ROYAL BANK OF CANADA Form FWP September 07, 2017

RBC Capital Markets®	Filed Pursuant to Rule 433 Registration Statement No. 333-208507
The information in this p and may be changed. Preliminary Terms Supplement Subject to Completion: Dated September 7, 2017 Pricing Supplement Dated September, 2017 to the Product Prospectus Supplement ERN-ES-1 Dated January 14, 2016, Prospectus Supplement Dated January 8, 2016, and Prospectus Dated	\$ Direct Investment Notes Linked to the September 2017 RBC Capital Markets U.S. Equity Top Picks List due October 9, 2018
January 8, 2016	

Royal Bank of Canada is offering the Notes linked to the September 2017 RBC Capital Markets U.S. Equity Top Picks List (the "Notes"). The Notes are linked to an equally weighted Basket consisting of 14 common equity securities set forth below. The CUSIP number for the Notes is 78013GEV3.

The Notes may pay interest on December 29, 2017, March 29, 2018, June 29, 2018 and the maturity date. The amount of any interest to be paid on the Notes will not be fixed, and will depend upon the total dividends paid on the Reference Stocks during the preceding quarter, as described in more detail below.

On the maturity date, the amount that we will pay to you (the "Redemption Amount") will depend upon the performance of the Basket over the term of the Notes. As described in more detail below, the Redemption Amount will be less than the price to the public set forth below if the Percentage Amount of the Basket is not at least approximately 102.30%.

We describe in more detail below how the payments on the Notes will be determined.

Issue Date: September 29, 2017

Maturity Date: October 9, 2018

The Notes will not be listed on any securities exchange.

Non-U.S. holders <u>will</u> be subject to withholding on dividend equivalent payments under Section 871(m) of the U.S. Internal Revenue Code. Please see the section below, "Supplemental Discussion of U.S. Federal Income Tax Consequences," which applies to the Notes.

Investing in the Notes involves a number of risks. See "Risk Factors" beginning on page S-1 of the prospectus supplement dated January 8, 2016, "Risk Factors" beginning on page PS-4 of the product prospectus supplement dated January 14, 2016, and "Selected Risk Considerations" beginning on page P-8 of this terms supplement.

The Notes will not constitute deposits insured by the Canada Deposit Insurance Corporation, the U.S. Federal Deposit Insurance Corporation or any other Canadian or U.S. government agency or instrumentality.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined that this terms supplement is truthful or complete. Any representation to the contrary is a criminal offense.

	Per Note	<u>Total</u>
Price to public	100.00%	\$
Underwriting discounts and commissions	1.50%	\$
Proceeds to Royal Bank of Canada	98.50%	\$

The initial estimated value of the Notes as of the date of this terms supplement is \$977.50 per \$1,000 in principal amount, which is less than the price to public. The final pricing supplement relating to the Notes will set forth our estimate of the initial value of the Notes as of the Pricing Date, which will not be less than \$957.50 per \$1,000 in principal amount. The actual value of the Notes at any time will reflect many factors, cannot be predicted with accuracy, and may be less than this amount. We describe our determination of the initial estimated value in more detail below.

If the Notes priced on the date of this terms supplement, RBC Capital Markets, LLC, which we refer to as RBCCM, acting as agent for Royal Bank of Canada, would receive a commission of approximately \$15.00 per \$1,000 in principal amount of the Notes and would use a portion of that commission to allow selling concessions to other dealers of up to approximately \$15.00 per \$1,000 in principal amount of the Notes. The other dealers may forgo, in their sole discretion, some or all of their selling concessions. See "Supplemental Plan of Distribution (Conflicts of Interest)" on below.

We may use this terms supplement in the initial sale of the Notes. In addition, RBCCM or another of our affiliates may use this terms supplement in a market-making transaction in the Notes after their initial sale. Unless we or our agent informs the purchaser otherwise in the confirmation of sale, this terms supplement is being used in a market-making transaction.

RBC Capital Markets, LLC

# SUMMARY

	is "Summary" section is qualified by the more detailed information set forth in this terms		
<b>II</b> · I	uct prospectus supplement, the prospectus supplement, and the prospectus.		
Issuer:	Royal Bank of Canada ("Royal Bank")		
Issue:	Senior Global Medium-Term Notes, Series G		
Underwriter:	RBC Capital Markets, LLC ("RBCCM")		
Reference Asset:	The Notes are linked to the value of a basket (the "Basket") consisting of the common equity securities of 14 publicly traded companies indicated on page P-3 (each, a "Reference Stock," and collectively, the "Reference Stocks"). The Reference Stocks were derived from RBC Capital Markets' U.S. Equity Top Picks List as of September 5, 2017, as indicated on page P-3. A Top Pick-rated stock represents an RBC Capital Markets analyst's best idea in a sector. See the section below, "The Basket."		
Currency:	U.S. Dollars		
Minimum Investment: \$1,000 and minimum denominations of \$1,000 in excess thereof			
Pricing Date:	September 27, 2017		
Issue Date:	September 29, 2017		
Valuation Date:	October 4, 2018		
	The amount that you will receive at maturity for each \$1,000 in principal amount of the Notes will depend upon the performance of the Basket and the dividends paid on the Reference Stocks. The Redemption Amount will equal the product of (a) \$977.50 and (b) the Percentage		
Payment at Maturity	Amount.		
(if held to maturity):	As discussed in more detail below, the Percentage Amount must exceed approximately		
	102.30% in order for you to receive a Redemption Amount per \$1,000 in principal amount of the Notes that exceeds the principal amount. In addition, the Redemption Amount could be substantially less than the principal amount of the Notes.		
Percentage Amount:	The Percentage Amount will equal an amount, expressed as a percentage and rounded to two decimal places, equal to:		
Initial Price:	The closing price per share of a Reference Stock on the Pricing Date, as determined by the Calculation Agent.		
Final Price:	The closing price per share of a Reference Stock on the Valuation Date.		

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Basket: Reference Stock	k Issuer	Ticker Initial Price		
Air Lease Corporation		AL		
Amphenol Corp	poration	APH		
Broadcom Limi	ited	AVGO		
Discover Finance	cial Services	DFS		
Dollar Tree, Inc	2.	DLTR		
DowDuPont Inc	с.	DWDP		
Gartner, Inc.		IT		
Louisiana-Pacif	fic Corporation	LPX		
Marathon Petro	leum Corporation	MPC		
ServiceNow, In	c.	NOW		
Newell Brands	Inc.	NWL		
	cial Services Group, Inc.	PNC		
Regency Center	•	REG		
Whirlpool Corp	ooration	WHR		
Component Weights:	1/14 for each Reference	Stock (subject to adjustment as provided below).		
Initial Basket Level:	The initial level of the B	asket shall be deemed to be \$1,000.		
	calculated as follows:	y be deemed to consist of a number of shares of each Reference Stock		
	• Each Reference Stock shall initially constitute 1/14 of the Basket, with an aggregate value of \$71.4286 (\$1,000 divided by 14, rounded to four decimal places).			
Initial Composition of	· Accordingly, initia	ally, the number of shares of each Reference Share in the Basket shall		
the Basket:	be calculated by dividing \$71.4286 by the Initial Price, rounded to four decimal places.			
ine Dusket.		res of each Reference Share initially included in the Basket will be		
	determined on the Pricing Date, and will be set forth in the final pricing supplement.			
	For example, if the Initial Price of a Reference Share is \$25, the Basket will initially be			

For example, if the Initial Price of a Reference Share is \$25, the Basket will initially be deemed to include 2.8571 shares of that Reference Share (\$71.4286 divided by \$25, rounded to four decimal places).

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# Direct Investment Notes Linked to the September 2017 RBC Capital Markets U.S. Equity Top Picks List due October 9, 2018

Final Basket Level:	The value of the shares (and any other assets) in the Basket as of the close of trading on the Valuation Date, as determined by the Calculation Agent, using the Final Price of each Reference Stock.
Adjustments to the Composition of the Basket:	The Calculation Agent will adjust the number of shares of each Reference Stock in the Basket, as may be needed to reflect stock splits, reverse stock splits, stock dividends, and similar transactions, as discussed in the section of the product supplement, "General Terms of the Notes—Anti-Dilution Adjustments Relating to Equity Securities." See "Other Terms of Your Notes" on page P-11 of this document.
Interest Payment Dates:	December 29, 2017, March 29, 2018, June 29, 2018 and October 9, 2018 (the maturity date).
Interest Calculation Dates:	December 27, 2017, March 27, 2018, June 27, 2018 and October 4, 2018 (the Valuation Date).
Calculation of Interest Payments:	The amount of each interest payment, if any, will depend upon the amount of dividends paid on each Reference Stock during the Interest Calculation Period preceding each interest payment date, and will equal, for each \$1,000 in principal amount, 97.75% of the sum of the Dividend Amounts for each of the Reference Stocks.
Interest Calculation Period:	The first Interest Calculation Period will commence on the trading day after the Pricing Date and end on the first Interest Calculation Date. Each subsequent Interest Calculation Period will begin on the trading day following an Interest Calculation Date and end on the next Interest Calculation Date. The final Interest Calculation Date will occur on the Valuation Date.
Dividend Amount:	For each Reference Stock, an amount in U.S. dollars equal to (a) \$1,000 divided by the Initial Price of the applicable Reference Stock multiplied by (b) the applicable Component Weight multiplied by (c) 100% of the gross cash distributions (including ordinary and extraordinary dividends) per share of Reference Stock declared by the applicable Reference Stock Issuer where the date that the applicable Reference Stock has commenced trading ex-dividend on its primary U.S. securities exchange as to each relevant distribution occurs during the relevant Interest Calculation Period, as described in more detail below.
Maturity Date:	October 9, 2018, subject to extension for market and other disruptions, as described in the product prospectus supplement dated January 14, 2016.
Term:	Approximately 53 weeks.
Principal at Risk:	The Notes are NOT principal protected. You may lose all or a substantial portion of your principal amount at maturity if the value of the Basket decreases, or does not increase by at least 2.30%, from the Pricing Date to the Valuation Date.
Calculation Agent:	RBCCM
U.S. Tax Treatment:	By purchasing a Note, each holder agrees (in the absence of a change in law, an administrative determination or a judicial ruling to the contrary) to treat the Note as a pre-paid cash-settled contingent income-bearing derivative contract linked to the Basket for U.S. federal income tax

purposes. However, the U.S. federal income tax consequences of your investment in the Notes are uncertain and the Internal Revenue Service could assert that the Notes should be taxed in a manner that is different from that described in the preceding sentence. Please see the section below, "Supplemental Discussion of U.S. Federal Income Tax Consequences," which applies to the Notes.

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# Direct Investment Notes Linked to the September 2017 RBC Capital Markets U.S. Equity Top Picks List due October 9, 2018

Secondary Market:	RBCCM (or one of its affiliates), though not obligated to do so, plans to maintain a secondary market in the Notes after the Issue Date. The amount that you may receive upon sale of your Notes prior to maturity may be less than the principal amount of your Notes.
Listing:	The Notes will not be listed on any securities exchange.
Clearance and Settlement:	DTC global (including through its indirect participants Euroclear and Clearstream, Luxembourg as described under "Description of Debt Securities—Ownership and Book-Entry Issuance" in the prospectus dated January 8, 2016).
Events of Default:	In case an event of default with respect to the Notes will have occurred and be continuing, the amount declared due and payable on the Notes upon any acceleration will be determined by the Calculation Agent and will be an amount of cash equal to the amount payable as described above under the caption "—Payment at Maturity," calculated as if the date of acceleration were the Valuation Date. The Dividend Amount for each Reference Stock will only include dividends declared and paid through that date.
dates for the No	te and the Issue Date of the Notes are subject to change. The actual Pricing Date, Issue Date, and other otes set forth above will be set forth in the final pricing supplement. tal Markets, LLC

# ADDITIONAL TERMS OF YOUR NOTES

You should read this terms supplement together with the prospectus dated January 8, 2016, as supplemented by the prospectus supplement dated January 8, 2016 and the product prospectus supplement dated January 14, 2016, relating to our Senior Global Medium-Term Notes, Series G, of which these Notes are a part. Capitalized terms used but not defined in this terms supplement will have the meanings given to them in the product prospectus supplement. In the event of any conflict, this terms supplement will control. The Notes vary from the terms described in the product prospectus supplement in several important ways. You should read this terms supplement carefully.

This terms supplement, together with the documents listed below, contains the terms of the Notes and supersedes all prior or contemporaneous oral statements as well as any other written materials including preliminary or indicative pricing terms, correspondence, trade ideas, structures for implementation, sample structures, brochures or other educational materials of ours. You should carefully consider, among other things, the matters set forth in "Risk Factors" in the prospectus supplement dated January 8, 2016 and "Risk Factors" in the product prospectus supplement dated January 14, 2016, as the Notes involve risks not associated with conventional debt securities. We urge you to consult your investment, legal, tax, accounting and other advisors before you invest in the Notes. You may access these documents on the Securities and Exchange Commission (the "SEC") website at www.sec.gov as follows (or if that address has changed, by reviewing our filings for the relevant date on the SEC website): Prospectus dated January 8, 2016:

http://www.sec.gov/Archives/edgar/data/1000275/000121465916008810/j18160424b3.htm Prospectus Supplement dated January 8, 2016:

http://www.sec.gov/Archives/edgar/data/1000275/000121465916008811/p14150424b3.htm

Product Prospectus Supplement ERN-ES-1 dated January 14, 2016:

https://www.sec.gov/Archives/edgar/data/1000275/000114036116047764/form424b5.htm

Our Central Index Key, or CIK, on the SEC website is 1000275. As used in this terms supplement, "we," "us," or "our" refers to Royal Bank of Canada.

Royal Bank of Canada has filed a registration statement (including a product prospectus supplement, a prospectus supplement, and a prospectus) with the SEC for the offering to which this terms supplement relates. Before you invest, you should read those documents and the other documents relating to this offering that we have filed with the SEC for more complete information about us and this offering. You may obtain these documents without cost by visiting EDGAR on the SEC website at www.sec.gov. Alternatively, Royal Bank of Canada, any agent or any dealer participating in this offering will arrange to send you the product prospectus supplement, the prospectus supplement and the prospectus if you so request by calling toll-free at 1-866-609-6009.

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# HYPOTHETICAL RETURNS AT MATURITY

The following hypothetical examples are provided for illustration purposes only and are hypothetical; they do not purport to be representative of every possible scenario concerning increases or decreases in the value of the Basket and the related effect on the Redemption Amount. The following hypothetical examples illustrate the payment you would receive on the maturity date if you purchased \$1,000 in principal amount of the Notes. Numbers appearing in the examples below have been rounded for ease of analysis. This table does not reflect any interest that may be paid on the Notes.

Percentage Amount Redemption Amount per \$1,000 in Percentage Gain (or Loss) per

Percentage Allio	Principal Amount	\$1,000 in Principal Amount
140.00%	\$1,368.50	36.85%
130.00%	\$1,270.75	27.08%
120.00%	\$1,173.00	17.30%
110.00%	\$1,075.25	7.53%
$102.30\%^{(1)}$	\$1,000.00	0.00%
$100.00\%^{(2)}$	\$977.50	-2.25%
90.00%	\$879.75	-12.03%
80.00%	\$782.00	-21.80%
70.00%	\$684.25	-31.58%
60.00%	\$586.50	-41.35%
50.00%	\$488.75	-51.13%
40.00%	\$391.00	-60.90%
30.00%	\$293.25	-70.68%
20.00%	\$195.50	-80.45%
10.00%	\$97.75	-90.23%
0.00%	\$0.00	-100.00%

<sup>(1)</sup> Due to the payment formula set forth above, for you to receive a Redemption Amount greater than the principal amount the Notes, the Percentage Amount must be greater than approximately 102.30%.

<sup>(2)</sup> If the Percentage Amount is not at least approximately 102.30%, you will lose some or all of the principal amount of the Notes.

Please see the sections below, "Selected Risk Considerations—Principal at Risk" and "—The Notes Will Not Reflect the Full Performance of the Reference Stocks, Which Will Negatively Impact Your Return on the Notes."

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#### SELECTED RISK CONSIDERATIONS

An investment in the Notes involves significant risks. Investing in the Notes is not equivalent to investing directly in the Reference Stocks. These risks are explained in more detail in the section "Risk Factors" beginning on page PS-4 of the product prospectus supplement. In addition to the risks described in the prospectus supplement and the product prospectus supplement, you should consider the following:

Principal at Risk – Investors in the Notes could lose all or a substantial portion of their principal amount if there is a ·decline in the value of the Basket. Investors will also lose a portion of their principal amount if the Percentage Amount is not at least approximately 102.30%.

The Notes May Not Pay Interest and Your Return May Be Lower than the Return on a Conventional Debt Security of Comparable Maturity – There may be no periodic interest payments on the Notes, and any such payments may be less than there would be on a conventional fixed-rate or floating-rate debt security having the same maturity. The amount of each interest payment, if any, will depend upon the amount of dividends paid on each Reference Stock during the Interest Calculation Period preceding each interest payment date. The yield that you will receive on your Notes, which could be negative, may be less than the yield you could earn if you purchased a standard senior debt security of ours with the same maturity date. Your investment may not reflect the full opportunity cost to you when you take into account factors that affect the time value of money.

The Notes Will Not Reflect the Full Performance of the Reference Stocks, Which Will Negatively Impact Your Return on the Notes – Because the calculation of the Redemption Amount for each \$1,000 in principal amount reflects the product of the Percentage Amount and \$977.50, the return, if any, on the Notes will not reflect the full performance of the Reference Stocks. Therefore, the yield to maturity based on the methodology for calculating the Redemption Amount will be less than the yield that would be produced if the Reference Stocks were purchased and held for a similar period. Similarly, the interest payments you receive on the Notes will be less than the applicable Dividend Amounts.

Payments on the Notes Are Subject to Our Credit Risk, and Changes in Our Credit Ratings Are Expected to Affect the Market Value of the Notes – The Notes are Royal Bank's senior unsecured debt securities. As a result, your receipt of all required payments on the Notes will be dependent upon Royal Bank's ability to repay its obligations as of the applicable payment date. This will be the case even if the value of the Basket increases after the Pricing Date, or if substantial payments are made on the Reference Stocks. No assurance can be given as to what our financial condition will be at any time during the term of the Notes.

There May Not Be an Active Trading Market for the Notes—Sales in the Secondary Market May Result in Significant Losses – There may be little or no secondary market for the Notes. The Notes will not be listed on any securities exchange. RBCCM and other affiliates of Royal Bank may make a market for the Notes; however, they are not required to do so. RBCCM or any other affiliate of Royal Bank may stop any market-making activities at any time. Even if a secondary market for the Notes develops, it may not provide significant liquidity or trade at prices advantageous to you. We expect that transaction costs in any secondary market would be high. As a result, the difference between bid and asked prices for your Notes in any secondary market could be substantial.

You Will Not Have Any Rights to the Reference Stocks – As a holder of the Notes, you will not have voting rights or  $\cdot$  other rights that holders of the Reference Stocks would have. You will have no right to receive shares of the Reference Stocks.

• The Historical Performance of the Reference Stocks Should Not Be Taken as an Indication of Their Future Performance – The Final Prices of the Reference Stocks will determine the Redemption Amount. The historical performance of the Reference Stocks does not necessarily give an indication of their future performance. As a result, it is impossible to predict whether the prices of the Reference Stocks will rise or fall during the term of the Notes. The prices of the Reference Stocks will be influenced by complex and interrelated political, economic, financial and other factors.

Holders of the Reference Stocks Are Only Entitled to Receive Those Dividends as Each Issuer's Board of Directors May Declare out of Funds Legally Available – Although dividends and distributions on one or more of the P-8 RBC Capital Markets, LLC

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Reference Stocks may have historically been declared by the applicable board of directors, they are not required to do so and may reduce or eliminate those dividends in the future. The Dividend Amount of one or more of the Reference Stocks during the term of the Notes may be zero. If the dividends paid on the Reference Stocks are not significant, any interest payments that you receive on the Notes may not be sufficient to provide you with your desired return on the Notes.

The Initial Estimated Value of the Notes Will Be Less than the Price to the Public – The initial estimated value set forth on the cover page and that will be set forth in the final pricing supplement for the Notes does not represent a minimum price at which we, RBCCM or any of our affiliates would be willing to purchase the Notes in any secondary market (if any exists) at any time. If you attempt to sell the Notes prior to maturity, their market value may be lower than the price you paid for them and the initial estimated value. This is due to, among other things, changes in the value of the Basket, the borrowing rate we pay to issue securities of this kind, and the inclusion in the price to the public of the underwriting discount and the estimated costs relating to our hedging of the Notes. These factors, together with various credit, market and economic factors over the term of the Notes, are expected to reduce the price at which you may be able to sell the Notes in any secondary market and will affect the value of the Notes in complex and unpredictable ways. Assuming no change in market conditions or any other relevant factors, the price, if any, at which you may be able to sell your Notes prior to maturity may be less than your original purchase price, as any such sale price would not be expected to include the underwriting discount and the hedging costs relating to the Notes. In addition to bid-ask spreads, the value of the Notes determined for any secondary market price is expected to be based on the secondary rate rather than the internal funding rate used to price the Notes and determine the initial estimated value. As a result, the secondary price will be less than if the internal funding rate was used. The Notes are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your Notes to maturity.

The Initial Estimated Value of the Notes on the Cover Page and that We Will Provide in the Final Pricing Supplement Are Estimates Only, Calculated as of the Time the Terms of the Notes Are Set – The initial estimated value of the Notes will be based on the value of our obligation to make the payments on the Notes, together with the mid-market value of the derivative embedded in the terms of the Notes. See "Structuring the Notes" below. Our estimates are based on a variety of assumptions, including our credit spreads, expectations as to dividends, interest rates and volatility, and the expected term of the Notes. These assumptions are based on certain forecasts about future events, which may prove to be incorrect. Other entities may value the Notes or similar securities at a price that is significantly different than we do.

The value of the Notes at any time after the Pricing Date will vary based on many factors, including changes in market conditions, and cannot be predicted with accuracy. As a result, the actual value you would receive if you sold the Notes in any secondary market, if any, should be expected to differ materially from the initial estimated value of the Notes.

•Our Business Activities May Create Conflicts of Interest – We and our affiliates expect to engage in trading activities related to the Reference Stocks that are not for the account of holders of the Notes or on their behalf. These trading activities may present a conflict between the holders' interests in the Notes and the interests we and our affiliates will have in their proprietary accounts, in facilitating transactions, including options and other derivatives transactions, for their customers and in accounts under their management. These trading activities, if they influence the prices of the Reference Stocks, could be adverse to the interests of the holders of the Notes. We and one or more of our affiliates may, at present or in the future, engage in business with the issuers of the Reference Stocks, including making loans to or providing advisory services. These services could include investment banking and merger and acquisition advisory services. These activities may present a conflict between our or one or more of our affiliates' obligations and your interests as a holder of the Notes. Any of these activities by us or one or more of our affiliates may affect the

value of the Reference Stocks, and, therefore, the market value of the Notes.

You Must Rely on Your Own Evaluation of the Merits of an Investment Linked to the Reference Stocks – In the ordinary course of their business, RBCCM and our other affiliates have expressed views on the value of the Reference Stocks and/or expected movements in their prices, and may do so in the future. These views or reports may be communicated to clients of our affiliates. However, these views are subject to change from time to time. Moreover, other professionals who transact business in markets relating to any Reference Stock may at any time have significantly different views from those of our affiliates. For these reasons, you are encouraged to derive information concerning the Reference Stocks from multiple sources, and you should not rely solely on views expressed by us or our affiliates.

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Direct Investment Notes Linked to the September 2017 RBC Capital Markets U.S. Equity Top Picks List due October 9, 2018

Some Reference Stocks Have Limited Historical Information – Because three of the Reference Stocks have limited •trading history, your investment in the Notes may involve a greater risk than investing in securities linked to one or more equity securities with more established records of performance.

The Inclusion of the Reference Stocks in the Basket Does Not Guarantee a Positive Return on the Notes – There can be no assurance that any Reference Stock, or the Basket in its entirety, will increase in value. The performance of the Reference Stocks may be less than the performance of the equities markets generally, and less than the performance of specific sectors of the equity markets, or other securities in which you may choose to invest. As of the date of this document, the Equity Research Department of RBCCM believes that the prices of the Reference Stocks have the potential to increase during the term of the Notes. However, there can be no assurance that they will in fact do so. Although RBCCM has expressed a positive view as to the Reference Stocks prior to the date of this terms supplement, its views may change significantly during the term of the Notes. In addition, any positive views of RBCCM's research divisions are separate and apart from the offering of the Notes, and do not constitute investment advice. Our offering of the Notes or in the Reference Stocks.

An Investment in the Notes Is Subject to Risks Relating to Foreign Securities Markets – Three of the Reference Stocks are organized outside of the U.S. An investment linked to companies of this type involves particular risks. For example, the relevant foreign markets may be more volatile than the U.S. markets, and market developments may affect these markets differently from the U.S. or other securities markets. Direct or indirect government intervention to stabilize the securities markets outside the U.S., as well as cross-shareholdings in certain companies, may affect trading prices and trading volumes in those markets.

As Calculation Agent, RBCCM Will Have the Authority to Make Determinations that Could Affect the Value of Your Notes and Your Payment at Maturity – As calculation agent for your Notes, RBCCM will have discretion in making various determinations that affect your Notes, including determining the Final Prices, the Percentage Amount, the Redemption Amount, the amounts of any interest payments on the Notes, and whether any market disruption events have occurred. The Calculation Agent also has discretion in making certain adjustments relating to mergers and certain other corporate transactions that an issuer of a Reference Stock may undertake. The exercise of this discretion by RBCCM could adversely affect the value of your Notes and may present RBCCM, which is our wholly owned subsidiary, with a conflict of interest.

Market Disruption Events and Adjustments – The payments on the Notes are subject to adjustment as described in this terms supplement and the product prospectus supplement. For a description of what constitutes a market disruption event as well as the consequences of that market disruption event, see "General Terms of the Notes—Market Disruption Events" in the product prospectus supplement.

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### OTHER TERMS OF YOUR NOTES

#### Certain Reorganization Events

If an issuer of a Reference Stock undergoes a Reorganization Event, as described on PS-16 of the product prospectus supplement dated January 14, 2016 (for example, if it merges with another entity and is not the surviving company), that Reference Stock may be removed from the Basket by the Calculation Agent following the effective date of the Reorganization Event, with the Component Weights of the remaining Reference Stocks increasing proportionately to reflect the relevant weightings of those remaining Reference Stocks at the time of the Reorganization Event. In order to accomplish the foregoing, the Calculation Agent will determine the value of the shares of the Reference Stock in the Basket that is subject to the Reorganization Event, and will add to the Basket a number of shares of each other Reference Stock that is proportionate to the relative weightings of the Reference Stocks at the time of the Reorganization Event.

In the event of a Reorganization Event, The Calculation Agent will have sole discretion in determining the distribution of shares. In order to determine the value of the Reference Stock that is subject to the Reorganization Event, the Calculation Agent may use its closing price on the last trading day on which it trades prior to the effective date of the relevant transaction, the terms of the transaction that is the subject of the Reorganization Event, or such other commercially reasonable method as it may determine to be appropriate at that time. The weightings of the remaining Reference Stocks at that time, and the number of shares of each to be added to the Basket, will be determined by the Calculation Agent based upon the percentage of the Basket value that they constitute, from their respective closing prices.

### Additional Anti-Dilution Adjustments

The Calculation Agent will adjust the number of shares of each Reference Stock in the Basket, as it determines may be needed to reflect stock splits, reverse stock splits, stock dividends, and other corporate transactions, which are discussed in the section of the product supplement, "General Terms of the Notes—Anti-Dilution Adjustments Relating to Equity Securities." For example, if a Reference Stock is subject to a 2-for-1 stock split, the Calculation Agent may determine that, upon the applicable effective date, each one share of that Reference Stock in the Basket shall be deemed to thereafter to represent two shares.

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#### INFORMATION REGARDING THE ISSUERS OF THE REFERENCE STOCKS

The issuer of each Reference Stock is registered under the Securities Exchange Act of 1934, as amended ("Exchange Act"). Companies with securities registered under the Exchange Act are required to periodically file financial and other information required by the Securities and Exchange Commission ("SEC"). This information is filed with the SEC and can be inspected and copied by you at the SEC's Public Reference Room located at 100 F Street, N.E., Washington, D.C. 20549 at prescribed rates. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. In addition, information filed by the issuers of the Reference Stocks with the SEC electronically is available to the public over the Internet at the SEC's website at http://www.sec.gov.

#### The Selection of the Basket

The Equity Research Department at RBCCM regularly publishes research. The Reference Stocks were selected from among the companies covered by the Equity Research Department and that are rated as "Top Picks." A "Top Pick" represents an RBCCM analyst's best idea in the sector, which is expected to provide significant absolute total return over 12 months with a favorable risk-reward ratio. However, we note that the selection of the Top Picks are only research views based on information available up to September 5, 2017. There is no assurance that any particular company will be successful, or that the investment thesis underlying these research views will come to pass. Moreover, the business, results of operations, and prospects of these companies and the growth and health of each issuer of the Reference Stocks are subject to conditions outside of the control of the Equity Research Department, such as general economic conditions.

Additional information regarding RBCCM research analyst ratings is available at

https://www.rbccm.com/equityresearch/cid-203939.html. Information on that website is not included or incorporated by reference in this document. A rating is subject to downward revision at any time, and a broker-dealer may cease to cover a particular security at any time, including during the term of the Notes.

Neither we nor our affiliates makes any representation as to the future performance of any Reference Stock or the Basket.

Description of the Reference Stock Issuers

The following information regarding each issuer of the Reference Stocks is derived from publicly available information and we have not independently verified it.

Air Lease Corporation is an aircraft leasing company. The company is principally engaged in purchasing commercial •aircraft and leasing to airlines in regions that include Asia, the Pacific Rim, Latin America, the Middle East and Eastern Europe. Its common stock trades on the New York Stock Exchange (the "NYSE") under the symbol "AL." Amphenol Corporation designs, manufactures, and markets electrical, electronic and fiber optic connectors, interconnect systems, and coaxial and flat-ribbon cable. The company's products are used in a variety of industries, including telephone, wireless, and data communications systems, cable television systems, and commercial and military aerospace electronics. Its common stock trades on the NYSE under the symbol "APH."

Broadcom Limited designs, develops, and supplies semiconductors and integrated circuits. The company offers products such as broadband carrier access, cables, switches, network processors, and wireless connectors. Its class A common stock trades on the NASDAQ Global Select Market under the symbol "AVGO."

Discover Financial Services is a credit card issuer and electronic payment services company. The company issues credit cards and offers student and personal loans, as well as savings products such as certificates of deposit and money market accounts and operates an automated teller machine/debit network. Its common stock trades on the NYSE under the symbol "DFS."

•Dollar Tree, Inc. operates a discount variety store chain in the United States. The company sells an assortment of everyday general merchandise at the \$1.00 price point. Its common stock trades on the NASDAQ Global Select

Market under the symbol "DLTR."

DowDuPont Inc. is a diversified chemical company that provides chemical, plastic, and agricultural products and services to various essential consumer markets. The company serves customers in countries around the world in markets such as food, transportation, health and medicine, personal care, and construction. Its common stock trades on the NYSE under the symbol "DWDP."

P-12 RBC Capital Markets, LLC

Direct Investment Notes Linked to the September 2017 RBC Capital Markets U.S. Equity Top Picks List due October 9, 2018

Gartner, Inc. provides research and analysis on the computer hardware, software, communications, and related •information technology industries. The company's business segments include research, consulting, measurement, events and executive programs. Its common stock trades on the NYSE under the symbol "IT."

Louisiana-Pacific Corporation manufactures building materials and engineered wood products. The company's products are used by homebuilders and light commercial builders. The company's products include oriented strand board sheathing, flooring, radiant barrier panels, siding and trim, I-joists, and laminated veneer lumber. Its common stock trades on the NYSE under the symbol "LPX."

Marathon Petroleum Corporation refines, transports, and markets petroleum products. The company sells its products • to resellers and consumers in the mid-west, gulf coast, and southeast United States. Its common stock trades on the NYSE under the symbol "MPC."

- ServiceNow, Inc. provides enterprise information technology (IT) management software. The company designs, •develops, and produces prepackaged computer software, cloud services, and IT service management platform. Its common stock trades on the NYSE under the symbol "NOW."
- Newell Brands Inc. manufactures and markets branded consumer products which are sold through a variety of retail and wholesale distribution channels. The company's products include housewares, juvenile products, home furnishings, office products, tools and hardware, and hair accessories. Its common stock trades on the NYSE under the symbol "NWL."
- The PNC Financial Services Group, Inc. is a diversified financial services organization. The company provides •regional banking, wholesale banking, and asset management services nationally and in the company's primary regional markets. Its common stock trades on the NYSE under the symbol "PNC."
  - Regency Centers Corporation is a self-administered and self-managed real estate investment trust that
  - owns and operates grocery anchored neighborhood retail centers. The company currently owns and operates properties in various states located throughout the United States. Its common stock trades on the NYSE under the symbol "REG."

Whirlpool Corporation manufactures and markets major home appliances. The company's principal products include ·laundry appliances, refrigeration and room air conditioning equipment, cooking appliances, dishwashers, and mixers and other small household appliances. Its common stock trades on the NYSE under the symbol "WHR."

P-13 RBC Capital Markets, LLC

### Additional Information

Please note that the selection of the Reference Stocks was based only on research views, based on information that was available through September 5, 2017. There is no assurance that any particular company will be successful, or that the investment thesis underlying these research views will come to pass. Moreover, the business, results of operations, and prospects of these companies and the growth and health of each issuer of the Reference Stocks are subject to conditions outside of the control of the Equity Research Department, such as general economic conditions. Additional information regarding RBCCM research analyst ratings is available at

https://www.rbccm.com/equityresearch/cid-203939.html. Information on that website is not included or incorporated by reference in this document. A rating is subject to downward revision at any time, and a broker-dealer may cease to cover a particular security at any time, including during the term of the Notes.

Neither we nor our affiliates make any representation as to the future performance of any Reference Stock or the Basket.

# Hypothetical Performance of the Basket

While actual historical information on the Basket will not exist before the Pricing Date, the following graph sets forth the hypothetical daily performance of the Basket from June 29, 2012 (the date on which the Reference Stock with the most limited trading history, ServiceNow, Inc., began trading) through September 5, 2017. The graph is based upon actual daily historical closing prices of the Reference Stocks and a hypothetical basket level of 100.00 as of June 29, 2012. This hypothetical data on the Basket is not necessarily indicative of the future performance of the Basket or what the value of the Notes may be. Any hypothetical upward or downward trend in the level of the Basket shown below is not an indication that the level of the Basket is more or less likely to increase or decrease at any time over the term of the Notes.

P-14 RBC Capital Markets, LLC

#### Historical Information

The graphs below set forth the recent historical performance of each of the Reference Stocks. In addition, below each graph is a table setting forth the intra-day high, intra-day low and period-end Closing Prices of each Reference Stock. The information provided in each table is for the four calendar quarters of 2011, 2012, 2013, 2014, 2015 and 2016, the first and second quarters of 2017 and the period from July 1, 2017 to September 5, 2017.

We obtained the information regarding the historical performance of the Reference Stocks in the graphs and tables below from Bloomberg Financial Markets.

We have not independently verified the accuracy or completeness of the information obtained from Bloomberg Financial Markets. The historical performance of the Reference Stocks should not be taken as an indication of their future performance or what the value of the Notes may be, and no assurance can be given as to the price of any Reference Stock on the Valuation Date. We cannot give you assurance that the performance of any Reference Stock will not result in the loss of a portion of your investment.

P-15 RBC Capital Markets, LLC

Period-Start Period-End Date Date		Low Intra-Day Price of the Reference Stock in (\$)	Period-End Closing Price of the Reference Stock in (\$)
4/19/2011 6/30/201		23.02	24.29
7/1/2011 9/30/201	1 25.36	18.32	19.20
10/1/2011 12/31/20	1123.95	17.24	23.71
1/1/2012 3/31/2012	2 26.47	23.10	24.07
4/1/2012 6/30/2012	2 25.00	18.66	19.39
7/1/2012 9/30/2012	2 22.79	18.45	20.40
10/1/2012 12/31/20	1223.17	20.13	21.50
1/1/2013 3/31/2013	3 29.87	21.73	29.32
4/1/2013 6/30/2013	3 31.00	25.13	27.59
7/1/2013 9/30/2013	3 28.88	25.74	27.66
10/1/2013 12/31/20	1333.57	27.38	31.08
1/1/2014 3/31/2014		30.01	37.29
4/1/2014 6/30/2014	4 42.89	34.10	38.58
7/1/2014 9/30/2014	4 39.00	32.22	32.50
10/1/2014 12/31/20	1438.96	30.55	34.31
1/1/2015 3/31/2013		32.22	37.74
4/1/2015 6/30/201		33.87	33.90
7/1/2015 9/30/201		28.12	30.92
10/1/2015 12/31/20	1535.22	29.96	33.48
		/-	/-
1/1/2016 3/31/2010		22.47	32.12
4/1/2016 6/30/2010		24.49	26.78
7/1/2016 9/30/2010		25.09	28.58
10/1/2016 12/31/20	1637.23	27.97	34.33
1/1/0017 0/00/001/	7 40 00	24.51	20.05
1/1/2017 3/30/2017		34.51	38.85
4/1/2017 6/30/2017		34.45	37.36
7/1/2017 9/5/2017	43.38	37.35	39.53

\*Air Lease Corporation commenced trading on April 19, 2011 and therefore has a limited historical performance.

PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS. P-16 RBC Capital Markets, LLC

Period-Star Date	rt Period-End Date	High Intra-Day Price of the Reference Stock in (\$)	Low Intra-Day Price of the Reference Stock in (\$)	Period-End Closing Price of the Reference Stock in (\$)
1/1/2011	3/31/2011		25.27	27.20
4/1/2011	6/30/2011		24.71	27.00
7/1/2011	9/30/2011		20.01	20.39
10/1/2011	12/31/2011		19.49	22.70
10/1/2011	12/31/201	125.20	17.17	22.10
1/1/2012	3/31/2012	30.06	22.50	29.89
4/1/2012	6/30/2012	30.92	25.53	27.46
7/1/2012	9/30/2012	31.85	25.45	29.44
10/1/2012	12/31/2012	232.63	28.71	32.35
1/1/2013	3/31/2013	37.36	32.89	37.33
4/1/2013	6/30/2013	41.69	35.05	38.97
7/1/2013	9/30/2013	42.83	37.03	38.69
10/1/2013	12/31/2013	344.73	37.09	44.59
1/1/2014	3/31/2014	46.81	42.06	45.83
4/1/2014	6/30/2014	49.38	45.15	48.17
7/1/2014	9/30/2014	52.97	47.24	49.93
10/1/2014	12/31/2014	455.66	45.27	53.81
1/1/2015	3/31/2015	60.54	51.19	58.93
4/1/2015	6/30/2015	59.61	54.95	57.97
7/1/2015	9/30/2015	58.51	47.44	50.96
10/1/2015	12/31/2015	555.68	49.01	52.23
1/1/2016	3/31/2016	58.35	44.50	57.82
4/1/2016	6/30/2016	60.17	54.94	57.33
7/1/2016	9/30/2016	65.76	55.37	64.91
10/1/2016	12/31/2010	569.19	62.63	67.20
1/1/2017	3/30/2017	71.98	66.01	71.89
4/1/2017	6/30/2017	76.67	68.57	73.82
7/1/2017	9/5/2017	81.15	72.35	80.35

#### PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS. P-17 RBC Capital Markets, LLC

Period-Start Period-End Date Date Reference	a-DayLow Intra-DayhePrice of thee Stock in (\$)Reference Stock in (\$)	Period-End Closing Price of the Reference Stock in (\$)
1/1/2011 3/31/2011 34.60	26.97	31.10
4/1/2011 6/30/2011 34.00	29.96	38.00
7/1/2011 9/30/2011 39.45	26.42	32.77
10/1/2011 12/31/2011 35.97	27.39	28.86
10/1/2011 12/31/2011 33.97	21.39	20.00
1/1/2012 3/31/2012 39.22	28.02	38.97
4/1/2012 6/30/2012 39.01	29.70	35.90
7/1/2012 9/30/2012 37.88	32.14	34.87
10/1/2012 12/31/201235.58	30.50	31.65
1/1/2013 3/31/2013 36.98	32.09	35.90
4/1/2013 6/30/2013 38.87	30.57	37.38
7/1/2013 9/30/2013 43.29	35.75	43.08
10/1/2013 12/31/201354.54	41.83	52.88
1/1/2014 3/31/2014 65.83	51.89	64.41
4/1/2014 6/30/2014 72.50	57.27	72.07
7/1/2014 9/30/2014 90.88	68.71	87.00
10/1/2014 12/31/2014105.00	68.75	100.59
1/1/2015 3/31/2015 136.28	95.18	126.98
4/1/2015 6/30/2015 150.50	114.56	132.93
7/1/2015 9/30/2015 137.75	100.00	125.01
10/1/2015 12/31/2015149.72	111.53	145.15
1/1/2016 3/31/2016 157.37	114.25	154.50
4/1/2016 6/30/2016 166.00	139.18	155.40
7/1/2016 9/30/2016 179.42	147.16	172.52
10/1/2016 12/31/2016183.99	160.62	176.77
1/1/2017 3/30/2017 227.49	173.50	220.04
4/1/2017 6/30/2017 256.78	208.46	233.05
7/1/2017 9/5/2017 259.33	228.22	249.05

PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS.

P-18 RBC Capital Markets, LLC

Period-Start Period-E	nd High Intra-Day Price of the	Low Intra-Day Price of the	Period-End Closing Price of the
Date Date	Reference Stock in (\$)	Reference Stock in (\$)	Reference Stock in (\$)
1/1/2011 3/31/201		18.31	24.12
4/1/2011 6/30/201	1 26.95	22.33	26.75
7/1/2011 9/30/201	1 27.92	20.51	22.94
10/1/2011 12/31/20	1125.95	21.44	24.00
1/1/2012 3/31/201	2 34.43	23.75	33.34
4/1/2012 6/30/201	2 34.75	30.48	34.58
7/1/2012 9/30/201	2 40.28	33.79	39.73
10/1/2012 12/31/20	1242.08	37.36	38.55
1/1/2013 3/31/201	3 45.38	37.24	44.84
4/1/2013 6/30/201	3 49.71	42.12	47.64
7/1/2013 9/30/201	3 53.36	46.93	50.54
10/1/2013 12/31/20	1356.20	48.40	55.95
1/1/2014 3/31/201		51.63	58.19
4/1/2014 6/30/201		54.35	61.98
7/1/2014 9/30/201		59.00	64.39
10/1/2014 12/31/20	1466.75	60.15	65.49
1/1/2015 3/31/201		54.02	56.35
4/1/2015 6/30/201		56.17	57.62
7/1/2015 9/30/201		50.36	51.99
10/1/2015 12/31/20	1558.08	50.20	53.62
1/1/2016 3/31/201		42.86	50.92
4/1/2016 6/30/201		46.37	53.59
7/1/2016 9/30/201		51.67	56.55
10/1/2016 12/31/20	16/3.62	53.91	72.09
1/1/0017 0/00/001			() ((
1/1/2017 3/30/201		65.60	68.66
4/1/2017 6/30/201		57.82	62.19
7/1/2017 9/5/2017	63.93	57.99	58.44

#### PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS. P-19 RBC Capital Markets, LLC

Period-StartPeriod-End <sup>Hig</sup> Pric	gh Intra-Day ce of the	Low Intra-Day Price of the	Period-End Closing Price of the
Linta Linta		Reference Stock in (\$)	
1/1/2011 3/31/2011 28.5		24.26	27.76
4/1/2011 6/30/2011 34.0		27.61	33.31
7/1/2011 9/30/2011 34.0		30.00	37.57
10/1/2011 12/31/2011 42.2		36.04	41.56
10/1/2011 12/31/201142.2	20	50.04	41.30
1/1/2012 3/31/2012 48.1	10	40.79	47.25
4/1/2012 6/30/2012 56.8	82	46.35	53.80
7/1/2012 9/30/2012 54.7	72	38.40	48.29
10/1/2012 12/31/201248.6	68	37.12	40.56
1/1/2013 3/31/2013 48.6	61	37.70	48.43
4/1/2013 6/30/2013 51.2	29	45.57	50.84
7/1/2013 9/30/2013 58.6	69	50.33	57.16
10/1/2013 12/31/201360.1	19	54.67	56.42
1/1/2014 3/31/2014 57.4		49.59	52.18
4/1/2014 6/30/2014 57.2		49.69	54.46
7/1/2014 9/30/2014 59.8	84	53.17	56.07
10/1/2014 12/31/201471.5	53	53.70	70.38
1/1/2015 3/31/2015 84.2		65.20	81.15
4/1/2015 6/30/2015 84.0		74.51	78.99
7/1/2015 9/30/2015 82.6		64.95	66.66
10/1/2015 12/31/201580.0	04	60.31	77.22
1/1/2016 3/31/2016 83.5		72.52	82.46
4/1/2016 6/30/2016 94.8		73.02	94.24
7/1/2016 9/30/2016 99.9		77.28	78.93
10/1/2016 12/31/201691.4	41	72.55	77.18
	25	70.01	70.44
1/1/2017 3/30/2017 82.2		72.91	79.44
4/1/2017 6/30/2017 83.4		65.79	69.92
7/1/2017 9/5/2017 83.3	32	66.01	82.49

PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS. P-20 RBC Capital Markets, LLC

Period-Sta Date	rtPeriod-En Date	Price of the	Low Intra-Day Price of the	Period-End Closing Price of the
			Reference Stock in (\$)	
1/1/2011	3/31/2011		34.12	37.75
4/1/2011	6/30/2011		33.97	36.00
7/1/2011	9/30/2011		22.46	22.46
10/1/2011	12/31/201	129.56	20.61	28.76
1/1/2012	3/31/2012		29.27	34.64
4/1/2012	6/30/2012		29.27	31.50
7/1/2012	9/30/2012		28.45	28.96
10/1/2012	12/31/2012	232.95	27.45	32.33
1/1/2013	3/31/2013		30.63	31.84
4/1/2013	6/30/2013	36.00	29.81	32.17
7/1/2013	9/30/2013	41.08	32.05	38.40
10/1/2013	12/31/2013	344.99	38.04	44.40
1/1/2014	3/31/2014	50.96	41.82	48.59
4/1/2014	6/30/2014	53.35	46.56	51.46
7/1/2014	9/30/2014	54.97	50.34	52.44
10/1/2014	12/31/2014	453.80	41.45	45.61
1/1/2015	3/31/2015	50.22	41.95	47.98
4/1/2015	6/30/2015	53.77	47.21	51.17
7/1/2015	9/30/2015	53.20	35.11	42.40
10/1/2015	12/31/2013	557.10	42.15	51.48
1/1/2016	3/31/2016	52.23	40.26	50.86
4/1/2016	6/30/2016	53.98	47.75	49.71
7/1/2016	9/30/2016	54.59	47.51	51.83
10/1/2016	12/31/201	659.33	51.60	57.22
1/1/2017	3/30/2017	65.42	56.53	64.18
4/1/2017	6/30/2017		59.30	63.07
7/1/2017	9/5/2017	67.50	62.52	64.98
			-	

#### PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS. P-21 RBC Capital Markets, LLC

Period-Start F Date I	late	High Intra-Day Price of the Reference Stock in (\$)	Low Intra-Day Price of the Reference Stock in (\$)	Period-End Closing Price of the Reference Stock in (\$)
1/1/2011 3	3/31/2011		33.11	41.67
	5/30/2011		35.80	40.29
	9/30/2011		31.98	34.87
	2/31/2011		32.24	34.77
10/1/2011 1	12/31/2011	41.09	32.24	34.77
1/1/2012 3	3/31/2012	43.19	34.39	42.64
4/1/2012 6	5/30/2012	44.97	39.50	43.05
7/1/2012 9	9/30/2012	51.45	42.49	46.09
	2/31/2012	48.23	43.11	46.02
1/1/2013 3	3/31/2013	54.52	46.53	54.41
4/1/2013 6	6/30/2013	59.07	53.07	56.99
7/1/2013 9	9/30/2013	62.99	55.79	60.00
10/1/2013 1	2/31/2013	71.47	57.19	71.05
1/1/2014 3	3/31/2014	73.53	61.34	69.44
4/1/2014 6	5/30/2014	75.60	65.55	70.52
7/1/2014 9	9/30/2014	76.82	67.83	73.47
10/1/2014 1	2/31/2014	87.57	71.26	84.21
	3/31/2015		76.74	83.85
	5/30/2015		82.37	85.78
	9/30/2015		82.26	83.93
10/1/2015 1	2/31/2015	94.82	81.52	90.70
	3/31/2016		77.82	89.35
	6/30/2016		86.32	97.41
	9/30/2016		87.86	88.45
10/1/2016 1	2/31/2016	105.45	84.57	101.07
1/1/2017	1001	110.41	00.40	100 75
	3/31/2017		90.40	108.75
	5/30/2017		107.70	123.51
7/1/2017 9	9/5/2017	129.77	115.94	120.22

# PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS. P-22 RBC Capital Markets, LLC

Period-Star Date	t Period-Enc Date	Price of the	Low Intra-Day Price of the Reference Stock in (\$)	Period-End Closing Price of the Reference Stock in (\$)
1/1/2011	3/31/2011	11.63	9.19	10.50
4/1/2011	6/30/2011	10.91	7.16	8.14
7/1/2011	9/30/2011	8.56	5.07	5.10
10/1/2011	12/31/2011	8.25	4.41	8.07
1/1/2012	3/31/2012	10.18	7.66	9.35
4/1/2012	6/30/2012	11.00	7.81	10.88
7/1/2012	9/30/2012	15.50	9.87	12.50
10/1/2012	12/31/2012	219.34	12.50	19.32
1/1/2013	3/31/2013		18.93	21.60
4/1/2013	6/30/2013		14.51	14.79
7/1/2013	9/30/2013		14.73	17.59
10/1/2013	12/31/2013	318.96	15.40	18.51
1/1/0014	2/21/2014	10.00	15.05	16.07
1/1/2014	3/31/2014		15.85	16.87
4/1/2014	6/30/2014		13.73	15.02
7/1/2014	9/30/2014		12.71	13.59
10/1/2014	12/31/2014	17.66	12.46	16.56
1/1/2015	3/31/2015	17 76	15.22	16.51
4/1/2015	6/30/2015		14.88	17.03
7/1/2015	9/30/2015		13.94	14.24
10/1/2015	12/31/2015		14.04	18.01
10/1/2013	12/31/2013	10.97	14.04	10.01
1/1/2016	3/31/2016	18.09	13.31	17.12
4/1/2016	6/30/2016	18.77	15.05	17.35
7/1/2016	9/30/2016	20.97	17.19	18.83
10/1/2016	12/31/2016	521.16	17.08	18.93
1/1/2017	3/30/2017	24.94	18.69	24.46
4/1/2017	6/30/2017	26.93	22.08	24.11
7/1/2017	9/5/2017	26.27	23.39	25.64

#### PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS. P-23 RBC Capital Markets, LLC

Date         Date           7/1/2011         9/30/20	-End High Intra-Day Price of the Reference Stock in (\$) 011 23.72 2011 19.78	Low Intra-Day Price of the Reference Stock in (\$) 13.18 13.31	Period-End Closing Price of the Reference Stock in (\$) 13.53 16.65
4/1/2012 6/30/20 7/1/2012 9/30/20	012 22.71 012 22.68 012 28.11 201231.72	15.12 16.83 21.30 26.18	21.68 22.46 27.30 31.50
4/1/2013 6/30/20 7/1/2013 9/30/20	013 46.37 013 45.27 013 38.29 201345.98	30.02 34.66 31.26 30.66	44.80 35.53 32.16 45.87
4/1/2014 6/30/20 7/1/2014 9/30/20	014 47.44 014 48.85 014 46.45 201448.97	40.34 38.97 37.84 37.32	43.52 39.04 42.34 45.13
4/1/2015 6/30/20 7/1/2015 9/30/20	015 54.16 015 53.07 015 60.38 2015 59.99	37.62 48.41 43.42 46.03	51.20 52.31 46.33 51.84
4/1/2016 6/30/20 7/1/2016 9/30/20	016 52.83 016 43.26 016 44.56 201651.15	29.24 32.02 35.16 40.01	37.18 37.96 40.59 50.35
	017 54.58 017 55.19 17 56.81	46.88 47.79 49.31	50.14 52.33 51.79

\* Marathon Petroleum Corporation commenced trading on July 1, 2011 and therefore has a limited historical performance.

# PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS.

P-24 RBC Capital Markets, LLC

Period-Start Period-End Date Date High Intra-Day Price of the Reference Stock in (\$)	Low Intra-Day Price of the Reference Stock in (\$)	Period-End Closing Price of the Reference Stock in (\$)
6/29/2012 6/30/2012 24.75	22.83	24.60
7/1/2012 9/30/2012 41.77	22.62	38.68
10/1/2012 12/31/201238.14	28.15	30.03
1/1/2013 3/31/2013 38.22	25.54	36.20
4/1/2013 6/30/2013 43.99	33.95	40.39
7/1/2013 9/30/2013 53.11	39.83	51.95
10/1/2013 12/31/2013 58.41	47.37	56.01
	54.24	<b>5</b> 0.0 <b>0</b>
1/1/2014 3/31/2014 71.80	54.36	59.92
4/1/2014 6/30/2014 63.96	44.17	61.96
7/1/2014 9/30/2014 64.98	54.11	58.78
10/1/2014 12/31/201470.90	54.05	67.85
1/1/2015 3/31/2015 81.24	62.55	78.78
4/1/2015 6/30/2015 83.52	70.32	74.31
7/1/2015 9/30/2015 81.21	64.29	69.45
10/1/2015 12/31/2015 91.21	67.65	86.56
1/1/2016 3/31/2016 85.67	46.00	61.18
4/1/2016 6/30/2016 77.76	55.36	66.40
7/1/2016 9/30/2016 80.31	64.31	79.15
10/1/2016 12/31/201689.79	72.80	74.34
1/1/2017 2/20/2017 04 72	74.60	06.04
1/1/2017 3/30/2017 94.72	74.63	86.94
4/1/2017 6/30/2017 110.64	84.04	106.00
7/1/2017 9/5/2017 116.50	103.01	116.15

\* ServiceNow, Inc. commenced trading on June 29, 2012 and therefore has a limited historical performance.

PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS. P-25 RBC Capital Markets, LLC

Period-Star Date	t Period-End Date	High Intra-Day Price of the Reference Stock in (\$)	Low Intra-Day Price of the Reference Stock in (\$)	Period-End Closing Price of the Reference Stock in (\$)
1/1/2011	3/31/2011	20.38	17.57	19.13
4/1/2011	6/30/2011	19.81	14.14	15.78
7/1/2011	9/30/2011	16.27	11.31	11.87
10/1/2011	12/31/2011	16.53	10.87	16.15
1/1/2012	3/31/2012	19.49	15.93	17.81
4/1/2012	6/30/2012	19.12	16.63	18.14
7/1/2012	9/30/2012	19.74	16.67	19.09
10/1/2012	12/31/2012	222.49	18.80	22.27
1/1/2013	3/31/2013	26.11	21.72	26.10
4/1/2013	6/30/2013	28.47	24.90	26.25
7/1/2013	9/30/2013	27.97	24.32	27.50
10/1/2013	12/31/2013	332.54	26.29	32.41
1/1/2014	3/31/2014	32.54	29.14	29.90
4/1/2014	6/30/2014	31.61	28.27	30.99
7/1/2014	9/30/2014	35.25	30.85	34.41
10/1/2014	12/31/2014	38.73	31.14	38.09
1/1/2015	3/31/2015		36.33	39.07
4/1/2015	6/30/2015	42.00	37.95	41.11
7/1/2015	9/30/2015		38.18	39.71
10/1/2015	12/31/2015	550.90	39.39	44.08
1/1/2016	3/31/2016		33.26	44.29
4/1/2016	6/30/2016		37.96	48.57
7/1/2016	9/30/2016		47.07	52.66
10/1/2016	12/31/2016	553.22	44.24	44.65
1/1/2017	3/30/2017		43.43	47.36
4/1/2017	6/30/2017		45.21	53.62
7/1/2017	9/5/2017	54.18	47.14	48.72

# PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS. P-26 RBC Capital Markets, LLC

Period-Start Period-End Date Date Reference Stock in (\$)	Low Intra-Day Price of the Reference Stock in (\$)	Period-End Closing Price of the Reference Stock in (\$)
1/1/2011 3/31/2011 65.19	59.67	62.99
4/1/2011 6/30/2011 64.37	55.56	59.61
7/1/2011 9/30/2011 61.21	42.70	48.19
10/1/2011 12/31/201158.70	44.74	57.67
1/1/2012 3/31/2012 64.79	56.88	64.49
4/1/2012 6/30/2012 67.89	55.60	61.11
7/1/2012 9/30/2012 67.04	56.76	63.10
10/1/2012 12/31/201265.73	53.36	58.31
1/1/2013 3/31/2013 66.94	58.96	66.50
4/1/2013 6/30/2013 74.19	63.69	72.92
7/1/2013 9/30/2013 77.93	71.48	72.45
10/1/2013 12/31/201378.36	70.63	77.58
1/1/2014 3/31/2014 87.80	76.06	87.00
4/1/2014 6/30/2014 89.85	79.80	89.05
7/1/2014 9/30/2014 90.00	80.43	85.58
10/1/2014 12/31/201493.45	76.69	91.23
1/1/2015 3/31/2015 96.71	81.84	93.24
4/1/2015 6/30/2015 99.61	90.42	95.65
7/1/2015 9/30/2015 100.52	82.77	89.20
10/1/2015 12/31/201597.50	84.93	95.31
1/1/2016 3/31/2016 94.26	77.67	84.57
4/1/2016 6/30/2016 90.85	77.40	81.39
7/1/2016 9/30/2016 91.39	77.86	90.09
10/1/2016 12/31/2016118.57	87.34	116.96
	110 50	101.50
1/1/2017 3/30/2017 131.80	113.70	121.53
4/1/2017 6/30/2017 128.24	115.47	124.87
7/1/2017 9/5/2017 133.23	123.40	123.79

PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS. P-27 RBC Capital Markets, LLC

Period-Star Date	rt Period-End Date	Price of the	Low Intra-Day Price of the	Period-End Closing Price of the
Date			Reference Stock in (\$)	
1/1/2011	3/31/2011		40.90	43.48
4/1/2011	6/30/2011	47.51	41.01	43.97
7/1/2011	9/30/2011		34.11	35.33
10/1/2011	12/31/201	141.63	32.30	37.62
1/1/2012	3/31/2012		36.31	44.48
4/1/2012	6/30/2012	47.98	41.65	47.57
7/1/2012	9/30/2012		45.81	48.73
10/1/2012	12/31/2012	250.36	44.80	47.12
1/1/2013	3/31/2013		47.19	52.91
4/1/2013	6/30/2013	59.35	45.40	50.81
7/1/2013	9/30/2013		45.80	48.35
10/1/2013	12/31/2013	353.47	45.35	46.30
1/1/2014	3/31/2014		45.43	51.06
4/1/2014	6/30/2014	56.09	50.56	55.68
7/1/2014	9/30/2014	57.99	53.28	53.83
10/1/2014	12/31/2014	465.72	53.55	63.78
1/1/2015	3/31/2015	70.80	63.38	68.04
4/1/2015	6/30/2015	69.45	58.81	58.98
7/1/2015	9/30/2015	64.79	57.01	62.15
10/1/2015	12/31/2015	569.45	61.73	68.12
1/1/2016	3/31/2016	77.17	66.05	74.85
4/1/2016	6/30/2016	83 73	72.35	83.73
7/1/2016	9/30/2016		75.82	77.49
10/1/2016	12/31/2010		65.18	68.95
10/1/2010	12/31/2010	577.12	03.10	00.75
1/1/2017	3/30/2017	72.05	61.90	66.39
4/1/2017	6/30/2017		58.84	62.64
7/1/2017	9/5/2017	67.67	60.88	64.52
., 1, 2017	2.0.2011	0		·

PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS. P-28 RBC Capital Markets, LLC

Period-Star Date	rtPeriod-End Date	Price of the	Low Intra-Day Price of the Reference Stock in (\$)	Period-End Closing Price of the Reference Stock in (\$)
1/1/2011	3/31/2011		79.16	85.36
4/1/2011	6/30/2011	92.00	72.48	81.32
7/1/2011	9/30/2011	82.97	47.35	49.91
10/1/2011	12/31/201	161.98	45.22	47.45
1/1/2012	3/31/2012	79.36	47.73	76.86
4/1/2012	6/30/2012	76.99	54.08	61.16
7/1/2012	9/30/2012	86.45	59.86	82.91
10/1/2012	12/31/2012	2104.21	82.38	101.75
1/1/2013	3/31/2013	120.00	101.77	118.46
4/1/2013	6/30/2013	134.08	107.89	114.36
7/1/2013	9/30/2013	151.83	111.76	146.44
10/1/2013	12/31/2013	3159.20	129.29	156.86
1/1/2014	3/31/2014	160.01	124.44	149.46
4/1/2014	6/30/2014	156.63	136.66	139.22
7/1/2014	9/30/2014	156.13	135.37	145.65
10/1/2014	12/31/2014	4196.70	139.85	193.74
1/1/2015 4/1/2015	3/31/2015	217.05	186.23	202.06