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FDA Commissioner Bifurcates

Cannabis Sector Equity Research



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Our Take on FDA Commissioner's Comments

It is now more than seven and half months since the HHS sent their rescheduling recommendation to the DEA. Supposedly, the 8-factor analysis can take up 3 to 6 months, then a report is written, and the DEA Administrator makes a final decision (). Some have speculated an announcement will be timed politically (4/20; summer; closer to the Nov election). Also, there is the question whether the DEA will reschedule by order rather than through the standard rulemaking process. * See more color here on the review process: https://www.youtube.com/watch?v=AwfVZ_jKsuU&t=1037s*

More than questions about international treaties, we think the “hold up” is related to issues such as bifurcation (med vs. rec) and whether placing medical cannabis in Schedule III would federally legalize medical cannabis (see our [Potential DEA Questions](#) report of 3/19). FDA Commissioner, Robert Califf, on 4/11, while testifying to the House of Representatives Committee on Oversight and Accountability on Thursday (**) touched on the issue of bifurcation. Yes, the headlines will focus on his “there is no reason for the DEA to delay” remark, but a) he himself gave context to the DEA delays (not that he speaks for the DEA); b) made the distinction between med and rec cannabis, and c) oddly to us, seemed to imply that it would be better for Congress to act on the matter more than the DOJ (at least on the subject of rec). Net, we think we will see progress this year (we prefer the incremental approach), with medical cannabis rescheduling only. To us this is a significant step forward for the industry, but it may not be what investors have been expecting. (**) <https://oversight.house.gov/hearing/oversight-of-the-u-s-food-and-drug-administration/>

Timing of DEA decision. To questions by Congresswoman Nancy Mace regarding when the DEA would respond to the HHS's recommendation to reschedule cannabis, Commissioner Califf said he did not know, and could not tell her even if he knew, but emphasized he did not know. When she asked “this year”, he said, “there is no reason for DEA to delay” (this is what garnered all the headlines), but qualified this by saying “they have to take into account all the regulations that are in play” (as if trying to explain the delay?).

Whether FDA role would change with rescheduling, and if FDA would have to take additional responsibilities. His first answer was “this is a very complicated topic”. He noted there are “30 different forms of cannabis” (actually 113 cannabinoids have been identified), and he said in cannabis “state regulation has been dominant, so this is an area where it would be better for Congress to decide on how to proceed (contradicting in part the current Executive path). Actually, on various topics (not just MJ) he made the same argument, let Congress set the rules, and let the FDA be the “referee”. Also, in answering the same question, he brought up the issue of bifurcation.

Bifurcation: Med vs. Rec. On the same subject of DEA timing and the FDA role, he distinguished between medical and recreational cannabis (note: recall the conventional wisdom narrative says that cannabis is not bifurcated in Schedule I, so it will not be bifurcated in Schedule III; we disagree with that view). He said, “medical cannabis is one thing when used for proven medical pathways, but then if it is used for recreational purposes there are no medical benefits in that case, and it does not fall into the typical FDA purview of regulations”. In our interpretation, this would mean then that only medical cannabis can be rescheduled and not rec.



His repeated remarks about “Congress has to act”. He seemed concerned with the harm caused by rec cannabis when used inappropriately, or in a dose that is dangerous, or when the product is packaged as candy for children. So, the FDA will “need help with the regulatory pathway”. He said almost all the FDA work is in regard to the health benefits from new drugs (or devices), but this falls in an area of harm reduction when it is used for recreational purposes. As a “child of the 60s”, he would like to see in his lifetime Congress come up with a “regulatory scheme” for cannabis (we assume here he was referring to rec). In the meantime, we continue to believe the DEA may decide to only reschedule medical cannabis (thus legalizing it at the federal level), while rec cannabis will be left to the states, until someday in the future “Congress acts”, in the words of the Commissioner. So, 280e would only go away for med, but not rec (unless rec is de-scheduled at the federal level).

About CBD. He stated again the FDA’s position that CBD does not meet the definition of dietary supplement (DS) due to “elevated liver enzymes”, so despite several “citizen petitions” asking for the DS classification, the FDA will wait for Congress to act and formulate a regulatory pathway for CBD, and then the FDA will focus on harm reduction. The proposed House Bill H.R. 1629 (Hemp and Hemp-Derived CBD Consumer Protection and Market Stabilization Act of 2023) would allow the use of hemp, cannabidiol (i.e., CBD) derived from hemp, or any other ingredient derived from hemp in a dietary supplement, provided that the supplement meets other applicable requirements (if it passes), but for now the Food and Drug Administration's position is that CBD products may not be sold as dietary supplements.

Table 1: Stocks mentioned in this report

Company name	Ticker	Ticker	Rating	Company name	Ticker	Rating
US MSOs				Canada LPs		
4Front Ventures		FFNTF	Not rated	Aurora Cannabis	ACB	not rated
Acreage Holdings		ACRDF	Not rated	Auxly Cannabis Group	CBWTF	not rated
Ascend Wellness		AAWH	Not rated	Avant Brands	AVTBF	not rated
AYR Wellness		AYRWF	Not rated	BZAM	BZAMF	not rated
Columbia Care		CCHWF	Not rated	Cannara Biotech	LOVFF	not rated
Cresco Labs		CRLBF	Not rated	Canopy Growth Corporation	CGC	not rated
Curaleaf Holdings		CURLF	Not rated	Cronos Group	CRON	not rated
GlassHouse Brands		GLASF	Not rated	Decibel Cannabis Co	DBCCF	Overweight
Gold Flora		GRAM	Overweight	Organigram Holdings	OGI	not rated
Greenlane Holdings		GNLN	Not rated	Rubicon Organics	ROMJF	not rated
Green Thumb Industries		GTBIF	Overweight	SNDL	SNDL	not rated
Grown Rogue		GRUSF	Not rated	Tilray Brands	TLRY	not rated
Jushi Holdings		JUSHF	Overweight	Village Farms Intl	VFF	Overweight
MariMed		MRMD	Overweight	Other		
Planet 13 Holdings		PLNHF	Overweight	Chicago Atlantic REFC	REFI	Overweight
Schwazze		SHWZ	Not rated	Intercure	INCR	Not rated
StateHouse Holdings Inc		STHZF	Neutral	Irwin Naturals	IWINF	Not rated
TerrAscend		TSNDF	Not rated	Leafly	LFLY	Not rated
Tilt Holdings		TLLTF	Overweight	New Lake Capital Partners	NLCP	Overweight
Trulieve Cannabis		TCNNF	Not rated	Smooore International	SMORF	Not rated
Verano Holdings		VRNOF	Overweight	Springbig	SBIG	Not rated
Vext Science, Inc.		VEXTF	Not rated	WM Technology	MAPS	Neutral

Source: Z&A ratings



Appendix I: Valuation Comps

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Exhibit 1: US MSO Valuation Multiples

US\$Mn 10-Apr-24	Z&A Spot EV / Sales			Z&A Spot EV / EBITDA			Financial Net Debt				Broadly Defined Net Debt			
	2023	2024	2025	2023	2024	2025	Sales		EBITDA		Sales		EBITDA	
							CY24	Current	CY24	Current	CY24	Current	CY24	Current
US MSOs	2.1x	1.9x	1.7x	11.9x	9.7x	7.7x								
Acreage Holdings	0.4x	1.3x	na	3.2x	6.6x	na	-0.8x	-0.9x	-4.2x	-8.1x	-1.0x	-1.1x	-4.9x	-9.5x
Ascend Wellness	1.4x	1.3x	1.2x	6.8x	5.8x	5.1x	-0.4x	-0.4x	-2.0x	-2.1x	-0.8x	-0.8x	-3.5x	-3.7x
Ayr Wellness	1.5x	1.4x	1.3x	6.2x	5.7x	5.0x	-0.8x	-0.9x	-3.4x	-3.7x	-1.0x	-1.1x	-3.9x	-4.3x
Cannabist Co	0.9x	0.9x	0.8x	6.9x	6.1x	4.7x	-0.5x	-0.5x	-3.4x	-3.3x	-0.6x	-0.7x	-4.3x	-4.2x
Cansortium	1.4x	na	na	4.2x	na	na	na	na	na	na	na	na	na	na
Cresco Labs	2.0x	2.1x	2.0x	8.9x	7.9x	7.6x	-0.6x	-0.5x	-2.1x	-2.1x	-0.8x	-0.8x	-3.0x	-3.0x
Curaleaf	3.8x	3.6x	3.4x	16.9x	14.7x	12.8x	-0.5x	-0.5x	-1.9x	-3.2x	-0.8x	-0.8x	-3.2x	-5.3x
4Front Ventures	1.7x	1.5x	na	15.6x	7.5x	na	-0.7x	-1.0x	-3.5x	-6.9x	-1.1x	-1.5x	-5.3x	-10.3x
Glass House	5.3x	3.9x	na	34.7x	16.6x	na	-0.1x	na	-0.5x	na	-0.3x	-0.4x	-1.5x	-1.8x
Gold Flora	1.1x	0.9x	0.7x	na	15.9x	4.2x	na	-0.2x	na	na	na	-0.6x	na	na
Goodness Growth	1.1x	1.0x	na	5.9x	4.3x	na	-0.5x	-0.5x	-2.1x	-1.8x	-0.6x	-0.6x	-2.4x	-2.1x
Green Thumb	3.4x	3.2x	2.9x	10.9x	10.5x	9.7x	-0.1x	-0.1x	-0.4x	-0.4x	-0.2x	-0.2x	-0.5x	-0.6x
Grown Rogue	4.2x	na	na	18.0x	na	na	na	na	na	na	na	na	na	na
iAnthus	1.7x	na	na	na	na	na	na	-0.8x	na	-7.5x	na	-0.9x	na	-8.0x
Jushi	1.6x	1.5x	1.4x	10.3x	8.4x	7.0x	-0.7x	-0.7x	-3.7x	-8.6x	-1.0x	-1.1x	-5.8x	-13.5x
MariMed	1.3x	1.2x	1.0x	7.6x	7.4x	4.7x	-0.3x	-0.3x	-2.0x	-2.1x	-0.4x	-0.4x	-2.6x	-2.8x
Planet 13	2.2x	1.8x	1.4x	-4.5x	16.2x	7.9x	0.3x	0.3x	2.4x	35.1x	0.1x	0.2x	1.2x	18.2x
Schwazze	1.7x	1.7x	na	5.4x	6.6x	na	-0.8x	-0.7x	-3.1x	-2.4x	-0.9x	-0.8x	-3.6x	-2.8x
StateHouse	2.0x	na	na	na	na	na	na	-1.1x	na	-57.5x	na	-1.8x	na	-92.6x
TerrAscend	3.1x	2.9x	2.6x	14.4x	13.3x	11.3x	-0.5x	-0.5x	-2.5x	-1.9x	-0.7x	-0.7x	-3.5x	-2.7x
TILT	0.6x	0.6x	0.5x	52.2x	19.1x	11.4x	-0.3x	-0.3x	-8.7x	-5.8x	-0.5x	-0.5x	-16.8x	-11.2x
Trulieve	2.6x	2.5x	2.4x	9.1x	8.9x	8.4x	-0.5x	-0.5x	-1.6x	-1.7x	-0.6x	-0.6x	-1.9x	-2.1x
Verano	2.6x	2.7x	2.5x	8.1x	8.2x	7.6x	-0.3x	-0.3x	-0.9x	-0.8x	-0.6x	-0.5x	-1.8x	-1.5x
Vext	1.8x	1.2x	na	9.5x	4.9x	na	-0.6x	-1.1x	-2.6x	-8.1x	-0.6x	-1.1x	-2.6x	-8.1x

1) By "current", we mean the latest reported qtr annualized; 2) Multiples calculated using FactSet consensus (when available) for 2023, 2024, and 2025

3) As there are no consensus estimates for Cansortium, Grown Rogue, iAnthus, and StateHouse, we take "current" sales for each of them

Source: FactSet, company reports, and Z&A estimates



12 April 2024

On the FDA Commissioner's Latest Comments on Cannabis

Exhibit 2: US MSOs EV Calculations

US\$Mn 10-Apr-24	FactSet Spot EV	Z&A Spot EV	US\$ price	mn shares	mn deriv	Total Mkt Cap	Financial net debt	Net leases	ST income tax liab.	Conting Cons.	ITM deriv inflow	Total BDND	Pref Stock Min Int
US MSOs													
Acreage Holdings	232	336	0.51	139.9	29.7	87	-214	-2	-34			-250	
Ascend Wellness	770	724	1.30	206.9	13.3	286	-244	-134	-60			-438	
Ayr Wellness	755	705	2.65	76.6	5.0	216	-417	6	-78	0		-489	
Cannabist Co	651	483	0.33	429.3		143	-272	-23	-45	0		-340	
Cansortium	140	146	0.21	298.3	6.3	65	-49	-7	-26			-81	
Cresco Labs	1,270	1,552	2.17	436.9	8.2	966	-415	-54	-111	-6		-586	
Curaleaf	4,346	5,160	5.22	744.3	7.9	3,926	-672	-18	-345	-81		-1,115	119
4Front Ventures	286	203	0.09	648.6		61	-95	-6	-41	0		-142	
Glass House	594	850	8.90	75.7	3.2	702	-26	0	-21	-29		-76	72
Gold Flora	130	143	0.25	287.5	0.2	73	-26	-32	-8	-4		-71	
Goodness Growth	109	101	0.40	108.7		43	-50	-8				-58	
Green Thumb	3,309	3,561	13.82	237.1	7.1	3,374	-147	-23	-11	-33	28	-187	
Grown Rogue	75	106	0.62	170.8		106	4	-3	0	0		0	
iAnthus	143	298	0.02	6,510.5		143	-146	-9				-155	
Jushi	401	419	0.67	196.6	1.1	132	-183	1	-106			-288	
MariMed	186	189	0.27	375.1	5.8	103	-52	-1	-14			-67	19
Planet 13	174	220	0.74	320.6	1.3	237	32	-6	-5	-5		17	
Schwazze	229	291	0.77	171.3		132	-138	-3	-18	0		-159	
StateHouse	151	203	0.04	255.6	141.0	17	-114	-13	-39	-24	7	-184	2
TerrAscend	805	991	2.00	351.2	15.3	733	-186	-7	-59	-6		-258	
TILT	118	108	0.03	384.8	10.9	13	-49	-43	-3			-95	
Trulieve	2,157	2,929	12.10	186.0	3.3	2,290	-537	-16	-81	-4		-639	
Verano	2,260	2,470	5.50	343.5	9.8	1,943	-271	-4	-248	-4		-527	
Vext	46	65	0.20	149.8	0.4	30	-35	0				-35	

Source: FactSet, company reports, and Z&A estimates



12 April 2024

On the FDA Commissioner's Latest Comments on Cannabis

Exhibit 3: Canada LP Valuation Multiples

Multiples 10-Apr-24	Z&A Spot EV / Sales			Z&A Spot EV / EBITDA			Financial Net Debt				Broadly Defined Net Debt			
							Sales		EBITDA		Sales		EBITDA	
	Current	2024	2025	Current	2024	2025	Current	CY24	Current	CY24	Current	CY24	Current	CY24
Aurora Cannabis Inc.	1.9x	1.5x	1.3x	27.7x	14.0x	9.2x	na	na	na	na	0.1x	0.1x	1.7x	0.9x
Auxly Cannabis Group Inc.	1.1x	na	na	12.9x	na	na	-0.1x	na	-1.6x	na	-0.3x	na	-3.5x	na
Avant Brands Inc	2.1x	na	na	-41.7x	na	na	-0.4x	na	7.6x	na	-0.9x	na	18.0x	na
BZAM Ltd	0.6x	na	na	5.5x	na	na	-0.3x	na	-3.1x	na	-0.5x	na	-4.6x	na
Cannara Biotech	1.6x	na	na	6.1x	na	na	-0.6x	na	-2.2x	na	-0.6x	na	-2.2x	na
Canopy Growth Corporation	1.9x	2.2x	2.0x	-16.9x	-65.3x	-46.1x	-1.4x	-1.5x	11.8x	45.8x	-1.2x	-1.3x	10.5x	40.6x
Cronos Group Inc	1.9x	1.7x	1.2x	-0.8x	-4.8x	-6.1x	na	na	na	na	8.9x	8.2x	-3.6x	-22.6x
Decibel Cannabis Company Inc	0.9x	0.8x	0.7x	4.3x	3.4x	2.9x	-0.3x	-0.3x	-1.7x	-1.4x	-0.4x	-0.4x	-1.9x	-1.5x
High Tide, Inc.	0.6x	0.5x	0.5x	16.2x	7.4x	5.4x	0.0x	0.0x	-0.7x	-0.3x	0.0x	0.0x	-0.9x	-0.4x
Nova Cannabis Inc	0.4x	0.4x	0.3x	4.2x	3.6x	2.8x	0.0x	0.0x	-0.1x	-0.1x	0.0x	0.0x	-0.4x	-0.4x
OrganiGram Holdings Inc	1.6x	1.5x	1.2x	-13.7x	39.2x	16.5x	na	na	na	na	0.3x	0.3x	-2.4x	7.0x
Rubicon Organics, Inc.	0.6x	na	na	4.7x	na	na	0.0x	na	-0.1x	na	0.0x	na	-0.1x	na
SNDL Inc.	0.5x	0.5x	0.5x	36.1x	11.6x	na	na	na	na	na	0.2x	0.2x	14.0x	4.5x
Tilray Brands, Inc.	2.3x	2.1x	1.9x	44.6x	19.2x	12.1x	-0.2x	-0.2x	-4.8x	-2.1x	-0.4x	-0.3x	-6.8x	-2.9x
Village Farms International, Inc.	0.6x	0.6x	0.6x	-71.0x	15.3x	10.1x	-0.1x	-0.1x	6.3x	-1.4x	-0.1x	-0.1x	6.7x	-1.4x

Source: FactSet, company reports, and Z&A estimates

Exhibit 4: Canada LP EV Calculations

C\$Mn 10-Apr-24	FactSet Spot EV	Z&A Spot EV	C\$ price	mn shares	mn deriv	Total Mkt Cap	Financial net debt	Net leases	ST income tax liab.	Conting Cons.	ITM deriv inflow	Total BDND	Pref Stock Min Int
Aurora Cannabis Inc.	423	483	9.12	54.5	1.6	512	89	-48		-11		30	
Auxly Cannabis Group Inc.	191	118	0.06	1,250.3	249.9	86	-15	-17		0		-32	
Avant Brands Inc	30	41	0.09	258.3	3.4	23	-7	-10				-18	
BZAM Ltd	121	54	0.05	180.8	0.2	9	-31	-14				-45	
Cannara Biotech	85	126	0.88	90.0	1.5	80	-45	0	-1			-46	
Canopy Growth Corporation	na	608	12.30	9.1	9.6	230	-426				48	-378	
Cronos Group Inc	197	239	3.52	381.1	7.8	1,369	1,132	-3				1,130	
Decibel Cannabis Company Inc	88	106	0.14	409.0	16.7	58	-42	-6				-48	
High Tide, Inc.	276	275	3.43	75.1	0.5	259	-12	-4				-16	
Nova Cannabis Inc	1	107	1.69	57.2		96	-4	-7				-11	
OrganiGram Holdings Inc	233	233	2.79	94.1	4.2	274	42		0			42	
Rubicon Organics, Inc.	26	24	0.39	56.2	4.1	24	0	0				0	
SNDL Inc.	480	502	2.79	236.7	12.8	696	232	-37				194	
Tilray Brands, Inc.	2,375	2,428	2.72	742.7		2,024	-260	-83		-28		-371	34
Village Farms International, Inc.	231	254	1.89	110.2		208	-23	-1				-24	22

Source: FactSet, company reports, and Z&A estimates

Exhibit 5: Stock Performance

10-Apr-24	Stock Performance		
Ticker	Last 30d	Last 90d	Last 12mo
US MSOs (mkt cap >\$200Mn)			
AAWH	9%	8%	53%
AYRWF	38%	34%	334%
CRLBF	38%	37%	46%
CURLF	23%	25%	120%
GLASF	37%	70%	202%
GTBIF	14%	26%	93%
PLNH	46%	3%	-3%
TSNDF	22%	19%	39%
TCNNF	21%	120%	136%
VRNOF	19%	19%	99%
US MSOs (mkt cap <\$200Mn)			
ACRDF	143%	155%	-36%
CBSTF	8%	-28%	-34%
CNTMF	15%	124%	165%
CXXIF	-4%	37%	54%
FFNTF	2%	-6%	-50%
GRAMF	-4%	15%	51%
GDNSF	14%	59%	199%
GRUSF	24%	130%	377%
ITHUF	15%	-12%	16%
JUSHF	8%	26%	35%
LOWLF	-34%	-31%	-64%
MRMD	8%	-6%	-32%
SHWZ	-31%	8%	-29%
STHZF	30%	2%	-6%
VEXTF	15%	-8%	-2%

Stock Performance			
Ticker	Last 30d	Last 90d	Last 12mo
Canadian LPs			
ACB	113%	48%	2%
AVTBF	-12%	-39%	-51%
BZAMF	12%	-60%	-85%
CBWTF	276%	257%	204%
CGC	199%	100%	-43%
CRON	31%	28%	37%
DBCCF	27%	-6%	-6%
ETRGF	-21%	-35%	-70%
HITI	56%	48%	90%
LOVFF	-10%	7%	12%
NVACF	-10%	80%	160%
OGI	2%	44%	-25%
ROMJF	-2%	-26%	-37%
SNDL	52%	37%	34%
TLRY	19%	1%	-26%
VFF	95%	79%	79%
Cannabis - International			
CLVR	49%	13%	-33%
IMCC	135%	63%	-49%
INCR	30%	4%	-21%
LGPPF	na	na	na
PCLOF	72%	9%	25%
Tech			
LFLY	20%	-38%	-61%
SBIG	-18%	-9%	-79%
MAPS	40%	44%	87%

Stock Performance			
Ticker	Last 30d	Last 90d	Last 12mo
MJ Fincos			
AFCG	-3%	-5%	1%
CNPOF	-5%	-15%	-16%
IIPR	1%	4%	36%
NLCP	13%	10%	45%
PW	-15%	-17%	-85%
SHFS	-16%	-46%	66%
SSIC	1%	18%	23%
REFI	-6%	-5%	11%
Pix & Shovel			
AGFY	-19%	-72%	-94%
GRWG	14%	0%	-25%
HYFM	22%	9%	-35%
SMG	6%	18%	-6%
UGRO	-11%	13%	-25%
Vape parts			
GNLN	8%	-6%	-86%
ISPR	-43%	-50%	-21%
SMORF	24%	27%	-28%
TLLTF	-19%	29%	-53%
Index			
S&P 500	1%	8%	26%
S&P 477	0%	3%	1%
Nasdaq	5%	11%	16%
MSOS ETF	20%	37%	83%
YOLO ETF	22%	31%	46%

Source: FactSet



Appendix II: Bio and Disclaimers

Zuanic & Associates



Analyst Bio

Pablo Zuanic is a well-known and highly rated equity analyst following the cannabis and psychedelics sector. Over the past five years he launched coverage of over 40 companies in the US, Canada, and overseas (MSOs, LPs, CBD, ancillary, psychedelics), kept close track of sectoral trends, and followed the reform process in the US and elsewhere. His firm Zuanic & Associates publishes equity research on the cannabis and psychedelics sectors, both from a macro/sectoral level in a thematic manner, as well as specific reports on listed stocks. The research service is aimed at institutional investors and corporations. The firm is also available for short-term consulting and research advisory projects. At various points in his career, Pablo was II ranked and called as expert witness in industry investigations. He has a deep global background having covered stocks over the past 20 years in the US, Europe, Latin America, and Asia, across consumer sub sectors. Prior employers include JP Morgan, Barings, and Cantor Fitzgerald. An MBA graduate of Harvard Business School, he started his career as a management consultant, which brings a strategic mindset to his approach to equity research. *Pablo Zuanic can be contacted via the company's portal www.zuanicassociates.com; via email pablo.zuanic@zuanicgroup.com; or via X @420Odysseus.*



Disclosures and Disclaimers

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