

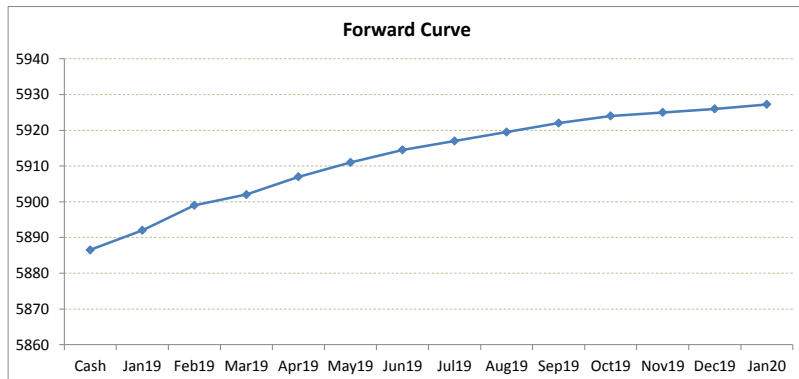
# LME Valuation - Copper

Cash - 3M: 19.50c

Date: 2019-01-08

Cash 5886.50  
 3M 5906.00  
 Jan19 5892.00  
 Feb19 5899.00  
 Mar19 5902.00  
 Apr19 5907.00  
 May19 5911.00  
 Jun19 5914.50  
 Jul19 5917.00  
 Aug19 5919.50  
 Sep19 5922.00  
 Oct19 5924.00  
 Nov19 5925.00  
 Dec19 5926.00  
 Jan20 5927.25

	Cash-Jan19	Cash-Feb19	Cash-Mar19	Cash-Apr19	Cash-May19	Cash-Jun19	Cash-Jul19	Cash-Aug19	Cash-Sep19	Cash-Oct19	Cash-Nov19	Cash-Dec19
Cash	5.50c	12.50c	15.50c	20.50c	24.50c	28.00c	30.50c	33.00c	35.50c	37.50c	38.50c	39.50c
	Jan19-3M	Feb19-3M	Mar19-3M	3M-Apr19	3M-May19	3M-Jun19	3M-Jul19	3M-Aug19	3M-Sep19	3M-Oct19	3M-Nov19	3M-Dec19
3M	14.00c	7.00c	4.00c	1.00c	5.00c	8.50c	11.00c	13.50c	16.00c	18.00c	19.00c	20.00c
	Jan19-Feb19	Feb19-Mar19	Mar19-Apr19	Apr19-May19	May19-Jun19	Jun19-Jul19	Jul19-Aug19	Aug19-Sep19	Sep19-Oct19	Oct19-Nov19	Nov19-Dec19	Dec19-Jan20
3rd wed	7.00c	3.00c	5.00c	4.00c	3.50c	2.50c	2.50c	2.50c	2.00c	1.00c	1.00c	1.25c
	Feb19	Mar19	Apr19	May19	Jun19	Jul19	Aug19	Sep19	Oct19	Nov19	Dec19	Jan20
Jan19	7.00c	10.00c	15.00c	19.00c	22.50c	25.00c	27.50c	30.00c	32.00c	33.00c	34.00c	35.25c
Feb19		3.00c	8.00c	12.00c	15.50c	18.00c	20.50c	23.00c	25.00c	26.00c	27.00c	28.25c
Mar19			3.00c	7.00c	10.50c	13.00c	15.50c	17.50c	19.00c	20.00c	21.00c	22.25c
Apr19				4.00c	7.50c	10.00c	12.50c	15.00c	17.00c	18.00c	19.00c	20.25c
May19					3.50c	6.00c	8.50c	11.00c	13.00c	14.00c	15.00c	16.25c
Jun19						2.50c	5.00c	7.50c	9.50c	10.50c	11.50c	12.75c
Jul19							2.50c	5.00c	7.00c	8.00c	9.00c	10.25c
Aug19								2.50c	4.50c	5.50c	6.50c	7.75c
Sep19									2.00c	3.00c	4.00c	5.25c
Oct19										1.00c	2.00c	3.25c
Nov19											1.00c	2.25c
Dec19												1.25c
Jan20												



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 \*\* Source: Reuters



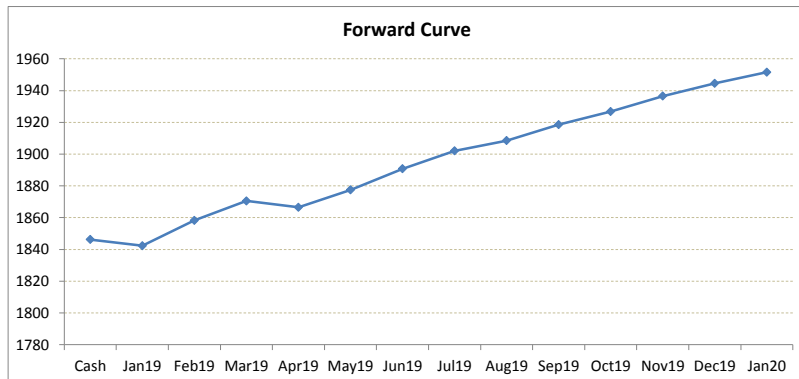
# LME Valuation - Aluminium

Cash - 3M: 18.25c

Date: 2019-01-08

Cash 1846.25  
 3M 1864.50  
 Jan19 1842.25  
 Feb19 1858.25  
 Mar19 1870.50  
 Apr19 1866.50  
 May19 1877.50  
 Jun19 1890.75  
 Jul19 1902.00  
 Aug19 1908.50  
 Sep19 1918.50  
 Oct19 1926.75  
 Nov19 1936.50  
 Dec19 1944.50  
 Jan20 1951.50

	Cash-Jan19	Cash-Feb19	Cash-Mar19	Cash-Apr19	Cash-May19	Cash-Jun19	Cash-Jul19	Cash-Aug19	Cash-Sep19	Cash-Oct19	Cash-Nov19	Cash-Dec19
Cash	4.00b	12.00c	24.25c	20.25c	31.25c	44.50c	55.75c	62.25c	72.25c	80.50c	90.25c	98.25c
	Jan19-3M	Feb19-3M	Mar19-3M	3M-Apr19	3M-May19	3M-Jun19	3M-Jul19	3M-Aug19	3M-Sep19	3M-Oct19	3M-Nov19	3M-Dec19
3M	22.25c	6.25c	6.00b	2.00c	13.00c	26.25c	37.50c	44.00c	54.00c	62.25c	72.00c	80.00c
	Jan19-Feb19	Feb19-Mar19	Mar19-Apr19	Apr19-May19	May19-Jun19	Jun19-Jul19	Jul19-Aug19	Aug19-Sep19	Sep19-Oct19	Oct19-Nov19	Nov19-Dec19	Dec19-Jan20
3rd wed	16.00c	12.25c	4.00b	11.00c	13.25c	11.25c	6.50c	10.00c	8.25c	9.75c	8.00c	7.00c
	Feb19	Mar19	Apr19	May19	Jun19	Jul19	Aug19	Sep19	Oct19	Nov19	Dec19	Jan20
Jan19	16.00c	28.25c	24.25c	35.25c	48.50c	59.75c	66.25c	76.25c	84.50c	94.25c	102.25c	109.25c
	Feb19	Mar19	Apr19	May19	Jun19	Jul19	Aug19	Sep19	Oct19	Nov19	Dec19	Jan20
		12.25c	8.25c	19.25c	32.50c	43.75c	50.25c	60.25c	68.50c	78.25c	86.25c	93.25c
		Mar19	Apr19	May19	Jun19	Jul19	Aug19	Sep19	Oct19	Nov19	Dec19	Jan20
			4.00b	7.00c	20.25c	31.50c	38.00c	48.00c	56.25c	66.00c	74.00c	81.00c
			Apr19	May19	Jun19	Jul19	Aug19	Sep19	Oct19	Nov19	Dec19	Jan20
				11.00c	24.25c	35.50c	42.00c	52.00c	60.25c	70.00c	78.00c	85.00c
				May19	Jun19	Jul19	Aug19	Sep19	Oct19	Nov19	Dec19	Jan20
					13.25c	24.50c	31.00c	41.00c	49.25c	59.00c	67.00c	74.00c
					Jun19	Jul19	Aug19	Sep19	Oct19	Nov19	Dec19	Jan20
						11.25c	17.75c	27.75c	36.00c	45.75c	53.75c	60.75c
						Jul19	Aug19	Sep19	Oct19	Nov19	Dec19	Jan20
							6.50c	16.50c	24.75c	34.50c	42.50c	49.50c
							Aug19	Sep19	Oct19	Nov19	Dec19	Jan20
								10.00c	18.25c	28.00c	36.00c	43.00c
								Sep19	Oct19	Nov19	Dec19	Jan20
									8.25c	18.00c	26.00c	33.00c
									Oct19	Nov19	Dec19	Jan20
										9.75c	17.75c	24.75c
										Nov19	Dec19	Jan20
											8.00c	15.00c
											Dec19	Jan20
												7.00c



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 \*\* Source: Reuters

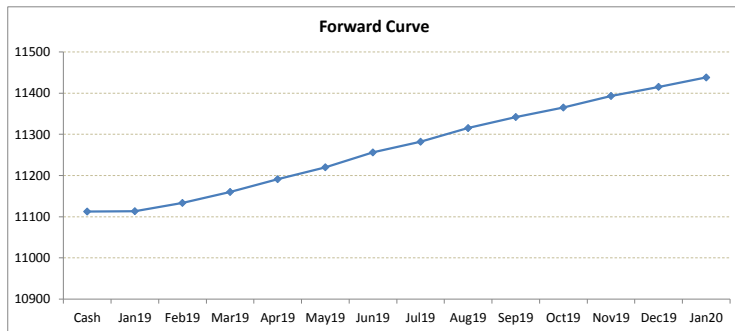
# LME Valuation - Nickel

Cash - 3M: 67.50c

Date: 2019-01-08

**Cash 11112.50**  
**3M 11180.00**  
 Jan19 11113.50  
 Feb19 11133.50  
 Mar19 11160.00  
 Apr19 11191.00  
 May19 11220.00  
 Jun19 11256.00  
 Jul19 11282.00  
 Aug19 11315.00  
 Sep19 11342.00  
 Oct19 11365.00  
 Nov19 11393.00  
 Dec19 11415.00  
 Jan20 11438.00

	Cash-Jan19	Cash-Feb19	Cash-Mar19	Cash-Apr19	Cash-May19	Cash-Jun19	Cash-Jul19	Cash-Aug19	Cash-Sep19	Cash-Oct19	Cash-Nov19	Cash-Dec19
Cash	1.00c	21.00c	47.50c	78.50c	107.50c	143.50c	169.50c	202.50c	229.50c	252.50c	280.50c	302.50c
	Jan19-3M	Feb19-3M	Mar19-3M	3M-Apr19	3M-May19	3M-Jun19	3M-Jul19	3M-Aug19	3M-Sep19	3M-Oct19	3M-Nov19	3M-Dec19
3M	66.50c	46.50c	20.00c	11.00c	40.00c	76.00c	102.00c	135.00c	162.00c	185.00c	213.00c	235.00c
	Jan19-Feb19	Feb19-Mar19	Mar19-Apr19	Apr19-May19	May19-Jun19	Jun19-Jul19	Jul19-Aug19	Aug19-Sep19	Sep19-Oct19	Oct19-Nov19	Nov19-Dec19	Dec19-Jan20
3rd wed	20.00c	26.50c	31.00c	29.00c	36.00c	26.00c	33.00c	27.00c	23.00c	28.00c	22.00c	23.00c
	Feb19	Mar19	Apr19	May19	Jun19	Jul19	Aug19	Sep19	Oct19	Nov19	Dec19	Jan20
Jan19	20.00c	46.50c	77.50c	106.50c	142.50c	168.50c	201.50c	228.50c	251.50c	279.50c	301.50c	324.50c
	Feb19	26.50c	57.50c	86.50c	122.50c	148.50c	181.50c	208.50c	231.50c	259.50c	281.50c	304.50c
		Mar19	31.00c	60.00c	96.00c	122.00c	155.00c	182.00c	205.00c	233.00c	255.00c	278.00c
			Apr19	29.00c	65.00c	91.00c	124.00c	151.00c	174.00c	202.00c	224.00c	247.00c
				May19	36.00c	62.00c	95.00c	122.00c	145.00c	173.00c	195.00c	218.00c
					Jun19	26.00c	59.00c	86.00c	109.00c	137.00c	159.00c	182.00c
						Jul19	33.00c	60.00c	83.00c	111.00c	133.00c	156.00c
							Aug19	27.00c	50.00c	78.00c	100.00c	123.00c
								Sep19	23.00c	51.00c	73.00c	96.00c
									Oct19	28.00c	50.00c	73.00c
										Nov19	22.00c	45.00c
											Dec19	23.00c



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 \*\* Source: Reuters



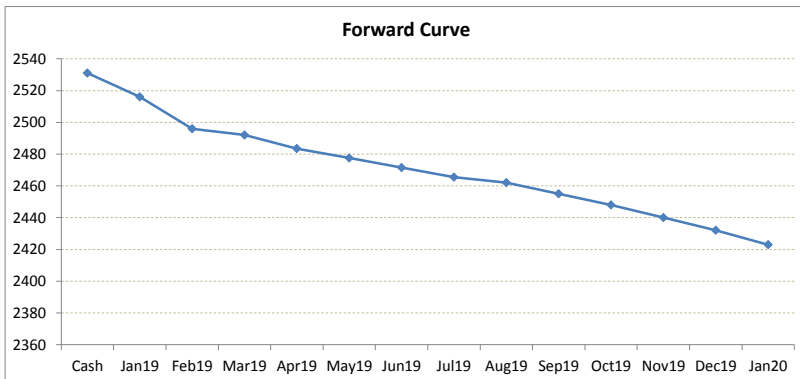
# LME Valuation - Zinc

Cash - 3M: **46.00b**

Date: **2019-01-08**

**Cash 2531.00**  
**3M 2485.00**  
 Jan19 **2516.00**  
 Feb19 **2496.00**  
 Mar19 **2492.00**  
 Apr19 **2483.50**  
 May19 **2477.50**  
 Jun19 **2471.50**  
 Jul19 **2465.50**  
 Aug19 **2462.00**  
 Sep19 **2455.00**  
 Oct19 **2448.00**  
 Nov19 **2440.00**  
 Dec19 **2432.00**  
 Jan20 **2423.00**

	Cash-Jan19	Cash-Feb19	Cash-Mar19	Cash-Apr19	Cash-May19	Cash-Jun19	Cash-Jul19	Cash-Aug19	Cash-Sep19	Cash-Oct19	Cash-Nov19	Cash-Dec19
Cash	15.00b	35.00b	39.00b	47.50b	53.50b	59.50b	65.50b	69.00b	76.00b	83.00b	91.00b	99.00b
	Jan19-3M	Feb19-3M	Mar19-3M	3M-Apr19	3M-May19	3M-Jun19	3M-Jul19	3M-Aug19	3M-Sep19	3M-Oct19	3M-Nov19	3M-Dec19
3M	31.00b	11.00b	7.00b	1.50b	7.50b	13.50b	19.50b	23.00b	30.00b	37.00b	45.00b	53.00b
	Jan19-Feb19	Feb19-Mar19	Mar19-Apr19	Apr19-May19	May19-Jun19	Jun19-Jul19	Jul19-Aug19	Aug19-Sep19	Sep19-Oct19	Oct19-Nov19	Nov19-Dec19	Dec19-Jan20
3rd wed	20.00b	4.00b	8.50b	6.00b	6.00b	6.00b	3.50b	7.00b	7.00b	8.00b	8.00b	9.00b
	Feb19	Mar19	Apr19	May19	Jun19	Jul19	Aug19	Sep19	Oct19	Nov19	Dec19	Jan20
Jan19	20.00b	24.00b	32.50b	38.50b	44.50b	50.50b	54.00b	61.00b	68.00b	76.00b	84.00b	93.00b
	Feb19	4.00b	12.50b	18.50b	24.50b	30.50b	34.00b	41.00b	48.00b	56.00b	64.00b	73.00b
		Mar19	8.50b	14.50b	20.50b	26.50b	30.00b	37.00b	44.00b	52.00b	60.00b	69.00b
			Apr19	6.00b	12.00b	18.00b	21.50b	28.50b	35.50b	43.50b	51.50b	60.50b
				May19	6.00b	12.00b	15.50b	22.50b	29.50b	37.50b	45.50b	54.50b
					Jun19	6.00b	9.50b	16.50b	23.50b	31.50b	39.50b	48.50b
						Jul19	3.50b	10.50b	17.50b	25.50b	33.50b	42.50b
							Aug19	7.00b	14.00b	22.00b	30.00b	39.00b
								Sep19	7.00b	15.00b	23.00b	32.00b
									Oct19	8.00b	16.00b	25.00b
										Nov19	8.00b	17.00b
											Dec19	9.00b
												Jan20



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 \*\* Source: Reuters



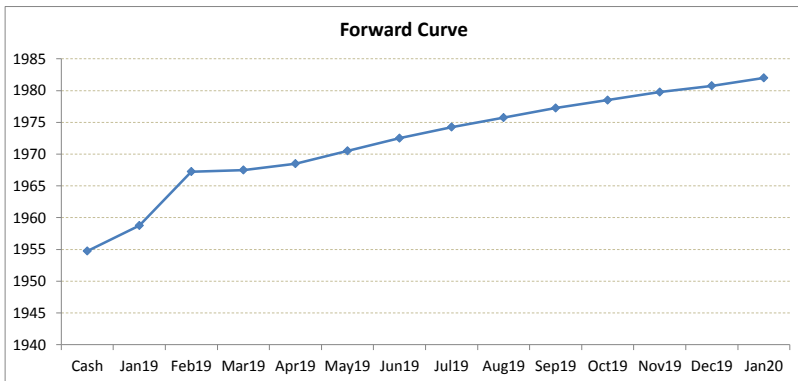
# LME Valuation - Lead

Cash - 3M: 13.25c

Date: 2019-01-08

**Cash 1954.75**  
**3M 1968.00**  
 Jan19 **1958.75**  
 Feb19 **1967.25**  
 Mar19 **1967.50**  
 Apr19 **1968.50**  
 May19 **1970.50**  
 Jun19 **1972.50**  
 Jul19 **1974.25**  
 Aug19 **1975.75**  
 Sep19 **1977.25**  
 Oct19 **1978.50**  
 Nov19 **1979.75**  
 Dec19 **1980.75**  
 Jan20 **1982.00**

	Cash-Jan19	Cash-Feb19	Cash-Mar19	Cash-Apr19	Cash-May19	Cash-Jun19	Cash-Jul19	Cash-Aug19	Cash-Sep19	Cash-Oct19	Cash-Nov19	Cash-Dec19	
Cash	4.00c	12.50c	12.75c	13.75c	15.75c	17.75c	19.50c	21.00c	22.50c	23.75c	25.00c	26.00c	
	Jan19-3M	Feb19-3M	Mar19-3M	3M-Apr19	3M-May19	3M-Jun19	3M-Jul19	3M-Aug19	3M-Sep19	3M-Oct19	3M-Nov19	3M-Dec19	
3M	9.25c	0.75c	0.50c	0.50c	2.50c	4.50c	6.25c	7.75c	9.25c	10.50c	11.75c	12.75c	
	Jan19-Feb19	Feb19-Mar19	Mar19-Apr19	Apr19-May19	May19-Jun19	Jun19-Jul19	Jul19-Aug19	Aug19-Sep19	Sep19-Oct19	Oct19-Nov19	Nov19-Dec19	Dec19-Jan20	
3rd wed	8.50c	0.25c	1.00c	2.00c	2.00c	1.75c	1.50c	1.50c	1.25c	1.25c	1.00c	1.25c	
	Feb19	Mar19	Apr19	May19	Jun19	Jul19	Aug19	Sep19	Oct19	Nov19	Dec19	Jan20	
Jan19	8.50c	8.75c	9.75c	11.75c	13.75c	15.50c	17.00c	18.50c	19.75c	21.00c	22.00c	23.25c	
Feb19		0.25c	1.25c	3.25c	5.25c	7.00c	8.50c	10.00c	11.25c	12.50c	13.50c	14.75c	
Mar19			1.00c	3.00c	5.00c	6.75c	8.25c	9.75c	11.00c	12.25c	13.25c	14.50c	
Apr19				2.00c	4.00c	5.75c	7.25c	8.75c	10.00c	11.25c	12.25c	13.50c	
May19					2.00c	3.75c	5.25c	6.75c	8.00c	9.25c	10.25c	11.50c	
Jun19						1.75c	3.25c	4.75c	6.00c	7.25c	8.25c	9.50c	
Jul19							1.50c	3.00c	4.25c	5.50c	6.50c	7.75c	
Aug19								1.50c	2.75c	4.00c	5.00c	6.25c	
Sep19									1.25c	2.50c	3.50c	4.75c	
Oct19										1.25c	2.25c	3.50c	
Nov19											1.00c	2.25c	
Dec19												1.25c	
Jan20													1.25c



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 \*\* Source: Reuters

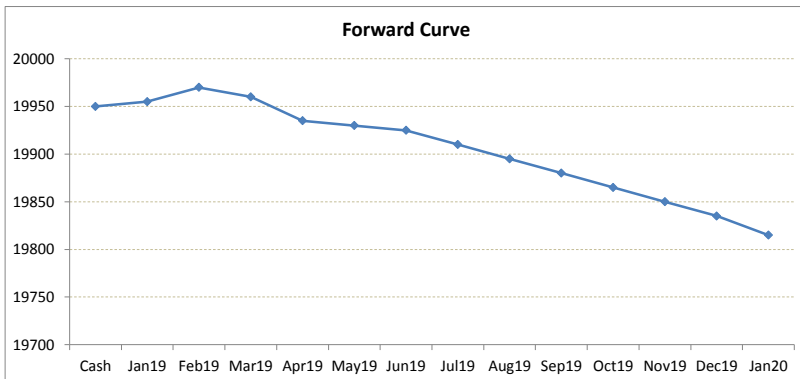
# LME Valuation - Tin

Cash - 3M: **10.00b**

Date: **2019-01-08**

Cash **19950.00**  
**3M 19940.00**  
 Jan19 **19955.00**  
 Feb19 **19970.00**  
 Mar19 **19960.00**  
 Apr19 **19935.00**  
 May19 **19930.00**  
 Jun19 **19925.00**  
 Jul19 **19910.00**  
 Aug19 **19895.00**  
 Sep19 **19880.00**  
 Oct19 **19865.00**  
 Nov19 **19850.00**  
 Dec19 **19835.00**  
 Jan20 **19815.00**

	Cash-Jan19	Cash-Feb19	Cash-Mar19	Cash-Apr19	Cash-May19	Cash-Jun19	Cash-Jul19	Cash-Aug19	Cash-Sep19	Cash-Oct19	Cash-Nov19	Cash-Dec19
Cash	5.00c	20.00c	10.00c	15.00b	20.00b	25.00b	40.00b	55.00b	70.00b	85.00b	100.00b	115.00b
	Jan19-3M	Feb19-3M	Mar19-3M	3M-Apr19	3M-May19	3M-Jun19	3M-Jul19	3M-Aug19	3M-Sep19	3M-Oct19	3M-Nov19	3M-Dec19
3M	15.00b	30.00b	20.00b	5.00b	10.00b	15.00b	30.00b	45.00b	60.00b	75.00b	90.00b	105.00b
	Jan19-Feb19	Feb19-Mar19	Mar19-Apr19	Apr19-May19	May19-Jun19	Jun19-Jul19	Jul19-Aug19	Aug19-Sep19	Sep19-Oct19	Oct19-Nov19	Nov19-Dec19	Dec19-Jan20
3rd wed	15.00c	10.00b	25.00b	5.00b	5.00b	15.00b	15.00b	15.00b	15.00b	15.00b	15.00b	20.00b
	Feb19	Mar19	Apr19	May19	Jun19	Jul19	Aug19	Sep19	Oct19	Nov19	Dec19	Jan20
Jan19	15.00c	5.00c	20.00b	25.00b	30.00b	45.00b	60.00b	75.00b	90.00b	105.00b	120.00b	140.00b
	Feb19	10.00b	35.00b	40.00b	45.00b	60.00b	75.00b	90.00b	105.00b	120.00b	135.00b	155.00b
		Mar19	25.00b	30.00b	35.00b	50.00b	65.00b	80.00b	95.00b	110.00b	125.00b	145.00b
			Apr19	5.00b	10.00b	25.00b	40.00b	55.00b	70.00b	85.00b	100.00b	120.00b
				May19	5.00b	20.00b	35.00b	50.00b	65.00b	80.00b	95.00b	115.00b
					Jun19	15.00b	30.00b	45.00b	60.00b	75.00b	90.00b	110.00b
						Jul19	15.00b	30.00b	45.00b	60.00b	75.00b	95.00b
							Aug19	15.00b	30.00b	45.00b	60.00b	80.00b
								Sep19	15.00b	30.00b	45.00b	65.00b
									Oct19	15.00b	30.00b	50.00b
										Nov19	15.00b	35.00b
											Dec19	20.00b
												Jan20



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 \*\* Source: Reuters

