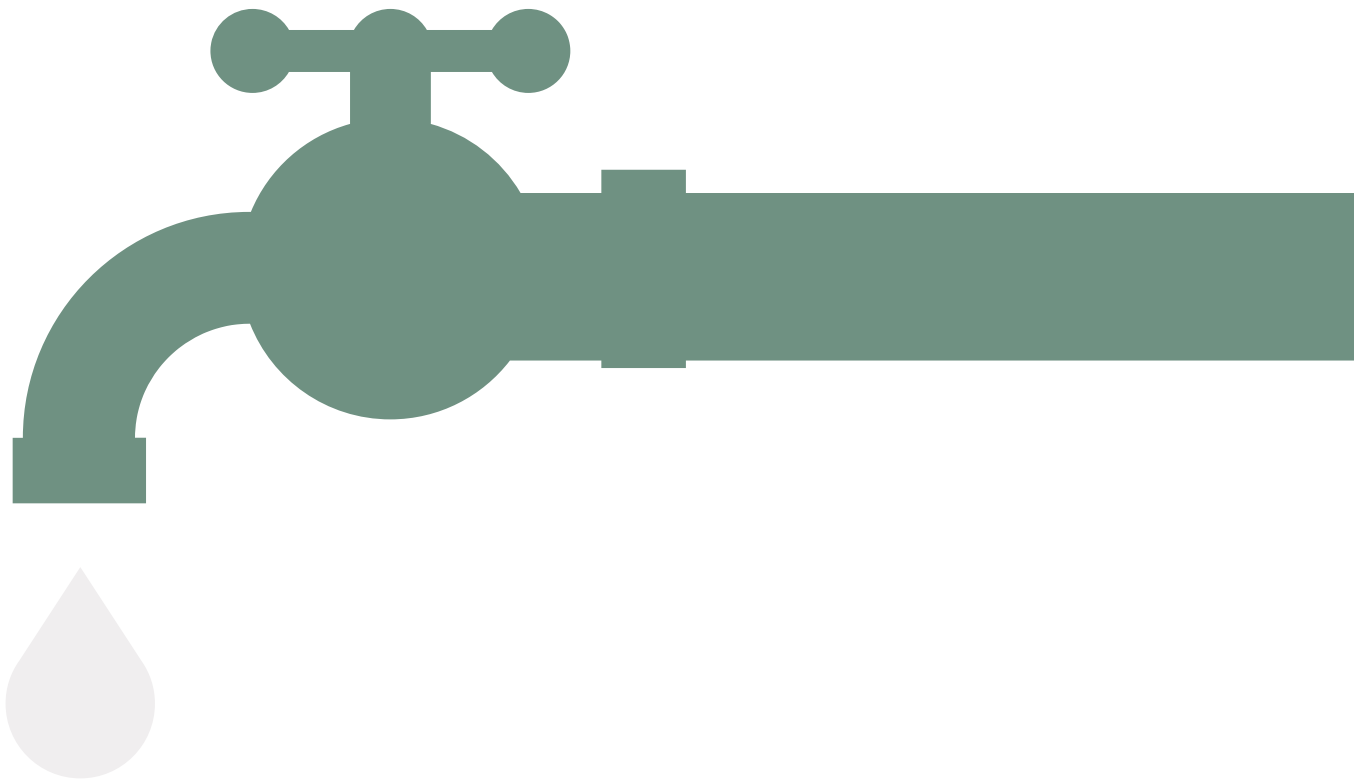


# Liquidity explained

MONTHLY PERSPECTIVES | PORTFOLIO ADVICE & INVESTMENT RESEARCH

June 2015



## In this issue

FINANCIAL MARKETS	
What is liquidity, exactly? .....	2 - 3
FIXED INCOME	
Crowded sidewalks .....	4
WEALTH CONSIDERATIONS	
Wealth creation and liquidity .....	5
THE LAST WORD	
Asset liquidity .....	6
A final thought .....	6
PERFORMANCE MONITOR	
Monthly market review .....	7
APPENDIX A	
Important information .....	8

Martha Hill, CFA

When it comes to investing, liquidity seems to be a common term, but what does it really mean? And perhaps more importantly, what does it mean to you?

For investors, it can take on many different meanings. For example, the ability to buy or sell an asset with ease without impacting price; trading volumes associated with a security or marketplace; the financial strength of a company and its ability to meet its funding and operating requirements; or simply, an individual's ability to access cash without incurring a significant penalty or loss.

In this issue, we explore the various definitions of liquidity, and what it means for investors and financial markets. Additionally, we discuss how an investor's liquidity requirements influence their portfolio and asset allocation.

This document is for distribution to Canadian clients only. Please refer to Appendix A of this report for important disclosure information.



## FINANCIAL MARKETS

## What is liquidity, exactly?

Scott Booth, CFA

Liquidity is a word that investors likely hear on a regular basis. But what is it exactly? Are there different definitions? Types? Should you be concerned about one vs. another?

In its simplest form, liquidity is the ability to convert an asset to cash quickly. Assets are liquid if they can be easily bought or sold without any material impact on price. This definition of liquidity describes what is referred to as market liquidity. Trading volumes and bid-ask spreads are tools that can be used to gauge an asset's market liquidity. The bid-ask spread is the difference between the highest price that a buyer is willing to pay for an asset and the lowest price for which a seller is willing to sell it. For example, if the bid price is \$15 and the ask price is \$16 then the "bid-ask spread" is \$1. Less liquid assets tend to have wider bid-ask spreads and lower trading volumes. The table below shows a recent snapshot of various asset classes and some liquidity related characteristics.

The average spread as a percentage of bid price shown below suggests that benchmark government bonds are the most liquid, followed by common and preferred shares, corporate debt and debentures. Average trading volumes illustrate a different aspect of liquidity, with convertible debentures and preferred shares trading considerably less than other asset classes. Having an appreciation for the liquidity characteristics of investments can help investors make choices that are compatible with their investment needs and risk tolerance.

In the fixed income world, market liquidity is usually quite good for benchmarks and new issues. As time passes, issues age and trade less frequently so liquidity tends to decline. In terms of absolute dollar value, bid-ask spreads tend to be wider on longer-dated bonds and considerably narrower on ones with shorter maturities.

It is worth noting that market liquidity is far from constant; it is transient. It can persist for long periods of time and then evaporate when it is needed most. Liquidity is best when there are a similar number of buyers and sellers and they are equally motivated in their willingness to either establish or divest a position. When the bulk of market participants are more motivated to be on one side of the transaction, liquidity can be negatively impacted and price volatility

often ensues. The rush to exit the rate-reset preferred share market and resulting 15.8% plunge between late-November 2014 and mid-April 2015 serves as a good example of what can happen when shifts in sentiment occur in illiquid markets.

Liquidity can also be used to describe a company's ability to pay off both its current obligations and long-term financial commitments as they become current. In this case, liquidity refers to the ability to come up with cash to sustain operations. Companies with strong liquidity positions are more able to weather crises and downturns. As Warren Buffet observed in his 2014 letter to Berkshire Hathaway shareholders, financial staying power requires a company to maintain three strengths under all circumstances: 1) a large and reliable stream of earnings; 2) massive liquid assets; and 3) no significant near-term cash requirements. Mr. Buffet went on to say that "cash is to a business as oxygen is to an individual; never thought about when it is present, the only thing in mind when it is absent."

The global financial crisis was an example of a dramatically reduced level of funding liquidity. During this event, some very strong companies needed support to meet their short-term liabilities when access to funding became very challenging. In the years since the global financial crisis, funding liquidity has become abundant. This is evidenced by the ease with which companies can raise capital. Speculative-grade corporate debt issuance has been running at a record pace. The average number of protective covenants on speculative-grade bond issues has plunged dramatically. As Moody's noted in a recent report on loan covenant quality, "as investors continue to seek yield in this low-rate environment, more of the structural protections meant to protect bondholders are disappearing." Moody's stated that issuance of high-yield lite bonds, which lack a restricted payments and/or debt incurrence covenant, rose from 22.4% in the first half of 2014 to 37.6% in the second half. Historically, high-yield lite averages 19.1% of issuance.

Macro or central bank sponsored liquidity is one of the key reasons that access to capital and funding liquidity is as easy as it is at present. Central banks, including the Bank of England, the Bank of Japan, the European Central Bank and the U.S. Federal Reserve

**Table 1: Asset Class Liquidity**

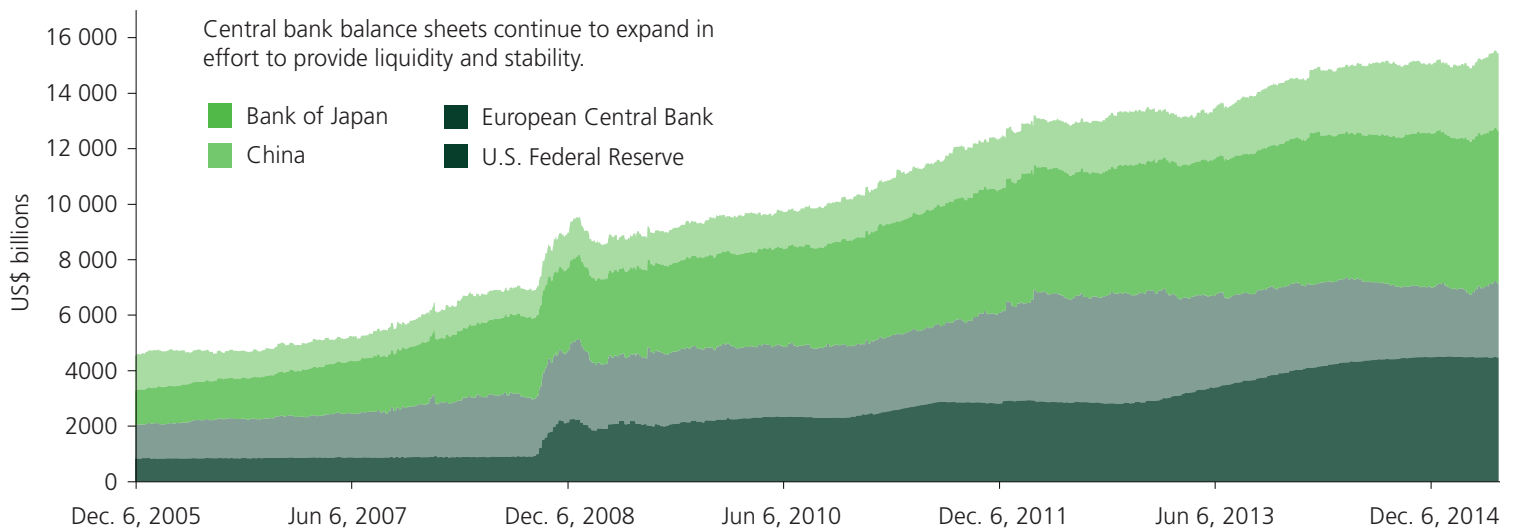
Asset Class	Market	Average Bid-Ask Spread	Average Spread (% of Bid Price)	Average Bid Size	Value of Average Bid Size	Average Daily Trading Volume
Benchmark GoC Bonds	Over the Counter	\$0.0607	0.05%	N/A	\$500,000	N/A
Common Shares	Exchange	\$0.0210	0.06%	2,100 shares	\$75,852	\$3-4 billion
Preferred Shares	Exchange	\$0.1270	0.58%	560 shares	\$12,247	< \$100 million
Corporate Debt	Over the Counter	\$1.3723	1.22%	N/A	\$500,000	N/A
Convertible Debentures	Exchange	\$1.8806	1.91%	28	\$28,000	< \$20 million

Source: Bloomberg Finance L.P. and Portfolio Advice & Investment Research. As at May 26, 2015.

## FINANCIAL MARKETS

have all, at varying times over the past several years, used their balance sheets to purchase assets. In their effort to fight deflation, they encouraged bank lending to promote economic growth, and expanded the money supply through the implementation of various quantitative or qualitative easing programs globally. The magnitude of their effort is reflected in the massive expansion of central bank balance sheets, as illustrated below.

**Figure 1: Central Bank Assets**



Source: Bloomberg Finance L.P. As at May 26, 2015.

These easing programs have expanded the monetary base and put severe downward pressure on interest rates. This reduction in interest rates resulted in a knock-on effect of forcing savers into riskier investments as available yields became insufficient to meet their income needs.

Additionally, monetary policy actions seem to have pushed valuations in the equity market upwards. Figure 2 illustrates the impact of increased liquidity on equity valuations. It shows that during periods of excess liquidity (when growth in the money supply exceeds nominal GDP growth) there is a tendency toward the expansion of price earnings ratios, meaning that equities become more expensive.

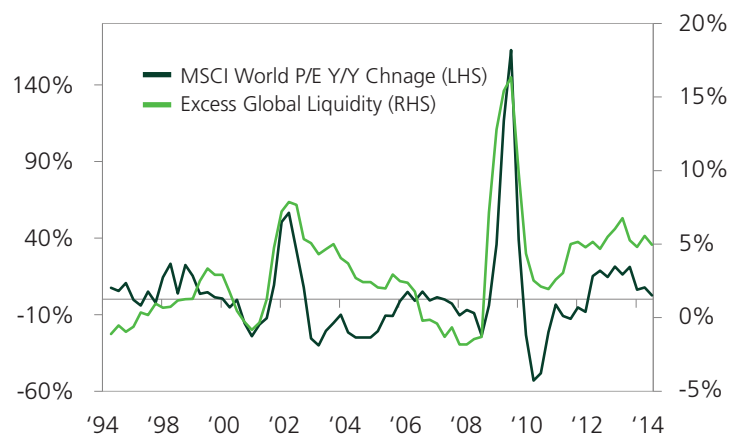
The European Central bank is the latest central bank to pick up the policy-easing torch with its plans to purchase €60 billion worth of bonds each month between now and September 2016. The performance of European equities has been strong so far this year and the implementation of Quantitative Easing has likely contributed to the advance in European stock markets.

It is clear that depending on the descriptor one puts in front of the word "liquidity," it can mean different things. For companies,

liquidity is very important for day-to-day operations. For investors, it is a very important consideration in the construction of portfolios and matching investment characteristics with timelines and goals. To clarify, there is nothing wrong with including high-quality illiquid assets as part of a diversified portfolio, provided they offer some incremental return to compensate for their lack of liquidity and they

are complemented by liquid assets to meet any potential needs for cash. Central bank sponsored liquidity has been a double edged sword as it seems to have led to an environment that rewards risk takers at the expense of savers.

**Figure 2: Excess Global Liquidity and P/E Expansion**



Source: Bloomberg Finance L.P. The Organisation for Economic Co-operation and Development (OECD). As at September 30, 2014.

## FIXED INCOME

## Crowded sidewalks

Sheldon Dong, CFA

The concept of financial market liquidity is a notoriously difficult one to define, even for industry professionals. But in many respects, liquidity in financial markets resembles crowded sidewalks. As an example, consider the downtown Toronto office tower infrastructure, which is connected by a vast underground network. The underground sidewalks are extremely important, allowing individuals to travel between different buildings for meetings, often to avoid adverse weather conditions. On sidewalks, people travel in both directions, with proper etiquette suggesting one keeps to their right hand side when conditions are crowded to ensure a smooth flow of traffic. This is how financial market liquidity basically works—corridors facilitate buyers and sellers of securities with smooth price discovery, ensuring that investors can adjust their holdings at minimal cost.

Problems for sidewalks arise when they become too crowded, or when people ignore etiquette. For some, this happens during the morning and evening rushes from, and to, the train station. During these times, you may find yourself walking against the flow of traffic. A corridor could be a hundred feet wide, but the crowd will often ignore etiquette and make no room for those going in the opposite direction. Travel time from one building to another, which normally takes five minutes when the flow of traffic is less congested, can take double the time during rush periods. Financial markets can often act like crowded sidewalks. Different assets travel on different sidewalks, with the primary difference being how wide that sidewalk is. One of the widest “sidewalks” is the U.S. Treasury bond market, the largest sovereign debt market in the world and considered to be one of the most liquid assets in financial markets. The size of the U.S. Treasury market is about US\$12.5 trillion, representing about 28% of the broader US\$45.5 trillion global bond market. Roughly US\$500 billion is traded every day in the U.S. Treasury market, making it a valued source of safety and liquidity. Millions of dollars in Treasury bonds can trade without impacting prices. The size of an order that can be transacted is often referred to as “market depth,” while the degree of price changes is often referred to as volatility. The ability to transact in large quantities while minimally affecting prices is one of the more common definitions of financial market liquidity. At the other end of the liquidity spectrum, riskier assets such as non-investment-grade bonds, preferred shares and small-capitalized stocks trade on much more narrow sidewalks, whereby large trading orders (large crowds) will have a considerable impact on price movements.

Liquidity risk is nothing new. This risk will occur any time investors make short-term shifts with securities that are designed for the longer term. Similarly, investors looking to liquidate risky assets should also expect some interruptions in liquidity as there may not always be a buyer who is willing and/or able to step in at the seller's desired price. This should be an important consideration

for investors, as there is growing concern that market liquidity is declining. The number of assets registering large moves, quantified as four or more standard deviations away from their normal trading range—something that might be expected to happen every 62 years—has been growing. A recent example is the German 10-year bond yield, which rose from a record low of 0.05% on April 17, 2015 to a high at 0.78% on May 7, a stunning 1460% increase in less than one month.

The factors affecting financial market liquidity constantly evolve and many are still not well understood. However, one of the most important is technological change, and how increasingly electronic, and often automated, markets affect liquidity. Automated trading is a sub-set of electronic trading that relies on computer algorithms for trading decisions, execution, and booking. Another major factor is regulatory change, which is impacting the risk-taking roles of traditional broker-dealers (largely banks) and their ability to act as market shock absorbers, particularly in times of high price-volatility by accommodating large order flows. Furthermore, the financial crisis led to higher capital requirements and increased costs for financial institutions, leaving broker-dealers less willing to provide such a function for relatively low-margin businesses.

---

### Investors need to make an important distinction between highly liquid cash and savings

---

It is now easier than ever to invest in almost any type of security or market you can think of through exchange traded funds (ETFs) or mutual funds that allow for daily liquidity in fund units. The problem is that the underlying securities that make up some of these funds are not as liquid as the funds themselves, creating a potential liquidity mismatch. The worst case scenario occurs when participants rush to the exits, and many investors try to sell at the same time. This could cause forced selling of the individual holdings, which could lead to much larger losses than most sellers are prepared to deal with. It becomes a self-fulfilling prophecy of losses on top of losses as more investors try to sell, exposing the liquidity mismatch between the fund and its underlying securities.

Overall, investors need to consider liquidity risk in their portfolios, making the important distinction between highly liquid cash and savings, with less-liquid longer-term investing. As financial markets are a reflection of human emotions, liquidity risk is more prevalent when markets are going down than up. Not being placed into the position of being a forced seller of longer-term investments during shorter-term adverse market conditions is the goal of structuring your portfolio for liquidity risk. Years of low interest rates have herded investors into the same yield-seeking market positions, but when the tide turns and they suddenly want to sell, they may all want to do it at the same time, potentially creating a very crowded sidewalk.

## WEALTH CONSIDERATIONS

## Wealth creation and liquidity

Clara Bor, CIM®

Perhaps you have encountered an emergency and you need money urgently to resolve the matter or you have an attractive investment opportunity and you have limited available cash on hand to cover without having to sell your investments or other assets. Liquidity planning is a crucial aspect of wealth management since it ensures access to cash whenever you need it, minimizing the potential negative impact to your investment holdings whether it is wrong timing or tax triggering.

The challenge is balancing the need to resolve a cash requirement with ease, without disrupting a long-term strategy that is in place to meet overall investment goals. Balancing the risk of lower returns with a need for ease in liquidity often involves tradeoffs. First, focusing only on achieving higher liquidity implies investing in liquid assets such as cash in the bank that generate lower returns. Second, emphasis on higher returns may mean investing in longer-term, possibly illiquid assets that may apply financial penalties or loss of capital with early withdrawals.

Regardless of their nature, financial liquidity needs usually fall into three categories. First are the basic liquidity needs to meet daily living expenses. Next are the precautionary liquidity needs that require cash to meet unexpected events, often referred to as the emergency or rainy day fund. Third are the discretionary liquidity needs for strategic purposes, which require that cash be readily available to take advantage of financial opportunities whenever they arise.

The challenge is balancing the need to resolve a cash requirement with ease, without disrupting a long-term strategy that is in place to meet overall investment goals.

In addition to a straightforward overdraft line on a chequing account that covers a temporary account shortfall, a line of credit can be an option for longer-term, more strategic purposes. For example, an investment loan, secured by a conservative, equities-based portfolio that offers liquidity without impacting or unwinding a longer-term investment or wealth strategy may be an option. Including a planned investment line into an overall wealth strategy, affords flexible access to equity that is otherwise locked-in or part of a broader wealth strategy. Consolidating available equity from financial assets under a single credit facility can afford access to funds when required for a business, real estate, investment opportunity or to meet a capital requirement at a moment's notice.



### Flexible and Convenient Solutions

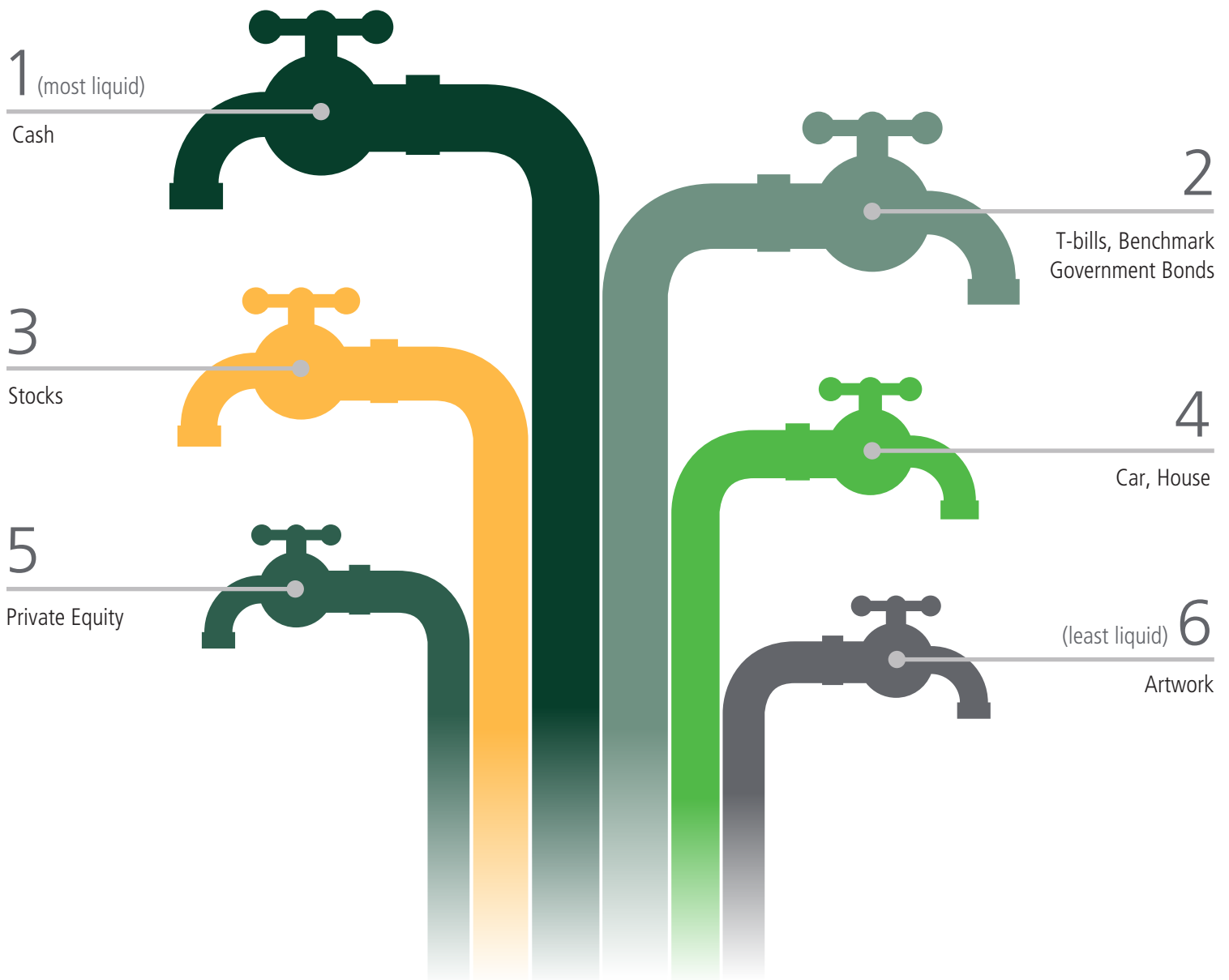
As wealth grows, banking and borrowing needs tend to become more complex, often requiring increased customization and expertise. Our TD Wealth specialists provide innovative, flexible credit solutions to support investment, estate and/or business succession planning needs, which seek to preserve your wealth capital while maximizing tax efficiency and minimizing risk.

A cornerstone to wealth creation is remaining disciplined and maintaining a long-term financial strategy. A financial liquidity plan complements this strategy, while allowing for discretionary liquidity needs. To determine which strategy is right for you and to ensure that you fully understand the potential risks and tax implications, we recommend that you speak with your advisor and tax professional before making any related decisions.

## THE LAST WORD

**Asset liquidity**

Chris Blake, CFA

**A final thought**

Martha Hill, CFA

One of the keys to successful investing is to develop a plan that includes a strategic asset allocation suited to your investment goal(s). When developing this plan, a number of factors need to be considered, including your objectives, risk tolerance, time horizon and liquidity requirements. These factors determine which asset classes to include in a portfolio. In general, if the investment goal has a short time horizon, the portfolio should focus on capital preservation and liquidity. For example, someone planning to purchase a cottage within the next two years should invest the funds in instruments that are not susceptible to short-term market swings and can be accessed easily. This investor will want to minimize the risk that the market value of the “cottage fund” is lower than expected at the time the funds are required. In general, the longer the time horizon, the higher the proportion of more volatile asset classes, such as stocks, or less liquid asset classes, such as private equity, can be included in a portfolio. When designing an asset mix strategy, it’s important to prioritize not only your investment goals but also the risks you are willing to take to achieve them.

## PERFORMANCE MONITOR

## Monthly market review

		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Canadian Indices (\$CA) Return	Index Level	1 Month	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	20 Years
S&P/TSX Composite (TR)	46,283	-1.22	-0.72	3.79	5.80	12.58	8.07	7.51	8.69
S&P/TSX Composite (PR)	15,014	-1.38	-1.45	2.61	2.81	9.25	5.00	4.57	6.27
S&P/TSX 60 (TR)	2,179	-1.16	-0.99	3.55	7.66	13.43	7.89	7.80	9.28
S&P/TSX SmallCap (TR)	879	0.26	1.00	4.75	-7.23	4.57	3.40	3.01	-
U.S. Indices (\$US) Return	Index Level	1 Month	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	20 Years
S&P 500 (TR)	3,891	1.29	0.64	3.23	11.81	19.67	16.54	8.12	9.14
S&P 500 (PR)	2,107	1.05	0.14	2.36	9.56	17.16	14.11	5.87	7.11
Dow Jones Industrial (PR)	18,011	0.95	-0.67	1.05	7.74	13.27	12.18	5.58	7.22
NASDAQ Composite (PR)	5,070	2.60	2.15	7.05	19.50	21.49	17.57	9.38	9.25
Russell 2000 (TR)	5,908	2.28	1.41	3.98	11.32	19.45	15.04	8.73	9.39
U.S. Indices (\$CA) Return	Index Level	1 Month	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	20 Years
S&P 500 (TR)	4,851	4.19	0.30	10.92	28.25	27.33	20.70	8.08	8.63
S&P 500 (PR)	2,627	3.95	-0.20	9.99	25.67	24.66	18.18	5.83	6.61
Dow Jones Industrial (PR)	22,452	3.85	-1.01	8.59	23.59	20.52	16.18	5.54	6.72
NASDAQ Composite (PR)	6,320	5.54	1.80	15.03	37.08	29.27	21.76	9.34	8.73
Russell 2000 (TR)	7,365	5.22	1.07	11.73	27.69	27.09	19.14	8.70	8.87
MSCI Indices (\$US) Total Return	Index Level	1 Month	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	20 Years
World	6,723	0.43	1.29	5.36	6.27	17.74	13.46	7.31	7.36
EAFE (Europe, Australasia, Far East)	6,977	-0.40	2.27	8.93	-0.06	16.13	10.44	6.05	5.64
EM (Emerging Markets)	2,032	-3.99	1.97	5.78	0.33	6.32	4.41	9.10	6.50
MSCI Indices (\$CA) Total Return	Index Level	1 Month	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	20 Years
World	8,381	3.31	0.95	13.21	21.90	25.27	17.51	7.27	6.85
EAFE (Europe, Australasia, Far East)	8,697	2.46	1.92	17.05	14.65	23.56	14.38	6.01	5.14
EM (Emerging Markets)	2,533	-1.23	1.63	13.67	15.09	13.12	8.14	9.06	6.00
Currency	Level	1 Month	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	20 Years
Canadian Dollar (\$US/\$CA)	80.22	-2.79	0.34	-6.94	-12.82	-6.02	-3.44	0.03	0.47
Regional Indices (Native Currency) Price Return	Index Level	1 Month	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	20 Years
London FTSE 100 (UK)	6,984	0.34	0.54	6.37	2.04	9.49	6.13	3.47	3.79
Hang Seng (Hong Kong)	27,424	-2.52	10.48	16.18	18.81	13.76	6.77	7.06	5.50
Nikkei 225 (Japan)	20,563	5.34	9.39	17.84	40.53	34.02	16.05	6.19	1.44
Bond Yields		3 Months		5 Years		10 Years		30 Years	
Government of Canada Yields		0.63		0.89		1.62		2.21	
U.S. Treasury Yields		0.00		1.49		2.12		2.88	
Canadian Bond Indices (\$CA) Total Return	Index Level	1 Month	3 Month	YTD	1 Year	3 Year	5 Year	10 Year	
FTSE TMX Canada Universe Bond Index	989.29	0.20	-1.48	2.94	7.12	3.96	5.56	5.20	
FTSE TMX Canadian Short Term Bond Index (1-5 Years)	684.35	0.40	-0.07	1.85	3.25	2.63	3.23	3.81	
FTSE TMX Canadian Mid Term Bond Index (5-10)	1075.03	0.28	-1.27	3.27	7.30	4.55	6.43	5.82	
FTSE TMX Long Term Bond Index (10+ Years)	1559.55	-0.13	-3.39	4.20	12.70	5.30	8.74	7.11	

Sources: TD Securities Inc., Bloomberg Finance L.P. TR: total return, PR: price return. As at May 31, 2015.

## APPENDIX A

## Important information

The information has been drawn from sources believed to be reliable. Where such statements are based in whole or in part on information provided by third parties, they are not guaranteed to be accurate or complete. Graphs and charts are used for illustrative purposes only and do not reflect future values or future performance of any investment. The information does not provide financial, legal, tax or investment advice. Particular investment, trading, or tax strategies should be evaluated relative to each individual's objectives and risk tolerance. TD Wealth, The Toronto-Dominion Bank and its affiliates and related entities are not liable for any errors or omissions in the information or for any loss or damage suffered.

Certain statements in this document may contain forward-looking statements ("FLS") that are predictive in nature and may include words such as "expects", "anticipates", "intends", "believes", "estimates" and similar forward-looking expressions or negative versions thereof. FLS are based on current expectations and projections about future general economic, political and relevant market factors, such as interest and foreign exchange rates, equity and capital markets, the general business environment, assuming no changes to tax or other laws or government regulation or catastrophic events. Expectations and projections about future events are inherently subject to risks and uncertainties, which may be unforeseeable. Such expectations and projections may be incorrect in the future. FLS are not guarantees of future performance. Actual events could differ materially from those expressed or implied in any FLS. A number of important factors including those factors set out above can contribute to these digressions. You should avoid placing any reliance on FLS.

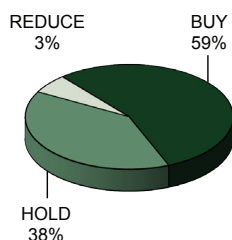
All credit products are subject to credit approval and various terms and conditions. Nothing contained herein should be construed as an offer or commitment to lend by the Toronto-Dominion Bank.

Full disclosures for all companies covered by TD Securities Inc. can be viewed at <https://www.tdsresearch.com/equities/welcome.important.disclosure.action>

## Research Ratings

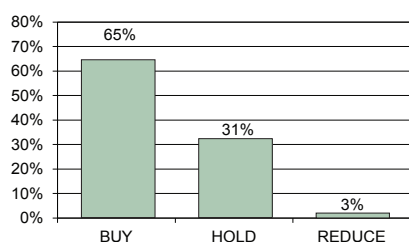
**Overall Risk Rating in order of increasing risk:** Low (6.7% of coverage universe), Medium (32.3%), High (50.0%), Speculative (11.0%)

## Distribution of Research Ratings



Percentage of subject companies under each rating category—BUY (covering Action List BUY, BUY and Spec. BUY ratings), HOLD and REDUCE (covering TENDER and REDUCE ratings). As at June 1, 2015.

## Investment Banking Services Provided



Percentage of subject companies within each of the three categories (BUY, HOLD and REDUCE) for which TD Securities Inc. has provided investment banking services within the last 12 months. As at June 1, 2015.

**Action List BUY:** The stock's total return is expected to exceed a minimum of 15%, on a risk-adjusted basis, over the next 12 months and it is a top pick in the Analyst's sector. **BUY:** The stock's total return is expected to exceed a minimum of 15%, on a risk-adjusted basis, over the next 12 months. **SPECULATIVE BUY:** The stock's total return is expected to exceed 30% over the next 12 months; however, there is material event risk associated with the investment that could result in significant loss. **HOLD:** The stock's total return is expected to be between 0% and 15%, on a risk-adjusted basis, over the next 12 months. **TENDER:** Investors are advised to tender their shares to a specific offer for the company's securities. **REDUCE:** The stock's total return is expected to be negative over the next 12 months.

**Research Report Dissemination Policy:** TD Waterhouse Canada Inc. makes its research products available in electronic format. These research products are posted to our proprietary

websites for all eligible clients to access by password and we distribute the information to our sales personnel who then may distribute it to their retail clients under the appropriate circumstances either by e-mail, fax or regular mail. No recipient may pass on to any other person, or reproduce by any means, the information contained in this report without our prior written consent.

**Analyst Certification:** The Portfolio Advice and Investment Research analyst(s) responsible for this report hereby certify that (i) the recommendations and technical opinions expressed in the research report accurately reflect the personal views of the analyst(s) about any and all of the securities or issuers discussed herein, and (ii) no part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the provision of specific recommendations or views expressed by the research analyst in the research report.

**Conflicts of Interest:** The Portfolio Advice & Investment Research analyst(s) responsible for this report may own securities of the issuer(s) discussed in this report. As with most other employees, the analyst(s) who prepared this report are compensated based upon (among other factors) the overall profitability of TD Waterhouse Canada Inc. and its affiliates, which includes the overall profitability of investment banking services, however TD Waterhouse Canada Inc. does not compensate its analysts based on specific investment banking transactions.

**Mutual Fund Disclosure:** Commissions, trailing commissions, performance fees, management fees and expenses all may be associated with mutual fund investments. Please read the prospectus, which contains detailed investment information, before investing. The indicated rates of return (other than for each money market fund) are the historical annual compounded total returns for the period indicated including changes in unit value and reinvestment of distributions. The indicated rate of return for each money market fund is an annualized historical yield based on the seven-day period ended as indicated and annualized in the case of effective yield by compounding the seven day return and does not represent an actual one year return. The indicated rates of return do not take into account sales, redemption, distribution or optional charges or income taxes payable by any unitholder that would have reduced returns. Mutual funds are not covered by the Canada Deposit Insurance Corporation or by any other government deposit insurer and are not guaranteed or insured. Their values change frequently. There can be no assurances that a money market fund will be able to maintain its net asset value per unit at a constant amount or that the full amount of your investment will be returned to you. Past performance may not be repeated.

**Corporate Disclosure:** TD Wealth represents the products and services offered by TD Waterhouse Canada Inc. (Member – Canadian Investor Protection Fund), TD Waterhouse Private Investment Counsel Inc., TD Wealth Private Banking (offered by The Toronto-Dominion Bank) and TD Wealth Private Trust (offered by The Canada Trust Company).

The Portfolio Advice and Investment Research team is part of TD Waterhouse Canada Inc., a subsidiary of The Toronto-Dominion Bank.

**Trade-mark Disclosures:** FTSE TMX Global Debt Capital Markets Inc. ("FTDCM"), FTSE International Limited ("FTSE"), the London Stock Exchange Group companies (the "Exchange") or TSX INC. ("TSX" and together with FTDCM, FTSE and the Exchange, the "Licensor Parties"). The Licensor Parties make no warranty or representation whatsoever, expressly or impliedly, either as to the results to be obtained from the use of the index/indices ("the Index/Indices") and/or the figure at which the said Index/Indices stand at any particular time on any particular day or otherwise. The Index/Indices are compiled and calculated by FTDCM and all copyright in the Index/Indices values and constituent lists vests in FTDCM. The Licensor Parties shall not be liable (whether in negligence or otherwise) to any person for any error in the Index/Indices and the Licensor Parties shall not be under any obligation to advise any person of any error therein.

"TMX" is a trade mark of TSX Inc. and is used under licence. "FTSE®" is a trade mark of the London Stock Exchange Group companies and is used by FTDCM under licence. Bloomberg and Bloomberg.com are trademarks and service marks of Bloomberg Finance L.P., a Delaware limited partnership, or its subsidiaries. All rights reserved.

TD Securities is a trade-mark of The Toronto-Dominion Bank representing TD Securities Inc., TD Securities (USA) LLC, TD Securities Limited and certain corporate and investment banking activities of The Toronto-Dominion Bank.

All trademarks are the property of their respective owners.

©The TD logo and other trade-marks are the property of The Toronto-Dominion Bank.

