

Testimony of Kevin Hearle

FTC v. Meta Platforms April 24, 2025

Assignment



- (1) Meta's profitability relative to an appropriate benchmark;
- (2a) The valuation methods Meta used to justify the \$19B expected purchase cost for acquiring WhatsApp, and,
- (2b) Relatedly, the size and sources of any dollar transaction premium;
- (3) WhatsApp's revenues and expenses since its acquisition by Meta;
- (4),(5) The verifiability of Meta's claim of infrastructure and other cost savings for Instagram and WhatsApp.

Summary of Conclusions

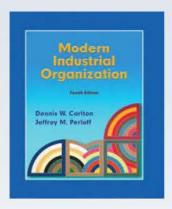


- (1) Meta has been highly profitable since its inception.
- (2a) Neither Meta's framework for WhatsApp's valuation nor the analyses associated with it constitute standard valuations.
- (2b) Meta's expected \$19B purchase cost for WhatsApp constituted a transaction premium of 135%.
- (3) Meta's data shows billions of dollars of losses for WhatsApp.
- (4),(5) Meta has not substantiated its claimed cost savings for Instagram and WhatsApp in a way that is verifiable.

Meta's Economic Profits

Economic Profits





Carlton & Perloff:

"To determine whether a firm is earning an excess rate of return, the proper comparison is between the rate of return actually earned and the competitive riskadjusted rate of return"



Fisher & McGowan:

"[l]t is clear that it is the economic rate of return that is equalized within an industry in long-run competitive equilibrium and (after adjustment for risk) equalized everywhere in a competitive economy in long-run equilibrium."

PX9005, Hearle Initial Report, ¶ 79 FTC v. Meta Platforms, Inc.

Internal Rate of Return (IRR) Measures the Rate of Return Meta Actually Earned



$$NPV = C_0 + \frac{C_1}{1 + IRR} + \frac{C_2}{(1 + IRR)^2} + \dots + \frac{C_N}{(1 + IRR)^N} = 0$$

Solve for IRR, where:

- NPV = the project's Net Present Value, which is set to zero;
- C_x = the project's cash flows during year x;
- N = the project's expected lifetime in years; and
- IRR = the annual Internal Rate of Return.

Meta's Internal Rate of Return (IRR)



Table 7
Estimated Average Annual Rate of Return (IRR) Earned by Meta Since Inception (\$ Millions)

			+			- Increase in	
		- Taxes on	Depreciation &	- Capital		Non-Cash Net Working	- F C1
Year	EBIT			Expenditures		_	Flow
[A]	[B]	[C]	[D]	[E]	[F]	[G]	[Н
2004	\$0	\$0	\$0	-\$6	\$0	\$0	-50
2005	-\$21	\$0	\$1	\$0	\$0	\$2	-\$19
2006	-\$7	\$0	\$4	-\$19	\$0	-\$4	-\$26
2007	-\$124	\$2	\$16	-\$61	-\$2	\$28	-\$14
2008	-\$55	\$0	\$50	-\$89	SO	-\$32	-\$120
2009	\$262	-\$26	\$77	-\$81	-\$18	-\$119	\$9:
2010	\$1,032	-\$412	\$139	-\$383	-\$82	-\$51	\$24
2011	\$1,756	-\$720	\$323	-\$787	-\$82	\$102	\$593
2012	\$538	-\$480	\$649	-\$1,601	-\$1,185	-\$878	-\$2,95
2013	\$2,804	-\$1,276	\$1,011	-\$1,753	-\$445	\$194	\$53
2014	\$4,994	-\$2,003	\$1,243	-\$2,074	-\$19,319	-\$121	-\$17,28
2015	\$6,225	-\$2,515	\$1,945	-\$2,642	-\$313	-\$419	\$2,28
2016	\$12,427	-\$2,287	\$2,342	-\$4,803	-\$197	-\$777	\$6,70
2017	\$20,203	-\$4,566	\$3,025	-\$6,733	-\$445	-\$1,015	\$10,46
2018	\$24,913	-\$3,189	\$4,315	-\$13,915	-\$137	\$743	\$12,73
2019	\$23,986	-\$6,116	\$5,741	-\$15,654	-\$508	\$6,032	\$13,48
2020	\$32,671	-\$3,986	\$6,862	-\$15,767	-\$388	-\$2,418	\$16,97
2021	\$46,753	-\$7,808	\$7,967	-\$19,367	-\$851	\$1,202	\$27,89
2022	\$28,944	-\$5,644	\$8,686	-\$32,281	-\$1,312	\$5,748	\$4,14
2023	\$43,000	-\$8,170	\$9,000	-\$30,000	\$0	\$0	\$13,830
2024	\$46,000	-\$7,820	\$13,000	-\$37,000	SO.	SO.	\$14.18
2025							
2026							
2027							
2028							
2029							
2030							

Sources and notes:

41.4%

Meta Platforms, Inc. (c/o Facebook, Inc.), Annual Report (Form 10-K) (Jan. 29, 2015; Jan. 28, 2016; Feb. 3, 2017; Feb. 1, 2018; Jan. 31, 2019; Jan. 30, 2020; Jan. 28, 2021; Feb. 3, 2022; Feb. 2, 2023) (years ended 2014-2022); Facebook Inc., Registration Statement (Form S-1) (Feb. 1, 2012); FB_FTC_CID_08152062 and FB_FTC_CID_08766247 (2006-2009 Meta Audited Financial Statements); and FTC-META-012478663 (Meta's consolidated financial information for 2004 and 2005).

- [B]: From reported Income from operations.
- [C]: Calculated as effective tax rates x [B].
- [E]: Figures through 2022 include Principal payments on finance leases.
- [F]: Figures through 2022 include Issuance of common stock related to acquistions.
- [G]: Calculated change in Net Working Capital, which is defined as: Current Assets (excluding cash and marketable securities) minus Current Liabilities (excluding interest-bearing items).
- [H]: Cash flows projected for 2023 onwards derived from Meta's 2023 LRP. FTC-META-012554358 at 358, 362.

Average annual rate of return between 36.4% to 41.4% per year

UNDER SEAL

2004-2022: 2004-2030:

Meta's Weighted Average Cost of Capital (WACC)



Table 8
Estimates of Meta's Weighted Average Cost of Capital (WACC)

		Capital books		Inflation		Capex llions)	Average	Max
Year			Bloomberg	The state of the s	Nominal			
[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]
2004	16.5%	19.3%		14.8	-\$6	-\$6	17.9%	19.3%
2005	17.1%	20.4%		13.6	\$0	\$0	18.7%	20.4%
2006	16.2%	18.4%		12.5	-\$19	-\$16	17.3%	18.4%
2007	13.9%	17.0%	10.8%	10.6	-\$61	-\$44	13.9%	17.0%
2008	12.1%	13.9%	11.7%	10.1	-\$89	-\$60	12.6%	13.9%
2009	10.1%	10.3%	9.5%	9.7	-\$81	-\$53	10.0%	10.3%
2010	10.8%	11.8%	8.3%	9.4	-\$383	-\$243	10.3%	11.8%
2011	11.3%	11.8%	8.6%	9.0	-\$787	-\$480	10.5%	11.8%
2012	9.7%	9.8%	7.2%	8.7	-\$1,601	-\$945	8.9%	9.8%
2013	9.4%	9.3%	7.3%	8.5	-\$1,753	-\$1,008	8.6%	9.4%
2014	8.7%		7.4%	8.4	-\$2,074	-\$1,170	8.0%	8.7%
2015	8.9%		8.1%	8.1	-\$2,642	-\$1,437	8.5%	8.9%
2016			9.2%	7.8	-\$4,803	-\$2,532	9.2%	9.2%
2017			9.9%	7.6	-\$6,733	-\$3,464	9.9%	9.9%
2018			11.4%	7.5	-\$13,915	-\$7,017	11.4%	11.4%
2019			9.9%	7.4	-\$15,654	-\$7,808	9.9%	9.9%
2020			8.4%	7.3	-\$15,767	-\$7,796	8.4%	8.4%
2021			9.8%	7.4	-\$19,367	-\$9,633	9.8%	9.8%
2022			10.0%	7.2	-\$32,281	-\$15,780	10.0%	10.0%
2023			9.9%	7.1	-\$30,000	-\$14,446	9.9%	9.9%
Weighte	ed Averag	es (annual	WACCs we	ighted by	real annu	al Capex)	9.8%	9.8%

Sources and notes:

[B], [C]: SIC Composite. SIC Codes for Meta obtained from S&P Capital IQ. Cost of Capital Yearbook, Ibbotson Associates c/o Morningstar Inc. (Years 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013); Valuation Handbook Industry Cost of Capital, Duff & Phelps (Years 2014, 2015).

[D]: Bloomberg Finance L.P. (BMG -- WACC DATA- META.xlsx).

[E]: Federal Reserve Economic Data, https://fred.stlouisfed.org, Series CUUR0000SEEE.

[F]: Table 7, column [E].

[G]: = $[F] \times [E] \div ([E] \text{ for } 2004)$.

[H]: Average of columns [B] through [D].

[I]: Maximum across columns [B] through [D].

Annual WACC ~10% per year

Illustration of Meta's Profitability



- Meta has earned an average annual rate of return on its investments between 36.4% to 41.4% per year.
- Meta's annual WACC was approximately 10% per year over a comparable time period.

Cumulative Cash Flows For A \$100 Investment That Earns an IRR of 10% Versus 40%



Assumes the investment has a useful life of 7 years.

Meta's Valuation Framework for WhatsApp

WhatsApp's Expected \$19 Billion Purchase Cost



facebook

Transaction Summary

	Acquisition of Cobalt
Company Overview	 Cross-platform mobile messaging app that allows messages to be exchanged without paying SMS charges Supports photo, video, and audio messages Founded in 2009 by Jan Koum and Brian Acton (ex-Yahoo employees). Funded by Sequoia. Headquarters in Mountain View, CA. Currently ~55 employees Business model: was \$1/app download – now subscription (free first year, in some cases \$1 thereafter) 460 MAU, mostly international (5% or 20M MAU in the U.S.) and growing extremely quickly (1.5M new registered users per day)
Structure	 Total cost of \$19B (~\$12B stock + \$4B cash as purchase price; \$3B in retention RSUs) Other deal terms such as breakup fee still to be negotiated
Integration Plan	 Jan Koum will join the Facebook Board of Directors Cobalt will continue to operate in its Mountain View headquarters and retain its brand and operations relatively unchanged; we will provide recruiting, policy, comms, legal, finance, ops/infrastructure resources to Cobalt as required

"Total cost of \$19B (~\$12B stock + \$4B cash as purchase price; \$3B in retention RSUs)"

FB FTC CID 10650596

Confidential Materials - Do Not Distribute

PX10858-004

Valuation Framework in WhatsApp Board Presentation



facebook

Valuation Framework: Future Value

Implied 2024 Operating and Financial Metrics Based on \$19B 2014 Valuation

1	Cobalt
2014 EV (\$B)	\$19
Discount Rate	10%
Required 2024 EV (\$B)	\$49
Revenue Multiple	12.0x
Required Net Revenue (\$B)	\$4.1

	2	024 ARPU	I
	Reve	enue Mult	iple
People (B)	8.0x	12.0x	16.0x
1.5	\$4.11	\$2.74	\$2.05
2.0	3.08	2.05	1.54
2.5	2.46	1.64	1.23
Implied EBITDA Multiple (1)	13.3x	20.0x	26.7x

Does not take into account synergies or other benefits of ownership

1-----

In 2024, assuming Cobalt is worth 12x revenue and has 2 billions users, it would need to have \$2.05 in ARPU, which today is less than Line's ARPU and when adjusted for inflation is \$1.53. (2)

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Source: Public filings; Wall Street research; ComScore; CapitallQ as of February 14, 2014.

(1) Assumes 60% margin on revenue.

(2) Discounted to present at CPI of 3%.

FB_FTC_CID_10650596

PX10858-012

WhatsApp's Pre-Acquisition Average Revenue Per User



Table 2 WhatsApp's Pre-Acquisition Revenue and EBITDA in 2013 and 2014 (\$ millions)

	WhatsApp	Reported Year Ended 12/31/2013	Reported 6 Months Through 6/30/2014	2014 Annualized	Estimates in Meta's Board Presentation
Row	- Constant	[B]	[C]	[D]	[E]
[1]	Revenue	\$10.2	\$15.3	\$30.6	\$46.0
[2]	EBITDA	-\$39.6	-\$25.7	-\$51.4	#N/A
[3]	Average MAUs (millions)	281.5	478.9		460.0
[4]	ARPU	\$0.036	\$0.032		\$0.100

Sources and notes:

- [B]: Facebook, Inc., Current Report (Form 8-K/A), Ex. 99.1 at 4-6 (Oct. 28, 2014).
- [C]: Facebook, Inc., Current Report (Form 8-K/A), Ex. 99.2 at 2-3 (Oct. 28, 2014).
- $[D]: = [C] \times 2.$
- [E]: Revenue in row [1] calculated from FB_FTC_CID_00002272 at 278 as 460 million (Current MAUs) x \$0.10 (2013 ARPU).
- [2]: "EBITDA" stands for Earnings Before Interest, Taxes, Depreciation, and Amortization, and is a measure of a company's gross cash flow generation before it pays for income taxes, debt service, and capital investments and before recognizing certain working capital (revenue and expense timing) adjustments. The EBITDA values calculated from WhatsApp's financial statements in columns [B] and [C] reflect add backs of all reported share-based compensation expense.
- [3]: [B]-[C]: Calculated from FTC-META-012004977 by averaging month-end totals. [4]: = [1] \div [3].

2013 ARPU = \$0.036 H1 2014 ARPU = \$0.032

WhatsApp Post-Acquisition Average Revenue Per User



[A] Period	[I] Implied Nominal Average ARPU CTWA at 0%	[I] Implied Nominal Average ARPU CTWA at %	[I] Implied Nominal Average ARPU CTWA at %
Q4 2014			
2015			
2016			
2017			
2018			
2019			
2020			
2021			
H1 2022			
Average for 2015 through H1 2022			

Valuation Framework in WhatsApp Board Presentation



facebook

Valuation Framework: Future Value

Implied 2024 Operating and Financial Metrics Based on \$19B 2014 Valuation

	Cobalt
2014 EV (\$B)	\$19
Discount Rate	10%
Required 2024 EV (\$B)	\$49
Revenue Multiple	12.0x
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	2024 ARPU				
	Rev	enue Mult	iple		
People (B)	8.0x	12.0x	16.0x		
1.5	\$4.11	\$2.74	\$2.05		
2.0	3.08	2.05	1.54		
2.5	2.46	1.64	1.23		
Implied EBITDA Multiple (1)	13.3x	20.0x	26.7x		

Does not take into account synergies or other benefits of ownership

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In 2024, assuming Cobalt is worth 12x revenue and has 2 billions users, it would need to have \$2.05 in ARPU, which today is less than Line's ARPU and when adjusted for inflation is \$1.53. (2)

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Source: Public filings; Wall Street research; ComScore; CapitallQ as of February 14, 2014.

Assumes 60% margin on revenue.

(2) Discounted to present at CPI of 3%.

FB_FTC_CID_10650596

PX10858-012

Premium Meta Paid for WhatsApp

Elements of Transaction Premium Calculation



1. Meta's Total Expected Purchase Cost of WhatsApp = \$19 Billion

2. Standalone Valuation of WhatsApp Prior to the Acquisition

PX9005, Hearle Report ¶ 37 FTC v. Meta Platforms, Inc

Pre-Acquisition Valuations of WhatsApp as a Standalone Company

WhatsAnn



Table 3

Pre-Acquisition Valuations of WhatsApp As a Standalone Company (\$ millions)

	Preparation Date	Valuation as of Date	Source	Value Basis	Valuation Method	Valuation Estimate	
Row	[A]	[B]	[C]	[D]	[E]	[F]	
[1]	Dec-2010	12/14/2010	Google	n/a	Revenue Multiples and Per User	\$30.0 to \$150.0	
[2]							i
[3]							ı
[4]	Jul-2013	7/17/2013	Sequoia	Equity	Market Transaction	\$1,500.0	
[5]	Oct-2013	9/30/2013	Alvarez & Marsal	E quity	Market Transaction	\$531.6	
[6]	Jan-2014	Jan-2014	Meta Personnel	Enterprise	"Last Financing"	\$10,000.0	
[7]	Jan-2014	Jan-2014	Meta Personnel	Enterprise	Unknown. "Current EV"	\$10,000.0	
[8]	Jan-2014	Jan-2014	Meta Personnel	Enterprise	Unknown. "EV with Premium"	\$12,500.0	
[9]	Jan-2014	12/31/2013	Morgan Stanley	Enterprise	Market Multiple (Projected EBITDA)	\$5,282.7	
[10]	Jan-2014	12/31/2013	Morgan Stanley	Enterprise	Market Multiple (Projected Revenue)	\$9,605.0	
[11]	Jan-2015	2/19/2014	KPMG (on behalf of Facebook)	Equity	Market Transaction	\$8,101.5	-
[12]	Mar-2014	3/28/2014	DST and Sequoia	Equity	Market Transaction	\$8,126.0	
	·	·			Maximum Valuation:	\$12,500.0	

Sources and notes:

[1]: GOOG-META-01997760 at 768 (PX14795 at 009).

- [4]: SCO 00000324 at 331 (PX10232 at 008). Value is post Sequoia's investment to acquire a 3.3% minority interest.
- [5]: KPMG META 0011157 at 204.
- [6]: FB_FTC_CID_05621407 (PX11662 at 007) (May "[a]ssume at least 25-30% Premium").
- [7]-[8]: FB FTC CID 03090860 (PX10849).
- [9]-[10]: FTC-META-003498484 (PX10225); MS_FTCMETA-00013342. The values shown are results from Morgan Stanley's "Standalone" Scenario. Morgan Stanley created seven Scenarios. The largest Scenario valuation estimate was \$12,488.7. This Scenario used Facebook as the acquirer, included revenue synergies, and projected more than 50% of WhatsApp's revenues would come from ads.
 - [11]: KPMG_META_0003446 at 468. The WhatsApp Valuation Estimate shown above in column [F] is from KPMG's Standalone Scenario, less the "\$2 billion breakup fee per the terms of the Facebook purchase agreement."
- [12]: DST0000099 at 100, 121, and DST0000124 (for \$8,000 million pre-money valuation); Facebook, Inc., Current Report (Form 8-K/A), Ex. 99.1 at 27 (Oct. 28, 2014) (for the additional \$126 million post-money). Valuation Estimate shown in column [F] is post acquisitions of an approximate 1.6% minority interest.

KPMG Valuation (on behalf of Meta): \$8.1015 billion

WhatsApp Transaction Premium



Total Expected Purchase Cost:

\$19 billion

Standalone Valuation:

\$8.1015 billion

Premium:

\$10.9 billion

\$19 / \$8.1015 - 1 =

135% transaction premium

Scale of the WhatsApp Deal



Meta's total market capitalization as of Feb. 19, 2014:

2.55 billion shares outstanding x \$68.06 per share

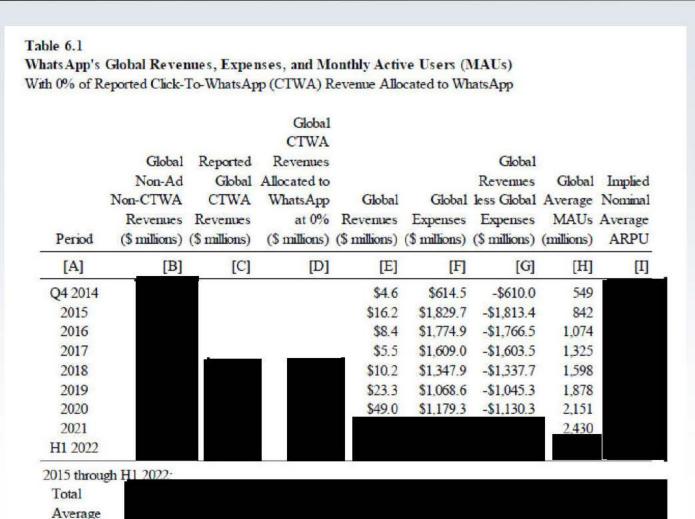
= \$173.5 billion total Meta market capitalization

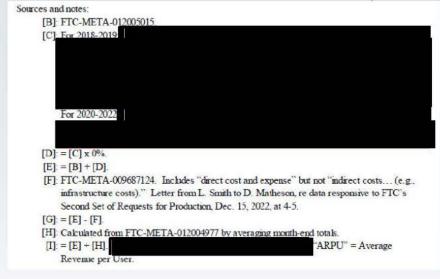
\$19 billion ÷ \$173.5 billion = 11% of total market cap

WhatsApp's Post-Acquisition Revenue and Expenses

WhatsApp Revenue and Expense Table (CTWA at 0%)



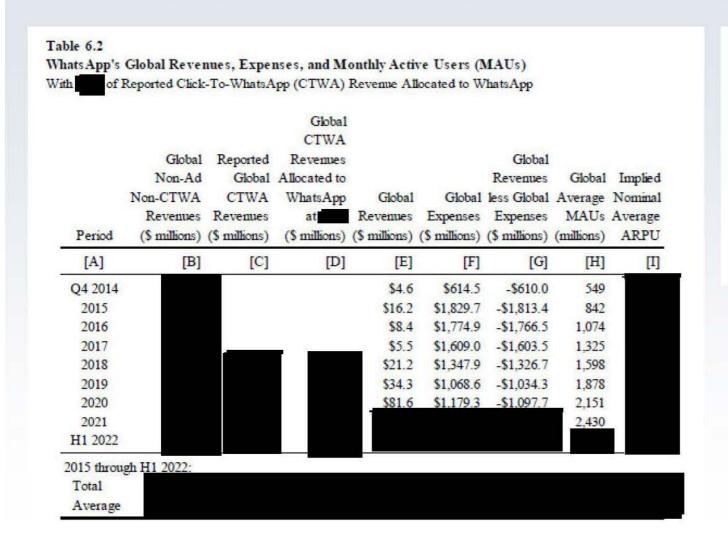


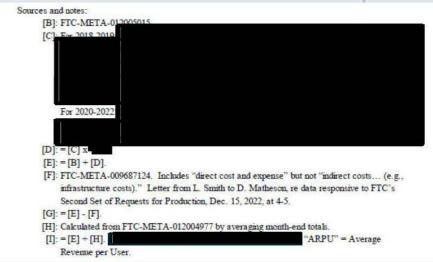


WhatsApp Revenue and Expense Table (CTWA at





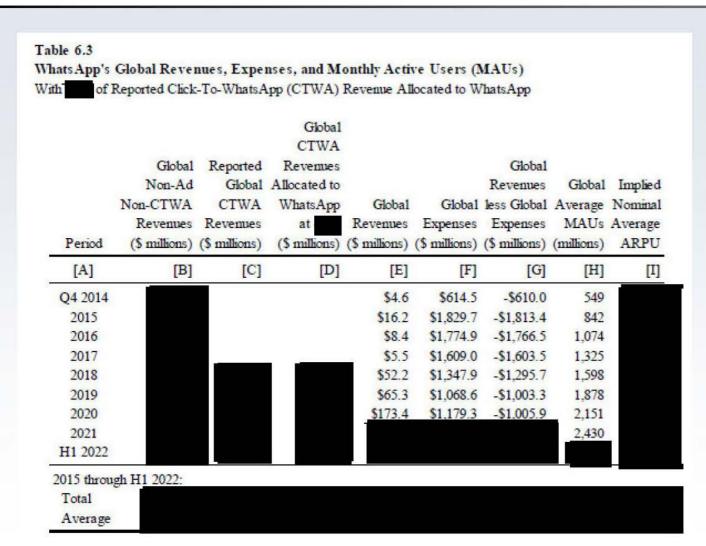


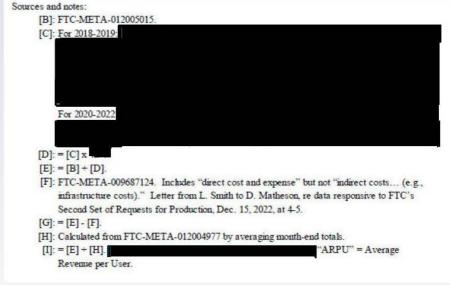


WhatsApp Revenue and Expense Table (CTWA at









WhatsApp Losses (in \$ millions)



[A] Period	[G] Global Revenues less Global Expenses CTWA at 0%	[G] Global Revenues less Globa Expenses CTWA at %	[G] Global Revenues less Global Expenses CTWA at %
Q4 2014	-\$610.0	-\$610.0	-\$610.0
2015	-\$1,813.4	-\$1,813.4	-\$1,813.4
2016	-\$1,766.5	-\$1,766.5	-\$1,766.
2017	-\$1,603.5	-\$1,603.5	-\$1,603.5
2018	-\$1,337.7	-\$1,326.7	-\$1,295.7
2019	-\$1,045.3	-\$1,034.3	-\$1,003.3
2020	-\$1,130.3	-\$1,097.7	-\$1,005.9
2021			
H1 2022			
Total for 2015 through H1 2022			
Average for 2015 through H1 2022			

Meta's Cost Savings Claims

Elements of Instagram Infrastructure Cost Savings Claim





Costs to run Instagram on AWS

Costs to run Instagram on Meta's technical infrastructure

Costs to transition Instagram from AWS to Meta's infrastructure



No assessment of alternative means to reduce costs

Other Cost Savings Claims





WhatsApp on Meta's technical infrastructure

WhatsApp and Instagram sharing Meta's "financial, legal, regulatory, and administrative infrastructure"