US Oil and Gas

CHK/SWN merger speculation re-emerges: this time too logical to ignore?

Industry Overview

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Equity
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Oils

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More CHK/SWN merger speculation: too logical to ignore?

In October a Reuters article raised speculation that CHK & SWN were in discussions for a potential merger. We addressed this in our Oct report, concluding that there are few potential combinations of two US E&Ps that would be as compelling. On Jan 5th the same speculation re-surfaced, this time in the WSJ, suggesting a $17bn deal (essentially the market capitalization of the two companies) could be announced as soon as this week. While still obviously speculation, our view remains that both stocks are undervalued at strip prices on a DCF basis; however, the opportunity to reduce cost, improve capital efficiency, optimize takeaway & lower discount rates could be a compelling investment case, with absolute value materially greater than the stand alone sum of the parts. If confirmed, our analysis indicates this could be a win-win deal for shareholders on both sides.

Industrial logic is compelling beyond 'just' cost reduction

Quantifying synergies is obviously premature, but we see the industrial logic as compelling. For example, we believe combined G&A could be cut in half. The geographical overlap is obvious, with potentially significant operating efficiencies: a majority of SWN's assets were once owned by CHK. CHK has a decade of drilling experience in the Haynesville that could immediately lower SWN drilling costs; conversely SWN has excess takeaway. Both have HQs no-where near operations: a combined company would not need two while both have space to absorb an expanded organization. Critically, one has a capital structure that is 36% net debt, while the other has low net debt: the combined balance sheet would improve equity volatility & hence the discount rate with the benefit of scale.

We see synergies reasonably 30% of the combined EV

As reviewed in our October report, we calculate the annualized impact of potential synergies could reasonably exceed $550mm, with associated value that is >20% of the combined market cap of SWN & CHK. As always, the challenge may be social issues. Both teams have scars from navigating a collapse in US gas prices; but both have emerged as two of the strongest 2-basin players in the US natural gas sector. Both want to be bigger, recognizing the economies of scale – but only in a manner that is accretive for shareholders. Change of control provisions are similar for both sides but dominated by the CEOs ($29mm for SWN and $25mm for CHK). Frankly, we see both CEO's motivated for any deal led by the priority that it is a positive outcome for shareholders.

Regardless, we see SWN & CHK materially undervalued

The fact that speculation has re-emerged may lend credibility to perceptions that a deal could happen. As a minimum, it shines a light on the deep value we see for both stocks at a current forward curve of $4.00 / mcf. On stand-alone merits we maintain Buy ratings on both CHK & SWN; but in absolute terms we see SWN with greater equity upside at ~89% vs 52% for CHK, by virtue only of SWN's more levered balance sheet. With that said, if we assume any confirmed deal equalized upside on an EV basis, we suggest the required premium for SWN would be around ~12%, and would deliver significant accretion in EPS, CFPS & free cash flow for the combined entity.

Glossary
CHK – Chesapeake Energy
SWN – Southwestern Energy
MCF – thousand cubic feet
E&P – exploration and production

EV – Enterprise Value

Refer to important disclosures on page 16 to 20. Analyst Certification on page 15. Price Objective Basis/Risk on page 14. 12642435

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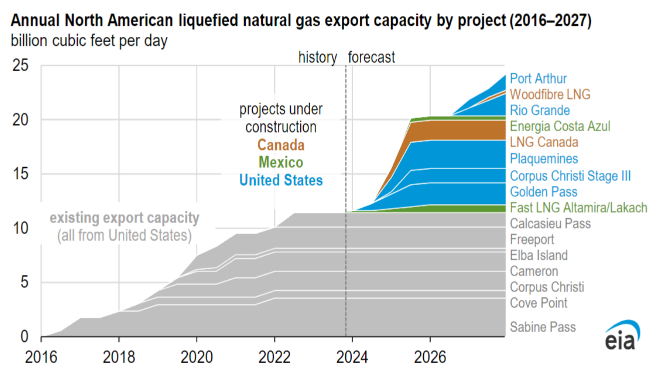
Revisiting M&A speculation on SWN/CHK

Too logical to ignore

We continue to believe US gas equities have some of the most compelling valuations of the US E&Ps. In our 'case for gas' series we have argued that the dynamics of US natural gas markets are changing, after 20 years of being weighed down by a declining cost of supply, despite the emergence of LNG exports in 2016. With capital discipline slowing associated gas from the Permian, we have argued that the next wave of US LNG exports, coal retirements and pipeline exports to Mexico will require incremental production that has greater than zero cost, most likely led by the Louisiana Haynesville, that could lift the marginal clearing price above $4.00/mcf.

Planned LNG start-ups expected to start in 2024 have been pushed to year end on construction delays. However, with line of sight for significant new LNG capacity due onstream over the next five years, 2025 has become the defining period for gas prices, with the start-up of over 10 bcf/d of new LNG demand. The chart below shows the EIA's latest outlook for LNG capacity, with rapid expansion in export demand (hence required US feedstock gas) starting in 2025. Alongside is our current estimate of the clearing price necessary for incremental supply to meet normal declines & demand growth.

Exhibit 1: US LNG projects
Golden Pass pushed to the right – but 2025 growth to 10bcf/d



Source: EIA

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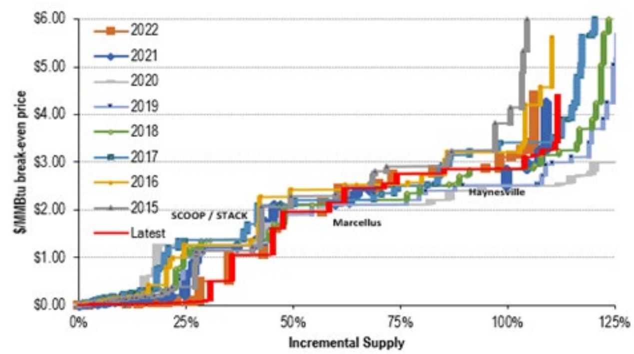
Exhibit 2: The marginal cost of supply: ~$2.75/mcf
Down from ~$4.00/mcf in 2018, driven lower by the Permian



Source: BofA Global Research

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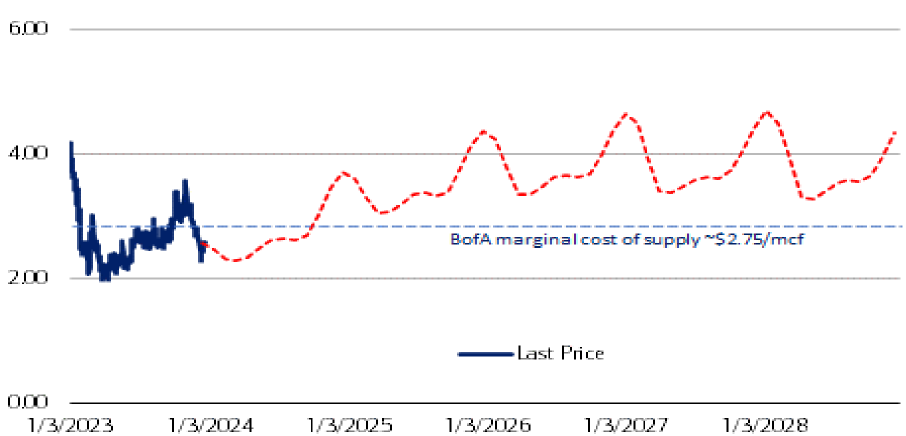
As we have argued, investors need only believe in a current forward curve, currently around $4.00 to see significant value in the US gas weighted E&P's.

Exhibit 3: Spot gas prices vs strip
Back below the incremental cost of supply



Source: BofA Global Research

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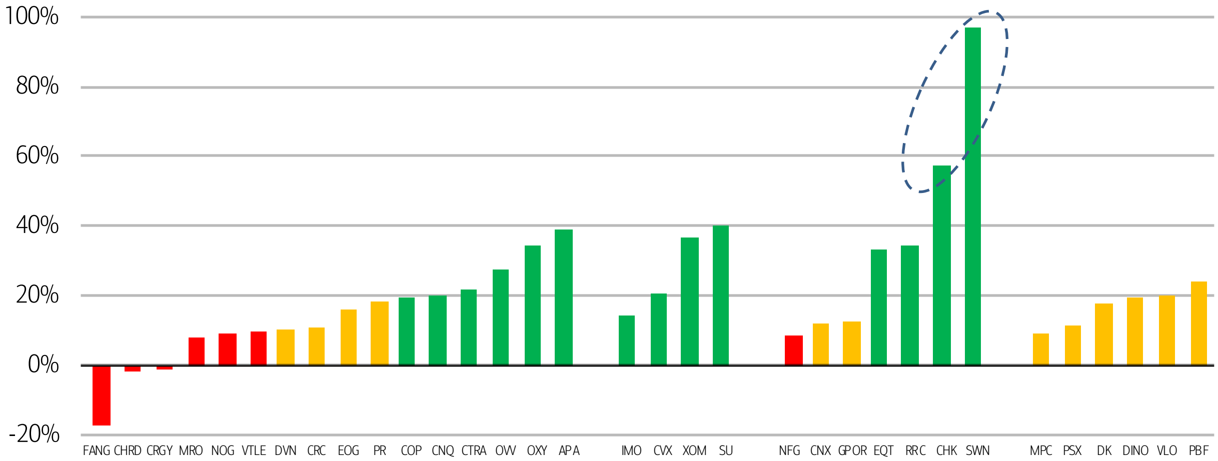
At this level we see we see upside for the broader US gas weighted E&P sector between 9% and 89%, with the greatest value in CHK & SWN. The chart below summarizes our view of absolute value across our integrated, E&P & refining coverage, assuming long term $75 Brent / $70 WTI & $4.0 HH natural gas.

Exhibit 4: Upside to price objectives: SWN & CHK are, by our analysis, the two most undervalued US E&Ps at strip prices
Oil E&Ps have limited upside; most attractive subsectors are US Gas E&P and Oil Sands, followed by Refining



Source: BofA Global Research

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This has been the basis of our view that as a sector, US gas weighted E&Ps offer the greatest absolute value opportunity in the sector. Of our coverage, our top ideas have been book-ended across the volatility spectrum by CHK with negligible net debt and SWN, with a current capital structure that has 36% net debt.

In October 2023 press speculation first emerged via a Reuters article that suggested discussions may be underway to combine these two companies. We addressed this in our Oct report, concluding that there are few combinations of two US E&Ps that would be as compelling. On Jan 5th the same speculation re-surfaced, this time in the WSJ suggesting a $17bn deal (essentially the market capitalization of the two companies) could be announced as soon as this week.

While still obviously speculation our view remains that both stocks are undervalued at strip prices on a DCF basis. Frankly, if M&A is a theme that marks the maturity of US shale, we see few combinations where the logic could be as compelling.

In our view, the opportunity to reduce cost, improve capital efficiency, optimize takeaway & lower discount rates could be a compelling investment case, with absolute value materially greater than the stand alone sum of the parts.

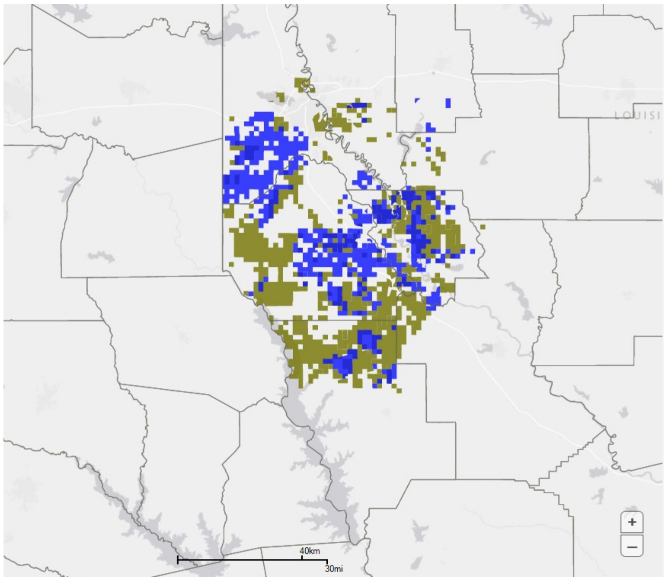
If confirmed, we believe this would be a win-win deal for shareholders on both sides.

What could synergies look like?

As a starting point consider that it is remarkable to think that the majority of SWN's portfolio was once owned by CHK[1]: it follows that at the simplest level, the geographical overlap is obvious, with potentially significant in-field operating efficiencies.

[1] In Oct 2014 SWN acquired ~ 413,000 net acres in WV & SW Pa from Chesapeake targeting for ~$5.375bn. In 2016 CHK sold 78,000 net acres to Indigo Minerals LLC, for $450mm. Indigo subsequently agreed a sale with SWN in Sep 2021 for $2.7bn.

Exhibit 5: SWN and CHK Haynesville Acreage
Show significant overlap; SWN in green & CHK in blue



Source: Rystad; BofA Global Research

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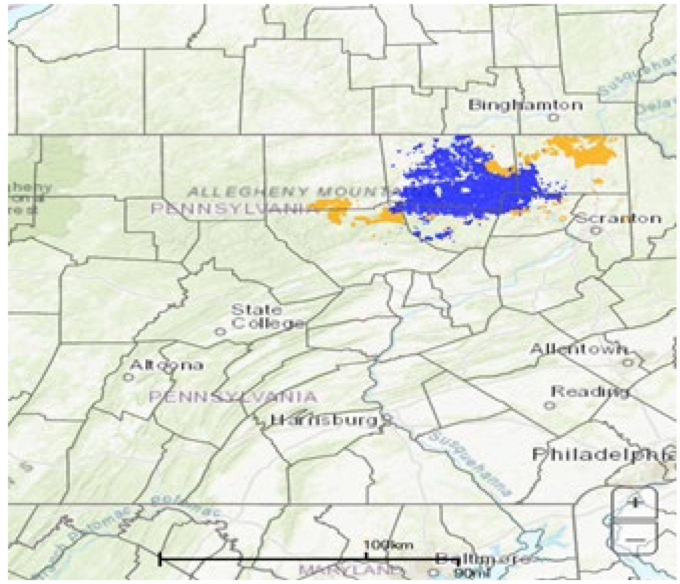
Exhibit 6: SWN and CHK Marcellus Acreage
Show significant overlap; SWN in green & CHK in blue



Source: BofA global Research

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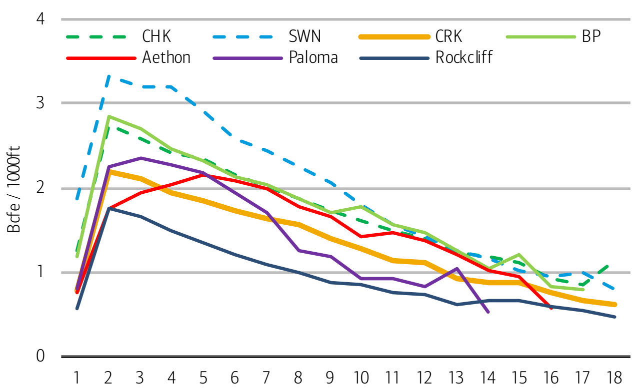
Both companies have long histories in the Marcellus; but in the Haynesville, with SWN's entry as recently as 2021, CHK has the advantaged of a decade of operations noting well costs per lateral foot remain 30% below SWN, albeit with lower productivity.

Exhibit 7: 2022 Production decline per lateral foot
SWN productivity leads peers, followed by CHK



Source: Rystad; BofA Global Research

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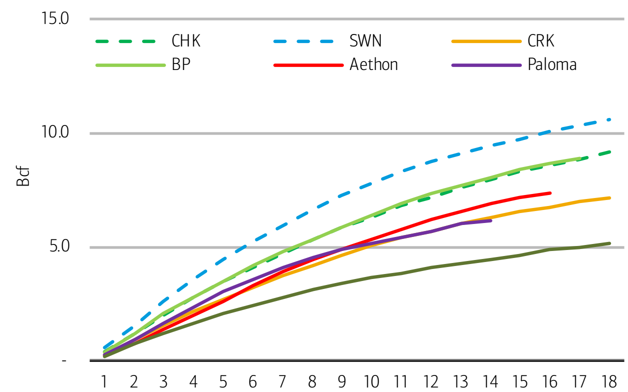
Exhibit 8: 2022 Cum production through 18-months
SWN cumulative production consistently outperforms CHK



Source: Rystad; BofA Global Research

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SWN has takeaway capacity; CHK is building takeaway including the Momentum pipeline (and helped by a key midstream hire from SWN). To offer some details:

- Appalachia takeaway: CHK & SWN are in close proximity to one another in north-east Pennsylvania. Regionally, SWN has ~1.4 Bcf /d of gross takeaway, which it had largely filled by 2Q23. However, in our view, there could be opportunities to optimize production as CHK has greater core inventory depth to back fill capacity.

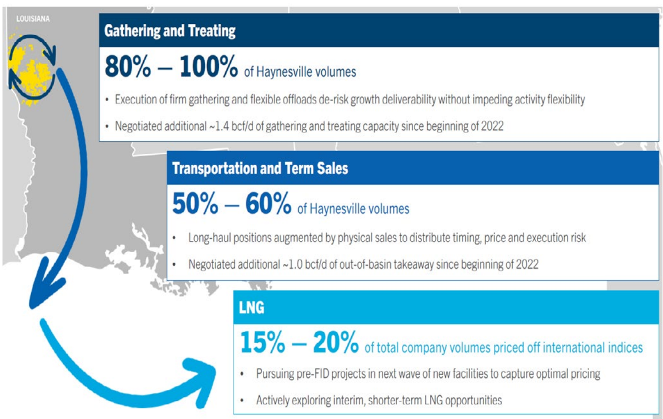
- In the Haynesville, post-bankruptcy, CHK was relieved of legacy firm transport agreements that had impacted its economics. The subsequent acquisition of Vine did not come with any such agreements and as a result, CHK management has had to enter new contracts where it last indicated some ~50% - 60% of its l/term gas volumes (2026+) is covered by transport & term sales.

- Conversely, when SWN entered the Haynesville via its Indigo & GeoSouthern transactions, a critical screen was to ensure all volumes were covered by contracted takeaway capacity.

Currently, our understanding is that SWN had ~3.2 Bcf /d of gross takeaway capacity in 2023 rising to ~3.7 Bcf/d gross in 2024, with net takeaway capacity of ~2.2 Bcf/d and ~2.6 Bcf/d respectively, assuming a 70% NRI., This remains well above SWN's 3Q23 Haynesville production of ~1.8 Bcf/d.

While CHK believes that it may have sufficient takeaway, we believe access to SWN's excess takeaway capacity could be another source of synergies.

Exhibit 9: CHK Haynesville takeaway
The 50-60% is based upon 2026 plus



Source: Company reports

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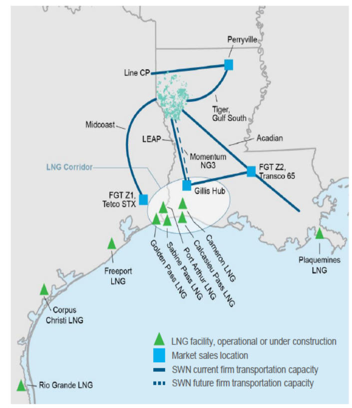
Exhibit 10: SWN's Haynesville takeaway capacity
We see potential synergies if CHK were able to fill some of this capacity

SWN Gulf Coast Transportation Portfolio(1)

LNG Corridor	2023E	2024E
LEAP (2)	1.2 Bcf/d	1.5 Bcf/d
Momentum NG3	–	0.3 Bcf/d
Acadian	0.2 Bcf/d	0.2 Bcf/d
Midcoast	0.2 Bcf/d	0.1 Bcf/d
Other (3)	0.2 Bcf/d	0.2 Bcf/d
LNG Corridor	**~1.8 Bcf/d**	**~2.3 Bcf/d**
Greater Gulf Coast	**2023E**	**2024E**
Gulf South	0.3 Bcf/d	0.3 Bcf/d
ETC Tiger	0.3 Bcf/d	0.3 Bcf/d
Enable CP	0.3 Bcf/d	0.3 Bcf/d
Rover	0.3 Bcf/d	0.3 Bcf/d
MXP / GXP	0.2 Bcf/d	0.2 Bcf/d
Greater Gulf Coast	**~1.4 Bcf/d**	**~1.4 Bcf/d**
Total	**~3.2 Bcf/d**	**~3.7 Bcf/d**



Source: Company report

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Operating costs

Quantifying synergies is obviously premature, but we see the industrial logic as potentially compelling: For example:

- Both have HQs nowhere near their respective operating areas albeit with different ownership structures: Oklahoma City (owned by CHK) and Houston (leased by SWN).

- A combined company would not need two – and both campuses have ample space to absorb an expanded organization. Regional offices could almost certainly be combined.

If we assume as a starting point that the combined company's G&A was cut in half, and that SWN's well costs converged on CHK, we believe the annualized impact on after tax free cashflow could reasonably be $550mm.

Annuitized at a 9% cost of capital over 15 years, we calculate the value in that scenario could be ~$4.9bn or almost 30% of the combined market capitalization of SWN and CHK.

Balance sheet considerations

Both managements have scars from navigating a collapse in natural gas prices that was a consequence of rapid growth in US natural gas production, specifically from the Permian where the incremental cost of supply is essentially zero. Any operations where the cost of supply was higher was subsequently challenged, attracting very different strategies on how to reposition the portfolio. For Chesapeake who was serially acquisitive under its founder and prior CEO Aubrey McLendon, the outcome was bankruptcy for a company with too many assets and capital commitments, and not enough cashflow. For SWN, management's strategy was to reposition the portfolio lower on the industry cost curve through acquisitions in the Marcellus and Haynesville.

Nick Dell'Osso, as CFO of legacy CHK navigated bankruptcy as a consequence of an over extended history of acreage acquisition.

- Post-bankruptcy, his appointment as CEO by the board in Oct-21 was followed by the subsequent acquisition of Vine (Haynesville, Nov-21) & Chief (Marcellus, Mar-22), the appointment of new senior management and the exit from peripheral assets including the Eagleford. This has left CHK positioned as a premier two basin operator, and low beta play on market recognition of the structural changes we believe are underway in the dynamics of US natural gas.

Critically, previous commentary from CHK suggests to us it is a management that believes consolidation is in the best interests of shareholders, irrespective of the successor management.

SWN CEO Bill Way joined in 2011 and has subsequently steered the company through the collapse in gas prices by repositioning the portfolio to become the second largest gas producer in the US, anchored on the two lowest cost dry gas basins in the Marcellus and Haynseville. However, there are consequences:

- SWN's portfolio reset has been at the expense of a balance sheet that utilized debt and hedging to protect cashflows, so that SWN has not participated in recent gas price strength.

- At end 3Q23 SWN held $4.1bn of net debt, with a target to reduce absolute debt to $3bn, essentially defined by an attractive debt maturity profile that extends to 2029, 2030 and 2032.

CHK pro-forma for its recent Eagleford sale (~$550mm net closed end Nov 2023) has low net debt. If a possible transaction were to combine the two companies balance sheets in an all-equity deal, the pro-forma capital structure would be reset to around 19% net debt / 81% equity.

In our view, a critical potential second order benefit would be a lower cost of capital as equity sensitivity to natural gas volatility would fall, with a lower beta outcome that lowers the combined company discount rate.

Both companies retain conservative hedging strategies – but easing into 2025.

Change of control is similar for both CEOs

Both managements have consistently indicated that they want to be bigger, recognizing the economies of scale – but only in a manner that is accretive for shareholders. Where the two managements become separated is share ownership and change of control, with SWN's top 3 Executives at $45mm vs $42mm but disproportionately skewed towards both CEOs when share ownership is considered albeit a function of tenure (CHK $29bn, SWN $62bn).

Notable is that both CEOs have similar change of control provisions ($29mm for SWN and $25mm for CHK respectively).

Frankly we see both management motivations for any potential deal led by the priority that any deal would be a positive outcome for shareholders.

Exhibit 11: SWN Change of Control policy
Both CEOs dominate change of control

	Title	Age	Shares Held	Value of Shares Held ($)	Change of Control ($)
SWN					
William J. Way	CEO	64	3,108,867	22,787,995	29,118,074
Clayton A. Carrell	CFO	57	184,106	1,349,497	13,367,919
Carl F. Giesler	COO	51	1,160,784	8,508,547	3,157,522
CHK					
Domenic "Nick" Dell'Osso, Jr.	CEO	47	45,340	4,062,011	24,912,696
Joshua J. Viets	CFO	43	37,655	3,373,511	7,746,377
Mohit Singh	COO	45	32,310	2,894,653	8,934,262

Source: Company Proxys; BofA Global Research

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Summary

Too logical to ignore? We see both stocks undervalued

In summary we see press speculation around potential consolidation shining a light on the deep valuation discounts of both CHK and SWN. At the current forward strip around $4/mcf we see both stocks deeply undervalued – and for their stand-alone merits we maintain Buy ratings on both names.

The fact that speculation has re-emerged may lend credibility to perceptions that a deal could happen. Note that both stocks rallied on the latest merger speculation, perhaps an indication that the initial market perception would be positive. As a minimum, we believe it shines a light on the deep value we see for both stocks at a current forward curve of $4.00 / mcf. On stand-alone merits we maintain Buy ratings on both CHK & SWN

- In absolute terms we see SWN with greater equity upside at ~89% with a price target of $13 per share;
- For CHK we see absolute upside around 52%, with DCF based PO at $120 per share.

Our summary DCF analysis for both stocks is shown in the Appendix.

Given CHK's Enterprise Value is essentially 100% equity, greater upside for SWN is predominantly a function of a more levered balance sheet, but of course SWN did not go bankrupt and hence did not have significant debt cancelled through the Chapter 11 process. If we assume any confirmed deal equalized upside on an EV basis, we calculate the required premium for SWN would be around ~12% from the recent closing price or ~$7.72 per share (and after the 8% move on the share price on the most recent merger speculation report),

Exhibit 12: Scenarios for an agreed possible acquisition price
Equalizing Enterprise Value Upside

	SWN	CHK
Current EV		
Shares	1,104	147
Share price	$6.87	$79.20
Mkt Cap	7,584	11,642
Net debt (end 3Q23)	4,088	1,319
Disposals	-	-
EV	11,672	12,961
EV at BofA PO		
Shares	1,104	147
Share price	$13.00	$120.00
Mkt Cap	14,352	17,640
Net debt (end 2Q23)	4,088	1,319
Disposals		
EV	18,440	18,959
EV upside implied by BofA PO		**46%**
Implied EV SWN	12,607	
less net debt	4,088	
Implid Mkt Cap	8,519	
Shares	1,104	
Implied acquisition price to equalize EV	$7.72	
Current share price	$6.87	
Implied premium	12%	

Source: BofA Global Research

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At a 12% premium paid for SWN in an all equity transaction, we see significant accretion in EPS, CFPS & free cash flow for the combined entity.

Appendix 1

Theoretical accretion math if EV upside is equalized

Exhibit 13: Chesapeake Southwestern merger scenario accretion / dilution table part 1
Assumes 12% premium paid for SWN ($7.70/share) vs close of 1/5/2024

Chesapeake Energy EV:	Pre-Deal	+SWN	Post-Deal
Shares	147	107	254
Sh Price (1/4/24)	$79.20	$79.20	$79.20
Market Cap	11,642	8,501	20,143
Debt	2,032	4,114	6,146
Cash	713	26	739
Net Debt	1,319	4,088	5,407
Enterprise Value	12,961	12,589	25,550

Dilution	42.20%

Southwestern Energy EV:	Pre-Deal	Post-Deal	
Shares	1,104	1,104	
Sh Price (1/4/24)	$6.87	$7.70	112%
Market Cap	7,584	8,501	
Debt	4,114	4,114	
Cash	26	26	
Net Debt	4,088	4,088	
Enterprise Value	11,672	12,589	

CHK Sh Px	$79.20
SWN Sh Px	$6.87
Ratio	11.53x

	2024	2025	2026	2027	2028
	GG	GL	GQ	GV	HA
Chesapeake Energy:					
Shares	147	147	147	147	147
Net Income	225	1,063	1,590	1,600	1,603
Depreciation	1,377	1,443	1,569	1,578	1,583
Deffered Tax	48	119	119	119	119
Exploration	12	12	12	12	12
Stock-based comp	12	12	12	12	12
Equity Investments in Momentum	-	(50)	(50)	(50)	(50)
Cash Flow	**1,674**	**2,599**	**3,253**	**3,272**	**3,279**
Capex	(1,525)	(1,600)	(1,600)	(1,600)	(1,600)
Capex (Momentum)	(75)	-	-	-	-
Total Capex	(1,600)	(1,600)	(1,600)	(1,600)	(1,600)
Free Cash Flow	**74**	**999**	**1,653**	**1,672**	**1,679**
Capex / MMCF	(1.41)	(1.34)	(1.24)	(1.23)	(1.23)
EPS	$1.53	$7.23	$10.82	$10.89	$10.91
CFPS	$11.38	$17.68	$22.13	$22.26	$22.31
FCFS	$0.50	$6.80	$11.24	$11.37	$11.42
EBITDAX	1,802	2,906	3,717	3,740	3,748
Net Debt	464	(46)	(833)	(1,572)	(2,316)
Net Debt to EBITDA	0.26	(0.02)	(0.22)	(0.42)	(0.62)
CHK Haynesville BOE	242	276	320	319	314
CHK Haynesville Liquids	-	-	-	-	-
CHK Haynesville Gas	1,455	1,657	1,920	1,912	1,881
CHK Appalachia BOE	276	267	271	276	282
CHK Appalachia Liquids	-	-	-	-	-
CHK Appalachia Gas	1,656	1,604	1,625	1,654	1,694
CHK Boe	518	543	591	594	596
CHK Liquids	-	-	-	-	-
CHK Natural Gas	3,110	3,260	3,545	3,566	3,575
Southwestern Energy:	dn	ds	dx	ec	eh
Shares	1,103	1,104	1,104	1,104	1,104
Net Income	535	662	1,703	1,701	1,692
Depreciation	1,372	1,476	1,618	1,736	1,859
Deffered Tax	160	60	177	177	176
Capitalized Interest	(116)	(116)	(118)	(118)	(118)
Cash Flow	**1,951**	**2,081**	**3,380**	**3,496**	**3,609**
Capex	(1,672)	(1,940)	(1,940)	(1,940)	(1,940)
Free Cash Flow	**279**	**141**	**1,440**	**1,556**	**1,669**

Exhibit 13: Chesapeake Southwestern merger scenario accretion / dilution table part 1
Assumes 12% premium paid for SWN ($7.70/share) vs close of 1/5/2024

Capex / MMCF	(1.04)	(1.01)	(0.97)	(0.93)	(0.90)
EPS	$0.48	$0.60	$1.54	$1.54	$1.53
CFPS	$1.77	$1.88	$3.06	$3.17	$3.27
FCFS	$0.25	$0.13	$1.30	$1.41	$1.51
EBITDAX	2,220	2,489	3,986	4,101	1,060
Net Debt	4,086	4,142	2,900	1,542	72
Net Debt to EBITDA	2	2	1	0	0
SWN Haynesville BOE	378	393	408	425	441
SWN Haynesville Liquids	-	-	-	-	-
SWN Haynesville Gas	2,268	2,356	2,445	2,550	2,645
SWN Appalachia BOE	359	486	504	524	543
SWN Appalachia Liquids	91	94	96	99	102
SWN Appalachia Gas	1,605	2,356	2,445	2,550	2,645
SWN Boe	737	879	911	949	984
SWN Liquids	91	94	96	99	102
SWN Natural Gas	3,873	4,713	4,890	5,100	5,290
Note: SG&A + Capitalized SG&A	(348)	(348)	(350)	(350)	(350)

Source: BofA Global Research,

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Exhibit 14: Chesapeake Southwestern merger scenario accretion / dilution table part 2
At a 12% premium paid for SWN in an all equity transaction, we see significant accretion in EPS, CFPS & free cash flow for the combined entity

Chesapeake Energy Proforma:					
Shares	147	147	147	147	147
New Shares	107	107	107	107	107
Total Shares	**254**	**254**	**254**	**254**	**254**
CHK Net Income	225	1,063	1,590	1,600	1,603
SWN Net Income	535	662	1,703	1,701	1,692
Synergies (SWN SG&A, after tax)	296	296	298	298	298
Proforma Net Income	**1,055**	**2,020**	**3,591**	**3,599**	**3,593**
CHK Depreciation	1,377	1,443	1,569	1,578	1,583
SWN Depreciation / Other	1,257	1,359	1,500	1,618	1,741
Deffered Tax	208	179	296	296	295
Other	(92)	(142)	(144)	(144)	(144)
ProForma Cash Flow	**3,805**	**4,860**	**6,812**	**6,947**	**7,067**
CHK Capex	(1,600)	(1,600)	(1,600)	(1,600)	(1,600)
SWN Capex	(1,672)	(1,940)	(1,940)	(1,940)	(1,940)
SWN Capex Synergies	300	300	300	300	300
Proforma Capex	**(2,972)**	**(3,240)**	**(3,240)**	**(3,240)**	**(3,240)**
Proforma Free Cash Flow	**833**	**1,620**	**3,572**	**3,707**	**3,827**

Exhibit 14: Chesapeake Southwestern merger scenario accretion / dilution table part 2

At a 12% premium paid for SWN in an all equity transaction, we see significant accretion in EPS, CFPS & free cash flow for the combined entity

Chesapeake Energy Proforma:					
Proforma EPS	$4.15	$7.94	$14.12	$14.15	$14.13
Proforma CFPS	$14.96	$19.11	$26.78	$27.31	$27.79
Proforma FCFS	$3.27	$6.37	$14.05	$14.58	$15.05
Dilution / Accretion					
EPS	171.5%	9.9%	30.5%	30.0%	29.5%
CFPS	31.4%	8.1%	21.1%	22.7%	24.6%
FCFS	554.1%	-6.3%	24.9%	28.2%	31.7%
EBITDAX	4,317.41	5,691.32	8,001.42	8,138.81	5,105.68
Net Debt	3,955	2,336	(1,237)	(4,944)	(8,771)
Net Debt to EBITDA	0.92	0.41	(0.15)	(0.61)	(1.72)
Pro Forma Haynesville BOE (Mbd)	620	669	728	744	754
Pro Forma Haynesville Liquids (Mbd)	-	-	-	-	-
Pro Forma Haynesville Gas (MMCFd)	3,722	4,013	4,366	4,462	4,527
Pro Forma Appalachia BOE (Mbd)	634	754	774	800	826
Pro Forma Appalachia Liquids (Mbd)	91	94	96	99	102
Pro Forma Appalachia Gas (MMCFd)	3,261	3,960	4,070	4,203	4,339
Pro Forma Boe (Mbd)	1,255	1,422	1,502	1,544	1,580
Pro Forma Liquids (Mbd)	91	94	96	99	102
Pro Forma Natural Gas (MMCFd)	6,983	7,973	8,435	8,665	8,865
	2024	2025	2026	2027	2028
Capex					
CHK	(1,600)	(1,600)	(1,600)	(1,600)	(1,600)
SWN	(1,672)	(1,940)	(1,940)	(1,940)	(1,940)
Production					
CHK (Boe * 6 * 0.365)	1,135	1,190	1,294	1,301	1,305
SWN (Boe * 6 * 0.365)	1,613	1,925	1,996	2,079	2,155
Capex / MCF					
CHK	($1.41)	($1.34)	($1.24)	($1.23)	($1.23)
SWN	($1.04)	($1.01)	($0.97)	($0.93)	($0.90)

Source: BofA Global Research

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Appendix 2

CHK Discounted Cashflow valuation summary

Note CHK' share count assumes warrant dilution

Exhibit 15: CHK DCF: $120 PO

Cashflow extend beyond the period shown

Discount Rate	**7.2%**	**4Q23**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Valuation of Natural gas assets & other assets- Ex Eagle Ford									
Natural Gas Production (MMcf / d)									
Marcellus		1,783	1,656	1,604	1,625	1,654	1,694		
Haynesville		1,480	1,455	1,657	1,920	1,912	1,881		
Total (MMcf / d)		3,263	3,110	3,260	3,545	3,566	3,575		
Bcfe		300	1,135	1,190	1,294	1,301	1,305		
WTI ($/bbl)		*$78.2*	*$75.0*	*$72.5*	*$70.0*	*$70.0*	*$70.0*		
Brent ($/bbl)		*$82.7*	*$80.0*	*$77.5*	*$75.0*	*$75.0*	*$75.0*		
Henry Hub ($/MMbtu)		*$2.88*	*$2.75*	*$3.55*	*$4.00*	*$4.00*	*$4.00*		
Consolidated:									
DACF		626	1,769	2,695	3,348	3,367	3,375	3,375	3,375
CAPEX (ex Eagle Ford)		(389)	(1,513)	(1,588)	(1,588)	(1,588)	(1,588)	(1,588)	(1,588)
Other (+/-)			-	-		391	-	-	-
FcF - Nat gas assets		-	256	1,107	1,760	2,170	1,787	1,787	1,787
PV (2026-50)		6,708							
PV (2020-2025)		11,888							
Total PV		18,596							

Exhibit 15: CHK DCF: $120 PO

Cashflow extend beyond the period shown

Discount Rate	**7.2%**	**4Q23**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Eagle ford valuation		-							
Valuation of Momentum									
Capex		(150)	(75)						
Cash flow				50	50	50	50	50	50
Free cash flow		-	(75)	50	50	50	50	50	50
Momentum Valuation		349							

Valuation Summary	
Natural gas assets	18,596
South Texas -Eagle Ford	-
Momentum valuation	349
Total PV	18,945
Less: Net Debt	(1,319)
Equity Value	17,626
Shares ex warrants	132.153
Equity Value per share	$133
Warrants exercisable at $27.63	
Number of warrants	4
Strike price	$23.25
Loss in equity	(495)
Number of shares assumed	137
Equity Value per share	$129
Warrants exercisable at $32.13	
Number of warrants	4
Strike price	$27.04
Loss in equity	(449)
Number of shares assumed	141
Equity Value per share	$125
Warrants exercisable at $36.18	
Number of warrants	5
Strike price	$30.45
Loss in equity	(519)
No.shares inc warrants	147
Equity Value per share	$120
PO	**$120.3**

Source: BofA Global Research

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Appendix 3

SWN Discounted Cashflow valuation summary

Exhibit 16: SWN DCF: $13

Cash Flows extend beyond the period shown

Discount Rate	**4Q23**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Natural Gas Production (MMcf/d)		-	-	-	-	-		
Boe Production (Mboe/d)		750	760	797	824	848		
Brent ($/bbl)		*$75.0*	*$70.0*	*$70.0*	*$70.0*	*$70.0*		
WTI ($/bbl)		*$80.0*	*$75.0*	*$75.0*	*$75.0*	*$75.0*		
Henry Hub ($/MMbtu)	*$2.88*	*$2.62*	*$4.00*	*$4.00*	*$4.00*	*$4.00*		
Consolidated:								
Debt Adjusted Cash Flow	507	2,158	2,289	3,592	3,707	3,820	3,820	3,820
Capital Expenditures	(371)	(1,868)	(2,136)	(2,138)	(2,138)	(2,138)	(2,138)	(2,138)
Free Cash Flow	136	291	153	1,453	1,569	1,682	1,682	1,682
Present Value (2020-2036)	12,105							
Terminal Value (2036+ decline)	6,418							

Exhibit 16: SWN DCF: $13
Cash Flows extend beyond the period shown

Discount Rate	4Q23	2024	2025	2026	2027	2028	2029	2030
Total PV	18,523							
Less: Net Debt (pro forma)	4,088							
Equity Value	14,435							
Shares Outstanding (estimated pro forma shares)	1,104							
Valuation	$13							

Source: BofA Global Research

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Exhibit 17: Stocks mentioned
Prices and ratings for stocks mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
CHK	CHK US	Chesapeake	US$ 79.20	B-1-7
SWN	SWN US	Southwestern	US$ 6.87	C-1-9

Source: BofA Global Research

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Price objective basis & risk

Chesapeake Energy (CHK)

Our price objective of $120/sh assumes $75 Brent and $70 WTI long-term. We assume long-term HH natural gas of $4.00. We apply a long-term (post-tax) weighted average cost of capital (WACC) of 7.2%, which is based on the BofA Strategy team's assumed risk premium and a five-year monthly beta.

Downside risks to our price objective are: E&P companies, in general, are subject to commodity price volatility, commensurate slowdowns in development drilling, and potential investor apathy. Company-specific downside risks to our price objective are: (1) Potential M&A as the company does consider potential acquisitions, (2) potential regional bottleneck, and (3) a production mix heavily weighted towards natural gas, making it more susceptible if commodity prices were to decline.

Upside risks to our PO 1) higher potential long-term gas and 2) the debottlenecking of US gas as LNG infrastructure is built along the Gulf Coast.

Southwestern Energy Corp. (SWN)
Our price objective of $13/sh assumes $75 Brent / $70 WTI / $4.00 Henry Hub long-term. We apply a long-term (post tax) WACC of approximately 6.8%, which is based on the BofA strategy team's assumed risk premium and a 5-year monthly beta.

The risks to our price objective are (1) the oil and gas price and margin environment, (2) significant delays to the new upstream projects critical to its production targets, and (3) inability to capture the price environment due to cost pressures (opex, capex, and taxation). Upside risks to our price objective are (1) higher gas prices, (2) potential asset sales that improve leverage outlook, and (3) further cost reductions

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

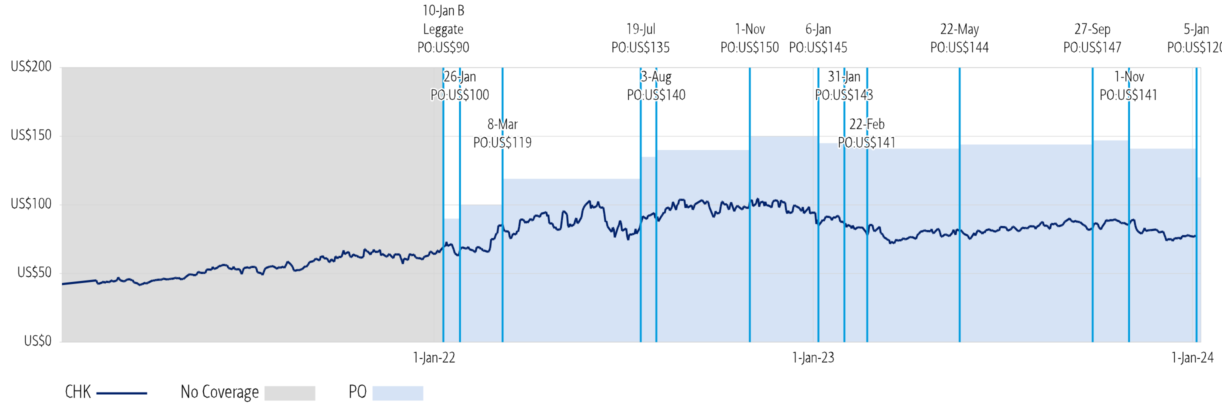
US - Large Cap Oils Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	APA Corporation	APA	APA US	Doug Leggate
	Canadian Natural Resources	YCNQ	CNQ CN	Doug Leggate
	Canadian Natural Resources	CNQ	CNQ US	Doug Leggate
	Chesapeake Energy	CHK	CHK US	Doug Leggate
	Chevron Corp.	CVX	CVX US	Doug Leggate
	ConocoPhillips	COP	COP US	Doug Leggate
	Coterra Energy Inc	CTRA	CTRA US	Doug Leggate
	EQT Corporation	EQT	EQT US	John H. Abbott
	ExxonMobil Corp.	XOM	XOM US	Doug Leggate
	Granite Ridge Resources, Inc	GRNT	GRNT US	John H. Abbott
	Imperial Oil	IMO	IMO US	Doug Leggate
	Imperial Oil	YIMO	IMO CN	Doug Leggate
	Kimbell Royalty Partners	KRP	KRP US	John H. Abbott
	Occidental Petroleum Corp.	OXY	OXY US	Doug Leggate
	Ovintiv Inc	YOVV	OVV CN	Doug Leggate
	Ovintiv Inc	OVV	OVV US	Doug Leggate
	Range Resources Corp	RRC	RRC US	Doug Leggate
	Southwestern Energy Corp.	SWN	SWN US	Doug Leggate
	Suncor	YSU	SU CN	Doug Leggate
	Suncor	SU	SU US	Doug Leggate
NEUTRAL				
	California Resources Corporation	CRC	CRC US	Kalei Akamine
	CNX Resources	CNX	CNX US	John H. Abbott
	Delek US Holdings, Inc.	DK	DK US	Doug Leggate
	Devon Energy Corp.	DVN	DVN US	Doug Leggate
	EOG Resources	EOG	EOG US	Doug Leggate
	Gulfport Energy Corporation	GPOR	GPOR US	Doug Leggate
	HF Sinclair Corporation	DINO	DINO US	Doug Leggate
	Marathon Petroleum Company	MPC	MPC US	Doug Leggate
	PBF Energy	PBF	PBF US	Doug Leggate
	Permian Resources Corporation	PR	PR US	Doug Leggate
	Phillips 66	PSX	PSX US	Doug Leggate
	Valero Energy Corp.	VLO	VLO US	Doug Leggate
UNDERPERFORM				
	Chord Energy Corporation	CHRD	CHRD US	John H. Abbott
	Crescent Energy Company	CRGY	CRGY US	John H. Abbott
	Diamondback Energy Inc.	FANG	FANG US	Doug Leggate
	Marathon Oil Corp.	MRO	MRO US	Doug Leggate
	National Fuel Gas Company	NFG	NFG US	John H. Abbott
	Northern Oil and Gas	NOG	NOG US	John H. Abbott
	Vital Energy Inc	VTLE	VTLE US	John H. Abbott
RSTR				
	Pioneer Natural Resources	PXD	PXD US	Doug Leggate

Disclosures

Important Disclosures

Chesapeake (CHK) Price Chart



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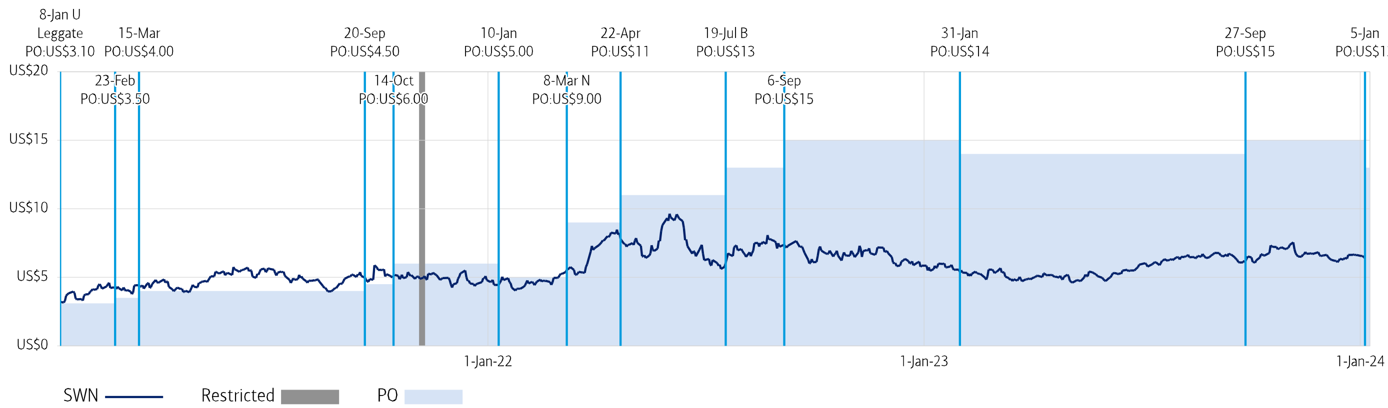
Southwestern (SWN) Price Chart



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

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Equity Investment Rating Distribution: Energy Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships [R1]	Count	Percent
Buy	83	61.48%	Buy	64	77.11%
Hold	28	20.74%	Hold	21	75.00%
Sell	24	17.78%	Sell	18	75.00%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships [R1]	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

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

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Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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