DEUTSCHE BANK AKTIENGESELLSCHAFT Form 424B2 August 17, 2017

Pricing Supplement No. 2897B *To underlying supplement No. 1 dated August 17, 2015,*

product supplement B dated July 31, 2015,

Registration Statement No. 333-206013

prospectus supplement dated July 31, 2015 and

Rule 424(*b*)(2)

prospectus dated April 27, 2016

The information in this preliminary pricing supplement is not complete and may be changed. This preliminary pricing supplement and the accompanying underlying supplement, product supplement, prospectus supplement and prospectus do not constitute an offer to sell nor do they seek an offer to buy the securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion. Dated August 17, 2017

Deutsche Bank AG

\$ Autocallable Securities Linked to the Lesser Performing of the iShares[®] MSCI EAFE ETF and the Russell 2000[®] Index due February 22, 2019

General

The securities are designed for investors who seek a return linked to the lesser performing of the iShares[®] MSCI EAFE ETF (the "**Fund**") and the Russell 2000Index (the "**Index**," and each of the Fund and the Index, an "**Underlying**"). The securities will be automatically called if, on any of the semi-annual Observation Dates, the Closing Levels of **both** Underlyings are greater than or equal to their respective Initial Levels. If the securities are automatically called, investors will receive on the applicable Call Settlement Date a cash payment per \$1,000 Face Amount of securities equal to the Face Amount *multiplied by* the applicable Call Return based on a rate of 9.00% per annum. The securities will cease to be outstanding following an Automatic Call and no further payments will be made following the Call Settlement Date.

•If the securities are not automatically called and the Final Level of the *lesser performing* Underlying, which we refer to as the "Laggard Underlying," is greater than or equal to its Buffer Level (equal to 80.00% of its Initial Level), investors will receive at maturity a positive return on the securities equal to the Digital Return of 3.25%. However, if the securities are not automatically called and the Final Level of the Laggard Underlying is less than its Buffer Level, for each \$1,000 Face Amount of securities, investors will lose 1.25% of the Face Amount for every 1.00% by which the Final Level of the Laggard Underlying is less than its Initial Level by an amount greater than the Buffer Amount of 20.00%. The securities do not pay coupons or dividends and investors should be willing to lose some or all of their investment if the securities are not automatically called and the Final Level of *either* Underlying is less than its

Buffer Level. Any payment on the securities is subject to the credit of the Issuer.

The first Observation Date, and therefore the earliest date on which an Automatic Call may be initiated, is February 20, 2018.

·Senior unsecured obligations of Deutsche Bank AG due February 22, 2019

•Minimum purchase of \$1,000. Minimum denominations of \$1,000 (the "Face Amount") and integral multiples thereof.

The securities are expected to price on or about August 17, 2017 (the "**Trade Date**") and are expected to settle on or about August 22, 2017 (the "**Settlement Date**").

Key Terms

Issuer:	Deutsche Bank AG, London Branch			
Issue Price:	100% of the Face Amount			
Underlyings:	Underlying Ticker Symbol Initial Level Buffer Level			<u>Buffer Level</u>
	iShares [®] MSCI EAFE ETF	EFA	\$66.76	\$53.41
	Russell 2000 [®] Index	RTY	1,383.534	1,106.827
	The securities will be automatically called by the Issuer if, on any of			
Automatic Call: the Observation Dates, the Closing Levels of both Underlyings are				
	greater than or equal to their respective Initial Levels.			
	(Key Terms continued on next page)			

Investing in the securities involves a number of risks. See "Risk Factors" beginning on page 7 of the accompanying product supplement, page PS-5 of the accompanying prospectus supplement and page 13 of the accompanying prospectus and "Selected Risk Considerations" beginning on page PS-10 of this pricing supplement.

The Issuer's estimated value of the securities on the Trade Date is approximately \$971.80 to \$991.80 per \$1,000 Face Amount of securities, which is less than the Issue Price. Please see "Issuer's Estimated Value of the Securities" on page PS-3 of this pricing supplement for additional information.

By acquiring the securities, you will be bound by and deemed irrevocably to consent to the imposition of any Resolution Measure (as defined below) by the competent resolution authority, which may include the write down of all, or a portion, of any payment on the securities or the conversion of the securities into ordinary shares or other instruments of ownership. If any Resolution Measure becomes applicable to us, you may lose some or all of your investment in the securities. Please see "Resolution Measures and Deemed Agreement" on page PS-4 of this pricing supplement for more information.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the securities or passed upon the accuracy or the adequacy of this pricing supplement or the accompanying underlying supplement, product supplement, prospectus supplement or prospectus. Any representation to the contrary is a

criminal offense.

	Price to Public	Discounts and Commissions ⁽¹⁾	Proceeds to Us
Per Security	\$1,000.00	\$0.50	\$999.50
Total	\$	\$	\$

For more detailed information about discounts and commissions, please see "Supplemental Plan of Distribution ⁽¹⁾(Conflicts of Interest)" in this pricing supplement. The securities will be sold with underwriting discounts and commissions in an amount of \$0.50 per \$1,000 Face Amount of securities.

The agent for this offering is our affiliate. For more information, please see "Supplemental Plan of Distribution (Conflicts of Interest)" in this pricing supplement.

The securities are not deposits or savings accounts and are not insured or guaranteed by the Federal Deposit Insurance Corporation or any other U.S. or foreign governmental agency or instrumentality.

Deutsche Bank Securities

August , 2017

(Key Terms continued from previous page)

If the securities are automatically called, you will receive a cash payment per \$1,000 Face Amount of securities on the related Call Settlement Date equal to the Face Amount *multiplied by* the Call Return Payment upon for the applicable Observation Date. The Call Returns are based on a rate of 9.00% per annum. The an Automatic securities will cease to be outstanding following an Automatic Call and no further payments will be made following the Call Settlement Date. The Observation Dates, Call Settlement Dates, Call Returns and the payment due upon an Automatic Call applicable to each Observation Date are set forth in the table below.

Observation D	ate	Call Settlement Date	Call Return	Payment upon an Automatic Call (per \$1,000 Face Amount of securities)
February 20, 20)18	February 23, 2018	4.50%	\$1,045.00
August 17, 2018	8	August 22, 2018	9.00%	\$1,090.00
February 19, 20 (<i>Final Valuation</i> <i>Date</i>)		February 22, 2019 (<i>Maturity Date</i>)	13.50%	\$1,135.00
Observation Dates ^{1, 2} : Semi-annually, on the dates set forth in the table under "Payment upon an Automatic Call" above				
Call Settlement As set forth in the table under "Payment upon an Automatic Call" above. The Call Settlement Date for				
Date ^{1, 2} : the final Observation Date will be the Maturity Date.				
Payment at	nent at If the securities are not automatically called, you will receive a cash payment at maturity that will			
Maturity:	Maturity: depend <i>solely</i> on the Final Level of the Laggard Underlying, calculated as follows:			
If the Final Level of the Laggard Underlying is greater than or equal to its Buffer Level, you				

will receive a cash payment at maturity per \$1,000 Face Amount of securities calculated as follows:

\$1,000 + (\$1,000 x Digital Return)

• If the Final Level of the Laggard Underlying is *less than* its Buffer Level, you will receive a cash payment at maturity per \$1,000 Face Amount of securities calculated as follows:

\$1,000 + [\$1,000 x (Underlying Return of the Laggard Underlying + Buffer Amount) x Downside Participation Factor]

If the securities are not automatically called and the Final Level of the Laggard Underlying is less than its Buffer Level, for each \$1,000 Face Amount of securities, you will lose 1.25% of the Face Amount for every 1.00% by which the Final Level of the Laggard Underlying is less than its Initial Level by an amount greater than the Buffer Amount. In this circumstance, you will lose some or all of your investment at maturity. Any payment at maturity is subject to the credit of the Issuer. The Underlying with the lower Underlying Return on the Final Valuation Date. If the calculation agent determines that the two Underlyings have equal Underlying Returns, then the calculation agent will, in its sole discretion, designate either of the Underlyings as the Laggard Underlying.

Underlying: will, in it Digital Return: 3.25% Downside 125.00%

Participation

Laggard

Factor:	
Buffer Level:	For each Underlying, 80.00% of the Initial Level of such Underlying, as set forth in the table under "Underlyings" above
Buffer Amount:	20.00%
Underlying Return:	For each Underlying, the performance of such Underlying from its Initial Level to its Final Level, calculated as follows:
	<u>Final Level – Initial Level</u>
	Initial Level
	The Underlying Return for each Underlying may be positive, zero or negative.
Initial Level:	For each Underlying, the Closing Level of such Underlying on August 16, 2017, as set forth in the table under "Underlyings" above. The Initial Level for each Underlying is <i>not</i> the Closing Level of
F ' = 1 I = = 1	such Underlying on the Trade Date.
Final Level:	For each Underlying, the Closing Level of such Underlying on the Final Valuation Date For the Fund, the closing price of one share of the Fund on the relevant date of calculation <i>multiplied</i> <i>by</i> the then-current Share Adjustment Factor, as determined by the calculation agent.
Closing Level:	

For the Index, the closing level of the Index on the relevant date of calculation.

Share Adjustment Factor:	Initially 1.0, subject to adjustment for certain actions affecting the Fund. See "Description of Securities — Anti-Dilution Adjustments for Funds" in the accompanying product supplement.
Trade Date ² :	August 17, 2017
Settlement Date ² :	August 22, 2017
Final Valuation Date ^{1, 2} :	February 19, 2019
Maturity Date ^{1,} ² :	February 22, 2019
Listing:	The securities will not be listed on any securities exchange.
CUSIP / ISIN:	25155MDE8 / US25155MDE84

Subject to adjustment as described under "Description of Securities — Adjustments to Valuation Dates and Payment Dates" in the accompanying product supplement. If an Observation Date is postponed, the related Call Settlement Date will be postponed as described under "Description of Securities — Adjustments to Valuation Dates and Payment Dates" in the accompanying product supplement.

In the event that we make any changes to the expected Trade Date or Settlement Date, the Observation Dates, Call ²Settlement Dates, Final Valuation Date and Maturity Date may be changed so that the stated term of the securities remains the same.

Issuer's Estimated Value of the Securities

The Issuer's estimated value of the securities is equal to the sum of our valuations of the following two components of the securities: (i) a bond and (ii) an embedded derivative(s). The value of the bond component of the securities is calculated based on the present value of the stream of cash payments associated with a conventional bond with a principal amount equal to the Face Amount of securities, discounted at an internal funding rate, which is determined primarily based on our market-based yield curve, adjusted to account for our funding needs and objectives for the period matching the term of the securities. The internal funding rate is typically lower than the rate we would pay when we issue conventional debt securities on equivalent terms. This difference in funding rate, as well as the agent's commissions, if any, and the estimated cost of hedging our obligations under the securities, reduces the economic terms of the securities to you and is expected to adversely affect the price at which you may be able to sell the securities in any secondary market. The value of the embedded derivative(s) is calculated based on our internal pricing models using relevant parameter inputs such as expected interest and dividend rates and mid-market levels of price and volatility of the assets underlying the securities or any futures, options or swaps related to such underlying assets. Our internal pricing models are proprietary and rely in part on certain assumptions about future events, which may prove to be incorrect.

The Issuer's estimated value of the securities on the Trade Date (as disclosed on the cover of this pricing supplement) is less than the Issue Price of the securities. The difference between the Issue Price and the Issuer's estimated value of the securities on the Trade Date is due to the inclusion in the Issue Price of the agent's commissions, if any, and the cost of hedging our obligations under the securities through one or more of our affiliates. Such hedging cost includes our or our affiliates' expected cost of providing such hedge, as well as the profit we or our affiliates expect to realize in consideration for assuming the risks inherent in providing such hedge.

The Issuer's estimated value of the securities on the Trade Date does not represent the price at which we or any of our affiliates would be willing to purchase your securities in the secondary market at any time. Assuming no changes in market conditions or our creditworthiness and other relevant factors, the price, if any, at which we or our affiliates would be willing to purchase the securities from you in secondary market transactions, if at all, would generally be lower than both the Issue Price and the Issuer's estimated value of the securities on the Trade Date. Our purchase price, if any, in secondary market transactions will be based on the estimated value of the securities determined by reference to (i) the then-prevailing internal funding rate (adjusted by a spread) or another appropriate measure of our cost of funds and (ii) our pricing models at that time, less a bid spread determined after taking into account the size of the repurchase, the nature of the assets underlying the securities for use on customer account statements would generally be determined on the same basis. However, during the period of approximately three months beginning from the Trade Date, we or our affiliates may, in our sole discretion, increase the purchase price determined as described above by an amount equal to the declining differential between the Issue Price and the Issuer's estimated value of the securities on the Trade Date, prorated over such period on a straight-line basis, for transactions that are individually and in the aggregate of the expected size for ordinary secondary market repurchases.

Resolution Measures and Deemed Agreement

On May 15, 2014, the European Parliament and the Council of the European Union adopted a directive establishing a framework for the recovery and resolution of credit institutions and investment firms (commonly referred to as the "Bank Recovery and Resolution Directive"). The Bank Recovery and Resolution Directive required each member state of the European Union to adopt and publish by December 31, 2014 the laws, regulations and administrative provisions necessary to comply with the Bank Recovery and Resolution Directive. Germany adopted the Recovery and Resolution Act (Sanierungs- und Abwicklungsgesetz, or the "Resolution Act"), which became effective on January 1, 2015. The Bank Recovery and Resolution Directive and the Resolution Act provided national resolution authorities with a set of resolution powers to intervene in the event that a bank is failing or likely to fail and certain other conditions are met. From January 1, 2016, the power to initiate resolution measures applicable to significant banking groups (such as Deutsche Bank Group) in the European Banking Union has been transferred to the European Single Resolution Board which, based on the European Union regulation establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund (the "SRM Regulation"), works in close cooperation with the European Central Bank, the European Commission and the national resolution authorities. Pursuant to the SRM Regulation, the Resolution Act and other applicable rules and regulations, the securities may be subject to any Resolution Measure by the competent resolution authority if we become, or are deemed by the competent supervisory authority to have become, "non-viable" (as defined under the then applicable law) and are unable to continue our regulated banking activities without a Resolution Measure becoming applicable to us. By acquiring the securities, you will be bound by and deemed irrevocably to consent to the provisions set forth in the accompanying prospectus, which we have summarized below.

By acquiring the securities, you will be bound by and deemed irrevocably to consent to the imposition of any Resolution Measure by the competent resolution authority. Under the relevant resolution laws and regulations as applicable to us from time to time, the securities may be subject to the powers exercised by the competent resolution authority to: (i) write down, including to zero, any payment (or delivery obligations) on the securities; (ii) convert the securities into ordinary shares of (a) the Issuer, (b) any group entity or (c) any bridge bank or other instruments of ownership of such entities qualifying as common equity tier 1 capital; and/or (iii) apply any other resolution measure including, but not limited to, any transfer of the securities to another entity, the amendment, modification or variation of the terms and conditions of the securities or the cancellation of the securities. We refer to each of these measures as a "**Resolution Measure**." A "group entity" refers to an entity that is included in the corporate group subject to a Resolution Measure. A "bridge bank" refers to a newly chartered German bank that would receive some or all of our assets, liabilities and material contracts, including those attributable to our branches and subsidiaries, in a resolution proceeding.

Furthermore, by acquiring the securities, you:

• are deemed irrevocably to have agreed, and you will agree: (i) to be bound by, to acknowledge and to accept any Resolution Measure and any amendment, modification or variation of the terms and conditions of the securities to give effect to any Resolution Measure; (ii) that you will have no claim or other right against us arising out of any

Resolution Measure; and (iii) that the imposition of any Resolution Measure will not constitute a default or an event of default under the securities, under the senior indenture dated November 22, 2006 among us, Law Debenture Trust Company of New York, as trustee, and Deutsche Bank Trust Company Americas, as issuing agent, paying agent, authenticating agent and registrar, as amended and supplemented from time to time (the "**Indenture**"), or for the purposes of, but only to the fullest extent permitted by, the Trust Indenture Act of 1939, as amended (the "**Trust Indenture Act**");

waive, to the fullest extent permitted by the Trust Indenture Act and applicable law, any and all claims against the trustee and the paying agent, the issuing agent and the registrar (each, an "**indenture agent**") for, agree not to initiate a suit against the trustee or the indenture agents in respect of, and agree that the trustee and the indenture agents will not be liable for, any action that the trustee or the indenture agents take, or abstain from taking, in either case in accordance with the imposition of a Resolution Measure by the competent resolution authority with respect to the securities; and

will be deemed irrevocably to have: (i) consented to the imposition of any Resolution Measure as it may be imposed without any prior notice by the competent resolution authority of its decision to exercise such power with respect to the securities; (ii) authorized, directed and requested The Depository Trust Company ("**DTC**") and any direct participant in DTC or other intermediary through which you hold such securities to take any and all necessary action, if required, to implement the imposition of any Resolution Measure with respect to the securities as it may be imposed, without any further action or direction on your part or on the part of the trustee or the indenture agents; and (iii) acknowledged and accepted that the Resolution Measure provisions described herein and in the "Resolution Measures" section of the accompanying prospectus are exhaustive on the matters described herein and therein to the exclusion of any other agreements, arrangements or understandings between you and the Issuer relating to the terms and conditions of the securities.

This is only a summary, for more information please see the accompanying prospectus dated April 27, 2016, including the risk factors beginning on page 13 of such prospectus.

Additional Terms Specific to the Securities

You should read this pricing supplement together with underlying supplement No. 1 dated August 17, 2015, product supplement B dated July 31, 2015, the prospectus supplement dated July 31, 2015 relating to our Series A global notes of which these securities are a part and the prospectus dated April 27, 2016. Delaware Trust Company, which acquired the corporate trust business of Law Debenture Trust Company of New York, is the successor trustee of the securities. When you read the accompanying underlying supplement, product supplement and prospectus supplement, please note that all references in such supplements to the prospectus dated July 31, 2015, or to any sections therein, should refer instead to the accompanying prospectus dated April 27, 2016 or to the corresponding sections of such prospectus, as applicable, unless otherwise specified or the context otherwise requires. You may access these documents on the website of the Securities and Exchange Commission (the "SEC") at.www.sec.gov as follows (or if such address has changed, by reviewing our filings for the relevant date on the SEC website):

Underlying supplement No. 1 dated August 17, 2015:

http://www.sec.gov/Archives/edgar/data/1159508/000095010315006546/crt_dp58829-424b2.pdf

Product supplement B dated July 31, 2015:

http://www.sec.gov/Archives/edgar/data/1159508/000095010315006059/crt_dp58181-424b2.pdf

Prospectus supplement dated July 31, 2015:

http://www.sec.gov/Archives/edgar/data/1159508/000095010315006048/crt-dp58161_424b2.pdf

Prospectus dated April 27, 2016:

https://www.sec.gov/Archives/edgar/data/1159508/000119312516559607/d181910d424b21.pdf

Our Central Index Key, or CIK, on the SEC website is 0001159508. As used in this pricing supplement, "we," "us" or "our" refers to Deutsche Bank AG, including, as the context requires, acting through one of its branches.

This pricing supplement, together with the documents listed above, contains the terms of the securities and supersedes all other 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 this pricing supplement and in "Risk Factors" in the accompanying product supplement, prospectus supplement and prospectus, as the securities involve risks not associated with conventional debt securities. We urge you to consult your investment, legal, tax, accounting and other advisers before deciding to invest in the securities.

You may revoke your offer to purchase the securities at any time prior to the time at which we accept such offer by notifying the applicable agent. We reserve the right to change the terms of, or reject any offer to purchase, the securities prior to their issuance. We will notify you in the event of any changes to the terms of the securities and you will be asked to accept such changes in connection with your purchase of any securities. You may choose to reject such changes, in which case we may reject your offer to purchase the securities.

Hypothetical Examples

The tables and hypothetical examples set forth below are for illustrative purposes only. The actual returns applicable to a purchaser of the securities will be determined on the relevant Observation Date or on the Final Valuation Date, as applicable. The following results are based *solely* on the hypothetical examples cited below. You should consider carefully whether the securities are suitable to your investment goals. The numbers appearing in the tables and hypothetical examples below may have been rounded for ease of analysis.

If the securities are called:

The following table illustrates the payment due upon an Automatic Call per \$1,000 Face Amount of securities on each of the Observation Dates. The Call Returns below are based on a rate of 9.00% per annum.

			Payment upon an Automatic Call
Observation Date	Call Settlement Dat	e Call Retur	n
			(per \$1,000 Face Amount of securities)
February 20, 2018	February 23, 2018	4.50%	\$1,045.00
August 17, 2018	August 22, 2018	9.00%	\$1,090.00
February 19, 2019	February 22, 2019	12 5007	¢1 125 00
(Final Valuation Date)	(Maturity Date)	13.50%	\$1,135.00

If the securities are not called:

The following table illustrates the hypothetical Payments at Maturity per \$1,000 Face Amount of securities for a hypothetical range of performances if the securities are not automatically called. The hypothetical Payments at Maturity set forth below reflect the Digital Return of 3.25%, the Buffer Amount of 20.00%, the Buffer Level for each Underlying equal to 80.00% of its Initial Level and the Downside Participation Factor of 125.00%. The actual Initial Level and Buffer Level for each Underlying are set forth on the cover of this pricing supplement. We make no representation or warranty as to which of the Underlyings will be the Laggard Underlying for purposes of calculating the Payment at Maturity.

Hypothetical Underlying Return of the Laggard Hypothetical Payment at		Hypothetical Return on the
Underlying (%)	Maturity (\$)	Securities (%)
100.00%	N/A	N/A
90.00%	N/A	N/A
80.00%	N/A	N/A

70.00%	N/A	N/A
60.00%	N/A	N/A
50.00%	N/A	N/A
40.00%	N/A	N/A
30.00%	N/A	N/A
20.00%	N/A	N/A
10.00%	N/A	N/A
5.00%	N/A	N/A
0.00%	N/A	N/A
-5.00%	\$1,032.50	3.25%
-10.00%	\$1,032.50	3.25%
-15.00%	\$1,032.50	3.25%
-20.00%	\$1,032.50	3.25%
-21.00%	\$987.50	-1.25%
-30.00%	\$875.00	-12.50%
-40.00%	\$750.00	-25.00%
-50.00%	\$625.00	-37.50%
-60.00%	\$500.00	-50.00%
-70.00%	\$375.00	-62.50%
-80.00%	\$250.00	-75.00%
-90.00%	\$125.00	-87.50%
-100.00%	\$0.00	-100.00%

N/A: Not applicable because the securities will be automatically called if the Final Level of the Laggard Underlying is greater than or equal to its Initial Level.

Hypothetical Examples of Amounts Payable at Maturity

The following hypothetical examples illustrate how the returns set forth in the tables above are calculated.

Example 1: The Closing Levels of *both* Underlyings are greater than their respective Initial Levels on the first Observation Date. Because the Closing Levels of **both** Underlyings on the first Observation Date are greater than their respective Initial Levels, the securities are automatically called on the first Observation Date and the investor will receive on the related Call Settlement Date a cash payment of \$1,045.00 per \$1,000 Face Amount of securities. There will be no further payments on the securities.

Example 2: The Closing Level of at least one Underlying is less than its Initial Level on the first Observation Date and the Closing Levels of both Underlyings are greater than their respective Initial Levels on the second Observation Date. Because the Closing Level of at least one Underlying is less than its Initial Level on the first Observation Date, the securities are not automatically called on the first Observation Date. Because the Closing Levels of both Underlyings are greater than their respective Initial Levels on Date. Because the Closing Levels of both Underlyings are greater than their respective Initial Levels on the second Observation Date, the securities are automatically called on the second Observation Date and the investor will receive on the related Call Settlement Date a cash payment of \$1,090.00 per \$1,000 Face Amount of securities. There will be no further payments on the securities.

Example 3: The Closing Level of at least one Underlying is less than its Initial Level on the first and second Observation Dates and the Closing Levels of both Underlyings are greater than their respective Initial Levels on the final Observation Date. Because the Closing Level of at least one Underlying is less than its Initial Level on the first and second Observation Dates, the securities are not automatically called on the first or second Observation Dates. Because the Closing Levels of both Underlyings are greater than their respective Initial Levels on Dates. Because the Closing Levels of both Underlyings are greater than their respective Initial Levels on the final Observation Date, the securities are automatically called and the investor will receive on the Maturity Date a cash payment of \$1,135.00 per \$1,000 Face Amount of securities.

Example 4: The Closing Level of at least one Underlying is less than its Initial Level on each Observation Date (including the final Observation Date) and the Final Level of the Laggard Underlying is greater than its Buffer Level, resulting in an Underlying Return of the Laggard Underlying of -15.00%. Because the Closing Level of at least one Underlying is less than its Initial Level on each Observation Date (including the final Observation Date), the securities are not automatically called. Because the Final Level of the Laggard Underlying is greater than its Buffer Level, the investor will receive on the Maturity Date a cash payment of \$1,032.50 per \$1,000 Face Amount of securities, calculated as follows:

\$1,000 + (\$1,000 x Digital Return)

 $1,000 + (1,000 \times 3.25\%) = 1,032.50$

Example 5: The Closing Level of at least one Underlying is less than its Initial Level on each Observation Date (including the final Observation Date) and the Final Level of the Laggard Underlying is less than its Buffer Level (while the Final Level of the other Underlying is greater than its Initial Level), resulting in an Underlying Return of the Laggard Underlying of -50.00%. Because the Closing Level of at least one Underlying is less than its Initial Level on each Observation Date (including the final Observation Date), the securities are not automatically called. Because the Final Level of the Laggard Underlying is less than its Buffer Level, despite the Final Level of the other Underlying is less than its Buffer Level, despite the Final Level of the other Underlying being greater than its Initial Level, the investor will receive on the Maturity Date a cash payment of \$625.00 per \$1,000 Face Amount of securities, calculated as follows:

\$1,000 + [\$1,000 x (Underlying Return of the Laggard Underlying + Buffer Amount) x Downside Participation Factor]

 $1,000 + [1,000 \times (-50.00\% + 20.00\%) \times 125.00\%] = 625.00$

Example 6: The Closing Level of at least one Underlying is less than its Initial Level on each Observation Date (including the final Observation Date) and the Final Levels of both Underlyings are less than their respective Initial Levels, with the Final Level of the Laggard Underlying being less than its Buffer Level, resulting in an Underlying Return of the Laggard Underlying of -70.00%. Because the Closing Level of at least one Underlying is less than its Initial Level on each Observation Date (including the final Observation Date), the securities are not automatically called. Because the Final Level of the Laggard Underlying is less than its Buffer Level, the investor will receive on the Maturity Date a cash payment of \$375.00 per \$1,000 Face Amount of securities, calculated as follows:

\$1,000 + [\$1,000 x (Underlying Return of the Laggard Underlying + Buffer Amount) x Downside Participation Factor]

 $1,000 + [1,000 \times (-70.00\% + 20.00\%) \times 125.00\%] = 375.00$

Selected Purchase Considerations

STEP-UP APPRECIATION POTENTIAL If the Closing Levels of *both* Underlyings on any semi-annual Observation Date (including the final Observation Date) are greater than or equal to their respective Initial Levels, the securities will be automatically called. If the securities are automatically called, you will receive on the applicable Call Settlement Date a cash payment per \$1,000 Face Amount of securities equal to the Face Amount *multiplied by* the applicable Call Return based on a rate of 9.00% per annum. Even if the securities are not automatically called, if the Final Level of the Laggard Underlying is greater than or equal to its Buffer Level, you will receive on the Maturity Date a positive return on the securities equal to the Digital Return of 3.25%. In this circumstance, you will receive a Payment at Maturity of \$1,032.50 per \$1,000 Face Amount of securities, which is less than the payment of \$1,350 per \$1,000 Face Amount of securities is subject to our ability to satisfy our obligations as they become due.

LIMITED PROTECTION AGAINST LOSS — If the securities are not automatically called and the Final Level of the Laggard Underlying is greater than or equal to its Buffer Level, you will receive at maturity a positive return on the securities equal to the Digital Return. However, if the securities are not automatically called and the Final Level of the Laggard Underlying is less than its Buffer Level, for each \$1,000 Face Amount of securities, you will lose 1.25% of the Face Amount for every 1.00% by which the Final Level of the Laggard Underlying is less than its Initial Level by an amount greater than the Buffer Amount. In this circumstance, you will lose some or all of your investment at maturity.

POTENTIAL EARLY EXIT WITH APPRECIATION AS A RESULT OF THE AUTOMATIC CALL

FEATURE While the original term of the securities is approximately eighteen months, the securities will be • automatically called if the Closing Levels of *both* Underlyings on any semi-annual Observation Date (including the final Observation Date) are greater than or equal to their respective Initial Levels, and you will receive the applicable payment corresponding to that Observation Date, as set forth on the cover of this pricing supplement.

RETURN LINKED TO THE LESSER PERFORMING OF THE TWO UNDERLYINGS — The return on the securities, which may be positive, zero or negative, is linked to the lesser performing of the iShares[®] MSCI EAFE ETF and the Russell 2000[®] Index as described herein. If the securities are not automatically called, the Payment at Maturity you receive, if any, will be determined *solely* by reference to the performance of the Laggard Underlying.

iShares® MSCI EAFE ETF

The iShares[®] MSCI EAFE ETF is an exchange-traded fund managed by iShares[®] Trust, a registered investment company. The iShares[®] Trust consists of numerous separate investment portfolios, including the iShares[®] MSCI EAFE ETF. The iShares[®] MSCI EAFE ETF seeks to provide investment results that correspond generally to the price and yield performance, before fees and expenses, of publicly traded securities in the European, Australasian and Far Eastern markets, as measured by the MSCI EAFE[®] Index (the "**Tracked Index**"). The iSharesMSCI EAFE ETF trades on NYSE Arca under the ticker symbol "EFA." It is possible that the iSharesMSCI EAFE ETF may not fully

replicate or may in certain circumstances diverge significantly from the performance of the Tracked Index due to the temporary unavailability of certain securities in the secondary markets, the performance of any derivative instruments contained in the iShares[®] MSCI EAFE ETF, the fees and expenses of the iShares[®] MSCI EAFE ETF or due to other circumstances. The investment advisor (the "**Fund Advisor**") to the iShares[®]MSCI EAFE ETF is Blackrock Fund Advisors. *This is only a summary of the iShares[®] MSCI EAFE ETF. For more information on the iShares[®] MSCI EAFE ETF, including information concerning its composition, calculation methodology and adjustment policy, please see the section entitled "The iShares Exchange Traded Funds — iSharedSCI EAFE ETF" in the accompanying underlying supplement No. 1 dated August 17, 2015. For more information on the MSCI EAFE[®] Index, please see the section entitled "The MSCI Indices — The MSCI EAFE EAFT" in the accompanying underlying supplement No. 1 dated August 17, 2015. For more information on the MSCI EAFE[®] Index, please see the section entitled "The MSCI Indices — The MSCI EAFE EAFT" in the accompanying underlying supplement No. 1 dated August 17, 2015. For more information on the MSCI EAFE[®] Index, please see the section entitled "The MSCI Indices — The MSCI EAFE EAFT" in the accompanying underlying supplement No. 1 dated August 17, 2015.*

Russell 2000[®] Index

The Russell 2000[®] Index is designed to track the performance of the small capitalization segment of the U.S. equity market. The Russell 2000[®] Index measures the composite price performance of stocks of approximately 2,000 companies domiciled in the U.S. and its territories and consists of the smallest 2,000 companies included in the Russell 3000[®] Index. The Russell 2000[®] Index represents approximately 10% of the total market capitalization of the Russell 3000[®] Index. *This is only a summary of the Russell 2000[®] Index. For more information on the Russell 2000[®] Index, including information concerning its composition, calculation methodology and adjustment policy, please see the section entitled "The Russell Indices — The Russell 2000^B and the accompanying underlying supplement No. 1 dated August 17, 2015.*

TAX CONSEQUENCES — Our special tax counsel, Davis Polk & Wardwell LLP, has advised that while it believes that it is reasonable to treat the securities for U.S. federal income tax purposes as prepaid financial contracts that are not debt, it is unable to conclude that it is more likely than not that this treatment will be upheld, and that other reasonable treatments are possible that could materially affect the timing and character of income or loss on your securities. Generally, if this treatment is respected, (i) you should not recognize taxable income or loss prior to the maturity or other taxable disposition of your securities and (ii) the gain or loss on your securities should be short-term capital gain or loss unless you have held the securities for more than one year, in which case the gain or loss should be long-term capital gain or loss. The Internal Revenue Service (the "**IRS**") or a court might not agree with this treatment, however, in which case the timing and character of income or loss on your securities could be materially and adversely affected.

In 2007, the U.S. Treasury Department and the IRS released a notice requesting comments on various issues regarding the U.S. federal income tax treatment of "prepaid forward contracts" and similar instruments. The notice focuses in particular on whether beneficial owners of these instruments should be required to accrue income over the term of their investment. It also asks for comments on a number of related topics, including the character of income or loss with respect to these instruments; the relevance of factors such as the nature of the underlying property to which the instruments are linked; the degree, if any, to which income (including any mandated accruals) realized by non-U.S. persons should be subject to withholding tax; and whether these instruments are or should be subject to the "constructive ownership" regime, which very generally can operate to recharacterize certain long-term capital gain as ordinary income and impose a notional interest charge. While the notice requests comments on appropriate transition rules and effective dates, any Treasury regulations or other guidance promulgated after consideration of these issues could materially and adversely affect the tax consequences of an investment in the securities, possibly with retroactive effect.

Withholding under legislation commonly referred to as "FATCA" might (if the securities were recharacterized as debt instruments) apply to amounts treated as interest paid with respect to the securities, as well as to the payment of gross proceeds of a taxable disposition, including redemption at maturity, of a security. However, under a recent IRS notice, this regime will not apply to payments of gross proceeds (other than any amount treated as interest) with respect to dispositions occurring before January 1, 2019. You should consult your tax adviser regarding the potential application of FATCA to the securities.

Section 871(m) of the Code and Treasury regulations promulgated thereunder ("**Section 871(m**)") generally impose a 30% withholding tax (unless an income tax treaty applies) on dividend equivalents paid or deemed paid to non-U.S. holders with respect to certain financial instruments linked to U.S. equities or indices that include U.S. equities. Section 871(m) provides certain exceptions to this withholding regime, including for instruments linked to certain broad-based indices that meet requirements set forth in the applicable Treasury regulations (such an index, a "**Qualified Index**"). Additionally, the applicable regulations exclude from the scope of Section 871(m) instruments issued in 2017 that do not have a delta of one with respect to underlying securities that could pay U.S.-source dividends for U.S. federal income tax purposes (each an "**Underlying Security**"). Based on certain determinations made by us, we expect that Section 871(m) will not apply to the securities with regard to non-U.S. holders. Our determination is not binding on the IRS, and the IRS may disagree with this determination. Section 871(m) is complex and its application may depend on your particular circumstances, including whether you enter into other transactions with respect to an Underlying Security. If necessary, further information regarding the potential application of Section 871(m) will be provided in the pricing supplement for the securities. You should consult your tax adviser regarding

the potential application of Section 871(m) to the securities.

You should review carefully the section of the accompanying product supplement entitled "U.S. Federal Income Tax Consequences." The preceding discussion, when read in combination with that section, constitutes the full opinion of our special tax counsel regarding the material U.S. federal income tax consequences of owning and disposing of the securities.

Under current law, the United Kingdom will not impose withholding tax on payments made with respect to the securities.

For a discussion of certain German tax considerations relating to the securities, you should refer to the section in the accompanying prospectus supplement entitled "Taxation by Germany of Non-Resident Holders."

You should consult your tax adviser regarding the U.S. federal tax consequences of an investment in the securities (including possible alternative treatments and the issues presented by the 2007 notice), as well as tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdiction.

Selected Risk Considerations

An investment in the securities involves significant risks. Investing in the securities is not equivalent to investing directly in the Underlyings or in any of the components of the Underlyings. In addition to these selected risk considerations, you should review the "Risk Factors" sections of the accompanying product supplement, prospectus supplement and prospectus.

YOUR INVESTMENT IN THE SECURITIES MAY RESULT IN A LOSS — The securities do not guarantee any return of your investment. The return on the securities is linked *solely* to the performance of the Laggard Underlying and will depend on whether the securities are automatically called and whether the Final Level of the Laggard Underlying is less than its Buffer Level, as applicable. If the securities are not automatically called and the Final ·Level of the Laggard Underlying is less than its Buffer Level, for each \$1,000 Face Amount of securities, you will lose 1.25% of the Face Amount for every 1.00% by which the Final Level of the Laggard Underlying is less than its Initial Level by an amount greater than the Buffer Amount. In this circumstance, you will lose some or all of your investment at maturity. **Any payment on the securities is subject to our ability to satisfy our obligations as they become due**.

THE RETURN ON THE SECURITIES IS LIMITED — If the securities are automatically called, the return on the securities will be limited by the pre-specified Call Return on the relevant Observation Date, regardless of the performance of the Underlyings. In addition, since the securities could be called as early as the first Observation Date, the term of your investment could be as short as approximately six months and your return on the securities would be less than what you would have received if the securities were called on a later Observation Date. If the securities are not automatically called and the Final Level of the Laggard Underlying is greater than or equal to its Buffer Level, you will receive a positive return on the securities equal to the Digital Return. In this circumstance, your positive return on the securities, which is less than the payment of \$1,350 per \$1,000 Face Amount of securities, which is less than the payment of \$1,350 per \$1,000 Face Amount of securities were automatically called on the Maturity Date. However, if the securities are not automatically called and the Final Level of the Laggard Underlying is less than its Buffer Level, for each \$1,000 Face Amount of securities, you will lose 1.25% of the Face Amount for every 1.00% by which the Final Level of the Laggard Underlying is less than its Initial Level by an amount greater than the Buffer Amount. Therefore, the return on the securities is limited regardless of whether the securities are automatically called or not.

REINVESTMENT RISK — If the securities are automatically called, the term of the securities may be reduced to as short as approximately six months. There is no guarantee that you would be able to reinvest the proceeds from an investment in the securities at a comparable return for a similar level of risk in the event the securities are automatically called prior to the Maturity Date.

IF THE SECURITIES ARE NOT AUTOMATICALLY CALLED, YOUR PAYMENT AT MATURITY WILL BE DETERMINED SOLELY BY THE PERFORMANCE OF THE LAGGARD UNDERLYING — If the securities are not automatically called, the Payment at Maturity will be determined *solely* by reference to the performance of the Laggard Underlying, without taking into consideration the performance of the other Underlying.

A HIGHER DIGITAL/CALL RETURN OR A LOWER BUFFER LEVEL FOR EACH UNDERLYING MAY REFLECT A GREATER EXPECTED VOLATILITY OF ONE OR BOTH UNDERLYINGS, WHICH IS GENERALLY ASSOCIATED WITH A GREATER RISK OF LOSS — Volatility is a measure of the degree of variation in the trading prices of an asset over a period of time. The greater the expected volatility at the time the terms of the securities are set on the Trade Date, the greater the expectation is at that time that at least one of the Underlyings may close below its Buffer Level on the Final Valuation Date (resulting in a loss of some or all of your investment). In addition, the economic terms of the securities, including the Buffer Levels and the Digital/Call Return, are based, in part, on the expected volatility will generally lead to a higher Digital/Call Return or a lower Buffer Level for each Underlying. Accordingly, a higher Digital/Call Return as compared with the expected return on our conventional fixed income securities with a similar maturity or the expected return on our other similarly structured securities will generally indicate a greater risk of loss, while a lower Buffer Level for each Underlying as compared with otherwise comparable securities does not necessarily indicate that the securities have a greater likelihood of returning your investment at maturity. You should be willing to accept the downside market risk of each Underlying and the potential loss of some or all of your investment at maturity.

THE SECURITIES DO NOT PAY ANY COUPONS — Unlike ordinary debt securities, the securities do not pay any coupons and do not guarantee any return of your investment at maturity.

THE SECURITIES ARE SUBJECT TO THE CREDIT OF DEUTSCHE BANK AG — The securities are senior unsecured obligations of Deutsche Bank AG and are not, either directly or indirectly, an obligation of any third party. Any payment(s) to be made on the securities depends on the ability of Deutsche Bank AG to satisfy its obligations as they become due. An actual or anticipated downgrade in Deutsche Bank AG's credit rating or increase in the credit spreads charged by the market for taking Deutsche Bank AG's credit risk will likely have an adverse effect on the value of the securities. As a result, the actual and perceived creditworthiness of Deutsche Bank AG will affect the value of the securities and, in the event Deutsche Bank AG were to default on its obligations or become subject to a Resolution Measure, you might not receive any amount(s) owed to you under the terms of the securities and you could lose your entire investment.

THE SECURITIES MAY BE WRITTEN DOWN, BE CONVERTED INTO ORDINARY SHARES OR OTHER INSTRUMENTS OF OWNERSHIP OR BECOME SUBJECT TO OTHER RESOLUTION MEASURES. YOU MAY LOSE SOME OR ALL OF YOUR INVESTMENT IF ANY SUCH MEASURE BECOMES APPLICABLE TO US — Pursuant to the SRM Regulation, the Resolution Act and other applicable rules and regulations described above under "Resolution Measures and Deemed Agreement," the securities are subject to the powers exercised by the competent resolution authority to impose Resolution Measures on us, which may include: writing down, including to zero, any claim for payment on the securities; converting the securities into ordinary shares of (i) the Issuer, (ii) any group entity or (iii) any bridge bank or other instruments of ownership of such entities qualifying as common equity tier 1 capital; or applying any other resolution measure including, but not limited to, transferring the securities to another entity, amending, modifying or varying the terms and conditions of the securities or cancelling the securities. The competent resolution authority may apply Resolution Measures individually or in any combination.

The German law on the mechanism for the resolution of banks of November 2, 2015

(*Abwicklungsmechanismusgesetz*, or the "**Resolution Mechanism Act**") provides that, in a German insolvency proceeding of the Issuer, certain specifically defined senior unsecured debt instruments would rank junior to, without constituting subordinated debt, all other outstanding unsecured unsubordinated obligations of the Issuer and be satisfied only if all such other senior unsecured obligations of the Issuer have been paid in full. This prioritization would also be given effect if Resolution Measures are imposed on the Issuer, so that obligations under debt instruments that rank junior in insolvency as described above would be written down or converted into common equity tier 1 instruments *before* any other senior unsecured obligations of the Issuer are written down or converted. A large portion of our liabilities consist of senior unsecured obligations that either fall outside the statutory definition of debt instruments that rank junior to other senior unsecured obligations according to the Resolution Mechanism Act or are expressly exempted from such definition.

Among those unsecured unsubordinated obligations that are expressly exempted are money market instruments and senior unsecured debt instruments whose terms provide that (i) the repayment or the amount of the repayment depends on the occurrence or non-occurrence of an event which is uncertain at the point in time when the senior unsecured debt instruments are issued or is settled in a way other than by monetary payment, or (ii) the payment of interest or the amount of the interest payments depends on the occurrence or non-occurrence of an event which is uncertain at the point in time when the senior unsecured debt instruments are issued unless the payment of interest or the amount of the interest payments depends on a fixed or floating reference interest rate and is settled by monetary payment. This order of priority introduced by the Resolution Mechanism Act would apply in German insolvency proceedings instituted, or when Resolution Measures are imposed, on or after January 1, 2017 with effect for debt instruments of the Issuer outstanding at that time. In a German insolvency proceeding or in the event of the imposition of Resolution

Measures with respect to the Issuer, the competent regulatory authority or court would determine which of our senior debt securities issued under the prospectus have the terms described in clauses (i) or (ii) above, referred to herein as the "**Structured Debt Securities**," and which do not, referred to herein as the "**Non-Structured Debt Securities**." We expect the securities offered herein to be classified as Structured Debt Securities, but the competent regulatory authority or court may classify the securities differently. In a German insolvency proceeding or in the event of the imposition of Resolution Measures with respect to the Issuer, the Structured Debt Securities are expected to be among the unsecured unsubordinated obligations that would bear losses after the Non-Structured Debt Securities as described above. **Nevertheless, you may lose some or all of your investment in the securities if a Resolution Measure becomes applicable to us**. Imposition of a Resolution Measure would likely occur if we become, or are deemed by the competent supervisory authority to have become, "non-viable" (as defined under the then applicable law) and are unable to continue our regulated banking activities without a Resolution Measure becoming applicable to us. The Bank Recovery and Resolution Directive and the Resolution Act are intended to eliminate the need for public support of troubled banks, and you should be aware that public support, if any, would only potentially be used by the competent supervisory authority as a last resort after having assessed and exploited, to the maximum extent practicable, the resolution tools, including the bail-in tool.

By acquiring the securities, you would have no claim or other right against us arising out of any Resolution Measure and we would have no obligation to make payments under the securities following the imposition of a Resolution Measure. In particular, the imposition of any Resolution Measure will not constitute a default or an event of default under the securities, under the Indenture or for the purposes of, but only to the fullest extent permitted by, the Trust Indenture Act. Furthermore, because the securities are subject to any Resolution Measure, secondary market trading in the securities may not follow the trading behavior associated with similar types of securities issued by other financial institutions which may be or have been subject to a Resolution Measure.

In addition, by your acquisition of the securities, you waive, to the fullest extent permitted by the Trust Indenture Act and applicable law, any and all claims against the trustee and the indenture agents for, agree not to initiate a suit against the trustee or the indenture agents in respect of, and agree that the trustee and the indenture agents will not be liable for, any action that the trustee or the indenture agents take, or abstain from taking, in either case in accordance with the imposition of a Resolution Measure by the competent resolution authority with respect to the securities. **Accordingly, you may have limited or circumscribed rights to challenge any decision of the competent resolution authority to impose any Resolution Measure**.

THE ISSUER'S ESTIMATED VALUE OF THE SECURITIES ON THE TRADE DATE WILL BE LESS THAN THE ISSUE PRICE OF THE SECURITIES — The Issuer's estimated value of the securities on the Trade Date (as disclosed on the cover of this pricing supplement) is less than the Issue Price of the securities. The difference between the Issue Price and the Issuer's estimated value of the securities on the Trade Date is due to the inclusion in the Issue Price of the agent's commissions, if any, and the cost of hedging our obligations under the securities through one or more of our affiliates. Such hedging cost includes our or our affiliates' expected cost of providing such hedge, as well as the profit we or our affiliates expect to realize in consideration for assuming the risks inherent in providing such hedge. The Issuer's estimated value of the securities is determined by reference to an internal funding rate and our pricing models. The internal funding rate is typically lower than the rate we would pay when we issue conventional debt securities on equivalent terms. This difference in funding rate, as well as the agent's commissions, if any, and the estimated cost of hedging our obligations under the securities, reduces the economic terms of the securities to you and is expected to adversely affect the price at which you may be able to sell the securities in any secondary market. In addition, our internal pricing models are proprietary and rely in part on certain assumptions about future events, which may prove to be incorrect. If at any time a third party dealer were to quote a price to purchase your securities or otherwise value your securities, that price or value may differ materially from the estimated value of the securities determined by reference to our internal funding rate and pricing models. This difference is due to, among other things, any difference in funding rates, pricing models or assumptions used by any dealer who may purchase the securities in the secondary market.

INVESTING IN THE SECURITIES IS NOT THE SAME AS INVESTING IN THE UNDERLYINGS OR THE SECURITIES COMPOSING THE UNDERLYINGS — The return on the securities may not reflect the return you would have realized if you had directly invested in the Underlyings or the securities composing the Underlyings. For instance, your return on the securities is *solely* dependent upon the performance of the Laggard Underlying, and you will not participate in any potential increase in the price or level, as applicable, of either Underlying, which could be significant.

IF THE PRICES OR LEVELS, AS APPLICABLE, OF THE UNDERLYINGS CHANGE, THE VALUE OF YOUR SECURITIES MAY NOT CHANGE IN THE SAME MANNER — Your securities may trade quite differently from the prices or levels, as applicable, of the Underlyings. Changes in the prices or levels, as applicable, of the Underlyings may not result in comparable changes in the value of your securities.

NO DIVIDEND PAYMENTS OR VOTING RIGHTS — As a holder of the securities, you will not have any voting •rights or rights to receive cash dividends or other distributions or other rights that holders of shares of the Fund or the securities composing the Underlyings would have.

YOUR INVESTMENT IS EXPOSED TO A DECLINE IN THE PRICE OR LEVEL, AS APPLICABLE, OF

EACH UNDERLYING — Your return on the securities, if any, is not linked to a basket consisting of the Underlyings. Rather, any payment on the securities will be determined *solely* by reference to the performance of the Laggard Underlying without taking into consideration the performance of the other Underlying. Unlike an instrument with a ·return linked to a basket, in which risk is mitigated and diversified among all of the basket components, you will be exposed equally to the risks related to each of the Underlyings and your return will be based *solely* on the performance of the Laggard Underlying, as measured on each Observation Date (including the Final Valuation Date). Poor performance by either Underlying over the term of the securities may adversely affect your return on the securities and will not be offset or mitigated by a positive performance by the other Underlying.

BECAUSE THE SECURITIES ARE LINKED TO THE LESSER PERFORMING OF THE TWO UNDERLYINGS, YOU ARE EXPOSED TO A GREATER RISK OF LOSING SOME OR ALL OF YOUR INVESTMENT THAN IF THE SECURITIES WERE LINKED TO JUST ONE UNDERLYING — The risk that you will lose some or all of your investment in the securities is greater than in substantially similar securities that are linked to the performance of just one of the Underlyings. With two Underlyings, it is more likely that the Final Level of at least one Underlying will be less than its Buffer Level than if the securities were linked to only one Underlying, and therefore, it is more likely that you will receive a Payment at Maturity that is less than your initial investment. In addition, the performance of the Underlyings may not be correlated. If the performance of the Underlyings is not correlated, or is negatively correlated, the potential for the level of at least one Underlying to be less than its Buffer Level on the Final Valuation Date is even greater. Although the correlation of the Underlyings' performance may change over the term of the securities, the Buffer Level is determined, in part, based on the correlation of the Underlyings' performance at the time when the terms of the securities are finalized. A lower Buffer Level is generally associated with a lower correlation of the Underlyings, which reflects a greater potential for loss on your investment at maturity.

THE INDEX REFLECTS THE PRICE RETURN OF THE STOCKS COMPOSING THE INDEX, NOT THEIR TOTAL RETURN INCLUDING ALL DIVIDENDS AND OTHER DISTRIBUTIONS — The Index •reflects the changes in the market prices of the stocks composing the Index. The Index is not, however, a "total return" index, which, in addition to reflecting the price returns of the stocks composing the Index, would also reflect the reinvestment of all dividends and other distributions paid on such component stocks.

THE SPONSOR OF THE INDEX MAY ADJUST THE INDEX IN WAYS THAT AFFECT THE LEVEL OF THE INDEX AND HAS NO OBLIGATION TO CONSIDER YOUR INTERESTS — The sponsor of the Index (the "Index Sponsor") is responsible for calculating and maintaining the Index. The Index Sponsor can add, delete or substitute the components of the Index or make other methodological changes that could change the level of the ·Index. You should realize that the changing of such Index components may affect such Index, as a newly added component may perform significantly better or worse than the component it replaces. Additionally, the Index Sponsor may alter, discontinue or suspend calculation or dissemination of the Index. Any of these actions could adversely affect the level of the Index and, thus, the value of, and your return on, the securities. The Index Sponsor has no obligation to consider your interests in calculating or revising the Index.

THE SECURITIES ARE SUBJECT TO RISKS ASSOCIATED WITH SMALL-CAPITALIZATION

COMPANIES — The stocks composing the Index are issued by companies with relatively small market capitalization. These companies often have greater stock price volatility, lower trading volume and less liquidity than large-capitalization companies and, therefore, the level of the Index may be more volatile than the levels of indices that consist of large-capitalization stocks. Stock prices of small-capitalization companies are also generally more vulnerable than those of large-capitalization companies to adverse business and economic developments, and the stocks of small-capitalization companies may be thinly traded. In addition, small-capitalization companies are typically less well-established and less stable financially than large-capitalization companies and may depend on a small number of key personnel, making them more vulnerable to loss of personnel. Such small-capitalization companies tend to have lower revenues, less diverse product lines, smaller shares of their product or service markets, fewer financial resources and less competitive strengths than large-capitalization companies and are more susceptible to adverse developments related to their products. These companies may also be more susceptible to adverse developments related to their products or services.

The Policies of the FUND ADVISOR and Changes that Affect the fund or THe Tracked Index Could Adversely Affect the Value of the securities — The policies of the Fund Advisor concerning the calculation of the Fund's net asset value ("NAV"), additions, deletions or substitutions of securities or other assets or financial measures held by the Fund, substitution of the Tracked Index and the manner in which changes affecting how the Tracked Index is calculated are reflected in the Fund could adversely affect the price of the shares of the Fund and, therefore, the value of, and your return on, the securities. The value of, and your return on, the securities could also be adversely affected if the Fund Advisor changes these policies, for example, by changing the manner in which it calculates the Fund's NAV, or if the Fund Advisor discontinues or suspends calculation or publication of the Fund's NAV, in which case it may become difficult to determine the value of the securities. If events such as these occur or if the Closing Level of the Fund is not available on the Final Valuation Date because of a market disruption event or for any other reason, the calculation agent, in certain circumstances, may determine the Closing Level of the Fund and the Payment at Maturity in a manner it considers appropriate in its sole discretion.

The Performance of the fund, Particularly During Periods of Market Volatility, May Not Match the • Performance of the Tracked Index or ITS NET ASSET VALUE per Share — The performance of the Fund may not match the performance of the Tracked Index due to a number of factors.

For instance, the Fund may not hold all or substantially all of the securities included in the Tracked Index and the Fund Advisor may invest a portion of the Fund's assets in securities not included in the Tracked Index. Therefore, the performance of the Fund is generally linked, in part, to assets other than the securities included in the Tracked Index. Additionally, the performance of the Fund will reflect transaction costs and fees that are not included in the calculation of the Tracked Index.

In addition, because the shares of the Fund are traded on a securities exchange and are subject to supply and demand, the performance of one share of the Fund may differ from the performance of the Tracked Index or the Fund's NAV per share. Furthermore, during periods of market volatility, securities or other assets held by the Fund may become unavailable in the secondary market due to reduced liquidity or suspensions of, or limitations on, trading, making it difficult for market participants to accurately calculate the NAV per share of the Fund and/or create, redeem or hedge shares of the Fund. In such circumstances, the prices at which market participants are willing to buy and sell shares of the Fund may be significantly lower than the Fund's NAV and the liquidity of the shares of the Fund may be materially and adversely affected. Consequently, the performance of the Fund may deviate significantly from the performance of the Tracked Index or the Fund's NAV per share. These circumstances may or may not constitute market disruption events and, in either case, your return on the securities may be determined based on the price of the Fund when it deviates significantly from the performance of the Tracked Index or the Fund when it deviates may be materially and adversely affected.

ANTI-DILUTION PROTECTION IS LIMITED AND THE CALCULATION AGENT MAY MAKE ADJUSTMENTS IN ADDITION TO, OR THAT DIFFER FROM, THOSE SET FORTH IN THE ACCOMPANYING PRODUCT SUPPLEMENT — The calculation agent will make adjustments to the Share Adjustment Factor, which will initially be set at 1.0, for certain events affecting the shares of the Fund. The calculation agent is not required, however, to make such adjustments in response to all events that could affect the shares of the Fund. If such an event occurs that does not require the calculation agent to make an adjustment, the value of the securities may be materially and adversely affected. In addition, you should be aware that the calculation agent may, at its sole discretion, make adjustments to the Share Adjustment Factor or any other terms of the securities that are in addition to, or that differ from, those described in the accompanying product supplement to reflect changes occurring in relation to the Fund in circumstances where the calculation agent determines that it is appropriate to reflect those changes to ensure an equitable result. Any alterations to the specified anti-dilution adjustments described in the accompanying product supplement may be materially adverse to investors in the securities. You should read "Description of Securities — Anti-Dilution Adjustments for Funds" in the accompanying product supplement in order to understand the adjustments that may be made to the securities.

THE SECURITIES ARE SUBJECT TO CURRENCY EXCHANGE RATE RISK — Because the Fund invests in · stocks denominated in foreign currencies but its shares are denominated in U.S. dollars, changes in currency exchange rates may negatively impact the Fund's return. Of particular importance to currency exchange rate risk are:

existing and expected rates of inflation;

existing and expected interest rates;

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political, civil or military unrest;

o the balance of payments between the countries represented in the Fund and the U.S.; and

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o the extent of governmental surpluses or deficits in the countries represented in the Fund and the U.S.

All of these factors are in turn sensitive to the monetary, fiscal and trade policies pursued by the governments of the countries represented in the Fund, the U.S. and other countries important to international trade and finance. An investor's net exposure to currency exchange rate risk will depend on the extent to which the currencies represented in the Fund strengthen or weaken against the U.S. dollar and the relative weight of each currency represented in the Fund. If, taking into account such weighting, the U.S. dollar strengthens against the component currencies as a whole, the price of the Fund will be adversely affected and the value of the securities may be reduced. Additionally, the volatility and/or correlation (including the direction and extent of such correlation) of the exchange rates between the U.S. dollar and the currencies represented in the Fund could adversely affect the value of the securities.

THERE ARE RISKS ASSOCIATED WITH INVESTMENTS IN SECURITIES LINKED TO THE VALUES OF EQUITY SECURITIES ISSUED BY NON-U.S. COMPANIES — The Fund holds component stocks that are

issued by companies incorporated outside of the U.S. Because the component stocks also trade outside the U.S., the securities are subject to the risks associated with non-U.S. securities markets. Generally, non-U.S. securities markets may be less liquid and more volatile than U.S. securities markets and market developments may affect non-U.S. securities markets differently than U.S. securities markets, which may adversely affect the price of the Fund and the value of your securities. Furthermore, there are risks associated with investments in securities linked to the values of equity securities issued by non-U.S. companies. There is generally less publicly available information about non-U.S. companies than about those U.S. companies that are subject to the reporting requirements of the SEC, and non-U.S. companies are subject to accounting, auditing and financial reporting standards and requirements that differ from those applicable to U.S. reporting companies. In addition, the prices of equity securities issued by non-U.S. companies may be adversely affected by political, economic, financial and social factors that may be unique to the particular countries in which the non-U.S. companies are incorporated. These factors include the possibility of recent or future changes in a non-U.S. government's economic and fiscal policies (including any direct or indirect intervention to stabilize the economy and/or securities market of the country of such non-U.S. government), the presence, and extent, of cross shareholdings in non-U.S. companies, the possible imposition of, or changes in, currency exchange laws or other non-U.S. laws or restrictions applicable to non-U.S. companies or investments in non-U.S. securities and the possibility of fluctuations in the rate of exchange between currencies. Moreover, certain aspects of a particular non-U.S. economy may differ favorably or unfavorably from the U.S. economy in important respects, such as growth of gross national product, rate of inflation, capital reinvestment, resources and self-sufficiency.

THERE IS NO AFFILIATION BETWEEN THE FUND OR THE UNDERLYING STOCK ISSUERS AND US AND WE HAVE NOT PARTICIPATED IN THE PREPARATION OF, OR VERIFIED, ANY INFORMATION ABOUT THE FUND OR THE UNDERLYING STOCK ISSUERS — We are not affiliated with the Fund or the other issuers of the component stocks held by the Fund or underlying the Index or the Tracked Index (such stocks, "Underlying Stocks," and the issuers of Underlying Stocks, "Underlying Stock Issuers"). However, we or our affiliates may currently, or from time to time in the future, engage in business with the Underlying Stock Issuers, including extending loans to, making equity investments in, acting as underwriter in connection with future offerings of the Underlying Stocks by, or providing advisory services (including merger and acquisition advisory services) to, such Underlying Stock Issuers. In the course of this business, we or our affiliates may acquire non-public information about the Underlying Stock Issuers and we will not disclose any such information to you. Nevertheless, neither we nor our affiliates have participated in the preparation of, or verified, any information about the Underlying Stocks or any of the Underlying Stock Issuers. You, as an investor in the securities, should make your own investigation into the Underlying Stocks and the Underlying Stock Issuers. Neither the Fund nor any of the Underlying Stock Issuers is involved in this offering in any way and none of them has any obligation of any sort with respect to your securities. The Fund has no obligation to take your interests into consideration for any reason, including when taking any actions that would require the calculation agent to adjust the Share Adjustment Factor, which may adversely affect the value of your securities.

PAST PERFORMANCE OF THE UNDERLYINGS IS NO GUIDE TO FUTURE PERFORMANCE — The actual performance of the Underlyings over the term of the securities may bear little relation to the historical closing · prices or levels, as applicable, of the Underlyings and/or the hypothetical examples set forth elsewhere in this pricing supplement. We cannot predict the future performance of the Underlyings or whether the performance of the Underlyings will result in the return of any of your investment.

•ASSUMING NO CHANGES IN MARKET CONDITIONS AND OTHER RELEVANT FACTORS, THE PRICE YOU MAY RECEIVE FOR YOUR SECURITIES IN SECONDARY MARKET TRANSACTIONS

WOULD GENERALLY BE LOWER THAN BOTH THE ISSUE PRICE AND THE ISSUER'S ESTIMATED **VALUE OF THE SECURITIES ON THE TRADE DATE** — While the payment(s) on the securities described in this pricing supplement is based on the full Face Amount of securities, the Issuer's estimated value of the securities on the Trade Date (as disclosed on the cover of this pricing supplement) is less than the Issue Price of the securities. The Issuer's estimated value of the securities on the Trade Date does not represent the price at which we or any of our affiliates would be willing to purchase your securities in the secondary market at any time. Assuming no changes in market conditions or our creditworthiness and other relevant factors, the price, if any, at which we or our affiliates would be willing to purchase the securities from you in secondary market transactions, if at all, would generally be lower than both the Issue Price and the Issuer's estimated value of the securities on the Trade Date. Our purchase price, if any, in secondary market transactions would be based on the estimated value of the securities determined by reference to (i) the then-prevailing internal funding rate (adjusted by a spread) or another appropriate measure of our cost of funds and (ii) our pricing models at that time, less a bid spread determined after taking into account the size of the repurchase, the nature of the assets underlying the securities and then-prevailing market conditions. The price we report to financial reporting services and to distributors of our securities for use on customer account statements would generally be determined on the same basis. However, during the period of approximately three months beginning from the Trade Date, we or our affiliates may, in our sole

discretion, increase the purchase price determined as described above by an amount equal to the declining differential between the Issue Price and the Issuer's estimated value of the securities on the Trade Date, prorated over such period on a straight-line basis, for transactions that are individually and in the aggregate of the expected size for ordinary secondary market repurchases.

In addition to the factors discussed above, the value of the securities and our purchase price in secondary market transactions after the Trade Date, if any, will vary based on many economic and market factors, including our creditworthiness, and cannot be predicted with accuracy. These changes may adversely affect the value of your securities, including the price you may receive in any secondary market transactions. Any sale prior to the Maturity Date could result in a substantial loss to you. The securities are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your securities to maturity.

THE SECURITIES WILL NOT BE LISTED AND THERE WILL LIKELY BE LIMITED LIQUIDITY — The

securities will not be listed on any securities exchange. There may be little or no secondary market for the securities. We or our affiliates intend to act as market makers for the securities but are not required to do so and may cease such market making activities at any time. Even if there is a secondary market, it may not provide enough liquidity to allow you to sell the securities when you wish to do so or at a price advantageous to you. Because we do not expect other dealers to make a secondary market for the securities, the price at which you may be able to sell your securities is likely to depend on the price, if any, at which we or our affiliates are willing to buy the securities. If, at any time, we or our affiliates do not act as market makers, it is likely that there would be little or no secondary market in the securities. If you have to sell your securities prior to maturity, you may not be able to do so or you may have to sell them at a substantial loss, even in cases where the prices or levels, as applicable, of the Underlyings have increased since the Trade Date.

MANY ECONOMIC AND MARKET FACTORS WILL AFFECT THE VALUE OF THE SECURITIES -

While we expect that, generally, the prices or levels, as applicable, of the Underlyings will affect the value of the securities more than any other single factor, the value of the securities prior to maturity will also be affected by a number of other factors that may either offset or magnify each other, including:

0	the expected volatility of the Underlyings;
0	the time remaining to the maturity of the securities;

o the market prices and dividend rates of the shares of the Fund and of the securities composing the Underlyings;

0

the composition of the Underlyings;

o the occurrence of certain events affecting the Fund that may or may not require an anti-dilution adjustment;

othe exchange rates between the U.S. dollar and the non-U.S. currencies that the stocks held by the Fund are traded in;

0

interest rates and yields in the markets generally;

o geopolitical conditions and economic, financial, political, regulatory or judicial events that affect either Underlying, the Tracked Index or the markets generally;

o supply and demand for the securities; and

o our creditworthiness, including actual or anticipated downgrades in our credit ratings.

During the term of the securities, it is possible that their value may decline significantly due to the factors described above even if the prices or levels, as applicable, of the Underlyings remain unchanged from their respective Initial Levels, and any sale prior to the Maturity Date could result in a substantial loss to you. You must hold the securities to maturity to receive the stated payout from the Issuer.

TRADING AND OTHER TRANSACTIONS BY US OR OUR AFFILIATES IN THE EQUITY AND EQUITY DERIVATIVE MARKETS MAY IMPAIR THE VALUE OF THE SECURITIES — We or our

affiliates expect to hedge our exposure from the securities by entering into equity and equity derivative transactions, •such as over-the-counter options, futures or exchange-traded instruments. We or our affiliates may also engage in trading in instruments linked or related to the Underlyings on a regular basis as part of our or their general broker-dealer and other businesses, for proprietary accounts, for other accounts under management or to facilitate transactions

for customers, including block transactions. Such trading and hedging activities may adversely affect the prices or levels, as applicable, of the Underlyings and, therefore, make it less likely that you will receive a positive return on your investment in the securities. It is possible that we or our affiliates could receive substantial returns from these hedging and trading activities while the value of the securities declines. We or our affiliates may also issue or underwrite other securities or financial or derivative instruments with returns linked or related to the Underlyings. To the extent that we or our affiliates serve as issuer, agent or underwriter for such securities or financial or derivative instruments, our or our affiliates' interests with respect to such products may be adverse to those of the holders of the securities. Introducing competing products into the marketplace in this manner could adversely affect the prices or levels, as applicable, of the Underlyings and the value of the securities. Any of the foregoing activities described in this paragraph may reflect trading strategies that differ from, or are in direct opposition to, investors' trading and investment strategies related to the securities. Furthermore, because Deutsche Bank Securities Inc. ("DBSI") or one of its affiliates is expected to conduct trading and hedging activities for us in connection with the securities, DBSI or such affiliate may profit in connection with such trading and hedging activities and such profit, if any, will be in addition to any compensation that DBSI receives for the sale of the securities to you. You should be aware that the potential to earn a profit in connection with hedging activities may create a further incentive for DBSI to sell the securities to you in addition to any compensation they would receive for the sale of the securities.

WE OR OUR AFFILIATES MAY PUBLISH RESEARCH, EXPRESS OPINIONS OR PROVIDE RECOMMENDATIONS THAT ARE INCONSISTENT WITH INVESTING IN OR HOLDING THE SECURITIES. ANY SUCH RESEARCH, OPINIONS OR RECOMMENDATIONS COULD ADVERSELY AFFECT THE PRICES OR LEVELS, AS APPLICABLE, OF THE UNDERLYINGS AND THE VALUE OF THE SECURITIES — We or our affiliates may publish research from time to time on financial markets and other matters that could adversely affect the prices or levels, as applicable, of the Underlyings and the value of the securities, or express opinions or provide recommendations that are inconsistent with purchasing or holding the securities. Any research, opinions or recommendations expressed by us or our affiliates may not be consistent with each other and may be modified from time to time without notice. You should make your own independent investigation of the merits of investing in the securities and the Underlyings.

POTENTIAL CONFLICTS OF INTEREST — We and our affiliates play a variety of roles in connection with the issuance of the securities, including acting as calculation agent, hedging our obligations under the securities and determining the Issuer's estimated value of the securities on the Trade Date and the price, if any, at which we or our affiliates would be willing to purchase the securities from you in secondary market transactions. In performing these roles, our economic interests and those of our affiliates are potentially adverse to your interests as an investor in the securities. The calculation agent will determine, among other things, all values, prices and levels required to be determined for the purposes of the securities on any relevant date or time. The calculation agent also has some discretion about certain adjustments to the Share Adjustment Factor and will be responsible for determining whether a market disruption event has occurred as well as, in some circumstances, the prices or levels, as applicable, related to the Underlyings that affect whether the securities are automatically called. Any determination by the calculation agent could adversely affect the return on the securities.

•THE U.S. FEDERAL INCOME TAX CONSEQUENCES OF AN INVESTMENT IN THE SECURITIES

ARE UNCERTAIN — There is no direct legal authority regarding the proper U.S. federal income tax treatment of the securities, and we do not plan to request a ruling from the IRS. Consequently, significant aspects of the tax treatment of the securities are uncertain, and the IRS or a court might not agree with the treatment of the securities as prepaid financial contracts that are not debt. If the IRS were successful in asserting an alternative treatment for the securities,

the tax consequences of ownership and disposition of the securities could be materially and adversely affected. In addition, as described above under "Tax Consequences," in 2007 the U.S. Treasury Department and the IRS released a notice requesting comments on various issues regarding the U.S. federal income tax treatment of "prepaid forward contracts" and similar instruments. Any Treasury regulations or other guidance promulgated after consideration of these issues could materially and adversely affect the tax consequences of an investment in the securities, possibly with retroactive effect. You should review carefully the section of the accompanying product supplement entitled "U.S. Federal Income Tax Consequences," and consult your tax adviser regarding the U.S. federal tax consequences of an investment in the securities (including possible alternative treatments and the issues presented by the 2007 notice), as well as tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdiction.

Historical Information

The following graphs set forth the historical performances of the iShares[®] MSCI EAFE ETF and the Russell 2000[®] Index based on their daily closing prices or levels, as applicable, from August 16, 2012 through August 16, 2017. The closing price of the iShares[®] MSCI EAFE ETF on August 16, 2017 was \$66.76. The closing level of the Russell 2000[®] Index on August 16, 2017 was 1,383.534. The graphs below also indicate by a broken line the Buffer Level equal to, (i) with respect to the iShares[®] MSCI EAFE ETF, \$53.41, which is equal to 80.00% of its Initial Level and, (ii) with respect to the Russell 2000[®] Index, 1,106.827, which is equal to 80.00% of its Initial Level. We obtained the historical closing prices and levels of the Underlyings below from Bloomberg L.P. and we have not participated in the preparation of, or verified, such information. The historical closing prices and levels of the Underlyings should not be taken as an indication of future performance and no assurance can be given as to the closing prices or levels, as applicable, of the Underlyings on any of the Observation Dates (including the Final Valuation Date). We cannot give you assurance that the performance of the Underlyings will result in the return of any of your initial investment.

Supplemental Plan of Distribution (Conflicts of Interest)

DBSI, acting as agent for Deutsche Bank AG, will receive a selling concession in connection with the sale of the securities in an amount equal to 0.05% or \$0.50 per \$1,000 Face Amount of securities.

DBSI, the agent for this offering, is our affiliate. Because DBSI is both our affiliate and a member of the Financial Industry Regulatory Authority, Inc. ("**FINRA**"), the underwriting arrangement for this offering must comply with the requirements of FINRA Rule 5121 regarding a FINRA member firm's distribution of the securities of an affiliate and related conflicts of interest. In accordance with FINRA Rule 5121, DBSI may not make sales in offerings of the securities to any of its discretionary accounts without the prior written approval of the customer. See "Plan of Distribution (Conflicts of Interest)" in the accompanying product supplement.

Settlement

We expect to deliver the securities against payment for the securities on the Settlement Date indicated above, which may be a date that is greater than three business days following the Trade Date. Under Rule 15c6-1 of the Securities Exchange Act of 1934, as amended, trades in the secondary market generally are required to settle in three business days, unless the parties to a trade expressly agree otherwise. Accordingly, if the Settlement Date is more than three business days after the Trade Date, purchasers who wish to transact in the securities more than three business days prior to the Settlement Date will be required to specify alternative settlement arrangements to prevent a failed settlement.

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2,273

2,365

2,133

Diluted shares outstanding

63,881

63,392

63,782

63,520

Income per common share:

Basic earnings per share

\$
0.80
\$
0.87
\$
1.72
\$
2.25
Diluted earnings per share
\$

0.77

\$

0.85

\$

1.66

\$

2.18

The following stock option grants were outstanding during the three and nine-months ended June 30, 2018 and 2017, but were excluded from the computation of diluted earnings per share because their inclusion would have been anti-dilutive.

	Three-M	onths	Nine-Months		
	Ended		Ended		
	June 30,		June 30,		
	2018 2017		2018	2017	
Options	764	780	760	66	
Weighted-average option price	\$ 78.70	\$ 62.64	\$ 78.73	\$ 62.98	

The weighted-average shares of common stock outstanding for basic and diluted earnings per share included the weighted-average treasury stock shares held for deferred compensation obligations of the following:

	Three-	Months	Nine-Months	
	Ended		Ended	
	June 3	0,	June 30,	
	2018	2017	2018	2017
Weighted-average treasury stock shares held for deferred compensation obligations	201	186	197	178

Note 4. Business acquisition

On April 8, 2018, the Company, and its wholly-owned subsidiary, Woodward Aken GmbH (collectively, the "Purchasers"), entered into a Share Purchase Agreement (the "L'Orange Agreement") with MTU Friedrichshafen GmbH ("MTU") and MTU America Inc. (together with MTU, the "Sellers"), both of which were subsidiaries of Rolls-Royce PLC ("Rolls-Royce"). Pursuant to the L'Orange Agreement, the Purchasers agreed to acquire all of the outstanding shares of stock of L'Orange GmbH, together with its wholly-owned subsidiaries in China and Germany, as well as all of the outstanding equity interests of its affiliate, Fluid Mechanics LLC, and their related operations (collectively, "L'Orange"), for total consideration (including cash consideration and the assumption of certain liabilities) of €700,000, or approximately \$811,000 based on the foreign currency exchange rate as of the date Woodward executed cross currency swaps in connection with the financing of the transaction as described in Note 7, Derivative instruments and hedging activities. The total consideration to be paid is subject to customary post-closing adjustments. The transactions contemplated by the L'Orange Agreement were completed on June 1, 2018 (the "Closing") and L'Orange became a subsidiary of the Company.

L'Orange is a supplier of fuel injection systems for industrial diesel, heavy fuel oil and dual-fuel engines. L'Orange supplies fuel injection technology for engines that power a wide range of industrial applications including marine power and propulsion systems, special-application vehicles, locomotives, oil and gas processing, and power generation. L'Orange serves many large specialist diesel engine manufacturers, including Rolls-Royce Power Systems' subsidiaries, MTU and Bergen Engines, and other low to high speed engine builders. Following the Closing, L'Orange was renamed Woodward L'Orange and has been integrated into the Company's Industrial segment.

In connection with the Closing, MTU and a subsidiary of Rolls-Royce, and L'Orange, entered into a long-term supply agreement, dated June 1, 2018 (the "LTSA"). Pursuant to the terms of the LTSA, L'Orange will continue to supply to MTU and its affiliates within Rolls-Royce certain liquid fuel injection systems, injectors, pumps and other associated parts and components for industrial diesel, heavy fuel oil and dual-fuel engines in a manner consistent with the supply of such products prior to the transaction. The LTSA has an initial term that extends through December 31, 2032. During the term of the LTSA, MTU is required to continue to purchase certain of these products exclusively from L'Orange, subject to certain limitations specified therein, at pricing negotiated at arms-length.

ASC Topic 805, "Business Combinations" ("ASC 805"), provides a framework to account for acquisition transactions under US GAAP. The preliminary purchase price of L'Orange, prepared consistent with the required ASC 805 framework, is allocated as follows:

Cash paid to Sellers	\$ 780,355
Less acquired cash and restricted cash	(9,286)
Total purchase price	\$ 771,069

The cash consideration was financed through the use of cash on hand, the issuance of an aggregate principal amount of \$400,000 of senior unsecured notes in a series of private placement transactions and \$167,420 borrowed under Woodward's existing revolving credit agreement (see Note 14, Credit Facilities, short-term borrowings and long-term debt). In connection with these borrowings, the Company entered into cross currency swap transactions, which effectively lowered the interest rate on each tranche of the senior unsecured notes and the borrowings under the existing revolving credit agreement (see Note 7, Derivative instruments and hedging activities).

The allocation of the purchase price to the assets acquired and liabilities assumed was accounted for under the purchase method of accounting in accordance with ASC 805. Assets acquired and liabilities assumed in the transaction were recorded at their estimated acquisition date fair values, while transaction costs associated with the

acquisition were expensed as incurred. Woodward's preliminary allocation was based on an evaluation of the appropriate fair values and represents management's best estimate based on available data.

Due to the timing of the transaction, Woodward is in the process of finalizing valuations of current assets, property, plant and equipment (including estimated useful lives), goodwill, intangible assets (including estimated useful lives), and all current and noncurrent liabilities other than the valuation of the pension obligation, the valuation of which is complete. Additionally, Woodward is finalizing the projected combined future tax rate to be applied to the valuation of assets, which could impact the valuation of goodwill and intangible assets. The final determination of the fair value of assets and liabilities will be completed within the one year measurement period as allowed by ASC 805.

The following table, which is preliminary and subject to change, summarizes the estimated fair values of the assets acquired and liabilities assumed at the date of the acquisition of L'Orange. Any potential adjustments will be made retroactively and could be material to the preliminary values presented below.

Accounts receivable	\$ 26,538
Inventories (1)	72,674
Other current assets	1,385
Property, plant, and equipment	90,589
Goodwill	269,433
Intangible assets	556,023
Total assets acquired	1,016,642
Other current liabilities	40,362
Deferred income tax liabilities	164,791
Other noncurrent liabilities	40,420
Total liabilities assumed	245,573
Net assets acquired	\$ 771,069

Inventories include a \$15,107 adjustment to state work in progress and finished goods inventories at their fair value as of the acquisition date. The inventory fair value adjustment is being recognized as a non-cash increase to cost of goods sold ratably over the estimated inventory turnover period, with the entire \$15,107 fair value adjustment expected to be recognized in cost of goods sold during the year ending September 30, 2018.
 In connection with the acquisition of L'Orange, Woodward assumed the defined benefit pension obligations of the

L'Orange defined benefit pension of D Orange, woodward assumed the defined benefit pension obligations of the L'Orange defined benefit pension plans (see Note 19, Retirement benefits). As of June 1, 2018, the total liability recognized by the Company associated with the L'Orange defined benefit pension plans was \$38,998, of which \$1,143 was considered current.

As summary of the intangible assets acquired, weighted-average useful lives, and amortization methods follows:

Intangible assets with finite lives:	Estimated Amounts	Weighted-Average Useful Life	Amortization Method
e	¢ 270 422	20	Studialst line
Customer relationships and contracts	\$ 379,423	20 years	Straight-line
Process technology	71,940	21 years	Straight-line
Backlog	40,611	1 year	Accelerated
Other	232	3 years	Straight-line
Intangible asset with indefinite life:			
Trade name	63,817	Indefinite	Not amortized
Total	\$ 556,023		

Future amortization expense associated with the acquired intangibles as of June 1, 2018 is expected to be:

Year Ending September 30:	
2018 (remaining)	\$ 18,832
2019	34,884
2020	19,701
2021	21,458
2022	21,745
Thereafter	375,586
	\$ 492,206

The preliminary purchase price allocation resulted in the recognition of \$269,433 of goodwill. Only the portion of goodwill which relates to the U.S. operations of L'Orange is expected to be deductible for tax purposes. The Company has included all of the goodwill in its Industrial segment. The goodwill represents the estimated value of potential expansion with new customers, the opportunity to further develop sales opportunities with new customers, other synergies including supply chain savings expected to be achieved through the integration of L'Orange with Woodward's Industrial segment, and intangible assets that do not qualify for separate recognition, such as value of the assembled L'Orange workforce that is not included within the estimated value of the acquired backlog and customer relationship intangible assets.

Pro forma results for Woodward giving effect to the L'Orange acquisition

The following unaudited pro forma financial information presents the combined results of operations of Woodward and L'Orange as if the acquisition had been completed as of the beginning of the prior fiscal year, or October 1, 2016. The unaudited pro forma financial information is presented for informational purposes and is not indicative of the results of operations that would have been achieved if the acquisition and related borrowings had taken place on October 1, 2016, nor are they indicative of future results.

The unaudited pro forma financial information for the three and nine-months ended June 30, 2018 includes Woodward's results, including the post-acquisition results of L'Orange, since June 1, 2018, and the pre-acquisition results of L'Orange for those periods. The unaudited pro forma financial information for the three and nine-months ended June 30, 2017 combines Woodward's results with the pre-acquisition results of L'Orange for those periods.

Prior to the L'Orange acquisition by Woodward, L'Orange was a wholly owned subsidiary of Rolls-Royce and as such was not a standalone entity for financial reporting purposes. Accordingly, the historical operating results of L'Orange may not be indicative of the results that might have been achieved, historically or in the future, if L'Orange had been a standalone entity.

The unaudited pro forma results for the three and nine-months ended June 30, 2018 and the three and nine-months ended June 30, 2017 follow:

	Three-Mont June 30, 20		Three-Months Ended June 30, 2017			
	As		As			
	reported	Pro forma	reported	Pro forma		
Net sales	\$ 588,117	\$ 639,665	\$ 548,622	\$ 619,485		
Net earnings	49,117	60,488	53,626	53,071		
Earnings per share:						
Basic earnings per share	\$ 0.80	\$ 0.98	\$ 0.87	\$ 0.87		
Diluted earnings per share	0.77	0.95	0.85	0.84		

	Nine-Months June 30, 2018		Nine-Months Ended June 30, 2017			
	As reported	Pro forma	As reported Pro forma			
Net sales	\$ 1,606,514	\$ 1,830,515	\$ 1,491,897	\$ 1,684,071		
Net earnings	105,866	129,191	138,279	108,190		
Earnings per share:						
Basic earnings per share	\$ 1.72	\$ 2.10	\$ 2.25	\$ 1.76		
Diluted earnings per share	1.66	2.03	2.18	1.70		

The unaudited pro forma results for all periods presented include adjustments made to account for certain costs and transactions that would have been incurred had the acquisition been completed as of October 1, 2016, including amortization charges for acquired intangible assets, eliminations of intercompany transactions, adjustments for acquisition transaction costs, adjustments for depreciation expense for property, plant, and equipment, and adjustments to interest expense. These adjustments are net of any applicable tax impact and were included to arrive at the pro forma results above.

L'Orange's operating results have been included in the Company's operating results for the periods subsequent to the completion of the acquisition on June 1, 2018. L'Orange contributed net sales of \$24,878 for both the three and nine-months ended June 30, 2018 and a net loss of \$1,215 for both the three and nine-months ended June 30, 2018.

Woodward incurred transaction-related costs of \$10,755 for the three-months ended June 30, 2018 and \$12,036 for the nine-months ended June 30, 2018, which are included in "Selling, general and administrative expenses" in the Condensed Consolidated Statements of Earnings. These transaction-related costs consisted of the L'Orange Acquisition transaction and integration costs, warranty and indemnity insurance costs, and German real estate transfer tax costs. Woodward incurred acquisition financing related costs of \$1,154 for the three and nine-months ended June 30, 2018, which are included in "Interest expense" in the Condensed Consolidated Statements of Earnings. Included in other expense (income), net for the three and nine-months ended June 30, 2018 was the cost of \$5,543 related to an at-the-money-forward option (the "Forward Option") entered into by the Company on April 18, 2018. The Forward

Option, which was entered into to manage the Company's exposure to fluctuations in the Euro prior to the anticipated close of the L'Orange Agreement, was not exercised by the Company and expired on June 1, 2018.

Note 5. Joint venture

On January 4, 2016, Woodward and General Electric Company ("GE"), acting through its GE Aviation business unit, consummated the formation of a strategic joint venture between Woodward and GE (the "JV") to design, develop and source fuel systems for specified existing and all future GE commercial aircraft engines that produce thrust in excess of fifty thousand pounds.

As part of the JV formation, Woodward contributed to the JV certain contractual rights and intellectual property applicable to the existing GE commercial aircraft engine programs within the scope of the JV. Woodward had no initial cost basis in the JV because Woodward had no cost basis in the contractual rights and intellectual property contributed to the JV. GE purchased from Woodward a 50% ownership interest in the JV for a \$250,000 cash payment to Woodward. In addition,

GE will pay contingent consideration to Woodward consisting of fifteen annual payments of \$4,894 per year, which began on January 4, 2017, subject to certain claw-back conditions. During the three-months ended March 31, 2018, Woodward received its second annual payment of \$4,894, which was recorded as deferred income and included in Net cash provided by operating activities under the caption "Other" on the Condensed Consolidated Statement of Cash Flows. Neither Woodward nor GE contributed any tangible assets to the JV.

Woodward determined that the JV formation was not the culmination of an earnings event because Woodward has significant performance obligations to support the future operations of the JV. Therefore, Woodward recorded as deferred income the \$250,000 consideration received from GE in January of 2016 for its purchase of a 50% equity interest in the JV. The \$250,000 deferred income will be recognized as an increase to net sales in proportion to revenue realized on sales of applicable fuel systems within the scope of the JV in a particular period as a percentage of total revenue expected to be realized by Woodward over the estimated remaining lives of the underlying commercial aircraft engine programs assigned to the JV. Unamortized deferred income recorded in connection with the JV formation included accrued liabilities of \$6,414 as of June 30, 2018 and \$6,451 as of September 30, 2017, and other liabilities of \$237,724 as of June 30, 2018 and \$236,896 as of September 30, 2017. Amortization of the deferred income recognized as an increase to sales was \$1,564 for the three-months and \$4,103 for the nine-months ended June 30, 2018, and \$1,387 for the three-months and \$4,515 for the nine-months ended June 30, 2017.

Woodward and GE jointly manage the JV and any significant decisions and/or actions of the JV require the mutual consent of both parties. Neither Woodward nor GE has a controlling financial interest in the JV, but both Woodward and GE do have the ability to significantly influence the operating and financial decisions of the JV. Therefore, Woodward is accounting for its 50% ownership interest in the JV using the equity method of accounting. The JV is a related party to Woodward. Other income includes income of \$738 for the three-months and \$2,340 for the nine-months ended June 30, 2018, and a loss of \$432 for the three-months and income of \$634 for the nine-months ended June 30, 2017 related to Woodward's equity interest in the earnings of the JV. Woodward received no cash distributions from the JV in the three and nine-months ended June 30, 2018, compared to a \$2,500 cash distribution from the JV during the nine-months ended June 30, 2017, which was included in Net cash provided by operating activities under the caption "Other" on the Condensed Consolidated Statement of Cash Flows. Woodward's net investment in the JV, which is included in other assets, was \$8,612 as of June 30, 2018 and \$6,272 as of September 30, 2017.

Woodward's net sales include \$20,085 for the three-months and \$50,137 for the nine-months ended June 30, 2018 of sales to the JV, compared to \$18,645 for the three-months and \$52,362 for the nine-months ended June 30, 2017. Woodward recorded a reduction to sales of \$7,340 for the three-months and \$19,670 for the nine-months ended June 30, 2018 related to royalties paid to the JV by Woodward on sales by Woodward directly to third party aftermarket customers, compared to \$6,163 for the three-months and \$17,240 for the nine-months ended June 30, 2017. The Condensed Consolidated Balance Sheets include "Accounts receivable" of \$10,213 at June 30, 2018, and \$8,554 at September 30, 2017, related to amounts the JV owed Woodward, and include "Accounts payable" of \$4,261 at June 30, 2018, and \$6,741 at September 30, 2017, related to amounts Woodward owed the JV.

Note 6. Financial instruments and fair value measurements

Financial assets and liabilities recorded at fair value in the Condensed Consolidated Balance Sheets are categorized based upon a fair value hierarchy established by U.S. GAAP, which prioritizes the inputs used to measure fair value into the following levels:

Level 1: Inputs based on quoted market prices in active markets for identical assets or liabilities at the measurement date.

Level 2: Quoted prices included in Level 1, such as quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are

observable and can be corroborated by observable market data.

Level 3: Inputs that reflect management's best estimates and assumptions of what market participants would use in pricing the asset or liability at the measurement date. The inputs are unobservable in the market and significant to the valuation of the instruments.

The table below presents information about Woodward's financial assets and liabilities that are measured at fair value on a recurring basis and indicates the fair value hierarchy of the valuation techniques Woodward utilized to determine such fair value.

	At June 30,	2018	т 1		At Septemb			
	T 11	T 10	Level		X 11		Level	
	Level 1	Level 2	3	Total	Level 1	2	3	Total
Financial assets:								
Cash	\$ 61,050	\$ -	\$ -	\$ 61,050	\$ 79,822	\$ -	\$ -	\$ 79,822
Restricted investments in money								
market funds	2,521	-	-	2,521	-	-	-	-
Investments in reverse repurchase								
agreements	185	-	-	185	1	-	-	1
Investments in term deposits with								
foreign banks	50,643	-	-	50,643	7,729	-	-	7,729
Equity securities	19,500	-	-	19,500	16,600	-	-	16,600
Total financial assets	\$ 133,899	\$ -	\$ -	\$ 133,899	\$ 104,152	\$ -	\$ -	\$ 104,152
Financial liabilities:								
Cross currency interest rate swaps	\$ -	\$ 23,527	\$ -	\$ 23,527	\$ -	\$ -	\$ -	\$ -
Total financial liabilities	\$ -	\$ 23,527	\$ -	\$ 23,527	\$ -	\$ -	\$ -	\$ -

Restricted investments in money market funds: A subsidiary of Woodward is required to maintain a balance in escrow to secure the indemnification obligations of the subsidiary's previous parent company. As allowed by the escrow agreement, the cash held in escrow is invested in money market funds not insured by the Federal Deposit Insurance Corporation ("FDIC"). The restriction on the use of the invested cash held in escrow will lapse once the underlying indemnification obligations are settled, which is expected to occur in the fourth quarter of fiscal year 2018.

Woodward believes that the investments in money market funds are on deposit with creditworthy financial institutions and that the funds are highly liquid, although their use is restricted. The investments in money market funds are reported at fair value, with realized gains from interest income realized in earnings and are included in "Cash and cash equivalents" in the Condensed Consolidated Balance Sheets. The fair values of Woodward's investments in money market funds are based on the quoted market prices for the net asset value of the various money market funds.

Investments in reverse repurchase agreements: Woodward sometimes invests excess cash in reverse repurchase agreements. Under the terms of Woodward's reverse repurchase agreements, Woodward purchases an interest in a pool of securities and is granted a security interest in those securities by the counterparty to the reverse repurchase agreement. At an agreed upon date, generally the next business day, the counterparty repurchases Woodward's interest in the pool of securities at a price equal to what Woodward paid to the counterparty plus a rate of return determined daily per the terms of the reverse repurchase agreement. Woodward believes that the investments in these reverse repurchase agreements are with creditworthy financial institutions and that the funds invested are highly liquid. The investments in reverse repurchase agreements are reported at fair value, with realized gains from interest income recognized in earnings, and are included in "Cash and cash equivalents" in the Condensed Consolidated Balance Sheets. Since the investments are generally overnight, the carrying value is considered to be equal to the fair value as the amount is deemed to be a cash deposit with no risk of change in value as of the end of each fiscal quarter.

Investments in term deposits with foreign banks: Woodward's foreign subsidiaries sometimes invest excess cash in various highly liquid financial instruments that Woodward believes are with creditworthy financial institutions. Such investments are reported in "Cash and cash equivalents" at fair value, with realized gains from interest income recognized in earnings. The carrying value of Woodward's investments in term deposits with foreign banks are considered equal to the fair value given the highly liquid nature of the investments. As of June 30, 2018, \$3,769 of the term deposits with foreign banks are restricted in use as they are pledged collateral for short-term borrowings. The restriction will lapse when the related short-term borrowings are paid.

Equity securities: Woodward holds marketable equity securities, through investments in various mutual funds, related to its deferred compensation program. Based on Woodward's intentions regarding these instruments, marketable equity securities are classified as trading securities. The trading securities are reported at fair value, with realized gains and losses recognized in "Other expense (income), net" on the Condensed Consolidated Statements of Earnings. The trading securities are included in "Other assets" in the Condensed Consolidated Balance Sheets. The fair values of Woodward's trading securities are based on the quoted market prices for the net asset value of the various mutual funds.

Cross currency interest rate swaps: Woodward holds cross currency interest rate swaps, which are accounted for at fair value. The swaps are included in "Other liabilities" in the Condensed Consolidated Balance Sheets. The fair values of

Woodward's cross currency interest rate swaps are determined using a market approach that is based on observable inputs other than quoted market prices, including contract terms, interest rates, currency rates, and other market factors.

Accounts receivable, accounts payable, and short-term borrowings are not remeasured to fair value, as the carrying cost of each approximates its respective fair value. The estimated fair values and carrying costs of other financial instruments that are not required to be remeasured at fair value in the Condensed Consolidated Balance Sheets were as follows:

		At June 30, 20	18	At September 30, 2017			
	Fair Value Hierarchy	Estimated		Estimated	Carrying		
	Level	Fair Value	Carrying Cost	Fair Value	Cost		
Assets:							
Notes receivable from							
municipalities	2	\$ 14,523	\$ 14,475	\$ 15,848	\$ 14,507		
Investments in short-term time							
deposits	2	103	104	8,227	8,223		
Liabilities:							
Long-term debt	2	\$ (1,203,413)	\$ (1,214,246)	\$ (592,317)	\$ (582,080)		

In fiscal years 2014 and 2013, Woodward received long-term notes from municipalities within the states of Illinois and Colorado in connection with certain economic incentives related to Woodward's development of a second campus in the greater-Rockford, Illinois area for its Aerospace segment and Woodward's development of a new campus at its corporate headquarters in Fort Collins, Colorado. The fair value of the long-term notes was estimated based on a model that discounted future principal and interest payments received at an interest rate available to the Company at the end of the period for similarly rated municipal notes of similar maturity, which is a level 2 input as defined by the U.S. GAAP fair value hierarchy. The interest rates used to estimate the fair value of the long-term notes were 2.8% at June 30, 2018 and 2.6% at September 30, 2017.

From time to time, certain of Woodward's foreign subsidiaries will invest excess cash in short-term time deposits with a fixed maturity date of longer than three months but less than one year from the date of the deposit. Woodward believes that the investments are with creditworthy financial institutions. The fair value of the investments in short-term time deposits was estimated based on a model that discounted future principal and interest payments to be received at an interest rate available to the foreign subsidiary entering into the investment for similar short-term time deposits of similar maturity. This was determined to be a level 2 input as defined by the U.S. GAAP fair value hierarchy. The interest rates used to estimate the fair value of the short-term time deposits was 5.3% at September 30, 2017. There were no investments in short-term time deposits as of June 30, 2018.

The fair value of long-term debt was estimated based on a model that discounted future principal and interest payments at interest rates available to the Company at the end of the period for similar debt of the same maturity, which is a level 2 input as defined by the U.S. GAAP fair value hierarchy. The weighted-average interest rates used to estimate the fair value of long-term debt were 3.5% at June 30, 2018 and 2.4% at September 30, 2017.

Note 7. Derivative instruments and hedging activities

Woodward has exposures related to global market risks, including the effect of changes in interest rates, foreign currency exchange rates, changes in certain commodity prices and fluctuations in various producer indices. From time to time, Woodward enters into derivative instruments for risk management purposes only, including derivatives designated as accounting hedges and/or those utilized as economic hedges. Woodward uses interest rate related derivative instruments to manage its exposure to fluctuations of interest rates. Woodward does not enter into or issue derivatives for trading or speculative purposes.

By using derivative and/or hedging instruments to manage its risk exposure, Woodward is subject, from time to time, to credit risk and market risk on those derivative instruments. Credit risk arises from the potential failure of the counterparty to perform under the terms of the derivative and/or hedging instrument. When the fair value of a derivative contract is positive, the counterparty owes Woodward, which creates credit risk for Woodward. Woodward mitigates this credit risk by entering into transactions with only counterparties that are believed to be creditworthy. Market risk arises from the potential adverse effects on the value of derivative and/or hedging instruments that result from a change in interest rates, commodity prices, or foreign currency exchange rates. Woodward minimizes this market risk by establishing and monitoring parameters that limit the types and degree of market risk that may be undertaken.

Derivative instruments not designated or qualifying as hedging instruments

On April 18, 2018, the Company entered into a Forward Option at a cost of \$5,543 whereby, on May 30, 2018, the Company had the ability to exercise its option to purchase €490,000 on June 1, 2018 using U.S. dollars at a fixed exchange rate of 1.2432. The Forward Option was entered into to manage the Company's exposure to fluctuations in the Euro prior to the anticipated close of the L'Orange Agreement. The Company did not enter into the Forward Option for trading or speculative purposes. As the spot rate was below 1.2432 on May 30, 2018, the Company elected not to exercise the option and a loss of \$5,543 was recognized on the Forward Option in "other (income) expense, net" in the Condensed Consolidated Statements of Earnings in the three and nine-months ended June 30, 2018. The Forward Option expired on June 1, 2018.

In May 2018, Woodward entered into cross currency interest rate swap agreements that synthetically convert \$167,420 of floating-rate debt under Woodward's existing revolving credit agreement to Euro denominated floating-rate debt in conjunction with the L'Orange acquisition (the "Floating-Rate Cross Currency Swap"). Also in May 2018, Woodward entered into cross currency interest rate swap agreements that synthetically convert an aggregate principal amount of \$400,000 of fixed-rate debt associated with the 2018 Note Purchase Agreement (as defined at Note 14, Credit facilities short-term borrowings and long-term debt) to Euro denominated fixed-rate debt (the "Fixed-Rate Cross Currency Swaps"). The cross currency interest rate swaps, which effectively reduce the interest rate on the underlying fixed and floating-rate debt under the 2018 Notes and Woodward's existing revolving credit agreement, respectively, is recorded as a reduction to "Interest expense" in Woodward's Condensed Consolidated Statements of Earnings.

Derivatives instruments in fair value hedging relationships

Concurrent with the entry into the Floating-Rate Cross Currency Swap, a corresponding Euro denominated intercompany loan receivable with identical terms and notional amount as the underlying Euro denominated floating-rate debt, with a reciprocal cross currency interest rate swap, was entered into by Woodward Barbados Financing SRL ("Barbados"), a wholly owned subsidiary of Woodward, and is designated as a fair value hedge under the criteria prescribed in ASC Topic 815, Derivatives and Hedging ("ASC 815"). The objective of the derivative instrument is to hedge against the foreign currency exchange risk attributable to the spot remeasurement of the Euro denominated intercompany loan.

Only the change in the fair value related to the cross currency basis spread, or excluded component, of the derivative instrument is recognized in accumulated OCI. The remaining change in the fair value of the derivative instrument is recognized in foreign currency transaction gain or loss included in "Selling, general and administrative costs" in Woodward's Condensed Consolidated Statements of Earnings. The change in the fair value of the derivative instrument in foreign currency transaction gain or loss offsets the change in the spot remeasurement of the intercompany Euro denominated loan. Hedge effectiveness is assessed based on the fair value changes of the derivative instrument, after excluding any fair value changes related to the cross currency basis spread. The initial cost of the cross currency basis spread is recorded in earnings each period through the swap accrual process. There is no credit-risk-related contingent features associated with the floating-rate cross currency interest rate swap.

Derivative instruments in cash flow hedging relationships

In conjunction with the entry into the Fixed-Rate Cross Currency Swaps, five corresponding intercompany loans receivable, with identical terms and amounts of each tranche of the underlying aggregate principal amount of \$400,000 of fixed-rate debt, and reciprocal cross currency interest rate swaps were entered into by Woodward Barbados, which are designated as cash flow hedges under the criteria prescribed in ASC 815. The objective of these derivative instruments is to hedge the risk of variability in cash flows attributable to the foreign currency exchange risk of cash flows for future principal and interest payments associated with the Euro denominated intercompany loans over a fifteen year period.

Changes in the fair values of the derivative instruments are recognized in accumulated OCI and reclassified to foreign currency transaction gain or loss included in "Selling, general and administrative costs" in Woodward's Condensed Consolidated Statements of Earnings. Reclassifications out of accumulated OCI of the change in fair value occur each reporting period based upon changes in the spot rate remeasurement of the Euro denominated intercompany loans, including associated interest. Hedge effectiveness is assessed based on the fair value changes of the derivative instruments and deemed to be highly effective in offsetting exposure to variability in foreign exchange rates. There are no credit-risk-related contingent features associated with these cross currency interest rate swaps.

In June 2013, in connection with Woodward's expected refinancing of current maturities on its then existing long-term debt, Woodward entered into a treasury lock agreement with a notional amount of \$25,000 that qualified as a cash flow hedge under ASC 815. The objective of this derivative instrument was to hedge the risk of variability in cash flows attributable to changes in the designated benchmark interest rate over a seven-year period related to the future principal and interest payments on a portion of anticipated future debt issuances. The treasury lock agreement was terminated in August 2013 and the resulting gain of \$507 was recorded as a reduction to accumulated OCI and is being recognized as a decrease to interest

expense over a seven-year period. Woodward expects to reclassify \$72 of net unrecognized gains on terminated derivative instruments from accumulated OCI to earnings during the next twelve months.

Derivatives instruments in net investment hedging relationships

On September 23, 2016, Woodward and Woodward International Holding B.V., a wholly owned subsidiary of Woodward organized under the laws of The Netherlands (the "BV Subsidiary"), each entered into a note purchase agreement (the "2016 Note Purchase Agreement") relating to the sale by Woodward and the BV Subsidiary of an aggregate principal amount of €160,000 of senior unsecured notes in a series of private placement transactions. Woodward issued €40,000 aggregate principal amount of Woodward's Series M Senior Notes due September 23, 2026 (the "Series M Notes"). Woodward designated the Series M Notes as a hedge of a foreign currency exposure of Woodward's net investment in its Euro denominated functional currency subsidiaries. On the Series M Notes, included in foreign currency translation adjustments within total comprehensive (losses) earnings are net foreign exchange gains of \$2,559 for the three-months and \$548 for the nine-months ended June 30, 2018, compared to net foreign exchange losses of \$880 for the three-months and \$3,030 for the nine-months ended June 30, 2017.

In July 2016, Woodward designated an intercompany loan of 160,000 renminbi between two wholly owned subsidiaries as a hedge of a foreign currency exposure of the net investment of the borrower in the lender. Related to the intercompany loan, net unrealized foreign exchange losses of \$283 for the three-months and net unrealized foreign exchange gains of \$452 for the nine-months ended June 30, 2017 are included in foreign currency translation adjustments within total comprehensive (losses) earnings. The intercompany loan was repaid in July 2017.

Impact of derivative instruments designated as qualifying hedging instruments

The following table discloses the impact of derivative instruments designated as qualifying hedging instruments on Woodward's Condensed Consolidated Statements of Earnings:

		Three-Months Ended June 30, 2018			Three-Months Ended June 30, 2017 Amount			
		of			of	Amount	Amount of	
		(Income)	Amount of	Amount of	(Incon	neof (Gain)	(Gain)	
		Expense	(Gain) Loss	(Gain) Loss	Expens	seLoss	Loss	
		Recogniz	Recognized	Reclassified	Recog	niRectognize	dReclassified	
		in	in	from	in	in	from	
		Earnings	Accumulated	Accumulate	dEarnin	gAccumula	tellccumulated	
		on	OCI on	OCI into	on	OCI on	OCI into	
Derivatives in:	Location	Derivativ	eDerivative	Earnings	Deriva	tiDerivative	e Earnings	
Cross currency interest								
rate swap agreement	Selling, general and							
designated as fair value	administrative	* • • • -	*	+ · · · -	*	*		
hedges	expenses	\$ 1,467	\$ 1,835	\$ 1,467	\$ -	\$ -	\$ -	
Cross currency interest rate swap agreements designated as cash flow	Selling, general and administrative expenses	3,506	21,823	3,506	-	-	-	

hedges							
Treasury lock agreement							
designated as cash flow							
hedge	Interest expense	(18)	-	(18)	(18)	-	(18)
C		\$ 4,955 \$	23,658	\$ 4,955	\$ (18) \$	-	\$ (18)
							~ /

							Ν	ine-M	Iontl	hs Ende	ed Ju	une 30,
		Nine-Mo	nth	s Ended Ju	ine	30, 2018	2017					
		Amount					Amount					
		of					of		Am	ount	Ar	nount of
		(Income)	A	mount of	Α	mount of	(I	ncom	eðf ((Gain)	(G	ain)
		Expense	(0	Gain) Loss	(0	Gain) Loss	E	xpens	eLos	SS	Lo	SS
		Recogniz	zeRa	ecognized	R	eclassified	R	ecogr	niReed	tognize	dRe	classified
		in	in		fr	om	in		in		fro	om
		Earnings	A	ccumulated	d A	ccumulate	dE	arning	gsAco	cumula	teAlc	cumulated
		on	0	CI on	Ο	CI into	01	1	OC	I on	00	CI into
Derivatives in:	Location	Derivativ	veD	erivative	E	arnings	D	eriva	tiDe	rivative	Ea	rnings
Cross currency interest												
rate swap agreement	Selling, general and											
designated as fair value	administrative											
hedges	expenses	\$ 1,467	\$	1,835	\$	1,467	\$	-	\$	-	\$	-
Cross currency interest												
rate swap agreements	Selling, general and											
designated as cash flow	administrative											
hedges	expenses	3,506		21,823		3,506		-		-		-
Treasury lock agreement												
designated as cash flow												
hedge	Interest expense	(54)		-		(54)		(54)		-		(54)
		\$ 4,919	\$	23,658	\$	4,919	\$	(54)	\$	-	\$	(54)

The remaining unrecognized gains and losses in Woodward's Condensed Consolidated Balance Sheets associated with derivative instruments that were previously entered into by Woodward, which are classified in accumulated OCI were net losses of \$18,521 as of June 30, 2018 and net gains of \$218 as of September 30, 2017.

Note 8. Supplemental statement of cash flows information

	Nine-Mon	ths Ended
	June 30,	
	2018	2017
Interest paid, net of amounts capitalized	\$ 24,966	\$ 24,879
Income taxes paid	31,443	29,807
Income tax refunds received	1,760	158
Non-cash activities:		
Purchases of property, plant and equipment on account	8,438	12,252
Common shares issued from treasury to settle employee liabilities	-	1,767
Common shares issued from treasury to settle benefit obligations (Note 19)	14,741	14,014
Cashless exercise of stock options	-	1,473

Note 9. Accounts receivable

Almost all of Woodward's sales are made on credit and result in accounts receivable, which are recorded at the amount invoiced and are generally not collateralized. In the normal course of business, not all accounts receivable are collected and, therefore, an allowance for uncollectible amounts is provided equal to the amount that Woodward believes ultimately will not be collected. In establishing the amount of the allowance related to the credit risk of accounts receivable, customer-specific information is considered related to delinquent accounts, past loss experience, bankruptcy filings, deterioration in the customer's operating results or financial position, and current economic conditions. Accounts receivable losses are deducted from the allowance, and the related accounts receivable balances are written off when the receivables are deemed uncollectible. Recoveries of accounts receivable previously written off are recognized when received. In addition, an allowance associated with anticipated future sales returns is also established and is included in the allowance for uncollectible amounts.

Consistent with common business practice in China, Woodward's Chinese subsidiaries accept from Chinese customers, in settlement of certain customer accounts receivable, bankers' acceptance notes issued by Chinese banks that are believed to be creditworthy. Bankers' acceptance notes are financial instruments issued by Chinese financial institutions as part of financing arrangements between the financial institution and a customer of the financial institution. Bankers' acceptance notes represent a commitment by the issuing financial institution to pay a certain amount of money at a specified future maturity date to the legal owner of the bankers' acceptance note as of the maturity date. The maturity date of bankers' acceptance notes varies, but it is Woodward's policy to only accept bankers' acceptance notes with maturity dates no more

than 180 days from the date of Woodward's receipt of such draft. The issuing financial institution is the obligor, not Woodward's customers. Upon Woodward's acceptance of a banker's acceptance note from a customer, such customer has no further obligation to pay Woodward for the related accounts receivable balance. Woodward only accepts bankers' acceptance notes issued by banks that are believed to be creditworthy and to which the credit risks associated with the bankers' acceptance notes are believed to be minimal.

The composition of Woodward's accounts receivable at June 30, 2018 and September 30, 2017 follows:

		September
	June 30,	30,
	2018	2017
Accounts receivable from:		
Customers	\$ 362,459	\$ 367,715
Other (Chinese financial institutions)	27,319	38,243
Allowance for uncollectible customer amounts	(3,668)	(3,776)
	\$ 386,110	\$ 402,182

Note 10. Inventories

		September
	June 30,	30,
	2018	2017
Raw materials	\$ 86,677	\$ 59,034
Work in progress	135,518	103,790
Component parts (1)	301,257	262,755
Finished goods	65,988	47,926
	\$ 589,440	\$ 473,505

(1) Component parts include items that can be sold separately as finished goods or included in the manufacture of other products.

Note 11. Property, plant, and equipment

		September
	June 30,	30,
	2018	2017
Land and land improvements	\$ 92,934	\$ 88,326
Buildings and building improvements	564,366	514,453
Leasehold improvements	17,827	16,142
Machinery and production equipment	654,495	543,641
Computer equipment and software	123,705	124,723
Office furniture and equipment	27,567	24,308
Other	19,326	19,393
Construction in progress	87,620	111,910
	1,587,840	1,442,896
Less accumulated depreciation	(543,807)	(520,853)
Property, plant, and equipment, net	\$ 1,044,033	\$ 922,043

In the second quarter of fiscal year 2018, the Company announced its decision to relocate its Duarte, California operations to the Company's newly renovated Drake Campus in Fort Collins, Colorado. The Company has identified assets held for sale with a carrying value of \$8,853 at June 30, 2018, the majority of which are included in "Land and land

improvements" and "Buildings and buildings improvements" which relate to the land, building and building improvements, and other assets at the Duarte facility. The assets held for sale are included in the Company's Aerospace segment. The Company had no assets held for sale recorded as of September 30, 2017. The carrying value of the remaining assets at the Duarte facility was approximately \$3,400 as of June 30, 2018, of which the Company has identified approximately \$500 that is planned to be disposed of as a result of the relocation.

The Company assessed whether the decision to relocate from its Duarte facility could indicate a potential impairment of the assets at the Duarte facility and concluded that the assets were not impaired as of June 30, 2018.

Included in "Office furniture and equipment" and "Other" is \$1,676 at June 30, 2018 and \$1,653 at September 30, 2017, of gross assets acquired on capital leases, and accumulated depreciation included \$1,081 at June 30, 2018 and \$739 at September 30, 2017 of amortization associated with the capital lease assets.

In fiscal year 2015, Woodward completed and placed into service a manufacturing and office building on a second campus in the greater-Rockford, Illinois area and has occupied the new facility for its Aerospace segment. This campus is intended to support Woodward's expected growth in its Aerospace segment as a result of Woodward being awarded a substantial number of new system platforms, particularly on narrow-body aircraft.

Included in "Construction in progress" are costs of \$30,198 at June 30, 2018 and \$49,347 at September 30, 2017 associated with new equipment purchases for the greater-Rockford, Illinois campus and costs of \$2,618 at June 30, 2018 and \$15,584 at September 30, 2017 associated with the renovation of the Drake Campus.

For the three and nine-months ended June 30, 2018 and 2017, Woodward had depreciation expense as follows:

 Three-Months Ended
 Nine-Months Ended

 June 30,
 June 30,

 2018
 2017
 2018
 2017

 Depreciation expense
 \$ 17,695
 \$ 14,141
 \$ 48,276
 \$ 40,259

For the three and nine-months ended June 30, 2018 and 2017, Woodward capitalized interest that would have otherwise been included in interest expense of the following:

	Three-l	Months	Nine-Months		
	Ended		Ended		
	June 30,		June 30,		
	2018	2017	2018	2017	
Capitalized interest	\$ 607	\$ 567	\$ 1,841	\$ 1,521	

Note 12. Goodwill

			Eff	fects of	
			Fo	reign	
	September		Cu	rrency	June 30,
	30, 2017	Additions	Tra	anslation	2018
Aerospace	\$ 455,423	\$ -	\$	-	\$ 455,423
Industrial	101,122	269,433		948	371,503
Consolidated	\$ 556,545	\$ 269,433	\$	948	\$ 826,926

On June 1, 2018, Woodward completed the acquisition of L'Orange (see Note 4, Business acquisition), which resulted in the recognition of \$269,433 in goodwill in the Company's Industrial segment.

Woodward tests goodwill for impairment during the fourth quarter of each fiscal year, or at any time there is an indication goodwill is more-likely-than-not impaired, commonly referred to as triggering events. There have been no such triggering events during any of the periods presented and Woodward's fourth quarter of fiscal year 2017 impairment test resulted in no impairment.

Note 13. Intangible assets, net

	June 30, 2018 Gross	3	Net	September Gross	30, 2017	Net
	Carrying Value	Accumulated Amortization	Carrying Amount	Carrying Value	Accumulated Amortization	Carrying Amount
Intangible assets with finite lives: Customer relationships and contracts:	, and	7 Infortization	minount	, unde	7 mortization	7 mount
Aerospace	\$ 281,683	\$ (162,692)	\$ 118,991	\$ 282,225	\$ (151,155)	\$ 131,070
Industrial Total	422,948 \$ 704,631	(35,198) \$ (197,890)	387,750 \$ 506,741	40,962 \$ 323,187	(34,407) \$ (185,562)	6,555 \$ 137,625
Intellectual property:						
Aerospace	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Industrial Total	19,480 \$ 19,480	(18,527) \$ (18,527)	953 \$ 953	19,422 \$ 19,422	(18,196) \$ (18,196)	1,226 \$ 1,226
	. ,		·	. ,		. ,
Process technology: Aerospace	\$ 76,372	\$ (53,377)	\$ 22,995	\$ 76,605	\$ (49,124)	\$ 27,481
Industrial	\$ 70,372 95,217	(19,139)	¢ 22,999 76,078	22,950	(17,756)	5,194
Total	\$ 171,589	\$ (72,516)	\$ 99,073	\$ 99,555	\$ (66,880)	\$ 32,675
Backlog:						
Aerospace	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Industrial Total	40,885	(4,579) \$ (4,570)	36,306	- ¢	- ¢	- \$ -
Total	\$ 40,885	\$ (4,579)	\$ 36,306	\$ -	\$ -	φ -
Other intangibles:						
Aerospace Industrial	\$ - 1,651	\$ - (1 211)	\$- 440	\$ -	\$ - (956)	\$ - 356
Total	1,051 \$ 1,651	(1,211) \$ (1,211)	\$ 440	1,312 \$ 1,312	(930) \$ (956)	\$ 356
	. ,			. ,		
Intangible asset with indefinite life: Tradename:						
Aerospace	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Industrial	64,248	-	64,248	-	-	-
Total	\$ 64,248	\$ -	\$ 64,248	\$ -	\$ -	\$ -
Total intangibles:						
Aerospace	\$ 358,055	\$ (216,069)	\$ 141,986	\$ 358,830	\$ (200,279)	\$ 158,551
Industrial Consolidated Total	644,429 \$ 1,002,484	(78,654) \$ (294,723)	565,775 \$ 707,761	84,646 \$ 443,476	(71,315) \$ (271,594)	13,331 \$ 171,882
	Ψ 1,002,404	$\Psi(277, 123)$	φ /0/,/01	φ	Ψ (2/1,3/7)	φ 171,002

For the three and nine-months ended June 30, 2018 and 2017, Woodward recorded amortization expense associated with intangibles of the following:

	Three-Mor	nths			
	Ended		Nine-Months Ended		
	June 30,		June 30,		
	2018	2017	2018	2017	
Amortization expense	\$ 11,360	\$ 6,439	\$ 23,861	\$ 19,328	

Future amortization expense associated with intangibles is expected to be:

Year Ending September 30:	
2018 (remaining)	\$ 20,097
2019	58,284
2020	42,879
2021	39,994
2022	38,131
Thereafter	444,128
	\$ 643,513

Note 14. Credit facilities, short-term borrowings and long-term debt

Revolving credit facility

Woodward maintains a \$1,000,000 revolving credit facility established under a revolving credit agreement among Woodward, a syndicate of lenders and Wells Fargo Bank, National Association, as administrative agent (the "Revolving Credit Agreement"). The Revolving Credit Agreement provides for the option to increase available borrowings up to \$1,200,000, subject to lenders' participation. Borrowings under the Revolving Credit Agreement can be made by Woodward and certain of its foreign subsidiaries in U.S dollars or in foreign currencies other than the U.S. dollar and generally bear interest at LIBOR plus 0.85% to 1.65%. The Revolving Credit Agreement matures in April 2020. Under the Revolving Credit Agreement, there were \$374,574 in principal amount of borrowings outstanding as of June 30, 2018, at an effective interest rate of 2.87%, and \$32,600 in principal amount of borrowings outstanding as of September 30, 2017, at an effective interest rate of 2.29%. As of June 30, 2018, \$140,231 of the borrowings under the Revolving Credit Agreement were classified as short-term borrowings based on Woodward's intent and ability to pay this amount in the next twelve months. As of September 30, 2017, all of the borrowings under the Revolving Credit Agreement were classified as short-term borrowings.

Short-term borrowings

Woodward has other foreign lines of credit and foreign overdraft facilities at various financial institutions, which are generally reviewed annually for renewal and are subject to the usual terms and conditions applied by the financial institutions. Pursuant to the terms of the related facility agreements, Woodward's foreign performance guarantee facilities are limited in use to providing performance guarantees to third parties. As of June 30, 2018, there were borrowings outstanding of \$3,769 on Woodward's foreign lines of credit and foreign overdraft facilities. There were no borrowings outstanding as of September 30, 2017.

Long-term debt

		September
	June 30,	30,
	2018	2017
Long-term portion of revolving credit facility - Floating rate (LIBOR plus 0.85% - 1.65%),		
due April 2020; unsecured	\$ 234,343	\$ -
Series D notes – 6.39%, due October 2018; unsecured	100,000	100,000
Series F notes – 8.24%, due April 2019; unsecured	43,000	43,000
Series G notes – 3.42%, due November 2020; unsecured	50,000	50,000
Series H notes – 4.03%, due November 2023; unsecured	25,000	25,000
Series I notes – 4.18%, due November 2025; unsecured	25,000	25,000
Series J notes – Floating rate (LIBOR plus 1.25%), due November 2020; unsecured	50,000	50,000
Series K notes – 4.03%, due November 2023; unsecured	50,000	50,000
Series L notes – 4.18%, due November 2025; unsecured	50,000	50,000
Series M notes – 1.12% due September 2026; unsecured	46,726	47,270
Series N notes – 1.31% due September 2028; unsecured	89,947	90,995
Series O notes – 1.57% due September 2031; unsecured	50,230	50,815
Series P notes – 4.27% due May 2025; unsecured	85,000	-
Series Q notes – 4.35% due May 2027; unsecured	85,000	-
Series R notes – 4.41% due May 2029; unsecured	75,000	-
Series S notes – 4.46% due May 2030; unsecured	75,000	-
Series T notes – 4.61% due May 2033; unsecured	80,000	-
Unamortized debt issuance costs	(2,850)	(1,794)
Total long-term debt	1,211,396	580,286
Less: Current portion of long-term debt	-	-
Long-term debt, less current portion	\$ 1,211,396	\$ 580,286
The Notes		

In October 2008, Woodward entered into a note purchase agreement relating to the Series D Notes. In April 2009, Woodward entered into a note purchase agreement relating to the Series F Notes. The Series D Notes mature and are payable in October 2018, and the Series F Notes mature and are payable in April 2019. As of June 30, 2018, the entire amount of debt under the Series D Notes and Series F Notes has been classified as long-term based on Woodward's intent and ability to refinance this debt prior to maturity using cash proceeds from its existing revolving credit facility which, in turn, is expected to be repaid beyond the next twelve months.

On October 1, 2013, Woodward entered into a note purchase agreement relating to the sale by Woodward of an aggregate principal amount of \$250,000 of its senior unsecured notes in a series of private placement transactions. Woodward issued the Series G, H and I Notes (the "First Closing Notes") on October 1, 2013. Woodward issued the Series J, K and L Notes (the "Second Closing Notes") on November 15, 2013.

On September 23, 2016, Woodward and the BV Subsidiary each entered into note purchase agreements relating to the sale by Woodward and the BV Subsidiary of an aggregate principal amount of €160,000 of senior unsecured notes in a series of private placement transactions. Woodward issued €40,000 Series M Notes. The BV Subsidiary issued (a) €77,000 aggregate principal amount of the BV Subsidiary's Series N Senior Notes (the "Series N Notes") and (b) €43,000 aggregate principal amount of the BV Subsidiary's Series O Senior Notes (the "Series O Notes" and together with the Series M Notes and the Series N Notes, the "2016 Notes,") and, together with the Series D Notes, the Series F Notes, the

First Closing Notes and the Second Closing Notes, collectively, the "Existing Notes").

On May 31, 2018, Woodward entered into a note purchase agreement (the "2018 Note Purchase Agreement") relating to the sale by Woodward of an aggregate principal amount of \$400,000 of senior unsecured notes comprised of (a) \$85,000 aggregate principal amount of its Series P Senior Notes due May 30, 2025 and bearing interest at a rate of 4.27% per annum (the "Series P Notes"), (b) \$85,000 aggregate principal amount of its Series Q Senior Notes due May 30, 2027 and bearing interest at a rate of 4.35% per annum (the "Series Q Notes"), (c) \$75,000 aggregate principal amount of its Series R Senior Notes due May 30, 2029 and bearing interest at a rate of 4.41% per annum (the "Series R Notes"), (d) \$75,000 aggregate principal amount of its Series S Senior Notes due May 30, 2030 and bearing interest at a rate of 4.46% per annum (the "Series S Notes"), and (e) \$80,000 aggregate principal amount of its Series T Senior Notes due May 30, 2033 and bearing interest at a rate of 4.61% per annum (the "Series R Notes"; together with the Series P Notes, the Series R Notes, the Series R

Notes, and the Series S Notes, the "2018 Notes" and; together with the Existing Notes, the "Notes"), in a series of private placement transactions.

In connection with the issuance of the 2018 Notes, the Company entered into cross currency swap transactions in respect of each tranche of the 2018 Notes, which effectively reduced the interest rates on the Series P Notes to 1.82% per annum, the Series Q Notes to 2.15% per annum, the Series R Notes to 2.42% per annum, the Series S Notes to 2.55% per annum and the Series T Notes to 2.90% per annum (see Note 7, Derivative instruments and hedging activities).

The Company's obligations under the 2018 Note Purchase Agreement and the 2018 Notes will rank at all times at least pari passu, without preference or priority, with the Existing Notes and the Company's outstanding debt under the Revolving Credit Agreement.

The 2018 Note Purchase Agreement contains restrictive covenants customary for such financings, including, among other things, covenants that place limits on the Company's ability to incur liens on assets, incur additional debt (including a leverage test), transfer or sell the Company's assets, merge or consolidate with other persons and enter into material transactions with affiliates. The 2018 Note Purchase Agreement also contains financial covenants which require Woodward to maintain a specified leverage ratio of net indebtedness to consolidated earnings before interest, taxes, depreciation and amortization and a minimum consolidated net worth, which are, in each case, consistent with financial covenants set forth in the Existing Notes.

The 2018 Note Purchase Agreement also contains events of default customary for such financings, the occurrence of which would permit the holders of the 2018 Notes to accelerate the amounts due thereunder. In the event of default, the interest rate accruing on each of the 2018 Notes would increase by 2.00%.

The Company's payment and performance obligations under the 2018 Note Purchase Agreement and the 2018 Notes, including without limitation the obligations for payment of all principal, interest and any applicable prepayment compensation amount on the 2018 Notes, are guaranteed by Woodward FST, Inc., MPC Products Corporation and Woodward HRT, Inc., each a wholly owned subsidiary of the Company.

The Company, at its option, is permitted at any time to prepay all or any part of the then-outstanding principal amount of any series of the 2018 Notes at 100% of the principal amount of the series of 2018 Notes to be prepaid (but, in the case of partial prepayment, not less than \$1,000), together with interest accrued on such amount to be prepaid to the date of prepayment, plus any applicable prepayment compensation amount and, if any holder of the Notes has entered into a cross currency swap agreement in respect of the note held by such holder, certain losses (if any) incurred by such holder under such cross currency swap agreement as a result of such prepayment.

Interest on the Series D Notes, the First Closing Notes, and the Series K and L Notes is payable semi-annually on April 1 and October 1 of each year until all principal is paid. Interest on the Series F Notes is payable semi-annually on April 15 and October 15 of each year until all principal is paid. Interest on the 2016 Notes is payable semi-annually on March 23 and September 23 of each year, until all principal is paid. Interest on the Series J Notes is payable quarterly on January 1, April 1, July 1 and October 1 of each year until all principal is paid. As of June 30, 2018, the Series J Notes bore interest at an effective rate of 3.58%. Commencing on November 30, 2018, interest on the 2018 Notes is payable semi-annually on May 30 and November 30 of each year until all principal is paid.

Debt Issuance Costs

Unamortized debt issuance costs associated with the Notes of \$2,850 as of June 30, 2018 and \$1,794 as of September 30, 2017 were recorded as a reduction in "Long-term debt, less current portion" in the Condensed Consolidated Balance Sheets. Unamortized debt issuance costs of \$1,603 associated with the Revolving Credit Agreement as of June 30, 2018 and \$2,259 as of September 30, 2017 were recorded as "Other assets" in the Condensed Consolidated Balance

Sheets. Amortization of debt issuance costs is included in operating activities in the Condensed Consolidated Statements of Cash Flows.

Note 15. Accrued liabilities

	June 30,	September
	June 50,	30,
	2018	2017
Salaries and other member benefits	\$ 63,743	\$ 91,285
Warranties	19,802	13,597
Interest payable	8,856	9,626
Current portion of acquired performance obligations and unfavorable contracts (1)	1,627	1,627
Accrued retirement benefits	3,529	2,413
Current portion of loss reserve on contractual lease commitments	1,245	1,343
Current portion of deferred income from JV formation (Note 5)	6,414	6,451
Deferred revenues	2,689	4,625
Restructuring charges	16,574	-
Taxes, other than income	18,012	14,401
Other	19,720	9,704
	\$ 162,211	\$ 155,072

(1) In connection with Woodward's acquisition of GE Aviation Systems LLC's (the "Seller") thrust reverser actuation systems business located in Duarte, California (the "Duarte Acquisition") in fiscal year 2013, Woodward assumed current and long-term performance obligations for contractual commitments that are expected to result in future economic losses. In addition, Woodward assumed current and long-term performance obligations for services to be provided to the Seller and others, partially offset by current and long-term assets related to contractual payments due from the Seller. The current portion of both obligations is included in "Accrued liabilities" in the Condensed Consolidated Balance Sheets.

Warranties

Provisions of Woodward's sales agreements include product warranties customary to these types of agreements. Accruals are established for specifically identified warranty issues that are probable to result in future costs. Warranty costs are accrued on a non-specific basis whenever past experience indicates a normal and predictable pattern exists. Changes in accrued product warranties were as follows:

	Three-Mo	nths Ended	Nine-Months Ended		
	June 30,		June 30,		
	2018	2017	2018	2017	
Warranties, beginning of period	\$ 13,283	\$ 15,041	\$ 13,597	\$ 15,993	

Increases due to acquisition of L'Orange	6,045	-	6,045	-
Expense, net of recoveries	2,696	2,746	3,000	6,808
Reductions for settling warranties	(1,838)	(3,746)	(2,670)	(8,528)
Foreign currency exchange rate changes	(384)	257	(170)	25
Warranties, end of period	\$ 19,802	\$ 14,298	\$ 19,802	\$ 14,298

Loss reserve on contractual lease commitments

In connection with the construction of a new production facility in Niles, Illinois, Woodward vacated a leased facility in Skokie, Illinois and recognized a loss reserve against the estimated remaining contractual lease commitments, less anticipated sublease income. Changes in the loss reserve were as follows:

	Three-Months		Nine-Mon	ths Ended
	Ended Ju	ine 30,	June 30,	
	2018	2017	2018	2017
Loss reserve on contractual lease commitments, beginning of period	\$ 4,478	\$ 8,395	\$ 5,270	\$ 9,242
Payments, net of sublease income	(267)	(382)	(1,059)	(1,229)
Non-cash adjustments	-	(2,322)	-	(2,322)
Loss reserve on contractual lease commitments, end of period	\$ 4,211	\$ 5,691	\$ 4,211	\$ 5,691

Other liabilities included \$2,966 and \$3,927 of accrued loss reserve on contractual lease commitments as of June 30, 2018 and September 30, 2017, respectively, which are not expected to be settled or paid within twelve months of the respective balance sheet date.

Restructuring charges

In the second quarter of fiscal year 2018, the Company recorded restructuring charges totaling \$17,013, the majority of which relate to the Company's decision to relocate its Duarte, California operations to the Company's newly renovated Drake Campus in Fort Collins, Colorado. The Duarte facility, which manufactures thrust reverser actuation systems, is part of the Company's Aerospace segment. The remaining restructuring charges recognized during the first nine months of fiscal year 2018 consist of workforce management costs related to aligning the Company's industrial turbomachinery business, which is part of the Company's Industrial segment, with current market conditions. All of the restructuring charges recorded in the second quarter and first nine months of fiscal year 2018 were recorded as nonsegment expenses and are expected to be paid within one year of the balance sheet date.

The summary of activity in accrued restructuring charges during the nine-months ended June 30, 2018 is as follows:

				Period A	Activity					
	as o Oct	lance of tobe 2017	r	Charges	(gains)	re	ash ceipts ayments)		n-cash ivity	Balances as of June 30, 2018
Workforce management costs associated with:										
Duarte plant relocation	\$	-		\$ 12,504		\$	-	\$	-	\$ 12,504
Industrial turbomachinery business realignment		-		4,509			(439)		-	4,070
Total	\$	-		\$ 17,013		\$	(439)	\$	-	\$ 16,574
	1.	.1	C *		1 6 6	1	0010	ъ. л.	0	

In addition to the restructuring charges recognized in the first nine months of fiscal year 2018, the Company anticipates incurring additional costs associated with the relocation from Duarte to the Drake campus such as expenses associated with equipment relocation, employee training, accelerated depreciation, and increased labor expenses over the coming year. The Company anticipates these additional expenses will vary by quarter, but are expected to be approximately \$12,000 in total. Although the Company plans to sell the Duarte facility's land, building and building improvements, it is currently still occupying the Duarte facility and has recorded these as assets held for sale as of June 30, 2018 (see Note 11, Property, plant and equipment).

Note 16. Other liabilities

	June 30 2018	,	Septemb 2017	er 30,
Net accrued retirement				
benefits, less amounts				
recognized within				
accrued liabilities	\$	92,075	\$	52,211
Noncurrent portion of				
deferred income from				
JV formation (1)		237,724		236,896
Total unrecognized tax				
benefits		9,910		20,949
Noncurrent income				
taxes payable (2)		23,920		-
Acquired unfavorable				
contracts (3)		591		2,076
Deferred economic		10, 100		1 4 5 7 4
incentives (4)		13,422		14,574
Loss reserve on				
contractual lease		2.000		2.027
commitments (5)		2,966		3,927
Cross currency swap		22.527		
derivative liability (6)		23,527		- 14165
Other	¢	12,363	¢	14,165
	\$	416,498	\$	344,798

(1) See Note 5, Joint venture for more information on the deferred income from JV formation.

(2) See Note 18, Income taxes for more information on the noncurrent income taxes payable.

(3) In connection with the Duarte Acquisition in fiscal year 2013, Woodward assumed current and long-term performance obligations for contractual commitments that are expected to result in future economic losses. The long-term portion of the acquired unfavorable contracts is included in Other liabilities.

(4) Woodward receives certain economic incentives from various state and local authorities related to capital expansion projects. Such amounts are initially recorded as deferred credits and are being recognized as a reduction to pre-tax expense over the economic lives of the related capital expansion projects.

(5) See Note 15, Accrued liabilities for more information on the loss reserve on contractual lease commitments.

(6) See Note 6, Financial instruments and fair value measurements for more information on the cross currency swap derivative liability.

Note 17. Other expense (income), net

	Three-M	onths		
	Ended		Nine-Mon	ths Ended
	June 30,		June 30,	
	2018	2017	2018	2017
Equity interest in the (earnings) losses of the JV (Note 5)	\$ (738)	\$ 432	\$ (2,340)	\$ (634)
Net (gain) loss on sales of assets	50	64	(404)	(3,598)
Rent income	(28)	(53)	(99)	(196)
Net gain on investments in deferred compensation program	(257)	(523)	(957)	(1,252)
Loss on forward option derivative instrument (Note 7)	5,543	-	5,543	-
Other	(373)	(370)	(731)	(673)
	\$ 4,197	\$ (450)	\$ 1,012	\$ (6,353)

Note 18. Income taxes

On December 22, 2017, the United States ("U.S.") enacted significant changes to the U.S. tax law following the passage and signing of the Tax Act. The Tax Act included significant changes to existing tax law, including a permanent reduction to the U.S. federal corporate income tax rate from 35% to 21%, a one-time repatriation tax on deferred foreign income ("Transition Tax"), deductions, credits and business-related exclusions.

U.S. GAAP requires that the interim period tax provision be determined as follows:

• At the end of each quarter, Woodward estimates the tax that will be provided for the current fiscal year stated as a percentage of estimated "ordinary income." The term ordinary income refers to earnings from continuing operations before income taxes, excluding significant unusual or infrequently occurring items.

The estimated annual effective rate is applied to the year-to-date ordinary income at the end of each quarter to compute the estimated year-to-date tax applicable to ordinary income. The tax expense or benefit related to ordinary

income in each quarter is the difference between the most recent year-to-date and the prior quarter year-to-date computations.

• The tax effects of significant unusual or infrequently occurring items are recognized as discrete items in the interim period in which the events occur. The impact of changes in tax laws or rates on deferred tax amounts, the effects of changes in judgment about beginning of the year valuation allowances, and changes in tax reserves resulting from the finalization of tax audits or reviews are examples of significant unusual or infrequently occurring items that are recognized as discrete items in the interim period in which the event occurs. Enactment of the Tax Act during December 2017 resulted in a provisional discrete net charge to Woodward's income tax expense in the amount of \$14,778, which was recorded in the first quarter of fiscal year 2018. The discrete net charge was increased by \$3,671 in the three months ended June 30, 2018 resulting in a net discrete impact from the Tax Act of \$18,449 in the nine-months ended June 30, 2018.

The determination of the annual effective tax rate is based upon a number of significant estimates and judgments, including the estimated annual pretax income of Woodward in each tax jurisdiction in which it operates, and the development of tax planning strategies during the year. In addition, as a global commercial enterprise, Woodward's tax expense can be impacted by changes in tax rates or laws, the finalization of tax audits and reviews, changes in the estimate of the amount of undistributed foreign earnings that Woodward considers indefinitely reinvested, and other factors that cannot be predicted with certainty. As such, there can be significant volatility in interim tax provisions.

The permanent reduction to the U.S. federal corporate income tax rate from 35% to 21% is effective January 1, 2018 (the "Effective Date"). When a U.S. federal tax rate change occurs during a taxpayer's fiscal year, taxpayers are required to compute a weighted daily average rate for the fiscal year of enactment. As a result of the Tax Act, Woodward has calculated a U.S. federal statutory corporate income tax rate of 24.5% for the fiscal year ending September 30, 2018 and applied this rate in computing the income tax provision for the three and nine-months ended June 30, 2018. The U.S. federal statutory tax rate of 24.5% is the weighted daily average rate between the pre-enactment U.S. federal statutory tax rate of 35% applicable to Woodward's 2018 fiscal year prior to the Effective Date and the post-enactment U.S. federal statutory tax rate of 21% applicable to the 2018 fiscal year after the Effective Date. Woodward expects the U.S. federal statutory rate to be 21% for fiscal years beginning after September 30, 2018.

On December 22, 2017, the SEC issued SAB 118. SAB 118 expresses views of the SEC regarding ASC 740 in the reporting period that includes the enactment date of the Tax Act. Subsequent to the issuance of SAB 118, in March 2018, the FASB issued ASU 2018-05, which formally amended ASC 740 for the guidance previously provided by SAB 118. The SEC staff issuing SAB 118 (the "Staff") recognized that a registrant's review of certain income tax effects of the Tax Act may be incomplete at the time financial statements are issued for the reporting period that includes the enactment date, including interim periods therein. The Staff's view of the enactment of the Tax Act has been developed considering the principles of ASC 805 which addresses the accounting for certain items in a business combination for which the accounting is incomplete upon issuance of the financial statements that include the reporting period in which the business combination occurs. Specifically, the Staff provides that the accounting guidance in ASC Topic 805 may be analogized to the accounting for impacts of the Tax Act. If a company does not have the necessary information available, prepared or analyzed for certain income tax effects of the Tax Act, SAB 118 allows a company to report provisional numbers and adjust those amounts during the measurement period not to extend beyond one year. For the three and nine-months ended June 30, 2018, Woodward has recorded all known and estimable impacts of the Tax Act that are effective for fiscal year 2018. Future adjustments to the provisional numbers will be recorded as discrete adjustments to income tax expense in the period in which those adjustments become estimable and/or are finalized. The Company expects to finalize its assessment of the income tax effects of the Tax Act in the fourth quarter of fiscal year 2018.

Accordingly, Woodward's income tax provision for the three and nine-months ended June 30, 2018 reflects (i) the current year impacts of the Tax Act on the estimated annual effective tax rate and (ii) discrete items, if any, resulting directly from the enactment of the Tax Act based on the information available, prepared, or analyzed (including computations) in reasonable detail. The discrete net charge was increased in the third quarter of fiscal year 2018 as a result of an IRS audit for fiscal years 2014, 2015 and 2016, which concluded during the quarter and resulted in an increase to the beginning fiscal year 2018 net deferred tax assets recorded by Woodward. The application of the permanent reduction of the U.S. federal

corporate income tax rate (enacted by the Tax Act) to the increase in the net deferred tax assets resulted in a net discrete charge of \$3,671 recorded in the three months ended June 30, 2018.

	Ν	ine-Months
	E	nded
	Ju	ine 30,
	20	018
Transition tax (provisional)	\$	26,000
Net impact on U.S. deferred tax assets and liabilities (provisional)		(16,260)
Net changes in deferred tax liability associated with anticipated repatriation taxes (provisional)		5,038
Total provisional discrete impact of the enactment of the Tax Act		14,778
Discrete impact recorded in the three months ended June 30, 2018		3,671
Net discrete impacts of the enactment of the Tax Act	\$	18,449

Woodward determined that the Transition Tax is provisional because various components of the computation are unknown as of June 30, 2018, including the following significant items: the exchange rates for fiscal year 2018, the actual aggregate foreign cash position and the earnings and profits of the foreign entities as of September 30, 2018, the interpretation and identification of cash positions as of September 30, 2018, and incomplete computations of accumulated earnings and profits balances as of November 2, 2017 and December 31, 2017. Consistent with provisions allowed under the Tax Act, the \$26,000 estimated Transition Tax liability will be paid over an eight year period beginning in fiscal year 2019. As of June 30, 2018, the current portion of the estimated Transition Tax liability in the amount of \$2,080 has been included in "Income taxes receivable, net," and the noncurrent portion in the amount of \$23,920 has been included in "Other liabilities" in the Condensed Consolidated Balance Sheets.

Woodward also determined that the impact of the U.S. federal corporate income tax rate change on the U.S. deferred tax assets and liabilities is provisional because the number cannot be calculated until the underlying timing differences are known rather than estimated.

Given the Tax Act's significant changes and potential opportunities to repatriate cash tax free, Woodward is in the process of evaluating its current indefinite assertions. As a result of the Tax Act, Woodward now expects to repatriate certain earnings which will be subject to withholding taxes. These additional withholding taxes were recorded as an additional deferred tax liability associated with the basis difference in such jurisdictions. The uncertainty related to the taxation of such withholding taxes on distributions under the Tax Act and finalization of the cash repatriation plan makes the deferred tax liability a provisional amount.

Woodward continues to review the anticipated impacts of the global intangible low taxed income ("GILTI") and base erosion anti-abuse tax ("BEAT") on Woodward, which are not effective until fiscal year 2019. Woodward has not recorded any impact associated with either GILTI or BEAT in the tax rate as of the third quarter of fiscal year 2018.

Within the calculation of Woodward's annual effective tax rate Woodward has used assumptions and estimates that may change as a result of future guidance, interpretation, and rule-making from the Internal Revenue Service, the SEC, and the FASB and/or various other taxing jurisdictions. For example, Woodward anticipates that the state jurisdictions will continue to determine and announce their conformity to the Tax Act which could have an impact on the annual effective tax rate.

The following table sets forth the tax expense and the effective tax rate for Woodward's earnings before income taxes:

	Three-Mo	nths Ended	Nine-Months Ended		
	June 30,		June 30,		
	2018	2017	2018	2017	
Earnings before income taxes	\$ 54,417	\$ 68,687	\$ 140,551	\$ 165,982	
Income tax expense	5,300	15,061	34,685	27,703	
Effective tax rate	9.7%	21.9%	24.7%	16.7%	

The decrease in the year-over-year effective tax rate for the three-months ended June 30, 2018 is primarily attributable to the benefits of the current year effect of the U.S. federal corporate tax rate reduction in connection with the enactment of the Tax Act on the estimated annual effective tax rate, a higher favorable adjustment for the net excess income tax benefits from stock-based compensation compared to the prior fiscal year third quarter, and higher favorable resolutions of tax matters in the current quarter compared to the same quarter last year. This combined benefit was partially offset by the resolution of the fiscal year 2014, 2015, and 2016 IRS audits in the third quarter of fiscal year 2018, which resulted in an additional provisional discrete income tax expense of \$3,671 recorded in the quarter in connection with the Tax Act.

The increase in the effective tax rate for the nine-months ended June 30, 2018 compared to the nine-months ended June 30, 2017 is primarily attributable to the \$18,449 net unfavorable impact in the period resulting from the enactment of the Tax Act. Additionally, the benefit from the repatriation to the U.S. of certain net foreign profits and losses was higher in the nine-months ended June 30, 2017 compared to the nine-months ended June 30, 2018. These increases were partially offset by higher favorable resolutions of tax matters in the first nine months of fiscal year 2018 compared to the first nine months of fiscal year 2017, as well as the current year effect of the U.S. federal corporate tax rate reduction in connection with the enactment of the Tax Act on the estimated annual effective tax rate.

Gross unrecognized tax benefits were \$9,710 as of June 30, 2018, and \$20,132 as of September 30, 2017. Included in the balance of unrecognized tax benefits were \$2,741 as of June 30, 2018 and \$9,677 as of September 30, 2017 of tax benefits that, if recognized, would affect the effective tax rate. At this time, Woodward estimates that it is reasonably possible that the liability for unrecognized tax benefits will decrease by as much as \$84 in the next twelve months due to the completion of reviews by tax authorities, lapses of statutes, and the settlement of tax positions. Woodward accrues for potential interest and penalties related to unrecognized tax benefits and all other interest and penalties related to tax payments in tax expense. Woodward had accrued gross interest and penalties of \$255 as of June 30, 2018 and \$1,123 as of September 30, 2017.

Woodward's tax returns are subject to audits by U.S. federal, state, and foreign tax authorities, and these audits are at various stages of completion at any given time. Reviews of tax matters by authorities and lapses of the applicable statutes of limitations may result in changes to tax expense. Fiscal years remaining open to examination in significant foreign jurisdictions include 2008 and thereafter. Woodward's fiscal years remaining open to examination for U.S. Federal income taxes include fiscal years 2017 and thereafter. Woodward has concluded U.S. federal income tax examinations through fiscal year 2016. Woodward is generally subject to U.S. state income tax examinations for fiscal years 2013 and the periods thereafter.

Note 19. Retirement benefits

Woodward provides various retirement benefits to eligible members of the Company, including contributions to various defined contribution plans, pension benefits associated with defined benefit plans, postretirement medical benefits and postretirement life insurance benefits. Eligibility requirements and benefit levels vary depending on employee location.

Defined contribution plans

Most of the Company's U.S. employees are eligible to participate in the U.S. defined contribution plan. The U.S. defined contribution plan allows employees to defer part of their annual income for income tax purposes into their personal 401(k) accounts. The Company makes matching contributions to eligible employee accounts, which are also deferred for employee personal income tax purposes. Certain foreign employees are also eligible to participate in similar foreign plans.

Most of Woodward's U.S. employees with at least two years of service receive an annual contribution of Woodward stock, equal to 5% of their eligible prior year wages, to their personal Woodward Retirement Savings Plan accounts. Woodward fulfilled its annual Woodward stock contribution obligation using shares held in treasury stock by issuing a total of 202 shares of common stock for a value of \$14,741 in the second quarter of fiscal year 2018, and 199 total shares of common stock for a value of \$14,014 in the second quarter of fiscal year 2017.

The amount of expense associated with defined contribution plans was as follows:

	Three-Months				
	Ended		Nine-Months Ended		
	June 30,		June 30,		
	2018	2017	2018	2017	
Company costs	\$ 8,262	\$ 8,039	\$ 24,858	\$ 23,790	

Defined benefit plans

Woodward has defined benefit plans that provide pension benefits for certain retired employees in the United States, the United Kingdom, Japan and, as a result of the acquisition of L'Orange, Germany. Woodward also provides other postretirement benefits to its employees including postretirement medical benefits and life insurance benefits. Postretirement medical benefits are provided to certain current and retired employees and their covered dependents and beneficiaries in the United States and the United Kingdom. Life insurance benefits are provided to certain retirees in the United States under frozen plans, which are no longer available to current employees. A September 30 measurement date is utilized to value plan assets and obligations for all of Woodward's defined benefit pension and other postretirement benefit plans.

In connection with the acquisition of L'Orange on June 1, 2018, Woodward assumed the unfunded defined benefit pension obligations of the L'Orange defined benefit pension plans (the "L'Orange Pension Plans"). Woodward's assumption of the liability associated with the L'Orange Pension Plans was part of the total consideration paid by Woodward to acquire L'Orange and thus reduced Woodward's cash payment for the transaction. Woodward has completed its valuation of the defined benefit pension obligations associated with the L'Orange Pension Plans and determined the value of the associated unfunded obligation was \$38,998, of which \$1,143 was considered current as of the June 1, 2018 acquisition date. The L'Orange Pension Plans had expenses of \$168 and Woodward made \$54 of contributions to the L'Orange Pension Plans during the three and nine-months ended June 30, 2018. Similar to Woodward's other defined benefit plans and other postretirement benefit plans, a September 30 measurement date will be utilized to value the plan obligations of the L'Orange Pension Plans going forward. The L'Orange Pension Plans are unfunded.

U.S. GAAP requires that, for obligations outstanding as of September 30, 2017, the funded status reported in interim periods shall be the same asset or liability recognized in the previous year end statement of financial position adjusted for (a) subsequent accruals of net periodic benefit cost that exclude the amortization of amounts previously recognized in other comprehensive income (for example, subsequent accruals of service cost, interest cost, and return on plan assets) and (b) contributions to a funded plan or benefit payments.

During the third quarter of fiscal year 2016, Woodward opened a lump-sum buy-out window, which closed in the fourth quarter of fiscal year 2016 and was fully settled during the first quarter of fiscal year 2017, for certain former U.S. employees and/or their dependents eligible to receive postretirement defined benefit pension payments for past employment services to the Company. Eligible pension plan participants were provided the opportunity to elect to receive a one-time lump-sum payment or an immediate annuity in lieu of future pension benefit payments. Pension benefit payments paid from available pension plan assets under the lump-sum buy-out options were \$670 during the first nine months of fiscal year 2017. Woodward made no further pension benefit payments under the lump-sum buy-out options.

The components of the net periodic retirement pension costs recognized are as follows:

	Three-Months Ended June 30,						
	United Sta	ates	Other Cou	untries	Total		
	2018	2017	2018	2017	2018	2017	
Service cost	\$ 410	\$ 419	\$ 283	\$ 192	\$ 693	\$ 611	
Interest cost	1,501	1,439	386	305	1,887	1,744	
Expected return on plan assets	(2,904)	(2,632)	(703)	(656)	(3,607)	(3,288)	
Amortization of:							
Net actuarial loss	150	464	74	130	224	594	
Prior service cost	177	95	-	-	177	95	
Net periodic retirement pension (benefit) cost	\$ (666)	\$ (215)	\$ 40	\$ (29)	\$ (626)	\$ (244)	
Contributions paid	\$ -	\$ -	\$ 227	\$ 99	\$ 227	\$ 99	
	Nine-Months Ended June 30,						
	United Sta	United States Other Countries					
	2018	2017	2018	2017	2018	2017	
Service cost	\$ 1,232	\$ 1,256	\$ 606	\$ 571	\$ 1,838	\$ 1,827	
Interest cost	4,503	4,318	1,059	897	5,562	5,215	
Expected return on plan assets	(8,711)	(7,897)	(2,106)	(1,935)	(10,817)	(9,832)	
Amortization of:							
Net actuarial loss	449	1,391	221	383	670	1,774	
Prior service cost	532	287	-	-	532	287	
Net periodic retirement pension benefit	\$ (1,995)	\$ (645)	\$ (220)	\$ (84)	\$ (2,215)	\$ (729)	
Contributions paid	\$ -	\$ -	\$ 658	\$ 565	\$ 658	\$ 565	
Net periodic retirement pension (benefit) cost Contributions paid Service cost Interest cost Expected return on plan assets Amortization of: Net actuarial loss Prior service cost Net periodic retirement pension benefit	\$ (666) \$ - Nine-Mor United Sta 2018 \$ 1,232 4,503 (8,711) 449 532 \$ (1,995)	\$ (215) \$ - attes 2017 \$ 1,256 4,318 (7,897) 1,391 287 \$ (645)	\$ 227 June 30, Other Cot 2018 \$ 606 1,059 (2,106) 221 - \$ (220)	\$ 99 intries 2017 \$ 571 897 (1,935) 383 - \$ (84)	\$ (626) \$ 227 Total 2018 \$ 1,838 5,562 (10,817) 670 532 \$ (2,215)	\$ (244) \$ 99 2017 \$ 1,827 5,215 (9,832) 1,774 287 \$ (729)	

The components of the net periodic other postretirement benefit costs recognized are as follows:

Three-Months Nine-Months Ended Ended June 30, June 30, 2018 2017 2018