J.P.Morgan

CEEMEA Equity Research
21 March 2024

Solutions by stc

Heightened competition with uninspiring growth for a digital play; yet at a sizeable premium - D/g to UW

We increase our PT for Solutions to SAR 324/share (+5%) and downgrade the name to UW (from Neutral). Despite the promising ICT outlook in KSA, we have concerns over Solutions' elevated exposure to the relatively mature, competitive and commoditized IT service markets coupled with limited access to faster-growing technologies, as STC and PIF subsidiaries gain a bigger role on that front. We acknowledge the attractiveness of STC landing a key agreement to digitize the mega and giga projects in KSA. We note, however, that Solutions' share will be mainly focused on managed services, system integration and cloud services. Instead, STC will extend the more lucrative and fast-growing services to its other JVs (iot squared) and PIF will support its own companies (SITE, SCAI, etc.). We view the Giza and CCC acquisitions as non-digital expansions, resulting in higher exposure to competitive and crowded segments while diverting the company's focus from building a larger digital business. In light of the uninspiring guidance, pressure on margins from competition, disappointing digital performance, and exposure to unattractive areas within the digital scene, we believe that the current valuation at a c. 40% premium to global peers is not justified, especially in light of a relatively more limited 11% net income FY 23-26 CAGR. **In this note we detail the new partnerships and initiatives undertaken by local and domestic peers that are causing competitive pressure on Solutions, while also looking at STC's deal with mega and giga projects and their implications for Solutions.**

- **Solutions to remain leader in ICT yet at the expense of margins:** We believe the company will continue to outpace the integration and connectivity market growth in the MT. We turn, however, more cautious on the profitability profile as global and local companies expand their market share in Saudi, and expect a lower margin profile within government projects. As a result, we forecast c. 200bps compression in GPM of the core ICT division over the MT
- **Uninspiring services within giga, mega and smart cities projects:** While we view STC's partnerships and agreements with giga project operators and smart cities as supportive for Solutions' pipeline, we note that Solutions' scope will mainly address connectivity, integration, managed service and BPO areas. These areas offer lower margins (vs. digital) while facing significant competition. We believe that iot squared (JV between PIF and STC), SCAI (PIF) and other key emerging technology operators will gain access to critical areas (IoT, AI) with strong potential for growth and scale within those projects.
- **Unjustified valuation given an uninspiring growth profile:** Solutions trades at c. 37x/34x P/E 24/25E, a premiums of c. 30% to Indian IT peers and 60% to global peers. This, in our view, is unwarranted given: 1) lower growth profile, 2) limited access to fast-growing and lucrative technologies, 3) competition driving margin compression, 4) competition from STC and PIF subsidiaries, 5) exposure to legacy and competitive segment even in giga-projects, and 6) uninspiring non-digital acquisitions. Our new net income estimates are c. 10% below Bloomberg consensus for FY 24-26E.

▼Underweight

Previous: Neutral

7202.SE, SOLUTION AB
Price (20 Mar 24):SRls397.00

▲Price Target (Dec-25):SRls324.00
Prior (Jun-25):SRls308.00

MENA Consumer, Healthcare and Real Estate

Tarek Sleiman AC
(971) 4428-1616
tarek.sleiman@jpmorgan.com
J.P. Morgan Securities plc

Taher Safieddine, CFA
(971) 4428-1654
taher.safieddine@jpmorgan.com
J.P. Morgan Securities plc

Vardhman Chhajed
(91 22) 6157 5017
vardhman.v.chhajed@jpmchase.com
J.P. Morgan India Private Limited

Style Exposure

Quant Factors	Current %Rank	Hist %Rank (1=Top) 6M	1Y	3Y	5Y
Value	47	53	55	87	74
Growth	48	50	37	28	78
Momentum	50	15	19		
Quality	22	25	15	12	
Low Vol	86	81	69		

Contents

Story in Charts	3
Executive Summary	5
Positioned in competitive areas of the ICT sector	9
Big projects: Tackling the commoditized offering	11
Impact of competition seen in margins	16
Acquisitions: more legacy exposure; less digital	21

Sources for: Style Exposure – J.P. Morgan Quantitative and Derivatives Strategy; all other tables are company data and J.P. Morgan estimates.

Tarek Sleiman AC
(971) 4428-1616
tarek.sleiman@jpmorgan.com

Price Performance

	YTD	1m	3m	12m
Abs	11.8%	5.8%	20.5%	63.3%
Rel	5.4%	4.1%	11.2%	36.3%

Company Data

Shares O/S (mn)	120
52-week range (SRIs)	409.80-236.00
Market cap ($ mn)	12,702.98
Exchange rate	3.75
Free float(%)	20.0%
3M - Avg daily vol (mn)	0.19
3M - Avg daily val ($ mn)	17.6
Volatility (90 Day)	30
Index	TADAWUL ALL SHARE
BBG BUY|HOLD|SELL	5|8|2

Key Metrics (FYE Dec)

SRIs in millions	FY23A	FY24E	FY25E	FY26E
Financial Estimates				
Revenue	11,040	12,456	14,042	15,699
Adj. EBIT	1,335	1,482	1,630	1,807
Adj. EBITDA	1,618	1,790	1,948	2,144
Adj. net income	1,192	1,333	1,456	1,609
Adj. EPS	9.93	11.11	12.14	13.40
BBG EPS	10.93	12.27	14.33	16.95
Cashflow from operations	1,715	1,301	1,911	2,313
FCFF	1,209	717	1,576	1,933
Margins and Growth				
Revenue Growth Y/Y (%)	25.4%	12.8%	12.7%	11.8%
EBIT margin	12.1%	11.9%	11.6%	11.5%
EBIT growth	17.9%	11.0%	10.0%	10.9%
EBITDA margin	14.7%	14.4%	13.9%	13.7%
EBITDA Growth Y/Y (%)	18.5%	10.7%	8.8%	10.1%
Net margin	10.8%	10.7%	10.4%	10.2%
Adj. EPS growth	13.2%	11.8%	9.3%	10.5%
Ratios				
Adj. tax rate	14.9%	14.7%	14.7%	14.7%
Interest cover	-	-	-	-
Net debt/Equity	NM	NM	NM	NM
Net debt/EBITDA	NM	NM	NM	NM
ROE	38.5%	36.6%	34.2%	32.6%
Valuation				
FCFF yield	2.5%	1.5%	3.3%	4.1%
Dividend yield	-	-	-	-
EV/Revenue	4.1	3.6	3.2	2.9
EV/EBITDA	27.9	25.2	23.2	21.0
Adj. P/E	40.0	35.7	32.7	29.6

Summary Investment Thesis and Valuation

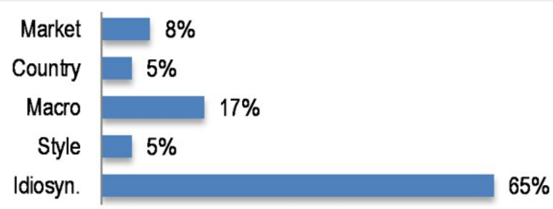
Investment Thesis

We are UW on Solutions given its elevated exposure to relatively mature and highly competitive and commoditized IT service markets which offer a more moderate growth outlook coupled with a pressured profitability profile as competition accelerates on the back of new players establishing presence in KSA and/or local operators partnering with global leading innovators. Additionally, we view Solutions' share in mega and giga projects limited to lower-margin areas, as STC extends the more lucrative and fast growing services to its other JVs (iot squared) while PIF support its own companies (SITE, SCAI, etc.). In light of the uninspiring guidance, pressure on margins from competition, disappointing digital performance, and exposure to unattractive areas within the digital scene; we expect a 13% FY 23-26E CAGR coupled with a c. 100bps compression in EBITDA margin over the MT resulting in a limited 11% FY 23-26 CAGR. The stock is currently trading at 37x/34x P/E 24/25E, at premiums of c. 30% premium to Indian IT services companies and c. 60% to global peers, which we believe is unwarranted given the limited growth profile coupled with stiffer competition on Solutions' key segments..

Valuation

We value Solutions at SAR 324/share using an 8Y DCF model, a WACC of 10.1% and a terminal growth rate of 4.0%. We arrive at our WACC using a blended RFR of 4.5%, an ERP of 7.5% and a Beta of 1.0x. We use a target Debt/Equity ratio of 20% and a cost of debt of 5.5%. We use an EBITDA margin of 16.5% in our terminal year assumption and a capex/revenues of 2.4%.

Performance Drivers



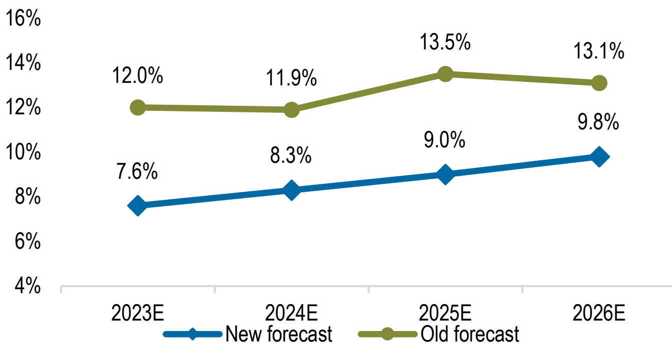
Factors	6M Corr	1Y Corr
Market: MSEUEMEA Index	0.52	0.30
Country: Saudi Arabia	0.05	0.28
Macro:		
Citi Economic Surprise - EM	-0.36	-0.34
JPM Global Equity Sentiment	-0.22	-0.20
US 10 Year Yield	-0.02	-0.14
Quant Styles:		
Momentum	0.28	0.32
DivYld	-0.35	-0.24
Quality	0.20	0.12

Source: J.P. Morgan Quantitative and Derivatives Strategy for Performance Drivers; company data, Bloomberg Finance L.P. and J.P. Morgan estimates for all other tables. Note: Price history may not be complete or exact.

Tarek Sleiman AC
(971) 4428-1616
tarek.sleiman@jpmorgan.com

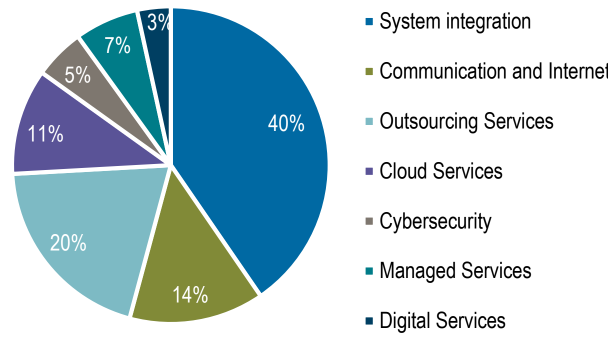
Story in Charts

Figure 1: Solid yet softer IT market growth in KSA



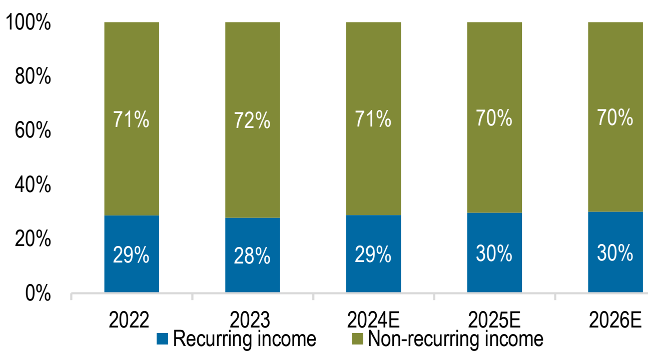
Source: J.P. Morgan estimates, Company data.

Figure 2: c.75% of Solutions' revenues based on contractual business…



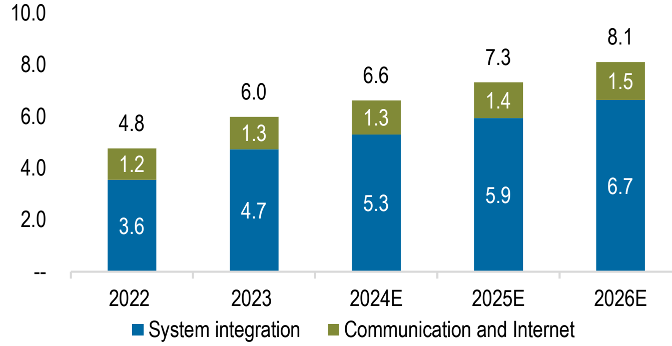
Source: J.P. Morgan estimates, Company data.

Figure 3: … with a limited c. 25% coming from recurring component which is mainly the digital business



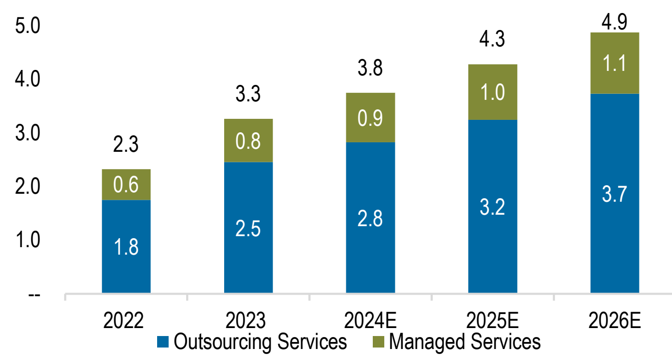
Source: J.P. Morgan estimates, Company data.

Figure 4: Core ICT segment set to print c. 11% FY 23-26E CAGR as competition intensifies driving lower margins



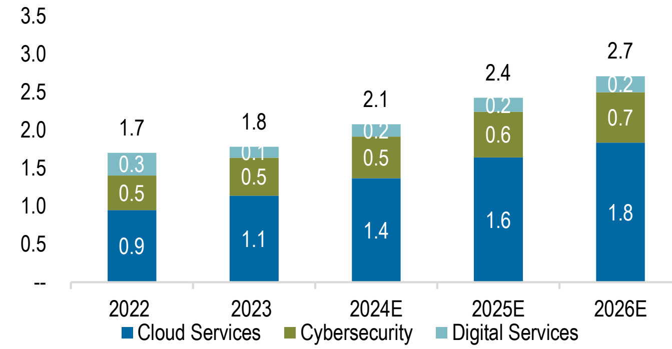
Source: J.P. Morgan estimates, Company data.

Figure 5: BPO and managed services to deliver a 15% FY 23-26E CAGR while margins benefit from scalability



Source: J.P. Morgan estimates, Company data.

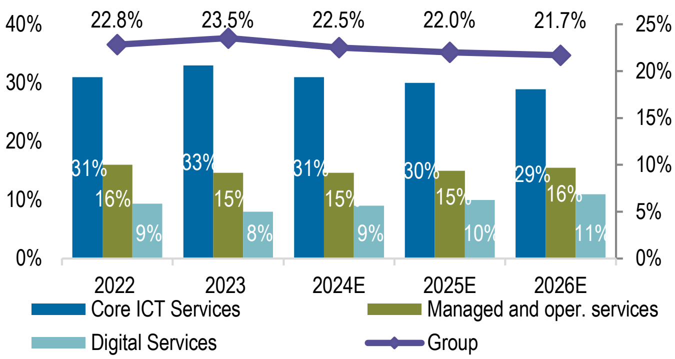
Figure 6: Digital services to grow at 15% FY 23-26E CAGR supported by the cloud offering mainly



Source: J.P. Morgan estimates, Company data.

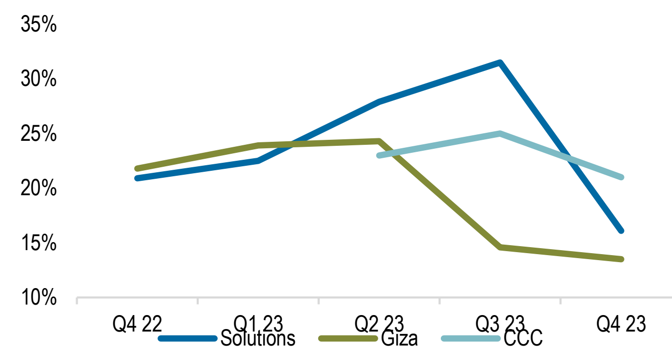
Tarek Sleiman [AC]
(971) 4428-1616
tarek.sleiman@jpmorgan.com

Figure 7: Gross profit margins to compress by c. 200bps on stiffer competition across key segments



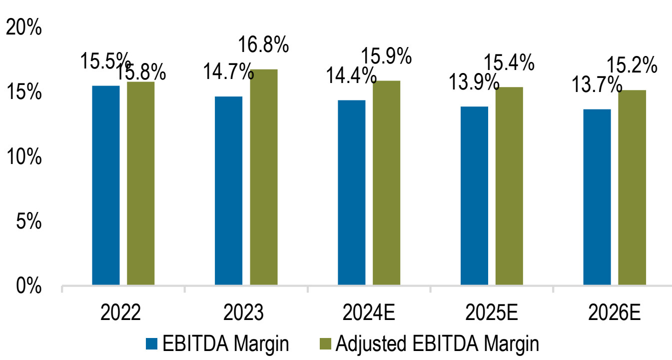
Source: J.P. Morgan estimates, Company data.

Figure 8: Gross profit margin compression across Solutions' organic and acquired businesses



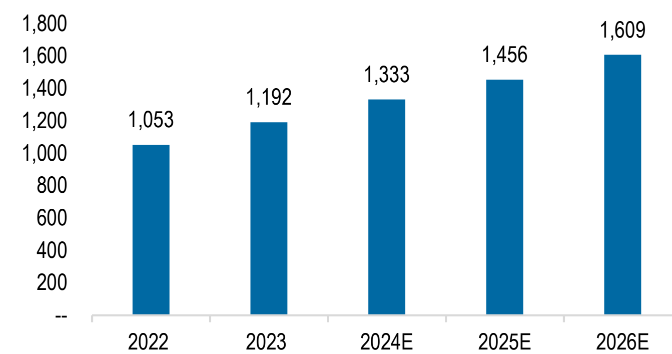
Source: Company data.

Figure 9: EBIDA margin down c. 150bps in the MT as a cost prudence partly mitigates the GPM compression



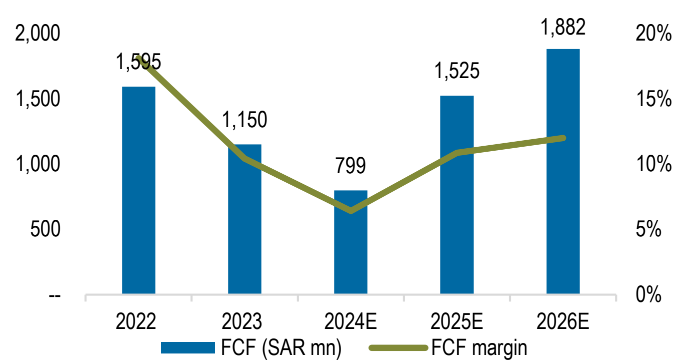
Source: J.P. Morgan estimates, Company data.

Figure 10: Net income FY 23-26E CAGR of 11% does not justify a 34x P/E 24E



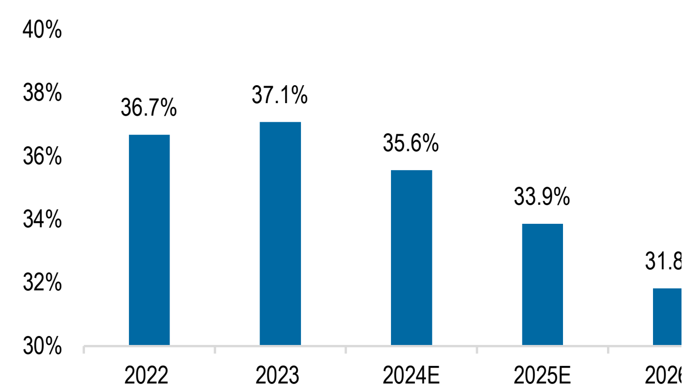
Source: J.P. Morgan estimates, Company data.

Figure 11: FCF margin hovering around 12% over the MT



Source: J.P. Morgan estimates, Company data.

Figure 12: Lower RoE as profitably profile is impacted by competitive pressures



Source: J.P. Morgan estimates, Company data.

Tarek Sleiman AC
(971) 4428-1616
tarek.sleiman@jpmorgan.com

Executive Summary

Despite the promising ICT outlook in KSA, we downgrade Solutions to UW (from Neutral) given its elevated exposure to relatively mature and highly competitive and commoditized IT service markets (system integration). This suggests a more moderate growth outlook coupled with a pressured profitability profile as competition accelerates on the back of new players establishing presence in KSA nad/or local operators partnering with global leading innovators. Additionally, while we acknowledge the attractiveness of STC landing key agreements to digitize the mega and giga projects in KSA, we note that Solutions' share will be mainly focused on managed services, system integration and cloud services. STC extends the more lucrative and fast growing services to its other JVs (iot squared), while PIF supports its own companies (SITE, SCAI, etc.). We view the Giza and CCC acquisitions as non-digital expansions, resulting in higher exposure to competitive and crowded segments while diverting the company's focus from building a larger digital business (faster-growth, higher-margins, recurring income). We note the uninspiring guidance, pressure on margins from competition, disappointing digital performance and exposure to unattractive areas within the digital scene. Thus we expect a 13% FY 23-26E CAGR coupled with a c. 100bps compression in EBITDA margin over the MT resulting in a limited net income FY 23-26 CAGR of 11%. The stock is currently trading at 37x/34x P/E 24/25E, at premiums of c. 30% premium to Indian IT services companies and c. 60% to global peers, which we believe is unwarranted given the limited growth profile coupled with stiffer competition on Solutions' key segments.

Addressing the competitive and commoditized offering in smart cities and giga-projects: The cloud space and the emerging technology fields (IoT, AI, robotics, etc.) are forecast to print some of the largest growth within the ICT space in KSA. We note, however, that STC's partnerships coupled with PIF companies are addressing these services across the mega/giga and smart cities' projects in KSA. Hence, while we see a large opportunity for Solutions , we also believe it will be more limited to system integration, connectivity and communication, managed services, and BPO. These areas are all currently seeing stiff competition from different operators and witnessing a downward trend in prices and margins.

Non-digital acquisitions should result in a lower margin profile in the MT: In light of all this, we view Solutions M&A activity as investment in lower-margin businesses with an inferior growth outlook (BPO: 8-10% over the MT; System integration: 6-8% over the MT; vs. Cloud/Digital: 20-25% over the MT). Additionally, we view both segments addressed in the acquisitions as highly competitive, relatively mature (vs. cloud and digital) and commoditized. This, in our view, should translate into limited margin gain over the MT within the BPO segment while potentially facing pressure across the integration division. Hence, while we capture a 100-300bps gains in gross margins across the BPO and digital division, we expect the c. 300bps compression in Core ICT should more than mitigate the improvement across the other division and drive a c. 150/200bps compression across the group's gross margin by FY 26E. We expect the EBITDA margin to compress by c. 100bps over the period, as Solutions mitigates part of the gross margin decline through cost prudence and efficiencies.

International players want a piece of the cake: We note that Atos, Capgemini, Accenture, Oracle, Miscrosoft, Alibaba, Google, Deloitte and other operators already highlighted their intentions to grow faster in KSA, and have either directly established

Tarek Sleiman AC
(971) 4428-1616
tarek.sleiman@jpmorgan.com

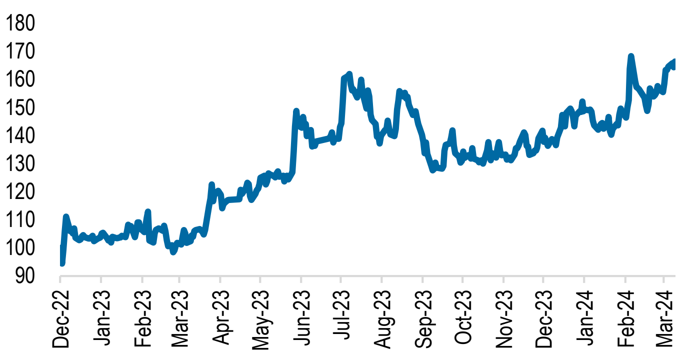
presence in the country or are partnering with leading local operators in order to gain a larger market share in KSA. Atos and Capgemini are likely to exert competitive pressure on Solutions, especially within the system integration space across smart cities, and the Zain and Mobily partnership could translate into competition across the connectivity division. We believe, however, that a larger Data Center space (real estate) should support Solutions' cloud services business, given its market leadership in this vertical and its know-how and ability to execute on large projects.

STC's partnerships and PIF companies– both competitive and complementary for Solutions: We view STC's IoT JV with PIF to create iot squared as a direct competitor to Solutions' digital business and expect this to translate into a lower market share for Solutions within smart cities' IoT projects. On the other hand, we see the formation of SCCC (Saudi Cloud Computing Company) as an attractive opportunity for Solutions to further expand its presence and share within the cloud services space. Additionally, we view PIF's SCAI and the partnerships with global AI providers as limiting Solutions' scope to legacy areas as PIF companies venture into the lucrative and fast-growing areas.

Valuation

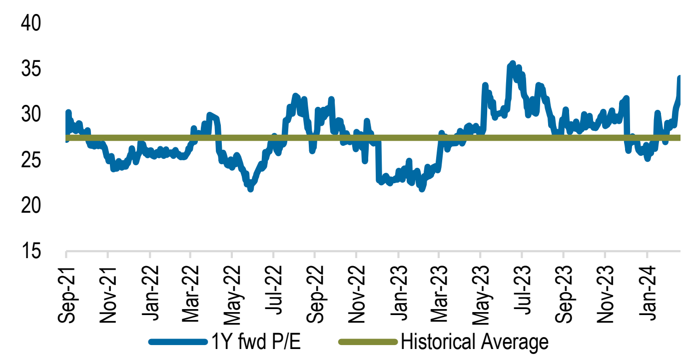
Following the c. 66% rise in share price since Jan-23, Solutions trades at c. 37x/34x P/E 24/25E, on our estimates, at premiums of c. 30% to Indian IT peers and 60% to global peers, which, in our view, is unwarranted given: 1) lower growth profile, 2) limited access to fast-growing and lucrative specialization in digital, 3) competition driving lower prices and margin compression, 4) competition from STC and PIF subsidiaries, 5) exposure to legacy and competitive segment even in smart cities and giga-projects, and 6) uninspiring acquisitions within the non-digital space.

Figure 13: Solutions up c. 66% since Jan-23 despite limited growth in the MT and a challenging backdrop



Source: Bloomberg Finance L.P.

Figure 14: Trading at 34x P/E 24E, a 35% premium to its historical average and c. 40% to global operators



Source: Bloomberg Finance L.P

Summary of changes to estimates

Solutions to remain leader in ICT yet at the expense of margins: In light of Solutions' leading market share, broad portfolio of partners, strong relationships with key government entities, and connection to STC, we believe the company will continue to outpace market growth in the MT. Nevertheless, we turn more cautious on the core ICT division of Solutions following the lower growth expected by the company and IDC for the IT service market into the MT and we expect compression across the profitability profile as global and local companies expand their market share in Saudi, and we thus expect a lower margin profile within government projects. As a result, we forecast an 11% FY 23-26E revenue CAGR for the core ICT division and a c. 300bps compression in GPM for the segment over the MT.

Managed services – solid revenue performance with limited gains from scalability: We still expect a solid print in managed services and BPO solutions (c. 25% of revenues) supported by rising demand for managed solutions (shift from capex to opex) coupled with the acquisition of CCC – the BPO leader in KSA. This should translate into a 14% FY 23-26E CAGR in BPO/managed service revenues in our view. However, we still believe that growth within this segment will come at the expense of margins, given a highly competitive landscape and commoditized business. Hence we expect the division's profitability to remain below margins printed in the core ICT division. However in light of Solutions' acquisition of CCC, we expect the company to gain in efficiencies and benefit from the scalability of the business, which in our view should translate into a 100bps expansion in GPM over the MT.

Digital division – another lackluster FY 23; better performance in FY 24E on cloud services: Solutions' digital division delivered limited 5% YoY growth in FY 23 as the cyber-security sub-segment continued to decline from the carve-out of the hardware business while the cloud services division was impacted by the delays of international players in establishing data centers in Saudi . We remain positive on the digital segment's performance into the MT as Solutions extends its services into the hyperscalers data centers and the mega-project in KSA, while we see upside into the longer term from a new business model with key revenue-sharing projects recently announced. We expect a healthy delivery over the MT with a 115% revenue FY 23-26E CAGR for the division coupled with an improvement in margins to the tune of 200-300bps over the MT given the scalability of the cloud services coupled with more lucrative initiatives in the digital services as the company aims to tap-into the healthcare, education, and other fast-growing verticals.

Downbeat guidance as competition takes a toll on Solutions: Solutions is guiding for 8-11% revenue growth in FY 24E which should reflect the projects signed by STC and the existing backlog of Solutions. We believe the limited revenue growth is mainly driven by: 1) lower prices as competition intensifies, 2) new players capturing a share of the new government and private digitization projects in KSA, and 3) Solutions' limited access to fast-growing services across emerging technologies limiting its ability to capitalize on emerging technologies trends. Additionally, the company is guiding for a 13-15% EBITDA margin in FY 24E which implies flattish performance to a c. 200bps YoY compression. This, in our view, is the result of the acquisition of a lower-margin business and pressure on system integration and managed services pricing as competition intensifies.

Below consensus: Our revised estimates are c. 12% below Bloomberg consensus on EBITDA as we believe the market is not fully capturing the competitive pressures while our net income forecasts are 10% below Bloomberg consensus for FY 24-26E.

Tarek Sleiman AC
(971) 4428-1616
tarek.sleiman@jpmorgan.com

Figure 15: Summary of our changes in estimates

Detail	2023	2024E			2025E			2026E		
SAR mn	**Actual**	**New**	**Old**	***Change (%)***	**New**	**Old**	***Change (%)***	**New**	**Old**	***Change (%)***
Core ICT	5,994	6,625	6,444	*2.8%*	7,328	6,995	*4.8%*	8,110	7,486	*8.3%*
Managed Services & BPO	3,262	3,752	3,539	*6.0%*	4,287	4,017	*6.7%*	4,878	4,394	*11.0%*
Digital Services	1,784	2,079	2,314	*(10.1%)*	2,427	2,702	*(10.2%)*	2,712	3,073	*(11.7%)*
Revenues	**11,040**	**12,456**	**12,298**	***1.3%***	**14,042**	**13,714**	***2.4%***	**15,699**	**14,953**	***5.0%***
Gross Profit	2,598	2,790	2,976	*(6.2%)*	3,084	3,359	*(8.2%)*	3,398	3,678	*(7.6%)*
Gross profit margin (%)	*23.5%*	*22.4%*	*24.2%*	*(1.8%)*	*22.0%*	*24.5%*	*(2.5%)*	*21.6%*	*24.6%*	*(3.0%)*
SG&A	1,262	1,308	1,314	*(0.4%)*	1,454	1,403	*3.6%*	1,591	1,476	*7.8%*
SG&A/revenues (%)	*11.4%*	*10.5%*	*10.7%*	*(0.2%)*	*10.4%*	*10.2%*	*0.1%*	*10.1%*	*9.9%*	*0.3%*
EBITDA	**1,618**	**1,790**	**1,983**	***(9.7%)***	**1,948**	**2,277**	***(14.4%)***	**2,144**	**2,533**	***(15.4%)***
EBITDA margin (%)	*14.7%*	*14.4%*	*16.1%*	*(1.8%)*	*13.9%*	*16.6%*	*(2.7%)*	*13.7%*	*16.9%*	*(3.3%)*
EBIT	**1,335**	**1,482**	**1,662**	***(10.8%)***	**1,630**	**1,956**	***(16.6%)***	**1,807**	**2,202**	***(17.9%)***
EBIT margin (%)	*12.1%*	*11.9%*	*13.5%*	*(1.6%)*	*11.6%*	*14.3%*	*(2.6%)*	*11.5%*	*14.7%*	*(3.2%)*
Net Profit	**1,192**	**1,333**	**1,425**	***(6.5%)***	**1,456**	**1,692**	***(14.0%)***	**1,609**	**1,915**	***(16.0%)***
Net Profit margin (%)	*10.8%*	*10.7%*	*11.6%*	*(0.9%)*	*10.4%*	*12.3%*	*(2.0%)*	*10.2%*	*12.8%*	*(2.6%)*
Operating Cashflow	**1,715**	**1,301**	**1,596**	***(18.5%)***	**1,911**	**2,167**	***(11.8%)***	**2,313**	**2,435**	***(5.0%)***
CAPEX	(527)	(596)	(295)	*101.8%*	(337)	(329)	*2.4%*	(377)	(359)	*5.0%*
FCF	**1,150**	**662**	**1,278**	***(48.2%)***	**1,525**	**1,812**	***(15.8%)***	**1,882**	**2,048**	***(8.1%)***

Source: J.P. Morgan estimates, Company data.

Tarek Sleiman AC
(971) 4428-1616
tarek.sleiman@jpmorgan.com

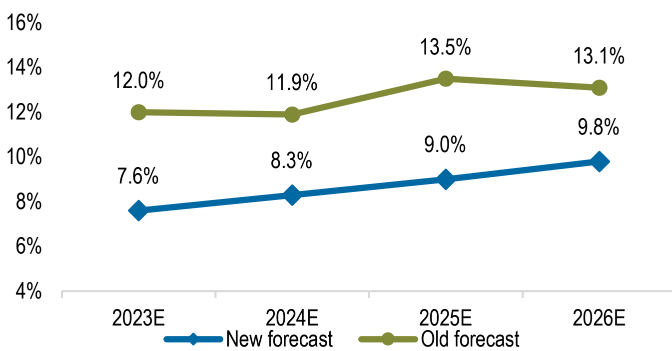
Positioned in competitive areas of the ICT sector

According to Solutions and IDC, the IT sector is set to print a c. 9% FY 23-27E CAGR and 8% YoY growth in FY 24 (from 13% FY 22-26 CAGR and 11.9% YoY for FY 24E expected in 2023). On the one hand, we believe that this performance is underpinned by a solid rise in emerging technologies (cloud, IoT, AI, Data analytics, etc.) coupled with a supportive trend in custom application development, application integration, smart cities, GovTech, and E-Gov services. On the other hand, we believe that the robust growth seen since FY 2020 indicates a fast a swift digital adoption across individuals and enterprises which coupled with the rising competition especially across the BPO, system integration, and managed services; resulted in a lower growth forecasted (by IDC and Solutions) for the MT and FY 24E. We still believe that the fastest-growth emerging technologies fields (cloud, AI, IoT, Analytics, etc.) are set for 15-25% growth over the MT. We view the system integration segment, however, as a slower growth field with 6-8% print expected over the same period. This is supported by the sizeable volume and value of projects announced in KSA, upgrades across enterprise integration projects (B2B), new companies expanding and establishing a presence in KSA hence expanding the addressable market of system integrators, and application integration printing a healthy momentum over the MT.

That said, we remain positive on Solutions' ability to capitalize on the growth within the system integration, BPO, and managed services. This is owing to Solutions' focus on market share coupled with its wide portfolio of services and partnerships, leadership and scalable positioning, and its one-stop shop offering;

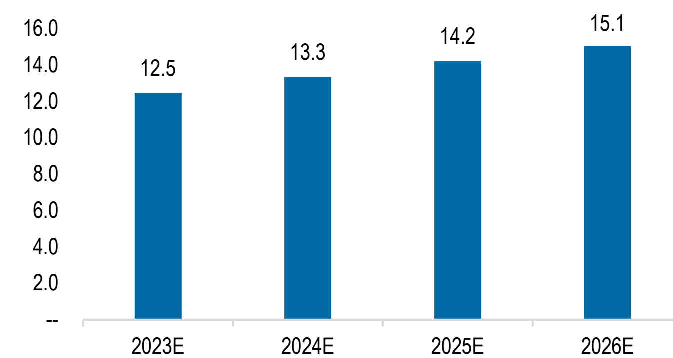
However, we believe that the market share expansion of Solutions within the integration and BPO segments will come at the expense of margins given the stiffer competition within those business lines with international, regional and domestic players aiming to establish a stronger presence within Saudi Arabia.

Figure 16: Solutions' TAM growth revised as FY 20-23 pulled part of the outer year growth in our view



Source: Solutions, MoF, IDC, Company Data

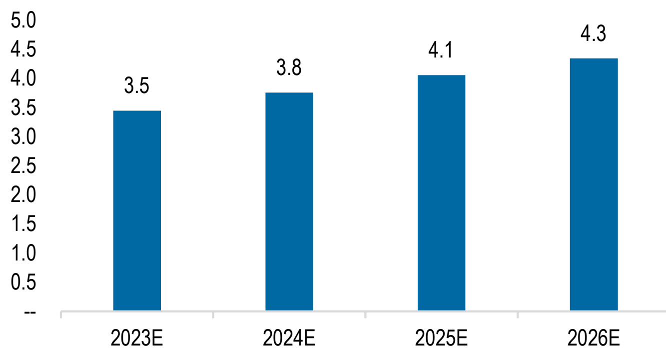
Figure 17: We now expect a c. 6.5% FY 23-26E CAGR for the system integration market in KSA



Source: Solutions, J.P. Morgan estimates, MoF, IDC, Company Data

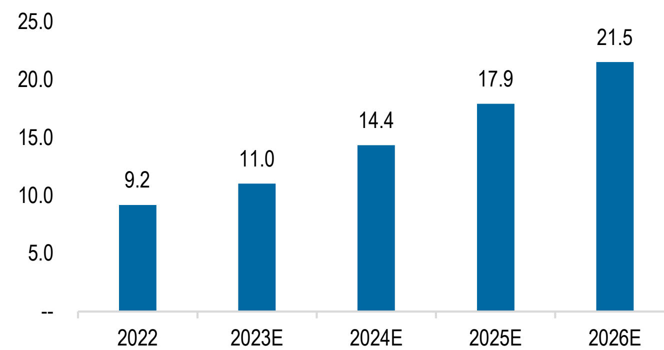
Tarek Sleiman AC
(971) 4428-1616
tarek.sleiman@jpmorgan.com

Figure 18: BPO segment set to print c. 8% FY 23-26E CAGR as competition translates into lower prices



Source: Solutions, J.P. Morgan estimates, IDC, Company Data

Figure 19: Digital segment is fastest growing with c. 25% FY 23-26E CAGR



Source: Solutions, J.P. Morgan estimates, IDC, Company Data

While Solutions' track record across the system integration segment and managed services coupled with the CCC acquisition within the BPO division enables the company to maintain a leading market share in our opinion, we note that the company's digital division remains pressured by: 1) delays from hyper-scalers to establish their data centers in Saudi, 2) limited proposition within the digital services sub-segment, and 3) competition on the cyber-security front.

However, Solutions recently announced winning a project to establish and develop smart parking systems in Riyadh which we believe opens the door for the company to step into the revenue-sharing business model in Saudi (similar to Elm) while addressing a critical need rendering the product portfolio more captive and recurring. Additionally, Solutions aims to tap into new verticals through the digital division by addressing the healthcare and education sectors, which in our view offer sizeable opportunities.

Finally, we believe that Solutions should largely benefit from new Data Centers opening in Saudi given its market leading cloud proposition which should enable the company to generate additional revenues, scale its operations, and expand its margins.

Tarek Sleiman [AC]
(971) 4428-1616
tarek.sleiman@jpmorgan.com

Big projects: Tackling the commoditized offering

STC's partnerships are supportive, yet with a competitive aspect on the promising segments

STC signed a raft of partnerships with leading mega and giga projects operators and key developers across the Kingdom in order to offer their digital products and solutions across their projects. We see this as a promising avenue for Solutions as the system integration services, managed services, and digital solutions offered by STC and present within Solutions' portfolio should be executed through the latter.

We name a few agreements signed by STC that, in our view, should support Solutions' core ICT and managed services divisions over the MT:

- **STC's partnership with Red Sea Global:** STC and RSG (Red Sea Global) signed a strategic partnership aimed at adopting modern communication and digital services in order to empower tourism destinations across the Red Sea coast. Through this deal, STC will offer cutting-edge connectivity services to the Red Sea and AMAALA destinations by delivering tailored solutions with potential expansion into newly developed areas in the near future. Those solutions include fixed and mobile services with 5G technologies and connectivity through the STC's data centers. Hence, we believe that Solutions - through its expertise in cloud solutions and connectivity services - will handle the digital and integration proposition for RSG and AMAALA.
- **STC's acquisition of Tonomus' LEO satellite connectivity capacity:** In a deal with Tonomus (NEOM technology and digital infrastructure company), STC will acquire Tonomus' Low Earth Orbit (LEO) satellite connectivity capacity in Saudi Arabia. The acquisition will provide STC with access to LEO satellite capacity and high-speed broadband internet and data services. Through this deal STC will also be able to offer business continuity solutions to government entities, large enterprises and SMEs across Saudi Arabia. We believe these solutions will be offered to the B2B segment through Solutions thereby enabling the company to boost its connectivity division through this unique offering.
- **STC's agreement with Diriyah:** Diriyah Company and STC group have signed an agreement to establish specialized digital infrastructure services in Diriyah, under which STC will develop wired and wireless communication networks and provide Internet services for Diriyah Company's main headquarters, commercial premises and cloud security services. The group's information technology solutions provider, Solutions, will offer comprehensive services in design, execution and managed services. That said, iot squared will handle the IoT related services in the project.
- **STC's MoU with ROSHN:** ROSHN, KSA's leading national real estate developer and PIF-funded giga-project, signed an infrastructure agreement and memorandum of understanding (MoU) with the STC group, to provide ROSHN communities best-in-class, cutting-edge telecommunications access, coverage, and connectivity and ICT solutions. These will include the installation of 5G towers, smart home and smart city solutions, and the use of big data and Internet of Things (IoT) technology to increase productivity, speed connections, and improve the quality of life for locals and tourists. A neutral host infrastructure will be created, constructed, and run by

STC for ROSHN's WAREFA community in Riyadh. Regardless of service provider, this development will provide residents with access to both fixed-fiber networks and expedited wireless mobility connectivity.

On the other hand we view the companies established by STC in order to provide specialized technology services as both complementary and competitive to Solutions. On the competitive front we flag **iot squared,** the JV established between PIF and STC, to offer IoT (internet of things) services:

iot squared: a competitive threat

IoT (Internet of Things) technology is in a breakthrough phase in Saudi Arabia, driven by smart cities and ongoing mega projects. IDC expects Saudi Arabia's IoT market to reach SAR 10.8bn ($2.9bn) by 2025 with an annual growth rate of 12.8% (data as of Apr-22).

Saudi Arabia's sovereign wealth fund, PIF, partnered in April 2022 with STC to establish an IoT company - iot squared - that aims to help accelerate IoT adoption in the country. Both STC and PIF will own 50% of the joint venture that will offer smart solutions in sectors including industrial manufacturing, logistics, transportation and smart cities. iot squared aims to make Saudi a regional technology centre for the Middle East and North Africa and a one-stop shop for IoT solutions. In addition to delivering IoT solutions, the company aims to create an ecosystem by providing consultancy, installation, and training assistance, as well as supporting creative finance mechanisms to help businesses adoption of IoT.

That said, we believe that the IoT projects, including devices, mechanism, software, applications, infrastructure, and services will be largely executed through iot squared across mega-projects and smart cities owned by the PIF as: 1) the target is create large one-stop-shop solutions with IoT in high use across smart cities; and 2) the PIF aims to turn the company into a MENA player, beyond KSA, via a solid record of execution.

Additionally iot squared has recently acquired Machinestalk, an IoT company which focuses on smart mobility, smart cities, smart buildings and facilities, smart transportation, and industrial IoT. Additionally iot squared signed a Memorandum of Understanding (MoU) with OQ Technology, the world's first global satellite telecom operator for IoT connectivity using 5G protocol. Finally, iot squared signed an MoU with Aqara, a leading provider of smart home products to forge a strategic partnership with a special focus on Information and Communications Technology (ICT) and Internet of Things (IoT) services. This collaboration is designed to spur the growth of digitalization through IoT research and development in Saudi Arabia, aligning with the Kingdom's Vision 2030.

More recently iot squared was included in the STC-Diriyah agreement where iot squared will provide CCTV service packages, install smart cameras and establish cloud-based video central monitoring systems, incorporating artificial intelligence technologies and data extraction services to aid decision-makin

Hence, we see stiff competition within the IoT space for Solutions, but we note that the company can still venture into software licensing related to IoT for those projects, target other projects (other municipalities to be turned into smart cities), focus on the enterprise segment, and partner with the JV across specific projects.

SCCC: Localizing global cloud capabilities

Saudi Cloud Computing Company (SCCC) is a new joint venture company formed by Alibaba Cloud, Saudi Telecom Company (STC) Group, eWTP Arabia Capital, the Saudi Company for Artificial Intelligence (SCAI), and the Saudi Information Technology Company (SITE). It announced the launch of its operations across the Kingdom in June 2022. We believe this offers a complementary proposition to Solutions given its cloud services division.

The JV announced the opening of two data centres in Riyadh that will offer customers in Saudi a local option to utilize world-leading cloud capabilities. Investors have shown concerns with regards to Solutions and Alibaba competing over the management of those data centers, as both players offer cloud management services within their service portfolio. However, Solution's management indicated that the company will be managing the data centers (through its cloud service division) with no competition from Alibaba's cloud service division, as per the agreement with the JV. We view this as an attractive opportunity for Solutions to expand its cloud service division and, in turn, its overall digital segment, which should support the margin profile of the digital business while boosting the recurring income component.

Competition from PIF and other telco operators is piling up

The competition within the most promising and lucrative areas is not only coming from STC's partnership and/or JVs, but we also see Zain (a leading telecom and digital services provider in the Kingdom) partnering with Red Sea Global while PIF is offering AI services through its SCAI (Saudi Company for Artificial Intelligence). This should put serious competitive pressure on Solutions.

- **Zain - Red Sea Global partnership:** Red Sea Global, AMAALA and Zain KSA have unveiled the world's first zero-carbon 5G network at the Six Senses Southern Dunes resort at the Red Sea. The zero-carbon 5G network, designed exclusively for the Red Sea, is the latest technological innovation at the resort. Designed with both people and planet in mind, the revolutionary 5G network will bring guests the highest speeds for 5G connectivity in the region.
- **SCAI - Saudi Company for Artificial Intelligence:** SCAI is wholly owned by the Public Investment Fund (PIF) and acts as PIF's arm in the AI and emerging technologies sector. The company's purpose is to support PIF's strategy and national priorities in innovating within the technology sector and positioning Saudi Arabia as a globally competitive hub for advanced technologies. Most recently the company signed a partnership with King Abdullah Financial District (KAFD) aiming via its subsidiaries to roll out smart traffic and mobility solutions to transform KAFD's urban experience, serving as a model for other smart city projects across the Kingdom. Additionally, SCAI partnered with Saudi Telecom Company (STC) and Saudi Technology and Security Comprehensive Control Company (Tahakom) on the launch of the "Sawaher" platform, a program initiated by The Saudi Data & AI Authority (SDAIA). The program aims to elevate the level of safety across the Kingdom's cities by harnessing AI technologies and smart analytics capabilities. The Sawaher platform is a result of the responsible adoption and effective integration of AI developed solutions and smart analytics cameras. The agreement also incorporates the development of a central platform capable of analyzing the visual data to identify and anticipate any potential risks and reinforce safety across the Kingdom's cities.

Tarek Sleiman AC
(971) 4428-1616
tarek.sleiman@jpmorgan.com

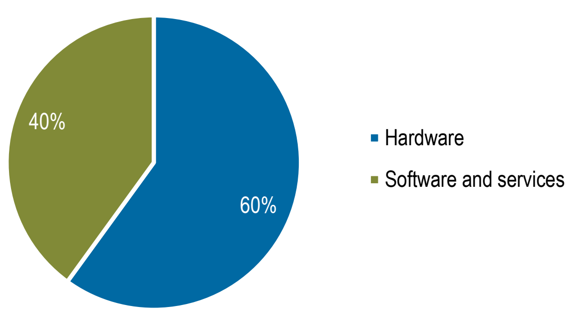
- **NEOM - Pony.ai deal:** NEOM and Pony.ai will collaborate to develop, manufacture, and deliver autonomous driving services, cutting-edge vehicles, and smart vehicle infrastructure across NEOM and key markets in the Middle East and North Africa (MENA) region.

IoT and AI account for a large share of the smart cities projects

A smart city is an urban area that makes use of cutting-edge technologies such as artificial intelligence (AI), the Internet of Things (IoT), cloud storage, big data, and data analytics to gather and analyze utilization data and use the insights gained from them to manage resources, services, and assets effectively.

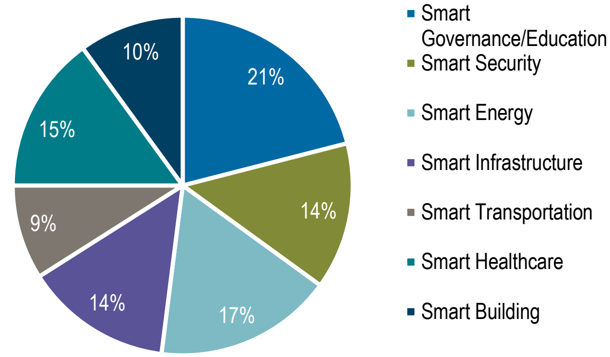
While it is challenging to detect Solutions' addressable market within smart cities and large government projects, we take a closer look at the segmentation of smart cities by component (software, hardware, and services) in order to assess the use-cases that Solutions could address through its offering.

Figure 20: Smart cities market segmentation



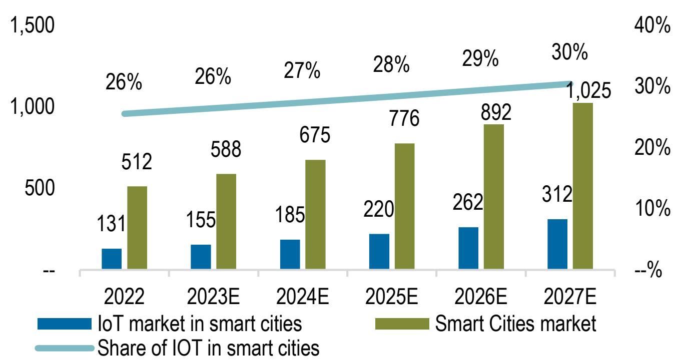
Source: J.P. Morgan estimates.

Figure 21: Smart cities market by use-cases



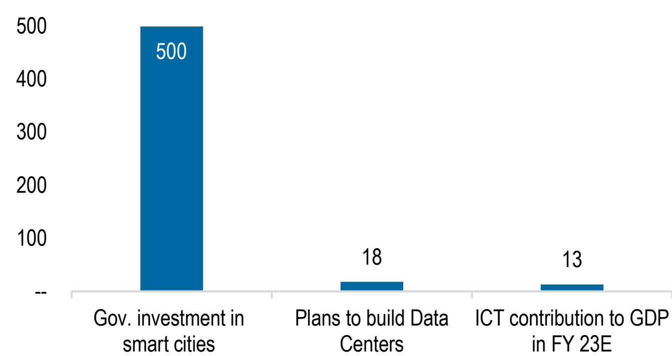
Source: J.P. Morgan estimates, Frost & Sullivan

Figure 22: IoT to account for c. 30% of global smart cities' services and solutions market (USD bn)



Source: J.P. Morgan estimates, Markets and Markets

Figure 23: KSA government earmarked USD 500bn to turn 284 municipalities into smart cities



Source: Solutions, local news sources

Although hardware accounts for 60% of the total smart cities' market, we note that the remaining 40% (hardware and services) offer a significantly larger growth outlook (c. 20-30% based on different consultant reports). Solutions is well-positioned to capture a decent share of the software and services projects within smart cities' projects in KSA through its proven track record and expertise within the integration, implementation,

Tarek Sleiman AC
(971) 4428-1616
tarek.sleiman@jpmorgan.com

migration, and connectivity fields mainly within the services segment. We argue that for the most common technologies used within smart cities (IoT, AI, ML, DA, etc.), Solutions should have the capabilities to win smart projects by being an agent/principal for hyperscalers and innovators given the differentiated and sophisticated expertise needed to develop software solutions for smart cities.

However, we also highlight that local peers have already ventured into the IoT space, either by partnering with hyperscalers (SBM) or by establishing new companies (PIF/STC JV) to address the growing need for IoT solutions (largest share of technology use-cases in smart cities), which, in our view, could stem competitive pressures on a large share of the addressable market (IoT mainly). Additionally, we note that on the software front Solutions' track-record has not been inspiring as competitors such as Elm and SCAI (PIF companies) have already ventured into the offering and won tenders to execute on the proposition for Jeddah and KAFD.

Tarek Sleiman AC
(971) 4428-1616
tarek.sleiman@jpmorgan.com

Impact of competition seen in margins

Crowded IT services market with new players and partnerships

Attracted by the emerging digitization trends across the public and private sectors within the Saudi economy, various international, regional, and local operators have tapped into the technology market to gain a share of its promising growth potential. Looking at the competitors' business models, propositions, solutions mix, and customer profiles, we believe that a large share of peers operate within the same markets as Solutions, i.e. IT services (system integration, managed networks, IT consultancy, etc.), while a lower share compete with Elm within the custom app development segment (competition is more advanced in BPO, professional services, and training).

International players are paving their way into the Saudi market by establishing outright presence in the kingdom or through key partnerships with local and domestic players which is translating into stiffer competition for Solutions across different verticals and through multiple offerings:

- **Ericsson and Mobily - managed services agreement:** During LEAP 24, Ericsson and Mobily, extended their managed services agreement for three additional years to leverage next-generation artificial intelligence and machine learning for autonomous operations. The partnership aims to optimize processes, enhance operational and service metrics, and reduce time-to-market.
- **Deloitte bringing key technologies:** At LEAP 24 Deloitte showcased a wide proposition of innovative technology products and services, with solutions spanning data and AI, cloud, unlimited reality, sustainability, and cyber security, while collaborating with global players such as Anaplan, Adobe, and ServiceNow.
- **ARAMCO - Accenture collaboration:** ARAMCO appointed Accenture as a strategic digital partner which would enable the global advisory company to play a key role in helping Saudi Aramco professionalize its digital foundation, and build digital capabilities. Saudi Aramco CEO Amin Nasser said that across the board, the company is planning to invest $1.9 billion in digital transformation over the next three years and the company launched a wholly owned subsidiary - ARAMCO Digital Company- which aims to accelerate digital transformation within the Kingdom and the MENA region.
- **Eaton - SBM:** Eaton has recently signed a partnership agreement with Saudi Business Machines (SBM) to act as the company's exclusive IT systems integrator for Saudi Arabia. SBM is one of KSA's largest system integrators with a big focus on data centers and mission critical infrastructure. The new partnership will enable Easton to leverage SBM's extensive reach and expertise to deliver data centre solutions.
- **Mobily - Huawei:** Mobily has signed a Memorandum of Understanding (MoU) with Huawei to collaborate on cloud services and enhance its digital and Internet of Things (IoT) B2B offerings. The agreement is part of Mobily's wider strategy to accelerate the adoption of advanced technologies that can deliver exciting new services to the consumer, industry, and governmental sectors.
- **Mobily - CMI:** China Mobile International Limited (CMI) and Mobily entered into an agreement to combine their strengths and capabilities to improve carrier services. The deal aims to offer a more seamless and efficient customer experience, leveraging advancements in technology and infrastructure to meet the ever-

increasing demands of digital consumers. CMI's iConnect ONE (Omni Network Enablement) serves as a comprehensive platform that streamlines services and offers tailored solutions to meet the evolving demands of carriers globally. This one-stop shop approach provides convenient access to voice, SMS, mobile, data and other offerings, as well as value-added business services covering roaming and connectivity, empowering carriers to expand their reach to new revenue streams.

- **SITE - NIL:** Saudi Information Technology Company (SITE) and NIL Ltd, part of Conscia Group, announced its recent strategic partnership to establish a national company specialized in developing and operating systems integration projects, including setting up operations centers, datacenters and infrastructures, in addition to building and localizing capabilities in systems integration.
- **Atos - Zain:** Atos and Zain will consolidate their solutions and services – infrastructure, communication, network and platform services – into one single, comprehensive offering. Together, they will address the growing demand for advanced digital solutions from businesses in Saudi Arabia, helping them better meet their customers' needs and foster their growth in an agile and scalable way.
- **DNeX offering a wide spectrum of services:** Dagang NeXchange Berhad (DNeX) is establishing access to Chinese high technology information technology solutions and strengthening the company's ties with its partner in the Middle East to expand its geographical footprint into MENA region. DNeX entered into a JV with Zhongheguoji Construction Group Co Ltd (CSI) to source state-of-the-art technology and solutions from China. CSI is a Chinese enterprise and is tasked with capitalising on the resource advantages in China, including IT industry, digital platforms, research institutions and local China connection to implement urban intelligence, rural modernisation, and other IT execution work.The JV will secure access to **Smart City technology** from Chinese technology partners which include **Tencent**, the developer of WeChat. This entity is also set to expand its technological scope by partnering with other Chinese entities specialising in various sectors such as supply chain and logistics, intelligent transportation, electrical manufacturing, clean energy, data centers, and equipment. In addition, DNeX also signed a collaboration agreement with **Ajlan & Bros Information Systems Technology** ("Ajlan Tech") and CSI to explore opportunities in commercial projects in the KSA offering Smart City solutions and other relevant technology solutions. Ajlan Tech is a business unit under Ajlan & Bros Holding Group, one of the largest private sector conglomerates in the Middle East region, employing over 15,000 people in more than 25 countries.
- **Zain - Pioneer partnership:** Zain KSA has signed a strategic partnership agreement with Pioneers Systems, a Saudi company specializing in the design, development, manufacture, and assembly of electronic circuits. This partnership aims to develop Internet of Things solutions and localize specialized products and expertise in this field to achieve sustainability of innovation in the Kingdom's communications and digital services sector, aspiring to contribute to raising the sector's local content percentage in line with Saudi Vision 2030's goals.
- **e& enterprise:** The Emirati telco aims to reach a 10% contribution to revenue from its Saudi presence (from 5%) by expanding into the information technology landscape mainly and offering more enterprise solutions.
- **Atos making strong moves:** Atos today announced plans to open a pioneering Sports Technology Centre of Excellence within a newly established Atos MENA HQ in the second quarter of 2024 in Riyadh, Saudi Arabia, Announced at LEAP 2024, the Centre of Excellence will leverage Atos' global track record in providing

Tarek Sleiman AC
(971) 4428-1616
tarek.sleiman@jpmorgan.com

high-quality IT services and solutions to global sporting events. The Centre will develop cutting-edge technology applications to benefit athletes, fans and the sports movement in Saudi Arabia.

We can split the peers into three different groups:

Telecommunication players: Solid presence

Those companies fall within the same market as Solutions (connectivity, cybersecurity, cloud, managed networks) without a noticeable overlap with Elm's businesses

Figure 24: Overview of telecommunication peers

Competitors	Product offering	Client Profile	Similarities with our company
Mobily	• Fixed line & Mobile telephone • DIA, VSAT • Managed Networks	• Retail • SME's and enterprises • Government	**Solutions:** DIA, VSAT, and Managed networks
Zain	• Mobile Communication & Data Services • Could Services (Alibaba Cloud) • Fleet Management & Mobile POS • Hosted Collaboration Solutions • Cloud & Fleet services	• Retail • Corporates • SME's	**Solutions:** Hosting services, cloud, connectivity, and communication **Elm:** Customer Service center
Integrated Telecom / Salam	• Broadband connectivity, internet solutions • Cloud computing • Managed, security and satellite services • Data Centres	• Banks and financial institutions • Retail	**Solutions:** VSAT, Cyber Security, Cloud Services (Microsoft), Managed Services, Connectivity Services
Sahara Net	• Internet • Cloud Hosting, security • Optimization and Managed Services	• Corporates	**Solution:** Cyber Security, Managed Services
NourNet	• Data Centres (Carrier-neutral) • Managed Services, cloud, Cybersecurity • Connectivity and collaboration	• Corporates	**Solutions:** Managed Services, cloud, Cybersecurity

Source: J.P. Morgan estimates, Solutions Prospectus, Company data.

International players making a strong push

International peers also have a primary focus on Solutions' areas of operations, while only Tata Consultancy Services (TCS) has a solid proposition of custom app development.

We note that hyperscalers and leading international players (Microsoft, Amazon Web Services, etc.) have been opting for partnerships with local payers (STC is one the leading partners), which provide an opportunity for local operators to service the market while limiting the competition with larger and more scalable operators. However, we highlight that the presence of international players in the Saudi market is set to increase given the large opportunity. That said, the local players are at a large advantage vs. new international peers, as a result of: 1) relationships with the government and ministries, 2) deep understanding of the market dynamics and needs of the Saudi frameworks, 3) lack of salesforce within the international operators, 4) government targets to enlarge the size of local tech operators and turn the sector into a pillar of the Saudi economy, and 5) local players incorporating emerging technologies and strengthening their workforce skillset in different areas.

We view Atos, Capgemini, Wipro, TCS, as the closest peers to Solutions' operations in terms of: 1) partnerships with global hyperscalers, 2) consultancy and advisory projects,

Tarek Sleiman AC
(971) 4428-1616
tarek.sleiman@jpmorgan.com

3) integration and migration functions, and 4) implementation of cloud, cyber-security, data analytics, and AI solutions. Hence, in light of the similarities across the offerings and the companies' well-established presences within the region, we see them contributing to rising competitive pressures, resulting in more moderate pricing power for Solutions (especially in light of its focus on market share gains).

That said, Cloud projects (data centers) announced by Google (partnership with Aramco), Oracle, and Alibaba (partnership with STC) are seen as a larger addressable market by Solutions' management as they provide the company – the largest Cloud Services operator in KSA – with the opportunity to massively expand this arm of the business.

Local technology players

These are primarily focused on system integration, managed services and cybersecurity, and also address the needs of both the government and private sector, rendering them natural competitors to Solutions.

Figure 25: Overview of local peers

Competitors	Product Offerings	Client Profile	Overlap with covered companies
Advanced Electronics Company (AEC)	• Digital Solutions • Enterprise Application Services • Managed Services and Manpower Outsourcing	• Government: Military & Defense • Private sector: Resources, Healthcare, and utilities	**Solutions:** System integration, Managed Services, software and hardware deploy. **Elm:** Digital solutions, Custom application development, Managed Services and Manpower Outsourcing, E-health solutions.
Saudi Business Machine (SBM)	• IBM systems & software solutions • Infrastructure Networking technology • Business Technology Solutions • Cyber security Solutions	• Government • Corporates (Financial Services, Utilities, Manufacturing)	**Solutions:** System and network Integration, software and hardware support, consulting services, cloud solutions. **Elm:** Business Technology Solutions, Custom application development
Ejada	• Business Intelligence • Data warehousing • Analytics	• Telecommunications and Banking sector • STC, Mobily (Analytics Services) • Government (Digitization of Ministeriers)	**Solutions:** System integration
Technology and Security Ecosystem	• Traffic solutions (IoT, Big Data) • Security Applications (biometric etc.)	• Government entities with private collaboration	**Solutions:** AI
Taqnia	• Cybersecurity • Manufacturing ICT solutions for automation (IoT) • Managed services for satellites	• Government • Corporates	**Solutions:** Cybersecurity
Thiqah	• System Integration • Custom application development • Outsourcing	• Government and public entities mainly ministry of	**Solutions:** System Integration **Elm:** Custom application development
Al Moammar Information Systems (MIS)	• Focus on Large scale IT projects • Network & information systems • Cybersecurity • Service management • Software solutions • Geographic survey systems	• Government • Enterprises (Network Solutions)	**Solutions:** Cybersecurity, hardware and software support **Elm:** Software solutions, Business Service Management
Alkhaleej Training and Education	• IT, leadership, trading training solutions • Call centre, customer care and technical support	• Retail • Government	**Elm:** Government outsourcing and training solutions
Jeraisy Computer and Communication Services	• Networking, Security and Surveillance • Infrastructure and Power management solutions • Software	• Government • Enterprises	**Elm:** Software development
Takamol Holding & Tamkeen technologies	• Solutions in automation, governance, upskilling and recruitment • Training	• Government • Private sector	**Elm:** Custom application development and Government outsourcing and training solutions
Arabic Computer Systems	• IT Essentials and Operations • Digital Solutions • IT Digitalization	• Government (Mega Projects) • Large Enterprises	**Solutions:** Managed Services
SURE Global Technologies (SURE)	• IT services • Emerging and Digital Solutions	• Corporates	**Solutions:** Cloud Solutions, POS

Source: J.P. Morgan estimates, Solutions Prospectus, Company data.

Tarek Sleiman AC
(971) 4428-1616
tarek.sleiman@jpmorgan.com

Acquisitions: more legacy exposure; less digital

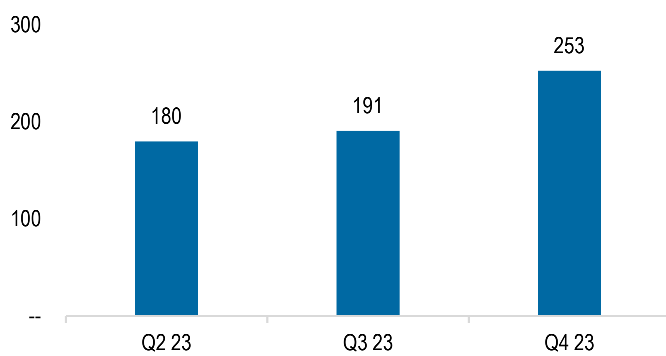
Focusing on integration and BPO instead of faster growth digital areas

As part of its M&A ambitions announced at the IPO time, Solutions acquired CCC and Giza in 2022/23 which are specialized in BPO (CCC) and system, application, and infrastructure integration for Giza.

CCC – acquisition in a competitive and commoditized segment:

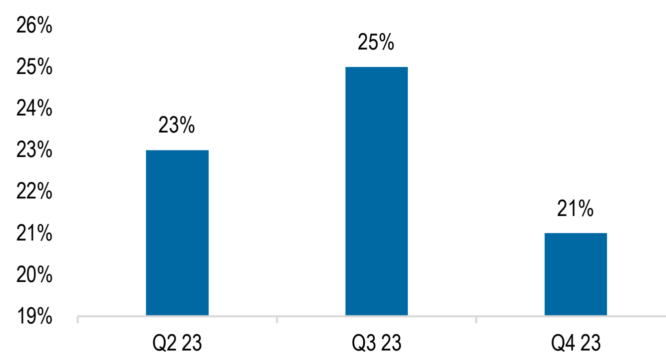
While we acknowledge the attractiveness of turning into the largest BPO player through the acquisition of CCC (from STC), we note that this transaction came at a time during which a wide portfolio of local and international companies are competing within this segment. This has been driving lower prices and compression in margins across the BPO sector overall as seen at CCC and Elm. Hence, we believe although this acquisition offers scalability opportunities for Solutions, efficiency gains and economies of scale will be partly mitigated by the lower price-points seen across the sector.

Figure 26: CCC contributing to a limited 6-8% of Solutions' revenue base



Source: Company data.

Figure 27: CCC margins better than Solutions' BPO business however still exposed to competitive dynamics



Source: Company data.

Hence, in our view while the BPO/managed service segment offers a large scope for growth, we believe that the commoditized nature of the business coupled with the increasing competition with international and local players; should translate into pressure on margins into the MT. However given Solutions' leadership position and its target to remain the market leader we expect large efficiency gains and scalability benefits which should in our view support a gradual expansions in margins over the MT.

Giza – Another non-digital addition

Despite offering a wide range of IT and digital services, Giza still generated c. 90% of its revenues from system integration while the remainder comes from digital services. The company offers system, infrastructure, and application integration services, application development services, bespoke digital solutions, and Data Center & cloud services.

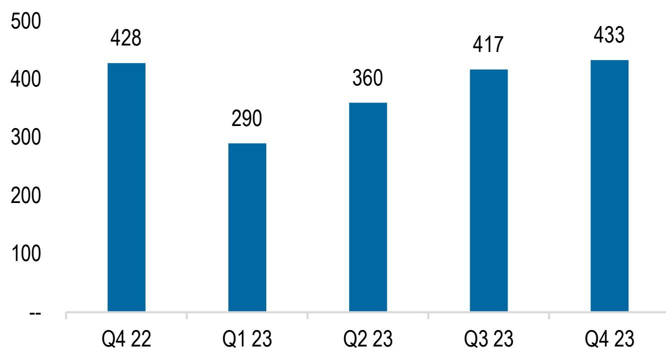
We view the offering as being fully compatible and complimentary to Solutions' proposition and note that the rationale behind Giza's acquisition was to strengthen

Tarek Sleiman [AC]
(971) 4428-1616
tarek.sleiman@jpmorgan.com

Solutions' positioning within the application integration sub-segment, which comes as the fastest growing vertical within the system integration field as a whole. Hence, we like the acquisition's rationale, however we note that the system integration segment is expected (according to IDC, Solutions, 2P) to print one of the slowest performances when compared to emerging technologies and digital solutions given the commoditized nature of the offering and the wide portfolio of providers for those services.

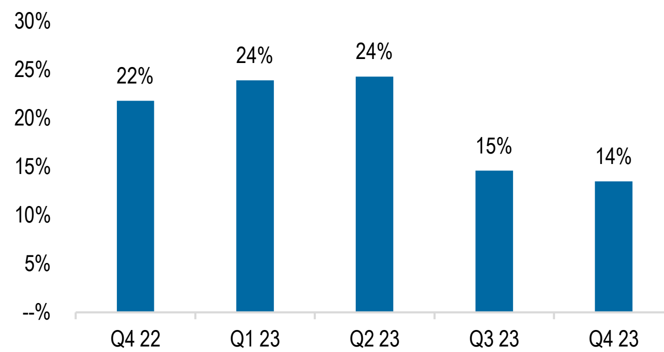
Hence, while we acknowledge the attractiveness of Solutions closing the loop within the system integration domain, we expect a moderate growth print as the margin profile is likely to come under pressure as local and international players partner up to bring advanced solutions into Saudi on this front.

Figure 28: Giza reported a flattish YoY performnce in Q4 23



Source: Company data.

Figure 29: While gross margins compressed by c. 700bps YoY in Q4 23



Source: Company data.

Tarek Sleiman [AC]
(971) 4428-1616
tarek.sleiman@jpmorgan.com

Investment Thesis, Valuation and Risks

Solutions by stc *(Underweight; Price Target: SRls324.00)*

Investment Thesis

We are UW on Solutions given its elevated exposure to relatively mature and highly competitive and commoditized IT service markets (system integration), which offer a more moderate growth outlook coupled with a pressured profitability profile as competition accelerates on the back of new players establishing presence in KSA nad/or local operators partnering with global leading innovators. Additionally, while we acknowledge the attractiveness of STC landing key agreement to digitize the mega and giga project sin KSA, we note that Solutions' share will be mainly focused on managed services, system integration, and cloud services. This as STC extends the more lucrative and fast growing services to its other JVs (iot squared) while PIF support its own companies (SITE, SCAI, etc.). We view the Giza and CCC acquisitions as non-digital expansions, resulting in higher exposure to competitive and crowded segments while diverting the company's focus from building a larger digital business (faster-growth, higher-margins, recurring income). In light of the uninspiring guidance, pressure on margins from competition, disappointing digital performance, and exposure to unattractive areas within the digital scene; we expect a 13% FY 23-26E CAGR coupled with a c. 100bps compression in EBITDA margin over the MT resulting in a limited 11% FY 23-26 CAGR. The stock is currently trading at 37x/34x P/E 24/25E, at premiums of c. 30% premium to Indian IT services companies and c. 60% to global peers, which we believe is unwarranted given the limited growth profile coupled with stiffer competition on Solutions' key segments.

Valuation

We value Solutions at SAR 324/share using an 8Y DCF model to fully capture the ramp-up of the digital segment, healthy delivery in managed services and BPO in the MT, yet a more challenging and competitive backdrop into the longer term. We discount cash flows using a WACC of 10.1% (from 10.6%) and a terminal growth rate of 4.0%. We arrive at our WACC using a blended RFR of 4.5%, an ERP of 7.5% and a Beta of 1.0x. We use a target Debt/Equity ratio of 20% and a cost of debt of 5.5%. We use an EBITDA margin of 16.5% (from 18.5%) in our terminal year assumption and capex/revenues of 2.4%.

Risks to Rating and Price Target
Upside Risks

- Unforeseen and unexpected large projects within the core ICT segment
- Faster-than-expected gains in market share
- Faster-than-expected ramp-up across the digital segment
- M&A into unexplored and high-growth segments
- Stronger-than-forecasted ability to mitigate price pressure and cost headwinds

Tarek Sleiman [AC]
(971) 4428-1616
tarek.sleiman@jpmorgan.com

Solutions by stc: Summary of Financials

Income Statement	FY22A	FY23A	FY24E	FY25E	FY26E
Revenue	**8,805**	**11,040**	**12,456**	**14,042**	**15,699**
COGS	(6,794)	(8,443)	(9,666)	(10,958)	(12,301)
Gross profit	**2,011**	**2,598**	**2,790**	**3,084**	**3,398**
SG&A	(619)	(748)	(813)	(925)	(1,018)
Adj. EBITDA	**1,365**	**1,618**	**1,790**	**1,948**	**2,144**
D&A	(232)	(282)	(308)	(318)	(337)
Adj. EBIT	**1,132**	**1,335**	**1,482**	**1,630**	**1,807**
Net Interest	38	69	65	60	59
Adj. PBT	**1,171**	**1,405**	**1,567**	**1,712**	**1,891**
Tax	(118)	(210)	(231)	(252)	(279)
Minority Interest	(1)	(3)	(3)	(4)	(4)
Adj. Net Income	**1,053**	**1,192**	**1,333**	**1,456**	**1,609**
Reported EPS	8.77	9.93	11.11	12.14	13.40
Adj. EPS	**8.77**	**9.93**	**11.11**	**12.14**	**13.40**
DPS	**-**	**-**	**-**	**-**	**-**
Payout ratio	-	-	-	-	-
Shares outstanding	120	120	120	120	120

Balance Sheet	FY22A	FY23A	FY24E	FY25E	FY26E
Cash and cash equivalents	544	2,588	2,790	3,671	4,841
Accounts receivable	4,345	4,364	4,778	5,001	5,161
Inventories	322	249	285	323	362
Other current assets	4,163	3,096	3,444	3,735	4,076
Current assets	**9,374**	**10,296**	**11,296**	**12,730**	**14,440**
PP&E	473	390	415	471	552
LT investments	-	-	-	-	-
Other non current assets	478	830	1,013	1,038	1,063
Total assets	**10,325**	**11,516**	**12,724**	**14,239**	**16,055**
Short term borrowings	194	211	211	211	211
Payables	2,623	3,315	3,754	4,039	4,516
Other short term liabilities	3,889	3,669	3,741	4,186	4,652
Current liabilities	**6,707**	**7,195**	**7,706**	**8,437**	**9,380**
Long-term debt	-	-	-	-	-
Other long term liabilities	518	518	600	703	806
Total liabilities	**7,486**	**8,164**	**8,789**	**9,663**	**10,757**
Shareholders' equity	2,840	3,353	3,935	4,576	5,299
Minority interests	-	-	-	-	-
Total liabilities & equity	**10,325**	**11,516**	**12,724**	**14,239**	**16,055**
BVPS	**-**	**-**	**-**	**-**	**-**
y/y Growth	-	-	-	-	-
Net debt/(cash)	(350)	(2,377)	(2,579)	(3,460)	(4,629)

Cash Flow Statement	FY22A	FY23A	FY24E	FY25E	FY26E
Cash flow from operating activities	**2,122**	**1,715**	**1,301**	**1,911**	**2,313**
o/w Depreciation & amortization	232	282	308	318	337
o/w Changes in working capital	732	(172)	(307)	156	379
Cash flow from investing activities	**(3,207)**	**1,036**	**(596)**	**(337)**	**(377)**
o/w Capital expenditure	(506)	(527)	(596)	(337)	(377)
as % of sales	*5.7%*	*4.8%*	*4.8%*	*2.4%*	*2.4%*
Cash flow from financing activities	**41**	**(689)**	**(503)**	**(693)**	**(767)**
o/w Dividends paid	(475)	(595)	(656)	(722)	(789)
o/w Shares issued/(repurchased)	0	-	-	-	-
o/w Net debt issued/(repaid)	538	(56)	80	100	100
Net change in cash	**(1,043)**	**2,063**	**202**	**881**	**1,169**
Adj. Free cash flow to firm	**1,628**	**1,209**	**717**	**1,576**	**1,933**
y/y Growth	*34.1%*	*(25.7%)*	*(40.7%)*	*119.7%*	*22.6%*

Ratio Analysis	FY22A	FY23A	FY24E	FY25E	FY26E
Gross margin	22.8%	23.5%	22.4%	22.0%	21.6%
EBITDA margin	15.5%	14.7%	14.4%	13.9%	13.7%
EBIT margin	12.9%	12.1%	11.9%	11.6%	11.5%
Net profit margin	12.0%	10.8%	10.7%	10.4%	10.2%
ROE	41.2%	38.5%	36.6%	34.2%	32.6%
ROA	12.0%	10.9%	11.0%	10.8%	10.6%
ROCE	38.4%	34.4%	32.8%	31.1%	29.9%
SG&A/Sales	7.0%	6.8%	6.5%	6.6%	6.5%
Net debt/Equity	NM	NM	NM	NM	NM
Net debt/EBITDA	NM	NM	NM	NM	NM
Sales/Assets (x)	1.0	1.0	1.0	1.0	1.0
Assets/Equity (x)	3.4	3.5	3.3	3.2	3.1
Interest cover (x)	-	-	-	-	-
Operating leverage	115.8%	70.5%	85.7%	78.6%	92.1%
Tax rate	10.1%	14.9%	14.7%	14.7%	14.7%
Revenue y/y Growth	22.2%	25.4%	12.8%	12.7%	11.8%
EBITDA y/y Growth	23.0%	18.5%	10.7%	8.8%	10.1%
EPS y/y Growth	26.4%	13.2%	11.8%	9.3%	10.5%

Valuation	FY22A	FY23A	FY24E	FY25E	FY26E
P/E (x)	45.2	40.0	35.7	32.7	29.6
P/BV (x)	-	-	-	-	-
EV/EBITDA (x)	33.1	27.9	25.2	23.2	21.0
Dividend Yield	-	-	-	-	-

Source: Company reports and J.P. Morgan estimates.
Note: SRls in millions (except per-share data).Fiscal year ends Dec. o/w - out of which

Analyst Certification: The Research Analyst(s) denoted by an "AC" on the cover of this report certifies (or, where multiple Research Analysts are primarily responsible for this report, the Research Analyst denoted by an "AC" on the cover or within the document individually certifies, with respect to each security or issuer that the Research Analyst covers in this research) that: (1) all of the views expressed in this report accurately reflect the Research Analyst's personal views about any and all of the subject securities or issuers; and (2) no part of any of the Research Analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the Research Analyst(s) in this report. For all Korea-based Research Analysts listed on the front cover, if applicable, they also certify, as per KOFIA requirements, that the Research Analyst's analysis was made in good faith and that the views reflect the Research Analyst's own opinion, without undue influence or intervention.

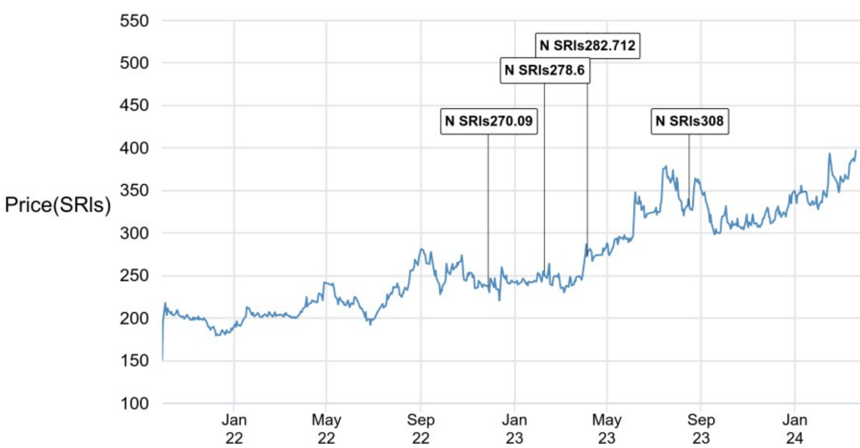
All authors named within this report are Research Analysts who produce independent research unless otherwise specified. In Europe, Sector Specialists (Sales and Trading) may be shown on this report as contacts but are not authors of the report or part of the Research Department.

Important Disclosures

- **Market Maker/ Liquidity Provider:** J.P. Morgan is a market maker and/or liquidity provider in the financial instruments of/related to Solutions by stc.
- **Client:** J.P. Morgan currently has, or had within the past 12 months, the following entity(ies) as clients: Solutions by stc.
- **Client/Non-Investment Banking, Securities-Related:** J.P. Morgan currently has, or had within the past 12 months, the following entity(ies) as clients, and the services provided were non-investment-banking, securities-related: Solutions by stc.
- **Client/Non-Securities-Related:** J.P. Morgan currently has, or had within the past 12 months, the following entity(ies) as clients, and the services provided were non-securities-related: Solutions by stc.
- **Non-Investment Banking Compensation Received:** J.P. Morgan has received compensation in the past 12 months for products or services other than investment banking from Solutions by stc.
- **Debt Position:** J.P. Morgan may hold a position in the debt securities of Solutions by stc, if any.

Company-Specific Disclosures: Important disclosures, including price charts and credit opinion history tables, are available for compendium reports and all J.P. Morgan–covered companies, and certain non-covered companies, by visiting https://www.jpmm.com/research/disclosures, calling 1-800-477-0406, or e-mailing research.disclosure.inquiries@jpmorgan.com with your request.

Solutions by stc (7202.SE, SOLUTION AB) Price Chart



Date	Rating	Price (SRls)	Price Target (SRls)
28-Nov-22	N	238.00	270.09
09-Feb-23	N	255.00	278.6
06-Apr-23	N	272.80	282.712
17-Aug-23	N	333.80	308

Source: Bloomberg Finance L.P. and J.P. Morgan; price data adjusted for stock splits and dividends.
Initiated coverage Nov 28, 2022. All share prices are as of market close on the previous business day.

The chart(s) show J.P. Morgan's continuing coverage of the stocks; the current analysts may or may not have covered it over the entire period.
J.P. Morgan ratings or designations: OW = Overweight, N= Neutral, UW = Underweight, NR = Not Rated

Explanation of Equity Research Ratings, Designations and Analyst(s) Coverage Universe:
J.P. Morgan uses the following rating system: Overweight (over the duration of the price target indicated in this report, we expect this stock will outperform the average total return of the stocks in the Research Analyst's, or the Research Analyst's team's, coverage universe); Neutral (over the duration of the price target indicated in this report, we expect this stock will perform in line with the average total return of the stocks in the Research Analyst's, or the Research Analyst's team's, coverage universe); and Underweight (over the duration of the price target indicated in this report, we expect this stock will underperform the average total return of the stocks in the Research Analyst's, or the Research Analyst's

team's, coverage universe. NR is Not Rated. In this case, J.P. Morgan has removed the rating and, if applicable, the price target, for this stock because of either a lack of a sufficient fundamental basis or for legal, regulatory or policy reasons. The previous rating and, if applicable, the price target, no longer should be relied upon. An NR designation is not a recommendation or a rating. In our Asia (ex-Australia and ex-India) and U.K. small- and mid-cap Equity Research, each stock's expected total return is compared to the expected total return of a benchmark country market index, not to those Research Analysts' coverage universe. If it does not appear in the Important Disclosures section of this report, the certifying Research Analyst's coverage universe can be found on J.P. Morgan's Research website, https://www.jpmorganmarkets.com.

Coverage Universe: Sleiman, Tarek: Al Hammadi (4007.SE), Burjeel Holdings (BURJEEL.AD), CARE (4005.SE), Dallah (4004.SE), ELM (7203.SE), Jamjoom Pharma (4015.SE), Middle East Health Care Company (4009.SE), Mouwasat (4002.SE), SPIMACO (2070.SE), Solutions by stc (7202.SE), Sulaiman Al Habib (4013.SE)

J.P. Morgan Equity Research Ratings Distribution, as of January 01, 2024

	Overweight (buy)	**Neutral** (hold)	**Underweight** (sell)
J.P. Morgan Global Equity Research Coverage*	47%	39%	13%
IB clients**	48%	43%	32%
JPMS Equity Research Coverage*	46%	42%	12%
IB clients**	68%	63%	46%

***Please note that the percentages may not add to 100% because of rounding.**
****Percentage of subject companies within each of the "buy," "hold" and "sell" categories for which J.P. Morgan has provided investment banking services within the previous 12 months.**
For purposes of FINRA ratings distribution rules only, our Overweight rating falls into a buy rating category; our Neutral rating falls into a hold rating category; and our Underweight rating falls into a sell rating category. Please note that stocks with an NR designation are not included in the table above. This information is current as of the end of the most recent calendar quarter.

Equity Valuation and Risks: For valuation methodology and risks associated with covered companies or price targets for covered companies, please see the most recent company-specific research report at http://www.jpmorganmarkets.com, contact the primary analyst or your J.P. Morgan representative, or email research.disclosure.inquiries@jpmorgan.com. For material information about the proprietary models used, please see the Summary of Financials in company-specific research reports and the Company Tearsheets, which are available to download on the company pages of our client website, http://www.jpmorganmarkets.com. This report also sets out within it the material underlying assumptions used.

A history of J.P. Morgan investment recommendations disseminated during the preceding 12 months can be accessed on the Research & Commentary page of http://www.jpmorganmarkets.com where you can also search by analyst name, sector or financial instrument.

Analysts' Compensation: The research analysts responsible for the preparation of this report receive compensation based upon various factors, including the quality and accuracy of research, client feedback, competitive factors, and overall firm revenues.

Registration of non-US Analysts: Unless otherwise noted, the non-US analysts listed on the front of this report are employees of non-US affiliates of J.P. Morgan Securities LLC, may not be registered as research analysts under FINRA rules, may not be associated persons of J.P. Morgan Securities LLC, and may not be subject to FINRA Rule 2241 or 2242 restrictions on communications with covered companies, public appearances, and trading securities held by a research analyst account.

Other Disclosures

J.P. Morgan is a marketing name for investment banking businesses of JPMorgan Chase & Co. and its subsidiaries and affiliates worldwide.

UK MIFID FICC research unbundling exemption: UK clients should refer to UK MIFID Research Unbundling exemption for details of J.P. Morgan's implementation of the FICC research exemption and guidance on relevant FICC research categorisation.

All research material made available to clients are simultaneously available on our client website, J.P. Morgan Markets, unless specifically permitted by relevant laws. Not all research content is redistributed, e-mailed or made available to third-party aggregators. For all research material available on a particular stock, please contact your sales representative.

Any long form nomenclature for references to China; Hong Kong; Taiwan; and Macau within this research material are Mainland China; Hong Kong SAR (China); Taiwan (China); and Macau SAR (China).

J.P. Morgan Research may, from time to time, write on issuers or securities targeted by economic or financial sanctions imposed or administered by the governmental authorities of the U.S., EU, UK or other relevant jurisdictions (Sanctioned Securities). Nothing in this report is intended to be read or construed as encouraging, facilitating, promoting or otherwise approving investment or dealing in such Sanctioned Securities. Clients should be aware of their own legal and compliance obligations when making investment decisions.

Any digital or crypto assets discussed in this research report are subject to a rapidly changing regulatory landscape. For relevant regulatory advisories on crypto assets, including bitcoin and ether, please see https://www.jpmorgan.com/disclosures/cryptoasset-disclosure.

The author(s) of this research report may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so.

Exchange-Traded Funds (ETFs): J.P. Morgan Securities LLC ("JPMS") acts as authorized participant for substantially all U.S.-listed ETFs. To the extent that any ETFs are mentioned in this report, JPMS may earn commissions and transaction-based compensation in connection with the distribution of those ETF shares and may earn fees for performing other trade-related services, such as securities lending to short sellers of the ETF shares. JPMS may also perform services for the ETFs themselves, including acting as a broker or dealer to the ETFs. In addition, affiliates of JPMS may perform services for the ETFs, including trust, custodial, administration, lending, index calculation and/or maintenance and other services.

Options and Futures related research: If the information contained herein regards options- or futures-related research, such information is available only to persons who have received the proper options or futures risk disclosure documents. Please contact your J.P. Morgan Representative or visit https://www.theocc.com/components/docs/riskstoc.pdf for a copy of the Option Clearing Corporation's Characteristics and Risks of Standardized Options or http://www.finra.org/sites/default/files/Security_Futures_Risk_Disclosure_Statement_2018.pdf for a copy of the Security Futures Risk Disclosure Statement.

Changes to Interbank Offered Rates (IBORs) and other benchmark rates: Certain interest rate benchmarks are, or may in the future become, subject to ongoing international, national and other regulatory guidance, reform and proposals for reform. For more information, please consult: https://www.jpmorgan.com/global/disclosures/interbank_offered_rates

Private Bank Clients: Where you are receiving research as a client of the private banking businesses offered by JPMorgan Chase & Co. and its subsidiaries ("J.P. Morgan Private Bank"), research is provided to you by J.P. Morgan Private Bank and not by any other division of J.P. Morgan, including, but not limited to, the J.P. Morgan Corporate and Investment Bank and its Global Research division.

Legal entity responsible for the production and distribution of research: The legal entity identified below the name of the Reg AC Research Analyst who authored this material is the legal entity responsible for the production of this research. Where multiple Reg AC Research Analysts authored this material with different legal entities identified below their names, these legal entities are jointly responsible for the production of this research. Research Analysts from various J.P. Morgan affiliates may have contributed to the production of this material but may not be licensed to carry out regulated activities in your jurisdiction (and do not hold themselves out as being able to do so). Unless otherwise stated below, this material has been distributed by the legal entity responsible for production. If you have any queries, please contact the relevant Research Analyst in your jurisdiction or the entity in your jurisdiction that has distributed this research material.

Legal Entities Disclosures and Country-/Region-Specific Disclosures:
Argentina: JPMorgan Chase Bank N.A Sucursal Buenos Aires is regulated by Banco Central de la República Argentina ("BCRA"- Central Bank of Argentina) and Comisión Nacional de Valores ("CNV"- Argentinian Securities Commission - ALYC y AN Integral N°51). **Australia:** J.P. Morgan Securities Australia Limited ("JPMSAL") (ABN 61 003 245 234/AFS Licence No: 238066) is regulated by the Australian Securities and Investments Commission and is a Market Participant of ASX Limited, a Clearing and Settlement Participant of ASX Clear Pty Limited and a Clearing Participant of ASX Clear (Futures) Pty Limited. This material is issued and distributed in Australia by or on behalf of JPMSAL only to "wholesale clients" (as defined in section 761G of the Corporations Act 2001). A list of all financial products covered can be found by visiting https://www.jpmm.com/research/disclosures. J.P. Morgan seeks to cover companies of relevance to the domestic and international investor base across all Global Industry Classification Standard (GICS) sectors, as well as across a range of market capitalisation sizes. If applicable, in the course of conducting public side due diligence on the subject company(ies), the Research Analyst team may at times perform such diligence through corporate engagements such as site visits, discussions with company representatives, management presentations, etc. Research issued by JPMSAL has been prepared in accordance with J.P. Morgan Australia's Research Independence Policy which can be found at the following link: J.P. Morgan Australia - Research Independence Policy. **Brazil**: Banco J.P. Morgan S.A. is regulated by the Comissao de Valores Mobiliarios (CVM) and by the Central Bank of Brazil. Ombudsman J.P. Morgan: 0800-7700847 / 0800-7700810 (For Hearing Impaired) / ouvidoria.jp.morgan@jpmorgan.com. **Canada**: J.P. Morgan Securities Canada Inc. is a registered investment dealer, regulated by the Canadian Investment Regulatory Organization and the Ontario Securities Commission and is the participating member on Canadian exchanges. This material is distributed in Canada by or on behalf of J.P.Morgan Securities Canada Inc. **Chile:** Inversiones J.P. Morgan Limitada is an unregulated entity incorporated in Chile. **China:** J.P. Morgan Securities (China) Company Limited has been approved by CSRC to conduct the securities investment consultancy business. **Dubai International Financial Centre (DIFC)**: JPMorgan Chase Bank, N.A., Dubai Branch is regulated by the Dubai Financial Services Authority (DFSA) and its registered address is Dubai International Financial Centre - The Gate, West Wing, Level 3 and 9 PO Box 506551, Dubai, UAE. This material has been distributed by JP Morgan Chase Bank, N.A., Dubai Branch to persons regarded as professional clients or market counterparties as defined under the DFSA rules. **European Economic Area (EEA):** Unless specified to the contrary, research is distributed in the EEA by J.P. Morgan SE ("JPM SE"), which is authorised as a credit institution by the Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin) and jointly supervised by the BaFin, the German Central Bank (Deutsche Bundesbank) and the European Central Bank (ECB). JPM SE is a company headquartered in Frankfurt with registered address at TaunusTurm, Taunustor 1, Frankfurt am Main, 60310, Germany. The material has been distributed in the EEA to persons regarded as professional investors (or equivalent) pursuant to Art. 4 para. 1 no. 10 and Annex II of MiFID II and its respective implementation in their home jurisdictions ("EEA professional investors"). This material must not be acted on or relied on by persons who are not EEA professional investors. Any investment or investment activity to which this material relates is only available to EEA relevant persons and will be engaged in only with EEA relevant persons. **Hong Kong**: J.P. Morgan Securities (Asia Pacific) Limited (CE number AAJ321) is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission in Hong Kong, and J.P. Morgan Broking (Hong

Kong) Limited (CE number AAB027) is regulated by the Securities and Futures Commission in Hong Kong. JP Morgan Chase Bank, N.A., Hong Kong Branch (CE Number AAL996) is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission, is organized under the laws of the United States with limited liability. Where the distribution of this material is a regulated activity in Hong Kong, the material is distributed in Hong Kong by or through J.P. Morgan Securities (Asia Pacific) Limited and/or J.P. Morgan Broking (Hong Kong) Limited. **India**: J.P. Morgan India Private Limited (Corporate Identity Number - U67120MH1992FTC068724), having its registered office at J.P. Morgan Tower, Off. C.S.T. Road, Kalina, Santacruz - East, Mumbai – 400098, is registered with the Securities and Exchange Board of India (SEBI) as a 'Research Analyst' having registration number INH000001873. J.P. Morgan India Private Limited is also registered with SEBI as a member of the National Stock Exchange of India Limited and the Bombay Stock Exchange Limited (SEBI Registration Number – INZ000239730) and as a Merchant Banker (SEBI Registration Number - MB/INM000002970). Telephone: 91-22-6157 3000, Facsimile: 91-22-6157 3990 and Website: http://www.jpmipl.com. JPMorgan Chase Bank, N.A. - Mumbai Branch is licensed by the Reserve Bank of India (RBI) (Licence No. 53/ Licence No. BY.4/94; SEBI - IN/CUS/014/ CDSL : IN-DP-CDSL-444-2008/ IN-DP-NSDL-285-2008/ INBI00000984/ INE231311239) as a Scheduled Commercial Bank in India, which is its primary license allowing it to carry on Banking business in India and other activities, which a Bank branch in India are permitted to undertake. For non-local research material, this material is not distributed in India by J.P. Morgan India Private Limited. Compliance Officer: Spurthi Gadamsetty; spurthi.gadamsetty@jpmchase.com; +912261573225. Grievance Officer: Ramprasadh K, jpmipl.research.feedback@jpmorgan.com; +912261573000.

Investment in securities market are subject to market risks. Read all the related documents carefully before investing. Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors.

Indonesia: PT J.P. Morgan Sekuritas Indonesia is a member of the Indonesia Stock Exchange and is registered and supervised by the Otoritas Jasa Keuangan (OJK). **Korea**: J.P. Morgan Securities (Far East) Limited, Seoul Branch, is a member of the Korea Exchange (KRX). JPMorgan Chase Bank, N.A., Seoul Branch, is licensed as a branch office of foreign bank (JPMorgan Chase Bank, N.A.) in Korea. Both entities are regulated by the Financial Services Commission (FSC) and the Financial Supervisory Service (FSS). For non-macro research material, the material is distributed in Korea by or through J.P. Morgan Securities (Far East) Limited, Seoul Branch. **Japan**: JPMorgan Securities Japan Co., Ltd. and JPMorgan Chase Bank, N.A., Tokyo Branch are regulated by the Financial Services Agency in Japan. **Malaysia**: This material is issued and distributed in Malaysia by JPMorgan Securities (Malaysia) Sdn Bhd (18146-X), which is a Participating Organization of Bursa Malaysia Berhad and holds a Capital Markets Services License issued by the Securities Commission in Malaysia. **Mexico**: J.P. Morgan Casa de Bolsa, S.A. de C.V. and J.P. Morgan Grupo Financiero are members of the Mexican Stock Exchange and are authorized to act as a broker dealer by the National Banking and Securities Exchange Commission. **New Zealand**: This material is issued and distributed by JPMSAL in New Zealand only to "wholesale clients" (as defined in the Financial Markets Conduct Act 2013). JPMSAL is registered as a Financial Service Provider under the Financial Service providers (Registration and Dispute Resolution) Act of 2008. **Philippines**: J.P. Morgan Securities Philippines Inc. is a Trading Participant of the Philippine Stock Exchange and a member of the Securities Clearing Corporation of the Philippines and the Securities Investor Protection Fund. It is regulated by the Securities and Exchange Commission. **Singapore**: This material is issued and distributed in Singapore by or through J.P. Morgan Securities Singapore Private Limited (JPMSS) [MCI (P) 030/08/2023 and Co. Reg. No.: 199405335R], which is a member of the Singapore Exchange Securities Trading Limited, and/or JPMorgan Chase Bank, N.A., Singapore branch (JPMCB Singapore), both of which are regulated by the Monetary Authority of Singapore. This material is issued and distributed in Singapore only to accredited investors, expert investors and institutional investors, as defined in Section 4A of the Securities and Futures Act, Cap. 289 (SFA). This material is not intended to be issued or distributed to any retail investors or any other investors that do not fall into the classes of "accredited investors," "expert investors" or "institutional investors," as defined under Section 4A of the SFA. Recipients of this material in Singapore are to contact JPMSS or JPMCB Singapore in respect of any matters arising from, or in connection with, the material. **South Africa**: J.P. Morgan Equities South Africa Proprietary Limited and JPMorgan Chase Bank, N.A., Johannesburg Branch are members of the Johannesburg Securities Exchange and are regulated by the Financial Services Conduct Authority (FSCA). **Taiwan**: J.P. Morgan Securities (Taiwan) Limited is a participant of the Taiwan Stock Exchange (company-type) and regulated by the Taiwan Securities and Futures Bureau. Material relating to equity securities is issued and distributed in Taiwan by J.P. Morgan Securities (Taiwan) Limited, subject to the license scope and the applicable laws and the regulations in Taiwan. According to Paragraph 2, Article 7-1 of Operational Regulations Governing Securities Firms Recommending Trades in Securities to Customers (as amended or supplemented) and/or other applicable laws or regulations, please note that the recipient of this material is not permitted to engage in any activities in connection with the material that may give rise to conflicts of interests, unless otherwise disclosed in the "Important Disclosures" in this material. **Thailand**: This material is issued and distributed in Thailand by JPMorgan Securities (Thailand) Ltd., which is a member of the Stock Exchange of Thailand and is regulated by the Ministry of Finance and the Securities and Exchange Commission, and its registered address is 3rd Floor, 20 North Sathorn Road, Silom, Bangrak, Bangkok 10500. **UK:** Unless specified to the contrary, research is distributed in the UK by J.P. Morgan Securities plc ("JPMS plc") which is a member of the London Stock Exchange and is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. JPMS plc is registered in England & Wales No. 2711006, Registered Office 25 Bank Street, London, E14 5JP. This material is directed in the UK only to: (a) persons having professional experience in matters relating to investments falling within article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) (Order) 2005 ("the FPO"); (b) persons outlined in article 49 of the FPO (high net worth companies, unincorporated associations or partnerships, the trustees of high value trusts, etc.); or (c) any persons to whom this communication may otherwise lawfully be made; all such persons being referred to as "UK relevant persons". This material must not be acted on or relied on by persons who are not UK relevant persons. Any investment or investment activity to which this material relates is only available to UK relevant persons and will be engaged in only with UK relevant persons. Research issued by JPMS plc has been prepared in accordance with JPMS plc's policy for prevention and avoidance of conflicts of interest related to the production of Research which can be found at the following link: J.P. Morgan EMEA - Research Independence Policy. **U.S.**: J.P. Morgan Securities LLC ("JPMS") is a member of the NYSE, FINRA, SIPC, and the NFA. JPMorgan Chase Bank, N.A. is a member of the FDIC. Material published by non-U.S. affiliates is distributed in the U.S. by JPMS who accepts responsibility for its content.

General: Additional information is available upon request. The information in this material has been obtained from sources believed to be reliable. While all reasonable care has been taken to ensure that the facts stated in this material are accurate and that the forecasts, opinions and expectations contained herein are fair and reasonable, JPMorgan Chase & Co. or its affiliates and/or subsidiaries (collectively J.P. Morgan) make no representations or warranties whatsoever to the completeness or accuracy of the material provided, except with respect to any disclosures relative to J.P. Morgan and the Research Analyst's involvement with the issuer that is the subject of the material. Accordingly, no reliance should be placed on the accuracy, fairness or completeness of the information contained in this material. There may be certain discrepancies with data and/or limited content in this material as a result of calculations, adjustments, translations to different languages, and/or local regulatory restrictions, as applicable. These discrepancies should not impact the overall investment analysis, views and/or recommendations of the subject company(ies) that may be discussed in the material. J.P. Morgan accepts no liability whatsoever for any loss arising from any use of this material or its contents, and neither J.P. Morgan nor any of its respective directors, officers or employees, shall be in any way responsible for the contents hereof, apart from the liabilities and responsibilities that may be imposed on them by the relevant regulatory authority in the jurisdiction in question, or the regulatory regime thereunder. Opinions, forecasts or projections contained in this material represent J.P. Morgan's current opinions or judgment as of the date of the material only and are therefore subject to change without notice. Periodic updates may be provided on companies/industries based on company-specific developments or announcements, market conditions or any other publicly available information. There can be no assurance that future results or events will be consistent with any such opinions, forecasts or projections, which represent only one possible outcome. Furthermore, such opinions, forecasts or projections are subject to certain risks, uncertainties and assumptions that have not been verified, and future actual results or events could differ materially. The value of, or income from, any investments referred to in this material may fluctuate and/or be affected by changes in exchange rates. All pricing is indicative as of the close of market for the securities discussed, unless otherwise stated. Past performance is not indicative of future results. Accordingly, investors may receive back less than originally invested. This material is not intended as an offer or solicitation for the purchase or sale of any financial instrument. The opinions and recommendations herein do not take into account individual client circumstances, objectives, or needs and are not intended as recommendations of particular securities, financial instruments or strategies to particular clients. This material may include views on structured securities, options, futures and other derivatives. These are complex instruments, may involve a high degree of risk and may be appropriate investments only for sophisticated investors who are capable of understanding and assuming the risks involved. The recipients of this material must make their own independent decisions regarding any securities or financial instruments mentioned herein and should seek advice from such independent financial, legal, tax or other adviser as they deem necessary. J.P. Morgan may trade as a principal on the basis of the Research Analysts' views and research, and it may also engage in transactions for its own account or for its clients' accounts in a manner inconsistent with the views taken in this material, and J.P. Morgan is under no obligation to ensure that such other communication is brought to the attention of any recipient of this material. Others within J.P. Morgan, including Strategists, Sales staff and other Research Analysts, may take views that are inconsistent with those taken in this material. Employees of J.P. Morgan not involved in the preparation of this material may have investments in the securities (or derivatives of such securities) mentioned in this material and may trade them in ways different from those discussed in this material. This material is not an advertisement for or marketing of any issuer, its products or services, or its securities in any jurisdiction.

Confidentiality and Security Notice: This transmission may contain information that is privileged, confidential, legally privileged, and/or exempt from disclosure under applicable law. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution, or use of the information contained herein (including any reliance thereon) is STRICTLY PROHIBITED. Although this transmission and any attachments are believed to be free of any virus or other defect that might affect any computer system into which it is received and opened, it is the responsibility of the recipient to ensure that it is virus free and no responsibility is accepted by JPMorgan Chase & Co., its subsidiaries and affiliates, as applicable, for any loss or damage arising in any way from its use. If you received this transmission in error, please immediately contact the sender and destroy the material in its entirety, whether in electronic or hard copy format. This message is subject to electronic monitoring: https://www.jpmorgan.com/disclosures/email

MSCI: Certain information herein ("Information") is reproduced by permission of MSCI Inc., its affiliates and information providers ("MSCI") ©2024. No reproduction or dissemination of the Information is permitted without an appropriate license. MSCI MAKES NO EXPRESS OR IMPLIED WARRANTIES (INCLUDING MERCHANTABILITY OR FITNESS) AS TO THE INFORMATION AND DISCLAIMS ALL LIABILITY TO THE EXTENT PERMITTED BY LAW. No Information constitutes investment advice, except for any applicable Information from MSCI ESG Research. Subject also to msci.com/disclaimer

©2024 Sustainalytics. All Rights Reserved. The information, data, analyses and opinions contained herein: (1) includes the proprietary information of Sustainalytics; (2) may not be copied or redistributed except as specifically authorized; (3) do not constitute investment advice nor an endorsement of any product or project; (4) are provided solely for informational purposes; and (5) are not warranted to be complete, accurate or timely. Sustainalytics is not responsible for any trading decisions, damages or other losses related to it or its use. The use of the data is subject to conditions available at https://www.sustainalytics.com/legal-disclaimers.

"Other Disclosures" last revised March 09, 2024.

Tarek Sleiman AC
(971) 4428-1616
tarek.sleiman@jpmorgan.com

prevent any and all access to or use of such J.P. Morgan Data by any third-party.

Completed 20 Mar 2024 02:35 PM GMT Disseminated 21 Mar 2024 12:15 AM GMT