

Option

Only one field required	Buyer Seller	
	Premium	
	Premium Payment Date	
	Currency Option Style	European unless stated otherwise
	Currency Option Type (Call / Put)	
Only one field required when FX pair is stated	Call Currency and Call Currency Amount Put Currency and Put Currency Amount	
	Strike Price	
	Expiration Date	
	Expiration Time	
	Settlement Date	
Only applicable for cash settled deliverable options	Settlement Rate Option (Spot Rate Reference Source) Settlement Currency	
	Calculation Agent	JPMorgan unless stated otherwise
	Governing Definitions	https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct

Forward

Forward Rate

Only one field required when
FX pair is stated

Amount and currency payable by JPMorgan	Amount and currency payable by Counterparty
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Settlement Date

Calculation Agent

Governing Definitions

JPMorgan unless stated otherwise

<https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct>

NDF non \$

Only one field required	Reference Currency Buyer Reference Currency Seller
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Forward Rate

Only one field required when FX pair is stated	Notional Amount Reference Currency Notional Amount
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Reference Currency

Valuation Date

Settlement Date

Settlement Currency

Settlement Rate Option (Spot Rate Reference Source) for the Settlement Currency

Default EMTA definitions for non-deliverable currencies unless stated otherwise non-deliverable currencies	Cross Currency Settlement Rate	The Cross Currency Settlement Rate shall be determined for the Valuation Date with reference to the Reference Currency Spot Rate and the Settlement Spot Rate, each as determined for the Valuation Date http://www.emta.org/ndftt.aspx
	Settlement Rate Option (Spot Rate Reference Source) for the Reference Currency	http://www.emta.org/ndftt.aspx
	Disruption Fallbacks	http://www.emta.org/ndftt.aspx
	Price Source Disruption	http://www.emta.org/ndftt.aspx
	Other Disruption Fallbacks	http://www.emta.org/ndftt.aspx
	Price Materiality [Applicable to Non-Deliverable Currency Option]	http://www.emta.org/ndftt.aspx
	Primary Rate [Applicable to Non-Deliverable Currency Option]	http://www.emta.org/ndftt.aspx
	Secondary Rate [Applicable to Non-Deliverable Currency Option]	http://www.emta.org/ndftt.aspx
	Price Materiality Percentage [Applicable to Non-Deliverable Currency Option]	http://www.emta.org/ndftt.aspx
	Relevant Cities for Business Day(s) for Valuation Date:	http://www.emta.org/ndftt.aspx
	Relevant City for Business Day for Settlement Date:	http://www.emta.org/ndftt.aspx
	Deferral Period for Unscheduled Holiday	http://www.emta.org/ndftt.aspx
	Unscheduled Holiday	http://www.emta.org/ndftt.aspx
	Valuation Postponement for Price Source Disruption	http://www.emta.org/ndftt.aspx
	Fallback Survey Valuation Postponement	http://www.emta.org/ndftt.aspx
	Cumulative Events	http://www.emta.org/ndftt.aspx
	Maximum Days of Postponement	http://www.emta.org/ndftt.aspx
	Calculation Agent	JPMorgan unless stated otherwise
	Governing Definitions	https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct

NDO \$

Only one field required	Buyer	
	Seller	
	Premium	
	Premium Payment Date	
	Currency Option Style	European unless stated otherwise
	Currency Option Type (Call / Put)	
	Call Currency and Call Currency Amount	
	Put Currency and Put Currency Amount	
	Strike Price	
	Settlement Currency	USD
Only one field required when FX pair is stated	Valuation Date	
	Settlement Date	
	Settlement Rate Option (Spot Rate Reference Source)	http://www.emta.org/ndftt.aspx
	DisruptionFallbacks	http://www.emta.org/ndftt.aspx
	Price Source Disruption	http://www.emta.org/ndftt.aspx
	Other DisruptionFallbacks	http://www.emta.org/ndftt.aspx
	Price Materiality [Applicable to Non-Deliverable Currency Option]	http://www.emta.org/ndftt.aspx
	Primary Rate [Applicable to Non-Deliverable Currency Option]	http://www.emta.org/ndftt.aspx
	Secondary Rate [Applicable to Non-Deliverable Currency Option]	http://www.emta.org/ndftt.aspx
	Price Materiality Percentage [Applicable to Non-Deliverable Currency Option]	http://www.emta.org/ndftt.aspx
Default EMTA definitions for non-deliverable currencies unless stated otherwise	Relevant Cities for Business Day(s) for Valuation Date:	http://www.emta.org/ndftt.aspx
	Relevant City for Business Day for Settlement Date:	http://www.emta.org/ndftt.aspx
	Deferral Period for Unscheduled Holiday	http://www.emta.org/ndftt.aspx
	Unscheduled Holiday	http://www.emta.org/ndftt.aspx
	Valuation Postponement for Price Source Disruption	http://www.emta.org/ndftt.aspx
	Fallback Survey Valuation Postponement	http://www.emta.org/ndftt.aspx
	Cumulative Events	http://www.emta.org/ndftt.aspx
	Maximum Days of Postponement	http://www.emta.org/ndftt.aspx
	Calculation Agent	JPMorgan unless stated otherwise
	Governing Definitions	https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct

NDO non-\$

Only one field required	Buyer	
	Seller	
	Premium	
	Premium Payment Date	
	Currency Option Style	European unless stated otherwise
	Currency Option Type (Call / Put)	
	Call Currency and Call Currency Amount	
	Put Currency and Put Currency Amount	
	Strike Price	
	Valuation Date	
Only one field required when FX pair is stated	Settlement Date	
	Settlement Currency	
	Settlement Rate Option (Spot Rate Reference Source) for the Settlement Currency	
	Cross Currency Settlement Rate	The Cross Currency Settlement Rate shall be determined for the Valuation Date with reference to the Reference Currency Spot Rate and the Settlement Spot Rate, each as determined for the Valuation Date
	Settlement Rate Option (Spot Rate Reference Source) for the Reference Currency	http://www.emta.org/ndftt.aspx
	DisruptionFallbacks	http://www.emta.org/ndftt.aspx
	Price Source Disruption	http://www.emta.org/ndftt.aspx
	Other DisruptionFallbacks	http://www.emta.org/ndftt.aspx
	Price Materiality [Applicable to Non-Deliverable Currency Option]	http://www.emta.org/ndftt.aspx
	Primary Rate [Applicable to Non-Deliverable Currency Option]	http://www.emta.org/ndftt.aspx
Default EMTA definitions for non-deliverable currencies unless stated otherwise	Secondary Rate [Applicable to Non-Deliverable Currency Option]	http://www.emta.org/ndftt.aspx
	Price Materiality Percentage [Applicable to Non-Deliverable Currency Option]	http://www.emta.org/ndftt.aspx
	Relevant Cities for Business Day(s) for Valuation Date:	http://www.emta.org/ndftt.aspx
	Relevant City for Business Day for Settlement Date:	http://www.emta.org/ndftt.aspx
	Deferral Period for Unscheduled Holiday	http://www.emta.org/ndftt.aspx
	Unscheduled Holiday	http://www.emta.org/ndftt.aspx
	Valuation Postponement for Price Source Disruption	http://www.emta.org/ndftt.aspx
	Fallback Survey Valuation Postponement	http://www.emta.org/ndftt.aspx
	Cumulative Events	http://www.emta.org/ndftt.aspx
	Maximum Days of Postponement	http://www.emta.org/ndftt.aspx
Calculation Agent		JPMorgan unless stated otherwise
Governing Definitions		https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct

Option (American Style)

Only one field required	Buyer Seller
	Premium
	Premium Payment Date
	Currency Option Style American
	Currency Option Type (Call / Put)
Only one field required when FX pair is stated	Call Currency and Call Currency Amount Put Currency and Put Currency Amount
	Strike Price
	Exercise Period
	Latest Exercise Time
	Expiration Date
	Expiration Time
	Settlement Date
	Calculation Agent JPMorgan unless stated otherwise
	Governing Definitions https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct

American Forward

Only one field required	Exercise Buy Exercise Seller Forward Rate
Only one field required when FX pair is stated	Amount and currency payable by JPMorgan (American Style) Amount and currency payable by Counterparty (American Style)
	Latest Exercise Time Exercise Period Minimum Exchange Amount Final Settlement Date Calculation Agent Governing Definitions
	JPMorgan unless stated otherwise https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct

Forward Start NDF

Only one field required	Reference Currency Buyer	Reference Currency Seller	The Forward Rate will be determined by the Calculation Agent by reference to the Forward Rate Fixing Source as of the Forward Rate Set Date, [plus or minus / multiplied by] the Adjustment.
	Forward Rate		
	Forward Rate Set Date		
	Forward Rate Fixing Source		
	Adjustment		
Only one field required when FX pair is stated	Notional Amount		
	Reference Currency Notional Amount		
	Reference Currency		
	Valuation Date		
	Settlement Date		
	Settlement Currency		
	Settlement Rate Option (Spot Rate Reference Source)		http://www.emta.org/ndftt.aspx
	Disruption Fallbacks		http://www.emta.org/ndftt.aspx
	Price Source Disruption		http://www.emta.org/ndftt.aspx
	Other Disruption Fallbacks		http://www.emta.org/ndftt.aspx
	Price Materiality [Applicable to Non-Deliverable Currency Option]		http://www.emta.org/ndftt.aspx
	Primary Rate [Applicable to Non-Deliverable Currency Option]		http://www.emta.org/ndftt.aspx
	Secondary Rate [Applicable to Non-Deliverable Currency Option]		http://www.emta.org/ndftt.aspx
	Price Materiality Percentage [Applicable to Non-Deliverable Currency Option]		http://www.emta.org/ndftt.aspx
	Relevant Cities for Business Day(s) for Valuation Date:		http://www.emta.org/ndftt.aspx
	Relevant City for Business Day for Settlement Date:		http://www.emta.org/ndftt.aspx
	Deferral Period for Unscheduled Holiday		http://www.emta.org/ndftt.aspx
	Unscheduled Holiday		http://www.emta.org/ndftt.aspx
	Valuation Postponement for Price Source Disruption		http://www.emta.org/ndftt.aspx
	Fallback Survey Valuation Postponement		http://www.emta.org/ndftt.aspx
	Cumulative Events		http://www.emta.org/ndftt.aspx
	Maximum Days of Postponement		http://www.emta.org/ndftt.aspx
	Calculation Agent		JPMorgan unless stated otherwise
	Governing Definitions		https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct

	Barrier	
JPMorgan Counterparty	Only one field required Buyer Seller	
Joint European American	Premium Currency Option Style Currency Option Type (Call / Put)	European unless stated otherwise
Knock-Out	Only one field required when FX pair is stated Call Currency and Call Currency Amount Put Currency and Put Currency Amount	
Knock-In	Strike Price	
Greater than or equal to the Barrier Level	Expiration Time	
Less than or equal to the Barrier Level	Valuation Date / Expiration Date	
Double Knock-Out	Settlement Date	<i>[Date / # Biz days following Barrier Event]</i>
Double Knock-In	Premium Payment Date	
	Only applicable for cash settlement Reference Currency Settlement Currency Settlement Rate Option (Spot Rate Reference Source) (if cash settled / Non-deliverable)	http://www.emta.org/ndftt.aspx
Default EMTA definitions for non-deliverable currencies unless stated otherwise	Disruption Fallbacks Price Source Disruption	http://www.emta.org/ndftt.aspx http://www.emta.org/ndftt.aspx
	Other Disruption Fallbacks Price Materiality [Applicable to Non-Deliverable Currency Option]	http://www.emta.org/ndftt.aspx http://www.emta.org/ndftt.aspx
	Primary Rate [Applicable to Non-Deliverable Currency Option]	http://www.emta.org/ndftt.aspx
	Secondary Rate [Applicable to Non-Deliverable Currency Option]	http://www.emta.org/ndftt.aspx
	Price Materiality Percentage [Applicable to Non-Deliverable Currency Option]	http://www.emta.org/ndftt.aspx
	Relevant Cities for Business Day(s) for Valuation Date:	http://www.emta.org/ndftt.aspx
	Relevant City for Business Day for Settlement Date:	http://www.emta.org/ndftt.aspx
	Deferral Period for Unscheduled Holiday	http://www.emta.org/ndftt.aspx
	Unscheduled Holiday	http://www.emta.org/ndftt.aspx
	Valuation Postponement for Price Source Disruption	http://www.emta.org/ndftt.aspx
	Fallback Survey Valuation Postponement	http://www.emta.org/ndftt.aspx
	Cumulative Events	http://www.emta.org/ndftt.aspx
	Maximum Days of Postponement	http://www.emta.org/ndftt.aspx
	Barrier Event Event Type Spot Rate Direction (not applicable to Double barriers)	Applicable
Barrier terms and conditions	Barrier Level (not applicable to Double barriers) Upper Barrier Level (only applicable to Double barriers) Lower Barrier Level (only applicable to Double barriers) Event Period Start Date and Time (not applicable for American style barriers) Event Period End Date and Time (not applicable for American style barriers) Barrier Event Rate Source Barrier Event Determination Date (only applicable for discrete)	<i>[Time & Date / Expiration Time and Expiration Date for European style Barrier Event]</i> <i>[Time & Date / Expiration Time and Expiration Date for European style Barrier Event]</i>
	Calculation Agent Governing Definitions	JPMorgan unless stated otherwise https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct

Binary

Only one field required

Buyer
Seller

Premium

Currency Option Style

Settlement

Settlement Currency and Amount

Expiration Time

Expiration Date

Settlement Date

Premium Payment Date

Binary

Non-Deliverable

[Date / # Biz days following Barrier Event]

Barrier terms and conditions

Barrier Event

Applicable

Event Type

Spot Rate Direction (not applicable to **Double** barriers)Barrier Level (not applicable to **Double** barriers)Upper Barrier Level (only applicable to **Double** barriers)Lower Barrier Level (only applicable to **Double** barriers)Event Period Start Date and Time (not applicable for **American** style barriers)*[Time & Date / Expiration Time and Expiration Date for European style Barrier Event]*Event Period End Date and Time (not applicable for **American** style barriers)*[Time & Date / Expiration Time and Expiration Date for European style Barrier Event]*

Barrier Event Rate Source

Barrier Event Determination Date (only applicable for discrete)

Calculation Agent

JPMorgan unless stated otherwise

Governing Definitions

<https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct>

Average Rate Forward

Only one field required	Base Currency Buyer Terms Currency Buyer
Only one field required when FX pair is stated	Base Currency and Base Currency Amount Terms Currency and Terms Currency Amount

Forward Rate
Settlement Currency

Settlement Rate

Settlement Rate Option (Spot Rate Reference
Source from which Fixing Rates are derived)

Settlement Amount

Valuation Date

Settlement Date
Settlement
Premium
Premium Payer
Premium Payment Date
Calculation Agent
Governing Definitions

Means the average rate determined by the Calculation Agent as follows, calculated to [dp] decimal places

$$\frac{\sum_{i=1}^n (Fixing\ Rate_i \times Weight_i)}{\sum_{i=1}^n Weight_i}$$

Arithmetic

Where $n = [\#]$

If positive then JPMorgan pays the Counterparty, if negative then the Counterparty pays JPMorgan:

Non-Deliverable

JPMorgan unless stated otherwise
<https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct>

i	Averaging Dates i	Weight i
1	[Date]	[Weight]
2	[Date]	[Weight]
...

$$1 / \left[\frac{\sum_{i=1}^n (1 / Fixing\ Rate_i \times Weight_i)}{\sum_{i=1}^n Weight_i} \right]$$

Harmonic

Average Rate Option

Only one field required	Buyer Seller
Only one field required when FX pair is stated	Call Currency and Call Currency Amount Put Currency and Put Currency Amount

Currency Option Style
Strike Price

European unless stated otherwise

Settlement Rate

Means the average rate determined by the Calculation Agent as follows, calculated to [dp] decimal places

$$\frac{\sum_{i=1}^n (Fixing\ Rate_i \times Weight_i)}{\sum_{i=1}^n Weight_i}$$

Arithmetic

$$1/\frac{\sum_{i=1}^n (1/ Fixing\ Rate_i \times Weight_i)}{\sum_{i=1}^n Weight_i}$$

Harmonic

Where $n = [\#]$

Settlement Rate Option (Spot Rate Reference
Source from which Fixing Rates are derived)

An amount if positive is payable by the Seller to the Buyer on the Settlement Date

Settlement Amount

Non-Deliverable

Expiration Date
Settlement Date
Settlement
Settlement Currency
Premium
Premium Payer
Premium Payment Date
Calculation Agent
Governing Definitions

JPMorgan unless stated otherwise
<https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct>

i	Averaging Dates i	Weight i
1	[Date]	[Weight]
2	[Date]	[Weight]
...

Average Strike Forward

Only one field required	Base Currency Buyer Terms Currency Buyer
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Base Currency and Base Currency Amount
Terms Currency and Terms Currency Amount

[CCY & Amount] or [Terms Currency Amount / Forward Rate]

[CCY & Amount] or [Base Currency Amount x Forward Rate]

Means the average rate determined by the Calculation Agent as follows, calculated to [dp] decimal places

$$Adjustment + \frac{\sum_{i=1}^n (Fixing\ Rate_i \times Weight_i)}{\sum_{i=1}^n Weight_i}$$

Forward Rate

Arithmetic

$$(1 + Adjustment) \frac{\sum_{i=1}^n (Fixing\ Rate_i \times Weight_i)}{\sum_{i=1}^n Weight_i}$$

Where $n = [\#]$

[+ve or -ve Forward Rate / %]

Fixing Rate_n

Adjustment

Settlement Rate

Settlement Rate Option (Spot Rate Reference)

Source from which Fixing Rates are derived)

Settlement Amount

Valuation Date

Settlement Date

Settlement

Settlement Currency

Premium

Premium Payer

Premium Payment Date

Calculation Agent

Governing Definitions

Non-Deliverable

JPMorgan unless stated otherwise

<https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct>

<i>i</i>	Averaging Dates _i	Weight _i
1	[Date]	[Weight]
2	[Date]	[Weight]
...

$$Adjustment + 1 / \left[\frac{\sum_{i=1}^n (1 / Fixing\ Rate_i \times Weight_i)}{\sum_{i=1}^n Weight_i} \right]$$

Harmonic

$$(1 + Adjustment) \left[\frac{\sum_{i=1}^n (1 / Fixing\ Rate_i \times Weight_i)}{\sum_{i=1}^n Weight_i} \right]$$

Average Strike Option

Only one field required	Buyer Seller
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Call Currency and Call Currency Amount
Put Currency and Put Currency Amount
Currency Option Style

[CCY & Amount] or [Put Currency Amount / Strike Price] or [Put Currency Amount x Strike Price]
[CCY & Amount] or [Put Currency Amount / Strike Price] or [Put Currency Amount x Strike Price]
European unless stated otherwise
Means the average rate determined by the Calculation Agent as follows, calculated to [dp] decimal places

$$Adjustment + \frac{\sum_{i=1}^n (Fixing\ Rate_i \times Weight_i)}{\sum_{i=1}^n Weight_i}$$

Strike Price

Arithmetic

$$(1 + Adjustment) \frac{\sum_{i=1}^n (Fixing\ Rate_i \times Weight_i)}{\sum_{i=1}^n Weight_i}$$

Where $n = [\#]$

[+ve or -ve Forward Rate / %]

Fixing Rate_n

Adjustment
Settlement Rate
Settlement Rate Option (Spot Rate Reference Source from which Fixing Rates are derived)

Settlement Amount

An amount if positive is payable by the Seller to the Buyer on the Settlement Date

Expiration Date
Settlement Date
Settlement
Settlement Currency
Premium
Premium Payer
Premium Payment Date
Calculation Agent
Governing Definitions

Non-Deliverable

JPMorgan unless stated otherwise

<https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct>

i	Averaging Dates _i	Weight _i
1	[Date]	[Weight]
2	[Date]	[Weight]
...

$$Adjustment + 1 / \left[\frac{\sum_{i=1}^n (1 / Fixing\ Rate_i \times Weight_i)}{\sum_{i=1}^n Weight_i} \right]$$

Harmonic

$$(1 + Adjustment) / \left[\frac{\sum_{i=1}^n (1 / Fixing\ Rate_i \times Weight_i)}{\sum_{i=1}^n Weight_i} \right]$$

Double Average Forward

Only one field required	Base Currency Buyer Terms Currency Buyer
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Base Currency and Base Currency Amount [CCY & Amount] or [Terms Currency Amount / Forward Rate]

[CCY & Amount] or [Base Currency Amount x

Terms Currency and Terms Currency Amount Forward Rate]

Means the average rate determined by the Calculation Agent as follows, calculated to [dp]

$$Adjustment + \frac{\sum_{i=1}^n (Fixing\ Rate_i \times Weight_i)}{\sum_{i=1}^n Weight_i}$$

Forward Rate

$$\frac{Arithmetic}{(1 + Adjustment) \frac{\sum_{i=1}^n (Fixing\ Rate_i \times Weight_i)}{\sum_{i=1}^n Weight_i}}$$

Where $n = \#$

[+ve or -ve Forward Rate / %]

Means the average rate determined by the

Calculation Agent as follows, calculated to [dp]

Settlement Rate

$$\frac{\sum_{j=1}^m (Spot\ Fixing\ Rate_j \times Weight_j)}{\sum_{j=1}^m Weight_j}$$

Arithmetic

Where $m = \#$

Settlement Rate Option (Spot Rate Reference

Source from which Fixing Rates are derived)

Settlement Amount

If positive then JPMorgan pays the Counterparty, if negative then the Counterparty pays JPMorgan:

Valuation Date

Settlement Date

Settlement

Non-Deliverable

Settlement Currency

Premium

Premium Payer

Premium Payment Date

Calculation Agent

JPMorgan unless stated otherwise

Governing Definitions

<https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct>

i	Forward Rate Averaging Dates _i	Weight _i
1	[Date]	[Weight]
2	[Date]	[Weight]
...

j	Spot Averaging Dates _j	Weight _j
1	[Date]	[Weight]
2	[Date]	[Weight]
...

$$Adjustment + 1 / \left[\frac{\sum_{i=1}^n (1 / Fixing\ Rate_i \times Weight_i)}{\sum_{i=1}^n Weight_i} \right]$$

$$(1 + Adjustment) \left[\frac{\sum_{i=1}^n (1 / Fixing\ Rate_i \times Weight_i)}{\sum_{i=1}^n Weight_i} \right]$$

$$1 / \left[\frac{\sum_{j=1}^m (1 / Spot\ Fixing\ Rate_j \times Weight_j)}{\sum_{j=1}^m Weight_j} \right]$$

Harmonic

<https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct>

Double Average Rate Option

Only one field required	Buyer Seller	
Call Currency and Put Currency and Currency Option		[CCY & Amount] or [Put Currency Amount / Strike Price] or [Put Currency Amount x Strike Price] [CCY & Amount] or [Put Currency Amount / Strike Price] or [Put Currency Amount x Strike Price] European unless stated otherwise

Means the average rate determined by the Calculation Agent as follows, calculated to [dp] decimal places

$$Adjustment + \frac{\sum_{i=1}^n (Fixing\ Rate_i \times Weight_i)}{\sum_{i=1}^n Weight_i}$$

Strike Price

Arithmetic

$$(1 + Adjustment) \frac{\sum_{i=1}^n (Fixing\ Rate_i \times Weight_i)}{\sum_{i=1}^n Weight_i}$$

Where $n = [\#]$

[+ve or -ve Forward Rate / %]

Fixing Rate_n

Means the average rate determined by the Calculation Agent as follows, calculated to [dp] decimal places

$$\frac{\sum_{j=1}^m (Spot\ Fixing\ Rate_j \times Weight_j)}{\sum_{j=1}^m Weight_j}$$

Arithmetic

Where $m = [\#]$

Settlement Rate
Option (Spot Rate)

Settlement Amount

An amount if positive is payable by the Seller to the Buyer on the Settlement Date

Expiration Date
Settlement Date

Settlement
Settlement

Premium
Premium Payer

Premium
Calculation Agent

Governing

Non-Deliverable

JPMorgan unless stated otherwise

<https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct>

i	Averaging Dates _i	Weight _i
1	[Date]	[Weight]
2	[Date]	[Weight]
...

j	Spot Averaging Dates _j	Weight _j
1	[Date]	[Weight]
2	[Date]	[Weight]
...

$$Adjustment + 1 / \left[\frac{\sum_{i=1}^n (1 / Fixing\ Rate_i \times Weight_i)}{\sum_{i=1}^n Weight_i} \right]$$

Harmonic

$$(1 + Adjustment) \left[\frac{\sum_{i=1}^n (1 / Fixing\ Rate_i \times Weight_i)}{\sum_{i=1}^n Weight_i} \right]$$

$$1 / \left[\frac{\sum_{j=1}^m (1 / Spot\ Fixing\ Rate_j \times Weight_j)}{\sum_{j=1}^m Weight_j} \right]$$

Harmonic

Currency Basket

Only one field required	Buyer Seller
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Premium

[Call / Put] Strike denominated amount ("Strike Amt Den

[CCY and Amount]

i

1 [CCY and Amount]

2 [CCY and Amount]

3 [Add as applicable for the number of Basket CCY]

[Call / Put] Local amount Ccy *i* ("Amt *i* Local"):

Expiration Date

Settlement Date

Premium Payment Date

Settlement Currency

Calculation Agent

Governing Definitions

The Settlement Amount will be an amount in [CCY] determined as follows;

JPMorgan unless stated otherwise

<https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct>

BASKET Call, DEN Ccy Put *(for reference only, please delete)*

if Ccy *i* is quoted as LocalCCyDenCCy, i.e., number of DenCCy per Local CCy *(for reference only, please delete)*

$$MAX \left(0, \sum_{i=1}^n \left[Amt_{i,Local} \cdot FXfinal_{Den_per_Local_i} \right] - StrikeAmt_{Den} \right)$$

BASKET Call, DEN Ccy Put *(for reference only, please delete)*

if CCy *i* is quoted as DenCCyLocalCCy, i.e., number of Local CCy per Den CCy *(for reference only, please delete)*

$$MAX \left(0, \sum_{i=1}^n \left[Amt_{i,Local} / FXfinal_{Local_per_Den_i} \right] - StrikeAmt_{Den} \right)$$

Denominated CCY Call, BASKET Put *(for reference only, please delete)*

if Ccy *i* is quoted as LocalCCyDenCCy, i.e., number of DenCCy per Local Ccy *(for reference only, please delete)*

$$MAX \left(0, StrikeAmt_{Den} - \sum_{i=1}^n \left[Amt_{i,Local} \cdot FXfinal_{Den_per_Local_i} \right] \right)$$

Denominated CCY Call, BASKET Put *(for reference only, please delete)*

if CCy *i* is quoted as DenCCyLocalCCy, i.e., number of Local CCy per Den Ccy *(for reference only, please delete)*

$$MAX \left(0, StrikeAmt_{Den} - \sum_{i=1}^n \left[Amt_{i,Local} / FXfinal_{Local_per_Den_i} \right] \right)$$

Where:

= [Insert number of CCY's applicable to BASKET)]

(c) $FXfinal_{Den_per_Local_i}$ Term Definitions

i = 1 Means the [CCY / CCY] spot foreign exchange rate expressed as a number of [CCY] required to purchase one [CCY] by reference to [Insert Fixing Source] at [Time and Location] on the Final Valuation Date

i = 2

i = 3 [Add as applicable for the number of Basket CCY]

(c) $FX_{final} \text{ Local_per_Den}_i$ Term Definitions

i = 1 Means the [CCY / CCY] spot foreign exchange rate expressed as a number of [CCY] required to purchase one [CCY] by reference to [Insert Fixing Source] at [Time and Location] on the Final Valuation Date

i = 2

i = 3 [Add as applicable for the number of Basket CCY]

If such Reference Source is not available, by reference to such other source as shall be determined by the Calculation Agent, in good faith

Accumulator Forward

Only one field required	Base Currency Buyer	See Other Terms and Conditions	Fixing Reference Date
	Terms Currency Buyer		
	Premium	See Other Terms and Conditions	
	Base Currency and Base Currency Amount		
	Terms Currency and Terms Currency Amount:		
	Forward Rate		
	Settlement		
Only applicable for cash settlement	Reference Currency		
	Settlement Currency		
	Settlement Rate Option (Spot Rate Reference Source)		
	Valuation Date		
	Settlement Date		
	Maximum Currency Amount		
	Premium Payment Date		
Single Trigger Only with no KO	Trigger Level	The [Base/Terms] Currency and Currency Amount will increase by [CCY and Quantity] for each Fixing Reference Date that the Spot Rate by reference to the Spot Rate Reference Source is equal to or [less/greater] than the Trigger Level	
	Other Terms and Conditions		
Double Trigger Only with no KO	Upper Trigger Level Lower Trigger Level	The [Base/Terms] Currency and Currency Amount will increase by [CCY and Quantity] for each Fixing Reference Date that the Spot Rate by reference to the Spot Rate Reference Source is equal to or less than the Upper Trigger Level and equal to or greater than the Lower Trigger Level	
	Other Terms and Conditions		
Single Trigger Only with KO	Barrier Level Event Period Start Date and Time Event Period End Date and Time Trigger Level	The [Base/Terms] Currency and Currency Amount will increase by [CCY and Quantity] for each Fixing Reference Date that the Spot Rate by reference to the Spot Rate Reference Source is equal to or [less/greater] than the Trigger Level, provided that no Knock-Out event has occurred	
	Other Terms and Conditions		
Double Trigger Only with KO	Barrier Level Event Period Start Date and Time Event Period End Date and Time Upper Trigger Level Lower Trigger Level	The [Base/Terms] Currency and Currency Amount will increase by [CCY and Quantity] for each Fixing Reference Date that the Spot Rate by reference to the Spot Rate Reference Source is equal to or less than the Upper Trigger Level and equal to or greater than the Lower Trigger Level, provided that no Knock-Out event has occurred	
	Other Terms and Conditions		

Calculation Agent
Governing Definitions

JPMorgan unless stated otherwise
<https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct>

Accumulator Option

Only one field required	Buyer	See Other Terms and Conditions See Other Terms and Conditions	<table border="1"> <thead> <tr> <th></th><th>Fixing Reference Date</th></tr> </thead> <tbody> <tr> <td>1</td><td>[Date]</td></tr> <tr> <td>2</td><td>[Date]</td></tr> <tr> <td>...</td><td>...</td></tr> </tbody> </table>		Fixing Reference Date	1	[Date]	2	[Date]
	Fixing Reference Date										
1	[Date]										
2	[Date]										
...	...										
Seller											
Premium											
Call Currency and Call Currency Amount											
Put Currency and Put Currency Amount											
Strike Price											
Only applicable for cash settlement	Settlement										
	Reference Currency										
	Settlement Currency										
	Settlement Rate Option (Spot Rate Reference Source)										
	Valuation Date										
	Settlement Date										
Single Trigger Only with no KO	Maximum Currency Amount	The [Call/Put] Currency and Currency Amount will increase by [CCY and Quantity] for each Fixing Reference Date that the Spot Rate by reference to the Spot Rate Reference Source is equal to or [less/greater] than the Trigger Level									
	Premium Payment Date										
	Trigger Level										
	Other Terms and Conditions										
	Upper Trigger Level										
	Lower Trigger Level										
Double Trigger Only with no KO	Other Terms and Conditions	The [Call/Put] Currency and Currency Amount will increase by [CCY and Quantity] for each Fixing Reference Date that the Spot Rate by reference to the Spot Rate Reference Source is equal to or less than the Upper Trigger Level and equal to or greater than the Lower Trigger Level									
	Barrier Level										
	Event Period Start Date and Time										
	Event Period End Date and Time										
	Trigger Level										
	Other Terms and Conditions										
Single Trigger Only with KO	Barrier Level	The [Call/Put] Currency and Currency Amount will increase by [CCY and Quantity] for each Fixing Reference Date that the Spot Rate by reference to the Spot Rate Reference Source is equal to or [less/greater] than the Trigger Level, provided that no Knock-Out event has occurred									
	Event Period Start Date and Time										
	Event Period End Date and Time										
	Upper Trigger Level										
	Lower Trigger Level										
	Other Terms and Conditions										
Double Trigger Only with KO	Barrier Level	The [Call/Put] Currency and Currency Amount will increase by [CCY and Quantity] for each Fixing Reference Date that the Spot Rate by reference to the Spot Rate Reference Source is equal to or less than the Upper Trigger Level and equal to or greater than the Lower Trigger Level, provided that no Knock-Out event has occurred									
	Event Period Start Date and Time										
	Event Period End Date and Time										
	Upper Trigger Level										
	Lower Trigger Level										
	Other Terms and Conditions										

Calculation Agent
Governing Definitions

JPMorgan unless stated otherwise
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Compound Option

Only one field required

Buyer
Seller

Premium

Expiration Date

Expiration Time

Other Terms and Conditions

The Buyer has the right but not the obligation at the Expiration Time on the Expiration Date of the Compound Option to cause the Underlying Currency Option to become effective.

Underlying Option

Only one field required

Buyer
Seller

Premium

Currency Option Style

European unless stated otherwise

Currency Option Type (Call / Put)

Call Currency and Call Currency Amount

Put Currency and Put Currency Amount

Strike Price

Expiration Date

Expiration Time

Only applicable for American options

Latest Exercise Time
Exercise Period

Settlement Date

Premium Payment Date

Calculation Agent

Governing Definitions

JPMorgan unless stated otherwise

<https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct>

Corr Swap

Notional Currency and Amount
 Strike %
 Settlement
 Settlement Currency
 Currency Pair 1
 Currency Pair 2
 Settlement Rate Option (Spot Rate Reference Source) 1
 Settlement Rate Option (Spot Rate Reference Source) 2
 First Fixing Date
 Last Fixing Date
 Settlement Date
 Premium Amount
 Premium Payer
 Premium Payment Date
 Number of Fixings
 Settlement Rate Option (Spot Rate Reference Source)
 Calculation Agent
 Governing Definitions

Non-Deliverable

i	Fixing Reference Dates $_i$
1	[Date]
2	[Date]
...	...

JPMorgan unless stated otherwise
<https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct>

Formula Rate Amount A

Formula Rate Amount A Payer
 Formula Rate Amount A Payment Date
 Formula Rate Amount A

1 O \times NA \times Maximum

Formula Rate Amount B

Formula Rate Amount B Payer
 Formula Rate Amount B Payment Date
 Formula Rate Amount B

1 O \times NA \times Maximum

Where

Correlation ("C"):

$$C = \frac{\sum_{i=1}^n (U_i - \bar{U})(V_i - \bar{V})}{\sqrt{\sum_{i=1}^n (U_i - \bar{U})^2} \sqrt{\sum_{i=1}^n (V_i - \bar{V})^2}} = \frac{\sum_{i=1}^n (U_i - \bar{U})(V_i - \bar{V})}{\sqrt{\sum_{i=1}^n (U_i - \bar{U})^2} \sqrt{\sum_{i=1}^n (V_i - \bar{V})^2}} \times \frac{1}{n}$$

U_i

Means the Spot Rate 1 on the i^{th}
Fixing Reference Date

U_{i+1}

Means the Spot Rate 1 on the $i+1^{th}$
Fixing Reference Date

V_i

Means the Spot Rate 2 on the i^{th}
Fixing Reference Date

V_{t+1}

Means the Spot Rate 2 on the $i + 1^{\text{th}}$
Fixing Reference Date

Where;

$$u_i = \ln\left(\frac{U_{i+1}}{U_i}\right)$$

$$v_i = \ln\left(\frac{V_{i+1}}{V_i}\right)$$

$n + 1$

the total number of Fixing Reference Dates

Dual Currency Investments

Only one field required	Buyer Seller
-------------------------	-----------------

Premium
Effective Date
Valuation Date
Settlement Date
Principal Currency and Principal Amount
Principal Payer
Principal Payment Date
Alternative Currency
Interest Rate
Day Count Fraction
Final Source Reference Rate

Effective Date

[INTEREST] % p.a

Final Spot Rate

Means the spot foreign exchange rate by reference to the Final Source Reference Rate at [insert Time and Location] on the Valuation Date Notwithstanding that the Valuation Date is not subject to any Business Day Convention, in determining the Final Spot Rate on the Valuation Date, the Calculation Agent may consider historical information consisting of relevant market data in the foreign exchange market

Strike Price

On the Valuation Date;
(a) The Final Spot Rate is equal to or [greater/less] than Strike Price, the Seller shall pay to the Buyer an amount in the Principal Currency equal to the sum of Principal Currency and Principal Amount and the Interest Amount; or
(b) The Final Spot Rate is [greater/less] than Strike Price, the Seller shall pay to the Buyer an amount in the Alternate Currency equal to the sum of Principal Currency and Principal Amount and the Interest Amount converted at the Strike Price.

On the Valuation Date;
(a) The Final Spot Rate is equal to or [greater/less] than Strike Price, the Seller shall pay to the Buyer an amount in the Principal Currency equal to the sum of Principal Currency and Principal Amount and the Interest Amount; or
(b) The Final Spot Rate is [greater/less] than Strike Price, the Seller shall pay to the Buyer an amount in the Alternate Currency equal to the sum of Principal Currency converted at the Strike Price and an amount in the Principal Currency equal to the Interest Amount

Business Days for Effective Date
Business Days for Valuation Date
Business Days for Settlement Date
Calculation Agent
Interest Amount
Governing Definitions

JPMorgan unless stated otherwise

Principle Amount x Interest Rate x Day Count Fraction

<https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct>

[Dual Currency At Expiry Digitals](#)

Only one field required	Buyer Seller Premium First In Strike Price Second In Strike Price First In Strike Price Reference Source Second In Strike Price Reference Source Expiration Date Settlement Date Premium Payment date In-The-Money Amount Settlement In-The-Money Amount	As set forth in Other Terms and Conditions
Other Terms and Conditions		If, on the Expiration Date, by reference to the First In Strike Price Reference Source, as determine by the Calculation Agent, the Spot Rate is equal to or [less / greater] than the First In Strike Price and by reference to the Second In Strike Price Reference Source, as determine by the Calculation Agent, the Spot Rate is equal to or [less / greater] than the Second In Strike Price then the Seller shall pay the Buyer the In-The-Money Amount JPMorgan unless stated otherwise https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct
Calculation Agent Governing Definitions		

Best Of / Worst Of

Only one field required	Buyer Seller Premium Final Valuation Date Final Settlement Date Premium Premium Payment Date Calculation Agent Governing Definitions <u>Option 1</u> Call Currency and Call Currency Amount Put Currency and Put Currency Amount Strike Price Settlement [Settlement Currency:] [Reference Currency:] Settlement Rate Option: <u>Option 2</u> Call Currency and Call Currency Amount Put Currency and Put Currency Amount Strike Price Settlement [Settlement Currency:] [Reference Currency:] Settlement Rate Option: <u>Option i</u> <i>[Add as applicable for the number of Basket CCY]</i> (b) Other Terms and Conditions: WORST OF On the Expiration Date this transaction shall be settled in accordance with the following conditions: 1 If all the three underlying Options are in-the-money from the perspective of the Buyer, then the Seller will select, at its sole discretion, either Option 1 or Option 2 or Option 3 for settlement and notify the Buyer. In the absence of any notification from the Seller, the Option with the lowest positive In-the-Money Amount will be settled. The In-the-Money Amount on all the three underlying Options shall be expressed in [CCY].
-------------------------	---

2 If one or more underlying Options are out-of-the-money from the perspective of the Buyer, the transaction will be deemed terminated and no further payments shall be due from JPMorgan or the Counterparty. The In-the-Money Amount on all the three underlying Options shall be expressed in [CCY]

3 Both parties acknowledge and agree that only one of the Currency Options forming the subject matter of this Confirmation may be exercised on the Expiration Date.

BEST OF

On the Expiration Date this transaction shall be settled in accordance with the following conditions:

1 If all the three underlying Options are in-the-money from the perspective of the Buyer, then the Buyer will select, at its sole discretion, either Option 1 or Option 2 or Option 3 for settlement and notify the Seller. In the absence of any notification from the Buyer, the Option with the highest positive In-the-Money Amount will be settled. The In-the-Money Amount on all the three underlying Options shall be expressed in [CCY].

2 If one or more underlying Options are out-of-the-money from the perspective of the Buyer, the transaction will be deemed terminated and no further payments shall be due from JPMorgan or the Counterparty. The In-the-Money Amount on all the three underlying Options shall be expressed in [CCY]

3 Both parties acknowledge and agree that only one of the Currency Options forming the subject matter of this Confirmation may be exercised on the Expiration Date.

Forward Volatility Agreement

Currency Option 1	Buyer	
	Seller	
	Premium	See Other Terms and Conditions
	Currency Option Style	
	Call Currency and Call Currency Amount	[CCY & Amount] / See Other Terms and Conditions
	Put Currency and Put Currency Amount	[CCY & Amount] / See Other Terms and Conditions
	Strike Price	See Other Terms and Conditions
	Expiration Date	
	Expiration Time	
	Settlement Date	
Currency Option 2	Premium Payment Date	
	Step Date and Step Time	
	Buyer	
	Seller	
	Premium	See Other Terms and Conditions
	Currency Option Style	
	Call Currency and Call Currency Amount	[CCY & Amount] / See Other Terms and Conditions
	Put Currency and Put Currency Amount	[CCY & Amount] / See Other Terms and Conditions
	Strike Price	See Other Terms and Conditions
	Expiration Date	

Other Terms and Conditions

The Strike Price and the Premium for this Transaction will be determined on the Step Date at the Step Time, by JPMorgan, calculated using an agreed Volatility of [%] for the [# of months] [Delta Neutral Straddle / At the Money Forward]

Calculation Agent

JPMorgan unless stated otherwise

Governing Definitions

<https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct>

<p>Hokey Cokey</p>	
Only one field required	<p>Buyer Seller Premium</p>
	<p>Currency Option Style Currency Option Type (Call / Put)</p>
Only one field required when FX pair is stated	<p>Call Currency and Call Currency Amount Put Currency and Put Currency Amount</p>
Only applicable for cash settlement	<p>Settlement Reference Currency Settlement Currency</p>
Only select for non-deliverable currencies	<p>Settlement Rate Option (Spot Rate Reference Source) http://www.emta.org/ndftt.aspx</p> <p>Disruption Fallbacks http://www.emta.org/ndftt.aspx</p> <p>Price Source Disruption http://www.emta.org/ndftt.aspx</p> <p>Other Disruption Fallbacks http://www.emta.org/ndftt.aspx</p> <p>Price Materiality [Applicable to Non-Deliverable C http://www.emta.org/ndftt.aspx</p> <p>Primary Rate [Applicable to Non-Deliverable Curr http://www.emta.org/ndftt.aspx</p> <p>Secondary Rate [Applicable to Non-Deliverable C http://www.emta.org/ndftt.aspx</p> <p>Price Materiality Percentage [Applicable to Non-D http://www.emta.org/ndftt.aspx</p> <p>Relevant Cities for Business Day(s) for Valuation Dat http://www.emta.org/ndftt.aspx</p> <p>Relevant City for Business Day for Settlement Date: http://www.emta.org/ndftt.aspx</p> <p>Deferral Period for Unscheduled Holiday http://www.emta.org/ndftt.aspx</p> <p>Unscheduled Holiday http://www.emta.org/ndftt.aspx</p> <p>Valuation Postponement for Price Source Disruption http://www.emta.org/ndftt.aspx</p> <p>Fallback Survey Valuation Postponement http://www.emta.org/ndftt.aspx</p> <p>Cumulative Events http://www.emta.org/ndftt.aspx</p> <p>Maximum Days of Postponement http://www.emta.org/ndftt.aspx</p>
	<p>Strike Price</p>
	<p>In Strike Price</p>
	<p>Out Strike Price</p>
	<p>Valuation Date / Expiration Date</p>
	<p>Expiration Time</p>
	<p>Settlement Date</p>
	<p>Premium Payment Date</p>
	<p>1. If at [any time from and including the Trade Date to and including] the Expiration Time on the Expiration Date ("Barrier Period"), the Spot Rate, as determined by the Calculation Agent by reference to the Barrier Event Rate Source, is equal to or [greater / less] than the In Strike Price ("Knock In Event"), this Currency Option will be exercisable provided that no Knock Out Event has occurred.</p>
	<p>2. If at [any time from and including the Trade Date to and including] the Expiration Time on the Expiration Date ("Barrier Period"), the Spot Rate, as determined by the Calculation Agent by reference to the Barrier Event Rate Source, is equal to or [greater / less] than the Out Strike Price this Currency Option will not be exercisable ("Knock Out Event").</p>
	<p>Other terms and Conditions</p>
	<p>Barrier Event Rate Source</p>
	<p>Calculation Agent</p>
	<p>Governing Definitions</p>
	<p>JPMorgan unless stated otherwise</p>
	<p>https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct</p>

James Bond

Only one field required

Buyer
Seller

Premium

Currency Option Style

European

Expiration Date

Expiration Time

Settlement Date

Premium Payment Date

Settlement Currency

Settlement Amount

In-the-Money Amount

1. If at no time during the Observation Period the Reference Rate is equal to or greater than the Upper Barrier Rate 1 or equal to or less than the Lower Barrier Rate 1 the In-the-Money Amount will equal **[CCY] [Amount]**

2. If at any time during the Observation Period the Reference Rate is equal to or greater than the Upper Barrier Rate 1 (Knock Out Event 1), provided that at no time the Reference Rate is equal to or less than the Lower Barrier Rate 1 (Knock Out Event 2), and at no time from the occurrence of Knock Out Event 1 to the Expiration Date, the Reference Rate is equal to or greater than the Upper Barrier Rate 2 or equal to or less than the Lower Barrier Rate 2, the In-the-Money Amount will equal **[CCY] [Amount]**

3. If at any time during the Observation Period Knock Out Event 2 occurs, provided no Knock Out Event 1 has occurred, and at no time from the occurrence of Knock Out Event 2 to the Expiration Date, the Reference Rate is equal to or greater than the Upper Barrier Rate 3 or equal to or less than the Lower Barrier Rate 3 the In-the-Money Amount will equal **[CCY] [Amount]**

4. If any subsequent Knock Out Event occurs the In-the-Money Amount will equal Zero

Reference Rate

Lower Barrier Rate 1

Upper Barrier Rate 1

Lower Barrier Rate 2

Upper Barrier Rate 2

Lower Barrier Rate 3

Upper Barrier Rate 3

Observation Period

Calculation Agent

Governing Definitions

The period from and including the Trade Date to and including the Expiration Date

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VarSwap

Vega Currency and Amount ("VA")

Notional Currency and Amount ("NA")

$$NA = \left(\frac{VA}{0.02 \times Strike} \right)$$

Strike %

Settlement

Non-Deliverable

Settlement Currency

Settlement Rate Option (Spot Rate Reference Source)

First Fixing Date

Last Fixing Date

Settlement Date

Premium Amount

Premium Payer

Premium Payment Date

Number of Fixings

Divisor N

Mean Adjusted

Annualization Factor

Calculation Agent

JPMorgan unless stated otherwise

Governing Definitions

<https://www.jpmorgan.com/country/US/en/disclosures/external-business-conduct>

Formula Rate Amount A

Formula Rate Amount A Payer

Formula Rate Amount A Payment Date

If Quantity Currency = Settlement Currency

$$NA \times \text{Maximum} (0, RV^2 - Strike^2)$$

If Quantity Currency ≠ Settlement Currency AND

Quantity Currency = TERMS

$$NA \times \text{Maximum} (0, RV^2 - Strike^2) / S_{n+1}$$

If Quantity Currency ≠ Settlement Currency AND

Quantity Currency = BASE

$$NA \times \text{Maximum} (0, RV^2 - Strike^2) \times S_{n+1}$$

If Quantity Currency ≠ Settlement Currency AND Other
Quantity Currency ≠ Settlement Currency

* NOTE please have FO and MO deal review if using this
formula

$$NA \times \text{Maximum} (0, RV^2 - Strike^2) / ([QuantityCCY / SettlementCCY] FinalFix)$$

Formula Rate Amount B

Formula Rate Amount B Payer

Formula Rate Amount B Payment Date

If Quantity Currency = Settlement Currency

$$NA \times \text{Maximum} (0, \text{Strike}^2 - RV^2)$$

If Quantity Currency \neq Settlement Currency AND
Quantity Currency = TERMS

$$NA \times \text{Maximum} (0, \text{Strike}^2 - RV^2) / S_{n+1}$$

If Quantity Currency \neq Settlement Currency AND
Quantity Currency = BASE

$$NA \times \text{Maximum} (0, \text{Strike}^2 - RV^2) \times S_{n+1}$$

If Quantity Currency \neq Settlement Currency AND Other
Quantity Currency \neq Settlement Currency

* NOTE please have FO and MO deal review if using this
formula

$$NA \times \text{Maximum} (0, \text{Strike}^2 - RV^2) / ([\text{QuantityCCY} / \text{SettlementCCY}] \text{FinalFix})$$

Realised Volatility ("RV")

Calculated as follows

[Mean-adjusted N-1]

$$\begin{aligned} \text{Realised Volatility} &= \sqrt{\frac{\sum_{i=1}^n (u_i - \bar{u})^2}{(n-1) \Delta t}} \\ \bar{u} &= \frac{\sum_{i=1}^n u_i}{n} \\ u_i &= \ln\left(\frac{S_{i+1}}{S_i}\right) \end{aligned}$$

[Mean-adjusted N]

$$\begin{aligned} \text{Realised Volatility} &= \sqrt{\frac{\sum_{i=1}^n (u_i - \bar{u})^2}{(n) \Delta t}} \\ \bar{u} &= \frac{\sum_{i=1}^n u_i}{n} \\ u_i &= \ln\left(\frac{S_{i+1}}{S_i}\right) \end{aligned}$$

[Not Mean-adjusted N-1]

$$\begin{aligned} \text{Realised Volatility} &= \sqrt{\frac{\sum_{i=1}^n u_i^2}{(n-1) \Delta t}} \\ u_i &= \ln\left(\frac{S_{i+1}}{S_i}\right) \end{aligned}$$

[Not Mean-adjusted N]

$$\text{Realised Volatility} = \sqrt{\frac{\sum_{i=1}^n u_i^2}{(n) \Delta t}}$$

$$u_i = \ln \left(\frac{s_{i+1}}{s_i} \right)$$

Where;

$\Delta t = 1 / [\text{INSERT}]$ – *NOTE "Number of Returns / Year" from Athena

S_i = Means the Spot Exchange Rate on the i^{th} Fixing Reference Date

S_{i+1} = Means the Spot Exchange Rate on the $i + 1^{th}$ Fixing Reference Date

$n+1$ = The Total Number of Fixing Reference Dates

VolSwap

Only one field required

Buyer
Seller

Premium

Vega Currency and Notional

Strike %

Settlement

Non-Deliverable

Settlement Currency

Settlement Rate Option (Spot Rate Reference Source)

First Fixing Date

Last Fixing Date

Settlement Date

Premium Payment Date

Number of Fixings

Divisor N

Mean Adjusted

Annualization Factor

Calculation Agent

Governing Definitions

JPMorgan unless stated otherwise

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