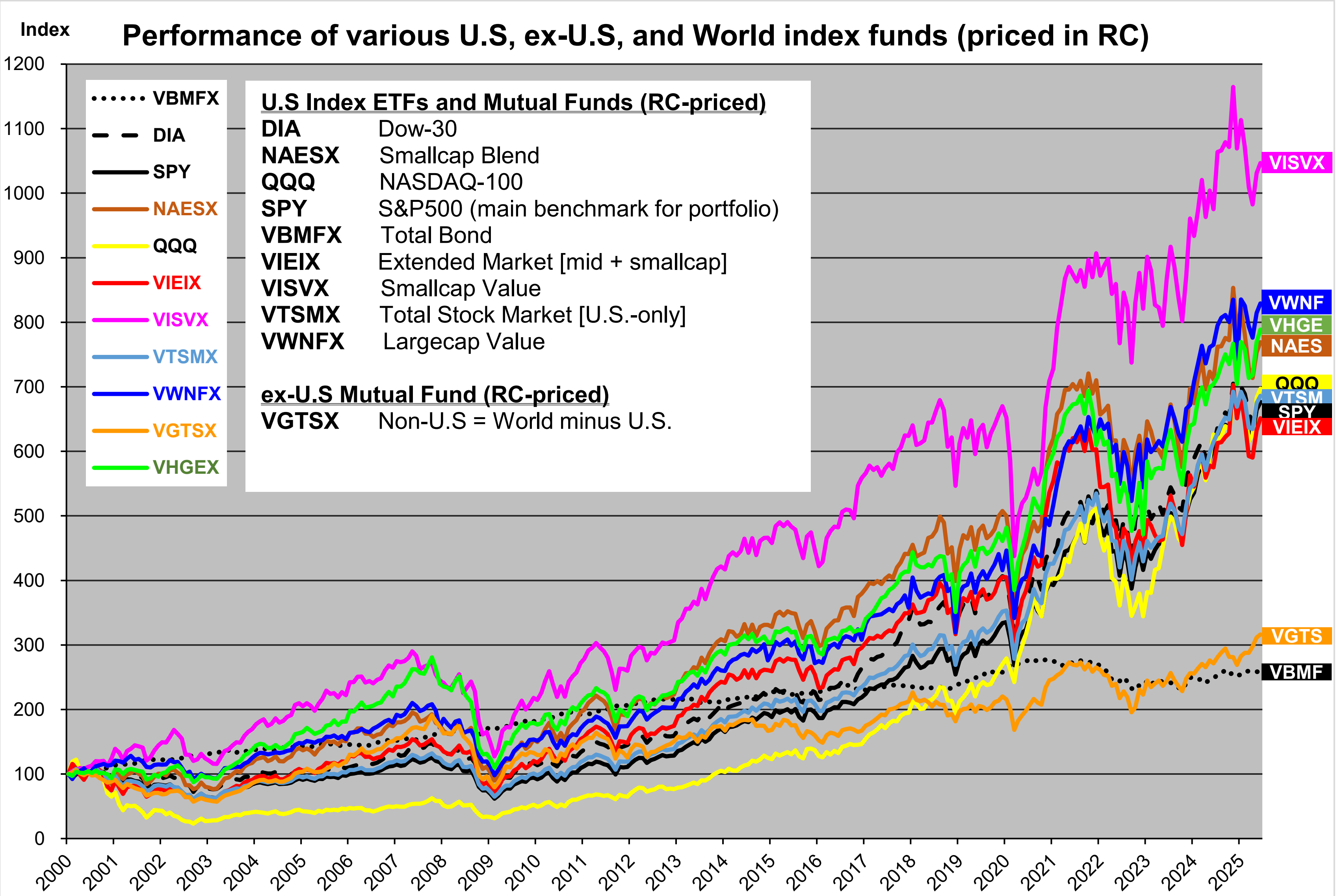
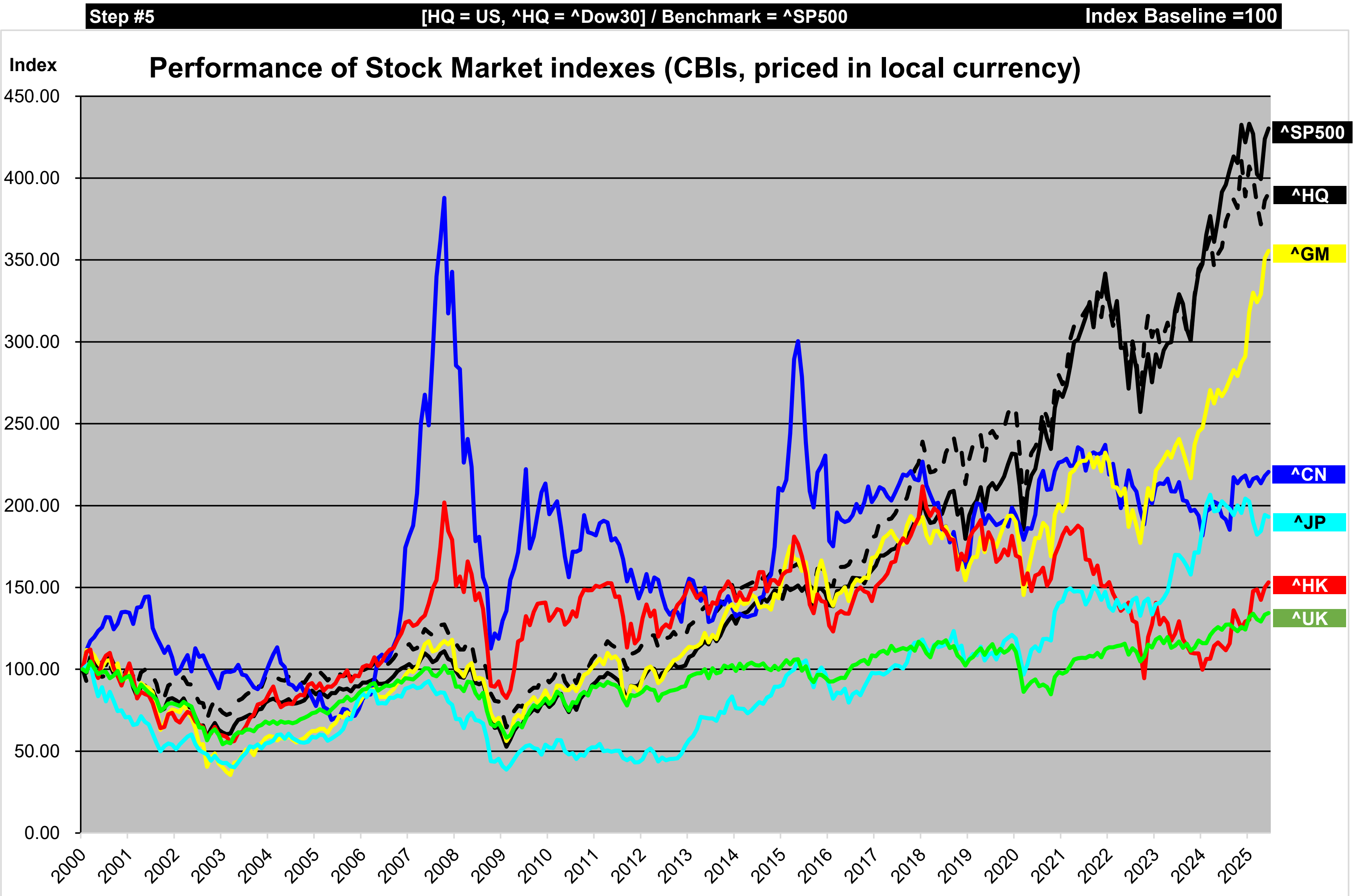
DO NOT delete this red banner and this worksheet.
DO NOT create your own Deliverables Worksheet. USE this Deliverables Worksheet.
Place/arrange your Deliverables below …

You should use this worksheet to "consolidate all your deliverable results and charts".
See BlackBoard **Documents > Individual International Equity Portfolio Project > s**
Or see **Phase4 Step #18** The Entire Project's Deliverables for instructions.

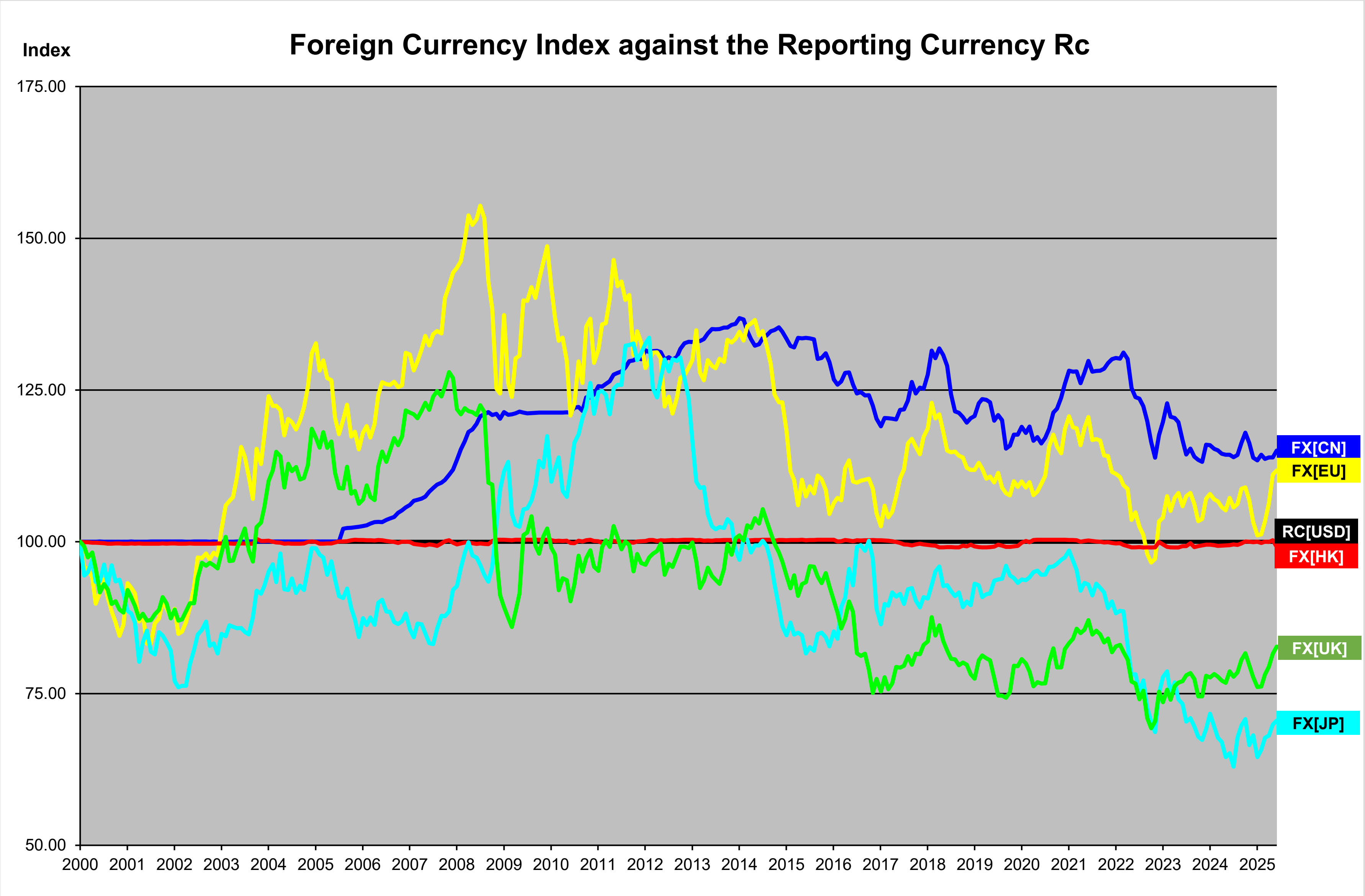
Step #4 **[HQ = US, RC = USD, ETF = DIA] / Benchmark = SP500 [SPY]** **Index Baseline =100**

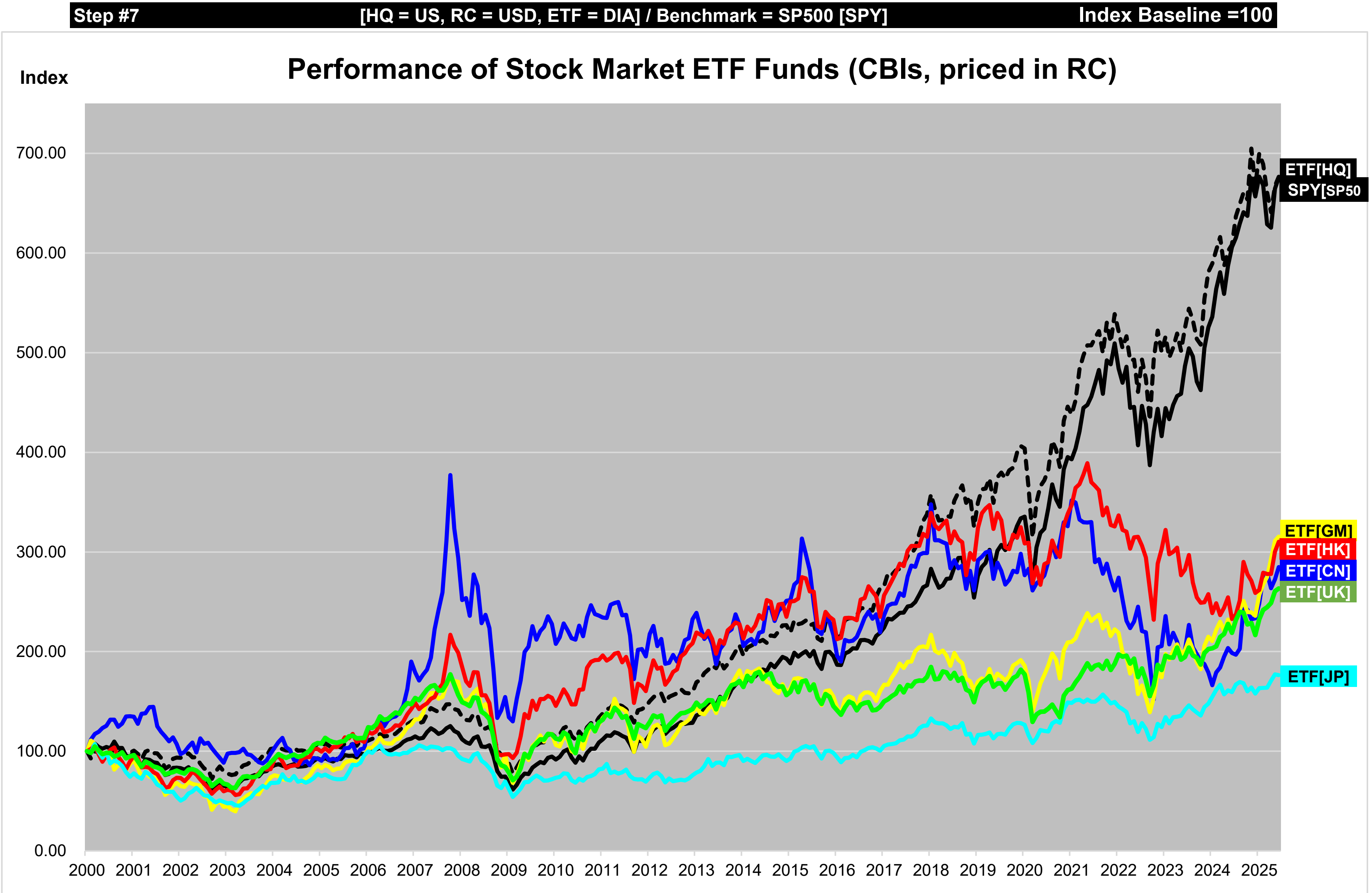




Step #5
[HQ = US, ^HQ = ^Dow30] / Benchmark = ^SP500
Index Baseline =100
Index
Performance of Stock Market indexes (CBIs, priced in local currency)
450.00
400.00
350.00
300.00
250.00
200.00
150.00
100.00
50.00
0.00
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
^SP500
^HQ
^GM
^CN
^JP
^HK
^UK

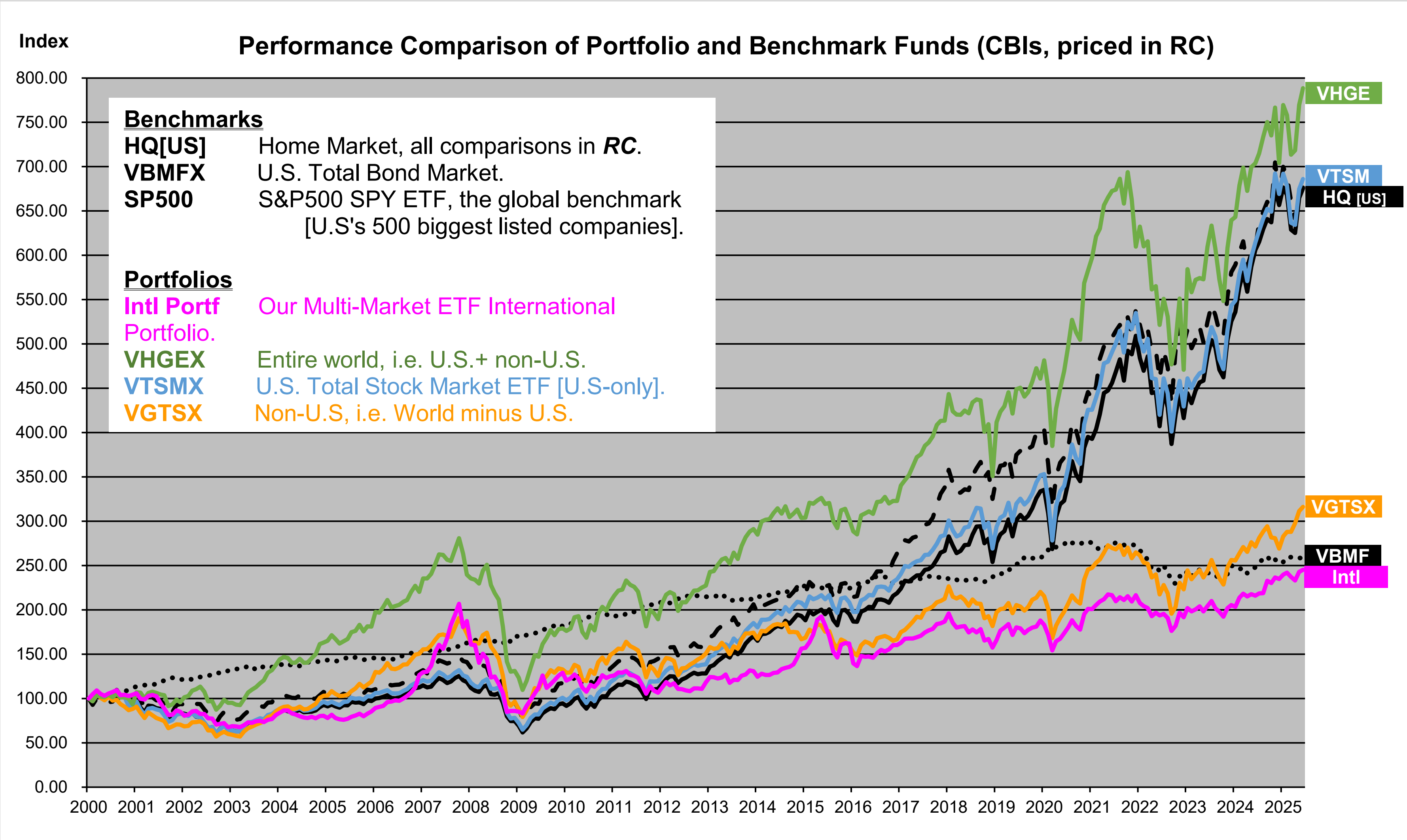
Step #6 [HQ = US, RC = USD] Index Baseline =100





Step #7
[HQ = US, RC = USD, ETF = DIA] / Benchmark = SP500 [SPY]
Index Baseline =100
Performance of Stock Market ETF Funds (CBIs, priced in RC)
Index
700.00
600.00
500.00
400.00
300.00
200.00
100.00
0.00
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
ETF[HQ]
SPY[SP50
ETF[GM]
ETF[HK]
ETF[CN]
ETF[UK]
ETF[JP]

Step #16 [HQ = US, RC = USD, ETF = DIA] / Benchmark = SP500 [SPY] Index Baseline =100



6-Mkt ETF Portfolio Returns and Statistics [HQ = US, RC = USD]

Step #10

	Market ETFs						6-Mkt ETF	Benchmark	
AA	20%	30%	10%	15%	15%	10%			
HPY[USD]	576.53%	184.85%	215.41%	210.16%	76.46%	163.37%	251.63%	575.61%	
Mth Avg	0.72%	0.61%	0.62%	0.56%	0.30%	0.44%	0.56%	0.73%	
Mth σ	4.29%	7.39%	6.88%	6.07%	4.69%	4.97%	4.80%	4.46%	
Sharpe	0.0806	0.0324	0.0353	0.0297	-0.0168	0.0135	0.0390	0.0792	
Mth RFR	0.38%	0.38%	0.38%	0.38%	0.38%	0.38%	0.3750%	0.3750%	
Correl	US[DIA]	CN[FXI]	GM[EWG]	HK[EWH]	JP[EWJ]	UK[EWU]	0.77		
US[DIA]		0.38	0.76	0.57	0.62	0.78		0.95	US[DIA]
CN[FXI]			0.50	0.73	0.41	0.54		0.42	CN[FXI]
GM[EWG]				0.65	0.62	0.84		0.79	GM[EWG]
HK[EWH]					0.52	0.72		0.61	HK[EWH]
JP[EWJ]						0.65		0.66	JP[EWJ]
UK[EWU]								0.80	UK[EWU]
								ρ(Mkt, US SPY)	

6-Mkt ETF Portfolio Returns and Statistics [HQ = US, RC = USD]

Step #12

	Market ETFs						6-Mkt Index Portfolio	Benchmark US Index ^SP500	
Weight:	20%	30%	10%	15%	15%	10%			
HPY%Δidx	290.87%	120.54%	255.56%	53.18%	93.15%	34.38%			
HPY%ΔFX	0.00%	15.01%	11.74%	-0.82%	-29.46%	-17.27%			
$HPY	290.87%	153.65%	297.29%	51.92%	36.24%	11.17%	148.34%	330.30%	
Mth Avg	0.54%	0.56%	0.66%	0.33%	0.28%	0.15%	0.45%	0.58%	
Mth σ	4.29%	7.11%	6.42%	6.17%	5.91%	4.70%	4.36%	4.40%	
Sharpe	0.0385	0.0259	0.0448	-0.0077	-0.0165	-0.0485	0.0166	0.0460	
Mth RFR	0.38%	0.38%	0.38%	0.38%	0.38%	0.38%	0.3750%	0.3750%	
Correl	^Dow30	^SSEC	^GDAXI	^HSI	^N225	^FTSE	0.73		
^Dow30		0.27	0.70	0.52	0.48	0.65		0.95	^Dow30
^SSEC			0.30	0.51	0.29	0.24		0.28	^SSEC
^GDAXI				0.53	0.50	0.78		0.73	^GDAXI
^HSI					0.45	0.52		0.57	^HSI
^N225						0.43		0.53	^N225
^FTSE								0.66	^FTSE
								ρ(Mkt, US^SP500)	

Step #13

[RC = USD] Market-by-Market Performance Comparison: Index vs ETF								Correl		
AA	Market	Idx/ETF	HPY[USD]	Mth Avg	Mth σ	Sharpe	Mth RFR	SP500	Market	Market
20%	US	^Dow30	290.87%	0.54%	4.29%	0.0385	0.3750%	0.95	1.00	US
		DIA	576.53%	0.72%	4.29%	0.0806	0.3750%	0.95		
30%	CN	^SSEC	120.54%	0.56%	7.11%	0.0259	0.3750%	0.28	0.64	CN
		FXI	184.85%	0.61%	7.39%	0.0324	0.3750%	0.42		
10%	GM	^GDAXI	255.56%	0.66%	6.42%	0.0448	0.3750%	0.73	0.81	GM
		EWG	215.41%	0.62%	6.88%	0.0353	0.3750%	0.79		
15%	HK	^HSI	53.18%	0.33%	6.17%	-0.0077	0.3750%	0.57	0.90	HK
		EWH	210.16%	0.56%	6.07%	0.0297	0.3750%	0.61		
15%	JP	^N225	93.15%	0.28%	5.91%	-0.0165	0.3750%	0.53	0.69	JP
		EWJ	76.46%	0.30%	4.69%	-0.0168	0.3750%	0.66		
10%	UK	^FTSE	34.38%	0.15%	4.70%	-0.0485	0.3750%	0.66	0.71	UK
		EWU	163.37%	0.44%	4.97%	0.0135	0.3750%	0.80		

Step #14

[RC = USD] Perf Comparison: Mkt Index Portf vs. ETF Portf vs. US Bnchmrk							Correl			
0		HPY[USD]	Mth Avg	Mth σ	Sharpe	Mth RFR	ETF Portf	^SP500	SPY	
Yours:	Market Idx Portf	148.34%	0.45%	4.36%	0.0166	0.3750%	0.87	0.73	0.73	Idx Portf
	Market ETF Portf	251.63%	0.56%	4.80%	0.0390	0.3750%		0.77	0.77	ETF Portf
US	^SP500 Market Idx	330.30%	0.58%	4.40%	0.0460	0.3750%			0.99	^SP500
Bnchmrk	SPY Market ETF	575.61%	0.73%	4.46%	0.0792	0.3750%				

Risk-Return statistics and Coefficient of Correlation between the monthly HPYs of VBMFX (U.S. Total Bond) and select U.S. index funds, your Market ETFs, your ETF Portfolio, and global funds:

Step #15

funds:	VBMFX TotBond	DIA US	SPY ^SP500	VTSMX UStotMkt
HPY[USD]	158.32%	576.53%	575.61%	585.98%
Mth Avg:	0.32%	0.72%	0.73%	0.74%
Mth σ:	1.23%	4.29%	4.46%	4.59%
Correls with VBMFX:	-	0.08	0.12	0.12
		U.S. Index fund correls below 0		

	CN FXI	GM EWG	HK EWH	JP EWJ	UK EWU	Your ETF Portfolio	VHGEX Global	VGTSX ex-US
HPY[USD]	184.85%	215.41%	210.16%	76.46%	163.37%	251.63%	688.59%	216.22%
Mth Avg:	0.61%	0.62%	0.56%	0.30%	0.44%	0.56%	0.82%	0.50%
Mth σ:	7.39%	6.88%	6.07%	4.69%	4.97%	4.80%	5.25%	4.90%
Correls with VBMFX:	0.16	0.14	0.19	0.18	0.15	0.19	0.21	0.21
	Foreign funds correls close to or even below 0							

PS: TotBond U.S. Total Bond fund has GREAT correls with ANY equity fund -- whether U.S., foreign, or global funds.