

## GlobalFoundries

# Slow recovery but cash flows on track, reiterate Buy

Reiterate Rating: BUY | PO: 70.00 USD | Price: 51.66 USD

## Reiterate Buy, \$70 PO on improved cash flows

Q3 sales/pf-EPS 0%/12% better, and Q4 guides mixed as lower sales from elevated mobile/comms infra inventories are offset by one-time tax credit benefit. Overall, mgmt is prudently managing a soft landing amid weak smartphone unit demand and high inventory at customers (QCOM 155 days in SepQ from 165 days in JunQ, still well above historical <90 days). Continued mix shift toward premium handset offers content lift, and GFS should start to benefit from easier comps as units recover in 2H. Though utilization should remain low into Q1 (low-/mid-80% vs. near-100% in CY22) and pressure near-term GMs (every 5pts of utilization equals 2pts of GM), we anticipate headwinds to reverse in 2H'24 as units recover. Moreover, a >50% reduction in CY24E capex should more than offset any impact on the cash flow side. Separately, Auto demand remains strong into Q4 and should reach \$1bn mark in CY23E, though we anticipate CY24E growth to moderate on modest unit weaknesses at OEMs. Overall, we lower CY24/25E sales by -5%/-3% and pf-EPS by -5%/-5% to \$2.24/\$2.91 on continued elevated inventories and higher taxes, but our CY24E FCF is now +100% higher to \$1.3bn. Reiterate our \$70 PO (now on 14x CY24E EV/EBITDA vs. 13x prior), at the high-end of historical 7x-16x range but justified given approaching the end of the down cycle.

## Likes: Cash flows, Automotive, Mobile bottoming

(1) Despite demand headwinds across multiple end markets, GFS sees healthy FCF growth (up 100% vs. prior) in CY24E, with capex expected to decline >50% YoY. (2) Automotive continues to be an area of strength, with sales on track to reach \$1bn in CY23E. Though concerns of modest demand (unit) weakness emerged, GFS sees healthy volume/ASP/mix growth. (3) Following a year of YoY declines, Smart Mobile Devices are now bumping along the bottom, with signs of inventories depleting in channels. By 2H24, comps should get easier, and we expect a return to YoY growth.

## Risks: Utilization, gross margins, tax increases

(1) On continued high customer inventories, utilization should remain at low-/mid-80% range in CY23, vs. near-100% in CY22. Every 5 points of utilization translates to 2 points of gross margins, though this could go both ways. (2) On low utilization and volume, our CY24 GM estimate is now below 30%. Mobile/consumer inventory levels remain elevated and should pressure GMs into first half of CY24. (3) Following various benefits through CY23, taxes should increase to low-teens rate going forward.

Estimates (Dec) (US\$)	2021A	2022A	2023E	2024E	2025E
EPS	0.03	3.13	2.21	2.24	2.91
GAAP EPS	(0.49)	2.62	1.84	1.92	2.58
EPS Change (YoY)	NM	NM	-29.4%	1.4%	29.9%
Consensus EPS (Bloomberg)			2.04	2.52	3.35
DPS	0	0	0	0	0
Valuation (Dec)					
P/E	1,722.0x	16.5x	23.4x	23.1x	17.8x
GAAP P/E	NM	19.7x	28.1x	26.9x	20.0x
EV / EBITDA*	16.7x	10.0x	11.3x	10.8x	9.2x
Free Cash Flow Yield*	3.9%	-1.7%	0.6%	4.6%	4.3%

\* For full definitions of *IQmethod*<sup>SM</sup> measures, see page 12.

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## Equity

### Key Changes

(US\$)	Previous	Current
2023E Rev (m)	7,397.0	7,390.3
2024E Rev (m)	8,070.2	7,667.8
2025E Rev (m)	8,876.2	8,578.0
2023E EPS	2.00	2.21
2024E EPS	2.35	2.24
2025E EPS	3.08	2.91

### Vivek Arya

Research Analyst  
BofAS  
+1 646 855 1755  
vivek.arya@bofa.com

### Blake Friedman

Research Analyst  
BofAS  
blake.friedman@bofa.com

### Duksan Jang

Research Analyst  
BofAS  
duksan.jang@bofa.com

### Lauren Guy

Research Analyst  
BofAS  
lauren.guy2@bofa.com

## Stock Data

Price	51.66 USD
Price Objective	70.00 USD
Date Established	8-Aug-2023
Investment Opinion	C-1-9
52-Week Range	48.12 USD - 72.50 USD
Mrkt Val (mn) / Shares Out (mn)	28,551 USD / 552.7
Average Daily Value (mn)	64.96 USD
BofA Ticker / Exchange	GFS / NAS
Bloomberg / Reuters	GFS US / GFS.OQ
ROE (2023E)	11.4%
Net Dbt to Eqty (Dec-2022A)	1.6%
ESGMeter <sup>TM</sup>	NLA

ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of BofA Global Research's equity investment rating, volatility risk rating, income rating, and price objective for that company. For full details, refer to "BofA ESGMeter Methodology".

ASP – average selling price  
LTA – long-term agreement  
SoC – system on chip  
RF-SOI – Radio frequency silicon-on-insulator  
GFS – GlobalFoundries  
A&D – Aerospace & Defense  
QCOM – Qualcomm  
OEM – Original Equipment Manufacturer

# iQprofile<sup>SM</sup> GlobalFoundries

## iQmethod<sup>SM</sup> – Bus Performance\*

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Return on Capital Employed	1.0%	9.7%	7.8%	7.8%	9.6%
Return on Equity	0.2%	19.2%	11.4%	10.6%	13.1%
Operating Margin	87.0%	89.4%	89.3%	89.4%	90.0%
Free Cash Flow	1,125	(487)	170	1,306	1,236

## iQmethod<sup>SM</sup> – Quality of Earnings\*

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Cash Realization Ratio	NM	1.5x	1.8x	1.8x	1.7x
Asset Replacement Ratio	1.0x	1.9x	1.4x	0.7x	1.1x
Tax Rate	44.9%	NM	NM	NM	NM
Net Debt-to-Equity Ratio	-11.5%	1.6%	1.6%	-7.6%	-14.7%
Interest Cover	2.0x	19.8x	NM	NA	NA

## Income Statement Data (Dec)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Sales	6,585	8,108	7,390	7,668	8,578
% Change	35.8%	23.1%	-8.9%	3.8%	11.9%
Gross Profit	1,069	2,303	2,136	2,235	2,729
% Change	NM	115.4%	-7.2%	4.6%	22.1%
EBITDA	1,843	3,096	2,735	2,859	3,347
% Change	89.1%	68.0%	-11.7%	4.5%	17.1%
Net Interest & Other Income	(108)	(73)	(6)	12	0
<b>Net Income (Adjusted)</b>	<b>17</b>	<b>1,727</b>	<b>1,231</b>	<b>1,248</b>	<b>1,630</b>
<b>% Change</b>	<b>NM</b>	<b>NM</b>	<b>-28.7%</b>	<b>1.4%</b>	<b>30.6%</b>

## Free Cash Flow Data (Dec)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Net Income from Cont Operations (GAAP)	(253)	1,447	1,021	1,074	1,443
Depreciation & Amortization	1,619	1,623	1,415	1,400	1,438
Change in Working Capital	1,175	(176)	(506)	(520)	(463)
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	282	(322)	242	349	431
Capital Expenditure	(1,698)	(3,059)	(2,002)	(997)	(1,612)
<b>Free Cash Flow</b>	<b>1,125</b>	<b>-487</b>	<b>170</b>	<b>1,306</b>	<b>1,236</b>
<b>% Change</b>	<b>102.1%</b>	<b>NM</b>	<b>NM</b>	<b>669.1%</b>	<b>-5.3%</b>

## Balance Sheet Data (Dec)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Cash & Equivalents	2,939	2,352	2,194	3,283	4,303
Trade Receivables	1,231	1,487	1,404	1,543	1,686
Other Current Assets	1,121	1,961	2,515	2,588	2,611
Property, Plant & Equipment	8,713	10,596	10,654	10,250	10,425
Other Non-Current Assets	1,023	1,445	1,968	1,948	1,928
<b>Total Assets</b>	<b>15,028</b>	<b>17,841</b>	<b>18,735</b>	<b>19,613</b>	<b>20,953</b>
Short-Term Debt	297	223	199	199	199
Other Current Liabilities	2,866	3,136	2,549	2,712	2,817
Long-Term Debt	1,716	2,288	2,181	2,181	2,181
Other Non-Current Liabilities	2,116	2,234	2,129	2,706	2,630
<b>Total Liabilities</b>	<b>6,994</b>	<b>7,881</b>	<b>7,058</b>	<b>7,798</b>	<b>7,827</b>
<b>Total Equity</b>	<b>8,033</b>	<b>9,960</b>	<b>11,677</b>	<b>11,815</b>	<b>13,125</b>
<b>Total Equity &amp; Liabilities</b>	<b>15,028</b>	<b>17,841</b>	<b>18,735</b>	<b>19,613</b>	<b>20,953</b>

\* For full definitions of iQmethod<sup>SM</sup> measures, see page 12.

## Company Sector

Semiconductors

## Company Description

GlobalFoundries is the fourth largest outsourced semiconductor manufacturer (aka foundry) and is the last remaining US-based pure-play foundry. GlobalFoundries manufactures complex, feature-rich integrated circuits addressing mission-critical applications in smart mobile device, personal computing, communication infrastructure & data center, home & industrial Internet of Things (IoT), and automotive markets.

## Investment Rationale

We rate GlobalFoundries Buy. As the #1 US-based foundry with no Taiwan or China footprint, GlobalFoundries is uniquely positioned to benefit from: (1) single-sourced wins and \$20bn in long-term agreements, (2) ability to deliver specialized, lagging-edge processes with lower capital intensity vs. leading edge development, (3) significant model leverage, (4) market share gains in \$70bn addressable market, (5) reduced cost of capital due to potential increase in government incentives.

## Stock Data

Average Daily Volume 1,257,498

## Quarterly Earnings Estimates

	2022	2023
Q1	0.42A	0.52A
Q2	0.58A	0.53A
Q3	0.67A	0.55A
Q4	1.44A	0.59E

# Summary of model changes

## Exhibit 1: Summary of changes to Sales and EPS estimates

We tweak FY23/24E EPS by +22c in FY23E to \$2.21, and by -12c to \$2.24 for FY24E

	Sales (\$mn)			Non-GAAP EPS		
	Old	NEW	delta	Old	NEW	delta
Mar-23	\$1,841	\$1,841	\$0	\$0.52	\$0.52	\$0.00
Jun-23	\$1,845	\$1,845	\$0	\$0.53	\$0.53	\$0.00
Sep-23	\$1,848	\$1,852	\$4	\$0.50	\$0.55	\$0.05
Dec-23E	\$1,863	\$1,852	(\$11)	\$0.43	\$0.59	\$0.16
<b>FY23E</b>	<b>\$7,397</b>	<b>\$7,390</b>	<b>(\$7)</b>	<b>\$2.00</b>	<b>\$2.21</b>	<b>\$0.22</b>
<b>YoY%</b>	<b>-8.8%</b>	<b>-8.9%</b>	<b>-0.1%</b>	<b>-36.2%</b>	<b>-29.3%</b>	<b>10.9%</b>
Mar-24E	\$1,922	\$1,756	(\$167)	\$0.50	\$0.46	(\$0.03)
Jun-24E	\$2,011	\$1,893	(\$118)	\$0.58	\$0.54	(\$0.04)
Sep-24E	\$2,056	\$1,984	(\$71)	\$0.62	\$0.60	(\$0.02)
Dec-24E	\$2,081	\$2,035	(\$46)	\$0.65	\$0.64	(\$0.01)
<b>FY24E</b>	<b>\$8,070</b>	<b>\$7,668</b>	<b>(\$402)</b>	<b>\$2.35</b>	<b>\$2.24</b>	<b>(\$0.12)</b>
<b>YoY%</b>	<b>9.1%</b>	<b>3.8%</b>	<b>-5.0%</b>	<b>17.7%</b>	<b>1.0%</b>	<b>-4.9%</b>
Mar-25E	\$2,129	\$2,073	(\$56)	\$0.70	\$0.67	(\$0.03)
Jun-25E	\$2,175	\$2,114	(\$62)	\$0.74	\$0.71	(\$0.03)
Sep-25E	\$2,256	\$2,167	(\$89)	\$0.81	\$0.76	(\$0.05)
Dec-25E	\$2,316	\$2,224	(\$92)	\$0.83	\$0.78	(\$0.05)
<b>FY25E</b>	<b>\$8,876</b>	<b>\$8,578</b>	<b>(\$298)</b>	<b>\$3.08</b>	<b>\$2.91</b>	<b>(\$0.17)</b>
<b>YoY%</b>	<b>10.0%</b>	<b>11.9%</b>	<b>-3.4%</b>	<b>30.8%</b>	<b>30.2%</b>	<b>-5.4%</b>

Source: BofA Global Research estimates, company reports

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# Q3 reported vs. expectations

## Exhibit 2: Summary of Q3 reported numbers vs. expectations

GFS reported SepQ sales 0% ahead of consensus and EPS was 6c ahead

	Sep-22	Jun-23	Sep-23							
			Guidance	Consensus	BofA	Reported	Delta vs. Cons. (%)	Delta (\$)	QoQ	YoY
<b>Sales (\$mn, Non-GAAP)</b>	<b>\$2,074</b>	<b>\$1,845</b>	<b>\$1,847.5</b>	<b>\$1,850</b>	<b>\$1,848</b>	<b>\$1,852</b>	<b>0.1%</b>	<b>\$2</b>	<b>0.4%</b>	<b>-10.7%</b>
QoQ%	4.1%	0.2%		0.2%	0.2%	0.4%				
YoY%	22.0%	-7.4%			-10.9%	-10.7%				
Wafer Shipments (000s)	637	573		574	565	575	0.2%	1	0.3%	-9.7%
Revenue Per Wafer (\$)	\$2,925	\$2,878		\$2,881	\$2,907	\$2,863	-0.6%	(\$19)	-0.5%	-2.1%
Automotive	\$95	\$245		\$272	\$270	\$303	11.6%	\$32	23.7%	218.9%
Comms Infrastructure and Data Center	\$368	\$211		\$220	\$186	\$156	-29.0%	(\$64)	-26.1%	-57.6%
Personal Computing	\$48	\$52		\$48	\$51	\$37	-22.8%	(\$11)	-28.8%	-22.9%
Home and Industrial IoT	\$398	\$358		\$344	\$365	\$371	7.9%	\$27	3.6%	-6.8%
Smart Mobile Devices	\$954	\$783		\$770	\$771	\$779	1.2%	\$9	-0.5%	-18.3%
Other & NWR	\$211	\$196		\$198	\$206	\$206	3.9%	\$8	5.1%	-2.4%
<b>Gross Margin % (Non-GAAP)</b>	<b>29.9%</b>	<b>29.6%</b>	<b>28.3%</b>	<b>28.1%</b>	<b>28.3%</b>	<b>29.2%</b>	<b>112</b>		<b>(38)</b>	<b>(73)</b>
Gross Profit (Non-GAAP)	\$621	\$546	<b>\$522</b>		523	\$541			-0.9%	-12.9%
R&D	\$124	\$106			111	\$108			1.9%	-12.9%
SG&A	\$129	\$132			139	\$143			8.3%	10.9%
Opex Total (Non-GAAP)	\$232	\$208		\$216	221	\$219	1.2%	\$3	5.3%	-5.6%
Op Inc (Non-GAAP)	\$389	\$338	<b>\$302</b>	<b>\$303</b>	<b>302</b>	\$322	6.2%	\$19	-4.7%	-17.2%
<b>Op Margin % (Non-GAAP)</b>	<b>18.8%</b>	<b>18.3%</b>	<b>16.3%</b>	<b>16.4%</b>	<b>16.3%</b>	<b>17.4%</b>	<b>99</b>		<b>(93)</b>	<b>(137)</b>
Pretax Income (Non-GAAP)	\$387	\$328			292	304			-7.3%	-21.4%
Tax expense (Non-GAAP)	(\$19)	(\$31)			(14)	4			-112.9%	NA
Tax rate (Non-GAAP)	4.9%	9.5%			4.8%	-1.3%			(1077)	NA
Net Income (Non-GAAP)	\$368	\$297	<b>\$278</b>		278	\$308			3.7%	-16.3%
<b>Diluted EPS (Non-GAAP)</b>	<b>\$0.67</b>	<b>\$0.53</b>	<b>\$0.50</b>	<b>\$0.49</b>	<b>\$0.50</b>	<b>\$0.55</b>	<b>12.4%</b>	<b>\$0.06</b>	<b>3.7%</b>	<b>-16.8%</b>
Diluted Shares	553	556	556		556	556			0.0%	0.5%
<b>Adjusted EBITDA</b>	<b>793</b>	<b>668</b>		<b>703</b>	<b>681</b>	<b>680</b>			<b>1.8%</b>	<b>-14.2%</b>

Source: BofA Global Research estimates, company reports, Bloomberg

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## Q4 guidance vs. expectations

### Exhibit 3: Summary of Q4 guidance vs. expectations

GFS guided DecQ sales \$34mn/2% below Street, with EPS guided 8c above

	Sep-23			Dec-23E	
	Reported	BofA	Cons	Guidance	New BofA
<b>Sales (\$mn)</b>	<b>\$1,852</b>	<b>\$1,863</b>	<b>\$1,884</b>	<b>\$1850 (\$1825-\$1875)</b>	<b>\$1,852</b>
QoQ%	0.4%	0.8%	2.0%		0.0%
	-10.7%	-11.3%			-11.8%
Wafer Shipments (000s)	575	559	594		565
Revenue Per Wafer (\$)	\$2,863	\$2,965	\$2,845		\$2,920
Automotive	\$303	\$296	\$302		\$309
Comms Infrastructure and Data Center	\$156	\$178	\$226		\$153
Personal Computing	\$37	\$50	\$46		\$52
Home and Industrial IoT	\$371	\$362	\$348		\$367
Smart Mobile Devices	\$779	\$771	\$768		\$767
Other & NWR	\$206	\$206	\$199		\$204
<b>Gross Margin % (Non-GAAP)</b>	<b>29.2%</b>	<b>28.5%</b>	<b>28.5%</b>	<b>28.3%</b>	<b>28.3%</b>
Gross Profit (Non-GAAP)	\$541	531		<b>\$523 (\$502-\$544)</b>	\$524
R&D	\$108	115			\$103
SG&A	\$143	143			\$126
Opex Total (Non-GAAP)	\$219	229	\$223		\$167
Op Inc (Non-GAAP)	\$322	302	\$313	<b>\$358 (\$327-\$389)</b>	\$357
<b>Op Margin % (Non-GAAP)</b>	<b>17.4%</b>	<b>16.2%</b>	<b>16.6%</b>	<b>19.3%</b>	<b>19.3%</b>
Pretax Income (Non-GAAP)	\$304	272			347
Tax expense (Non-GAAP)	\$4	(33)			(21)
Tax rate (Non-GAAP)	-1.3%	12.0%			6.0%
Net Income (Non-GAAP)	\$308	239		<b>\$327 (\$296-\$358)</b>	\$326
<b>Diluted EPS (Non-GAAP)</b>	<b>\$0.55</b>	<b>\$0.43</b>	<b>\$0.51</b>	<b>\$0.585 (\$0.53-\$0.64)</b>	<b>\$0.59</b>
Diluted Shares	556	556		557	557
<b>Adjusted EBITDA</b>	<b>680</b>	<b>684</b>	<b>728</b>		<b>732</b>

Source: BofA Global Research estimates, company reports, Bloomberg

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## Balance sheet, cash flow snapshot

### Exhibit 4: Summary of Balance Sheet and Cash Flow Statement

GFS net cash position increased QoQ; Inventory dollars increased and days decreased QoQ

	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	QoQ%	YoY%
Total Cash	\$2,541	\$2,352	\$2,256	\$1,832	\$1,880		
ST Debt	\$244	\$223	\$205	\$221	\$199		
LT Debt	\$1,972	\$2,288	\$2,310	\$2,208	\$2,181		
Total Debt	\$2,216	\$2,511	\$2,515	\$2,429	\$2,380		
Net Cash	\$325	(\$159)	(\$259)	(\$597)	(\$500)		
<b>Net Cash/Share</b>	<b>\$0.59</b>	<b>(\$0.29)</b>	<b>(\$0.47)</b>	<b>(\$1.07)</b>	<b>(\$0.90)</b>	<b>16.2%</b>	<b>-253.0%</b>
DSO	51.3	64.4	64.1	60.8	69.0		
DPO	-	-	-	-	-		
<b>Inventory \$</b>	<b>\$1,342</b>	<b>\$1,339</b>	<b>\$1,423</b>	<b>\$1,504</b>	<b>\$1,509</b>	<b>0.3%</b>	<b>12.4%</b>
<b>Inventory Days</b>	<b>83.4</b>	<b>82.4</b>	<b>97.7</b>	<b>104.2</b>	<b>103.8</b>	<b>-0.4%</b>	<b>24.4%</b>
Cash Conversion days	134.7	146.8	161.7	165.0	172.8		
<b>Cash Flow from Ops</b>	<b>\$679</b>	<b>\$491</b>	<b>\$479</b>	<b>\$546</b>	<b>\$416</b>	<b>-23.8%</b>	<b>-38.7%</b>
Capex	(\$613)	(\$991)	(\$853)	(\$400)	(\$323)		
<b>Free cash flow</b>	<b>\$66</b>	<b>(\$500)</b>	<b>(\$374)</b>	<b>\$146</b>	<b>\$93</b>	<b>-36.3%</b>	<b>40.9%</b>
FCF as % of sales (ttm)	3.2%	-23.8%	-20.3%	7.9%	5.0%		

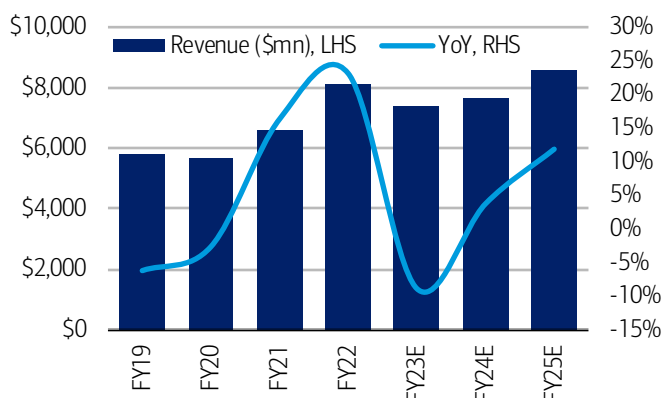
Source: BofA Global Research estimates, company reports

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# Key charts

## Exhibit 5: GFS annual revenue and YoY growth

We see revenue growing towards \$8bn+ by 2025E

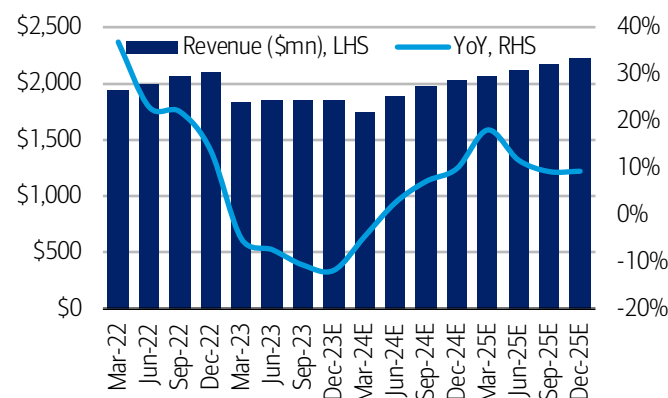


Source: BofA Global Research estimates, company reports

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## Exhibit 6: GFS quarterly revenue and YoY growth

We see consistent 5-10%+ quarterly YoY revenue growth

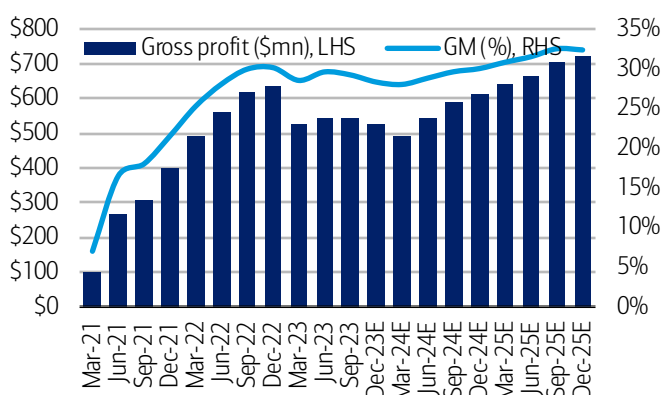


Source: BofA Global Research estimates, company reports

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## Exhibit 7: GFS quarterly gross profit and gross margin %

We see path towards 30%+ gross margins by 2025E

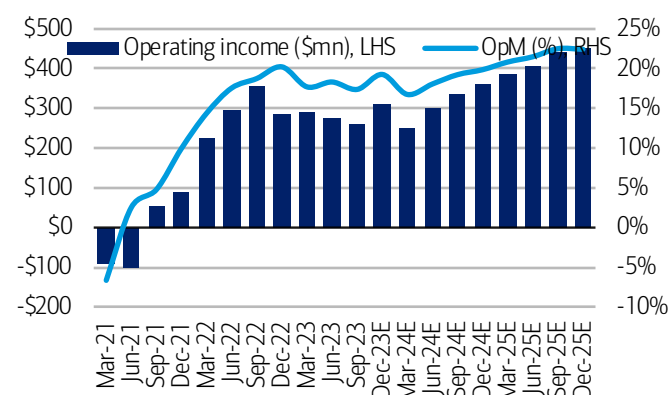


Source: BofA Global Research estimates, company reports

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## Exhibit 8: GFS quarterly operating income and operating margin %

We see path towards 20%+ OpMs by 2025E

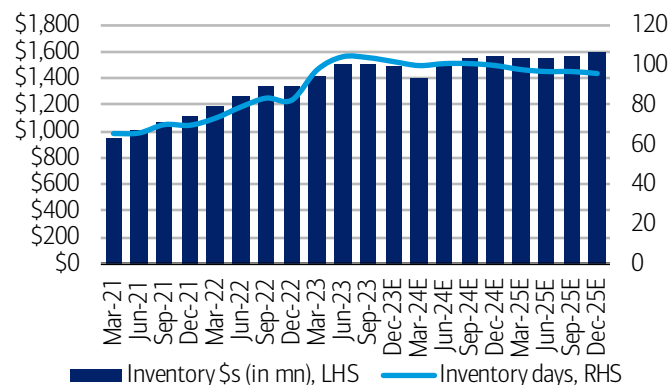


Source: BofA Global Research estimates, company reports

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**Exhibit 9: GFS inventory dollars and days**

We expect inventory days to remain in the 70-100 days range

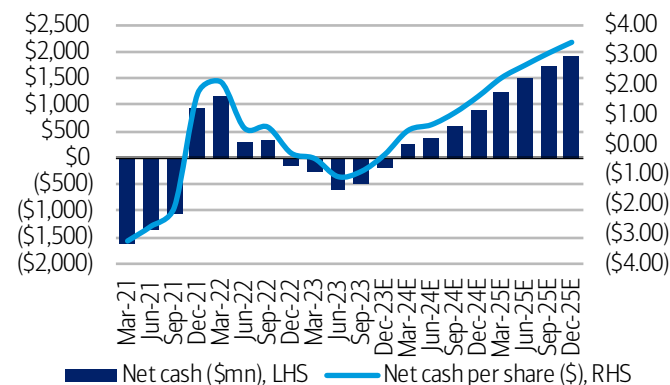


Source: BofA Global Research estimates, company reports

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**Exhibit 10: GFS net cash and net cash per share**

We expect net cash to gradually improve

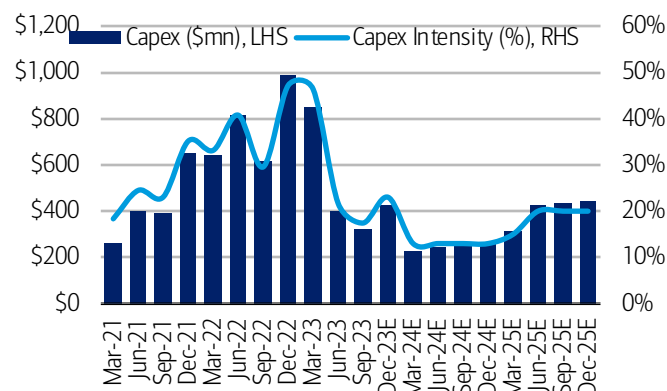


Source: BofA Global Research estimates, company reports

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**Exhibit 11: GFS quarterly capex and YoY growth**

We see a period of capex investment in 2022/2023E

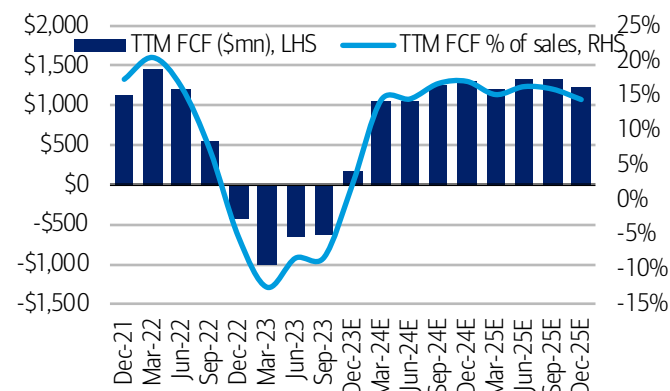


Source: BofA Global Research estimates, company reports

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**Exhibit 12: GFS TTM FCF and FCF as a % of sales**

We see long-term FCF margins approaching 15%



Source: BofA Global Research estimates, company reports

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# Exhibit 13: GFS – Income Statement

GFS reported \$1.85bn in sales and 0.55c in EPS in SepQ

	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23E	1Q24E	2Q24E	3Q24E	4Q24E	FY23E	FY24E	FY25E
FY (December)	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23E	Mar-24E	Jun-24E	Sep-24E	Dec-24E	Dec-23	Dec-24	Dec-25
<b>Revenues (Adj.)</b>	<b>\$1,940</b>	<b>\$1,993</b>	<b>\$2,074</b>	<b>\$2,101</b>	<b>\$1,841</b>	<b>\$1,845</b>	<b>\$1,852</b>	<b>\$1,852</b>	<b>\$1,756</b>	<b>\$1,893</b>	<b>\$1,984</b>	<b>\$2,035</b>	<b>\$7,390</b>	<b>\$7,668</b>	<b>\$8,578</b>
QoQ	5%	3%	4%	1%	-12%	0%	0%	0%	-5%	8%	5%	3%			
YoY	37%	23%	22%	14%	-5%	-7%	-11%	-12%	-5%	3%	7%	10%	-9%	4%	12%
Cost of Revenue	1,471	1,455	1,464	1,479	1,326	1,313	1,323	1,342	1,273	1,358	1,408	1,436	5,304	5,474	5,896
Gross Profit (GAAP)	469	538	610	622	515	532	529	510	482	535	577	600	2,086	2,193	2,682
Gross Profit (Non-GAAP)	490	559	621	633	525	546	541	524	492	545	588	611	2,136	2,235	2,729
R&D Expense	128	120	124	110	109	106	108	103	104	107	108	108	426	426	449
SG&A Expense	116	121	129	130	111	132	143	126	127	130	131	132	512	519	547
Total Opex (GAAP)	244	241	253	334	225	257	268	198	231	236	239	239	948	945	996
Total Opex (Non-GAAP)	211	209	232	208	199	208	219	167	198	203	206	206	793	813	856
Operating Income (GAAP)	225	297	357	288	290	275	261	312	251	299	338	360	1,138	1,248	1,686
Operating Income (Non-GAAP)	279	350	389	425	326	338	322	357	294	342	382	404	1,343	1,422	1,874
Interest Expense	(28)	(19)	(11)	(15)	1	-	3	(10)	3	3	3	3	(6)	12	-
Gain on Asset Sales & Other	10	16	9	403	(14)	(10)	(21)	-	-	-	-	-	(45)	-	-
Pretax Income (GAAP)	207	294	355	676	277	265	243	302	254	302	341	363	1,087	1,260	1,686
Pretax Income (Non-GAAP)	261	347	387	813	313	328	304	347	297	345	385	407	1,292	1,434	1,874
Net Income (GAAP)	179	264	336	668	254	237	249	281	216	257	291	310	1,021	1,074	1,443
Net Income (Non-GAAP)	232	317	368	800	290	297	308	326	258	300	335	354	1,231	1,248	1,630
Diluted EPS (GAAP)	\$0.33	\$0.48	\$0.61	\$1.21	\$0.46	\$0.43	\$0.45	\$0.50	\$0.39	\$0.46	\$0.52	\$0.56	\$1.84	\$1.92	\$2.58
<b>Diluted EPS (Non-GAAP)</b>	<b>\$0.42</b>	<b>\$0.58</b>	<b>\$0.67</b>	<b>\$1.44</b>	<b>\$0.52</b>	<b>\$0.53</b>	<b>\$0.55</b>	<b>\$0.59</b>	<b>\$0.46</b>	<b>\$0.54</b>	<b>\$0.60</b>	<b>\$0.64</b>	<b>\$2.21</b>	<b>\$2.24</b>	<b>\$2.91</b>
Diluted Shares (GAAP)	549	550	553	554	555	556	556	557	558	558	558	558	556	558	560
Diluted Shares (Non-GAAP)	549	550	553	554	555	556	556	557	558	558	558	558	556	558	560
<b>Margin Analysis (Non-GAAP)</b>															
<b>Gross Margin</b>	<b>25.3%</b>	<b>28.0%</b>	<b>29.9%</b>	<b>30.1%</b>	<b>28.5%</b>	<b>29.6%</b>	<b>29.2%</b>	<b>28.3%</b>	<b>28.0%</b>	<b>28.8%</b>	<b>29.6%</b>	<b>30.0%</b>	<b>28.9%</b>	<b>29.2%</b>	<b>31.8%</b>
R&D (GAAP)	6.6%	6.0%	6.0%	5.2%	5.9%	5.7%	5.8%	5.5%	5.9%	5.6%	5.4%	5.3%	5.8%	5.6%	5.2%
SG&A (GAAP)	6.0%	6.1%	6.2%	6.2%	6.0%	7.2%	7.7%	6.8%	7.2%	6.8%	6.6%	6.5%	6.9%	6.8%	6.4%
Opex	10.9%	10.5%	11.2%	9.9%	10.8%	11.3%	11.8%	9.0%	11.3%	10.7%	10.4%	10.1%	10.7%	10.6%	10.0%
<b>Operating Margin</b>	<b>14.4%</b>	<b>17.6%</b>	<b>18.8%</b>	<b>20.2%</b>	<b>17.7%</b>	<b>18.3%</b>	<b>17.4%</b>	<b>19.3%</b>	<b>16.7%</b>	<b>18.1%</b>	<b>19.2%</b>	<b>19.9%</b>	<b>18.2%</b>	<b>18.5%</b>	<b>21.8%</b>
Tax rate	11.1%	8.6%	4.9%	1.6%	7.3%	9.5%	(1.3%)	6.0%	13.0%	13.0%	13.0%	13.0%	4.7%	13.0%	13.0%
Net Income	12.0%	15.9%	17.7%	38.1%	15.8%	16.1%	16.6%	17.6%	14.7%	15.9%	16.9%	17.4%	16.7%	16.3%	19.0%

Source: BofA Global Research estimates, company reports

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**Exhibit 14: GFS – Segment Model**

We expect revenue growth to be led by automotive sales growth

	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23E	1Q24E	2Q24E	3Q24E	4Q24E	FY23E	FY24E	FY25E
<b>FY (December)</b>	<b>Mar-22</b>	<b>Jun-22</b>	<b>Sep-22</b>	<b>Dec-22</b>	<b>Mar-23</b>	<b>Jun-23</b>	<b>Sep-23</b>	<b>Dec-23E</b>	<b>Mar-24E</b>	<b>Jun-24E</b>	<b>Sep-24E</b>	<b>Dec-24E</b>	<b>Dec-23</b>	<b>Dec-24</b>	<b>Dec-25</b>
Automotive	81	82	95	115	180	245	303	309	298	292	289	291	1,037	1,171	1,355
Comms Infrastructure and Data Center	327	342	368	386	352	211	156	153	150	184	211	217	872	762	828
Personal Computing	41	95	48	115	36	52	37	52	53	56	59	55	177	222	242
Home and Industrial IoT	323	346	398	416	344	358	371	367	358	372	402	422	1,440	1,555	1,788
Smart Mobile Devices	977	969	954	823	696	783	779	767	691	773	797	813	3,025	3,073	3,408
Other & NWR	191	159	211	246	233	196	206	204	206	215	226	237	839	885	956
<b>Total Revenue</b>	<b>1,940</b>	<b>1,993</b>	<b>2,074</b>	<b>2,101</b>	<b>1,841</b>	<b>1,845</b>	<b>1,852</b>	<b>1,852</b>	<b>1,756</b>	<b>1,893</b>	<b>1,984</b>	<b>2,035</b>	<b>7,390</b>	<b>7,668</b>	<b>8,578</b>
<b>QoQ Change %</b>															
Automotive															
Comms Infrastructure and Data Center															
Personal Computing															
Home and Industrial IoT															
Smart Mobile Devices															
Other & NWR															
<b>Total Revenue</b>															
<b>YoY Change %</b>															
Automotive													178%	13%	16%
Comms Infrastructure and Data Center													-39%	-13%	9%
Personal Computing													-41%	26%	9%
Home and Industrial IoT													-3%	8%	15%
Smart Mobile Devices													-19%	2%	11%
Other & NWR													4%	5%	8%
<b>Total Revenue</b>													<b>-9%</b>	<b>4%</b>	<b>12%</b>
<b>% of Sales</b>															
Automotive	4%	4%	5%	5%	10%	13%	16%	17%	17%	15%	15%	14%	14%	15%	16%
Comms Infrastructure and Data Center	17%	17%	18%	18%	19%	11%	8%	8%	9%	10%	11%	11%	12%	10%	10%
Personal Computing	2%	5%	2%	5%	2%	3%	2%	3%	3%	3%	3%	3%	2%	3%	3%
Home and Industrial IoT	17%	17%	19%	20%	19%	19%	20%	20%	20%	20%	20%	21%	19%	20%	21%
Smart Mobile Devices	50%	49%	46%	39%	38%	42%	42%	41%	39%	41%	40%	40%	41%	40%	40%
Other & NWR	10%	8%	10%	12%	13%	11%	11%	11%	12%	11%	11%	12%	11%	12%	11%
<b>Total Revenue</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: BofA Global Research estimates, company reports

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## Exhibit 15: GFS – Balance Sheet

We expect an improvement in GFS' net cash position overtime

FY (December)	1Q22 Mar-22	2Q22 Jun-22	3Q22 Sep-22	4Q22 Dec-22	1Q23 Mar-23	2Q23 Jun-23	3Q23 Sep-23	4Q23E Dec-23E	1Q24E Mar-24E	2Q24E Jun-24E	3Q24E Sep-24E	4Q24E Dec-24E	FY23E Dec-23	FY24E Dec-24	FY25E Dec-25
<b>Assets</b>															
Cash and Cash Equivalents	3,264	2,474	2,541	2,352	2,256	1,832	1,880	2,194	2,645	2,753	2,979	3,283	2,194	3,283	4,303
Other Current Assets	0	525	567	622	653	955	1,014	1,014	1,014	1,014	1,014	1,014	1,014	1,014	1,014
Receivables, Prepayments and Other Assets	1,210	1,247	1,169	1,487	1,296	1,232	1,404	1,404	1,331	1,435	1,504	1,543	1,404	1,543	1,686
Inventories	1,185	1,262	1,342	1,339	1,423	1,504	1,509	1,501	1,397	1,504	1,559	1,574	1,501	1,574	1,597
<b>Total current assets</b>	<b>5,659</b>	<b>5,508</b>	<b>5,619</b>	<b>5,800</b>	<b>5,628</b>	<b>5,523</b>	<b>5,807</b>	<b>6,113</b>	<b>6,387</b>	<b>6,706</b>	<b>7,056</b>	<b>7,414</b>	<b>6,113</b>	<b>7,414</b>	<b>8,600</b>
Other Noncurrent Assets	733	963	1,069	1,153	1,087	1,258	1,192	1,192	1,192	1,192	1,192	1,192	1,192	1,192	1,192
Deferred Tax Assets	337	313	302	292	271	245	251	776	771	766	761	756	776	756	736
Property, Plant, and Equipment	9,173	9,410	10,218	10,596	10,829	10,789	10,594	10,654	10,562	10,462	10,358	10,250	10,654	10,250	10,425
Goodwill and Intangible Assets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Assets</b>	<b>15,902</b>	<b>16,194</b>	<b>17,208</b>	<b>17,841</b>	<b>17,815</b>	<b>17,815</b>	<b>17,844</b>	<b>18,735</b>	<b>18,911</b>	<b>19,126</b>	<b>19,366</b>	<b>19,613</b>	<b>18,735</b>	<b>19,613</b>	<b>20,953</b>
<b>Liabilities &amp; Equity</b>															
Trade and Other Payables	0	0	0	0	0	0	0	0	42	75	93	95	0	95	200
Other Current Liabilities	3,039	3,051	3,628	3,136	2,690	2,569	2,549	2,549	2,549	2,549	2,549	2,549	2,549	2,549	2,549
Current Portion of Lease Obligation	0	0	0	0	0	0	0	0	68	68	68	68	0	68	68
Current Portion of Long-term Debt	281	262	244	223	205	221	199	199	199	199	199	199	199	199	199
<b>Total current liabilities</b>	<b>3,320</b>	<b>3,313</b>	<b>3,872</b>	<b>3,359</b>	<b>2,895</b>	<b>2,790</b>	<b>2,748</b>	<b>2,748</b>	<b>2,858</b>	<b>2,891</b>	<b>2,909</b>	<b>2,911</b>	<b>2,748</b>	<b>2,911</b>	<b>3,016</b>
Other Non-current liabilities	2,413	2,315	2,283	2,234	2,303	2,243	2,084	2,129	2,172	2,215	2,259	2,303	2,129	2,303	2,490
Noncurrent Deferred Revenue	0	0	0	0	0	0	0	0	-66	-132	-197	-263	0	-263	-526
Noncurrent Portion of Lease Obligation	0	0	0	0	0	0	0	0	666	666	666	666	0	666	666
Noncurrent Portion of Long-term Debt	1,830	1,908	1,972	2,288	2,310	2,208	2,181	2,181	2,181	2,181	2,181	2,181	2,181	2,181	2,181
<b>Total Liabilities</b>	<b>7,563</b>	<b>7,536</b>	<b>8,127</b>	<b>7,881</b>	<b>7,508</b>	<b>7,241</b>	<b>7,013</b>	<b>7,058</b>	<b>7,811</b>	<b>7,821</b>	<b>7,818</b>	<b>7,798</b>	<b>7,058</b>	<b>7,798</b>	<b>7,827</b>
Total Equity	8,339	8,658	9,081	9,960	10,307	10,574	10,831	11,677	11,100	11,305	11,549	11,815	11,677	11,815	13,125
<b>Total Liabilities and Shareholders' Equity</b>	<b>15,902</b>	<b>16,194</b>	<b>17,208</b>	<b>17,841</b>	<b>17,815</b>	<b>17,815</b>	<b>17,844</b>	<b>18,735</b>	<b>18,911</b>	<b>19,126</b>	<b>19,366</b>	<b>19,613</b>	<b>18,735</b>	<b>19,613</b>	<b>20,953</b>
<b>Cash and Liquidity Ratios</b>															
Total Cash	3,264	2,474	2,541	2,352	2,256	1,832	1,880	2,194	2,645	2,753	2,979	3,283	2,194	3,283	4,303
Short-term debt	281	262	244	223	205	221	199	199	199	199	199	199	199	199	199
Long-term debt	1,830	1,908	1,972	2,288	2,310	2,208	2,181	2,181	2,181	2,181	2,181	2,181	2,181	2,181	2,181
Total debt	2,111	2,170	2,216	2,511	2,515	2,429	2,380	2,380	2,380	2,380	2,380	2,380	2,380	2,380	2,380
Net Cash	1,153	304	325	(159)	(259)	(597)	(500)	(186)	265	373	599	903	(186)	903	1,923
<b>Net Cash/dil. share</b>	<b>2.10</b>	<b>0.55</b>	<b>0.59</b>	<b>(0.29)</b>	<b>(0.47)</b>	<b>(1.07)</b>	<b>(0.90)</b>	<b>(0.33)</b>	<b>0.48</b>	<b>0.67</b>	<b>1.07</b>	<b>1.62</b>	<b>(0.33)</b>	<b>1.62</b>	<b>3.43</b>
<b>Cash conversion ratios</b>															
Days Sales Outstanding (DSO)	56.8	56.9	51.3	64.4	64.1	60.8	69.0	69.0	69.0	69.0	69.0	69.0			
Payable Days (DPO)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	5.0	6.0	6.0			
<b>Inventory Days (DIO)</b>	<b>73.3</b>	<b>78.9</b>	<b>83.4</b>	<b>82.4</b>	<b>97.7</b>	<b>104.2</b>	<b>103.8</b>	<b>101.8</b>	<b>99.8</b>	<b>100.8</b>	<b>100.8</b>	<b>99.8</b>			
Cash Conversion Days	130.1	135.9	134.7	146.8	161.7	165.0	172.8	170.8	171.8	174.8	175.8	174.8			

Source: BofA Global Research estimates, company reports

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**Exhibit 16: GFS – Statement of Cash Flow**

We expect a large capex decline in 2024E

<b>FY (December)</b>	<b>1Q22</b>	<b>2Q22</b>	<b>3Q22</b>	<b>4Q22</b>	<b>1Q23</b>	<b>2Q23</b>	<b>3Q23</b>	<b>4Q23E</b>	<b>1Q24E</b>	<b>2Q24E</b>	<b>3Q24E</b>	<b>4Q24E</b>	<b>FY23E</b>	<b>FY24E</b>	<b>FY25E</b>
	<b>Mar-22</b>	<b>Jun-22</b>	<b>Sep-22</b>	<b>Dec-22</b>	<b>Mar-23</b>	<b>Jun-23</b>	<b>Sep-23</b>	<b>Dec-23E</b>	<b>Mar-24E</b>	<b>Jun-24E</b>	<b>Sep-24E</b>	<b>Dec-24E</b>	<b>Dec-23</b>	<b>Dec-24</b>	<b>Dec-25</b>
<b>Operating Activities</b>															
Net Income (Loss)	179	264	336	668	254	237	249	281	216	257	291	310	1,021	1,074	1,443
Depreciation & Amortization	408	411	395	409	343	340	366	366	321	346	362	372	1,415	1,400	1,438
Stock Compensation Expense	54	53	32	43	31	44	44	45	43	43	44	44	164	174	187
Gain on Sale of Assets	0	0	0	(403)	0	0	0	0	0	0	0	0	0	0	0
Finance Expense	28	19	11	15	(1)	0	(3)	10	(3)	(3)	(3)	(3)	6	(12)	0
Other Adjustments	(31)	(59)	(69)	(15)	35	(8)	(18)	21	39	45	50	53	30	186	244
Change in assets and liabilities:															
Change in working capital	189	(101)	(37)	(226)	(205)	(91)	(218)	8	220	(179)	(106)	(52)	(506)	(117)	(60)
Customer advance funding - receivables	(1)	0	0	0	0	0	0	0	6	6	6	6	0	25	25
Customer advance funding - payables	0	0	0	0	0	0	0	0	(72)	(72)	(72)	(72)	0	(288)	(288)
Interest Paid	0	0	0	0	0	0	0	0	(30)	(30)	(30)	(30)	0	(120)	(120)
Income Tax Paid	0	0	0	0	0	0	0	0	(5)	(5)	(5)	(5)	0	(20)	(20)
<b>Cash From Operations</b>	<b>844</b>	<b>609</b>	<b>679</b>	<b>491</b>	<b>479</b>	<b>546</b>	<b>416</b>	<b>731</b>	<b>734</b>	<b>408</b>	<b>538</b>	<b>623</b>	<b>2,172</b>	<b>2,302</b>	<b>2,848</b>
<b>Investing Activities</b>															
Purchase of Property, Plant, Equipment	(643)	(812)	(613)	(991)	(853)	(400)	(323)	(426)	(228)	(246)	(258)	(265)	(2,002)	(997)	(1,612)
Advances and Proceeds from Sale of Assets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Adjustments	4	(792)	(151)	(60)	267	(488)	10	10	0	0	0	0	(201)	0	0
<b>Cash From Investing</b>	<b>(639)</b>	<b>(1,604)</b>	<b>(764)</b>	<b>(1,051)</b>	<b>(586)</b>	<b>(888)</b>	<b>(313)</b>	<b>(416)</b>	<b>(228)</b>	<b>(246)</b>	<b>(258)</b>	<b>(265)</b>	<b>(2,203)</b>	<b>(997)</b>	<b>(1,612)</b>
<b>Financing Activities</b>															
Proceeds/Repayment of Shareholder Loan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proceeds/Repayment of Debt	107	124	95	255	(30)	(87)	(54)	0	0	0	0	0	(171)	0	0
Repayment of Lease Obligation	0	0	0	0	0	0	0	0	(9)	(9)	(9)	(9)	0	(37)	(37)
Proceeds from Government Grant	0	0	0	0	0	0	0	0	7	7	7	7	0	28	28
Non-Controlling Interest & Other	11	83	62	105	40	5	1	1	(50)	(50)	(50)	(50)	47	(199)	(199)
IPO Proceeds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cash From Financing</b>	<b>118</b>	<b>207</b>	<b>157</b>	<b>360</b>	<b>10</b>	<b>(82)</b>	<b>(53)</b>	<b>1</b>	<b>(52)</b>	<b>(52)</b>	<b>(52)</b>	<b>(52)</b>	<b>(124)</b>	<b>(208)</b>	<b>(208)</b>
Effect of Exchange Rate Changes	1	(2)	(5)	11	1	0	(2)	(2)	(2)	(2)	(2)	(2)	(3)	(8)	(8)
Net Change in Cash/Eqv.	325	(790)	67	(189)	(96)	(424)	48	314	451	108	226	305	(158)	1,090	1,020
Cash/Eqv. at beginning of period	2,939	3,264	2,474	2,541	2,352	2,256	1,832	1,880	2,194	2,645	2,753	2,979	2,285	2,127	3,216
<b>Cash/Eqv. at end of period</b>	<b>3,264</b>	<b>2,474</b>	<b>2,541</b>	<b>2,352</b>	<b>2,256</b>	<b>1,832</b>	<b>1,880</b>	<b>2,194</b>	<b>2,645</b>	<b>2,753</b>	<b>2,979</b>	<b>3,283</b>	<b>2,127</b>	<b>3,216</b>	<b>4,236</b>
Free Cash Flow	201	(203)	66	(500)	(374)	146	93	305	505	162	280	359	170	1,306	1,236
TTM FCF	426	132	683	1,141	1,455	1,214	563	(436)	(1,011)	(662)	(635)	170			
<b>TTM FCF Margin</b>	<b>8.7%</b>	<b>2.5%</b>	<b>11.8%</b>	<b>17.3%</b>	<b>20.5%</b>	<b>16.2%</b>	<b>7.2%</b>	<b>(5.4%)</b>	<b>(12.6%)</b>	<b>(8.4%)</b>	<b>(8.3%)</b>	<b>2.3%</b>	<b>2.3%</b>	<b>17.0%</b>	<b>14.4%</b>

Source: BofA Global Research estimates, company reports

BofA GLOBAL RESEARCH



## Price objective basis & risk

### GlobalFoundries (GFS)

Our PO of \$70 is based on 14x our CY24E EV/EBITDA , which is above Asian pure-play foundry peers at 4-8x but in line with US-based integrated design/manufacturing peers at 8-14x.

Downside risks to our PO are: (1) semi industry cyclicality where foundries are more impacted in down-cycle given high fixed cost structure, (2) execution on strategic repositioning which is critical to gross margin expansion and EPS growth, (3) large ownership concentration with Mubadala, which is wholly owned by the government of Abu Dhabi adds geopolitical and investor concentration risk.

## Analyst Certification

I, Vivek Arya, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

### US - Semiconductors and Semiconductor Capital Equipment Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
<b>BUY</b>				
	Analog Devices Inc.	ADI	ADI US	Vivek Arya
	Applied Materials, Inc.	AMAT	AMAT US	Vivek Arya
	Arm Holdings	ARM	ARM US	Vivek Arya
	Axcelis Technologies	ACLS	ACLS US	Duksan Jang
	Broadcom Inc	AVGO	AVGO US	Vivek Arya
	Cadence	CDNS	CDNS US	Vivek Arya
	Camtek	CAMT	CAMT US	Vivek Arya
	GlobalFoundries	GFS	GFS US	Vivek Arya
	KLA Corporation	KLAC	KLAC US	Vivek Arya
	Lam Research Corp.	LRCX	LRCX US	Vivek Arya
	Marvell Technology Group Ltd.	MRVL	MRVL US	Vivek Arya
	Microchip	MCHP	MCHP US	Vivek Arya
	Nova	NVMI	NVMI US	Vivek Arya
	NVIDIA Corporation	NVDA	NVDA US	Vivek Arya
	NXP Semiconductors NV	NXPI	NXPI US	Vivek Arya
	onsemi	ON	ON US	Vivek Arya
	Synopsys	SNPS	SNPS US	Vivek Arya
<b>NEUTRAL</b>				
	Advanced Micro Devices, Inc	AMD	AMD US	Vivek Arya
	Allegro MicroSystems	ALGM	ALGM US	Blake Friedman
	Coherent Corp	COHR	COHR US	Vivek Arya
	Lattice Semiconductor	LSCC	LSCC US	Blake Friedman
	M/A-Com	MTSI	MTSI US	Vivek Arya
	Micron Technology, Inc	MU	MU US	Vivek Arya
	Teradyne	TER	TER US	Vivek Arya
	Texas Instruments Inc.	TXN	TXN US	Vivek Arya
<b>UNDERPERFORM</b>				
	Ambarella	AMBA	AMBA US	Vivek Arya
	Credo Technology	CRDO	CRDO US	Vivek Arya
	Intel	INTC	INTC US	Vivek Arya
	Lumentum Holdings	LITE	LITE US	Vivek Arya
	Qorvo Inc.	QRVO	QRVO US	Vivek Arya
	Skyworks Solutions, Inc.	SWKS	SWKS US	Vivek Arya
	Wolfspeed Inc	WOLF	WOLF US	Vivek Arya



## **iQmethod<sup>SM</sup> Measures Definitions**

### **Business Performance**

Return On Capital Employed

Return On Equity  
Operating Margin  
Earnings Growth  
Free Cash Flow

### **Quality of Earnings**

Cash Realization Ratio  
Asset Replacement Ratio  
Tax Rate  
Net Debt-To-Equity Ratio  
Interest Cover

### **Valuation Toolkit**

Price / Earnings Ratio  
Price / Book Value  
Dividend Yield  
Free Cash Flow Yield  
Enterprise Value / Sales

EV / EBITDA

### **Numerator**

NOPAT = (EBIT + Interest Income) × (1 – Tax Rate) + Goodwill Amortization

Net Income  
Operating Profit  
Expected 5 Year CAGR From Latest Actual  
Cash Flow From Operations – Total Capex

### **Numerator**

Cash Flow From Operations  
Capex  
Tax Charge  
Net Debt = Total Debt – Cash & Equivalents  
EBIT

### **Numerator**

Current Share Price  
Current Share Price  
Annualised Declared Cash Dividend  
Cash Flow From Operations – Total Capex  
EV = Current Share Price × Current Shares + Minority Equity + Net Debt +  
Other LT Liabilities  
Enterprise Value

### **Denominator**

Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill  
Amortization  
Shareholders' Equity  
Sales  
N/A  
N/A

### **Denominator**

Net Income  
Depreciation  
Pre-Tax Income  
Total Equity  
Interest Expense

### **Denominator**

Diluted Earnings Per Share (Basis As Specified)  
Shareholders' Equity / Current Basic Shares  
Current Share Price  
Market Cap = Current Share Price × Current Basic Shares  
Sales

Basic EBIT + Depreciation + Amortization

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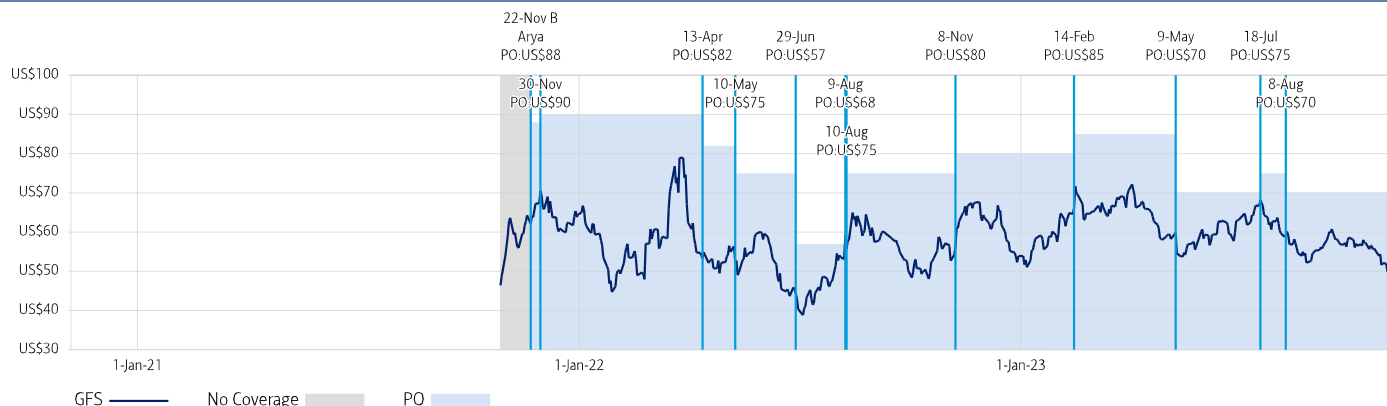
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## Important Disclosures

### GlobalFoundries (GFS) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

### Equity Investment Rating Distribution: Technology Group (as of 30 Sep 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	204	51.52%	Buy	104	50.98%
Hold	95	23.99%	Hold	45	47.37%
Sell	97	24.49%	Sell	27	27.84%

### Equity Investment Rating Distribution: Global Group (as of 30 Sep 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	1869	53.48%	Buy	1046	55.97%
Hold	828	23.69%	Hold	461	55.68%
Sell	798	22.83%	Sell	370	46.37%

<sup>R1</sup> Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster <sup>R2</sup>
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

<sup>R2</sup> Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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