

# Intel Corp.

## Magnitude and Quality of Upside Disappoints

INTC

Semiconductor Devices | Decrease Target Price

Target price (12M, US\$)  
**65.00**  
Outperform

**Bottom line:** While INTC reported C3Q and guided C4Q modestly ABOVE – the upside fell short of more bullish previews, GM/OpM was BELOW estimates, and C4Q EPS upside of 3 cents includes ~8 cents from un-forecasted investment gains. Disappointing GM despite accounting benefits from 10nm ramp will embolden calls that INTC is facing increased competition, and lack of clarity on 7nm manufacturing will continue to be an overhang. We would note, ASP declines in C3Q were mainly mix related – more NB than DT, low-end client in PCs, and weak Enterprise Servers (-47% y/y) – and increasing platform costs on 30% higher mix of 10nm and ramp of Networking SoCs. We previewed INTC earnings as a beat/raise (we were disappointed) but noted that we did not believe the cc would alter investors view of structural issues (unfortunately we were not disappointed). However we continue to argue that while share loss and execution concerns underscore that INTC is not the most levered play on an accelerating Compute TAM (3-5% CAGR to 10-15% CAGR), valuation suggests it's the most undervalued especially in light of the companies ecosystem value and improving product cycle in 2021 (Ice Lake, Sapphire Rapids). C3Q Rev/EPS was \$18.3bn/\$1.11 with Rev slightly ABOVE guide of ~\$18.20bn/\$1.10 albeit C3Q GM of 54.8% (~flat q/q) was BELOW guide of 57.0% due to (1) DCG platform ASPs down 14% q/q (-15% y/y) as mix shifted from weak Enterprise/Gov't (down 47% y/y) to Cloud/Comms – DCG ex-E&G down ~3% q/q and (2) NB/DT ASPs down 5%/10% q/q (flat/down 7% y/y) as CCG mix shifted heavily to consumer NB vs DT. Specifically, C4Q Rev/EPS was guided to ~\$17.4bn/\$1.10 with Rev mostly INLINE with Street \$17.4bn and EPS ABOVE Street \$1.07 albeit low quality - ~8 cent EPS benefit from capital portfolio investments with GM/OpM ~300bps/300bps BELOW. INTC expects similar negative mix/ASPs impacts to C4Q CCG/DCG as education/consumer NBs remain strong and DCG reflects moderate digestion in Cloud, with E&G still weak – guide embeds: (1) PC-Centric down low-single digit % y/y and (2) DCG down ~25% y/y. We lower our CY21 EPS to \$4.70 from \$5.20 to reflect removing NAND from non-GAAP results beginning in C1Q21 (~20 cents) with the balance reflecting lower GM until there is clarity on 7nm – our CY21 Rev growth ex-NAND is a reasonable -4.4% y/y. INTC currently trades at 11.4x CY21 EPS – a 48% discount to SOX well below 25%/20% 3/5 yr averages – or 13.8x our new TP of \$65 down from \$70.

Previous target price (12M, US\$)	70.00
Price (22 Oct 20, US\$)	53.90
52-week price range	68.47 - 44.61
Enterprise value (US\$ m)	211,399

### Research Analysts

John W. Pitzer

Dalya Hahn

Eric Hu

Jerome Darling

### Financial and valuation metrics

Year	12/19A	12/20E	12/21E
EPS (Excl. ESO) (US\$)	5.43	5.26	5.10
EPS (CS adj.,)	5.09	4.88	4.70
Prev. EPS (CS adj., US\$)	-	4.90	5.20
P/E (CS adj.) (x)	10.6	11.0	11.5
P/E rel. (CS adj., %)	49.9	42.0	55.0
Revenue (US\$ m)	71,965.0	75,289.0	72,000.0
Net Debt (US\$ m)	11,911	-17,837	-23,211
OCFPS (US\$)	7.41	7.72	8.68
P/OCF (x)	7.3	7.0	6.2
Number of shares (m)	4,253.00	Price/Sales (x)	3.08
BV/share (Next Qtr., US\$)	12.3	P/BVPS (x)	2.3
Net debt (Next Qtr., US\$ m)	-20,778.0	Dividend (current, US\$)	1.3
Dividend yield (%)	1.98		

Source: Company data, Refinitiv, Credit Suisse estimates

### Share price performance



On 22-Oct-2020 the S&P 500 INDEX closed at 3453.49 Daily  
Oct24, 2019 - Oct22, 2020, 10/24/19 = US\$52.23

Quarterly EPS	Q1	Q2	Q3	Q4
2019A	0.89	1.06	1.32	1.58
2020E	1.32	1.14	1.02	1.02
2021E	0.86	1.02	1.22	1.27

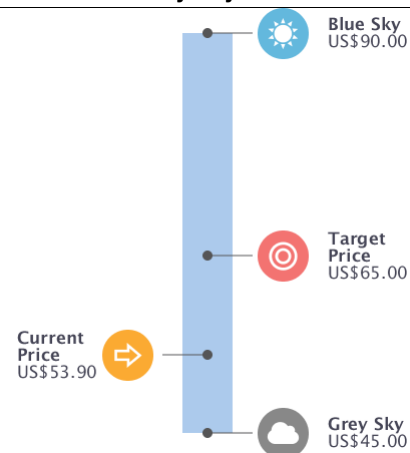
**DISCLOSURE APPENDIX AT THE BACK OF THIS REPORT CONTAINS IMPORTANT DISCLOSURES, ANALYST CERTIFICATIONS, LEGAL ENTITY DISCLOSURE AND THE STATUS OF NON-US ANALYSTS.** US Disclosure: Credit Suisse does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

**Intel Corp. (INTC)**Price (22 Oct 2020): **US\$53.9**Target Price: (from 70.00) **65.00**Analyst: **John Pitzer**Rating: **Outperform**

Income Statement	12/19A	12/20E	12/21E	
Revenue (US\$ m)	71,965.0	75,289.0	72,000.0	
EBITDA	36,134.0	27,304.7	25,084.9	
Operating profit	23,752.0	23,603.0	21,711.0	
Recurring profit	25,775.0	24,049.0	22,311.0	
Cash Flow	12/19A	12/20E	12/21E	
Cash flow from operations	33,145	32,586	35,426	
CAPEX	(16,213)	(14,350)	(17,000)	
Free cashflow to the firm	16,932	18,236	18,426	
Cash flow from investments	(1,405)	(21,855)	(17,000)	
Net share issue(/repurchase)	(12,826)	9,765	(4,328)	
Dividends paid	(5,576)	(5,619)	(5,616)	
Issuance (retirement) of debt	765	7,472	0	
Other	72	605	0	
Cashflow from financing activities	(17,565)	12,223	(9,944)	
Effect of exchange rates	-	-	-	
Changes in Net Cash/Debt	(3,244)	29,748	5,374	
Net debt at end	11,911	(17,837)	(23,211)	
Balance Sheet (\$US)	12/19A	12/20E	12/21E	
Assets				
Other current assets	1,713	2,119	2,119	
Total current assets	31,239	66,079	72,473	
Total assets	136,524	174,442	183,661	
Liabilities				
Short-term debt	3,693	504	504	
Total current liabilities	22,310	20,037	19,636	
Long-term debt	25,308	36,059	36,059	
Total liabilities	58,865	68,632	66,231	
Shareholder equity	77,659	105,809	117,399	
Total liabilities and equity	136,524	174,442	183,629	
Net debt	11,911	(17,837)	(23,211)	
Per share	12/19A	12/20E	12/21E	
No. of shares (wtd avg)	4,473	4,222	4,080	
CS adj. EPS	5.09	4.88	4.70	
Prev. EPS (US\$)	-	4.90	5.20	
Dividend (US\$)	1.25	1.33	1.38	
Free cash flow per share	3.79	4.32	4.52	
Earnings	12/19A	12/20E	12/21E	
Sales growth (%)	1.6	4.6	(4.4)	
Net profit growth (%)	3.9	(9.4)	(6.9)	
EPS growth (%)	9.0	(3.3)	(3.0)	
EBIT margin (%)	33.0	31.3	30.2	
Valuation	12/19A	12/20E	12/21E	
EV/Sales (x)	3.35	2.81	2.86	
EV/EBIT (x)	10.2	9.0	9.5	
P/E (x)	10.6	11.0	11.5	
Quarterly EPS	Q1	Q2	Q3	Q4
2019A	0.89	1.06	1.32	1.58
2020E	1.32	1.14	1.02	1.02
2021E	0.86	1.02	1.22	1.27

**Company Background**

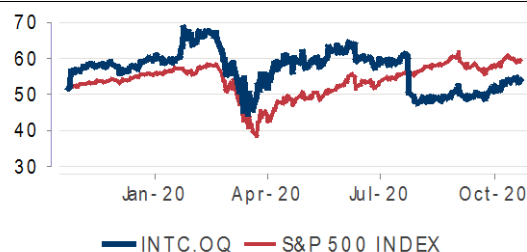
Intel Corporation is a semiconductor chip maker company. The Company develops advanced integrated digital technology products, primarily integrated circuits, components, such as microprocessors, chipsets, motherboards, wireless and wired connectivity.

**Blue/Grey Sky Scenario****Our Blue Sky Scenario (US\$) 90.00**

Our Blue Sky scenario assumes a reacceleration in DCG growth, healthy PC environment and sustainable operating leverage, driving upside to \$90.

**Our Grey Sky Scenario (US\$) 45.00**

In our Grey Sky scenario, should the macro backdrop worsen we see a floor at \$45 or ~3% dividend yield.

**Share price performance**

On 22-Oct-2020 the S&P 500 INDEX closed at 3453.49  
Daily Oct24, 2019 - Oct22, 2020, 10/24/19 = US\$52.23

Source: Company data, Refinitiv, Credit Suisse estimates

## Figure 1: Summary of Results/Expectations

US\$ in millions, unless otherwise stated

INTC	Jun-20	Sep-20				Dec-20E				CY2020E					CY2021E		
	Reported	New CS	CS	Cons	Guidance	New CS	CS	Cons	Guidance	New CS	CS	Cons	Guidance	New Guidance	New CS	CS	Cons
Revenue	\$19,728	\$18,333	\$18,200	\$18,240	-\$18.2bn	\$17,400	\$17,245	\$17,377	-\$17.4bn	\$75,289	\$75,001	\$75,176	-\$75bn	-\$75.3bn	\$72,000	\$76,750	\$73,634
% q/q	-0.5%	-7.1%	-7.7%	-7.5%		-5.1%	-5.2%	-4.7%	-5.1%								
Seasonal q/q %	3.2%	9.6%	9.6%			3.1%	3.1%			4.6%	4.2%	4.5%	5.9%	4.6%	-4.4%	2.3%	-2.1%
% y/y	19.5%	-4.5%	-5.2%	-5.0%		-13.9%	-14.7%	-14.0%									
Gross Margin	54.8%	54.8%	57.0%	56.7%	~57%	55.0%	58.5%	57.9%	~55%	56.8%	58.1%	57.7%	~58%	~57%	57.2%	57.5%	57.4%
OpEx (R&D plus MG&A)	\$4,751	\$4,655	\$4,920			\$4,960	\$4,850			\$19,132	\$19,287				\$19,500	\$19,600	
Operating Margin	30.7%	29.4%	30.0%	30.0%	~30%	26.5%	30.4%	29.6%	~26.5%	31.3%	32.4%	32.1%	~32%	~31.5%	30.2%	32.0%	30.8%
Net Income	\$5,278	\$4,675	\$4,642		TR -15.5%	\$4,497	\$4,557		TR -15.5%	\$20,682	\$20,709		TR of -14.5%	TR -14.5%	\$19,187	\$21,234	
Net Margin	26.8%	25.5%	25.5%			25.8%	26.4%			27.5%	27.6%				26.6%	27.7%	
EPS (Non-GAAP w/SBC)	\$1.23	\$1.11	\$1.10	\$1.11	-\$1.10	\$1.10	\$1.12	\$1.07	-\$1.10	\$4.89	\$4.90	\$4.85	\$4.85	-\$4.90	\$4.70	\$5.20	\$4.74
Fully diluted shares	4,284	4,211	4,213			4,080	4,080			4,222	4,222				4,080	4,080	

Source: Company data, Credit Suisse estimates, FactSet

## Figure 2: CS Estimate Variance vs INTC Results

P&L	Reported vs. CS Estimates (Reported Quarter)			
	Sep-20A	Sep-20E	Abs. Delta	% Delta
<b>Segment Revenue</b>	<b>\$18,333.0</b>	<b>\$18,200.0</b>	<b>\$133.0</b>	<b>0.7%</b>
CCG	\$9,847.0	\$9,027.0	\$820.0	9.1%
DCG	\$5,905.0	\$6,383.0	(\$478.0)	-7.5%
IoT	\$911.0	\$900.0	\$11.0	1.2%
NSG	\$1,153.0	\$1,300.0	(\$147.0)	-11.3%
PSG	\$411.0	\$500.0	(\$89.0)	-17.8%
Other	\$106.0	\$90.0	\$16.0	17.8%
<b>Revenue</b>	<b>\$18,333.0</b>	<b>\$18,200.0</b>	<b>\$133.0</b>	<b>0.7%</b>
<b>Gross Profit</b>	<b>\$10,051.0</b>	<b>\$10,374.0</b>	<b>(\$323.0)</b>	<b>-3.1%</b>
<b>GM</b>	<b>54.8%</b>	<b>57.0%</b>	<b>-218 bps</b>	<b>-218 bps</b>
R&D	\$3,272.0	\$3,300.0	(\$28.0)	-0.8%
SG&A	\$1,435.0	\$1,620.0	(\$185.0)	-11.4%
<b>OpEx</b>	<b>\$5,044.0</b>	<b>\$5,281.0</b>	<b>(\$237.0)</b>	<b>-4.5%</b>
<b>OpIn</b>	<b>\$5,396.0</b>	<b>\$5,454.0</b>	<b>(\$58.0)</b>	<b>-1.1%</b>
<b>OpM</b>	<b>29.4%</b>	<b>30.0%</b>	<b>-53 bps</b>	<b>-53 bps</b>
Interest Expense	(\$74.0)	\$100.0	(\$174.0)	-174.0%
Taxes	\$843.0	\$851.6	(\$8.6)	-1.0%
<b>Net Income (w/ options)</b>	<b>\$4,675.0</b>	<b>\$4,642.4</b>	<b>\$32.6</b>	<b>0.7%</b>
<b>Net Income (GAAP)</b>	<b>\$4,184.0</b>	<b>\$4,291.4</b>	<b>(\$107.4)</b>	<b>-2.5%</b>
Diluted Shares	4,211.0	4,212.9	(1.9)	0.0%
<b>EPS GAAP</b>	<b>\$0.99</b>	<b>\$1.02</b>	<b>(\$0.03)</b>	<b>-2.5%</b>
<b>EPS FC (w/ options)</b>	<b>\$1.11</b>	<b>\$1.10</b>	<b>\$0.01</b>	<b>0.7%</b>

Source: Company data, Credit Suisse estimates

**Key Message:** INTC reported C3Q Rev slightly ABOVE Street with EPS INLINE and guided C4Q Rev/EPS mostly INLINE/slightly ABOVE Street despite GM/OpM BELOW Street due to ~8 cent benefit from capital investments. While CY20 Rev guide of ~\$75.3bn was up from ~\$75bn (Street \$75.2bn) both GM/OpM of ~57%/31.5% were ~100bps/50bps lower than C2Q guide and BELOW Street 57.7%/32.1% due to (1) unfavorable DCG mix from higher Cloud, lower Enterprise/Gov't in Q3/Q4 (2) higher mix of NB vs. DT than expected, and (3) accelerated 10nm product ramp. CY20 Capex spend was lowered to ~\$14.2bn-14.5bn from ~\$15bn and of the ~\$650m reduction, ~\$300m is due to NSG Sale to SK Hynix. No update was given on 7nm roadmap and we expect decision/update should be given by C4Q/C1Q. Specifically, C3Q Rev/EPS was \$18.3bn/\$1.11 with Rev slightly ABOVE CS/guide of ~\$18.2bn and Street of \$18.24bn and EPS mostly INLINE with CS/guide \$1.10 and Street \$1.11. GM of 54.8% (~flat q/q) was BELOW CS/Street estimate of 57.0%/56.7% due to (1) DCG platform ASPs down 14% q/q (-15% y/y) as mix shifted from weak Enterprise/Gov't (down 47% y/y) to Cloud/Comms - DCG ex-E&G down ~3% q/q and (2) NB/DT ASPs down 5%/10% q/q (flat/down 7% y/y) as CCG mix shifted heavily to consumer NB vs. DT - with NB units +19% q/q (+25% y/y) and DT unit +10% q/q (down 18% y/y). C3Q OpM ~50bps BELOW Street was also impacted by ramp of 10nm 5G SoC products (2H20 10nm product demand +30% up h/h well above expectations) and Ice Lake Server ramp which should begin sampling/volume in C4Q20/C1Q21 - overall net positive as we see both being LT competitive offerings. Specifically, C4Q Rev/EPS was guided to ~\$17.4bn/\$1.10 with Rev mostly INLINE

with Street \$17.4bn and EPS ABOVE Street \$1.07 from ~8 cent EPS benefit from capital portfolio investments despite GM/OpM ~300bps/150bps BELOW. INTC expects similar negative mix/ASPs impacts to C4Q CCG/DCG as education/consumer NBs remains strong and DCG reflects moderate digestion in Cloud, with E&G still weak – guide embeds: (1) PC-Centric down low-single digit % y/y and (2) DCG down ~25% y/y. However, INTC expects strong LT drivers into CY21: (1) TGL ramp exceeding expectation with 100+ design wins by end CY20, ~2x expectations from C2Q, (2) the Company regaining share in NB/DT market (has ceded 11/7ppts NB/DT share over past 8Qs), (3) 10nm product demand accelerating, and (4) NSG sale to SK Hynix providing ~1-2ppt tailwind to CY21 GM. We lower our CY20/21 EPS to \$4.89/\$4.70 from \$4.90/\$5.20 (Street \$4.85/\$4.74).

## Summary of Results and Guidance:

### C3Q Rev slightly ABOVE CS/Street, EPS mostly INLINE

INTC reported C3Q Rev \$18.3bn slightly ABOVE CS and guidance of ~\$18.20bn (-7.7% q/q), Street of \$18.24bn (-7.6% q/q) with EPS \$1.11 was mostly INLINE with CS/Street of \$1.10/\$1.11 and guidance of ~\$1.10.

- **Revenue:** \$18.33bn was slightly ABOVE CS and guidance of ~\$18.20bn (-7.7% q/q), Street of \$18.24bn (-7.6% q/q). Rev -7.1% q/q was BELOW seasonal of +9.6% q/q
  - **CCG:** \$9.8bn (up 1% y/y) WELL ABOVE CS/Street of \$9.03bn, Street \$9.09bn – revenue was up on record NB units, partially offset by mix shift from commercial to consumer, DT to NB and increased entry/education volume – specifically, (1) DT units up 10% q/q, down 18% y/y and ASPs down 5% q/q and flat y/y, (2) NB units +19% q/q and 25% y/y and ASPs down 10% q/q and down 7% y/y. OpM of ~36% was flat q/q though down 500bps y/y. Note, Tiger Lake ramp is exceeding expectation with 100 design wins expected by end-of-year up from 50 forecasted in C2Q and as supply increases INTC expects to continue to regain share through CY20.
  - **DCG:** \$5.9bn (down 7% y/y) BELOW CS/Street of \$6.38bn, Street \$6.21bn – revenue was down on COVID-driven impacts to Enterprise & Gov't, with platform units down 3% q/q (+4% y/y) and platform ASPs down 14% q/q (down 15% y/y). By segment: Cloud SP Rev was up 15% y/y, Enterprise/Gov't down 47% y/y, and Comms SP up 4% y/y. OpM of ~32% was lowest ever (down 17ppts y/y) – due to ASPs down on +93% increase in SoC volume and customer mix away from enterprise. Operating Income was also down on mix-driven decline and higher costs related to 10nm ramp of 5G SoCs.
  - **IoT:** \$677m (down 33% y/y) BELOW CS \$750m, Street of \$789m – and OpInc down 80% y/y on COVID impacts and US DoC bans
  - **Mobileye:** \$234m (up 2% y/y) ABOVE CS \$200m and strongly up 60% q/q as global vehicle production improves and returned to profitability.
  - **NSG:** \$1.2bn (down 11% y/y) BELOW CS/Street \$1.30bn/\$1.5bn – the weakness was mostly based on NAND bit decline, partially offset by higher ASPs with higher OpInc on increased ASPs and unit cost improvements.
  - **PSG:** \$411m (down 19% y/y) BELOW CS of \$500m, Street of \$501m
- **GM BELOW:** 54.8% (~flat q/q) was BELOW CS/Street estimate of 57.0%/56.7% (+220 bps/+190bps) and guidance of ~57%. The ~200bps below-expectations was due to lower data center ASPs driven by mix shift from enterprise and government-to-cloud and lower PC client ASPs on increased demand for consumer and education PCs

- **OpM BELOW:** While OpEx was \$4.66bn was BELOW CS estimate of \$4.92bn, OpM of 29.4% was slightly BELOW CS/Street estimate of 30.0% and guidance ~30.0% - again driven by mix and ASPs.
- **Net Interest/Other:** \$112m income was ABOVE CS estimate of \$40m income – 2 cent accretive to EPS.
- **Taxes:** \$843m was mostly INLINE with CS/Street of \$852m/\$841m – no impact to EPS.
- **EPS:** \$1.11 was mostly INLINE with CS/Street of \$1.10/\$1.11 and guidance of ~\$1.10 – 1 cent operational EPS downside to CS
- **Inventory:** \$9.3bn up 3.4% q/q; days of 102 up 10 days q/q from 92 days in C2Q.
- **Shareholder Returns:** INTC bought ~\$14.5bn worth of stock (~\$2bn from ASR), paid \$1.4bn in dividends – the accelerated share repurchase program is for an aggregate of \$10 billion of common stock. Following settlement of these agreements by the end of CY20, INTC expects to have purchased ~\$17.6 billion in shares as part of the planned \$20bn share repurchase program announced in October 2019.

#### C4Q Rev Guide most INLINE, EPS Guide BELOW CS, ABOVE Street

INTC guided C4Q Revenue of ~\$17.4bn (-5.1% q/q) is mostly INLINE with CS \$17.3bn, and Street \$17.4bn. Seasonal is +3.1% q/q. However, EPS guide of ~\$1.10 was slightly BELOW CS \$1.12 albeit slightly ABOVE Street 1.07.

- **Revenue mostly INLINE:** ~\$17.4bn (-5.1% q/q) is mostly INLINE with CS \$17.3bn, and Street \$17.4bn. Seasonal is +3.1% q/q.
- **GM BELOW:** ~55% (+20 bps q/q) BELOW CS 58.5% and Street 57.9% due to same negative mix and ASP dynamics as C3Q.
- **OpM BELOW:** ~26.5% (-300 bps q/q) BELOW CS estimate of 30.4% and Street at 29.6%. Relative to prior expectations, Opex will be down q/q and EPS helped by gains from INTC Capital Portfolio adding ~\$0.08/share.
- **Tax Rate:** ~15.5% ABOVE CS of 14.0%.
- **EPS:** ~\$1.10 slightly BELOW CS \$1.12 and slightly ABOVE Street 1.07.
- **Segment Guidance:** INTC expects same dynamics in Q4 that were in place in Q3. This includes: continued strength in consumer notebook PCs supported by WFH and from increased supply, strong Mobileye growth as design win momentum continues and the automotive industry stabilizes, continued demand weakness in IOTG and NSG as well as in the enterprise and government segment of DCG. Within DCG guide assumes cloud segment demand moderates as key customers enter digestion period following multiple quarters of above-trend line growth. Specifically, (1) PC-Centric down low-single digits y/y and (2) Data-Center down 25% y/y.

#### CY20 Rev Guide ABOVE Previous Guide and CS/Street, But Lower Profitability/EPS

- **Revenue:** ~\$75.3bn (+4.6% y/y) ABOVE CS \$75.0bn and slightly ABOVE Street \$75.2bn and ABOVE previously guided \$75.0bn.
- **GM BELOW:** ~57% BELOW CS of 58.1% and Street 57.7% and previously guided ~58%.
- **OpM BELOW:** ~31.5% BELOW CS of 32.4% and Street 32.1% and previously guided ~32%.
- **EPS INLINE with CS:** ~\$4.90 INLINE with CS \$4.90 and ABOVE Street \$4.85 and previously guided \$4.85.

- **Capex Lowered:** ~\$14.2-14.5bn is BELOW previously guided \$15.0bn – with ~\$300m of \$650m reduction due to sale of NSG business, and additive to FCF.
- **Segment Guidance:** INTC expects (1) PC business to be up mid-single-digits y/y against TAM also up mid-to-high single-digits y/y and (2) Data-centric businesses up mid-single-digits y/y on strong cloud demand, NSG growth, increased 5G buildouts offset by COVID-related weakness in our IOTG business.
- **Technology Roadmaps:** Notably, no update on the company's 7nm-based CPU product timing is shifting approximately six months relative to prior expectations. The primary driver is the yield of Intel's 7nm process, which based on recent data, is now trending approximately twelve months behind the company's internal target.

**Figure 3: INTC Revenue Model**

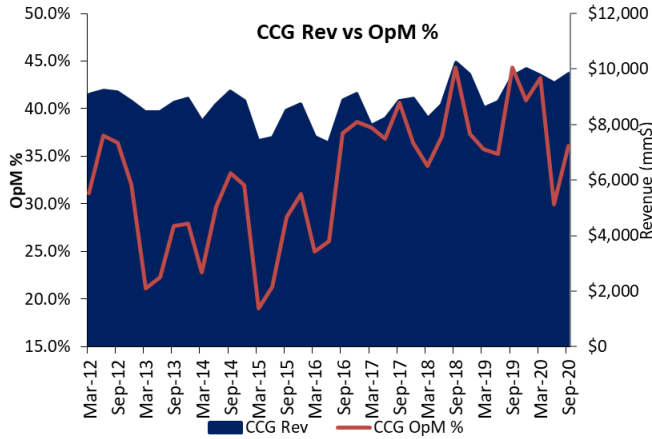
US\$ in millions, unless otherwise stated

Segment Revenue \$ in millions	Dec-19 4Q	Mar-20 1Q	Jun-20 2Q	Sep-20 3Q	Dec-20E 4Q	Mar-21 1Q	Jun-21 2Q	Sep-21 3Q	Dec-21 4Q	2019	2020E	2021E
<b>PC-Centric</b>	\$10,010	\$9,775	\$9,496	\$9,847	\$9,700	\$8,880	\$8,800	\$9,500	\$9,530	\$37,146	\$38,818	\$36,710
<b>Data-Centric</b>	\$10,199	\$10,053	\$10,232	\$8,486	\$7,700	\$7,120	\$8,700	\$9,500	\$9,970	\$34,819	\$36,471	\$35,290
DCG	\$7,213	\$6,993	\$7,117	\$5,905	\$5,300	\$5,400	\$6,850	\$7,600	\$7,800	\$23,481	\$25,315	\$27,650
IoT	\$1,160	\$1,137	\$816	\$911	\$890	\$1,100	\$1,250	\$1,280	\$1,500	\$4,700	\$3,754	\$5,130
NSG	\$1,217	\$1,338	\$1,659	\$1,153	\$1,040	\$0	\$0	\$0	\$0	\$4,362	\$5,190	\$0
PSG	\$505	\$519	\$501	\$411	\$400	\$550	\$550	\$550	\$600	\$1,987	\$1,831	\$2,250
Other	\$104	\$66	\$139	\$106	\$70	\$70	\$50	\$70	\$70	\$289	\$381	\$260
<b>Total</b>	\$20,209	\$19,828	\$19,728	\$18,333	\$17,400	\$16,000	\$17,500	\$19,000	\$19,500	\$71,965	\$75,289	\$72,000
<b>% of Total</b>	<b>Dec-19</b>	<b>Mar-20</b>	<b>Jun-20</b>	<b>Sep-20</b>	<b>Dec-20</b>	<b>Mar-21</b>	<b>Jun-21</b>	<b>Sep-21</b>	<b>Dec-21</b>	<b>2019</b>	<b>2020E</b>	<b>2021E</b>
<b>PC-Centric</b>	49.5%	49.3%	48.1%	53.7%	55.7%	55.5%	50.3%	50.0%	48.9%	51.6%	51.6%	51.0%
<b>Data-Centric</b>	50.5%	50.7%	51.9%	46.3%	44.3%	44.5%	49.7%	50.0%	51.1%	48.4%	48.4%	49.0%
DCG	35.7%	35.3%	36.1%	32.2%	30.5%	33.8%	39.1%	40.0%	40.0%	32.6%	33.6%	38.4%
IoT	5.7%	5.7%	4.1%	5.0%	5.1%	6.9%	7.1%	6.7%	7.7%	6.5%	5.0%	7.1%
NSG	6.0%	6.7%	8.4%	6.3%	6.0%	0.0%	0.0%	0.0%	0.0%	6.1%	6.9%	0.0%
PSG	2.5%	2.6%	2.5%	2.2%	2.3%	3.4%	3.1%	2.9%	3.1%	2.8%	2.4%	3.1%
Other	0.5%	0.3%	0.7%	0.6%	0.4%	0.4%	0.3%	0.4%	0.4%	0.4%	0.5%	0.4%
<b>Total</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>Q/Q</b>	<b>Dec-19</b>	<b>Mar-20</b>	<b>Jun-20</b>	<b>Sep-20</b>	<b>Dec-20</b>	<b>Mar-21</b>	<b>Jun-21</b>	<b>Sep-21</b>	<b>Dec-21</b>			
<b>PC-Centric</b>	3.1%	-2.3%	-2.9%	3.7%	-1.5%	-8.5%	-0.9%	8.0%	0.3%			
<b>Data-Centric</b>	7.6%	-1.4%	1.8%	-17.1%	-9.3%	-7.5%	22.2%	9.2%	4.9%			
DCG	13.0%	-3.1%	1.8%	-17.0%	-10.2%	1.9%	26.9%	10.9%	2.6%			
IoT	-6.0%	-2.0%	-28.2%	11.6%	-2.3%	23.6%	13.6%	2.4%	17.2%			
NSG	-5.7%	9.9%	24.0%	-30.5%	-9.8%	-100.0%	--	--	--			
PSG	-0.4%	2.8%	-3.5%	-18.0%	-2.7%	37.5%	0.0%	0.0%	9.1%			
Other	55.2%	-36.5%	110.6%	-23.7%	-34.0%	0.0%	-28.6%	40.0%	0.0%			
<b>Total</b>	<b>5.3%</b>	<b>-1.9%</b>	<b>-0.5%</b>	<b>-7.1%</b>	<b>-5.1%</b>	<b>-8.0%</b>	<b>9.4%</b>	<b>8.6%</b>	<b>2.6%</b>			
<b>Y/Y</b>	<b>Dec-19</b>	<b>Mar-20</b>	<b>Jun-20</b>	<b>Sep-20</b>	<b>Dec-20</b>	<b>Mar-21</b>	<b>Jun-21</b>	<b>Sep-21</b>	<b>Dec-21</b>	<b>2019</b>	<b>2020E</b>	<b>2021E</b>
<b>PC-Centric</b>	1.9%	13.8%	7.4%	1.4%	-3.1%	-9.2%	-7.3%	-3.5%	-1.8%	0.4%	4.5%	-5.4%
<b>Data-Centric</b>	15.4%	34.5%	33.5%	-10.5%	-24.5%	-29.2%	-15.0%	11.9%	29.5%	2.9%	4.7%	-3.2%
DCG	18.8%	42.7%	42.8%	-7.5%	-26.5%	-22.8%	-3.8%	28.7%	47.2%	2.1%	7.8%	9.2%
IoT	16.7%	1.6%	-31.3%	-26.2%	-23.3%	-3.3%	53.2%	40.5%	68.5%	13.0%	-20.1%	36.7%
NSG	9.9%	46.2%	76.5%	-10.6%	-14.5%	-100.0%	-100.0%	-100.0%	-100.0%	1.3%	19.0%	-100.0%
PSG	-17.5%	6.8%	2.5%	-18.9%	-20.8%	6.0%	9.8%	33.8%	50.0%	-6.4%	-7.9%	22.9%
Other	96.2%	24.5%	113.8%	58.2%	-32.7%	6.1%	-64.0%	-34.0%	0.0%	10.3%	31.8%	-31.8%
<b>Total</b>	<b>8.3%</b>	<b>23.5%</b>	<b>19.5%</b>	<b>-4.5%</b>	<b>-13.9%</b>	<b>-19.3%</b>	<b>-11.3%</b>	<b>3.6%</b>	<b>12.1%</b>	<b>1.6%</b>	<b>4.6%</b>	<b>-4.4%</b>

Source: Company data, Credit Suisse estimates

**Figure 4: CCG Profitability**

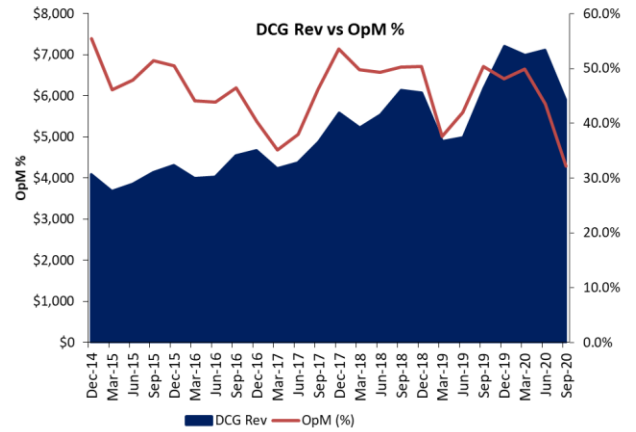
US\$ in millions, unless otherwise stated



Source: Company data, Credit Suisse estimates

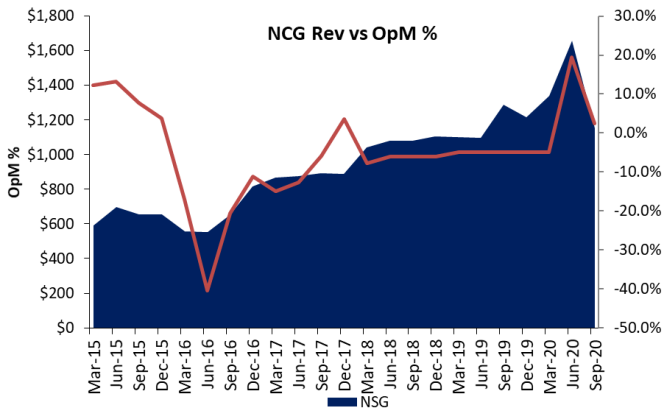
**Figure 5: DCG Profitability**

US\$ in millions, unless otherwise stated



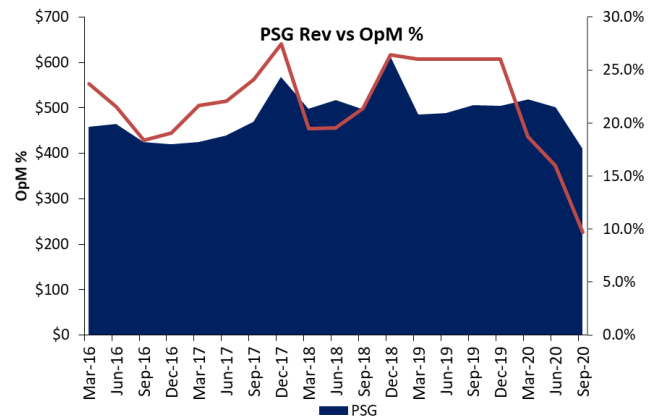
Source: Company data, Credit Suisse estimates

**Figure 6: NSG Profitability**



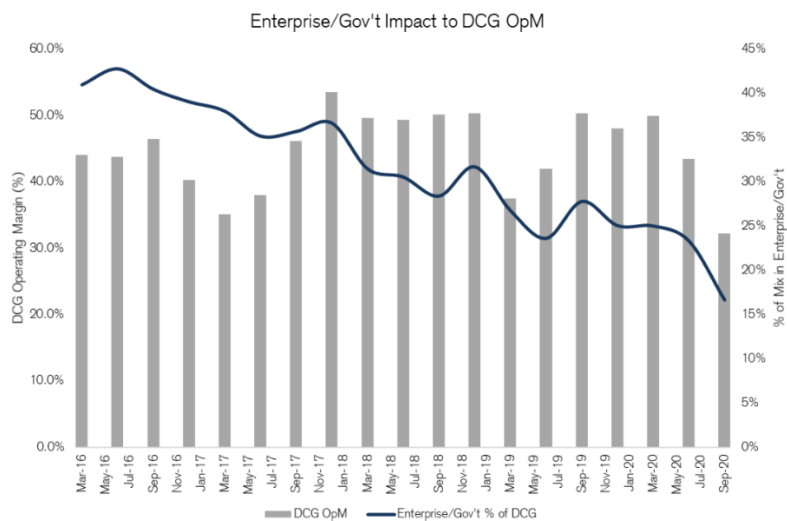
Source: Company data, Credit Suisse estimates

**Figure 7: PSG Profitability**



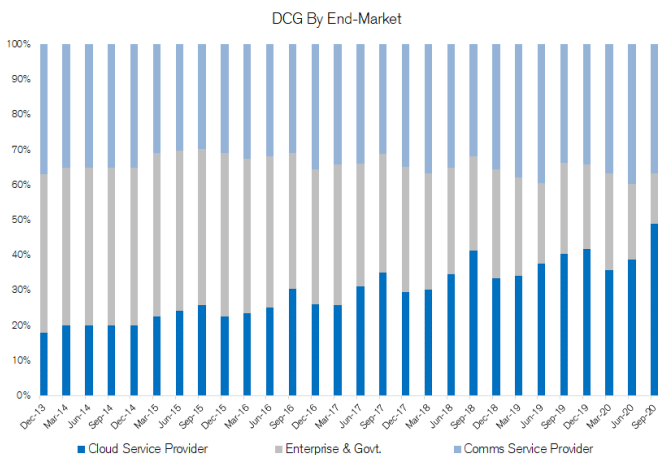
Source: Company data, Credit Suisse estimates

**Figure 8: Enterprise Traditionally has Higher ASPs**



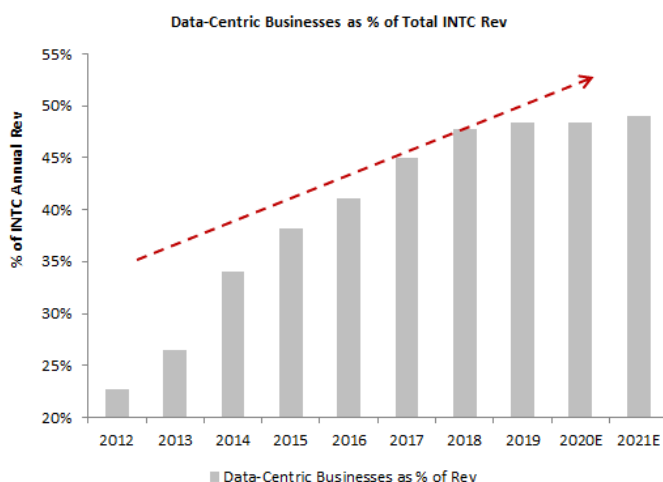
Source: Company data, Credit Suisse estimates

**Figure 9: DCG By End-Market**



Source: Company data, Credit Suisse estimates

**Figure 10: DCG as % of Total Rev**



Source: Company data, Credit Suisse estimates

**The INTC Bull Thesis.** Our positive view on INTC is based on the following: (1) AI lowers analytics costs, unlocking the > than 98% of Data today that goes unanalyzed, (2) Compute is more levered to data analytics than creation, as analytics cost decline, new applications will drive accelerating Compute TAM from CY19 of \$90 bn to >\$225 bn by 2025 - beneficial - x86, FPGA, GPUs, ASICs etc - a RISING KING TIDE lifts all boats (see hyperlink our CY2020 report here), (3) Even with share loss of 15-20%, underlying TAM growth should support DGC CAGR of 10-12%, (4) Share loss is less than certain - Scale still matters as R&D is now a larger fix cost than CapEx, INTC spends \$2 of R&D for every \$1 of AMD REVENUE - software, applications optimization, and channel partner development is now equally critical for success - market share especially, "wallet" share is more resilient than feared - absolute growth Rev/NI since 2017 is equal to 1.4/10.5 "2019-AMDs", (5) Adjacencies (Memory, I/O, Connectivity, Packing) provide not only incremental TAM but more importantly the needed IP to lower the cost of compute for customers the Holy Grail for success, and (6) Current investor sentiment is

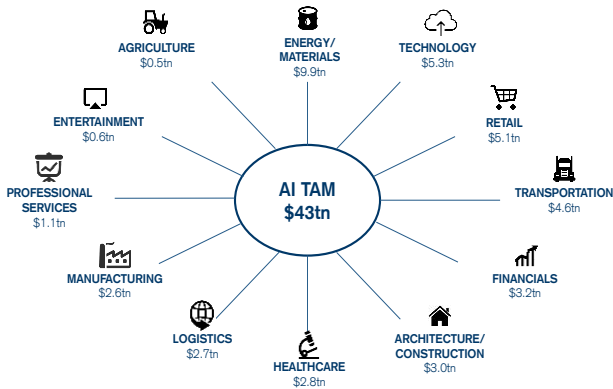


poor – despite 12+ upgrades since COVID – most are “getting out the way” NT but still negative of share loss longer term - we only have to be 10% right to be right and (7) Stock is cheap, embedding what looks to be zero to negative LT growth versus our view that INTC can grow their DataCenter businesses at 8-12% CAGR and overall Rev at 3-5% - which should easily support a ~13 multiple on \$4.89 or our \$65 PT, even before we argue for sustained EPS growth.

## Key Issues

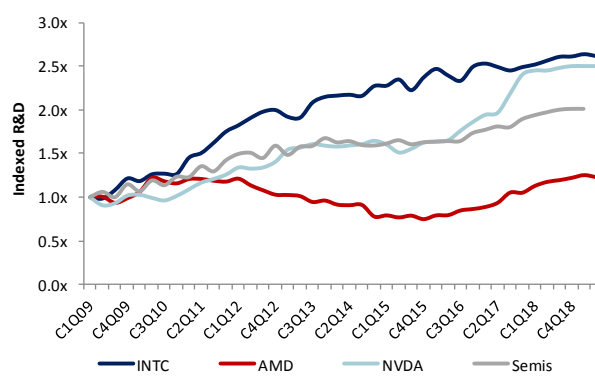
**Core TAM Expanding:** AI is the first technology to reduce the cost of analytics – which will be accompanied by an explosion of new use cases that drive overall compute demand and a rising-tide-lifts-all environment. We equate the AI TAM to \$43tn. Assuming Semis capture 1.0% of Global GDP (current share of 0.6%) and Compute Rev represents ~30% of Semi Rev – this implies an AI Compute TAM of ~\$130bn. Since C1Q09 INTC's indexed R&D has increased ~160% while AMD's has grown ~20% and INTC is spending ~9x on R&D. AMD has not done enough to engender the ecosystem as INTC has.

**Figure 11: AI TAM = Global COGS/OpEx/CapEx**



Source: Company data, Credit Suisse estimates

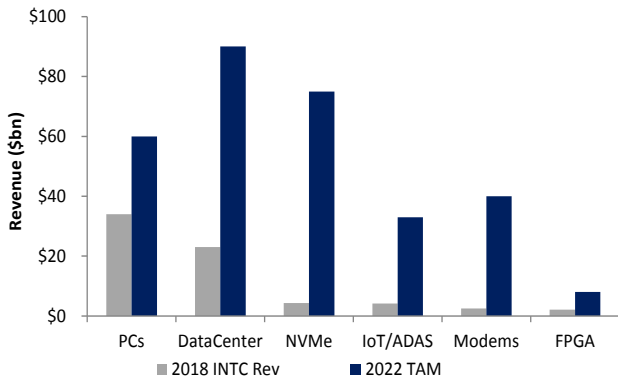
**Figure 12: INTC R&D Meaningfully Outpacing AMD**



Source: Company data, Credit Suisse estimates

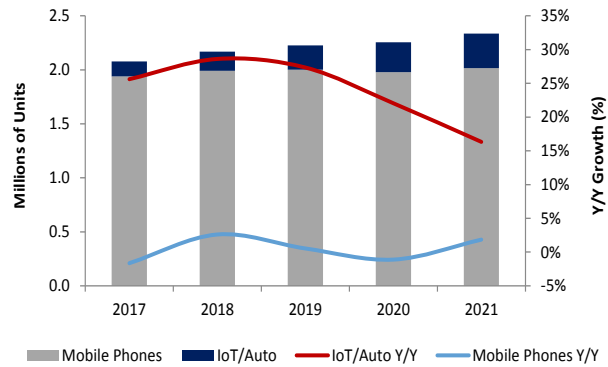
**TAM Expanding:** While INTC's traditional share likely has a downward bias – the Company only has ~23% share of its \$300bn+ TAM and only ~6% of the \$115bn Memory + Modem TAM. New applications like AI are significantly more memory intensive with logic/memory ratio moving from ~1-to~1 in PCs/Handsets to 8-1 in a standard server to 11-1 in a deep learning sever. While the market for Mobile Modems is likely flattish over coming years – Modems for IoT/Auto are expected to grow at a 22% CAGR from CY18-21 represent ~13.5% of CY21 units.

**Figure 13: INTC's \$300bn+ TAM**



Source: Company data, Credit Suisse estimates

**Figure 14: Growing Importance of Modems in IoT**



Source: Company data, Credit Suisse estimates

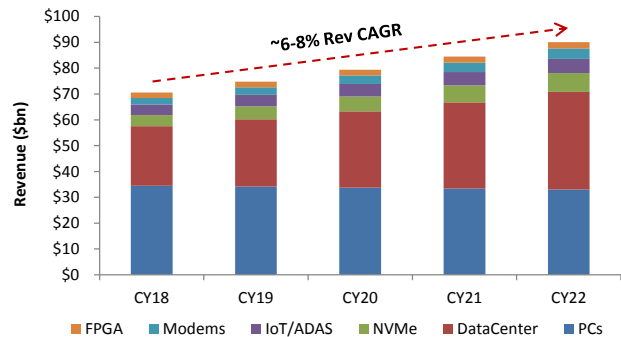
**CEO "Math" – Maximum Value at \$95/sh:** Swan's CEO comp package has several option packages tied to share price appreciation – with the first threshold at 30%, the 2nd at 50% and 3rd at 100% (~\$60, ~\$70, ~\$95, respectively). INTC's 3/5/10-yr Rev CAGR in CY18 was 9/6/7% vs. 4/3/5% in CY17. The midpoint of our sensitivity analysis requires a ~6-8% Rev CAGR and ~35% OpM to achieve a \$95 share price. Assuming: (1) a flat PC TAM and 100 bps of share loss/yr, (2) a DataCenter TAM CAGR of 15% and 150 bps of share loss/yr, and (3) 100 bps of annual share gains in new TAM implies a ~6-8% Rev CAGR from CY18-22.

**Figure 15: Sensitivity Analysis to Achieve \$95/sh**

Implied Rev CAGR Required to Achieve \$95/sh		Operating Margin (%)					
		30.0%	32.0%	34.0%	36.0%	38.0%	40.0%
P/E (x)	10x	13.8%	12.6%	11.5%	10.4%	9.4%	8.5%
	11x	12.1%	10.9%	9.8%	8.7%	7.7%	6.8%
	12x	10.4%	9.3%	8.2%	7.2%	6.2%	5.3%
	13x	9.0%	7.8%	6.8%	5.7%	4.8%	3.9%
	14x	7.7%	6.5%	5.5%	4.5%	3.5%	2.6%
	15x	6.5%	5.3%	4.3%	3.3%	2.4%	1.5%

Source: Company data, Credit Suisse estimates

**Figure 16: INTC Forecasted Rev CAGR Analysis**



Source: Company data, Credit Suisse estimates, IDC

**INTC + SK Hynix Sale Accretion**

On 10/20 INTC announced the sale of its Dalian Fab to Hynix, issuing an 8K with incremental details of the transaction: (1) INTC's Optane business will be excluded from the transaction and will be retained and (2) Hynix will only acquire INTC's Dalian Fab/Assets and NAND SSD business. At the deal's 1<sup>st</sup> closing (Nov-2021), INTC will sell to Hynix the Dalian Fab Assets for ~\$7 billion cash and transfer related IP rights and assets to a wholly-owned separate subsidiary. INTC will then enter into an agreement in which they will manufacture/sell NAND memory wafers for Hynix to purchase – this arrangement will continue until deal's 2<sup>nd</sup> closing (Mar-2025). At the 2<sup>nd</sup> closing, INTC will then sell to Hynix all of INTC's equity interests in the subsidiary for ~\$2 billion in cash. We expect the Company will start to non-GAAP NAND results starting in 1Q21, and while this does not affect CY20 estimates, it could impact CY21 Rev/EPS. We base our accretion analysis on the deal being ~1% accretive to OpM – and expected to be slightly more accretive to GM. Additionally, the non-GAAP changes to NSG revenue should impact CY21 Revenue estimates, but not CY20.

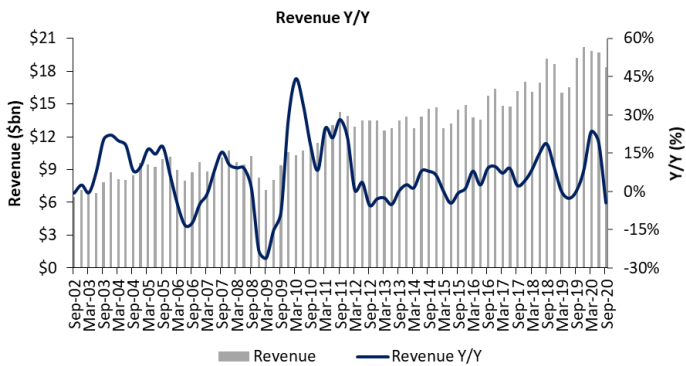
**Figure 17: Deal is ~Breakeven to CY21 EPS w/ Full ~\$9bn in Buyback**

INTC Pro Forma (\$m)	INTC 2021	NSG 2021	INTC Sale w/o Buyback	INTC Sale w/ Buyback
Revenue	\$76,750.0	\$5,320.0	\$71,430.0	\$71,430.0
COGS	\$32,618.8			
Gross Profit	\$44,131.3			
GM (%)	57.5%			
R&D	\$13,200.00			
SG&A	\$6,400.00			
Other	\$0.0			
OpEx	\$19,600.0			
Op Inc	\$24,531.3		\$23,571.9	\$23,571.9
OpM (%)	32.0%		33.0%	33.0%
Net Int/Other	\$160.0		\$160.0	\$160.0
Pre-tax Income	\$24,691.3		\$23,731.9	\$23,731.9
Taxes	\$3,456.78		\$3,300.07	\$3,300.07
TR (%)	14.0%		14.0%	14.0%
Net Inc	\$21,234.5		\$20,431.8	\$20,431.8
Shares	4,079.9		4,079.9	3,915.1
EPS (ex-SBC)	\$5.20		\$5.01	\$5.22
Accretion/Dilution (\$)			-\$0.20	+\$0.01
Accretion/Dilution (%)			-4.0%	0.2%

Source: Company data, Credit Suisse estimates

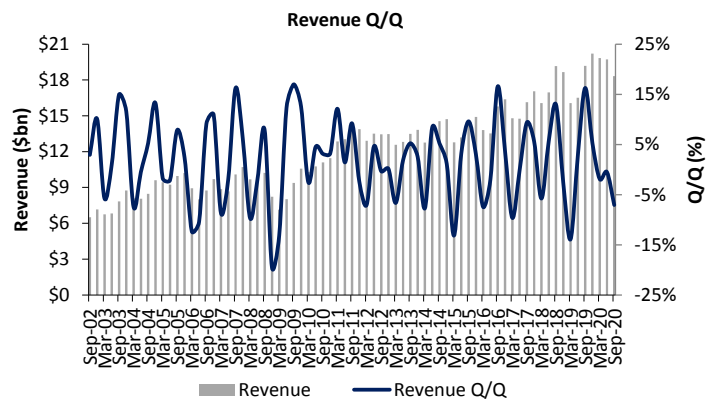
### Income Analysis

**Figure 18: Revenue Y/Y Trends**



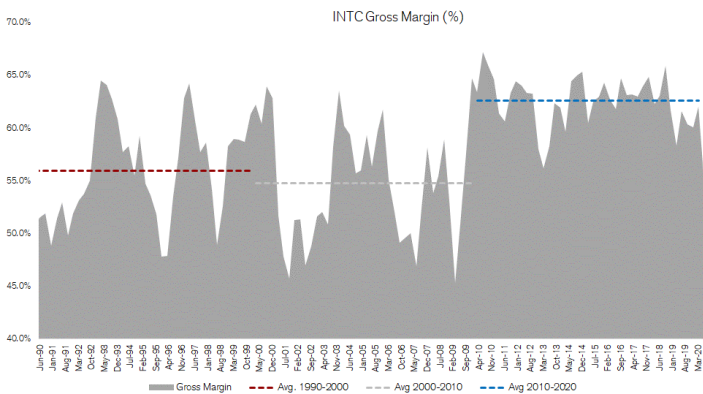
Source: Company data, Credit Suisse estimates

**Figure 19: Revenue Q/Q Trends**



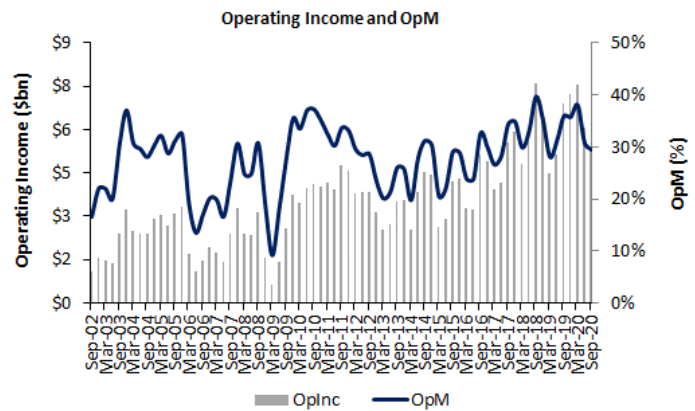
Source: Company data, Credit Suisse estimates

**Figure 20: Gross Margin Analysis**



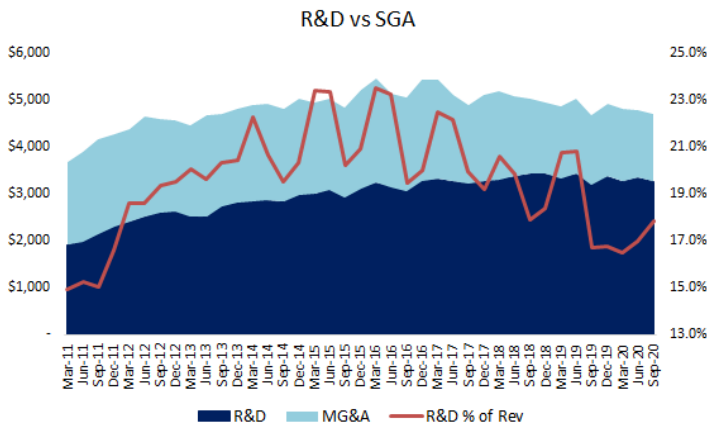
Source: Company data, Credit Suisse estimates

**Figure 21: OpM Analysis**



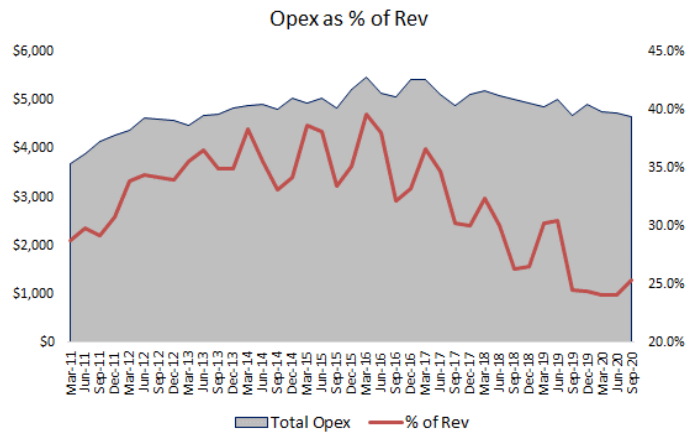
Source: Company data, Credit Suisse estimates

**Figure 22: OpEx Breakdown**



Source: Company data, Credit Suisse estimates

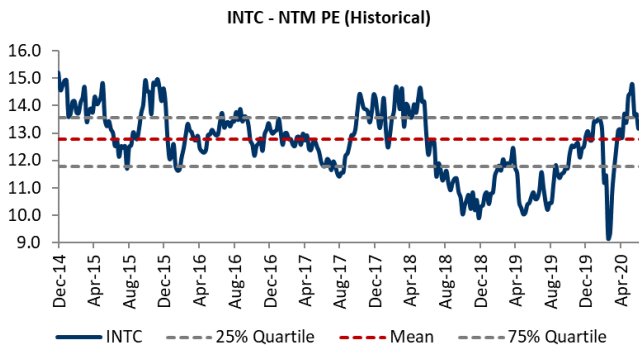
**Figure 23: Opex as % of Rev**



Source: Company data, Credit Suisse estimates

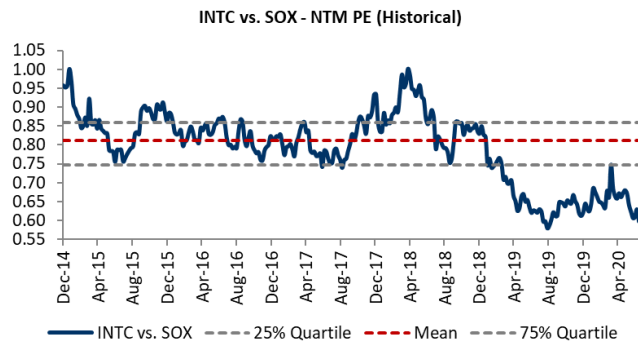
**Valuation:** INTC trades at 12x NTM P/E a ~25% DISCOUNT to 5-year average, and a ~46% discount to the SOX compared to its 5-year average of ~20% discount. We continue to see upside in INTC's valuation as the market appreciates (1) the strength of INTC's IP and share of CPUs, and (2) the value of a TAM expanding into data analytics. We reiterate our OP and \$65 PT – 12.3x/12.7x CY20/21 EPS of \$4.89/\$4.70 – still ~5+ turns BELOW the Semi average.

**Figure 24: NTM P/E**



Source: Company data, Credit Suisse estimates

**Figure 25: NTM EV/FCF**



Source: Company data, Credit Suisse estimates

## Valuation, Methodology and Risks

---

### Target Price and Rating

#### Valuation Methodology and Risks: (12 months) for Intel Corp. (INTC.OQ)

**Method:** Our \$65 target price and Outperform rating for Intel are based on 13x 2020E P/E. Our Outperform rating is based upon the following: INTC remains well levered to Data Growth not only in DCG but also in its IoT and NSG businesses. We believe the company's business model/IP has significant barriers to entry (evidenced by one of the highest "R&D + CapEx to Revenue" ratio), and we continue to argue that Moore's Law has been the cornerstone of Tech economics for 40 years and that INTC will be the Last-man-standing on Moore's Law, leading to market share gains in Compute (including Mobile), as well as Foundry.

**Risk:** Risks to our \$65 target price and Outperform rating for Intel are aggressive pricing, higher manufacturing spending, loss of market share in key enterprise markets, reversal of recent strength in servers where Intel has renewed momentum, ability to maintain share in desktop and mobile, with the new Core i3/i5/i7 offering, lower gross margin due to higher manufacturing costs, and seeing slower-than-expected unit growth of PC units.

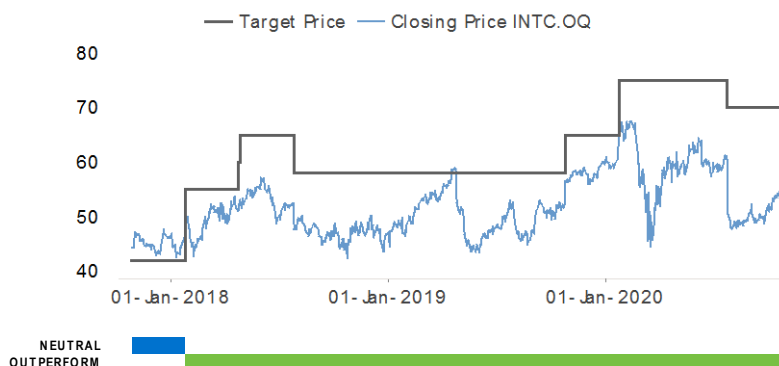
**Companies Mentioned** (Price as of 22-Oct-2020)**Advanced Micro Devices, Inc.** (AMD.OQ, \$79.42)**Intel Corp.** (INTC.OQ, \$53.9, OUTPERFORM, TP \$65.0)**Disclosure Appendix****Analyst Certification**

John W. Pitzer, Dalya Hahn, Eric Hu and Jerome Darling each certify, with respect to the companies or securities that the individual analyzes, that (1) the views expressed in this report accurately reflect his or her personal views about all of the subject companies and securities and (2) no part of his or her compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this report.

**3-Year Price and Rating History for Intel Corp. (INTC.OQ)**

INTC.OQ	Closing Price	Target Price	
Date	(US\$)	(US\$)	Rating
27-Oct-17	44.40	42.00	N
26-Jan-18	50.08	55.00	O
24-Apr-18	51.45	60.00	
27-Apr-18	52.73	65.00	
27-Jul-18	47.68	58.00	
25-Oct-19	56.46	65.00	
24-Jan-20	68.47	75.00	
23-Jul-20	60.40	70.00	

\* Asterisk signifies initiation or assumption of coverage.

**As of December 10, 2012 Analysts' stock rating are defined as follows:**

**Outperform (O)** : The stock's total return is expected to outperform the relevant benchmark\* over the next 12 months.

**Neutral (N)** : The stock's total return is expected to be in line with the relevant benchmark\* over the next 12 months.

**Underperform (U)** : The stock's total return is expected to underperform the relevant benchmark\* over the next 12 months.

\*Relevant benchmark by region: As of 10th December 2012, Japanese ratings are based on a stock's total return relative to the analyst's coverage universe which consists of all companies covered by the analyst within the relevant sector, with Outperforms representing the most attractive, Neutrals the less attractive, and Underperforms the least attractive investment opportunities. As of 2nd October 2012, U.S. and Canadian as well as European (excluding Turkey) ratings are based on a stock's total return relative to the analyst's coverage universe which consists of all companies covered by the analyst within the relevant sector, with Outperforms representing the most attractive, Neutrals the less attractive, and Underperforms the least attractive investment opportunities. For Latin America, Turkey and Asia (excluding Japan and Australia), stock ratings are based on a stock's total return relative to the average total return of the relevant country or regional benchmark (India - S&P BSE Sensex Index); prior to 2nd October 2012 U.S. and Canadian ratings were based on (1) a stock's absolute total return potential to its current share price and (2) the relative attractiveness of a stock's total return potential within an analyst's coverage universe. For Australian and New Zealand stocks, the expected total return (ETR) calculation includes 12-month rolling dividend yield. An Outperform rating is assigned where an ETR is greater than or equal to 7.5%; Underperform where an ETR less than or equal to 5%. A Neutral may be assigned where the ETR is between -5% and 15%. The overlapping rating range allows analysts to assign a rating that puts ETR in the context of associated risks. Prior to 18 May 2015, ETR ranges for Outperform and Underperform ratings did not overlap with Neutral thresholds between 15% and 7.5%, which was in operation from 7 July 2011.

**Restricted (R)** : In certain circumstances, Credit Suisse policy and/or applicable law and regulations preclude certain types of communications, including an investment recommendation, during the course of Credit Suisse's engagement in an investment banking transaction and in certain other circumstances.

**Not Rated (NR)** : Credit Suisse Equity Research does not have an investment rating or view on the stock or any other securities related to the company at this time.

**Not Covered (NC)** : Credit Suisse Equity Research does not provide ongoing coverage of the company or offer an investment rating or investment view on the equity security of the company or related products.

**Volatility Indicator [V]** : A stock is defined as volatile if the stock price has moved up or down by 20% or more in a month in at least 8 of the past 24 months or the analyst expects significant volatility going forward.

Analysts' sector weightings are distinct from analysts' stock ratings and are based on the analyst's expectations for the fundamentals and/or valuation of the sector\* relative to the group's historic fundamentals and/or valuation:

**Overweight** : The analyst's expectation for the sector's fundamentals and/or valuation is favorable over the next 12 months.

**Market Weight** : The analyst's expectation for the sector's fundamentals and/or valuation is neutral over the next 12 months.

**Underweight** : The analyst's expectation for the sector's fundamentals and/or valuation is cautious over the next 12 months.

\*An analyst's coverage sector consists of all companies covered by the analyst within the relevant sector. An analyst may cover multiple sectors.

Credit Suisse's distribution of stock ratings (and banking clients) is:

#### Global Ratings Distribution

Rating	Versus universe (%)	Of which banking clients (%)
Outperform/Buy*	50%	(33% banking clients)
Neutral/Hold*	37%	(28% banking clients)
Underperform/Sell*	12%	(20% banking clients)
Restricted	1%	

Please click [here](#) to view the MAR quarterly recommendations and investment services report for fundamental research recommendations.

*\*For purposes of the NYSE and FINRA ratings distribution disclosure requirements, our stock ratings of Outperform, Neutral, and Underperform most closely correspond to Buy, Hold, and Sell, respectively; however, the meanings are not the same, as our stock ratings are determined on a relative basis. (Please refer to definitions above.) An investor's decision to buy or sell a security should be based on investment objectives, current holdings, and other individual factors.*

#### Important Global Disclosures

Credit Suisse's research reports are made available to clients through our proprietary research portal on CS PLUS. Credit Suisse research products may also be made available through third-party vendors or alternate electronic means as a convenience. Certain research products are only made available through CS PLUS. The services provided by Credit Suisse's analysts to clients may depend on a specific client's preferences regarding the frequency and manner of receiving communications, the client's risk profile and investment, the size and scope of the overall client relationship with the Firm, as well as legal and regulatory constraints. To access all of Credit Suisse's research that you are entitled to receive in the most timely manner, please contact your sales representative or go to <https://plus.credit-suisse.com>.

Credit Suisse's policy is to update research reports as it deems appropriate, based on developments with the subject company, the sector or the market that may have a material impact on the research views or opinions stated herein.

Credit Suisse's policy is only to publish investment research that is impartial, independent, clear, fair and not misleading. For more detail please refer to Credit Suisse's Policies for Managing Conflicts of Interest in connection with Investment Research: <https://www.credit-suisse.com/sites/disclaimers-ib/en/managing-conflicts.html>.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

Credit Suisse has decided not to enter into business relationships with companies that Credit Suisse has determined to be involved in the development, manufacture, or acquisition of anti-personnel mines and cluster munitions. For Credit Suisse's position on the issue, please see <https://www.credit-suisse.com/media/assets/corporate/docs/about-us/responsibility/banking/policy-summaries-en.pdf>.

The analyst(s) responsible for preparing this research report received compensation that is based upon various factors including Credit Suisse's total revenues, a portion of which are generated by Credit Suisse's investment banking activities

Please refer to the firm's disclosure website at <https://rave.credit-suisse.com/disclosures/view/selectArchive> for the definitions of abbreviations typically used in the target price method and risk sections.

*See the Companies Mentioned section for full company names*

Credit Suisse currently has, or had within the past 12 months, the following as investment banking client(s): INTC.OQ

Credit Suisse provided investment banking services to the subject company (INTC.OQ) within the past 12 months.

Within the last 12 months, Credit Suisse has received compensation for non-investment banking services or products from the following issuer(s): INTC.OQ

Within the past 12 months, Credit Suisse has received compensation for investment banking services from the following issuer(s): INTC.OQ

Credit Suisse expects to receive or intends to seek investment banking related compensation from the subject company (INTC.OQ) within the next 3 months.

Credit Suisse currently has, or had within the past 12 months, the following issuer(s) as client(s), and the services provided were non-investment-banking, securities-related: INTC.OQ

Credit Suisse currently has, or had within the past 12 months, the following issuer(s) as client(s), and the services provided were non-investment-banking, non securities-related: INTC.OQ

Credit Suisse or a member of the Credit Suisse Group is a market maker or liquidity provider in the securities of the following subject issuer(s): INTC.OQ

A member of the Credit Suisse Group is party to an agreement with, or may have provided services set out in sections A and B of Annex I of Directive 2014/65/EU of the European Parliament and Council ("MiFID Services") to, the subject issuer (INTC.OQ) within the past 12 months.

For date and time of production, dissemination and history of recommendation for the subject company(ies) featured in this report, disseminated within the past 12 months, please refer to the link: <https://rave.credit-suisse.com/disclosures/view/report?i=560370&v=6btww73jophsrzvkfdw50vam9>.

#### Important Regional Disclosures

Singapore recipients should contact Credit Suisse AG, Singapore Branch for any matters arising from, or in connection with, this research report. The analyst(s) involved in the preparation of this report may participate in events hosted by the subject company, including site visits. Credit Suisse does not accept or permit analysts to accept payment or reimbursement for travel expenses associated with these events.

For Credit Suisse Securities (Canada), Inc.'s policies and procedures regarding the dissemination of equity research, please visit <https://www.credit-suisse.com/sites/disclaimers-ib/en/canada-research-policy.html>.

Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment.

This research report is authored by:

**Credit Suisse Securities (USA) LLC**.....John W. Pitzer ; Dalya Hahn ; Eric Hu ; Jerome Darling

Important disclosures regarding companies that are the subject of this report are available by calling +1 (877) 291-2683. The same important disclosures, with the exception of valuation methodology and risk discussions, are also available on Credit Suisse's disclosure website at <https://rave.credit-suisse.com/disclosures>. For valuation methodology and risks associated with any recommendation, price target, or rating referenced in this report, please refer to the disclosures section of the most recent report regarding the subject company.

---



This report is produced by subsidiaries and affiliates of Credit Suisse operating under its Global Markets Division. For more information on our structure, please use the following link: <https://www.credit-suisse.com/who-we-are>. This report may contain material that is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Credit Suisse or its affiliates ("CS") to any registration or licensing requirement within such jurisdiction. All material presented in this report, unless specifically indicated otherwise, is under copyright to CS. None of the material, nor its content, nor any copy of it, may be altered in any way, transmitted to, copied or distributed to any other party, without the prior express written permission of CS. All trademarks, service marks and logos used in this report are trademarks or service marks or registered trademarks or service marks of CS or its affiliates. The information, tools and material presented in this report are provided to you for information purposes only and are not to be used or considered as an offer or the solicitation of an offer to sell or to buy or subscribe for securities or other financial instruments. CS may not have taken any steps to ensure that the securities referred to in this report are suitable for any particular investor. CS will not treat recipients of this report as its customers by virtue of their receiving this report. The investments and services contained or referred to in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about such investments or investment services. Nothing in this report constitutes investment, legal, accounting or tax advice, or a representation that any investment or strategy is suitable or appropriate to your individual circumstances, or otherwise constitutes a personal recommendation to you. Please note in particular that the bases and levels of taxation may change. Information and opinions presented in this report have been obtained or derived from sources believed by CS to be reliable, but CS makes no representation as to their accuracy or completeness. CS accepts no liability for loss arising from the use of the material presented in this report, except that this exclusion of liability does not apply to the extent that such liability arises under specific statutes or regulations applicable to CS. This report is not to be relied upon in substitution for the exercise of independent judgment. CS may have issued, and may in the future issue, other communications that are inconsistent with, and reach different conclusions from, the information presented in this report. Those communications reflect the different assumptions, views and analytical methods of the analysts who prepared them and CS is under no obligation to ensure that such other communications are brought to the attention of any recipient of this report. Some investments referred to in this report will be offered solely by a single entity and in the case of some investments solely by CS, or an associate of CS or CS may be the only market maker in such investments. Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information, opinions and estimates contained in this report reflect a judgment at its original date of publication by CS and are subject to change without notice. The price, value of and income from any of the securities or financial instruments mentioned in this report can fall as well as rise. The value of securities and financial instruments is subject to exchange rate fluctuation that may have a positive or adverse effect on the price or income of such securities or financial instruments. Investors in securities such as ADRs, the values of which are influenced by currency volatility, effectively assume this risk. Structured securities are complex instruments, typically involve a high degree of risk and are intended for sale only to sophisticated investors who are capable of understanding and assuming the risks involved. The market value of any structured security may be affected by changes in economic, financial and political factors (including, but not limited to, spot and forward interest and exchange rates), time to maturity, market conditions and volatility, and the credit quality of any issuer or reference issuer. Any investor interested in purchasing a structured product should conduct their own investigation and analysis of the product and consult with their own professional advisers as to the risks involved in making such a purchase. Some investments discussed in this report may have a high level of volatility. High volatility investments may experience sudden and large falls in their value causing losses when that investment is realised. Those losses may equal your original investment. Indeed, in the case of some investments the potential losses may exceed the amount of initial investment and, in such circumstances, you may be required to pay more money to support those losses. Income yields from investments may fluctuate and, in consequence, initial capital paid to make the investment may be used as part of that income yield. Some investments may not be readily realisable and it may be difficult to sell or realise those investments, similarly it may prove difficult for you to obtain reliable information about the value, or risks, to which such an investment is exposed. This report may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the report refers to website material of CS, CS has not reviewed any such site and takes no responsibility for the content contained therein. Such address or hyperlink (including addresses or hyperlinks to CS's own website material) is provided solely for your convenience and information and the content of any such website does not in any way form part of this document. Accessing such website or following such link through this report or CS's website shall be at your own risk.

This report is issued and distributed in **European Union (except Germany and Spain)**: by Credit Suisse Securities (Europe) Limited, One Cabot Square, London E14 4QJ, England, which is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority; **Spain**: Credit Suisse Securities, Sociedad de Valores, S.A. ("CSSSV") regulated by the Comisión Nacional del Mercado de Valores; **Germany**: Credit Suisse (Deutschland) Aktiengesellschaft regulated by the Bundesanstalt fuer Finanzdienstleistungsaufsicht ("BaFin"); **United States**: Credit Suisse Securities (USA) LLC; **Canada**: Credit Suisse Securities (Canada), Inc.; **Switzerland**: Credit Suisse AG; **Brazil**: Banco de Investimentos Credit Suisse (Brasil) S.A or its affiliates; **Mexico**: Banco Credit Suisse (México), S.A., Institución de Banca Múltiple, Grupo Financiero Credit Suisse (México) and Casa de Bolsa Credit Suisse (México), S.A. de C.V., Grupo Financiero Credit Suisse (México) ("Credit Suisse Mexico"). This document has been prepared for information purposes only and is exclusively distributed in Mexico to Institutional Investors. Credit Suisse Mexico is not responsible for any onward distribution of this report to non-institutional investors by any third party. The authors of this report have not received payment or compensation from any entity or company other than from the relevant Credit Suisse Group company employing them; **Japan**: by Credit Suisse Securities (Japan) Limited, Financial Instruments Firm, Director-General of Kanto Local Finance Bureau ( *Kinsho*) No. 66, a member of Japan Securities Dealers Association, The Financial Futures Association of Japan, Japan Investment Advisers Association, Type II Financial Instruments Firms Association; **Hong Kong**: Credit Suisse (Hong Kong) Limited; **Australia**: Credit Suisse Equities (Australia) Limited; **Thailand**: Credit Suisse Securities (Thailand) Limited, regulated by the Office of the Securities and Exchange Commission, Thailand, having registered address at 990 Abdulrahman Place, 27th Floor, Unit 2701, Rama IV Road, Siom, Bangkok, Bangkok10500, Thailand, Tel. ; **Malaysia**: Credit Suisse Securities (Malaysia) Sdn Bhd; **Singapore**: Credit Suisse AG, Singapore Branch; **India**: Credit Suisse Securities (India) Private Limited (CIN no.U67120MH1996PTC104392) regulated by the Securities and Exchange Board of India as Research Analyst (registration no. INH 000001030) and as Stock Broker (registration no. INZ000248233), having registered address at 9th Floor, Ceejay House, Dr.AB. Road, Worli, Mumbai - 18, India, T - ; **South Korea**: Credit Suisse Securities (Europe) Limited, Seoul Branch; **Taiwan**: Credit Suisse AG Taipei Securities Branch; **Indonesia**: PT Credit Suisse Sekuritas Indonesia; **Philippines**: Credit Suisse Securities (Philippines) Inc., and elsewhere in the world by the relevant authorised affiliate of the above.

#### Additional Regional Disclaimers

**Australia**: Credit Suisse Securities (Europe) Limited ("CSSEL") and Credit Suisse International ("CSI") are authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority ("FCA") and the Prudential Regulation Authority under UK laws, which differ from Australian Laws. CSSEL and CSI do not hold an Australian Financial Services Licence ("AFSL") and are exempt from the requirement to hold an AFSL under the Corporations Act (Cth) 2001 ("Corporations Act") in respect of the financial services provided to Australian wholesale clients (within the meaning of section 761G of the Corporations Act) (hereinafter referred to as "Financial Services"). This material is not for distribution to retail clients and is directed exclusively at Credit Suisse's professional clients and eligible counterparties as defined by the FCA, and wholesale clients as defined under section 761G of the Corporations Act. Credit Suisse (Hong Kong) Limited ("CSHK") is licensed and regulated by the Securities and Futures Commission of Hong Kong under the laws of Hong Kong, which differ from Australian laws. CSHK does not hold an AFSL and is exempt from the requirement to hold an AFSL under the Corporations Act in respect of providing Financial Services. Investment banking services in the United States are provided by Credit Suisse Securities (USA) LLC, an affiliate of Credit Suisse Group. CSSU is regulated by the United States Securities and Exchange Commission under United States laws, which differ from Australian laws. CSSU does not hold an AFSL and is exempt from the requirement to hold an AFSL under the Corporations Act in respect of providing Financial Services. Credit Suisse Asset Management LLC (CSAM) is authorised by the Securities and Exchange Commission under US laws, which differ from Australian laws. CSAM does not hold an AFSL and is exempt from the requirement to hold an AFSL under the Corporations Act in respect of providing Financial Services. This material is provided solely to Institutional Accounts (as defined in the FINRA rules) who are Eligible Contract Participants (as defined in the US Commodity Exchange Act). Credit Suisse Equities (Australia) Limited (ABN 35 068 232 708) ("CSEAL") is an AFSL holder in Australia (AFSL 237237).

**Malaysia**: Research provided to residents of Malaysia is authorised by the Head of Research for Credit Suisse Securities (Malaysia) Sdn Bhd, to whom they should direct any queries on + .

**Singapore**: This report has been prepared and issued for distribution in Singapore to institutional investors, accredited investors and expert investors (each as defined under the Financial Advisers Regulations) only, and is also distributed by Credit Suisse AG, Singapore Branch to overseas investors (as defined under the Financial Advisers Regulations). Credit Suisse AG, Singapore Branch may distribute reports produced by its foreign entities or affiliates pursuant to an arrangement under Regulation 32C of the Financial Advisers Regulations. Singapore recipients should contact Credit Suisse AG, Singapore Branch at for matters arising from, or in connection with, this report. By virtue of your status as an institutional investor, accredited investor, expert investor or overseas investor, Credit Suisse AG, Singapore Branch is exempted from complying with certain compliance requirements under the Financial Advisers Act, Chapter 110 of Singapore (the "FAA"), the Financial Advisers Regulations and the relevant Notices and Guidelines issued thereunder, in respect of any financial advisory service which Credit Suisse AG, Singapore Branch may provide to you.

**EU**: This report has been produced by subsidiaries and affiliates of Credit Suisse operating under its Global Markets Division

In jurisdictions where CS is not already registered or licensed to trade in securities, transactions will only be effected in accordance with applicable securities legislation, which will vary from jurisdiction to jurisdiction and may require that the trade be made in accordance with applicable exemptions from registration or licensing requirements.

This material is issued and distributed in the U.S. by CSSU, a member of NYSE, FINRA, SIPC and the NFA, and CSSU accepts responsibility for its contents. Clients should contact analysts and execute transactions through a Credit Suisse subsidiary or affiliate in their home jurisdiction unless governing law permits otherwise.

CS may provide various services to US municipal entities or obligated persons ("municipalities"), including suggesting individual transactions or trades and entering into such transactions. Any services CS provides to municipalities are not viewed as "advice" within the meaning of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act. CS is providing any such services and related information solely on an arm's length basis and not as an advisor or fiduciary to the municipality. In connection with the provision of the any such services, there is no agreement, direct or indirect, between any municipality (including the officials, management, employees or agents thereof) and CS for CS to provide advice to the municipality. Municipalities should consult with their financial, accounting and legal advisors regarding any such services provided by CS. In addition, CS is not acting for direct or indirect compensation to solicit the municipality on behalf of an unaffiliated broker, dealer, municipal securities dealer, municipal advisor, or investment adviser for the purpose of obtaining or retaining an engagement by the municipality for or in connection with Municipal Financial Products, the issuance of municipal securities, or of an investment adviser to provide investment advisory services to or on behalf of the municipality. If this report is being distributed by a financial institution other than Credit Suisse AG, or its affiliates, that financial institution is solely responsible for distribution. Clients of that institution should contact that institution to effect a transaction in the securities mentioned in this report or require further information. This report does not constitute investment advice by Credit Suisse to the clients of the distributing financial institution, and neither Credit Suisse AG, its affiliates, and their respective officers, directors and employees accept any liability whatsoever for any direct or consequential loss arising from their use of this report or its content. No information or communication provided herein or otherwise is intended to be, or should be construed as, a recommendation within the meaning of the US Department of Labor's final regulation defining "investment advice" for purposes of the Employee Retirement Income Security Act of 1974, as amended and Section 4975 of the Internal Revenue Code of 1986, as amended, and the information provided herein is intended to be general information, and should not be construed as, providing investment advice (impartial or otherwise).

Copyright © 2020 CREDIT SUISSE AG and/or its affiliates. All rights reserved.

When you purchase non-listed Japanese fixed income securities (Japanese government bonds, Japanese municipal bonds, Japanese government guaranteed bonds, Japanese corporate bonds) from CS as a seller, you will be requested to pay the purchase price only.