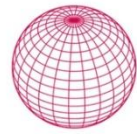This information is for learning purposes only.

This is not investment advice or a recommendation.

Ask
Ajarn
Andrew

Will Meta get more of your cash?

Sector: Comm. Serv.

Social media giant with 3.5bn+ active users through Facebook, WhatsApp, and Instagram; one of the world's most valuable brands

My value estimate:

US$339
(Upside 54%)

STRONG BUY

3 things to know about this company

★ User base might have reached maximum, focus on price

★ Reality Labs squeeze profits, but could turn big in the future

★ Competitors grow out of nothing to challenge its dominance

Key statistics

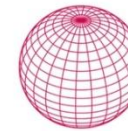| Analyst consensus (60)	PE ratio	Dividend yield
US$350 **(Upside 59%)**	**16x**	**0%**

STRONG BUY

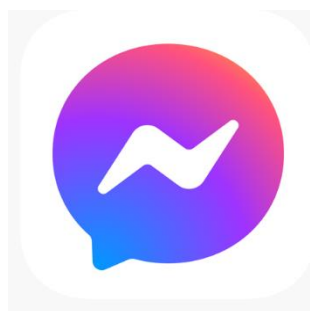**This is not investment advice and it's not a recommendation.**
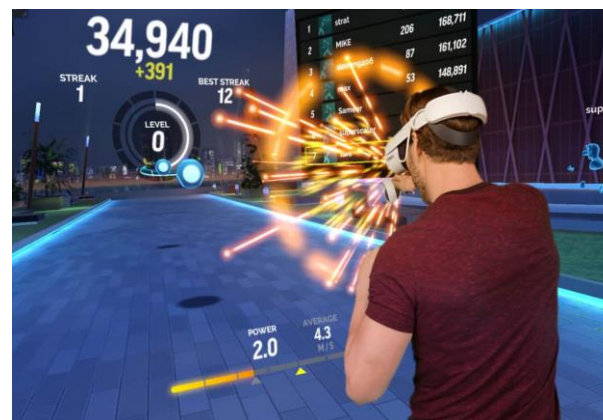
Revenue breakdown 2021

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Risks

Advertising 98%

Virtual reality 2%

Breakdown by region

- Rest of World 10%
- APAC 18%
- United States & Canada 47%
- Europe 25%

Sources: A. Stotz Investment Research, company data
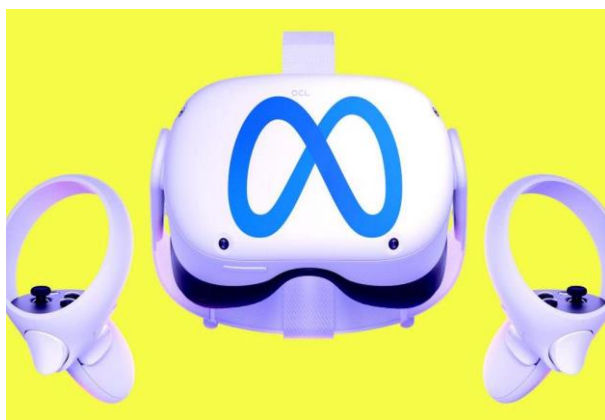
This is not investment advice and it's not a recommendation.
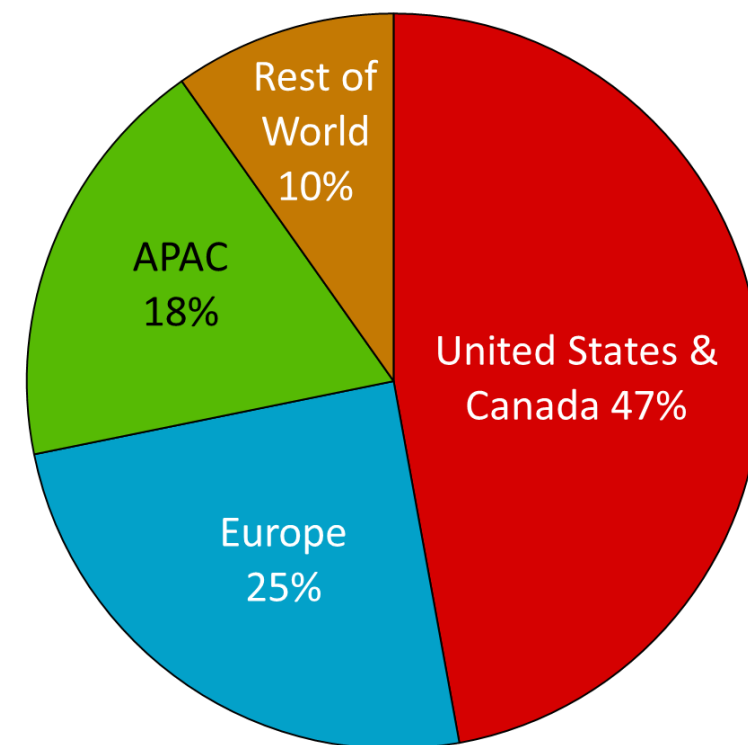
Price turned bearish but could turnaround soon

(USD)

FB.O — 50DMA — 200DMA
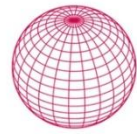
Volume RSI (14 days)
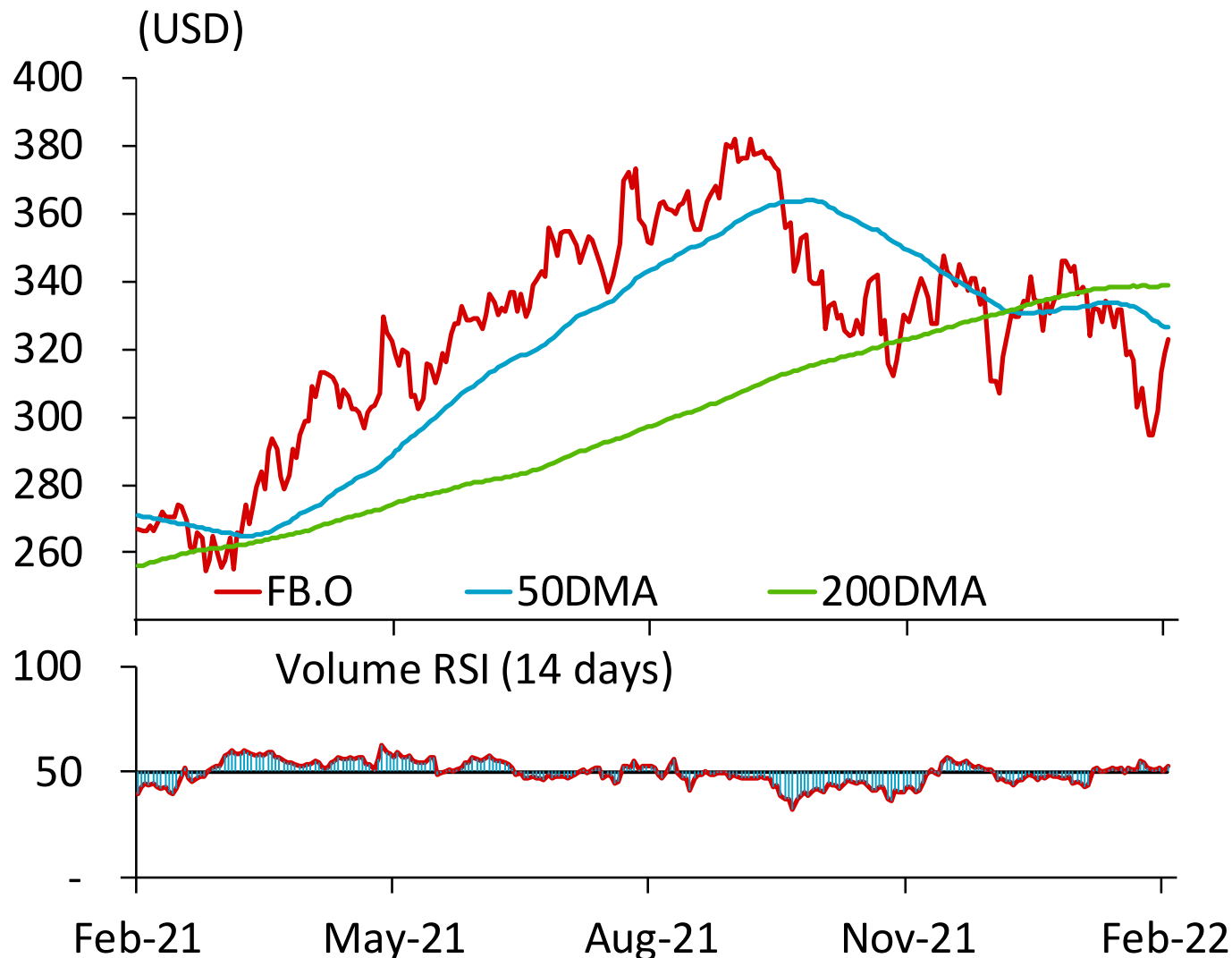
★ In the first three quarters of 2021, Meta saw a strong bullish rally before its price has been corrected downward by the end of past year

- **In January 2022, Meta saw its largest intra-day drop in its history with the share price down by 25%**
- **However, recently, the share price started to rebound and could do so further**

★ Volume RSI has been neutral recently, providing no clear signal yet

Sources: A. Stotz Investment Research, Refinitiv   **This is not investment advice and it's not a recommendation.**   4 February 2022   5

What did actually happen to Meta's share price?

- On 3rd of January, Meta's share price dropped by 25%, equaling around US$230bn in market cap

- Here is what happened:
  - Meta reported a decline in daily active users for the first time
  - Apple update on iOS devices makes it more difficult to track consumers, dragging Meta's advertising revenue
  - US$10bn loss from its new Reality Labs business unit
  - Lower management profit forecast for 2022E

Ask Ajarn Andrew

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Monthly active users on Meta's platforms (bn)

★ While the American and European market has been mature for a while, Asia still provided a massive growth potential
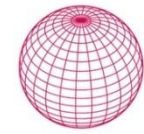
• **However, the pace of new users also starts to stagnate**

★ With over 3.5bn+ active users on its platforms, Meta covers more than 65% of the internet population

• **Hence, it is close to reach maximum saturation**

— North America   — Europe
— Asia Pacific   --- Rest of the world

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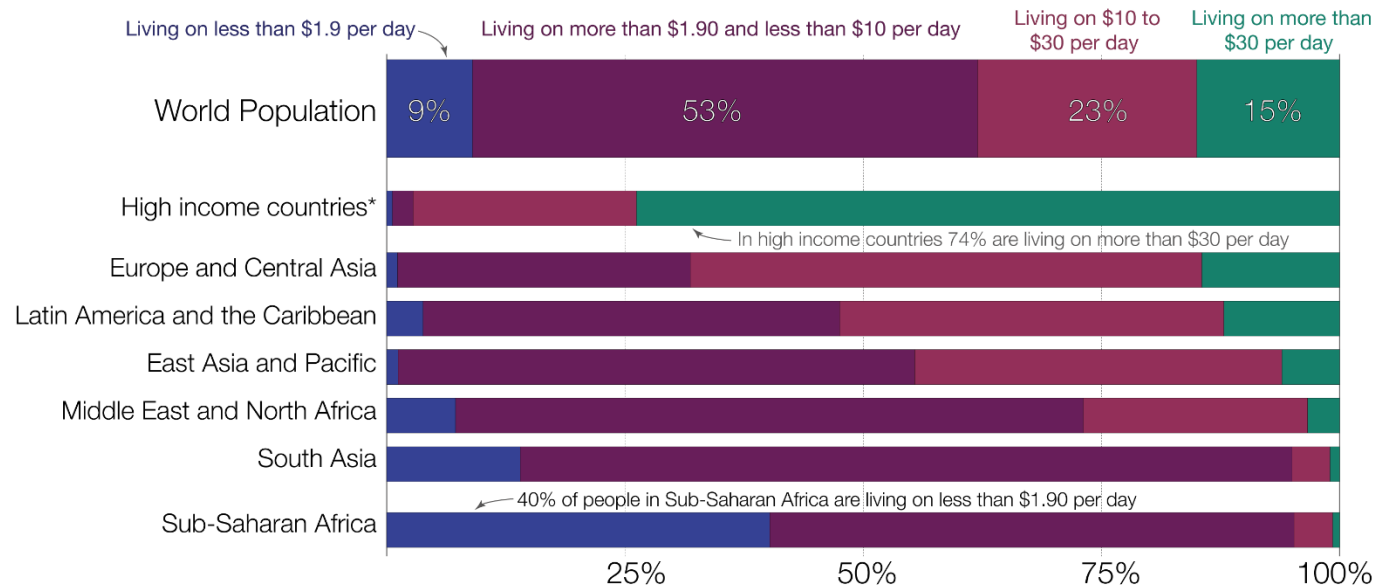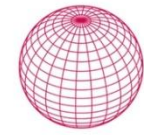
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The global income distribution by world region

Measurement: All data is expressed in *international-dollars*, which means it is adjusted for price differences between countries. One international-$ has the same purchasing power as one US-$ *in the US*. This means no matter where in the world a person is living on int.-$10, they can buy the goods and services that cost $10 *in the US*.

Living on less than $1.9 per day — Living on more than $1.90 and less than $10 per day — Living on $10 to $30 per day — Living on more than $30 per day

	less than $1.9	$1.90–$10	$10–$30	more than $30
World Population	9%	53%	23%	15%

In high income countries 74% are living on more than $30 per day

High income countries*
Europe and Central Asia
Latin America and the Caribbean
East Asia and Pacific
Middle East and North Africa
South Asia
Sub-Saharan Africa

40% of people in Sub-Saharan Africa are living on less than $1.90 per day

25%   50%   75%   100%

* These are Australia, Austria, Belgium, Canada, Cyprus, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Japan, South Korea, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Taiwan, United Arab Emirates, UK and the US. Countries included in this list are not included in any other region.
Data source: World Bank (PovcalNet) for 2018
OurWorldinData.org – Research and data to make progress against the world's largest problems.   Licensed under CC-BY by the author Max Roser

★ 700m people live on less than US$2 per day

★ Maybe another 16% or about 1.3bn people live on US$2 to US$5 per day

★ 1.4bn people in China don't have access to Facebook

★ So, my rough estimate of market size is 4.6bn (8bn - 0.7bn -1.3bn -1.4bn) people of which 3.5bn, or 76% are Meta customers

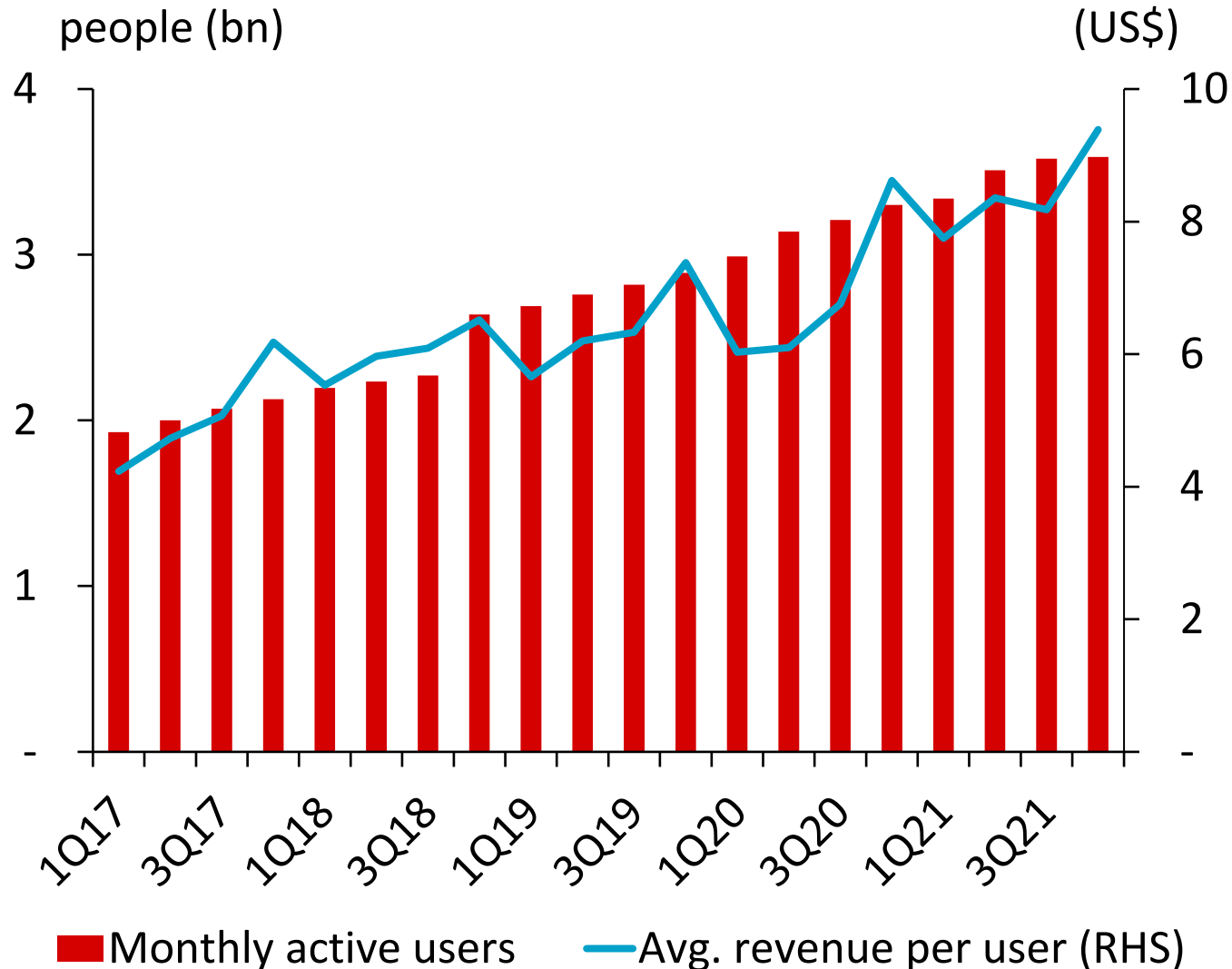# Meta should focus on getting more revenue out of its users
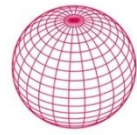
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Risks

★ The average revenue per user (ARPU) has been steadily increasing over time, and could drive further growth of its advertising business

★ There are still large differences across the regions

- **In the US, ARPU has risen to $41 in 4Q21, compared to US$13 in Europe**

- **Asia is even lower with an ARPU of US$3.6, but could grow in the future**

This is not investment advice and it's not a recommendation.

How I incorporated the story in my forecast

Revenue breakdown	19	20	21	22E	23E	24E
Active users (bn)	2.8	3.2	3.5	3.7	3.8	3.9
Rev. per user (US$ per quarter)	6.4	6.9	8.4	8.7	9.5	10.1
Advertising revenue (US$bn)	**71**	**86**	**116**	**129**	**143**	**156**

- I expect low growth in active users as Facebook starts to hit the ceiling here
- The company needs to shift to raising price instead of growing quantity
  - **It can do so because it still is the dominant social media platform**

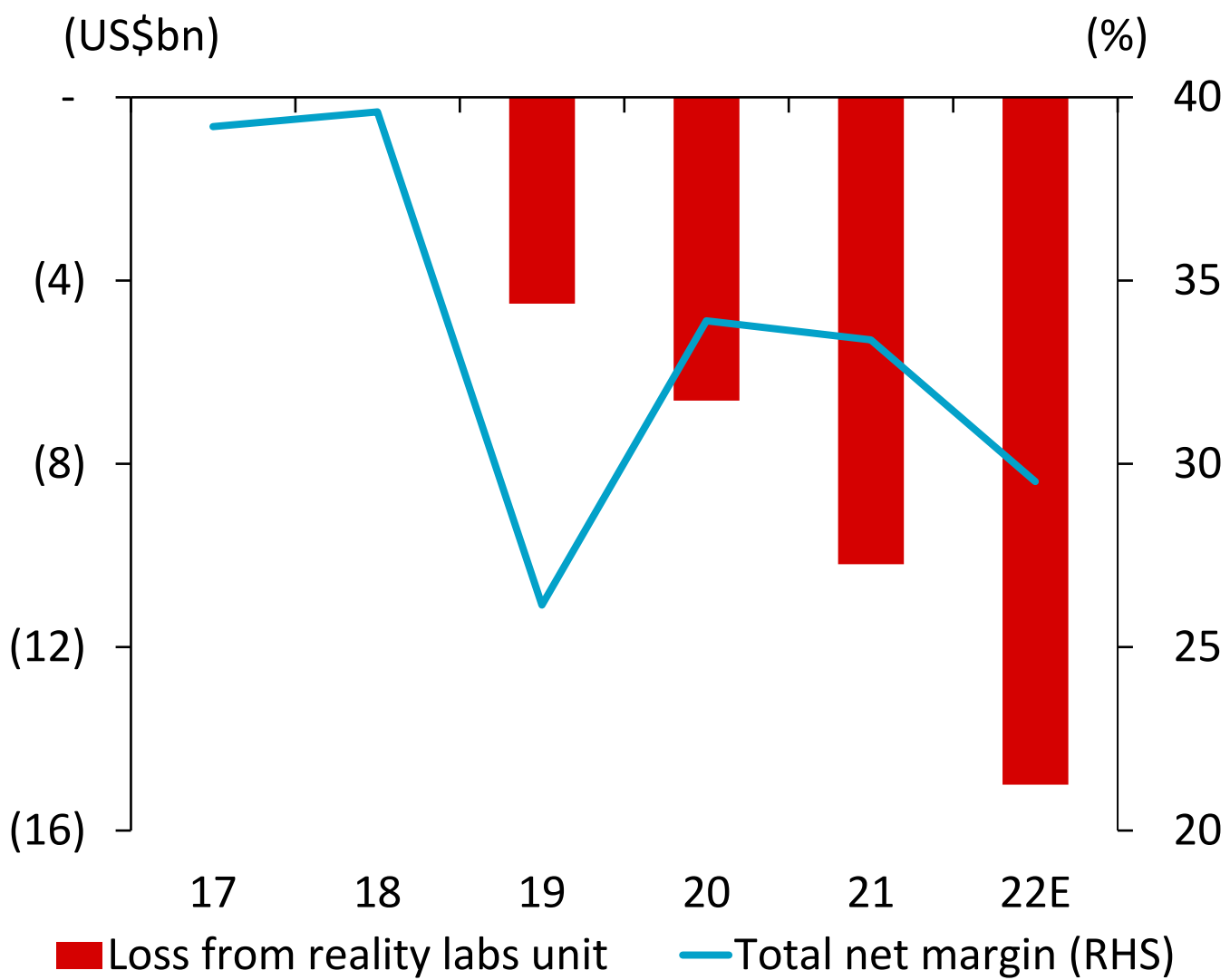**VALUATION MASTER CLASS**

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Risks

★ The company's strategy is to transition from a social platform into an entire virtual world called metaverse

- **The main concept is to take the digital experience to a new level**

★ Therefore, Meta has created its new reporting unit "Reality Labs"

- **Its product range covers virtual reality headsets and development of games, smart glasses, presence platforms, and work-related applications**

Operating losses from new business unit could worsen further

Sales

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Risks

(US$bn) | (%)

- 40

(4) — 35

(8) — 30

(12) — 25

(16) — 20

17   18   19   20   21   22E

■ Loss from reality labs unit ── Total net margin (RHS)

★ In 2021, Meta recorded a US$10bn loss from Reality Labs, dragging profitability

★ Still, Meta continues to invest heavily and is willing to accept losses from this unit over the next 5-10 years
  - **It has the capacity to do so compared to smaller players**

★ Meta places a risky bet on the success of the metaverse
  - **If the company is right, the share price could skyrocket**

How I incorporated the story in my forecast

Revenue breakdown	19	20	21	22E	23E	24E
Active users (bn)	2.8	3.2	3.5	3.7	3.8	3.9
Rev. per user (US$ per quarter)	6.4	6.9	8.4	8.7	9.5	10.1
Advertising revenue (US$bn)	**71**	**86**	**116**	**129**	**143**	**156**
Reality Labs (US$bn)	0.5	1.1	2.3	4.0	10.0	20.0
Total revenue (US$bn)	**71**	**86**	**118**	**133**	**153**	**176**
Net margin (%)	26.1	33.9	33.4	29.5	28.7	28.8
Net profit	**18.5**	**29.1**	**39.4**	**39.3**	**44.0**	**50.7**

- Meta's R&D investment aim to establish its new business unit as the next big growth driver
- The investment is a long run bet as profits are likely to be squeezed in the short run
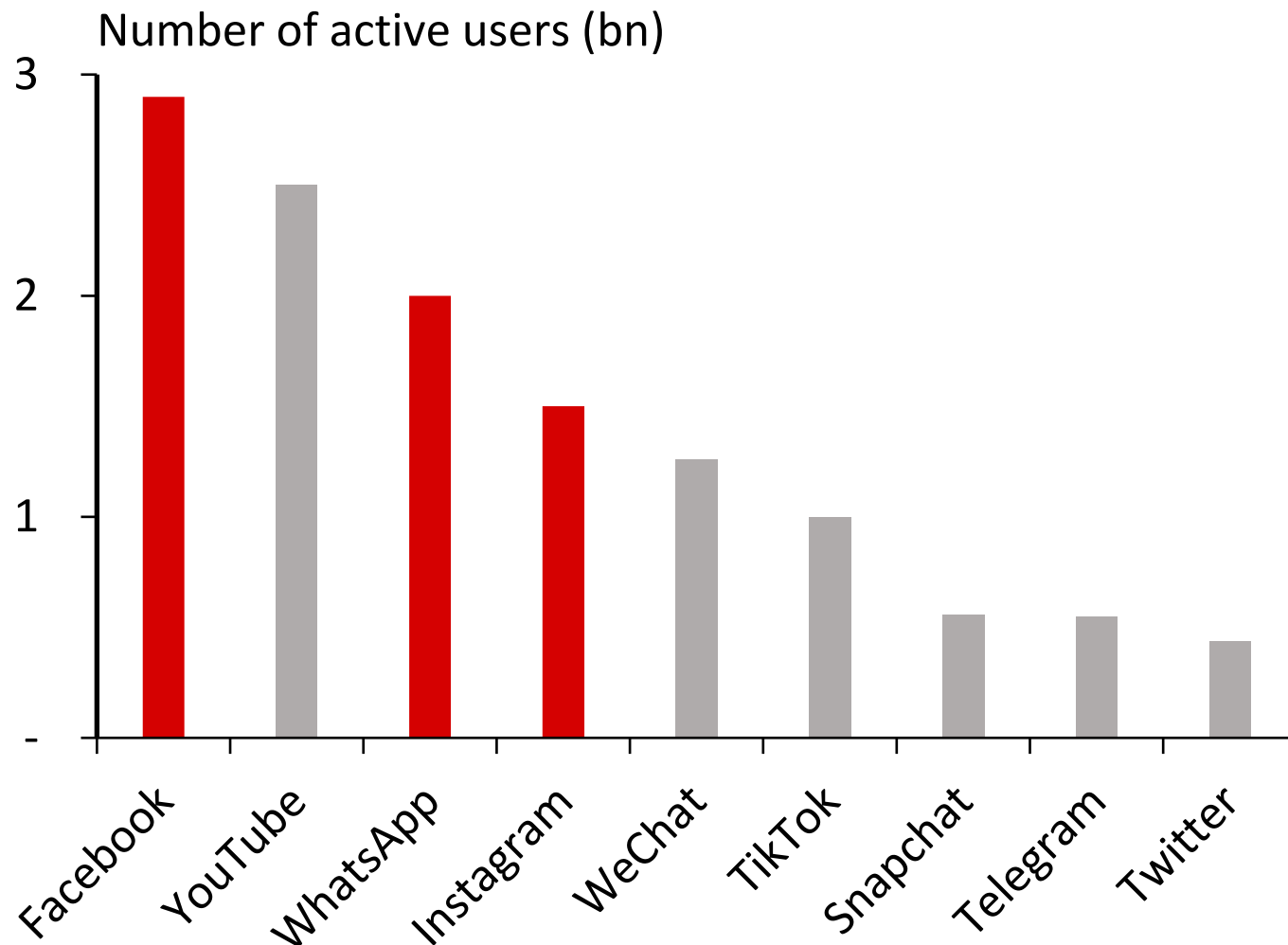
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Risks

Number of active users (bn)
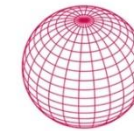
★ Meta still owns 3 of the 4 most used platforms

★ However, new platforms try to differentiate themselves from meta and scale pretty fast as TikTok demonstrated
  • **Founded in 2017, TikTok already records 1bn+ users**

★ In particular, Meta fails to attract young users
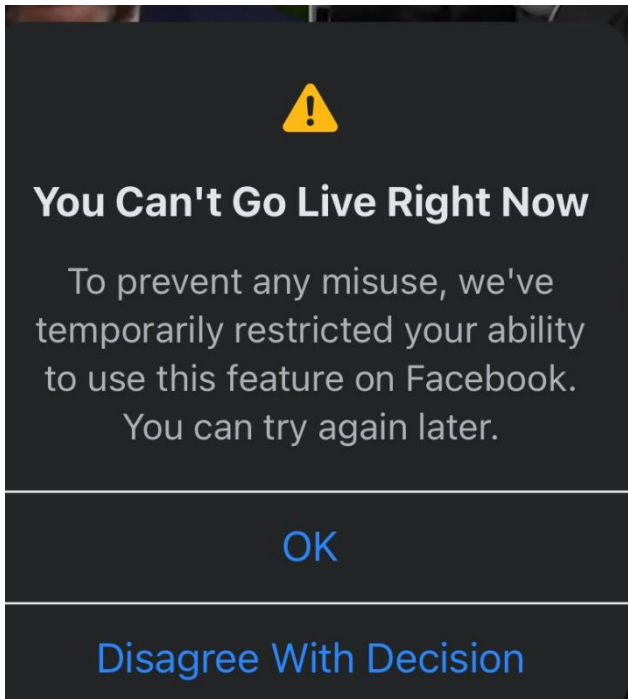 • **The shift to the metaverse aims to gain them back**

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Risks

★ Even I got put in Facebook jail!
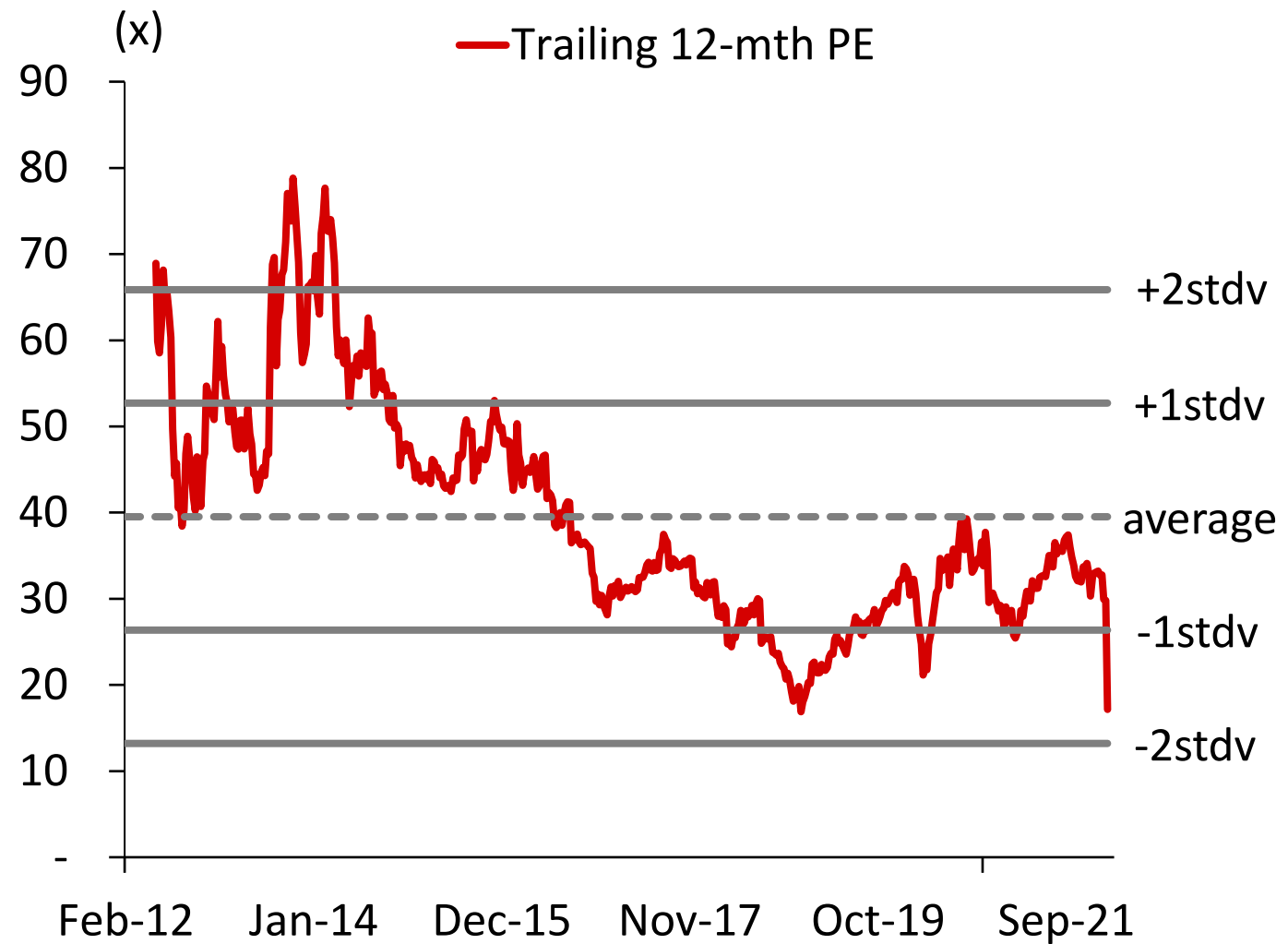
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(x)

— Trailing 12-mth PE

★ In 2022, the trailing PE ratio has dropped 2x standard deviation below its historical average

- **With a current PE of 16x, it even trades cheaper than the US average of Comm. Serv. Companies (19x)**

★ I believe that the disappointed market punished Meta too much

Forward looking PE does not look expensive

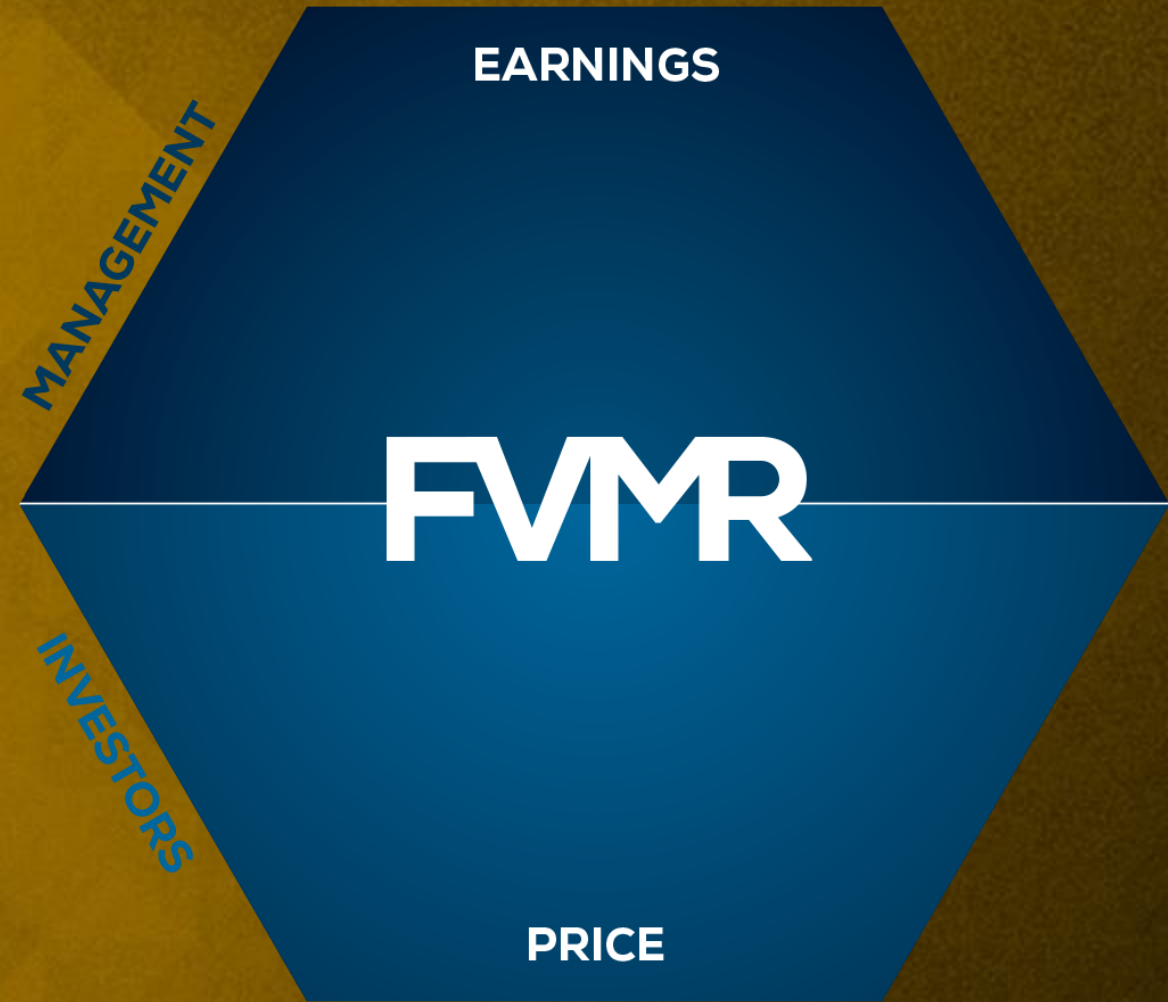| Revenue breakdown	19	20	21	22E	23E	24E
Active users (bn)	2.8	3.2	3.5	3.5	3.6	3.7
Rev. per user (US$ per quarter)	6.4	6.9	8.4	8.5	8.6	8.6
Advertising revenue (US$bn)	**71**	**86**	**116**	**115**	**118**	**119**
Reality Labs (US$bn)	0.5	1.1	2.3	4.0	6.0	8.5
Total revenue (US$bn)	**71**	**86**	**118**	**133**	**153**	**176**
Net margin (%)	26.1	33.9	33.4	29.5	28.7	28.8
Net profit	**18.5**	**29.1**	**39.4**	**39.3**	**44.0**	**50.7**
Market capitalization	585	778	935	627		
PE ratio	**31.6**	**26.7**	**23.7**	**15.9**	**14.3**	**12.4**

Scan this QR code to go to the ValuationMasterClass.com blog to download all full Case Study reports for free.
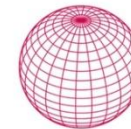
It's usually up within 24h.

FVMR Scorecard

★ Measures a stock's attractiveness relative to all other companies

★ Attractiveness is based on four elements
- Fundamentals, Valuation, Momentum, and Risk

★ Scale from 1 (Best) to 10 (Worst)

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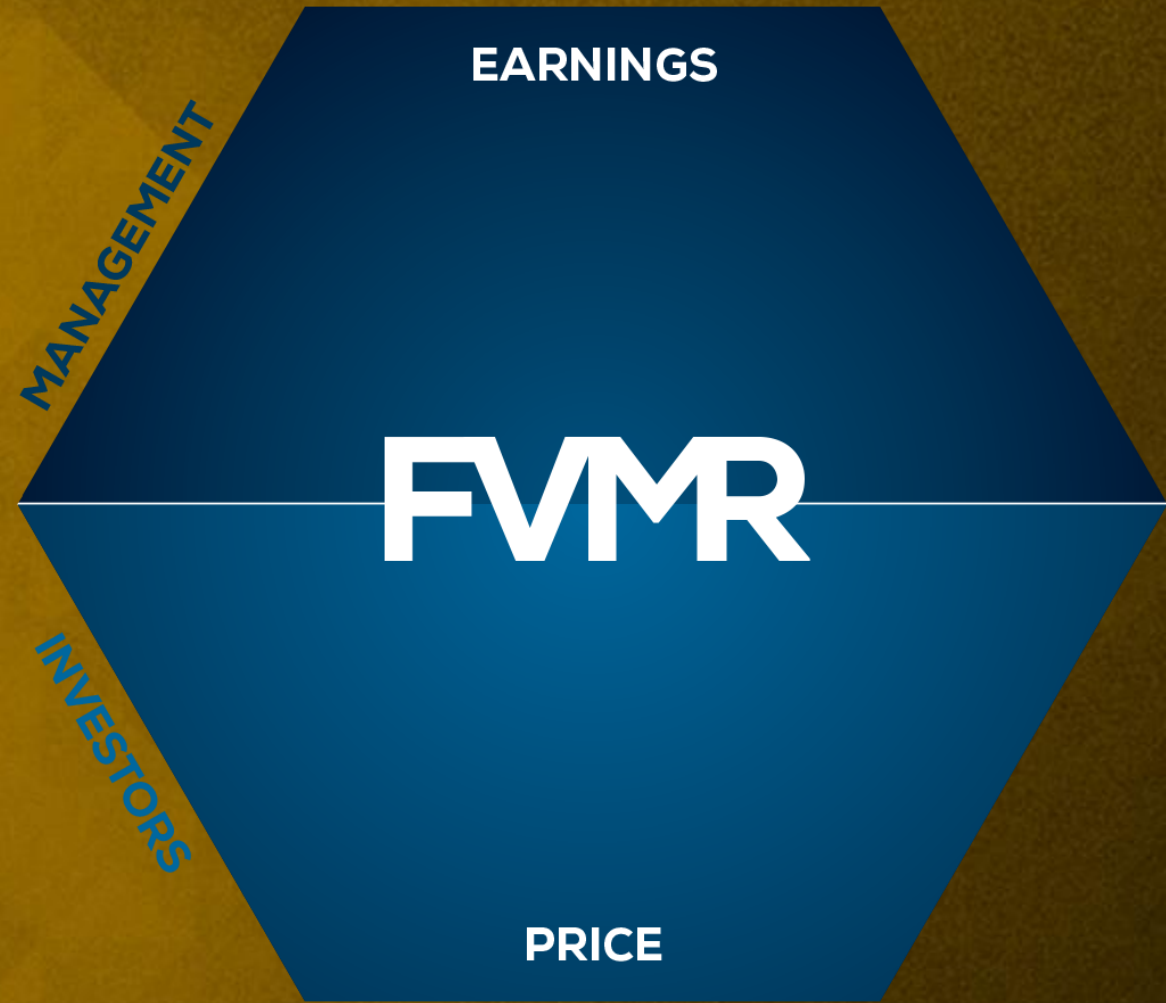
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Fundamentals

(%)	Dec-17	Dec-18	Dec-19	Dec-20	PTM**
Operating profit margin	48.7	43.6	39.8	37.5	41.3
Recurring net margin	44.2	39.8	31.5	34.1	35.9
Asset turnover	54.4	61.4	61.3	58.7	71.1
Return on assets	24.0	24.4	19.3	20.0	25.5
Recurring return on equity	26.9	28.0	24.1	25.6	32.1

Valuation

(x)	Dec-17	Dec-18	Dec-19	Dec-20	PTM**
Price-to-sales	11.6	8.7	6.8	9.9	7.8
Price-to-earnings	26.3	21.9	21.5	29.0	21.8
Price-to-book	6.2	5.7	4.7	6.5	6.4
PE-to-EPS growth (PEG)	0.4	0.9	11.6	0.9	0.4
EV/EBIT	21.3	17.8	15.0	24.1	17.2

Momentum

(%)	Dec-17	Dec-18	Dec-19	Dec-20	PTM**
Revenue growth	47.1	37.4	26.6	21.6	42.2
Recurring EPS growth	72.8	25.3	1.9	31.1	61.2
Operating profit margin chg. (bps)	413	(509)	(380)	(236)	594
	6mth	3mth	1mth	3wk	1wk
Price change	(7.1)	(18.4)	(8.6)	(10.0)	(7.9)

Risk

(x)	Dec-17	Dec-18	Dec-19	Dec-20	PTM**
Current ratio	12.9	7.2	4.4	5.1	4.2
Net debt-to-equity (%)	(56.1)	(48.9)	(53.8)	(47.9)	(43.5)
Times-interest-earned	3,301.8	2,707.8	1,408.4	nm	nm
	5yr	3yr	1yr	6mth	3mth
Beta	1.1	1.1	1.5	1.7	1.3

Note: Benchmarking against 2,160 non-financial companies in USA.

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Risks

Fundamentals	W									B

(%)	Dec-17	Dec-18	Dec-19	Dec-20	PTM**
Operating profit margin	48.7	43.6	39.8	37.5	41.3
Recurring net margin	44.2	39.8	31.5	34.1	35.9
Asset turnover	54.4	61.4	61.3	58.7	71.1
Return on assets	24.0	24.4	19.3	20.0	25.5
Recurring return on equity	26.9	28.0	24.1	25.6	32.1

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Consensus is bullish

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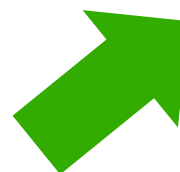
Risks

Analyst consensus valuation

Recommendation	Oct-21	Nov-21	Dec-21	Current
Strong buy	18	18	18	16
Buy	29	29	30	29
Hold	8	9	9	13
Sell	2	1	1	1
Strong sell	-	-	-	1
Average score	**1.9**	**1.9**	**1.9**	**2.0**

Price target	Nov-21	Dec-21	Jan-22	Current
Median	410	410	410	350
Mean	402	402	402	343

60 analysts

Upside: 59%

## Analyst consensus 3-year forecast

(%)	19	20	21	22E	23E	24E
Revenue growth	2.5	21.6	37.2	13.8	16.9	11.6
Gross margin	81.9	80.6	80.8	79.5	79.2	79.6
EBIT margin	41.0	38.0	39.6	32.0	32.5	31.0
Net margin	26.1	33.9	33.4	27.6	27.9	26.6

★ Most analysts has a BUY recommendation, as it sees a massive potential after the share price has been beaten down

★ Consensus has already incorporated a significant drop in margin due to the loss-making Reality Lab business unit

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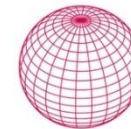
Risks

(YE Dec, US$ m)	2020A	2021A	2022E	2023E
Revenue	85,965	117,929	133,260	153,249
Cost of goods & services	(16,692)	(22,649)	(25,319)	(30,650)
Gross profit	**69,273**	**95,280**	**107,940**	**122,599**
SG&A	(36,602)	(48,527)	(59,967)	(68,962)
Other operating (exp)/inc	-	-	-	-
EBIT	**32,671**	**46,753**	**47,974**	**53,637**
Interest expense (net)	658	446	366	437
Other non-operating inc/(exp)	(20)	225	225	225
Earnings before taxes (EBT)	**33,309**	**47,424**	**48,565**	**54,299**
Income tax	(4,034)	(7,914)	(9,227)	(10,317)
Earnings after taxes (EAT)	**29,275**	**39,510**	**39,338**	**43,982**
Equity income/Minority interest	-	-	-	-
Earnings from cont. operations	**29,275**	**39,510**	**39,338**	**43,982**
Forex/Exceptionals before tax	(129)	(140)	-	-
Net profit	**29,146**	**39,370**	**39,338**	**43,982**

★ In line with management forecast, I don't expect a profit growth in 22E as the Reality Labs unit could make growing losses

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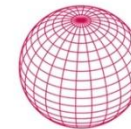
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(YE Dec, US$ m)	2020A	2021A	2022E	2023E
Cash & short-term investments	61,954	47,998	56,870	88,579
Accounts receivable	11,335	14,039	16,657	19,156
Inventories	-	-	-	-
Other current assets	2,381	4,629	4,664	5,364
Total current assets	**75,670**	**66,666**	**78,192**	**113,098**
Long-term investments	6,234	6,775	7,317	7,902
Net fixed assets	54,981	69,964	78,206	88,509
Intangible assets	623	634	717	807
Goodwill	19,050	19,197	19,773	20,366
Other long-term assets	2,758	2,751	2,889	3,033
Total assets	**159,316**	**165,987**	**187,093**	**233,715**

★ Meta announced to continue investing heavily in data infrastructure and development of new virtual reality products

★ Also, it has a large, US$50bn amount of cash, equaling 1/3 of its total assets

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(YE Dec, US$ m)	2020A	2021A	2022E	2023E
Overdrafts & short-term loans	54	75	73	74
Accounts payable	8,069	12,933	14,418	17,453
Other current liabilities	6,858	8,127	7,996	9,195
Total current liabilities	**14,981**	**21,135**	**22,487**	**26,722**
Long-term debt	469	506	513	519
Other long-term liabilities	15,576	19,467	19,856	20,253
Total liabilities	**31,026**	**41,108**	**42,857**	**47,494**
Minority interest	-	-	-	-
Paid-up capital - Common shares	50,018	55,811	55,811	55,811
Paid-up capital - Preferred shares	-	-	-	-
Retained earnings	77,345	69,761	109,099	153,081
Revaluation/Forex/Others	927	(693)	(20,673)	(22,671)
Total equity	**128,290**	**124,879**	**144,237**	**186,221**
Total liab & shareholders' equity	**159,316**	**165,987**	**187,093**	**233,715**

★ Meta is net cash and has very low debt, which is quite typical for fast-growing companies

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(YE Dec)	2020A	2021A	2022E	2023E
General growth (YoY, %)				
Revenue	21.6	37.2	13.0	15.0
Assets	19.4	4.2	12.7	24.9
Gross profit	19.6	37.5	13.3	13.6
Operating profit	12.7	43.1	2.6	11.8
Attributable profit	57.7	35.1	(0.1)	11.8
EPS	57.8	37.8	3.6	13.9
Recurring EPS	30.7	36.3	3.3	13.9
Du Pont analysis (%)				
Net profit margin	33.9	33.4	29.5	28.7
Revenue per US$100 of assets	58.7	72.5	75.5	72.8
Assets/equity (x)	2.9	2.8	2.9	2.8
Return on equity	56.8	68.8	65.0	59.2
Others (%)				
Effective tax rate	12.2	16.7	19.0	19.0
Dividend payout ratio	-	-	-	-

★ Meta has a remarkable consistent profitability, which is far above the sector average ROE of 18%

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(YE Dec)	2020A	2021A	2022E	2023E
Internal liquidity (x)				
Current ratio	5.1	3.2	3.5	4.2
Quick, or acid test ratio	5.1	3.2	3.5	4.2
Working cap. mgmt (Days)				
Inventory conversion period	-	-	-	-
Receivables collection period	44	39	41	42
Days from raw mat to coll	44	39	41	42
Payables deferral period	201	167	194	187
Cash conversion cycle	(157)	(128)	(153)	(145)
Profitability ratios (%)				
Gross profit margin	80.6	80.8	81.0	80.0
EBIT margin	38.0	39.6	36.0	35.0
EBIT return on avg assets	22.3	28.7	27.2	25.5
Return on average assets	19.9	24.2	22.3	20.9
Financial risk (x)				
Liabilities-to-assets (%)	19.5	24.8	22.9	20.3
Debt-to-equity	0.0	0.0	0.0	0.0
Net debt-to-equity	(1.1)	(0.8)	(0.9)	(1.0)
Times-interest-earned	2,823.8	3,648.0	3,366.5	3,805.1
Effective interest rate (%)	2.8	2.7	3.0	3.0

★ Profitability is dragged in the short run
  • **However, in the long run, the contribution of the metaverse business could bring profitability back to its previous heights**

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If you want to learn how to value companies like this, check out my 6-week, online

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- **INSPIRING** – Join a group of inspiring, like-minded financial professionals

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Class starts March 7th!
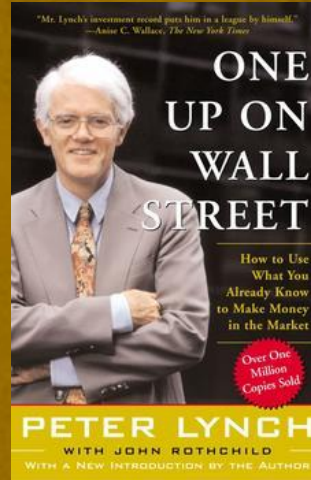
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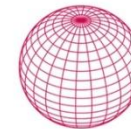# A. Stotz Investment Research Stock Picking Checklist

Inspired by

Peter Lynch's book

★ Where he talked about "ten baggers", which are stocks that go up 10x

★ We did extensive research on ten baggers and found

★ 9 factors that drive long-term share price performance

Long-term share price performance potential

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Value

Risks

A. Stotz Investment Research Stock Picking Checklist

| Stock Picking Checklist	Potential	Comment
1. Management – Commitment to growth	**Good**	Meta saw massive 30% revenue CAGR over the past 5 years and looks for new growth areas
2. Growth – Can grow at double-digits	**Good**	Virtual reality could become the next big thing
3. Margin – High gross margin	**Good**	Gross margin is one of a kind
4. Predictability – Minimal non-core expenses	**Good**	Net profit has been stable and growing; in some years lawsuits slightly dragged profit
5. Intensity – Sales grow faster than assets	**Moderate**	Heavy investment in data infrastructure required, but sales could skyrocket afterward
6. Conversion – Low cash conversion cycle	**Good**	Cash conversion cycle is negative
7. Cash flow – Consistently positive cash flow	**Good**	Consistent and strong operating cash flows were able to cover investing outflows
8. Capital – Access to capital	**Good**	Meta is net cash
9. Valuation – Reasonable valuation	**Moderate**	Trades low on 22E PE compared to US Comm. Serv.; high on PB but justified by higher ROE

10x Bagger Potential

5x

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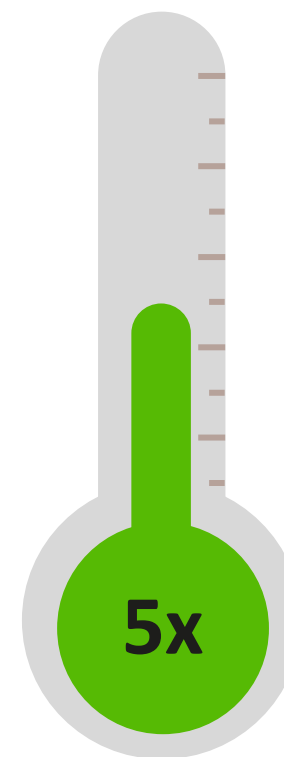
Risks

(YE Dec, US$ m)	2020A	2021A	2022E	2023E
EBIT	32,671	46,753	47,974	53,637
Est tax rate (%)	*12*	*17*	*19*	*19*
NOPAT	**28,699**	**38,928**	**38,859**	**43,446**
Add: Depre & amort	6,862	7,967	10,999	13,684
Less: CAPEX	(15,115)	(18,567)	(18,839)	(23,549)
Chg in A/R	(1,817)	(2,704)	(2,618)	(2,499)
Chg in inventory	-	-	-	-
Chg in oth curr assets	(529)	(2,248)	(35)	(700)
Chg in A/P	(2,516)	4,864	1,485	3,035
Chg in oth curr liabs	2,445	1,269	(131)	1,199
Less: Chg in working cap	**(2,417)**	**1,181**	**(1,300)**	**1,036**
Less: Chg in invest cap				
Free cash flow to firm	**18,029**	**29,509**	**29,718**	**34,618**

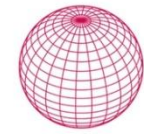★ Meta has delivered strongly on cash flow in the past and I expect rising FCFF in the future

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Value estimate

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Forecast assumptions

3-year average	Consensus	My assumptions
Revenue growth (CAGR)	14.1	14.3
Gross margin	79.4	80.3
EBIT margin	31.8	35.3
Net margin	27.4	29.0

My valuation method

Market: United States of America

Market risk-free rate	2.5
Market equity risk premium	9.0
Market return	**11.5**
Company beta (x)	1.0
COE	**11.5**
WACC	10.9
Terminal growth rate	5.0

Valuation Method: FCFF

★ I expect similar revenue growth compared to the consensus

★ However, I am a bit more optimistic with regards to the margin in the short run

• **Meta's ability to increase prices for ads could offset the losses from the metaverse segment better than expected**
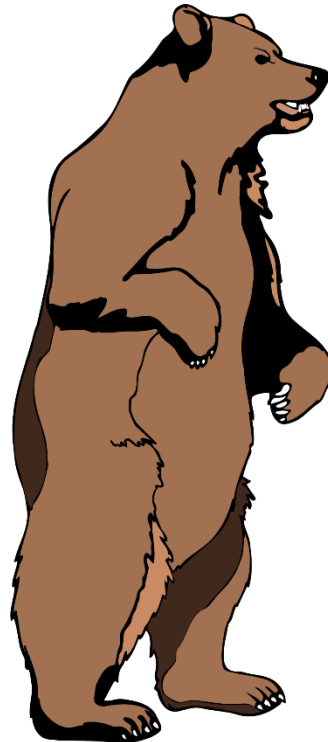
Sources: A. Stotz Investment Research, Refinitiv

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Risks

Bear
US$310
(Upside 41%)

Base
US$339
(Upside 54%)

Bull
US$368
(Upside 67%)

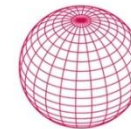**This is not investment advice and it's not a recommendation.**

World Class Benchmarking Scorecard

- ★ We identify a company's competitive position relative to global peers

- ★ We use a composite rank of profitability and growth, called "Profitable Growth"

- ★ Scale from 1 (Best) to 10 (Worst)

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Profitable Growth

'17	'18	'19	'20	PTM
1	1	1	1	1

Profitability

'17	'18	'19	'20	PTM
1	1	1	1	1

Growth

'17	'18	'19	'20	PTM
2	3	5	3	3
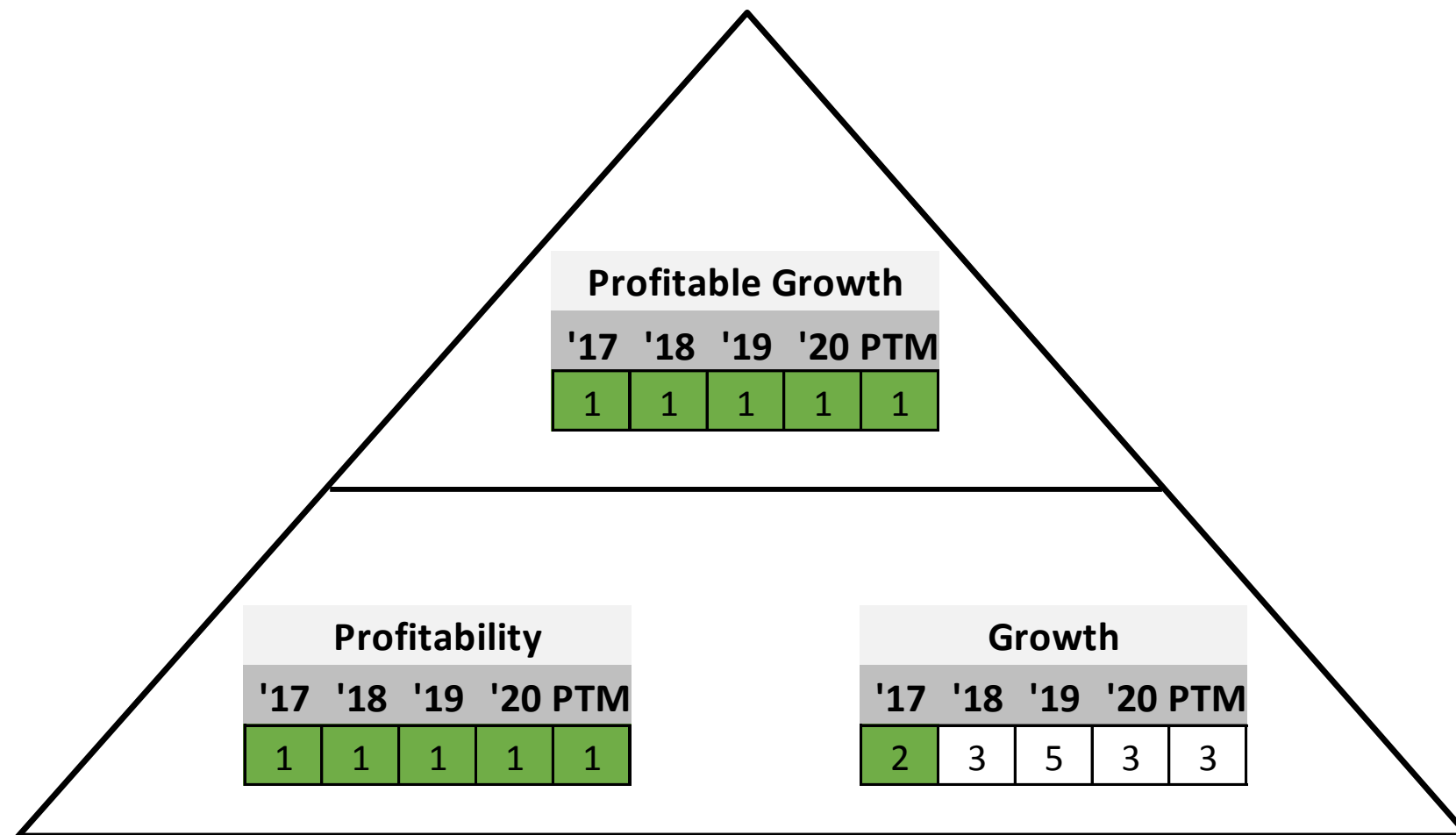
Benchmarked against 270 large Comm. Serv. companies worldwide.

This is not investment advice and it's not a recommendation.

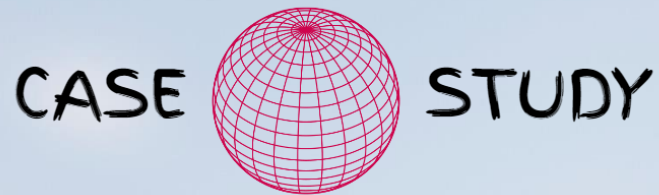**VALUATION** MASTER CLASS

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Risks

★ Failure to attract young people to its social media platforms

★ Rising competition that grows out of nothing

★ Metaverse could just be a bubble waiting to explode

★ Regulatory pressure

CONCLUSION

- **High pricing power could offset slowing pace of new user addition**
- **Investment in Metaverse is risky, but could become a double-digit growth engine**
- **Massive ROE makes it an attractive play**

CASE STUDY

VALUATION MASTER CLASS
by
A.Stotz INVESTMENT RESEARCH

Will **Meta** get more of your **cash**?