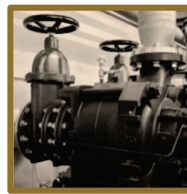
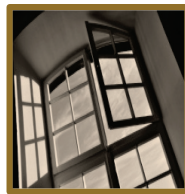


STATUS OF THE CAPITAL MARKETS: Cash Liquidity in the U.S. and Canadian Capital System

Industry In-Sight™

JANUARY 2018



**JORDAN KNAUFF
& COMPANY**

Why Cash Liquidity⁽¹⁾ is Important in the Middle-Market

For mergers and acquisitions (M&A) transactions in the middle-market, one of the most important concerns is the amount of liquidity in the marketplace. Greater liquidity can result in easier borrowing at lower rates. Thus, the cash positions of central bank reserves and non-banking finance companies (NBFCs) provide a general forecast for middle-market M&A. Much like in real estate, the ability to borrow at low rates usually increases the prices paid for assets and decreases the transaction time as more money chases a shrinking pool of desirable deals.

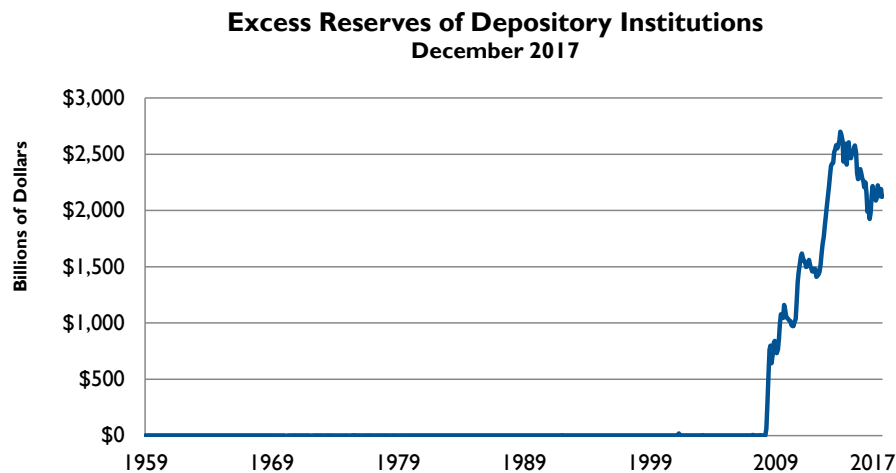
However, NBFCs and commercial banks do not frequently engage in M&A activities themselves, except as strategic buyers in their own industries. Private equity (PE) and strategic buyers are, by far, the most frequent participants in M&A. Thus, a forecast for the market can be obtained by measuring the level of uncommitted funds in PE and the amount of cash residing on corporate balance sheets, supplemented by the amount of cash reserves available to their financiers, the commercial banks. This is the “dry powder” that fuels the M&A middle-market. High levels of uninvested funds lead to pressure from investors to put capital to good use or return cash to the Limited Partners of PE funds and shareholders of cash rich corporations. This pressure can create an excellent climate for pitching deals.

(1) Cash liquidity is defined as cash and cash equivalents for the purpose of this analysis.

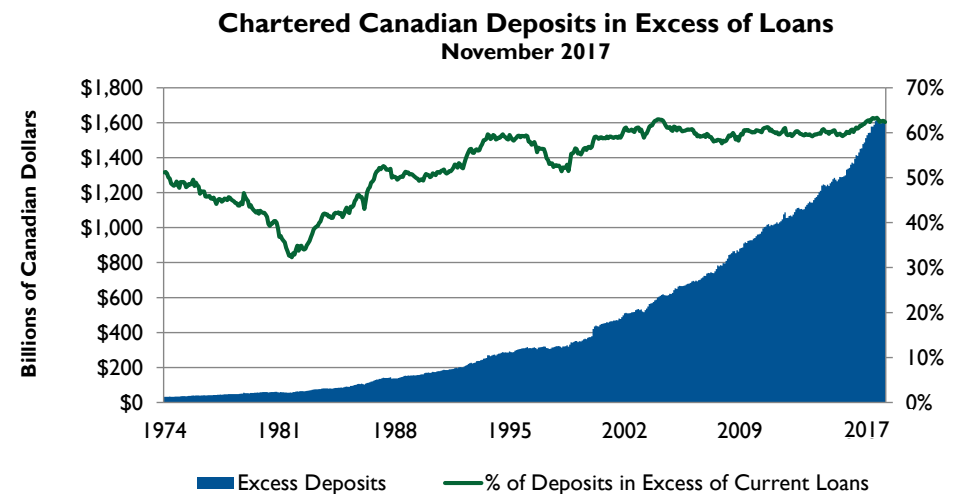
Status of the Capital Markets: Cash Liquidity

■ Banking System (reserve deposits)

U.S. = \$2.1 trillion⁽¹⁾



Canada = \$1.3 trillion (U.S.)⁽²⁾



(1) Federal Reserve Bank of St. Louis. [Federal Reserve Economic Data](#), January 11, 2018.

(2) Bank of Canada. Table 176-0025 - Chartered bank assets and liabilities and monetary aggregates, monthly average, seasonally adjusted, January 5, 2018. Conversion rate of 1 CAD = 0.802758 USD.

Status of the Capital Markets: Cash Liquidity (cont'd)

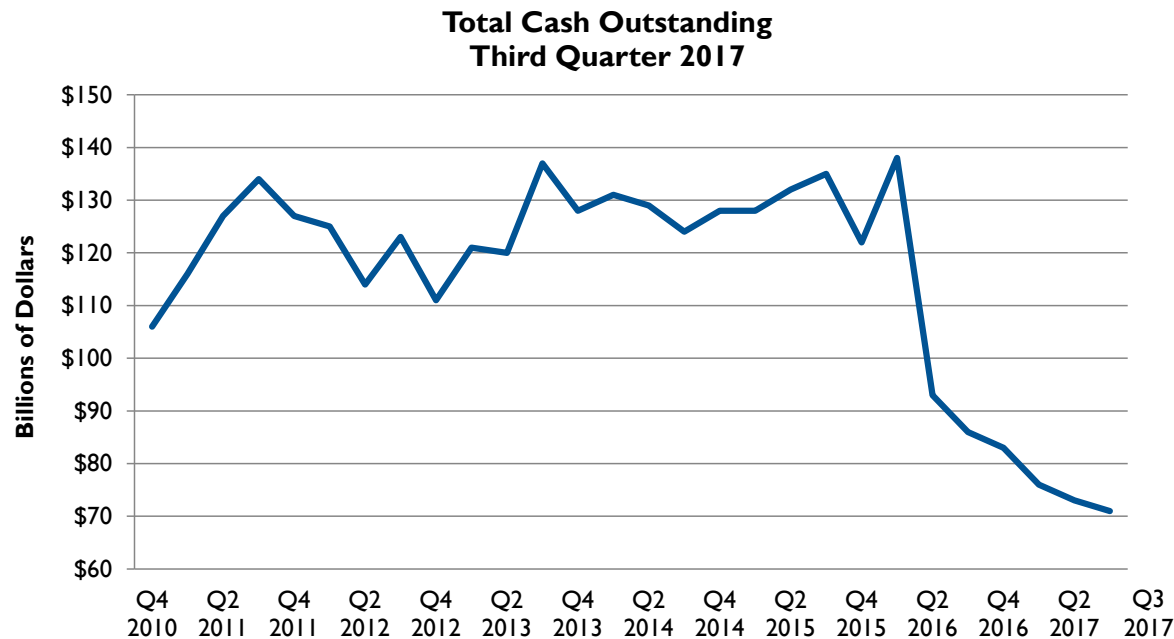
■ Notes on Banking System Cash Liquidity

- The Canadian banking system does not require official levels of cash reserves, as in the U.K. and Australia. The data we have compiled to approximate U.S. excess reserves is the amount by which Canadian Chartered Bank Deposits exceed recorded loans.

Status of the Capital Markets: Cash Liquidity (cont'd)

■ Finance Companies

U.S. = \$0.07 trillion⁽¹⁾



(1) Federal Reserve Bank of St. Louis. Domestic finance companies, cash and cash equivalents outstanding, quarterly, not seasonally adjusted. January 3, 2018.

Status of the Capital Markets: Cash Liquidity (cont'd)

■ Notes on Finance Companies

- Canada does not collect national level data on this sector.
- The Federal Reserve defines finance companies as firms meeting the following criteria:⁽¹⁾
 - ▶ 50% or more of assets are business or consumer loans or leases;
 - ▶ The institution does not accept deposits; and
 - ▶ The institution is not an industrial loan corporation.

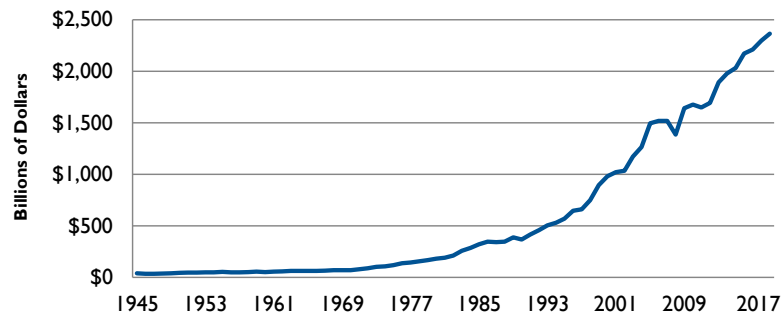
(1) Federal Reserve. FR3033s: Instructions to Survey of Finance Companies, December 31, 2013.

Status of the Capital Markets: Cash Liquidity (cont'd)

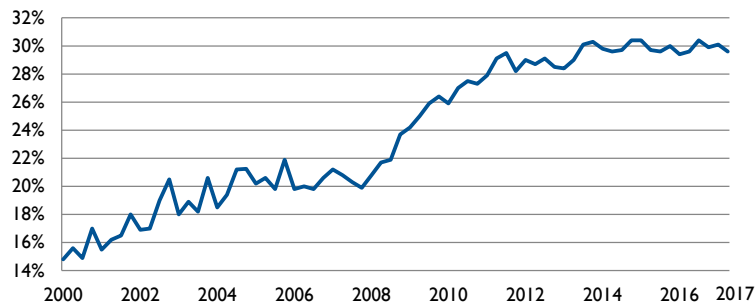
■ Non-financial Corporate Balance Sheets

U.S. = \$2.3 trillion⁽¹⁾

Non-financial Corporate Liquid Assets
Third Quarter 2017

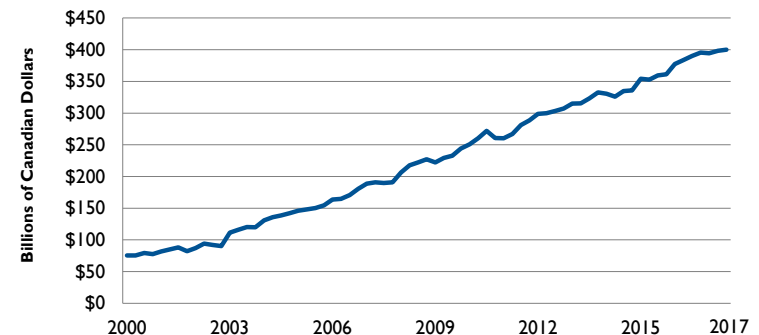


Corporate Cash as a Percent of Current Assets ⁽²⁾
S&P 500 Companies Second Quarter 2017

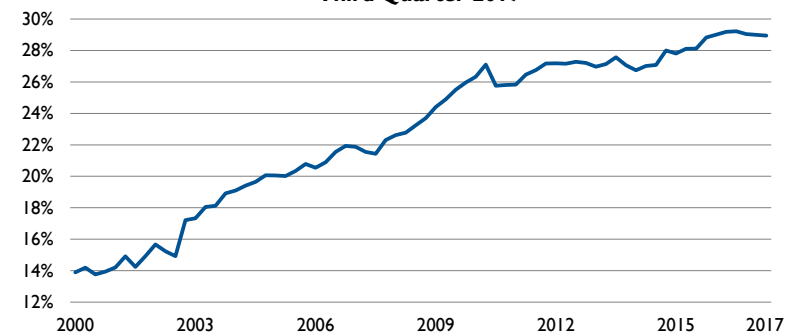


Canada = \$0.32 trillion (U.S.)⁽³⁾

Cash and Deposits of Non-financial Firms
Third Quarter 2017



Cash and Deposits of Non-financial Firms
as a Percent of Current Assets⁽³⁾
Third Quarter 2017



(1) Board of Governors of the Federal Reserve System. Z.1 Financial Accounts of the United States – Third Quarter 2017, December 7, 2017, p. 80.

(2) J.P. Morgan Asset Management. Guide to the Markets – U.S., 4Q 2017, November 30, 2017.

(3) Statistics Canada. Table 187-0001 - Quarterly balance sheet and income statement, November 23, 2017. Conversion rate of 1 CAD = 0.802758 USD.

Status of the Capital Markets: Cash Liquidity (cont'd)

U.S. Corporate Cash Offshore

- As many media outlets and congressional reports have noted, large amounts of U.S. corporate cash is officially domiciled offshore to defer recognition for tax purposes.
- According to Moody's Investor Service, offshore cash constituted 74% of U.S. corporate cash reserves in 2016.⁽¹⁾
- Although this cash is officially domiciled offshore in foreign subsidiaries, investigations by Senator Carl Levin have revealed that at least 46% of offshore reserves are present in the U.S. financial system.
- As a result, we estimate that 40% of U.S. corporate cash reserves are both offshore and not present in the U.S. financial system.⁽²⁾

Gross U.S. Non-financial Corporate Liquid Assets	=	\$2.30 trillion
<Estimated Offshored Cash>	=	<0.92 trillion>
<hr/>		
U.S. Domestic Cash on Balance Sheets	=	1.38 trillion
+ Canadian Cash and Deposits	=	0.32 trillion
<hr/>		
Net U.S. and Canadian System Cash	=	U.S. \$1.70 trillion

(1) Moody's Investor Service, Global Credit Research, November 3, 2016.

(2) JKC research.

Status of the Capital Markets: Cash Liquidity (cont'd)

■ Notes to Non-financial Corporate Balance Sheets:

- Canada conducts quarterly surveys of all non-financial incorporated entities. The total amount of cash and cash equivalents is projected from these quarterly samples. Response to the survey is compulsory.⁽¹⁾
- Canada and the U.S. both use the same GAAP standard⁽²⁾ to define cash and cash equivalents with very small differences related to recording of transactions at trade or settlement date. Cash is either currency on hand or demand deposits held at banks. Cash equivalents⁽³⁾ are any of the following assets: asset-backed securities, certificates of deposit, time deposits, municipal / government / agency securities, commercial paper, credit / debit card receivables and money market funds at carrying value that meet the conditions of having an original maturity of ≤ 90 days and are readily convertible to known amounts of cash.

(1) Statistics Canada. Definitions, Data Sources and Methods: Quarterly Survey of Financial Statements, p. 2.

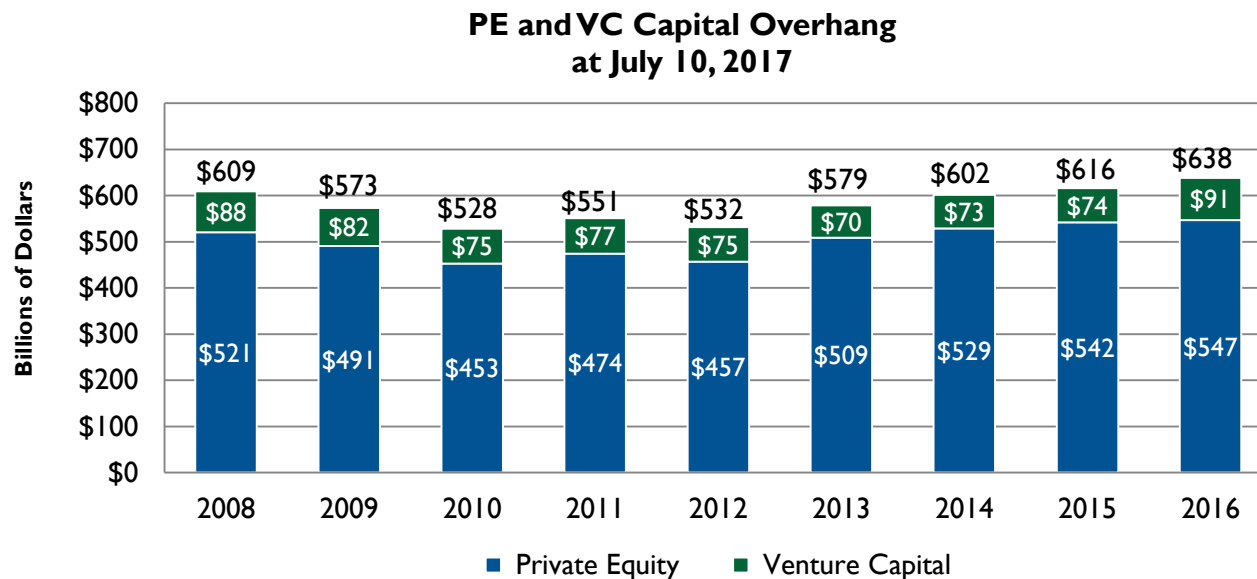
(2) PwC. Similarities and Differences: A comparison of Brazilian GAAP, IFRS, U.S. GAAP and Canadian GAAP for Investment Funds, p. 8.

(3) Federal Accounting Standards Board. FAS 95: Statement of Cash Flows, paragraphs 7 – 10.

Status of the Capital Markets: Cash Liquidity (cont'd)

■ Venture Capital / Private Equity Uninvested Commitments

U.S. = \$0.64 trillion⁽¹⁾

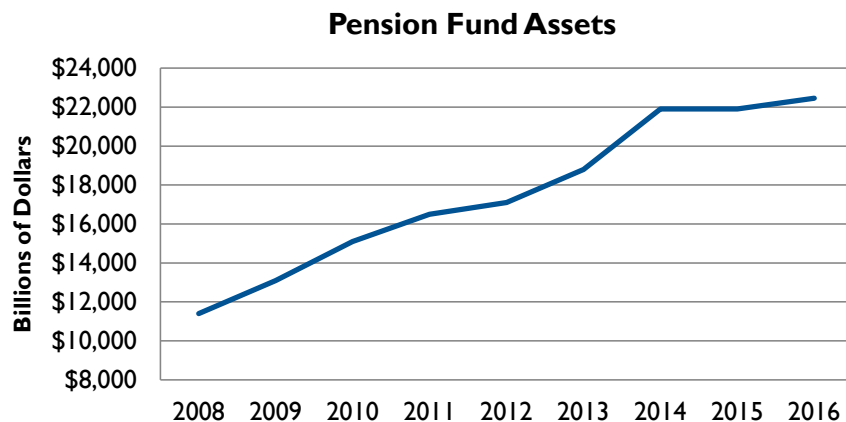


(1) Pitchbook Data. 2017 Annual PE & VC Fundraising Report, August 14, 2017.

Status of the Capital Markets: Cash Liquidity (cont'd)

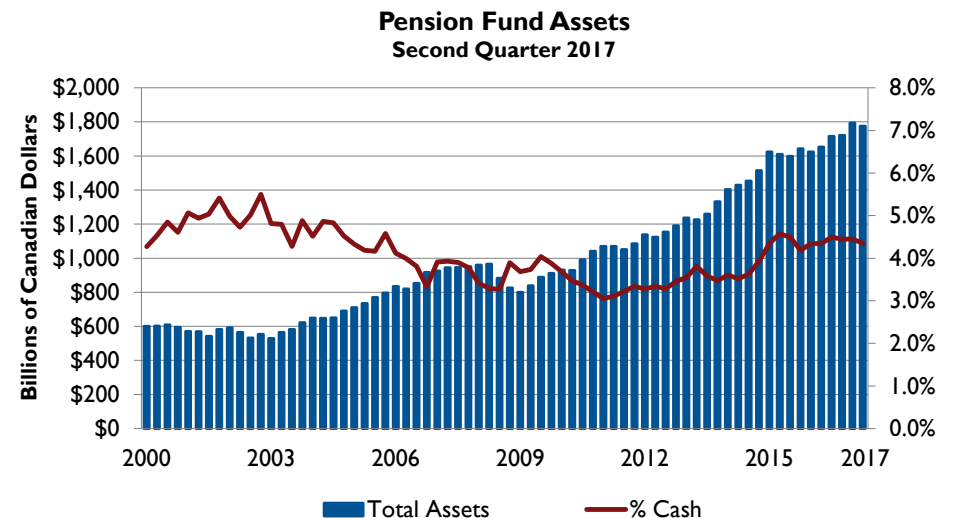
Public and Private Pension Funds

U.S. = \$22.4 trillion⁽¹⁾



Average 5.0% Cash Balance = ~ U.S. \$1.1 Trillion

Canada = \$1.4 trillion (U.S.)⁽²⁾



Average 4.3% Cash Balance = ~ U.S. \$60.2 Billion

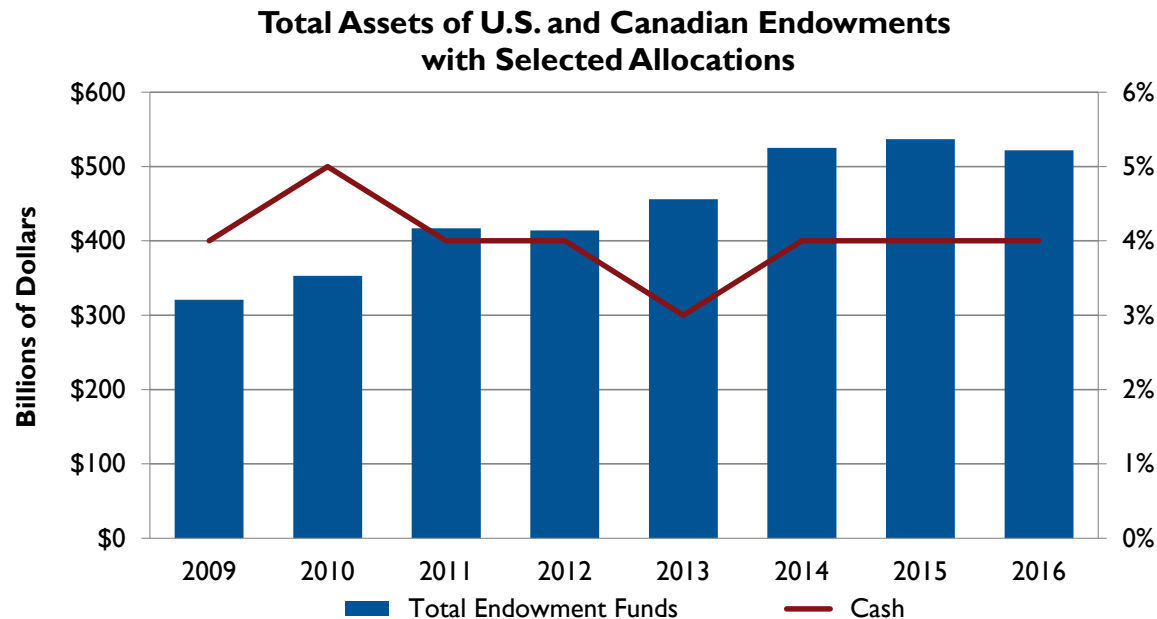
(1) Willis Towers Watson. Global Pension Assets Study, January 30, 2017.

(2) Statistics Canada. Table 280-0003 - Trusteed pension funds, market and book value of assets, by foreign and domestic holdings, quarterly, December 12, 2017.
Conversion rate of 1 CAD = 0.802758 USD.

Status of the Capital Markets: Cash Liquidity (cont'd)

■ Endowments

U.S. and Canada = \$0.52 trillion (U.S.)⁽¹⁾

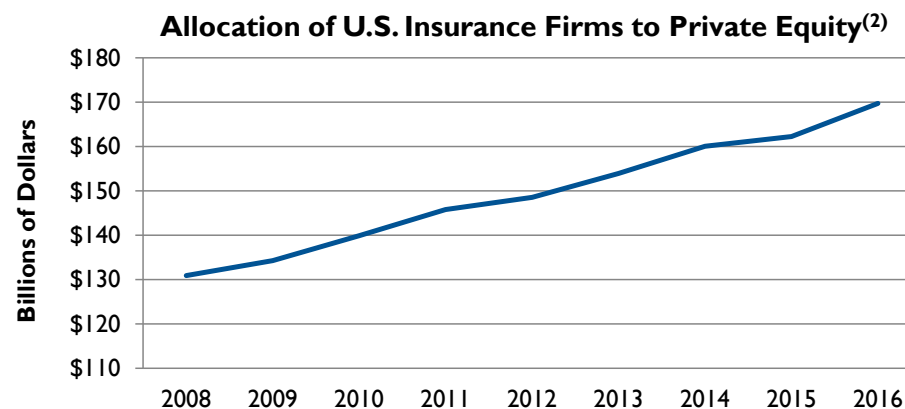
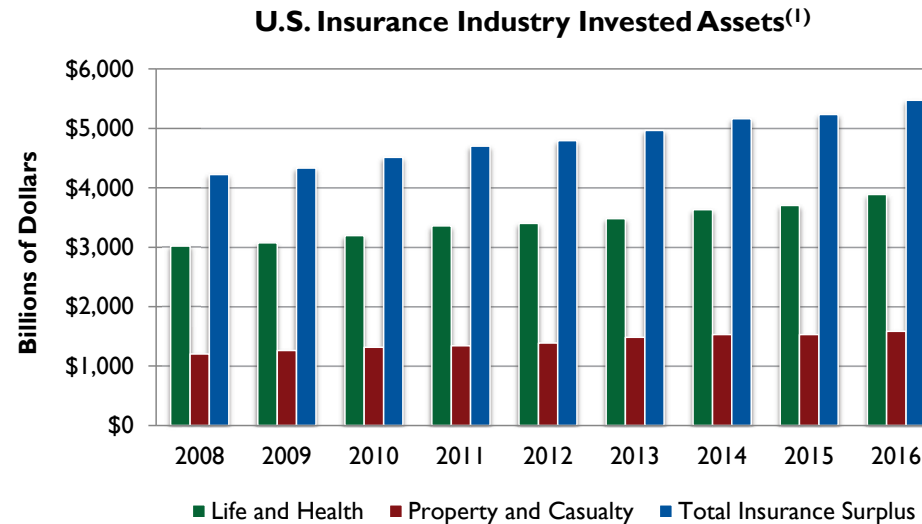


Average 4.0% Cash Balance = ~ U.S. \$21.0 billion Currently 4.0% Cash Balance = ~ U.S. \$21.0 billion

(1) National Association of College and University Business Officers. 2016 NACUBO-Commonfund Study of Endowments, January 31, 2017. In U.S. dollars.

Status of the Capital Markets: Cash Liquidity (cont'd)

■ Insurance



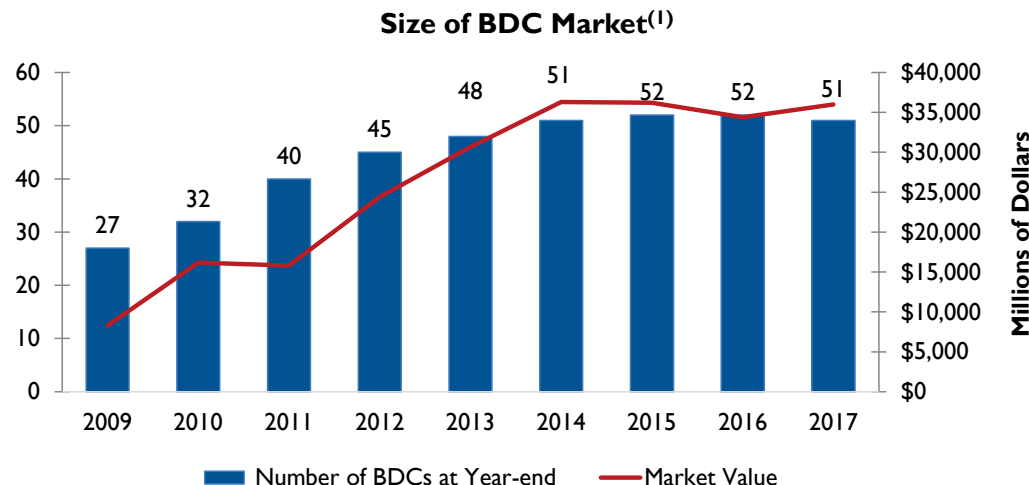
(1) Federal Insurance Office. U.S. Department of the Treasury, Annual Report on the Insurance Industry, September 2017.

(2) Preqin Ltd. Preqin Special Report: Insurance Companies Investing in Private Equity.

Status of the Capital Markets: Cash Liquidity (cont'd)

■ Business Development Companies (BDC)

- Defined in a 1980 amendment to the Investment Company Act of 1940.
- A BDC may be either private or publicly traded.
- BDCs are similar to a closed-end mutual fund or REIT with the following investment restrictions:
 - ▶ A BDC must only purchase equity or offer debt to non-public firms with more than \$2 million in capital and surplus, but less than \$4 million in assets; and
 - ▶ A BDC must provide significant managerial assistance to the firms in its debt and equity portfolios.



(1) Compustat and Closed-End Fund Advisors, Quarterly Closed-End Fund & BDC Review and Outlook, Fourth Quarter 2017, January 18, 2018.

The Impact of Liquidity in the Current M&A Climate

An increasingly important factor in the M&A market is the presence of pension, insurance, endowment and family office funds. These investors are typically focused on much longer term investments than other market participants. The public frequently views these participants as conservative investors benefitting “widows and orphans.” However, the long liability horizons and predictable pay out requirements for these participants enable them to place large portions of their assets in illiquid, long-term investments. Although trends indicate that these funds are increasing their level of direct investment in private firms, the vast majority of these participants’ impact on the M&A market is via PE funds. The lower the yields on fixed income, the more desirable PE investments become. The willingness of PE firms to launch new funds often depends on the participation and sponsorship of these institutional investors.

A secular trend of low returning, fixed income assets and large amounts of corporate cash currently prevails. This environment leads PE operators into being more inclined to fill launched funds quickly in order to launch subsequent funds while conditions are still favorable for institutional investments. The desire of PE funds to make hay while the sun shines is augmented by corporate cash flowing into strategic acquisitions which places even more upward pressure on M&A pricing. All of these factors point to a prime sellers’ market in M&A.

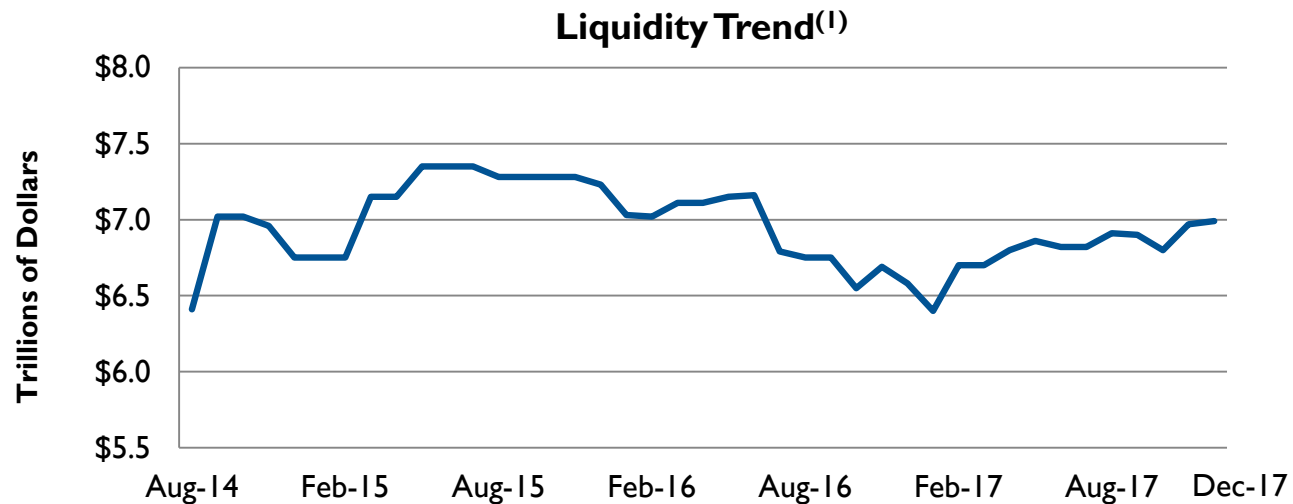
Status of the Capital Markets: Cash Liquidity (cont'd)

	U.S.	Canada
■ Summary of Cash Liquidity in the U.S. and Canada		
▶ Banking System (reserve deposits)	\$2.1 trillion	\$1.3 trillion
▶ Finance Companies	\$0.07 trillion	
▶ Non-financial Corporate Balance Sheets with Offshoring Adjustment	\$1.38 trillion	\$0.32 trillion
▶ Venture Capital / Private Equity Uninvested Commitments	\$0.64 trillion	
▶ Public and Private Pension Funds	\$1.1 trillion	\$0.06 trillion
	\$5.29 trillion	+ \$1.68 trillion
▶ Endowments (U.S. & Canada)	+ \$0.02 trillion	

Total Cash Liquidity Pool (December 2017) \$6.99 trillion (U.S.)

Status of the Capital Markets: Cash Liquidity (cont'd)

■ Cash Liquidity in the U.S. and Canada Over Time



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ABOUT JORDAN KNAUFF & COMPANY

Jordan Knauff & Company was founded in 2001 to undertake a distinct mission: to assemble and maintain a staff of top-notch investment banking personnel and offer their knowledge and experience to provide the best available investment banking services to middle-market companies, the entrepreneurs that lead them and the financial entities that transact with them. On a combined basis, over the course of their careers our employees have completed over 200 transactions as investors, owners, operators, buyers, sellers and investment bankers of middle-market businesses across a variety of industries. The majority of our firm's broad transaction experience has been with private companies owned by one shareholder, a partnership, a family or private equity investors.



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