CME S&P Case Shiller Futures
July 31, 2020 Snapshot

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Overview

Objective

- The purpose of this monthly report is to compile information from a variety of sources into one place, at a point in time, to facilitate the understanding, analysis, awareness, and hopefully trading of the CME Case Shiller Home Price futures (and options) and other housing derivative products. Feel free to contact me if you have an ideas for an outright trade, calendar spread, option or inter-city theme.

Market Color/Discussion

- Resources: www.homepricefutures.com
- Market Updates: Twitter @HomePriceFuture
- LinkedIn: There is a CME Case Shiller home price futures group, but I use Twitter and blogs more often.
- Note: Almost all of the bid/ask quotes that are used here are my record of end-of-trading day prices, and thus may differ from CME closes and quotes, which are tallied an hour earlier.
- I use CUS and HCI interchangeably for the 10-city index. Different trading platforms use different symbols. Sorry for any confusion.
- Based demand for hedging products for other regions I recently launched Home Price Hedging Fund https://www.homepricefutures.com/hphf Contact me with any interest in hedging Top 50 cities.

Observations for July 2020

- **Trading/Quotes/Spreads/Activity**:
  - Activity for July included 9 lots traded, across only 3 expirations, and 3 regions.
  - Prices were generally lower across all regions.
  - Bid/Ask spreads were wider on longer expirations, but unchanged out 1-2 years.
  - Aug and Nov '20 contracts reflect current strong home price market, but then prices fall to 2021. While longer prices (e.g. G24, G25) are above G21, there's a wider variance on G22 and G23 levels.
  - Light trading and third-party activity was like 2019, with the exception of a 5-lot offer in HCIQ21 that has prompted further discussion of "where will home prices be a year from now".
  - I've been getting more inquiries on puts. While I'm open to writing a small amount (OTC) from the Home Price Hedging Fund platform, other put writers are needed to build this market. My sense is to have all interest focus on HCI (10-city) contracts, and then using RP (Relative Performance) Agreements for individual city risk.
  - I'm also hearing from readers looking to hedge regions not covered by CME contracts (e.g. Seattle, Austin). I've tried to also steer many of those conversations to RP swaps. More on this in early August.
  - Please DM me on ideas for trades.

Price Changes/ Aug 3 v June 30*

- Price changes only show markets with two-sided quotes. (Typically Q20, X20, G21 and G23)
- Bids moved more than offers, tightening bid/asks spreads.
- * I'm referencing Aug 3, as I was traveling July 31.

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CME S&P Case Shiller Home Price Futures:
Aug 3 v June 30

	Bid Δ	Ask Δ	Δ		Change* Bid	Ask	
CUS	-38.0	-32.8	**-5.2**	Q20	-3.2	-14.8	**11.6**
BOS	-19.8	-20.0	**0.2**	X20	-15.2	-20.2	**5.0**
CHI	-17.0	-11.8	**-5.2**	G21	-47.6	-34.2	**-13.4**
DEN	-19.8	-19.2	**-0.6**	K21	-4.8	-5.2	**0.4**
LAV	-13.6	-10.6	**-3.0**	Q21	-4.4	-5.4	**1.0**
LAX	-12.6	-8.8	**-3.8**	G22	-5.4	-3.8	**-1.6**
MIA	-12.2	-10.4	**-1.8**	X22	-4.0	-3.6	**-0.4**
NYM	-19.8	-14.4	**-5.4**	G23	-54.4	-33.4	**-21.0**
SDG	-22.0	-15.0	**-7.0**	G24	-4.6	-3.4	**-1.2**
SFR	-24.4	-13.6	**-10.8**	G25	-69.8	-43.4	**-26.4**
WDC	-14.2	-10.8	**-3.4**				
	-213.4	**-167.4**	**-46.0**		**-213.4**	**-167.4**	**-46.0**

*Change -only for 2-sided mkts

*- These prices are my best effort to collect end-of-day
data and are not actual closing CME bids and offers.
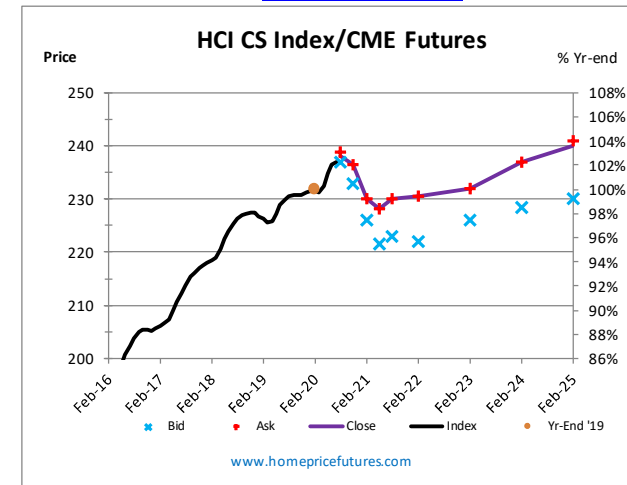www.homepricefutures.com

Dip on intermediate contracts?

- Aug '20/ Nov '20 contracts seem to be focused on low inventory/ mortgage rates.
- Feb '21 prices reflect debate about a possible dip (with wider bid/ask).
- Feb '24, '25 prices are driven by calendar spreads that seem based on a notion of "new normal"/prices rising with inflation.
- Feb '22, '23 prices are in flux, and seem to depend on one's views of how and when the economy will rebound post-Covid, and the timing on a vaccine.

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HCI   a/o   8/3/2020

Contract	Expiration	Last	Prices		Mkt % spot	
			Bid	Ask	Bid	Ask
HCI		236.98				
HCIQ20	Aug '20	238.2	237.0	238.8	100.0%	100.8%
HCIX20	Nov '20	236.4	233.0	236.4	98.3%	99.8%
HCIG21	Feb '21	230.0	226.0	230.0	95.4%	97.1%
HCIK21	May '21	228.2	221.6	228.2	93.5%	96.3%
HCIQ21	Aug '21	230.0	223.0	230.0	94.1%	97.1%
HCIG22	Feb '22	230.6	222.0	230.6	93.7%	97.3%
HCIG23	Feb '23	232.0	226.0	232.0	95.4%	97.9%
HCIG24	Feb '24	237.0	228.4	237.0	96.4%	100.0%
HCIG25	Feb '25	240.0	230.0	241.0	97.1%	101.7%

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HCI CS Index/CME Futures

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Price Changes/ Aug 3 v June 30

CME S&P Case Shiller Home Price Futures: Aug 3 v June 30

9	Bid	Ask	Bid	Ask	Bid Δ	Ask Δ
HCI	236.98					
HCIQ20	237.0	238.8	237.6	240.2	-0.6	-1.4
HCIX20	233.0	236.4	234.8	238.0	-1.8	-1.6
HCIG21	226.0	230.0	228.4	232.4	-2.4	-2.4
HCIK21	221.6	228.2	226.4	233.4	-4.8	-5.2
HCIQ21	223.0	230.0	227.4	235.4	-4.4	-5.4
HCIG22	222.0	230.6	227.4	234.4	-5.4	-3.8
HCIX22	227.0	233.0	231.0	236.6	-4.0	-3.6
HCIG23	226.0	232.0	230.0	235.0	-4.0	-3.0
HCIG24	228.4	237.0	233.0	240.4	-4.6	-3.4
HCIG25	230.0	241.0	236.0	244.0	-6.0	-3.0

10	Bid	Ask	Bid	Ask	Bid Δ	Ask Δ
BOS	231.35					
BOSQ20	231.8	233.6	232.0	235.0	-0.2	-1.4
BOSX20	228.0	231.6	230.0	233.6	-2.0	-2.0
BOSG21	221.6	227.6	226.2	230.0	-4.6	-2.4
BOSK21	218.4					
BOSQ21	220.4					
BOSG22	218.4					
BOSX22	223.4					
BOSG23	224.0	233.6	230.4	239.0	-6.4	-5.4
BOSG24	227.4					
BOSG25	230.4	244.2	237.0	253.0	-6.6	-8.8

9	Bid	Ask	Bid	Ask	Bid Δ	Ask Δ
CHI	146.96					
CHIQ20	147.0	149.0	146.8	149.8	0.2	-0.8
CHIX20	143.4	147.2	143.8	147.8	-0.4	-0.6
CHIG21	134.8	140.6	140.4	144.2	-5.6	-3.6
CHIK21		143.2				
CHIQ21	130.0	145.0				
CHIG22		145.6				
CHIX22		148.8				
CHIG23	135.0	145.0	140.0	148.0	-5.0	-3.0
CHIG24						
CHIG25	133.8	149.2	140.0	153.0	-6.2	-3.8

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Price Changes/ Aug 3 v June 30

CME S&P Case Shiller Home Price Futures: Aug 3 v June 30

DEN	Bid	Ask	Bid	Ask	Bid Δ	Ask Δ
DEN	231.39					
DENQ20	231.4	233.4	232.6	235.6	-1.2	-2.2
DENX20	227.2	231.2	230.0	233.8	-2.8	-2.6
DENG21	221.0	226.8	225.6	231.2	-4.6	-4.4
DENK21		230.8				
DENQ21		233.8				
DENG22		232.6				
DENX22		234.2				
DENG23	224.0	233.0	228.0	236.0	-4.0	-3.0
DENG24						
DENG25	227.8	242.0	235.0	249.0	-7.2	-7.0

LAV	Bid	Ask	Bid	Ask	Bid Δ	Ask Δ
LAV	200.78					
LAVQ20	198.6	200.8	198.0	202.0	0.6	-1.2
LAVX20	192.8	197.4	193.0	198.6	-0.2	-1.2
LAVG21	181.2	189.0	185.0	191.4	-3.8	-2.4
LAVK21						
LAVQ21						
LAVG22						
LAVX22						
LAVG23	178.0	188.0	182.0	191.0	-4.0	-3.0
LAVG24						
LAVG25	172.8	190.2	179.0	193.0	-6.2	-2.8

LAX	Bid	Ask	Bid	Ask	Bid Δ	Ask Δ
LAX	297.00					
LAXQ20	296.6	298.6	294.8	298.2	1.8	0.4
LAXX20	290.6	295.4	290.8	296.4	-0.2	-1.0
LAXG21	279.0	287.0	284.8	290.4	-5.8	-3.4
LAXK21	274.2	287.0	281.2			
LAXQ21	277.0	288.0	280.2			
LAXG22	277.0	290.0	283.6			
LAXX22	279.6	292.0	287.2			
LAXG23	280.0	290.0	283.2	292.0	-3.2	-2.0
LAXG24			287.2			
LAXG25	284.0	300.2	289.2	303.0	-5.2	-2.8

MIA	Bid	Ask	Bid	Ask	Bid Δ	Ask Δ
MIA	252.70					
MIAQ20	252.2	254.2	253.4	256.4	-1.2	-2.2
MIAX20	247.8	251.8	249.4	254.4	-1.6	-2.6
MIAG21	240.2	246.6	244.4	250.4	-4.2	-3.8
MIAK21						
MIAQ21	236.0	248.0				
MIAG22						
MIAX22						
MIAG23	239.6	248.6	242.6	250.6	-3.0	-2.0
MIAG24						
MIAG25	240.8	256.2	243.0	256.0	-2.2	0.2

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Price Changes/ Aug 3 v June 30

CME S&P Case Shiller Home Price Futures: Aug 3 v June 30

NYM	Bid	Ask	Bid	Ask	Bid Δ	Ask Δ	SDG	Bid	Ask	Bid	Ask	Bid Δ	Ask Δ
NYM	204.88						SDG	273.51					
NYMQ20	205.2	207.2	206.4	209.4	-1.2	-2.2	SDGQ20	273.6	275.6	274.0	277.0	-0.4	-1.4
NYMX20	201.2	205.2	203.2	207.8	-2.0	-2.6	SDGX20	269.2	273.2	270.0	274.8	-0.8	-1.6
NYMG21	194.6	200.6	199.0	204.4	-4.4	-3.8	SDGG21	261.0	266.4	266.0	270.4	-5.0	-4.0
NYMK21			197.0				SDGK21			271.0	261.6		
NYMQ21	190.0	202.0	198.0				SDGQ21			270.0	266.0		
NYMG22			197.0				SDGG22			271.2	263.0		
NYMX22			201.0				SDGX22			274.6	266.0		
NYMG23	195.0	205.0	201.0	208.0	-6.0	-3.0	SDGG23	261.0	270.0	268.0	273.0	-7.0	-3.0
NYMG24			201.6				SDGG24			270.0			
NYMG25	196.8	213.2	203.0	216.0	-6.2	-2.8	SDGG25	263.8	279.6	272.6	284.6	-8.8	-5.0

SFR	Bid	Ask	Bid	Ask	Bid Δ	Ask Δ	WDC	Bid	Ask	Bid	Ask	Bid Δ	Ask Δ
SFR	275.59						WDC	241.94					
SFRQ20	274.6	276.6	275.6	278.0	-1.0	-1.4	WDCQ20	241.6	243.6	241.6	244.6	0.0	-1.0
SFRX20	270.4	272.6	272.0	275.0	-1.6	-2.4	WDCX20	236.6	241.2	238.4	243.2	-1.8	-2.0
SFRG21	261.6	268.0	266.6	270.0	-5.0	-2.0	WDCG21	231.8	237.6	234.0	239.6	-2.2	-2.0
SFRK21			264.0	273.0			WDCK21						
SFRQ21	257.0	269.0	266.8				WDCQ21	227.0	238.0				
SFRG22			263.4	273.6			WDCG22						
SFRX22			268.8	278.0			WDCX22						
SFRG23	260.0	270.0	267.8	273.0	-7.8	-3.0	WDCG23	230.0	239.0	234.0	242.0	-4.0	-3.0
SFRG24			269.8	281.0			WDCG24						

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Bid/Ask Spreads

- Tightest two bid/ask spreads (by expiration) in green/ widest two in red.
- Note two-sided spreads quoted now in five key expirations: Q20, X20, G21, G23 and G25. Quotes in many other expirations are either: a) to provide a fuller curve for 10-city index contracts, b) to provide quotes on contracts with OI, or c) as part of ongoing attempts by users to unwind open exposures.
- Bid/ask spreads are much tighter in G21, G23 than over most of the last two months, but still have room to run as many regional quotes are still being derived from Intercity Spread levels.

		CUS	BOS	CHI	DEN	LAV	LAX	MIA	NYM	SDG	SFR	WDC
					BID/ASK Spread							
Aug '20	Q20	1.8	1.8	2.0	2.0	2.2	2.0	2.0	2.0	2.0	2.0	2.0
Nov '20	X20	3.4	3.6	3.8	4.0	4.6	4.8	4.0	4.0	4.0	2.2	4.6
Feb '21	G21	4.0	6.0	5.8	5.8	7.8	8.0	6.4	6.0	5.4	6.4	5.8
May '21	K21	6.6					12.8					
Aug '21	Q21	7.0		15.0			11.0	12.0	12.0		12.0	11.0
Feb '22	G22	8.6					13.0					
Nov '22	X22	6.0					12.4					
Feb '23	G23	6.0	9.6	10.0	9.0	10.0	10.0	9.0	10.0	9.0	10.0	9.0
Feb '24	G24	8.6										
Feb '25	G25	11.0	13.8	15.4	14.2	17.4	16.2	15.4	16.4	15.8	15.4	15.4

Trading Activity: June/Rolling-12 mon

- There were 9 lots traded in July across only 3 expirations, and 3 regions.
- SFR remains the most active regional contract over the last 12 months.

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CME Case Shiller Trading

Futures					
Contract	July	Trailing 12	**Region**	July	Trailing 12
	9	293		9	293
Q19	0	4	HCI	6	84
X19	0	19	BOS	0	33
G20	0	27	CHI	0	14
K20	0	62	DEN	1	18
Q20	0	31	LAV	0	3
X20	0	55	LAX	0	10
G21	6	26	MIA	0	7
K21	0	0	NYM	0	30
Q21	1	1	SDG	2	23
G22	0	0	SFR	0	50
X22	0	47	WDC	0	20
G23	2	4	TBA	0	1
G24	0	16			
G25	0	0			
TBA	0	1			

Volume: CME S&P Case Shiller

	Contracts Traded							
	By Month							
	2013	2014	2015	2016	2017	2018	2019	2020
Jan	8	15	8	9	25	9	3	16
Feb	7	21	4	8	8	3	2	38
Mar	26	10	12	2	13	9	42	79
Apr	11	14	14	14	5	9	19	50
May	17	52	6	16	12	7	3	13
June	4	2	2	3	13	15	2	21
July	18	2	5	9	6	5	10	9
Aug	12	19	5	5	18	8	9	
Sept	29	1	3	11	22	2	19	
Oct	68	15	9	17	9	22	19	
Nov	23	10	15	46	2	11	14	
Dec	7	5	10	7	3	10	6	
Total	**230**	**166**	**93**	**147**	**136**	**110**	**148**	**226**
red =tenta Running 12								293

Open Interest (OI)

- OI rose from 35 to 36.
- Three regions (DEN, MIA and WDC) have no OI.
- OI has skewed toward shorter contracts (see average "time to expiration" < 1.0) as debate on near-term price forecasts dominate trading.

7/31/2020   *current month -estimated

Contract	BOS	CHI	DEN	HCI	LAV	LAX	MIA	NYM	SDG	SFR	WDC	Total
Aug 20	1			1			0	0	0	2	0	4
Nov 20		3	0	2	2	2			2	6		17
Feb 21				5								5
May 21												0
Aug 21									1			1
Feb 22												0
Nov 22	0			2		2		0		2	0	6
Feb 23			0					1				1
Feb 24	0			2								2
Feb 25												0
SUM	1	3	0	12	2	4	0	1	3	10	0	36

Average Expiration (yrs)   0.98

Open Interest: 2013-2020								
	2013	2014	2015	2016	2017	2018	2019	2020
Jan	109	89	63	44	53	36		54
Feb	89	86	57	37	54	37		49
Mar	102	95	64	37	66	33	56	41
Apr	109	107	71	51	69	40	59	42
May	85	88	57	42	48	35	45	34
June	85	88	58	43	51	39	45	35
July	96	89	58			44	51	36
Aug	83	77	49	36	61	48	45	
Sept	105	78		42	45	47	53	
Oct	149	85	52	46	51	49	60	
Nov	81	54	35	38	34	32	53	
Dec	85	57	40	41	34	37	54	

Price Discovery

- I've continued to update price thoughts to my website : (www.homepricefutures.com/quotes) where I share indications of where I'd buy/sell Feb '21 (and now Aug '20 and Feb '23) contracts.
- I try to update 2-3 days/week.
- In addition I started posting trading axes that users had shared (to the right).
- I'm going to continue posting daily updates, to help users (and me) with price discovery, as the contracts trade to new levels.

Aug 2020 (Q20)

Q20	Spot	Bid	Bid % spot	Ask % spot	Ask	Outright Bid/ Ask
HCI	236.98	**237.2**	100.1%	100.9%	**239.0**	1.8
BOS	231.35	231.8	100.2%	101.1%	233.8	2.0
CHI	146.96	147.0	100.0%	101.4%	149.0	2.0
DEN	231.39	231.6	100.1%	101.0%	233.6	2.0
LAV	200.78	198.0	98.6%	100.1%	201.0	3.0
LAX	297	296.6	99.9%	100.7%	299.0	2.4
MIA	252.7	252.6	100.0%	100.8%	254.6	2.0
NYM	204.88	205.0	100.1%	101.0%	207.0	2.0
SDG	273.51	273.6	100.0%	100.8%	275.6	2.0
SFR	275.59	275.0	99.8%	100.5%	277.0	2.0
WDC	241.94	242.0	100.0%	100.9%	244.0	2.0

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Feb 2021 (G21)

G21	Spot	Bid	Bid % spot	Ask % spot	Ask	Outright Bid/ Ask
HCI	236.98	**226.0**	95.4%	97.5%	**231.0**	
BOS	231.35	221.6	95.8%	98.8%	228.6	7.0
CHI	146.96	134.8	91.7%	96.4%	141.6	6.8
DEN	231.39	223.0	96.4%	98.4%	227.8	4.8
LAV	200.78	185.0	92.1%	94.6%	190.0	5.0
LAX	297.00	282.6	95.2%	97.0%	288.0	5.4
MIA	252.70	240.8	95.3%	98.0%	247.6	6.8
NYM	204.88	197.0	96.2%	98.4%	201.6	4.6
SDG	273.51	261.6	95.6%	97.8%	267.4	5.8
SFR	275.59	266.0	96.5%	98.3%	271.0	5.0
WDC	241.94	234.4	96.9%	98.2%	237.6	3.2

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S&P 500 v CME HCIX20

- Movements in Home Price index futures only barely follow the stock market.
- (HCIX20 is being used as it has a long history, but is becoming too short (less sensitive). I'll switch to G21, or G23 next month).
- Low volatility = good for option writers.
- Low correlation =good for diversification.

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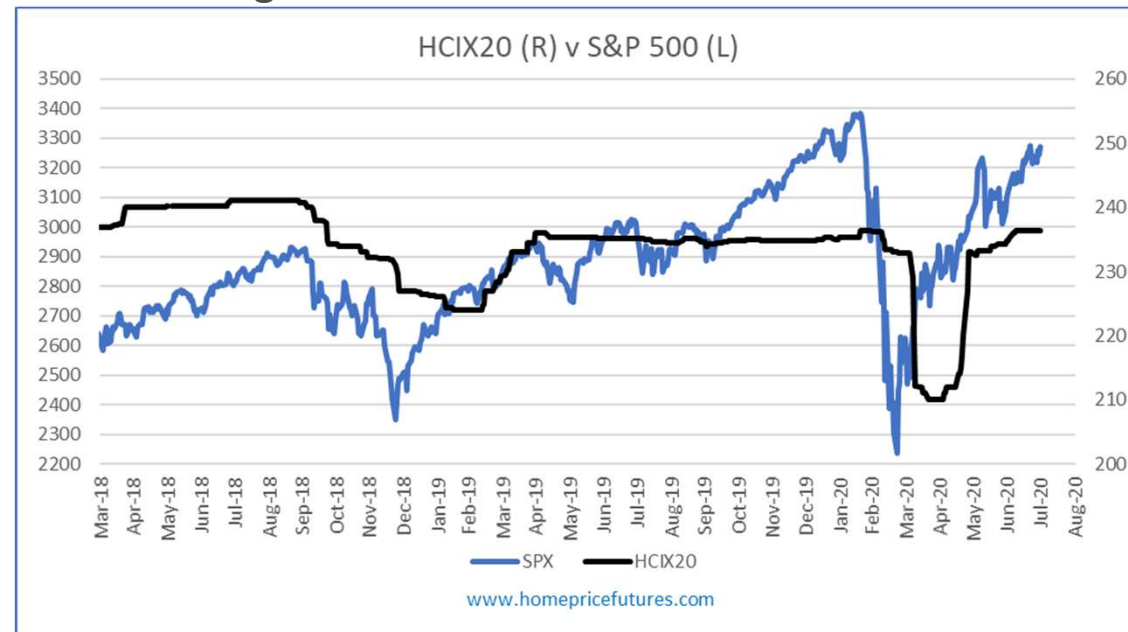
Inter-City (IC) G21Quotes

- A note: I've interpreted IC $-spreads to implied gains vs. spot. Negative % (e.g. BOS, DEN, WDC) indicate regional contract priced to outperform 10-city contract (HCI). Positive % with region underperforming HCI (e.g. CHI, LAV).
- Regional IC spreads (e.g. LAX v SDG) may also be quoted (but not shown).

	Index	Spot	Exp	InterCity Bid	Ask	Bid/ Ask	Feb '20 Spot		
Front	HCI	236.98	G21	2.4	4.4	2.0	231.6		
Back	BOS	231.35					224.9		
				-1.3%	-0.5%			-1.88%	-0.99%
Front	HCI	236.98	G21	89.4	91.2	1.8	231.6		
Back	CHI	146.96					143.8		
				1.4%	2.6%			1.54%	2.79%
Front	HCI	236.98	G21	3.2	5.0	1.8	231.6		
Back	DEN	231.39					223.1		
				-1.0%	-0.2%			-2.34%	-1.53%
Front	HCI	236.98	G21	41.0	44.8	3.8	231.6		
Back	LAV	200.78					195.2		
				2.9%	4.8%			2.50%	4.44%
Front	HCI	236.98	G21	-57.0	-53.0	4.0	231.6		
Back	LAX	297.00					289.2		
				0.4%	1.8%			0.07%	1.46%
Front	HCI	236.98	G21	-16.6	-14.2	2.4	231.6		
Back	MIA	252.70					247.2		
				-0.5%	0.4%			-0.44%	0.53%
Front	HCI	236.98	G21	29.4	31.4	2.0	231.6		
Back	NYM	204.88					203.1		
				-0.9%	0.1%			0.56%	1.54%
Front	HCI	236.98	G21	-36.4	-35.0	1.4	231.6		
Back	SDG	273.51					263.5		
				-0.3%	0.2%			-1.77%	-1.23%
Front	HCI	236.98	G21	-39.0	-35.0	4.0	231.6		
Back	SFR	275.59					266.7		
				-0.6%	0.9%			-1.60%	-0.05%
Front	HCI	236.98	G21	-7.8	-5.8	2.0	231.6		
Back	WDC	241.94					235.1		
				-1.2%	-0.4%			-1.83%	-0.98%

March 20:https://www.homepricefutures.com/posts/a-review-of-intercity-spreads-in-cme-case-shiller-futures

HCI Contracts: Feb, April, Today

- This graph reflects the changes in various HCI contracts from Feb (in green/pre-Covid) to April (in red, with the lowest prices the contract saw this year) to today (in purple).
- The graph shows the complete recovery in prices for the HCI (10-city) Aug '20 contract, and the not-quite total reversal of prices for the Feb '21 contract.
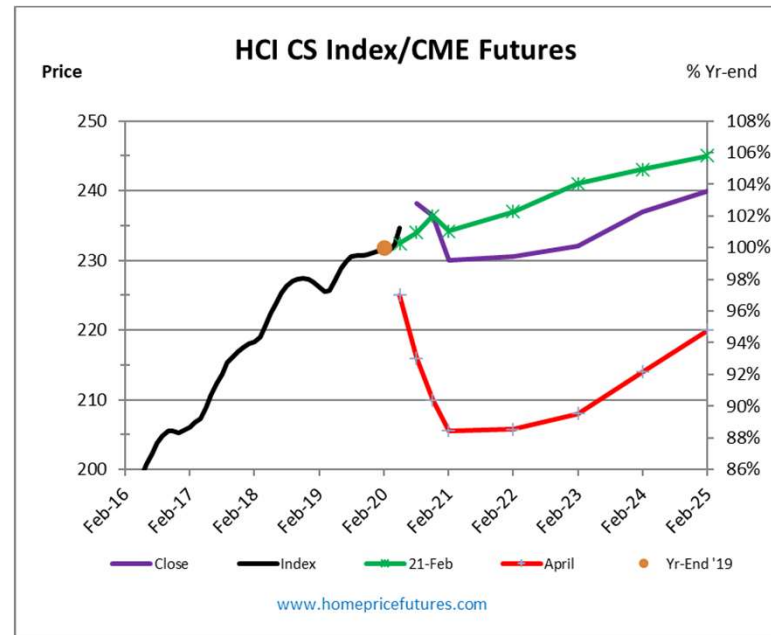
Disclosures

Risk Factors/Disclosure

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