highs. Since March 9, 2009, major equity indices have risen substantially, with strong performances throughout 2017 including: Dow Jones +25%, S&P 500 +19% and Nasdaq +28%. Concurrently, market volatility decreased to historic lows during 2017, with the VIX reaching an all-time low of 9.19 on October 5. The confluence of these factors, strong and rising valuations and depressed volatility, has served as a constructive backdrop to strategic M&A around the globe.

Major U.S. stock indices achieved record valuations during 2017

Throughout 2017, equities across industries in the U.S. performed exceedingly well, with nine out of ten sectors achieving positive returns. Strong stock price performance was principally driven by several factors:

- Strong corporate earnings growth across sectors, with every sector apart from energy generating positive returns
- Historically low interest rates, despite increases by the Federal Reserve Board in March, June and December
- Strengthening economy driven by an unemployment rate of 4.1% in December (the lowest rate in 17 years) and an improving GDP growth backdrop (Q1: 1.2%, Q2: 3.1%, Q3: 3.0% and estimated 2.8% for Q4 to be reported in January 2018)
- Increasing consumer and business confidence: University of Michigan Index of Consumer Sentiment hit its highest level in December 2017 since January of 2004



Key index metrics				
	S&P 500	Dow Jones	NASDAQ	Russell 2000
# of all-time highs in 2017	62	71	72	31
Current NTM P/E	18.2x	18.2x	22.5x	24.2x
% growth over NTM P/E as of 12/31/16	8.5%	10.6%	12.6%	2.7%

Source: FactSet as of 12/31/17

Summary of S&P 500 sector performance										
	Consumer Disc.	Consumer Staples	Energy	Financials	Healthcare	Industrials	Info Tech	Materials	Real Estate	Utilities
Index return since 12/31/16	13%	2%	(10%)	14%	18%	13%	35%	18%	5%	13%
Current NTM P/E	21.8x	20.0x	25.7x	14.6x	16.6x	19.6x	18.7x	18.3x	17.9x	17.4x
% growth over NTM P/E as of 12/31/16	17%	5%	(22%)	6%	14%	9%	16%	10%	3%	2%

Source: FactSet as of 12/31/17

Consolidation themes / sectors

In 2017, strategic acquirors drove 78% of M&A deals, in line with 79% in 2016. Strategics focused on sector consolidating, highly synergistic (revenue and cost) transactions. Key consolidation transactions are detailed in the table below:

Key consolidation transactions announced in 2017					
Sector	Ann. date	Acquiror	Target	Consideration	Deal size (US\$bn)
Consumer/Retail	01/16/17	Essilor International	Luxottica Group	Stock	25.6
	02/02/17	Mead Johnson Nutrition	Reckitt Benckiser	Cash	17.9
	04/05/17	JAB Holdings*	Panera Bread	Cash	7.5
	04/25/17	LVMH Moët Hennessy Louis Vuitton	Christian Dior Couture	Cash	7.1
	05/08/17	Coach	Kate Spade	Cash	2.4
	07/25/17	Michael Kors*	Jimmy Choo	Cash	1.4
Financial Institutions	03/06/17	Standard Life	Aberdeen Asset Management*	Stock	5.0
	02/14/17	SoftBank Group*	Fortress Investment Group	Cash	3.3
Healthcare	01/27/17	Johnson & Johnson	Actelion	Cash	31.4
	04/23/17	Becton Dickinson	CR Bard	Mixed	25.5
	08/28/17	Gilead Sciences	Kite Pharmaceuticals	Cash	11.9
	04/18/17	Cardinal Health	Medtronic (Medical supplies business)*	Cash	6.1
	01/09/17	Takeda Pharmaceuticals	Ariad Pharmaceuticals*	Cash	5.7
	10/17/17	Impax Laboratories	Amneal Pharmaceuticals*	Stock	5.5
Industrials	10/18/17	Hochtief*	Abertis Infrastructure	Mixed	41.7
	09/04/17	United Technologies	Rockwell Collins*	Mixed	30.1
	09/18/17	Northrop Grumman	Orbital ATK	Cash	9.5
	09/26/17	Siemens	Alstom*	Stock	8.7

Key consolidation transactions announced in 2017 (cont.)					
Sector	Ann. date	Acquiror	Target	Consideration	Deal size (US\$bn)
Media & Communications	12/14/17	Disney*	21st Century Fox	Stock	69.0
	07/31/17	Discovery	Scripps*	Mixed	14.8
	07/18/17	Crown Castle International	Light Tower Fiber*	Cash	7.1
	05/08/17	Sinclair Broadcast Group*	Tribune Media	Mixed	6.6
	05/15/17	Moody's	Bureau van Dijk Electronic Publishing*	Cash	3.3
	04/08/17	Liberty Interactive*	General Communication	Stock	2.7
Oil and Gas	03/29/17	Cenovus Energy*	ConocoPhillips (FCCL Partnership)	Mixed	12.5
	06/19/17	EQT	Rice Energy	Mixed	8.7
Power/Utilities	08/21/17	Sempra	Energy Future Holdings	Cash	18.8
	10/30/17	Vistra Energy	Dynegy	Stock	10.7
	07/10/17	Great Plains	Westar Energy	Stock	9.7 ¹
	01/25/17	AltaGas*	WGL Holdings	Cash	6.6
	07/19/17	Hydro One	Avista	Cash	5.3
	10/16/17	South Jersey Industries	Elizabethtown Gas and Elkton Gas	Cash	1.7
Real Estate	10/30/17	Lennar	CalAtlantic Group*	Mixed	9.5
	08/10/17	Invitation Homes*	Starwood Waypoint Homes	Stock	8.4
Technology	11/06/17	Broadcom*	Qualcomm	Mixed	130.3
	07/04/17	Vantiv	Worldpay Group	Mixed	13.7
	11/20/17	Marvell Technology	Cavium*	Mixed	6.7
	11/30/17	Altran Technologies	Aricent*	Cash	2.0
	07/13/17	Yandex.Taxi*	Uber (Russian operations)	Cash	1.4

Source: Dealogic as of 01/04/18

* J.P. Morgan served as financial advisor

¹ Renegotiated, all stock MOE transaction after the original deal, which was announced on 05/29/16

Surprisingly, despite record high equity valuations, acquiror use of stock as an acquisition currency (e.g., all-stock deals and/or mixed consideration deals) was lower in 2017 than prior years. However, as we look forward to 2018, with likely interest rate increases and fully priced equity markets, we anticipate that stock will increasingly be utilized as an acquisition currency as strategic buyers look to continue the trend of consolidation and sector expansion. This trend may be muted by the impact of repatriation of upwards of ~\$2.0 trillion of offshore cash in connection with U.S. tax reform.

Total global consideration – stock & cash split						
	All stock deals		Mixed consideration deals		All cash deals	
	# announced	% of total	# announced	% of total	# announced	% of total
2017	1,117	13.0%	1,250	14.6%	6,194	72.4%
2016	1,068	12.8%	995	11.9%	6,312	75.4%
2015	1,089	13.0%	1,064	12.7%	6,233	74.3%
2014	1,134	13.5%	980	11.7%	6,261	74.8%
2013	1,020	14.9%	634	9.3%	5,200	75.9%

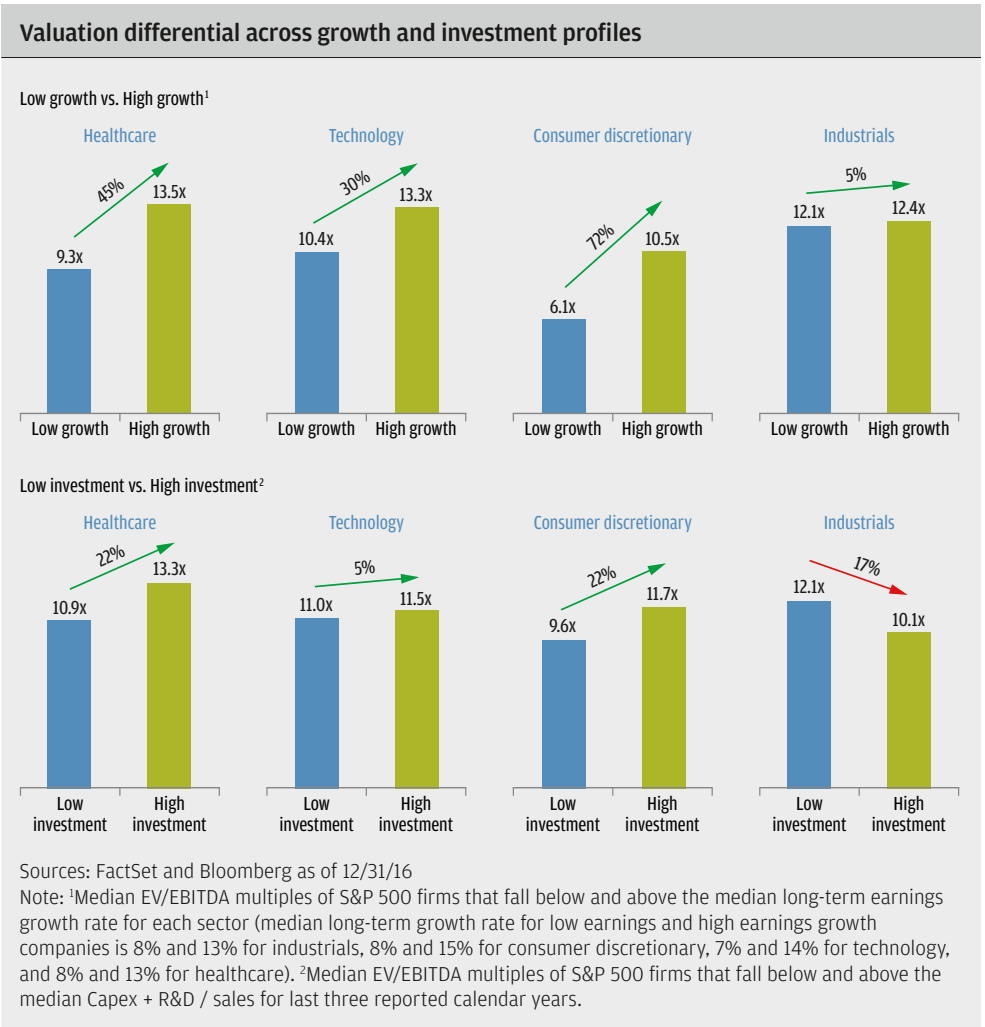
Source: FactSet as of 12/31/17

Note: Assumes no minimum transaction size; mixed consideration allocated based on % of total consideration

3. Disruption continues to drive M&A

As the rate of technological change continues to increase and new consumer trends emerge, disruption risk is affecting companies across sectors. Technology is creating more differentiation between the largest, most successful firms and the rest of the market, which suggests that disruption is fueling a “winner takes all” environment. For boards and corporate decision-makers, these changes have implications on valuation, market share, capital allocation and core business models.

While firms with higher actual or expected growth and investment usually trade at higher multiples, S&P 500 companies have reduced capital and R&D investment over the past decade, which suggests that firms are not investing enough to mitigate disruptive change in their industries. To make the corporate conundrum even harder, investors and, in particular, shareholder activists often do not give value to incumbents for investment strategies with unproven outcomes or long time horizons.

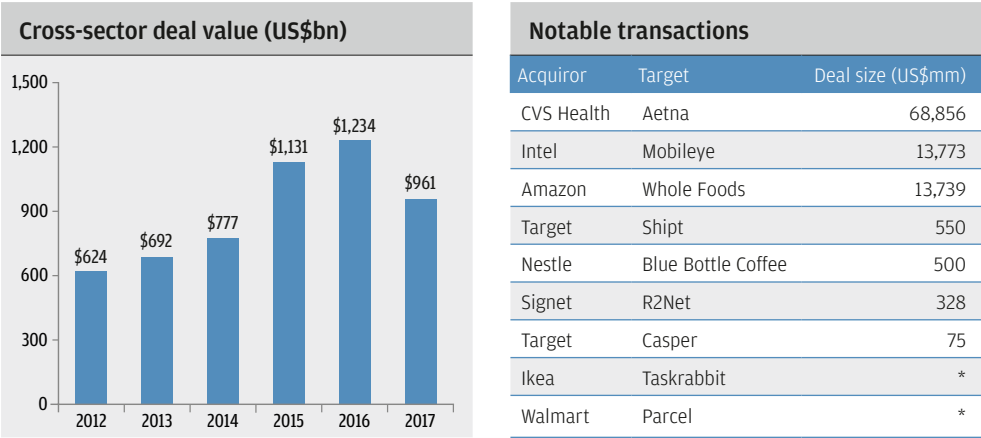


Cross-sector activity increases

As the line between traditional sectors continues to blur, cross-sector M&A has increased in recent years. 2017 saw \$961bn of M&A volume across sectors, 21% above the 10-year historical average of \$794bn. The most active sectors were technology, industrials and real estate.

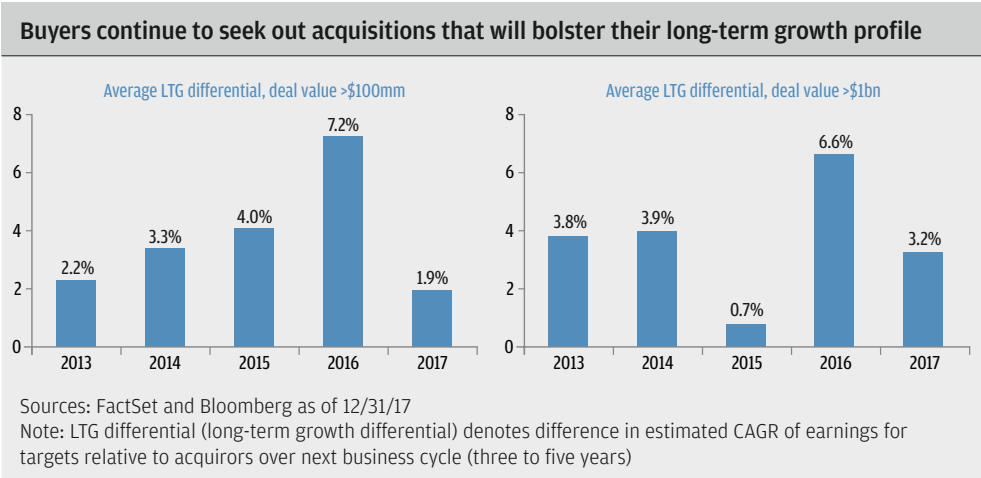
The retail sector demonstrated the largest increase compared to 2016, up 139%. Today, millennials represent the largest demographic and are increasingly influential in the markets. As fully digital natives, millennials value a continuous purchasing relationship rather than a single transaction, and have come to expect instant delivery and gratification with the ability to compare prices, product information and peer reviews. Mall traffic across the U.S. has slowed significantly and traditional retail companies are seeking to expand their presence in adjacent or complementary retail categories and digital platforms. Large retail footprints are no longer requisites and can often be a liability, with many brick and mortar investments shifting toward redevelopments in an effort to enhance in-store execution and the overall customer experience.

In further support of the trend of transactions across sectors, in March 2017, established technology company Intel acquired Mobileye for \$13.8bn as a strategic commitment to the assisted and connected car industry.



Source: Dealogic as of 01/04/18
 Note: Cross-sector indicates deal where target sector differs from acquiror sector. Excludes private equity and spin-off deals; * Deal size not publicly disclosed

M&A has also increasingly become a source of growth as firms turn to targets that can supplement the underlying growth profile. However, the feasibility of this strategy is highly dependent on available opportunities and acquisition multiples. Data suggests that for acquisitions, firms have been seeking targets that offer higher relative growth rates when compared to their base businesses.



4. Regulatory challenges

U.S. tax reform – A new reality

At the end of 2017, the Tax Cuts and Jobs Act (i.e., tax reform bill) was passed into legislation, with sweeping implications for U.S. corporations. The tax bill was designed in large part to make U.S. corporations more competitive and, accordingly, contains a number of significant changes including (but not limited to) a lower corporate tax rate, a shift toward a form of a territorial tax system (i.e., tax-free dividends from foreign subsidiaries) accompanied by a one-time transition tax on repatriated foreign earnings and the implementation of certain revenue-raising provisions (such as limitations on interest deductibility and anti-base erosion measures). All of these changes raise several important questions as companies consider M&A opportunities:

1. How does tax reform affect corporate valuations?

Broadly speaking, most U.S. companies should benefit from tax reform legislation. The lower corporate tax rate is intended to outweigh any increase in taxes resulting from elimination of certain tax deductions. Increased earnings and cash flow are expected to result, benefitting high tax-paying, U.S.-weighted businesses the most. However, certain firms could be adversely impacted, particularly in industries where payments to foreign affiliates (e.g., IP royalties) would be subject to additional U.S. anti-base erosion taxes.

2. How does tax reform affect firepower for M&A?

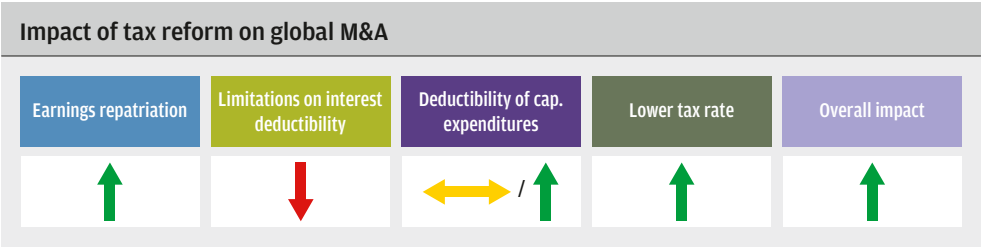
Access to current offshore cash following the mandatory transition tax on un-repatriated earnings, as well as ongoing access to foreign profits without incremental U.S. tax, should immediately increase cash balances on the whole and acquisition firepower for most U.S. incorporated multinationals.

3. How will limitations on interest deductibility affect the M&A landscape?

New tax rules limit interest deductibility to 30% of U.S. EBITDA from years 2018-21, and to 30% of U.S. EBIT for years thereafter, with carryforwards for unused interest. Firms that will be most heavily impacted are those with significant non-U.S. operations (and therefore a lower proportion of U.S. EBITDA/EBIT) and highly leveraged companies, such as sponsor-backed portfolio companies. In a competitive bidding process, this would result (at times) in a disadvantage for financial sponsors relative to strategic bidders due to the reliance on highly leveraged capital structures. Coupled with the lower tax shield resulting from a 21% corporate tax rate, the interest deductibility limitations could impact cash/stock consideration mixes or result in greater benefits for utilizing alternate sources of capital (e.g., preferred equity).

4. Will tax reform shift the competitive balance between U.S. and non-U.S. strategic buyers?

Tax reform legislation should make U.S. corporations more competitive relative to foreign peers compared to the previous tax regime. For U.S. corporations that rely extensively on foreign earnings, the one-time transition tax and a longer-term shift toward a territorial tax regime will increase liquidity and decrease overall taxation. For U.S. corporations with earnings derived primarily from the domestic market, the lowering of the corporate tax rate will result in a lower effective tax rate and greater cash flows for shareholder return and strategic acquisitions, and will create stronger acquisition currencies to raise capital. Thus, U.S. strategic buyers should gain a relative advantage over non-U.S. buyers as a result of U.S. tax reform.



Withdrawn deals

In 2017, withdrawn deal volume was \$658 billion, 23% below 2016, driven by both regulatory hurdles and general M&A process developments such as failing to gain shareholder approval. North American targets accounted for 34% of all withdrawn deal volume. In 2018, we anticipate the U.S. administration to be more pro-business and show greater willingness to rely on market self-correction. However, recent efforts by the U.S. Department of Justice to block AT&T’s \$108 billion acquisition of Time Warner signal that the regulatory environment will still remain challenging despite pro-business sentiment of the Trump administration. Additionally, there may be further scrutiny on CFIUS as demonstrated by the termination of Lattice Semiconductor’s sale to China-backed private equity Canyon Bridge Capital, which was the result of the fourth presidential prohibition in history.

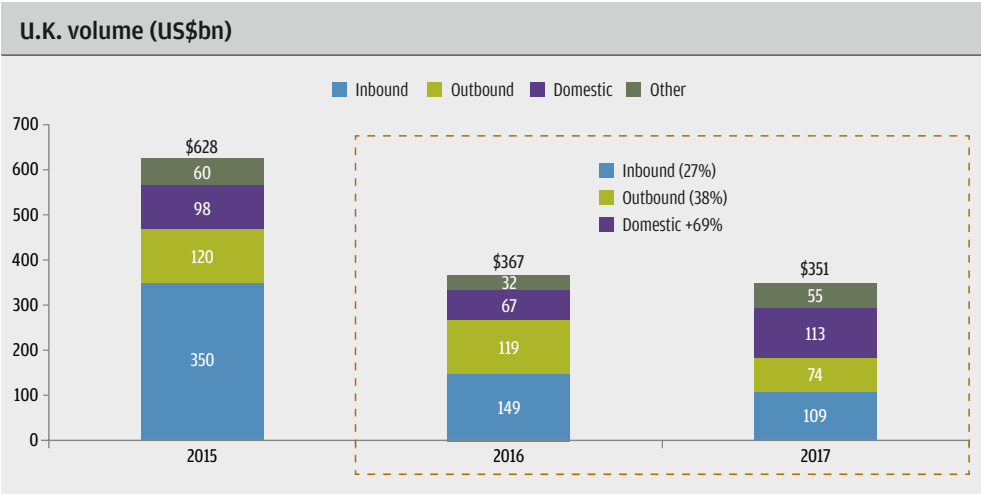
Select deals greater than US\$10bn transaction value (withdrawn 2017)

Ann. date	Withdrawn date	Value (US\$bn)	Target	Acquiror	Target country	Acquiror country	Sector	Reason for termination
Feb 17, 2017	Feb 19, 2017	155.1	Unilever	Kraft Heinz	United Kingdom	United States	Consumer / retail	Proposal rejected by Unilever
Jun 20, 2015	May 12, 2017	51.9	Cigna	Anthem	United States	United States	Insurance	Blocked for antitrust reasons
Jul 3, 2015	Feb 14, 2017	35.0	Humana	Aetna	United States	United States	Insurance	Blocked for antitrust reasons
Aug 2, 2017	Nov 28, 2017	28.9	Rockwell Automation	Emerson Electric	United States	United States	Industrial machinery	Lack of support from Rockwell's Board
Mar 9, 2017	Jun 1, 2017	27.1	Akzo Nobel	PPG Industries	Netherlands	United States	Chemicals	Antitrust and Dutch political concerns
Jan 24, 2017	Feb 24, 2017	23.9	Assicurazioni Generali	Intesa Sanpaolo	Italy	Italy	Insurance	Potential antitrust concerns; timing not right
Jul 29, 2016	Jun 7, 2017	18.4	Energy Future Holdings	NextEra Energy	United States	United States	Utilities / Power	Blocked by Public Utility Commission of Texas
Jul 7, 2017	Aug 21, 2017	17.5	Energy Future Holdings	Berkshire Hathaway	United States	United States	Utilities / Power	Topping bid from Oncor
Oct 27, 2015	Jun 29, 2017	14.3	Rite Aid	Walgreens Boots Alliance	United States	United States	Retail	Antitrust; pursued a smaller Rite Aid deal
Feb 23, 2016	Mar 29, 2017	14.2	London Stock Exchange	Deutsche Boerse	United Kingdom	Germany	Financial institutional	Blocked for antitrust reasons
May 22, 2017	Oct 27, 2017	10.2	Huntsman	Clariant	United States	Switzerland	Chemicals	Activist pressure; lack of shareholder support

Source: Dealogic as of 01/04/18

Brexit: Myth vs. reality – What actually happened?

Although the immediate market reaction to Britain’s June 2016 vote to leave the European Union (EU) was volatile, markets around the world began to find a "new normal" in the following months, and upheaval gave way to a strong recovery across European markets, stretching into early 2017. This stability was once again tested with Prime Minister Theresa May triggering Article 50 in March, formally notifying the EU of the U.K.’s intention to leave the Union, and thereby starting the official two-year withdrawal period. Despite this Brexit-related “new normal” in European politics and markets, there remains a sense of uncertainty among U.K. corporates, which has paradoxically contributed to a rise in transaction volumes between U.K. companies. This is the result of U.K. companies looking to increase scale and capabilities to offset Brexit-related uncertainty, accounting for a 69% increase in domestic M&A volumes involving two U.K. companies. Otherwise, Brexit-related concerns were evident in a significant 27% decline in inbound U.K. M&A volumes. Also of particular note was the 38% decrease in outbound activity, which stands in contrast to expectations for a boost in outbound activity from U.K.-domiciled corporates looking to diversify geographically as a way to offset Brexit-related uncertainty. As we look forward to 2018, we anticipate that geographic diversification will be top of mind for domestic U.K. companies and that outbound U.K. activity will be a feature in the overall European M&A picture.



\$1bn+ number of deals	2015	2016	2017
Inbound	33	20	23
Outbound	16	10	13
Domestic	16	12	16
Other	12	6	9
Total	77	48	61

Source: Dealogic as of 01/09/18
Note: Deal volume includes Ireland; “Other” reflects divestor/parent from the U.K. and target business or acquiror from outside the U.K.

Top 5 domestic U.K. deals in 2017			
Ann. date	Acquiror	Target	Deal value (US\$mm)
Dec 6, 2017	Hammerson plc	Intu Properties plc	11,006
Dec 7, 2017	GVC Holdings plc	Ladbrokes Coral Group plc	6,732
Mar 6, 2017	Standard Life plc	Aberdeen Asset Management plc	5,040
Jan 27, 2017	Tesco plc	Booker Group plc	4,665
Mar 13, 2017	John Wood Group plc	AMEC Foster Wheeler plc	3,960

Source: Dealogic as of 01/09/18

Emergence of new pan-European champions

Aside from the Brexit negotiations, the EU was also shaped in 2017 by two key elections held in France (April) and Germany (September) where EU-favorable parties won, stemming the growing populist movement across the Union and the threat of ongoing political instability. The election of Emmanuel Macron and the re-election of Angela Merkel to form a new coalition government have, in some quarters, solidified a sense of new unity across the bloc and deeper integration of member states. Merkel has expressed support for Macron's pushing reform measures, making the eurozone more resilient. Once the new German government is in place, negotiations about a European finance minister, a more meaningful European budget and transformation of the ESM into a European monetary fund will be advanced. Support for pooling resources in defense as well as more cooperation in infrastructure is strong and broad-based among core continental European member states.

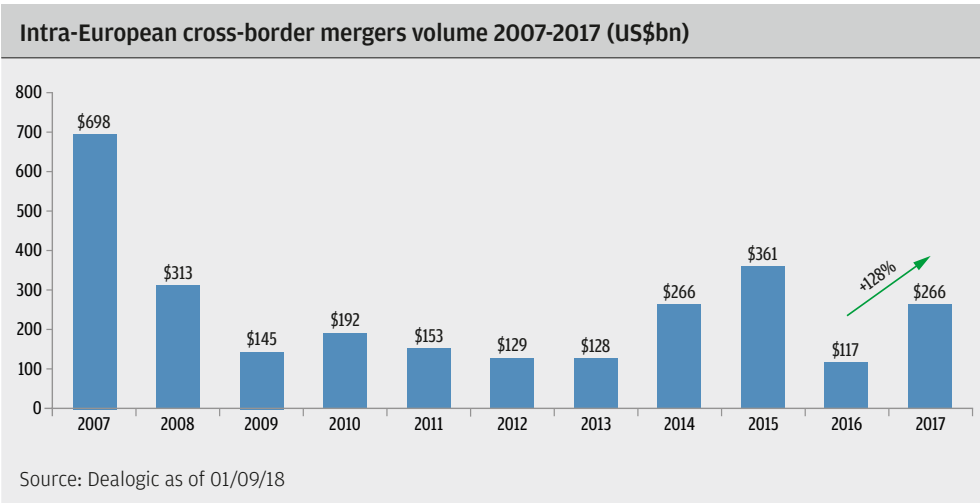
Outcome of recent European elections			
Date	Country	Winner	Leader
Sep 2017	Germany	CDU/CSU	Angela Merkel
May 2017	U.K.	Conservative	Theresa May
Apr/May 2017	France	EN Marche!	Emmanuel Macron
Mar 2017	Netherlands	VVD	Mark Rutte

Source: Public information

France has adopted a pro-business policy, favoring the emergence of European regional champions and privileging the end result from an industrial standpoint rather than optics of control over sovereign assets and protectionism. The Alstom and Siemens Mobility transaction is a good example of this mindset. While the combined group will remain listed in France, its CEO will be French and the group made a number of undertakings to France, German Siemens will own a majority of the share capital. Such a transaction would have been blocked by state officials a few years ago. This is a notable change which may be replicated in other sectors where European consolidation is critical to fend off the growing competition from non-European players.

One example of this is Airbus, which is often shown as an example of visionary industrial cooperation between countries and creation of a world class and European-based champion of legacy European competitors. Such a concept resonates very well with public opinion and politicians, and it is no surprise that each and every sector is reviewing strategic alternatives with that proven concept in mind.

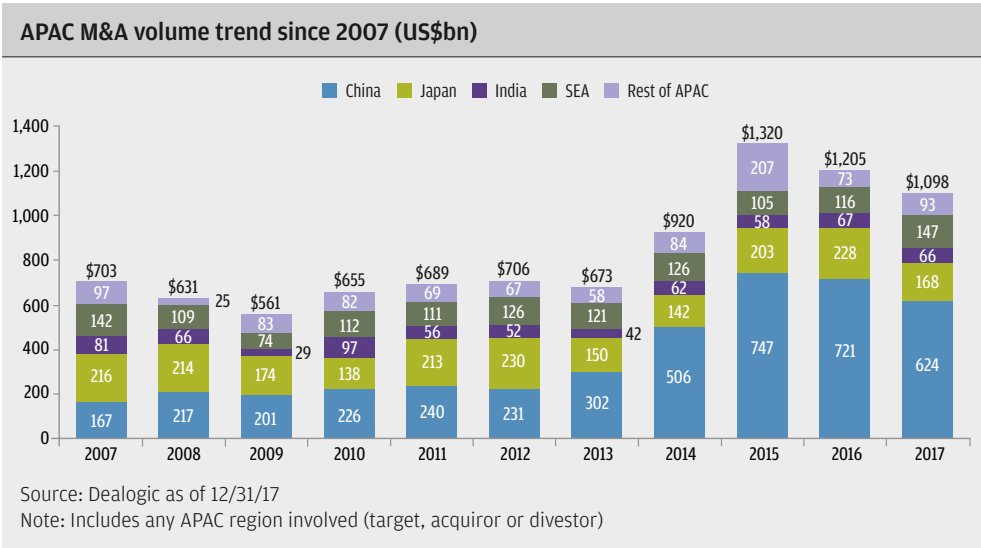
Overall, aside from the emergence of regional champions, Europe experienced a significant uptick in 2017 of intra-cross-border volumes where deal value grew more than twofold, as confidence returned following a raft of economic challenges in recent years.



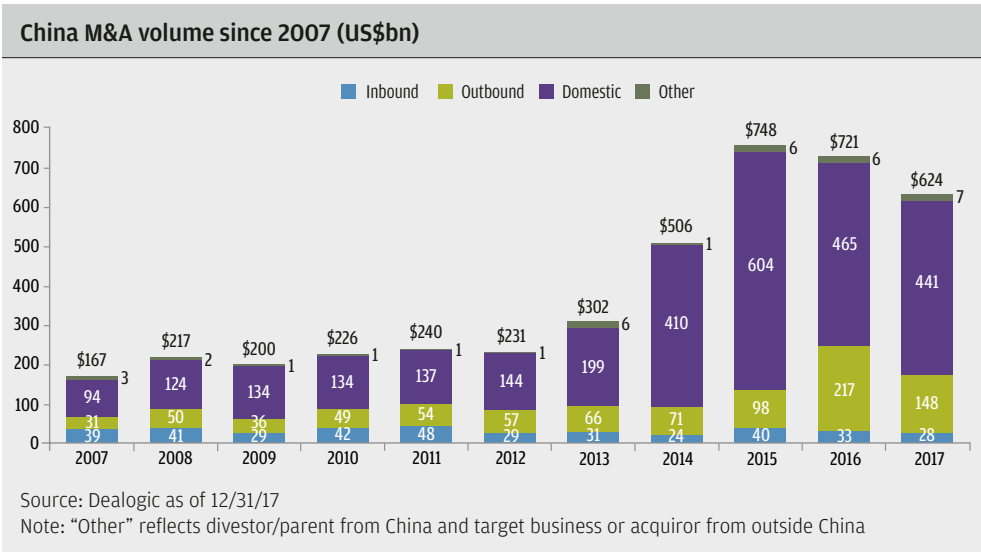
5. M&A without borders: Cross-border activity broadens

APAC activity update

In 2017, the Asia Pacific M&A market demonstrated resilience despite regulatory headwinds for outbound M&A, with overall volume slightly down by 9% year-over-year. China and Japan remained the key driving forces for APAC M&A by contributing 57% and 15% of the overall volume.



China M&A volume was down 13%, as outbound M&A saw a decline of 32% due to the country's continued capital controls and new measures to curb "irrational" outbound investments. Meanwhile, China's domestic M&A showed more resilience, helped by continued domestic consolidation, particularly among State Owned Enterprises (SOEs).



Top 10 China outbound deals for 2017			
Ann. date	Acquiror	Target	Deal Value (US\$mm)
Jul 14, 2017	China Vanke Co Ltd; Hopu Investment Management Co; Bank of China Ltd; Hillhouse Capital Management Ltd; SMG Eastern Ltd	Global Logistic Properties Ltd	16,052
Jun 2, 2017	China Investment Corp	Logicor Europe Ltd	13,766
Jul 7, 2017	COSCO SHIPPING Holdings Co Ltd; Shanghai International Port (Group) Co Ltd	Orient Overseas (International)	8,388
Sep 8, 2017	Shanghai Energy Fund Investment Co Ltd	Rosneft Oil Co OAO (14.2%)	8,039
Jan 23, 2017	State Grid Corp of China	CPFL Energia SA (40.1%)	3,571
Dec 27, 2017	Zhejiang Geely Holding Group Co Ltd	Volvo AB (7.9%)	3,217
Jan 24, 2017	Yanzhou Coal Mining Co Ltd	Coal & Allied Industries Ltd	3,100
Jul 24, 2017	Xiaoju Kuaizhi Inc; SoftBank Group Corp; Toyota Tsusho Corp; Existing Shareholders	GrabTaxi Holdings Pte Ltd (41.7%)	2,500
Aug 30, 2017	Bohai Capital Holding Co Ltd	Hong Kong Aviation Capital Ltd (54.8%)	2,300
Sep 27, 2017	State Power Investment Corp	Power Station (Sao Simao hydroelectric power plant)	2,258

Source: Dealogic as of 12/31/17

Cross-border activities for Southeast Asia regions rose by 25% in 2017, mainly driven by the \$16.1bn privatization of Global Logistic Properties by a Chinese consortium. Supported by strong outbound activities and an increasing number of corporate divestures, Japan M&A market experienced a 7% increase in deal count, while overall volume decreased 26% due to a 31% drop in average deal size, which more than offset the increased number of deals.

Update on China outbound M&A activity and regulations

In November 2016, China first introduced new rules to curb “irrational outbound investments” amid accelerated capital outflows. As such measures took effect and the yuan stabilized in 2017, the Chinese government officially published the guideline for outbound investments in August 2017. These guidelines clearly defined “encouraged”, “restricted” and “prohibited” outbound investments and demonstrated the Chinese government’s support for investments that can help boost the nation’s long term growth potential and economic benefits, while restricting “irrational” investments. In December 2017, China NDRC further simplified the regulatory procedure for outbound investments, with the most notable change being the removal of the NDRC pre-clearance requirement (a.k.a. “NDRC Road Pass”).

Three categories for outbound investments

1 Encouraged investments	2 Restricted investments	3 Prohibited investments
<ul style="list-style-type: none"> • Investments that facilitate the “One Belt One Road” framework and infrastructure • Investments that focus on high technologies, advanced manufacturing capability and R&D • E&P of offshore oil & gas, mining and other natural resources sectors (prudent evaluation of economic interests is required) • Investments in agriculture, forestry, animal husbandry and fishery • Investments in cultural, logistic and other service sectors • Setting up overseas branches and service networks by qualified financial institutions 	<ul style="list-style-type: none"> • Investments in sensitive countries and regions • Investments in real estate, hotel, cinema, entertainment and sports sectors • Setting up offshore equity investment funds or platform which doesn't have concrete or specific business purpose • Investments related to using equipment not in compliance with host countries' technical standards • Investments that contravene environmental and safety standards 	<ul style="list-style-type: none"> • Investments that involve exportation of core military technology / product • Investments in gambling and the sex industry • Investments that may harm national security

On the back of a stabilized yuan and a successful completion of China's 19th Party Congress, we expect several possible trends for China outbound M&A in 2018:

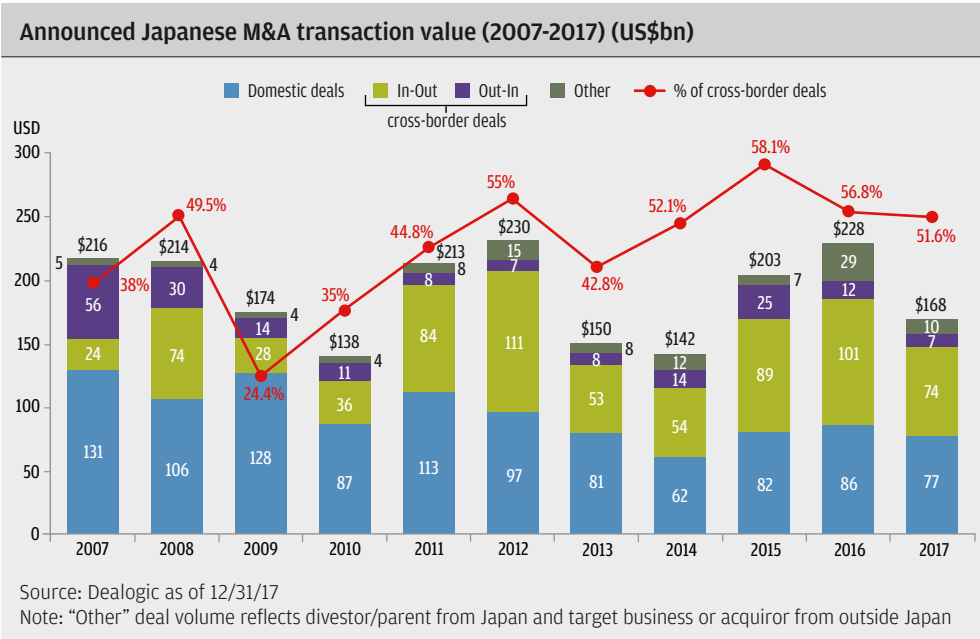
- Strong appetite for transactions that fall under the “Encouraged” category, particularly those in the infrastructure, power and utilities sectors to promote the “One Belt One Road” initiative.
- Although not specifically mentioned in the “Encouraged” list, we believe that the government is also supportive of outbound investments related to food safety, healthcare and businesses with strong brand recognition and a complementary international presence.
- CFIUS and other foreign investment scrutiny in some host countries will cause Chinese buyers to avoid sensitive targets and use JV/minority deal structures in more situations.
- Chinese companies with offshore financing capabilities would continue to be more competitive than other Chinese buyers relying on domestic onshore financing. Non-recourse, target-level financing will continue to be favored by Chinese buyers as an important source of funding.
- Meanwhile, we expect China to further open up for inbound foreign investments in exchange for a more reciprocal environment to support its continued outbound M&A initiatives.

Key themes in Japanese M&A market

Japanese M&A market overview

The overall Japanese M&A market has grown in recent years and will continue to be active throughout 2018, as substantial cross-border deals are pursued at a high level.

Transaction volume in 2017 for cross-border deals slightly declined from the previous year. However, we expect outbound M&A deal volume to remain consistently near these levels over the long term.



Factors leading to the outbound activities in Japan include a saturated domestic market and supportive financing environment. Due to the shrinking population, opportunities for organic expansion within domestic market are limited. In order to achieve growth objectives, Japanese corporations are seeking access to external markets, products, and innovations to supplement their internal businesses operations.

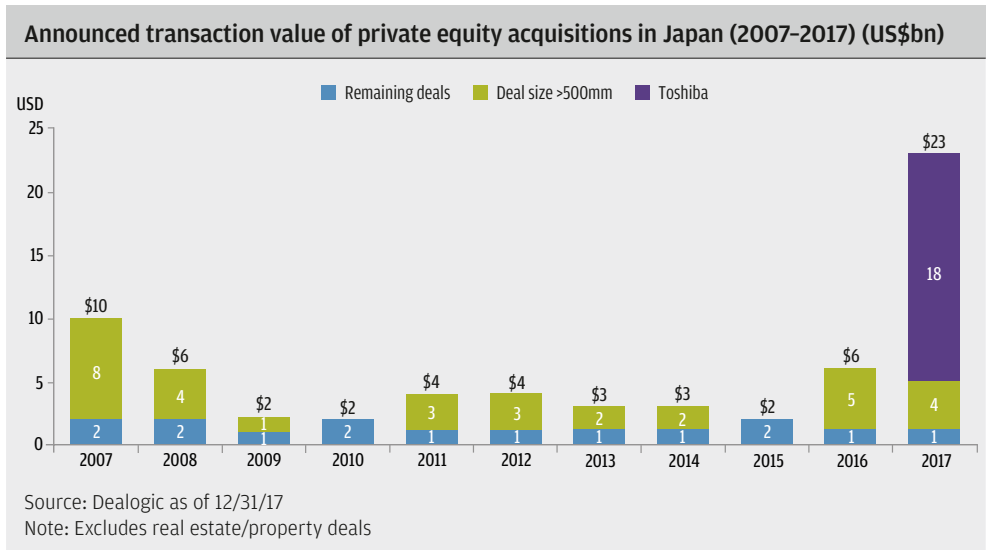
In addition, low interest rates facilitate access to cheap financing sources for Japanese corporations. The government has also been encouraging strategic outbound investments.

On the other hand, potential risks could limit outbound activity. They include asset price inflation, risk of goodwill impairments under IFRS and uncertainties associated with post-acquisition integration.

Corporate carve-outs

The Japanese M&A market in 2017 was marked by active deals by private equity firms. In particular, the number of large-scale private equity deals has been on the rise, highlighted by Bain Capital's \$17.9 billion acquisition of Toshiba Memory Corporation, the largest Japanese private equity corporate deal ever.

The trend is explained by the rationalization of business portfolios by Japanese conglomerates. More corporations are carving out their non-core assets as they focus on their main businesses. The expected volume of acquisitions will be high in the foreseeable future, as restructuring of Japanese business operations continues to create buy-side opportunities for private equity firms.



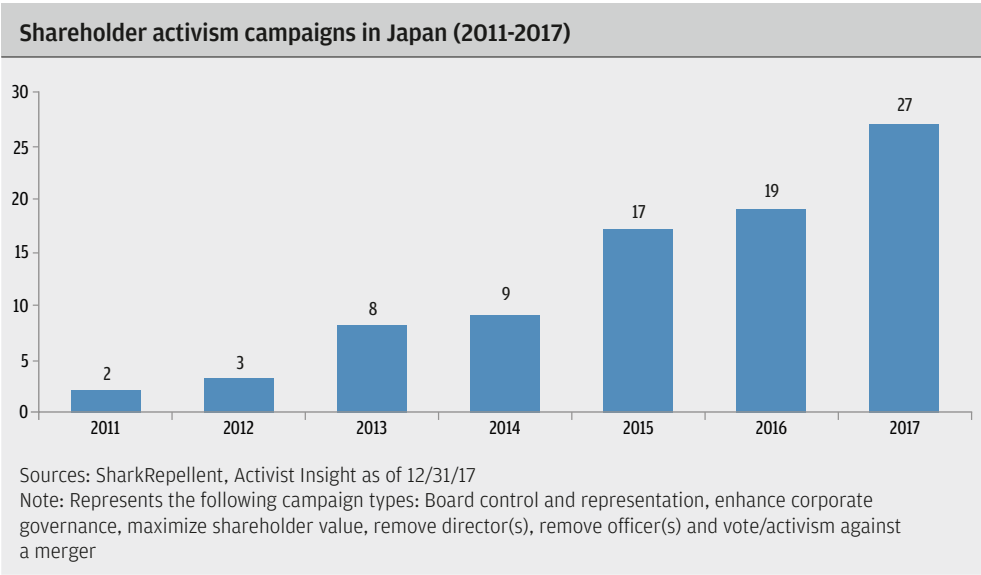
Announced private equity acquisition deals in Japan > US\$1bn (2016-2017)				
Announcement date	Seller	Acquiror	Target	Deal value (US\$bn)
September 2017	Toshiba Corp.*	Bain Capital LLC SK Hynix Inc. Hoya Corp.	Toshiba Memory Corp.	17.9
November 2016	Nissan Motor Co Ltd.*	KKR & Co LP.	Calsonic Kansei Corp.	4.3
April 2017	Hitachi Ltd.*	KKR & Co LP.	Hitachi Kokusai Electric Inc.	1.4
November 2016	Reno Inc. Office Support Co Ltd.	MBK Partners Ltd.	Accordia Golf Co Ltd.	1.2
January 2017	Hitachi Ltd.*	KKR & Co LP.	Hitachi Koki Co Ltd.	1.2
October 2017	WPP plc	Bain Capital LLC.	Asatsu-DK Inc.	1.2

Source: Dealogic as of 12/31/17

* Corporate carve-out

Increasing shareholder activism

The level of activist campaigns in Japan is rising. While we observed a particular increase in shareholder proposals regarding Board representation this year, activism against M&A transactions also received significant spotlight. There were three notable cases of deal term objections by institutional investors in 2017. Looking forward, we expect the number of activist campaigns in Japan to continue increasing.

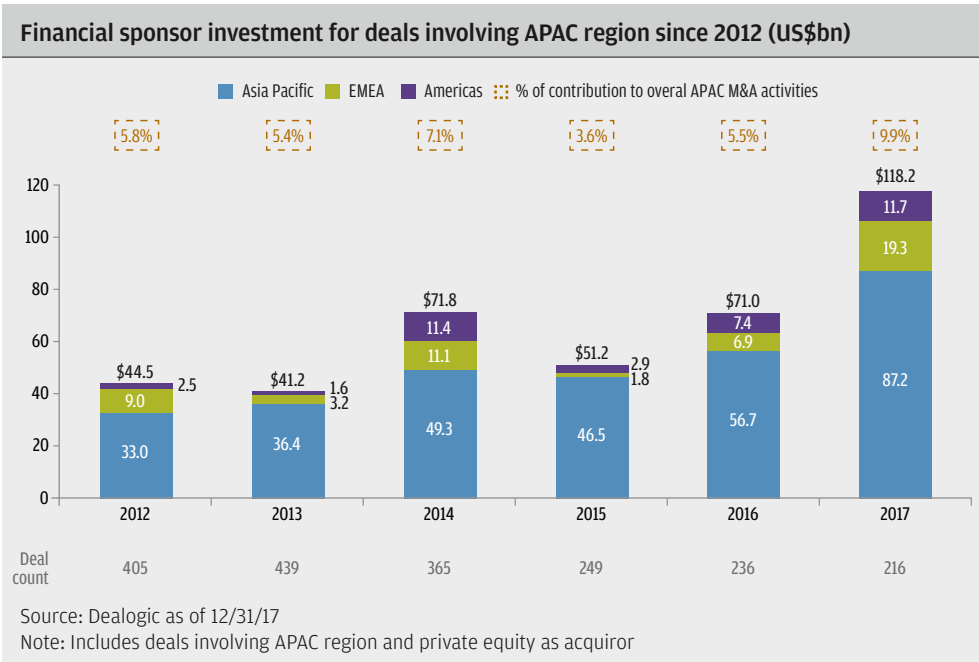


Selected 2017 activist campaigns (target companies with market capitalization over US\$1bn)			
Date	Target	Activist	Campaign type
September 17	Hitachi Kokusai Electric Inc.	Elliott Management	Objections to deal terms - tender offer price unfair
January 29	PanaHome Corp	Oasis Management (Hong Kong) LLC.	Objections to deal terms - stock exchange ratio unfair, termination of stock exchange to tender offer, tender offer price unfair
October 4 October 17	Asatsu-DK Inc.	Silchester International Investors Oasis Management (Hong Kong) LLC.	Objections to deal terms - tender offer price unfair

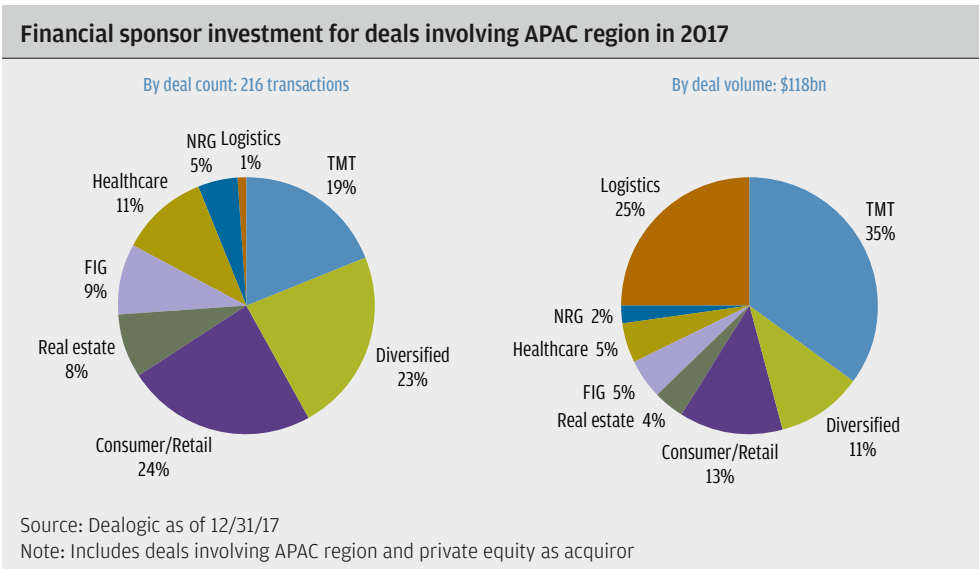
Sources: SharkRepellent, Activist Insight, press articles as of 12/31/17

Strong increase in APAC private equity activity

Private equity investment in APAC saw strong growth, 67% increase year-over-year in 2017 to \$118bn, a historical record for the region. The strong momentum was boosted by record-breaking fundraising successes, availability of leveraged financing, and less competition from Chinese domestic buyers due to capital controls. We expect these factors to continue driving APAC private equity M&A activities, especially buyouts, in 2018.



In 2017, 66% of APAC private equity's investments by deal count were deployed in TMT, diversified industries and consumer/retail sectors, with a number of landmark buyout transactions announced across Asia.



Top APAC private equity buyout transactions in 2017				
Rank	Acquiror	Target	Deal value (US\$mm)	Target sector
1	Bain Capital SK Hynix Hoya Corp	Toshiba Memory Corp	17,914	TMT
2	China Vanke Hopu Investment Bank of China SMG Eastern Hillhouse Capital	Global Logistic Properties	16,052	Logistics
3	China Investment Corp	Logicor Europe	13,766	Logistics
4	SoftBank Group Corp; Dragoneer Investment Group LLC; Sequoia Capital; TPG Global LLC; Tencent Holdings Ltd	Uber Technologies Inc (17.5%)	8,400	TMT
5	Hillhouse Capital Wisdom Man Ventures CDH Investments	Belle International	5,825	Consumer/Retail
6	Canada Pension Plan Investment Board	Nord Anglia Education	3,042	TMT
7	PAG Asia Capital	Yingde Gases Group	2,827	Diversified
8	CITIC Ltd CITIC Capital Partners Carlyle Group	McDonald's China	2,080	Consumer/Retail

Source: Dealogic as of 12/31/17

6. Activism update

Activists posted a solid 2017 following a challenging 2016

Activist hedge funds recovered from their first decline in assets under management at the end of 2016, with AUM of \$125.4bn as of September 2017, up 3.5% from the end of 2016 and up 2.0% from the end of 2015. Activists largely shook off the troubles that plagued many in 2015 and 2016, particularly those with meaningful commodity exposure, to reassert their place as a permanent investment strategy that issuers must contend with. We expect 2018 to be another year of growth for shareholder activism as activists build off a number of high-profile mega-cap campaigns, both in the U.S. and globally, during 2017.

The resurgence of shareholder activism, which at one point was at least somewhat uncertain, should focus issuers on preparedness and proactive measures that can be taken to avoid the attention of an activist. Regular and robust shareholder communication have never been more important as shareholders are often an issuer's first line of defense when an activist is contemplating the launch of a public campaign.

We previously identified the rise in direct engagement by long-only institutional investors as a key area for issuers to watch. That trend will continue and expand in 2018. Institutional investors have taken an ever-expanding role in not only supporting shareholder activism, but in facilitating shareholder activism via indirect (and increasingly, direct) requests to activists to investigate value-creating options at their portfolio companies.

The return of large-cap activism

2017 witnessed the return of activism targeting large- and mega-cap issuers. After taking stock and refocusing following substantial losses by a number of high-profile activist hedge funds and a resulting wave of redemptions by LPs in 2016, activists returned to high-profile mega-cap activism in 2017. Targets spanned multiple sectors and geographies; however, results for activists were mixed with some close and not-so-close outcomes on both sides of the table.

This renewal of large-cap activism signifies a renewed confidence by activist investors that large bets will not just be tolerated by their LPs, but that failure on individual campaigns will not necessarily lead to dire consequences for the fund in the eyes of LPs. One change from large-cap activism from years past, however, is that a number of these campaigns were initiated using special purpose investment vehicles. These are typically special situation funds raised by the activist with a specific target in mind. This structure provides some, albeit limited, comfort to LPs as typically an activist will need to confidentially disclose the target to at least a limited number of anchor investors in order to raise the capital required to initiate the campaign. In some situations this has helped alleviate LPs' skepticism toward supporting a very large investment out of a blind-pool fund.

We expect the trend toward large- and mega-cap activism to continue, particularly outside the U.S., where there may be a greater number of potential targets given the past activity that has already occurred in the size range in the U.S.

The convergence of activism and M&A

M&A and shareholder activism have become ever more intertwined and we see no impetus changing that fact in the immediate future. Activists continue to advance the well-established strategy of pushing companies to seek out potential buyers for the company, in whole or in parts, willing to pay a premium to the value ascribed to those assets by the market. This is not a new trend and is not a trend that is likely to change anytime soon.

Similarly, activists will continue to appear after transactions have been announced, criticizing either the acquiror for paying too much or the seller for not demanding enough. 2017 has seen a number of campaigns abandoned, in the U.S. and Europe, following pressure from a shareholder activist. Issuers should be vigilant in the face of activist opposition to an announced M&A transaction, as the termination of the transaction does not necessarily result in the activist's exiting. In fact, an activist likely has a thesis supporting shareholder value creation that begins only once the transaction is abandoned.

Lastly, at the end of 2017, we have seen an even closer marriage of shareholder activism and traditional M&A when an activist who had been agitating for change with an issuer for some time ultimately decided to take the company private entirely in order to effectuate the changes they were advocating. While this is unlikely to become a widespread activist strategy, the largest and most experienced activists are likely to continue exploring this as an avenue to create value.

Institutional investors focusing on new concerns

Long a concern of institutional investors, particularly index funds and public pension funds, corporate governance at publicly listed companies is under continuous pressure as investors and activists advocate for “best in class” corporate governance structures. In years past, this meant eliminating traditional protective provisions such as staggered boards or poison pills. More recently it was the push for adoption on proxy access policies to allow shareholders to utilize the company's proxy materials to make director nominations.

The focus for 2018 will continue to include those themes, but will expand to include the makeup of company boards themselves. While institutional investors have spoken in the past about the importance of diversity in the boardroom, those statements have strengthened recently, indicating seriousness about using the strength of their ownership to diversify public company boardrooms away from the “pale, male and stale” of years past. 2018 is likely to see action, in the form of shareholder proposals, withhold vote campaigns or director nominations by institutional holders aimed at bringing that change to boards.

Globalization continues, more aggressively than ever

The globalization of shareholder activism is not a new development. In fact, activists have been active in non-U.S. markets for many years. What have changed recently are the number of global shareholder activist campaigns, the rate at which that pace is accelerating and the size and caliber of companies being targeted outside the U.S.

While new campaign activity in the U.S. has reached a relatively steady state in terms of number of campaign announcements, campaign activity outside the U.S. continues to grow meaningfully year-over-year. Furthermore, companies targeted outside the U.S. now include some of the most prominent and sizable global brands, including European and Asian companies. Nowhere was this more clear than at campaigns targeting Nestle and BHP Billiton in 2017. At Nestle, Dan Loeb's Third Point demanded the company return capital to shareholders, improve productivity and reshape its portfolio, resulting in the board's evaluating alternatives for certain divisions and replacing key managers. At BHP Billiton, Elliott Management continued its global crusade against companies, pressuring the dual listed (Australia and the U.K.) company to unify its corporate structure in Australia, separate its U.S. petroleum business, and implement a more robust capital return policy.

Historically, activist campaign tactics outside the U.S. have been more moderate, eschewing the visceral and personal attacks on management and directors that have become familiar in U.S. shareholder activist campaigns. As activist activity follows a similar growth trajectory globally to that of the U.S. in years past, the development of campaign tactics, and their acceptance by investors in global companies, follows a similar pattern of development as was seen in the U.S. as activism developed.

This charge against global companies is not being led just by U.S.-based hedge fund activists. In Europe, investors such as TCI and Cevian have increased their focus on domestic targets, with TCI attempting a major shake-up of the board and management at London Stock Exchange Group. Cevian Capital also launched a campaign against ThyssenKrupp after having received board seats at both LM Ericsson and ABB earlier in the year. Prior to these Cevian campaigns, their last public activist activity had been nearly 10 years ago.

Every publicly traded company, anywhere in the world, must now take seriously the prospect that they may be targeted by a shareholder activist and must act with a sense of urgency to understand their potential vulnerability and prepare to respond and defend themselves in the event an activist emerges.

7. About J.P. Morgan M&A Advisory

We advise corporations and institutions of all sizes on their most complex strategic needs, in their home markets and around the world. Whatever your strategic challenge or opportunity, J.P. Morgan provides a full M&A offering to address your needs. Drawing upon our in-depth industry-specific expertise and regional market acumen, we can evaluate your business with a long-term view to provide a tailored, comprehensive and integrated solution.

We have a track record of strategic defense. Our scale and breadth of experience with shareholder activism mean we provide a differentiated approach toward defense for clients. We have successfully engaged with all the major activists in some of the most sophisticated campaigns around the world, and our deep understanding of activist tactics and firsthand knowledge brings unparalleled experience to your defense. As we advise only corporate clients and do not counsel any shareholder activist campaigns, our interests are fully aligned with your company's priorities.

Clients benefit from J.P. Morgan's global experience leveraging our specialized advice, swift strategic execution, and strong resources to help you seize opportunities and solve problems.

Our bespoke solutions combine:

- In-depth knowledge of sector and market dynamics with M&A bankers based locally in most major markets globally.
- Innovative advice on valuation, transaction structures and deal tactics and negotiations.
- Rigorous execution delivered with responsive and agile service.
- Ability to partner with product experts across our full range of competencies, including comprehensive financing through our debt and equity issuance platforms, as well as derivatives and treasury services, such as escrow services.

J.P. Morgan provides M&A advisory solutions across the full strategic life cycle of our clients:

Strategic expansion

- Acquisitions, including cross-border opportunities
- Mergers and joint ventures

Enhancing business value

- Corporate combinations
- Divestures
- Capital restructuring projects
- Spinoffs and other repositionings

Shareholder strategy

- Defense preparations for publicly announced and non-public approaches
- Dedicated shareholder activism advice

8. Select J.P. Morgan-advised transactions in 2017

Pending \$130.3bn Advisor to Broadcom on its offer to acquire Qualcomm	Pending \$69.0bn Advisor to Disney on its acquisition of 21st Century Fox's entertainment businesses	Pending \$41.7bn Advisor to Hochtief on its offer to acquire Abertis Infraestructuras	Pending \$30.1bn Advisor to Rockwell Collins on its sale to United Technologies	Pending \$22.5bn Advisor to Unibail-Rodamco on its acquisition of Westfield
2017 \$16.6bn Advisor to ONEOK on its acquisition of 58.8% stake in ONEOK Partners	Pending \$16.1bn Advisor to Global Logistic Properties on its sale to China Vanke consortium	Pending \$14.8bn Advisor to Scripps Networks Interactive on its sale to Discovery Communications	2017 \$12.5bn Advisor to Cenovus on its acquisition of oil sands and Deep Basin assets from ConocoPhillips	2017 \$12.0bn Advisor to METRO Group's demerger and listing of METRO Wholesale & Food Specialist
Pending \$11.0bn Advisor to Hammerson on its acquisition of Intu Properties	2018 \$10.2bn Advisor to Telecom Argentina on its combination with Cablevision	Pending \$9.5bn Advisor to CalAtlantic on its combination with Lennar	Pending \$8.7bn Advisor to Alstom on its merger with Siemens' Mobility division	2017 \$8.4bn Advisor to Invitation Homes on its merger of equals with Starwood Waypoint Homes
Pending \$8.4bn Advisor to Orient Overseas on its sale to COSCO Shipping and Shanghai International Port	2017 \$8.2bn Advisor to Royal Dutch Shell on the sale of its stake in Athabasca Oil Sands Project and other oil sands assets	2017 \$7.5bn Advisor to JAB Holdings on its acquisition of Panera Bread	2017 \$7.4bn Advisor to United Internet on its merger of 1&1 telco business with Drillisch	2017 \$7.1bn Advisor to LTS Group on its sale to Crown Castle
2017 \$6.8bn Advisor to Gecina on its acquisition of Eurosic	Pending \$6.7bn Advisor to Cavium on its sale to Marvell Technology	Pending \$6.6bn Advisor to Sinclair Broadcast on its acquisition of Tribune Media	Pending \$6.6bn Advisor to AltaGas on its acquisition of WGL Holdings	Pending \$6.5bn Advisor to Gemalto on its sale to Thales

Pending \$6.4bn Advisor to Nets A/S on its sale to H&F consortium	2017 \$6.3bn Advisor to Avantor Performance Materials on its acquisition of VWR	Pending \$6.1bn Advisor to Pinnacle Entertainment on its sale to Penn National Gaming	Pending \$6.1bn Advisor to Copenhagen Airport on its acquisition of Københavns Lufthavne	2017 \$6.1bn Advisor to Medtronic on its sale of a portion of its Patient Monitoring & Recovery Division to Cardinal Health
Pending \$6.0bn Advisor to Vonovia on its acquisition of BUWOG	2017 \$6.0bn Advisor to MetLife on its spin-off of Brighthouse Financial	2017 \$5.7bn Advisor to PPD on sale of its minority stakes to Abu Dhabi Investment Authority and GIC	2017 \$5.7bn Advisor to ARIAD Pharmaceuticals on its sale to Takeda Pharmaceutical	Pending \$5.5bn Advisor to Amneal Pharmaceuticals on its merger with Impax Laboratories
2017 \$5.5bn Advisor to Andeavor Logistics on its acquisition of Western Refining and restructuring of its General Partner and Incentive Distribution Rights	2017 \$5.0bn Advisor to Aberdeen Asset Management on its sale to Standard Life	2018 \$5.0bn Advisor to Equis Pte on the sale of Equis Energy to GIP and co-investors	2017 \$5.0bn Advisor to Fidelity National Financial on its spin-off of Black Knight	Pending \$4.9bn Advisor to Akorn on its sale to Fresenius
Pending \$4.7bn Advisor to Booker on its merger with Tesco	2017 \$4.3bn Advisor to TerraForm Power on its sale of controlling stake to Brookfield Asset Management	2017 \$4.3bn Advisor to Onex and USI on its sale to KKR and CDPQ	2017 \$4.3bn Advisor to Bain Capital & Cinven on its acquisition of 65.3% stake in STADA Arzneimittel	Pending \$4.1bn Advisor to Iliad on its acquisition of 64.5% stake in Eircom
2017 \$4.0bn Adviser to John Wood Group on its combination with Amec Foster Wheeler	Pending \$3.9bn Advisor to Refresco on its sale to PAI and consortium	Pending \$3.9bn Advisor to Signode Industrial on its sale to Crown Holdings	Pending \$3.9bn Advisor to TPG Capital, Welsh, Carson, Anderson & Stowe and Humana on its acquisition of Kindred Healthcare	2017 \$3.6bn Advisor to eviCore Healthcare on its sale to Express Scripts

Notes

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