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Playing FTSE With Taiwan Beyond TSMC's Rise To Hardware Dominance

by Tariq Dennison, +852 9476 2868

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Image credit: My own photo of Sky 85 Tower in Kaosiung, August 2014

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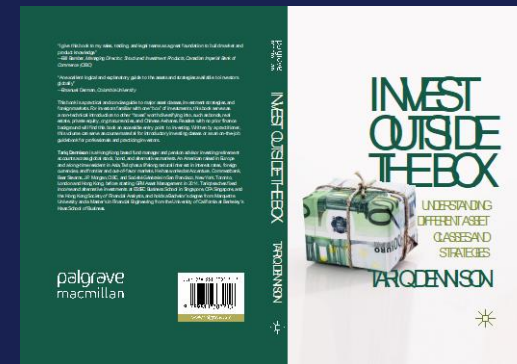
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 - Commerzbank (NY, London, Frankfurt)
 - Bear Stearns (NY)
 - J.P. Morgan (NY)
 - Canadian Imperial Bank of Commerce
 - Societe Generale (HK)
- Masters in Financial Engineering
 - University of California at Berkeley
- Visiting Prof at ESSEC Business School
 - Fixed Income
 - Alternative Investments
- Author of "Invest Outside the Box"



Outline of Fundamental Part

- Background on Taiwan's Market
- Why Taiwan?
- Currency drivers
- Understanding the FTSE Taiwan Index
- Focus on TSMC

Outline of Action Part

- Understanding the SGX FTSE Taiwan futures
- Sample long and short trading strategies

Spanish & Dutch Formosa in the 17th Century...



Taiwan under Qing Rule, 1683-1895

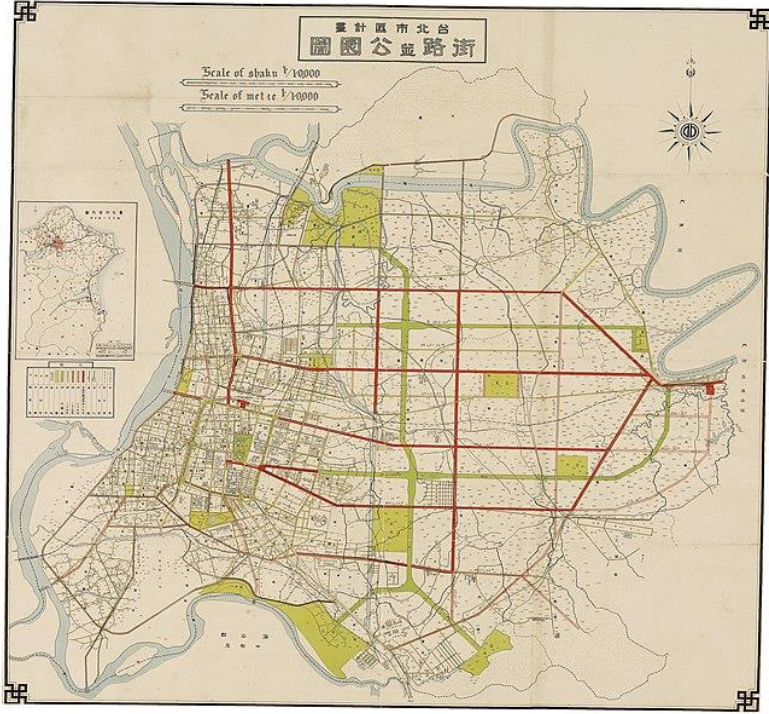
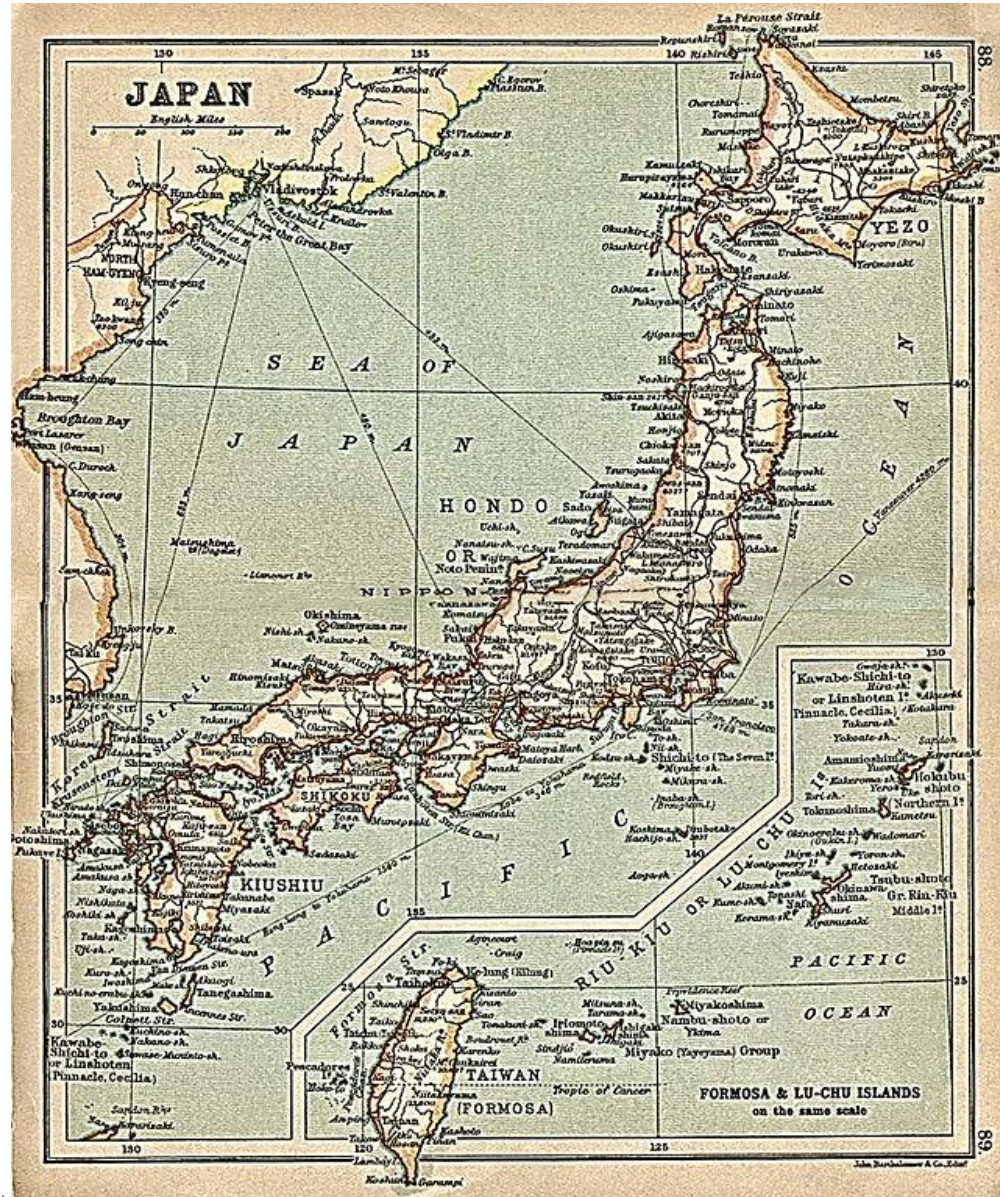


Taiwan under Japanese Rule, 1895*-1945** (1952?***)

* Treaty of Shimonoseki

** Hirohito surrenders

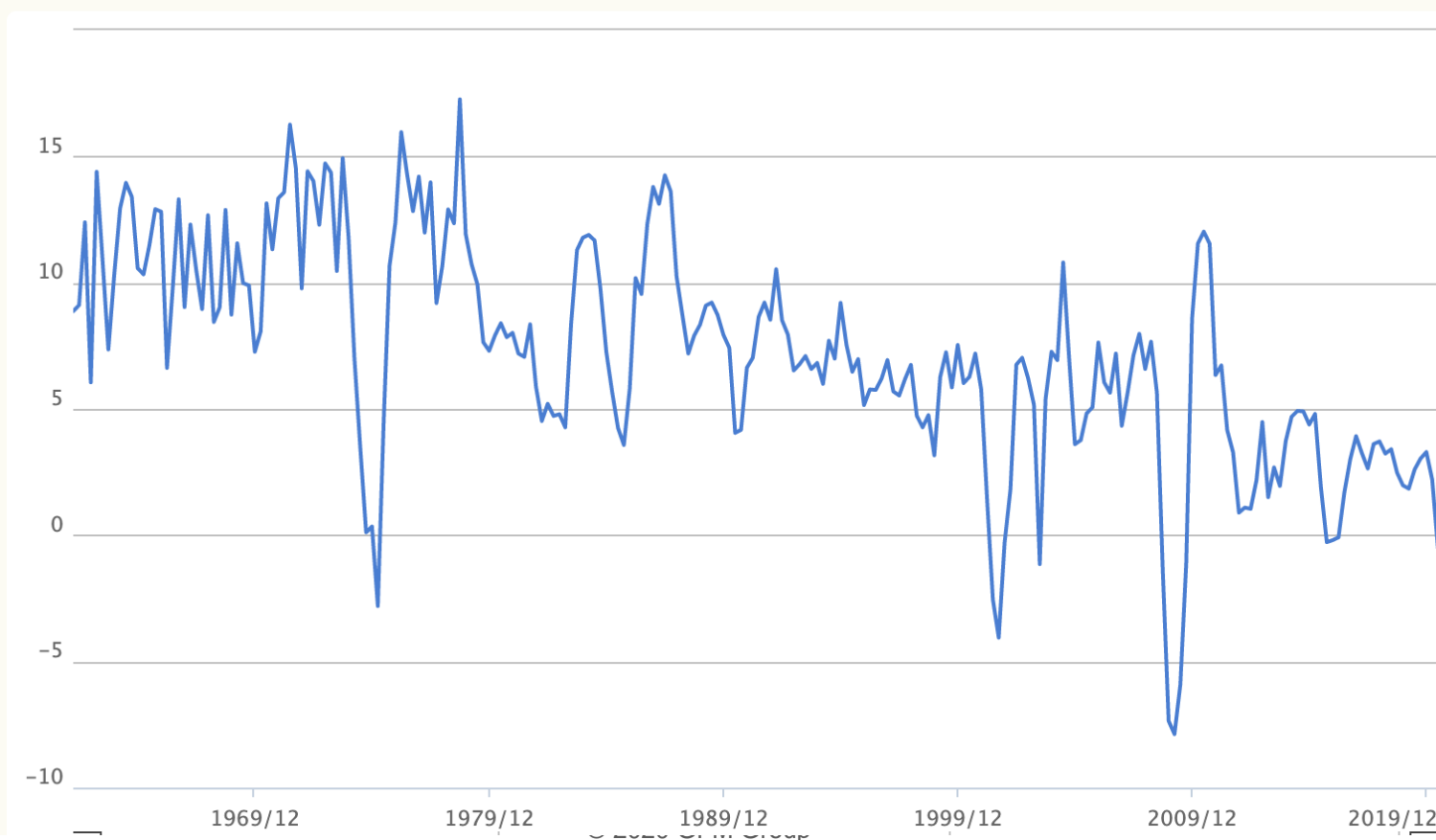
*** Treaty of San Francisco



Taiwan's Post-War Economy

Economic Growth Rate(yoy) (%)	-0.58 [2nd Quarter 2020 preliminary estimate]
Economic Growth Rate(yoy) (%)	3.92 [2021 forecast]
GDP(at Current Prices) (million NT dollars)	20,039,184 [2021 forecast]
Per Capita GDP (US dollars)	28,758 [2021 forecast]
Per Capita GNI (US dollars)	29,502 [2021 forecast]

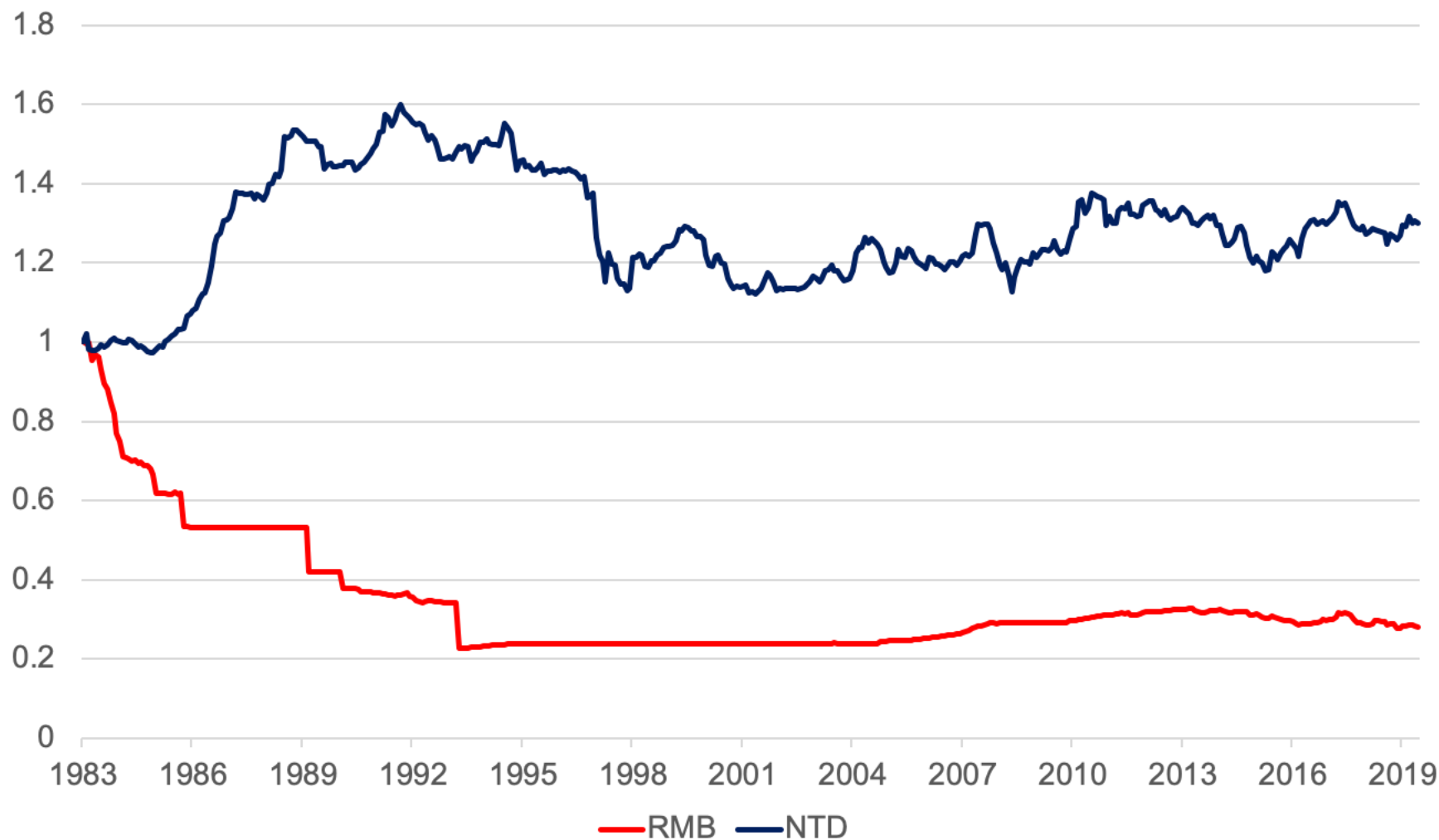
[::: Detail :::](#)



Source: <https://eng.stat.gov.tw/point.asp?index=1>

Currencies since 1983...

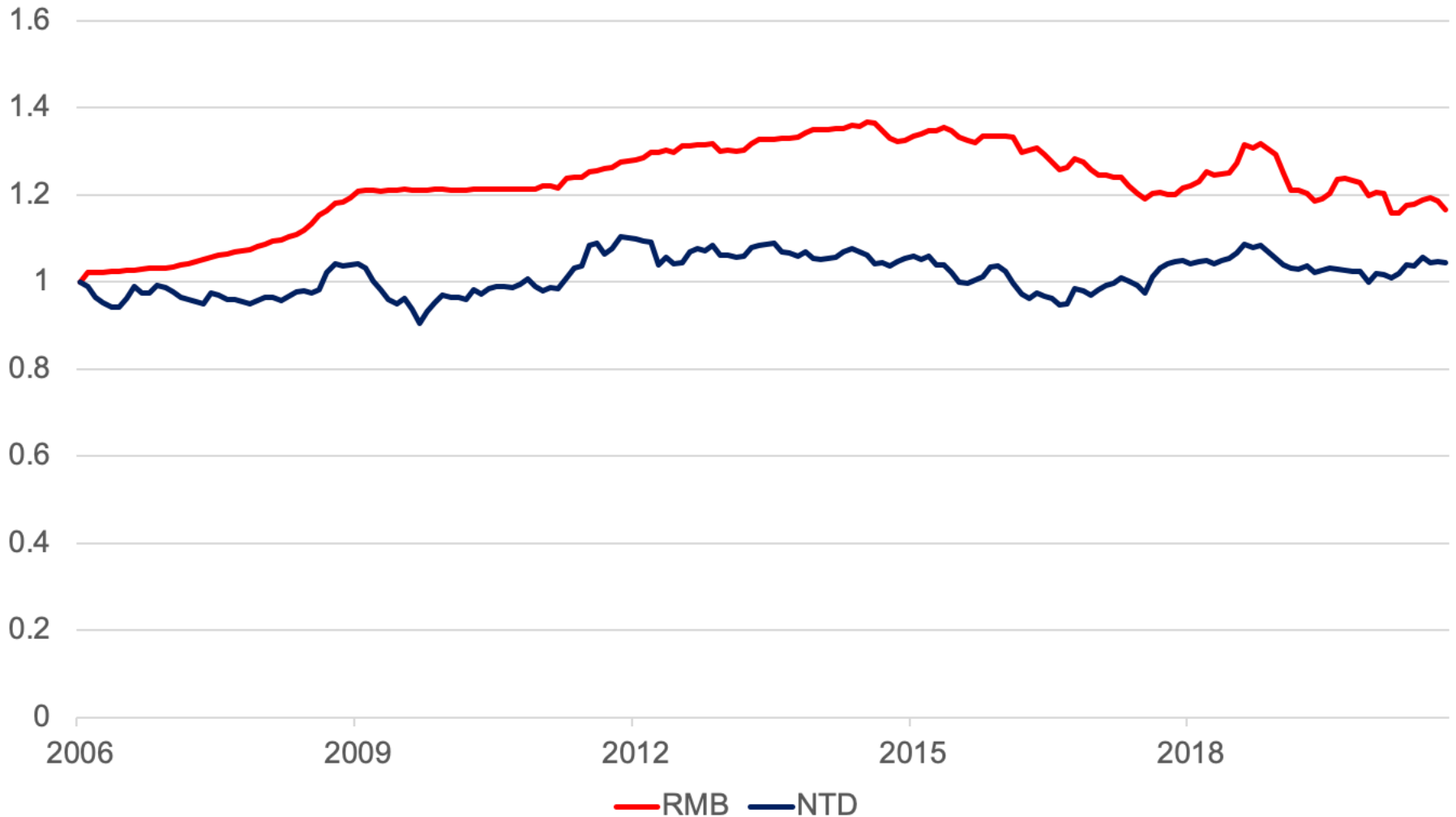
US\$1 to Chinese Yuan Renminbi vs New Taiwan Dollar, 1983-2020



Source: https://www.bis.org/statistics/full_data_sets.htm, NTD data 1949-1983 not available

... and since the 2005 RMB de-peg

US\$1 to Chinese Yuan Renminbi vs New Taiwan Dollar, 2006-2020

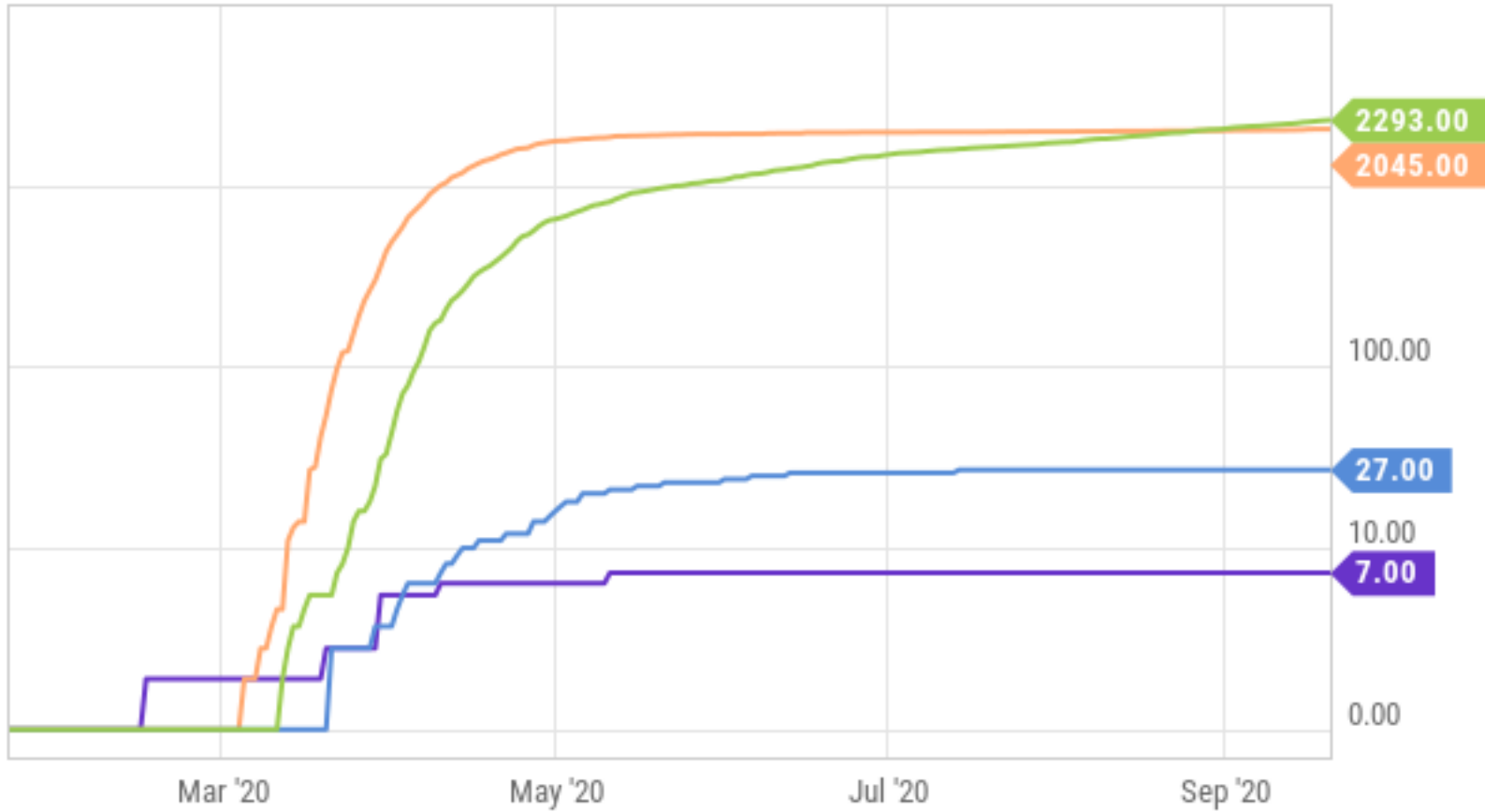


Source: https://www.bis.org/statistics/full_data_sets.htm

Taiwan's current nominal GDP by comparison

20	 Switzerland	715,360	20	 Switzerland	703,082	20	 Switzerland	705,141
—	 Taiwan	586,104	21	 Poland	592,164	21	 Poland	585,661
21	 Poland	565,854	—	 Taiwan (2017)	574,905	—	 Taiwan	579,865
22	 Thailand	529,177	22	 Thailand	543,650	22	 Sweden	556,087
23	 Sweden	528,929	23	 Sweden	530,833	23	 Belgium	543,026
24	 Belgium	517,609	24	 Belgium	529,607	24	 Argentina	518,475
25	 Iran	458,500	25	 Argentina	449,663	25	 Thailand	504,992
26	 Austria	447,718	26	 Nigeria	448,120	26	 Iran	473,091
27	 Nigeria	446,543	27	 Austria	446,315	27	 Austria	455,508
28	 Argentina	445,469	28	 Iran (2017)	445,345	28	 Norway	434,167
29	 Norway	417,627	29	 United Arab Emirates	421,142	29	 Nigeria	421,821
30	 United Arab Emirates	405,771	30	 Norway	403,336	30	 United Arab Emirates	414,179
31	 Israel	387,717	31	 Israel	395,099	31	 Ireland	382,674
32	 Ireland	384,940	32	 Ireland	388,699	32	 Israel	370,588
—	 Hong Kong	372,989	33	 Philippines	376,796	33	 South Africa	368,094
33	 Malaysia	365,303	34	 Singapore	372,063	—	 Hong Kong	362,682
34	 Singapore	362,818	—	 Hong Kong	366,030	34	 Singapore	361,115
35	 South Africa	358,839						

- Taiwan Coronavirus Deaths
- Switzerland Coronavirus Deaths
- Singapore Coronavirus Deaths
- Poland Coronavirus Deaths



Sep 21 2020, 5:34AM EDT. Powered by **YCHARTS**

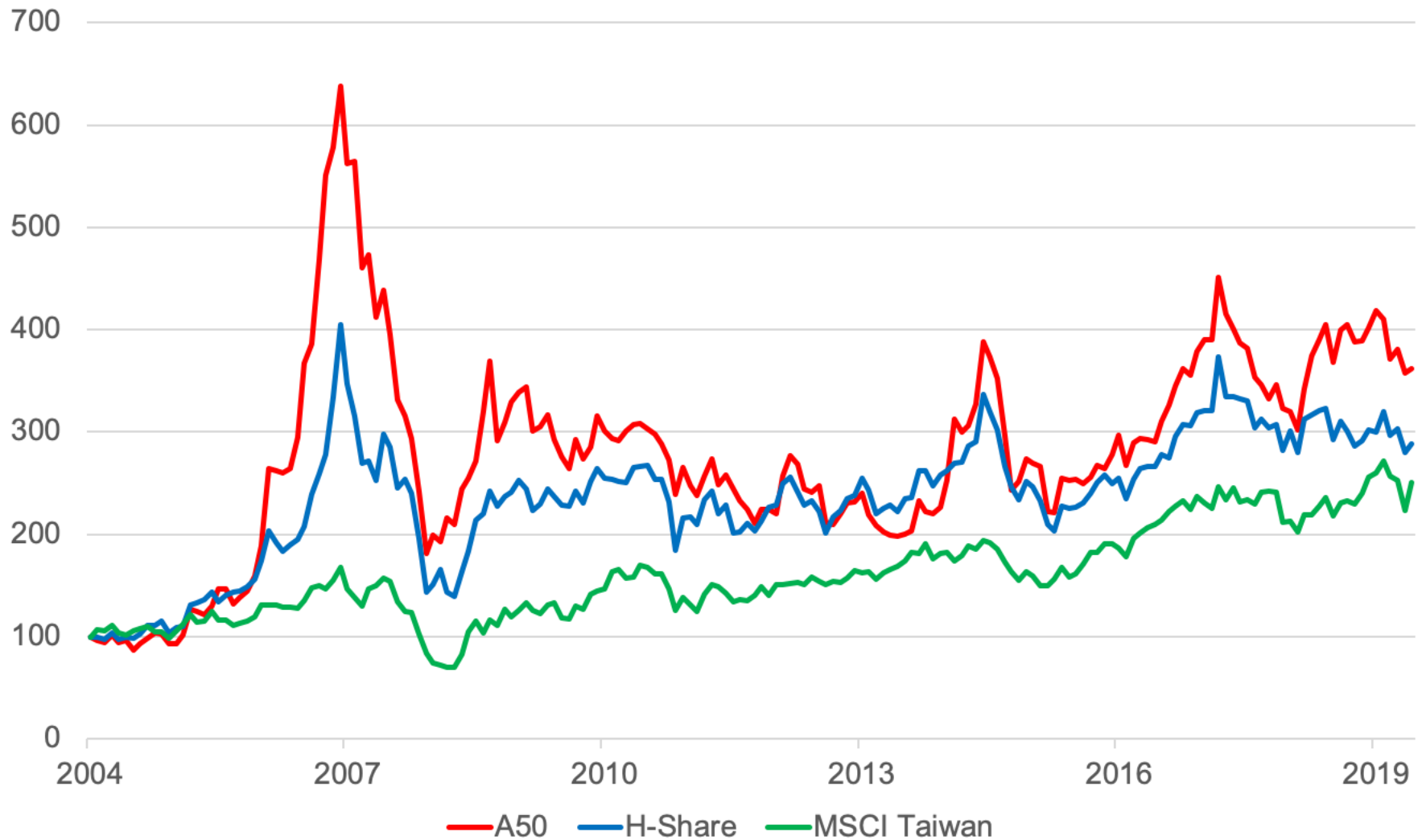
Compared with FTSE Weights...

Country Breakdown

Country	No. of Cons	Net MCap (USDm)	Wgt %
Australia	105	1,071,620	2.02
Austria	8	24,588	0.05
Belgium	14	140,907	0.27
Brazil	91	332,743	0.63
Canada	55	1,315,630	2.48
Chile	22	36,412	0.07
China	981	2,683,844	5.06
Hong Kong	92	551,444	1.04
Poland	14	41,470	0.08
Singapore	38	164,552	0.31
South Africa	67	236,435	0.45
Spain	26	337,018	0.64
Sweden	48	458,275	0.86
Switzerland	48	1,437,402	2.71
Taiwan	95	798,527	1.51
Thailand	48	135,694	0.26
Turkey	26	25,443	0.05
UAE	14	37,456	0.07
UK	130	2,094,904	3.95
USA	609	30,424,012	57.38
Totals	3947	53,022,086	100.00

Since 2001, Greater China Increasingly Coupled

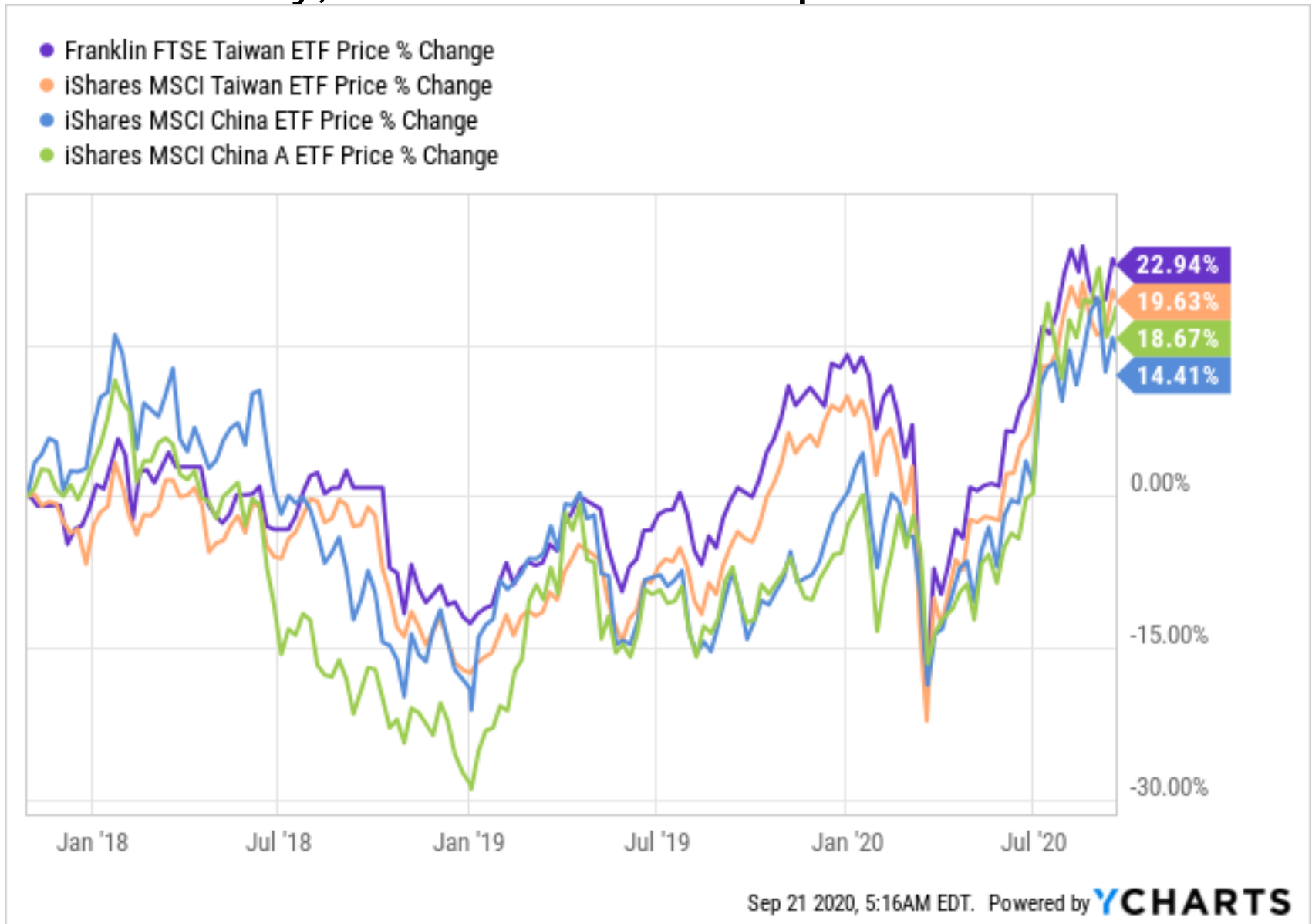
Total Return of \$100 Invested in A50 vs H-Share vs MSCI Taiwan



Source: Yahoo! Finance. 2823.HK used as proxy for A50, FXI for H-share, and EWT for MSCI Taiwan

But Taiwan's equity market remains even more difficult for foreign investors to access than Mainland China's A-share market!

More recently, FTSE Taiwan Outperformed w/ Less Vol



FTSE vs MSCI Taiwan

Biggest difference: 20% **quarterly** cap on single weight, 48% on sum(4.5%)
 RIC Cap = to comply with US rules for registered investment companies*

Top 10 Constituents - FTSE Taiwan RIC Capped

Constituent	ICB Sector	Net MCap (USDm)	Wgt %
Taiwan Semiconductor Manufacturing	Technology Hardware & Equipment	190,742	25.16
Hon Hai Precision Industry	Electronic & Electrical Equipment	39,427	5.20
MediaTek	Technology Hardware & Equipment	35,340	4.66
Chunghwa Telecom	Fixed Line Telecommunications	17,730	2.34
Delta Electronics	Electronic & Electrical Equipment	17,542	2.31
Formosa Plastics Corp	Chemicals	16,360	2.16
Nan Ya Plastics	Chemicals	14,919	1.97
Largan Precision	Leisure Goods	14,907	1.97
CTBC Financial Holding	Banks	14,771	1.95
Cathay Financial Holding	Life Insurance/Assurance	14,148	1.87
Totals		375,886	49.59

ICB Industry Breakdown - FTSE Taiwan RIC Capped

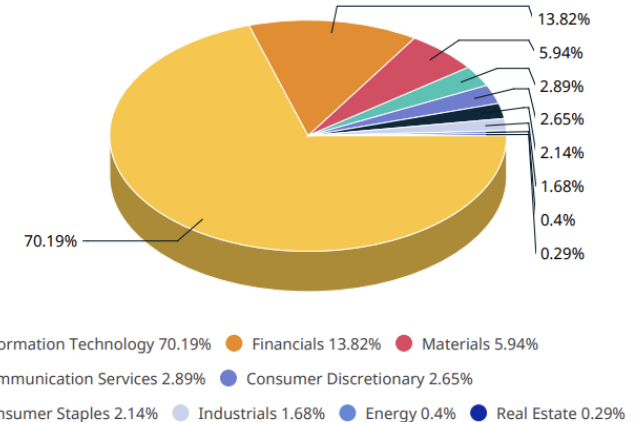
ICB Code	ICB Industry	No. of Cons	Net MCap (USDm)	Wgt %
0001	Oil & Gas	1	4,809	0.63
1000	Basic Materials	7	55,538	7.33
2000	Industrials	20	113,875	15.02
3000	Consumer Goods	12	52,570	6.94
4000	Health Care	1	677	0.09
5000	Consumer Services	5	19,688	2.60
6000	Telecommunications	3	29,066	3.83
8000	Financials	20	148,937	19.65
9000	Technology	26	332,808	43.91
Totals		95	757,967	100.00

MSCI Taiwan

TOP 10 CONSTITUENTS

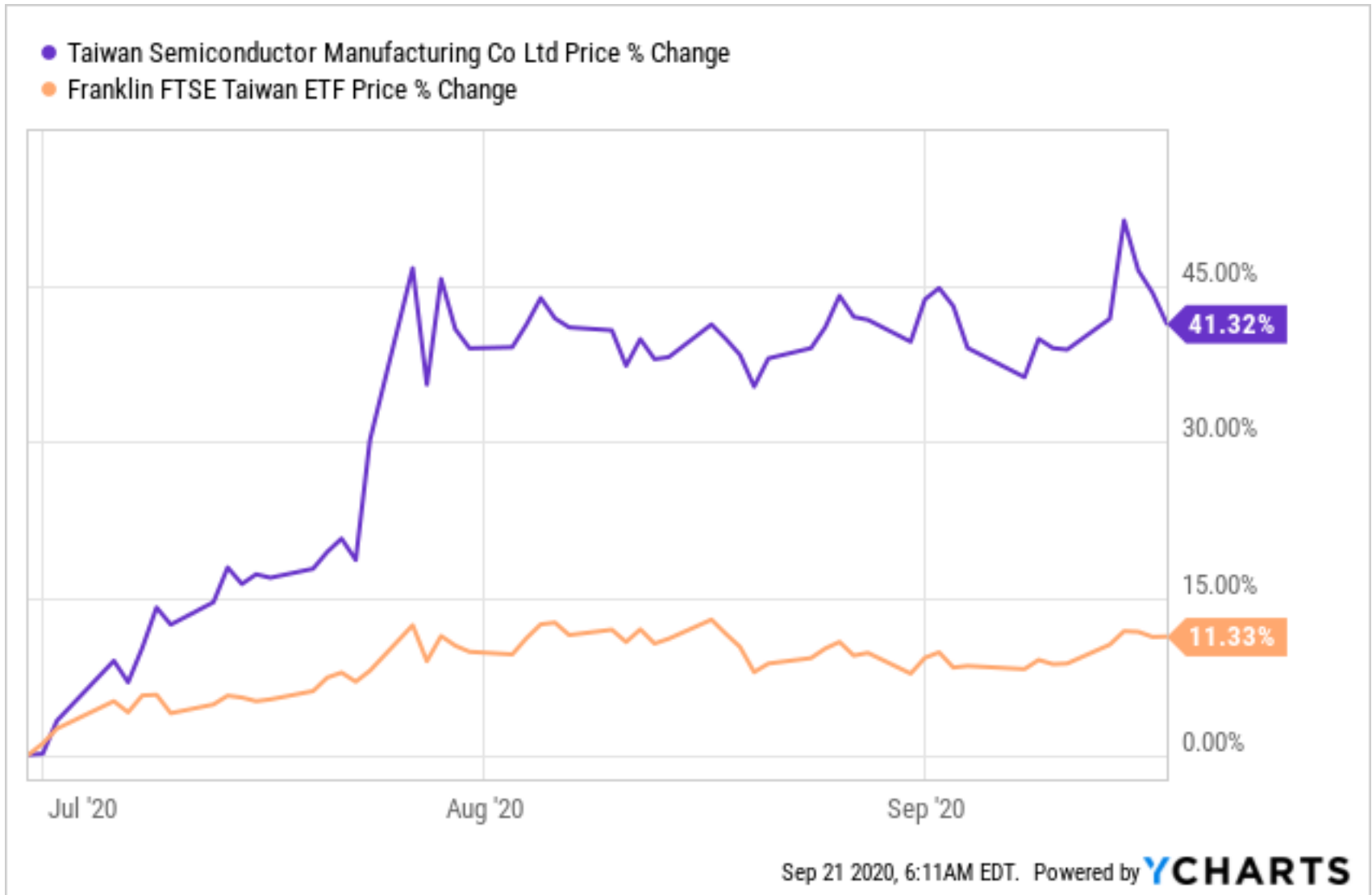
	Float Adj Mkt Cap (USD Billions)	Index Wt. (%)	Sector
TAIWAN SEMICONDUCTOR MFG	358.07	44.82	Info Tech
HON HAI PRECISION IND CO	32.70	4.09	Info Tech
MEDIATEK INC	28.62	3.58	Info Tech
CHUNGHWA TELECOM CO	14.06	1.76	Comm Svcs
DELTA ELECTRONICS	12.55	1.57	Info Tech
LARGAN PRECISION CO	11.61	1.45	Info Tech
CTBC FINANCIAL HOLDING	11.33	1.42	Financials
UNI-PRESIDENT ENT.	10.96	1.37	Cons Staples
MEGA FINANCIAL HOLDING	10.85	1.36	Financials
NAN YA PLASTIC	10.80	1.35	Materials
Total	501.55	62.79	

SECTOR WEIGHTS

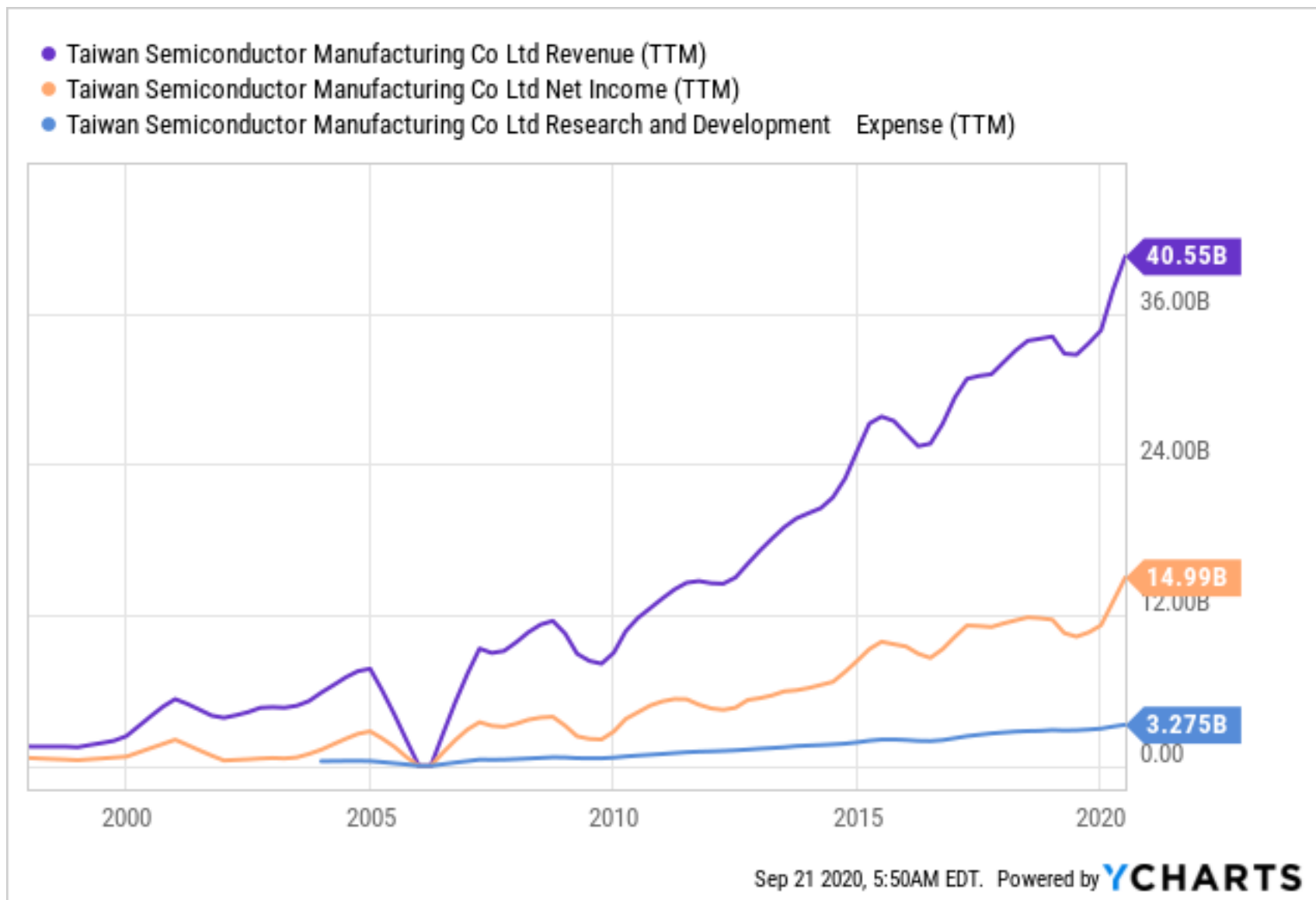


* This is why the US listed MSCI Taiwan Index ETF has deviated so much from the index!

Cap triggered by recent outperformance --> take profits



Longer-term numbers on TSMC:





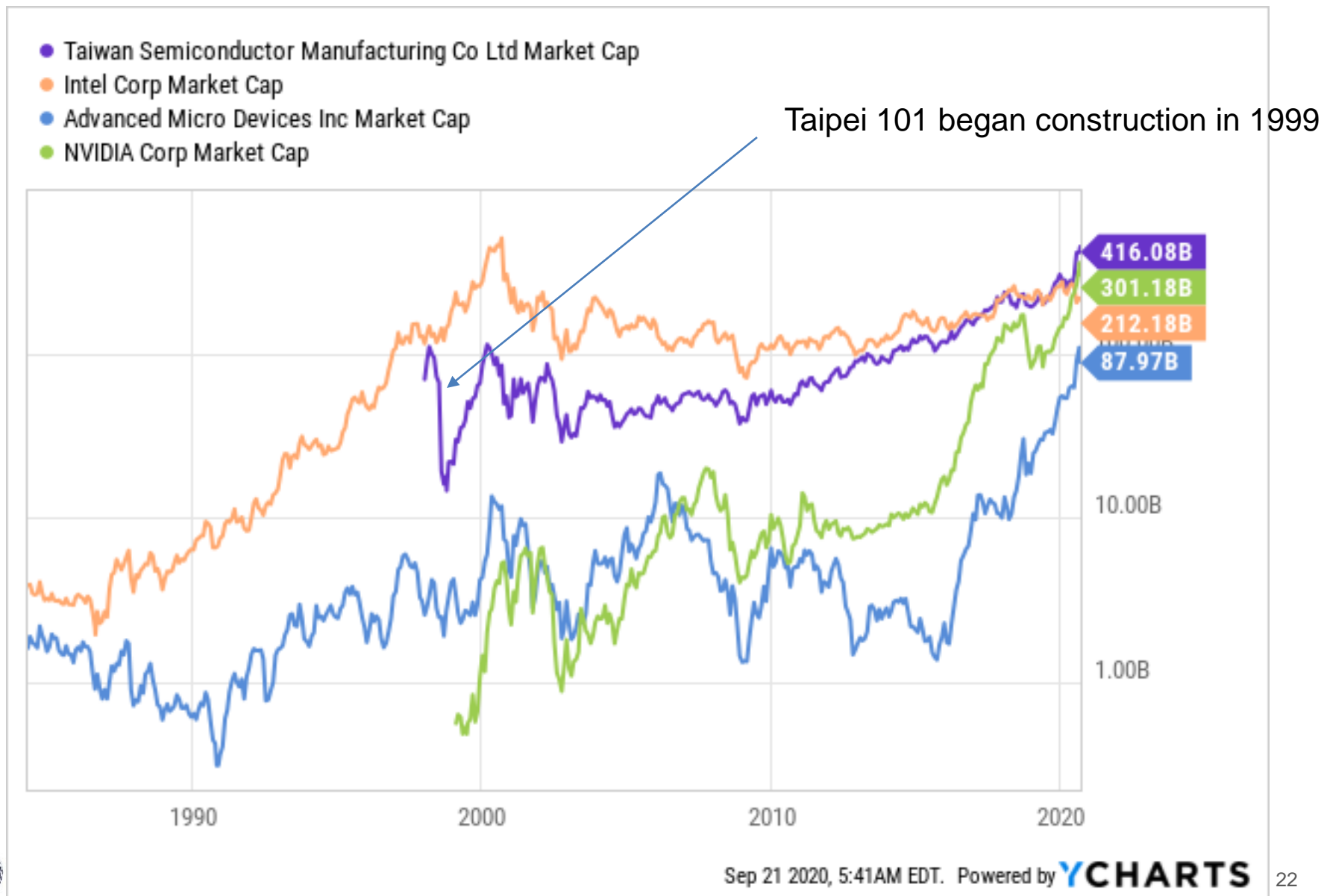
Dividend

Year	Per Common Share		Ex-Dividend Date	Record Date	Payment Date
	Stock Dividend	Cash Dividend			
2Q20	-	NT\$2.5	2020/12/17	2020/12/23	2021/01/14
1Q20	-	NT\$2.5	2020/09/17	2020/09/23	2020/10/15
4Q19	-	NT\$2.5	2020/06/18	2020/06/24	2020/07/16
3Q19	-	NT\$2.5	2020/03/19	2020/03/25	2020/04/16
2Q19	-	NT\$2.5	2019/12/19	2019/12/25	2020/01/16
1Q19	-	NT\$2.0	2019/09/19	2019/09/25	2019/10/17
2018	-	NT\$8.0	2019/06/24	2019/06/30	2019/07/18
2017	-	NT\$8.0	2018/06/25	2018/07/01	2018/07/19
2016	-	NT\$7.0	2017/06/26	2017/07/02	2017/07/20
2015	-	NT\$6.0	2016/06/27	2016/07/03	2016/07/21
2014	-	NT\$4.49987539	2015/06/29	2015/07/05	2015/07/23
2013	-	NT\$2.99991232	2014/07/14	2014/07/20	2014/08/06
2012	-	NT\$2.99955220	2013/07/03	2013/07/09	2013/07/24
2011	-	NT\$2.99948071	2012/07/04	2012/07/10	2012/07/25
2010	-	NT\$2.99951326	2011/06/29	2011/07/05	2011/07/20
2009	-	NT\$2.99973242	2010/07/06	2010/07/12	2010/07/22

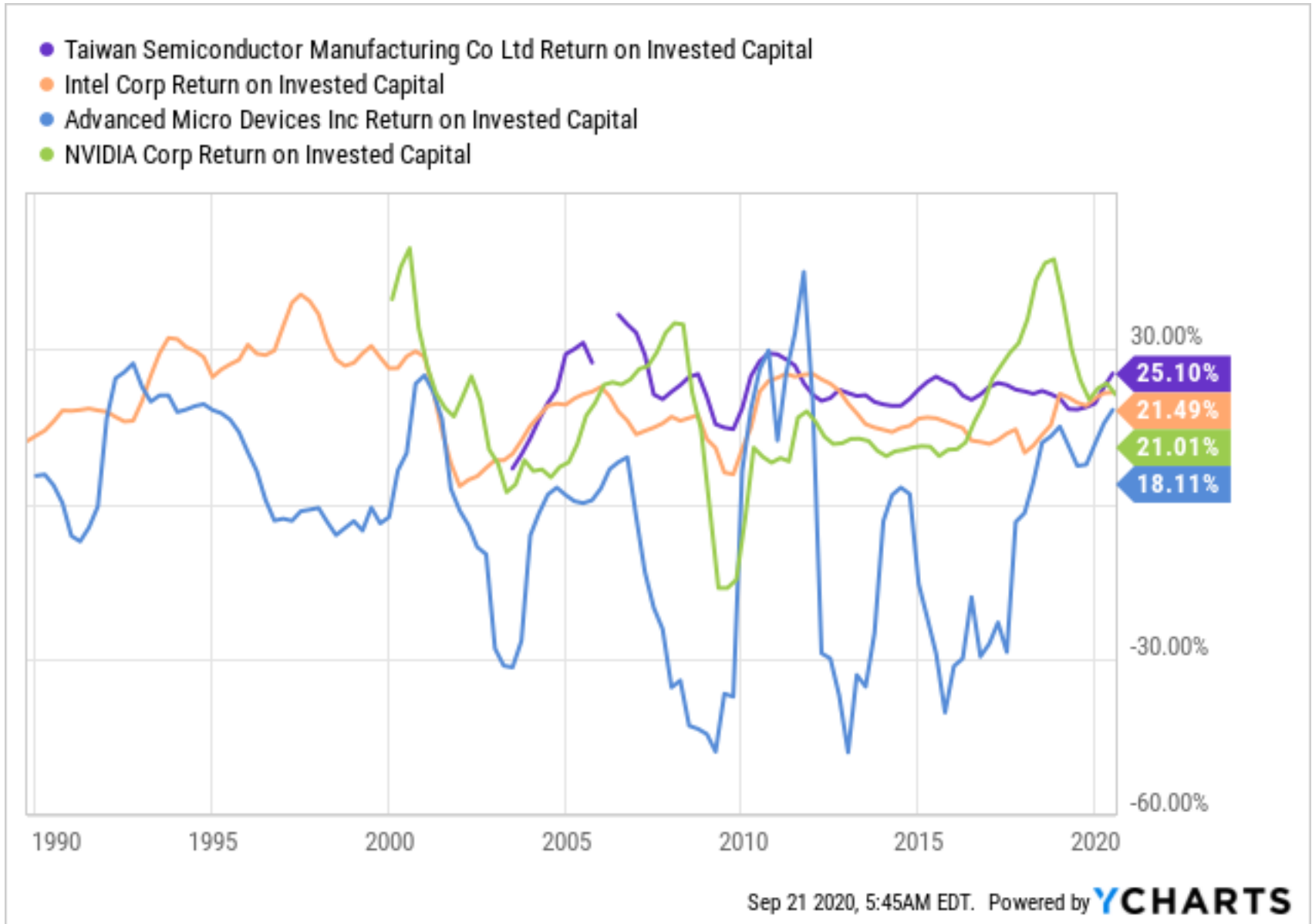
TSMC's impressive dividend history



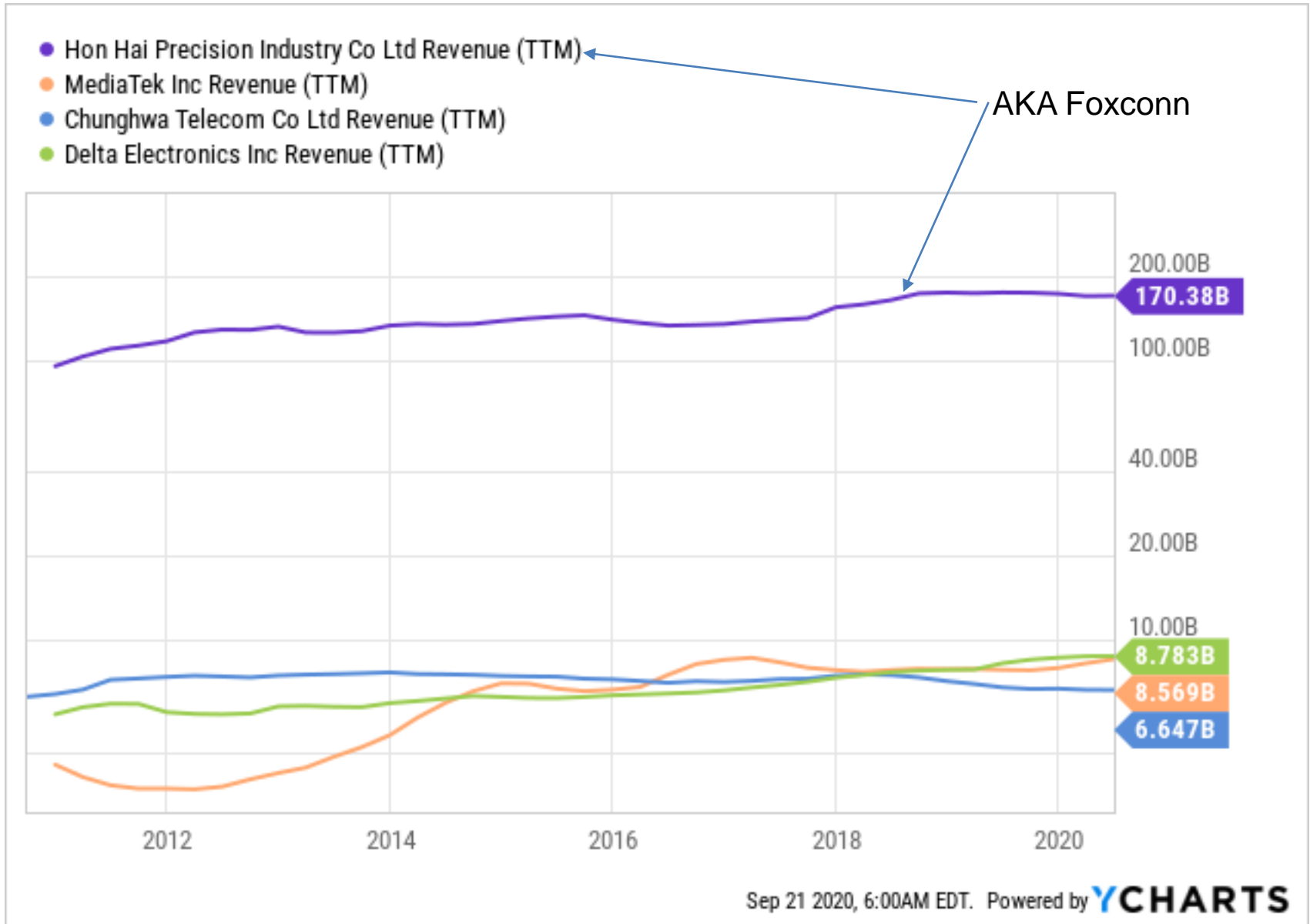
Compared with US chip giants



TSMC: more consistently profitable

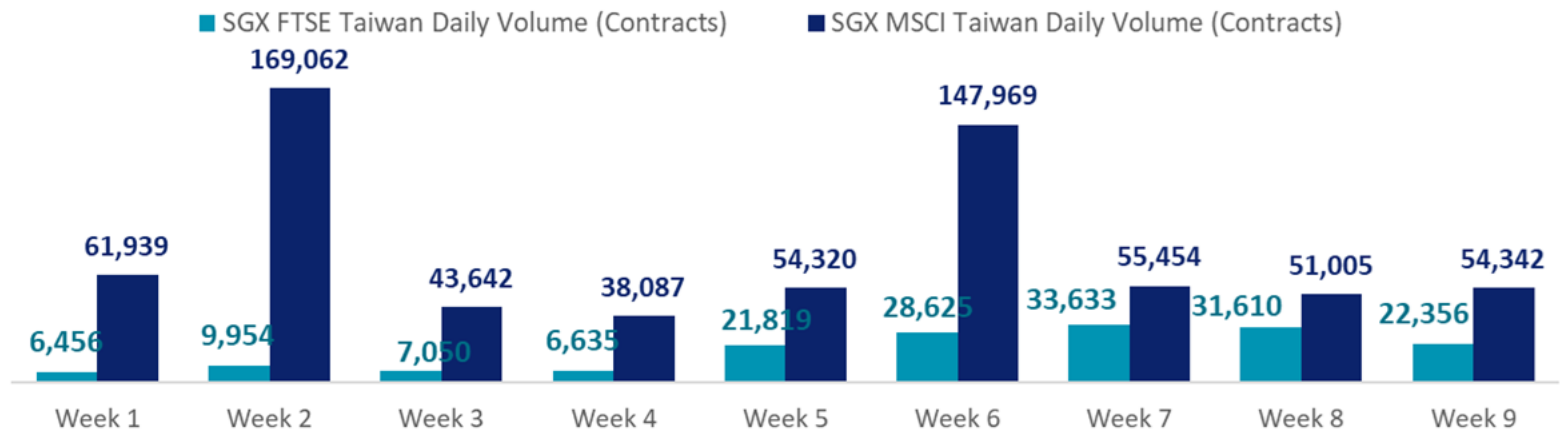


... vs the rest of the top 5:



Now, on to actionable futures trades...

The SGX MSCI Taiwan Futures twilights this October, hence the gradual shift to the FTSE Futures



Source: SGX

Home > Derivatives

Delayed Prices - Futures

Category: **Equity Index** | Contract: **TWN - SGX FTSE Taiwan Index Futures** | Trading Session: **All** Show Prices

Show TAIC trades

Customise

Session	Month	Last	Change	Bid Size	Bid	Ask	Ask Size	Screen ...	Open Interest
T	Sep 2020	1,105.25	-14.75	0	-	1,107.00	12	14,891	6,394
T+1	Sep 2020	1,104.00	-	52	1,103.75	1,104.25	3	321	-
T	Oct 2020	1,101.75	-11.25	20	1,050.25	1,140.75	20	677	1,492
T+1	Oct 2020	-	-	1	1,096.00	1,097.00	1	1	-
T	Nov 2020	-	-	20	1,054.50	1,144.50	20	0	600
T+1	Nov 2020	-	-	20	1,054.50	1,144.50	20	0	-
T	Dec 2020	-	-	20	1,039.75	1,136.75	20	0	1,001
T+1	Dec 2020	-	-	25	1,071.25	1,103.25	25	0	-
T	Mar 2021	-	-	0	-	-	0	0	-
T+1	Mar 2021	-	-	0	-	-	0	0	-
T	Jun 2021	-	-	0	-	-	0	0	-
T+1	Jun 2021	-	-	0	-	-	0	0	-
T	Sep 2021	-	-	0	-	-	0	0	-
T+1	Sep 2021	-	-	0	-	-	0	0	-
T	Dec 2021	-	-	0	-	-	0	0	-
T+1	Dec 2021	-	-	0	-	-	0	0	-

View Details

TAIWAN FUND INC - NYSE
 Stock(SMART) ↑↔

LYXOR MSCI TAIWAN - SBF
 Stock(SMART)

FTSE Taiwan RIC Capped Price Return TWD Index - OTC
 Futures

Search by company name

[View Popular Products](#)

TWN@SGX			1 pt = \$40.00 ⓘ
TWN SEP	Sep29'20	1110.50	
TWN OCT	Oct29'20	1102.75	
TWN NOV	Nov27'20	1104.00	
TWN ∞ SEP	Continuous (Sep)	1110.50	
More/Multiple Futures Spreads			

FTSE Taiwan RIC Capped Price Return TWD Index

Financial Instrument	Bid	Ask	Last
TWN ∞ Sep29'20 @SGX	◆ 1109.50	1109.75 ◆	◆ 1109.75

Order Description

SELL 1

Order Type LMT Routing SGX Time in Force DAY
 Limit Price 1120.00 Clearing IB

Messages

Amount		Margin Impact (in USD)			
Amount			Current	Change	Post-trade*
Amount	44,800 USD	Equity with Loan	133,155	-1	133,154
Commission (est.)	1.25 USD	Initial Margin	45,184	2,817	48,000
Total	44,798.75 USD	Maintenance Margin	37,308	2,253	39,561
		Position	0	-1	-1

*This is a current projection and is subject to change.

Don't display this message again.

Override and Transmit Cancel

Direct Stock / ETF

- Buy with cash
- Borrow to short
- Hold as long as you wish
- FX full capital amount
- Dividend / tax issues?
- Smaller lot sizes

Futures

- Small margin requirement
- Short w/ no borrow
- Must roll monthly/quarterly
- FX only the margin
- Implied div priced in
- “Institutional” liquidity

Strat 1: Buy and Roll

- "Permanent" long exposure to the index
- Synthetic ownership = no explicit dividend or withholding tax
- Efficient use of capital and leverage
- Possible "loan yield"

Risks

- Execution costs / risks with periodic roll
- Delisting or other sudden change to contract listing
- Margin calls

Strat 2: Sell to hedge

- Short position to offset "beta" exposure in a broader portfolio
- Capital efficient short exposure, no borrowing
- Isolate / fine tune drivers of alpha vs beta

Risks

- Your shorts outperform your longs
- Still at risk of margin calls, contract discontinuation, etc.

Strat #3: FTSE vs MSCI

- Futures vs Futures trade
- Margin offsetting
- Requires quarterly view on differences between indexes

Risks

- High leverage needed for narrow "alpha edge"
- High leverage means high risk of margin calls
- Requires specialist focus on the index spreads



GLOBAL FINANCIAL MARKETS
GROUP

Questions?



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 TARIQ DENNISON

Long Run Income



Securities

Fixed Income

Derivatives

Indices

Home > Derivatives

Delayed Prices - Futures

Category: **Equity Index** Contract: **TW - SGX MSCI Taiwan Index Futures** Trading: **T**

Show TAIC trades

Session	Month	Last	Bid Size	Bid	Ask	Ask Size	Total Vol...	Open Int...
T	May 2020	404.10	12	404.00	404.10	15	49,830	154,171
T	Jun 2020	400.60	5	399.00	405.00	4	14	44
T	Jul 2020	-	0	-	-	0	0	-
T	Sep 2020	-	1	389.00	396.10	1	0	5
T	Dec 2020	-	2	384.30	397.20	1	0	-
T	Mar 2021	-	2	360.10	418.30	5	0	-

After hours:

Session	Month	Last	Change	% Chan...	Bid Size	Bid	Ask	Ask Size	Open	High	Low	Screen ...
T	May 2020	407.00	+2.90	0.72	1	406.90	407.00	2	407.40	409.70	405.20	27,549
T+1	May 2020	407.50	-	-	13	407.50	407.60	67	407.20	407.80	406.90	777
T	Jun 2020	402.80	+2.60	0.65	1	401.10	405.40	2	404.00	405.40	401.40	22
T+1	Jun 2020	403.40	-	-	12	402.70	403.60	1	402.60	403.40	402.60	7



Order Confirmation

MSCI Taiwan Index

Financial Instrument	Bid	Ask	Last
STW May28'20 @SGX	◆ 405.20	405.40 ◆	◆ 405.30

Order Description

SELL 1

Order Type LMT Routing SGX Time in Force DAY
Limit Price 414.40 Clearing IB

Messages

You are trying to submit an order without having market data for this instrument. IB strongly recommends against this kind of blind trading which may result in erroneous or unexpected trades.

Amount

Amount 41,440 USD
Commission (est.) 1.85 USD
Total 41,438.15 USD

Margin Impact (in USD)

	<u>Current</u>	<u>Change</u>	<u>Post-trade*</u>
Equity with Loan	107,765	-2	107,763
Initial Margin	63,580	7,598	71,177
Maintenance Margin	53,298	6,078	59,376
Position	0	-1	-1

*This is a current projection and is subject to change.

Don't display this message again.

Override and Transmit

Cancel

Taiwan in "Greater China"



● Shanghai
A-shares (CNY)
B-shares (USD)

● Shenzhen
A-shares (CNY)
B-shares (HKD)

● Taipei (TWD)

● Hong Kong (HKD)

● Macao (MOP, but no real market)

Source: https://commons.wikimedia.org/wiki/File:Greater_China.GIF

On to stocks, one map of “global China” equity benchmarks according to MSCI...

Key MSCI China Indexes	Domestic		Non-Domestic								
	Share Classes	China A	China H	China B	Red Chip	P Chip	HK	HSBC	Taiwan	US	SGP
Domestic China Index											
MSCI China A Index		●									
Non-domestic China Indexes											
MSCI China Index			●	●	●	●					
MSCI China H Index			●								
MSCI China B Index				●							
MSCI China Red Chip Index					●						
MSCI China P Chip Index						●					
MSCI China Free Index			●		●	●					
MSCI Hong Kong Index							●				
MSCI Overseas China Index										●	●
China Composite Indexes											
MSCI China A + H Index		●	●								
MSCI China A + B Index		●		●							
MSCI China A + B + H Index		●	●	●							
MSCI International China Index			●	●	●	●				●	●
MSCI China Free + Overseas China Index			●		●	●				●	●
MSCI Zhong Hua Index			●	●	●	●	●				
MSCI Zhong Hua + Overseas China Index			●	●	●	●	●			●	●
MSCI Zhong Hua + HSBC Index			●	●	●	●	●	●			
MSCI Golden Dragon Index			●	●	●	●	●		●		
MSCI Golden Dragon (A) Index		●	●	●	●	●	●		●		
MSCI Golden Dragon + Overseas China Index			●	●	●	●	●		●	●	●
MSCI All China Index		●	●	●	●	●				●	●
MSCI All China + Hong Kong + Taiwan Index		●	●	●	●	●	●		●	●	●

Source: <https://www.msci.com/documents/10199/c843449c-94e5-4a55-a606-fd0b7f234acb>