

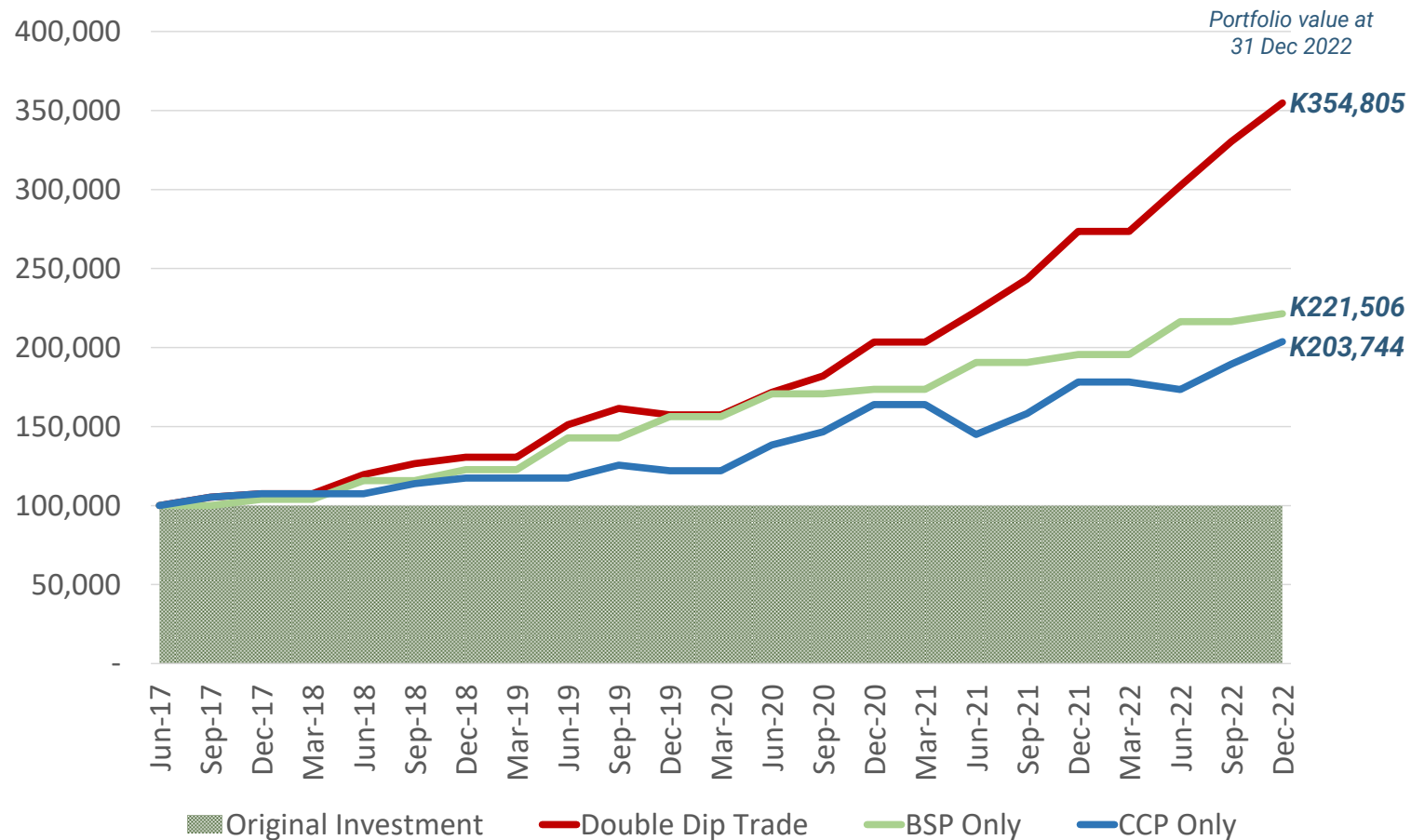
Dividend Double Dipping?.....don't mind if I do!

It is well understood by investors and analysts on the PNGX that Credit Corporation PNG Limited (**PNGX:CCP**) derives a large part of its cash flows and valuation from its >36 million shares in BSP Financial Group (**PNGX: BSP**).

BSP typically pays its main dividend distribution in the first half of the financial year, whereas CCP typically pays dividends in the second half.

This, combined with the knowledge that BSP dividends form the bulk of the cash distributed by CCP, made our analysts wonder whether the historical data betrays a viable 'Dividend Double Dip Strategy'?

On an ex-post basis (which has its limits), the findings are dramatic!



Analysis based on trading and dividend data for PNGX:BSP and PNGX:CCP from 30 June 2017 through 31 December 2022. Three investment strategies considered. Investment of K100,000 assumed. Efficient markets and NIL transaction costs. Dividend withholding tax at 15% assumed:

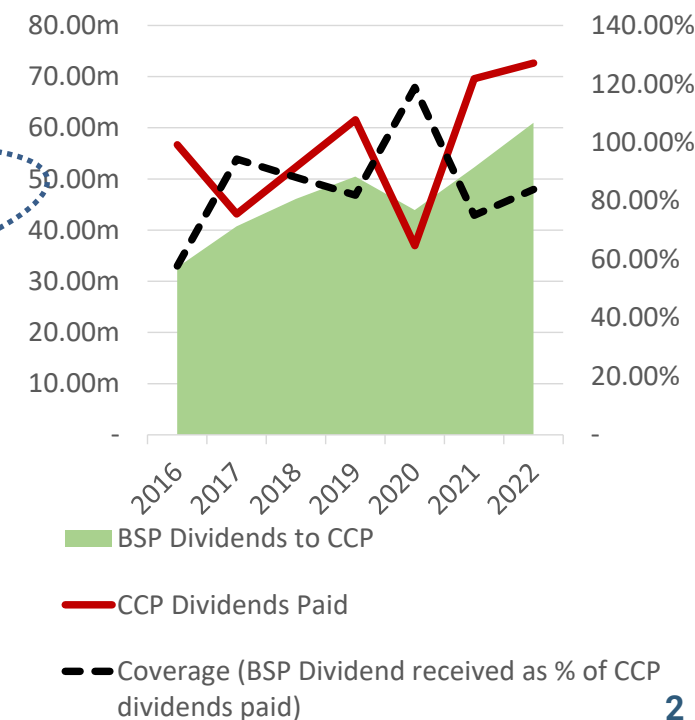
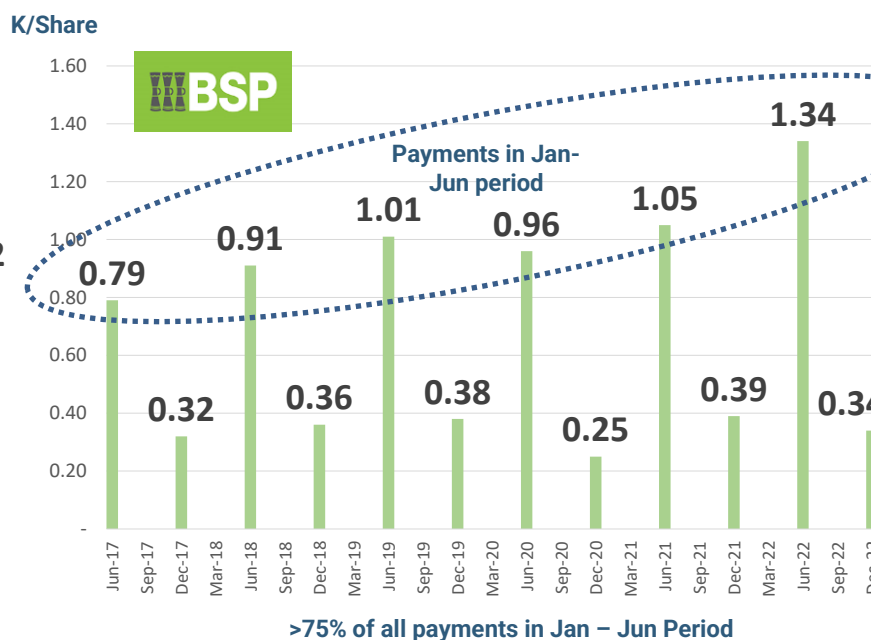
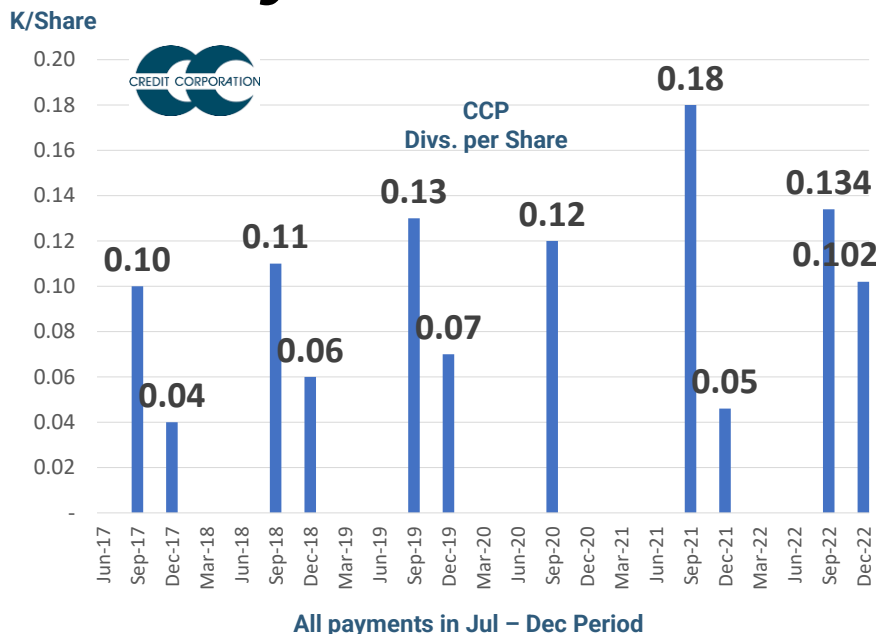
- 1) Buy and hold BSP – reinvest all dividends.
- 2) Buy and hold CCP – reinvest all dividends
- 3) Buy BSP during Jan, Sell BSP in June, Buy CCP in July, Sell CCP in December

	2016	2017	2018	2019	2020	2021	2022
Number of BSP shares owned by CCP	38,262,051	36,682,696	36,294,081	36,294,081	36,294,081	36,294,081	36,294,081
BSP dividends per share	0.855	1.110	1.270	1.390	1.210	1.440	1.680
Calculated CCP dividends from BSP	32,714,054	40,717,793	46,093,483	50,448,773	43,915,838	52,263,477	60,974,056
Calculated Cumulative BSP Dividends Received by CCP	32,714,054	73,431,846	119,525,329	169,974,102	213,889,940	266,153,416	327,127,472
Number of CCP Shares on Issue	314,866,510	308,280,832	307,936,332	307,931,332	307,931,332	307,931,332	307,931,332
Calculated BSP dividends per CCP share	0.104	0.132	0.150	0.164	0.143	0.170	0.198
CCP Dividends per share	0.18	0.140	0.170	0.200	0.120	0.226	0.236
Coverage (BSP Dividend received as % of CCP dividends paid)	57.72%	94.34%	88.05%	81.92%	118.85%	75.10%	83.90%
Total Dividends Paid by CCP	56,675,972	43,159,316	52,349,176	61,586,266	36,951,760	69,592,481	72,671,794

During the period from 1 July 2017 through 31 December 2022, CCP received in excess of **K327 million** in dividends from its shareholding in BSP.

During the same period, CCP paid **K393 million** in dividends to its shareholders.

BSP yields drive CCP dividends...



Knowing what we do about the relationship in terms of **timing and quantum** between BSP dividend payments and CCP dividend payments, our team of researchers decided to explore whether – on an *ex-post* basis – there would have been alpha in a strategy aiming to double-dip the BSP dividends by holding BSP during the January to June period and CCP during July to December. Our analysis covered the Jun 2017 – Dec 2022 period.

The aim of the trading strategy would be to collect the Final BSP dividends during the June Quarter – traditionally the largest BSP dividend period for the year – then swapping our portfolio into CCP to collect CCP dividends (which largely consist of BSP payments).

BSP in Jan.....CCP in July?

Period		Action		Dividend	Dividend	Comment	Dividends per Share			
Start	End	Start	End	Flows	Reinvestment		Q1 BSP	Q2 BSP	Q3 CCP	Q4 CCP
01-Jul-17	31-Dec-17	Buy CCP	Sell CCP	CCP	Q3 Receipts	Reinvest only Q3 dividends			0.100	0.040
01-Jan-18	30-Jun-18	Buy BSP	Sell BSP	BSP	No	BSP dividends paid in Q2	-	0.910		
01-Jul-18	31-Dec-18	Buy CCP	Sell CCP	CCP	Q3 Receipts	Reinvest only Q3 dividends			0.110	0.060
01-Jan-19	30-Jun-19	Buy BSP	Sell BSP	BSP	No	BSP dividends paid in Q2	-	1.010		
01-Jul-19	31-Dec-19	Buy CCP	Sell CCP	CCP	Q3 Receipts	Reinvest only Q3 dividends			0.130	0.070
01-Jan-20	30-Jun-20	Buy BSP	Sell BSP	BSP	No	BSP dividends paid in Q2	-	0.960		
01-Jul-20	31-Dec-20	Buy CCP	Sell CCP	CCP	Q3 Receipts	Reinvest only Q3 dividends			0.120	-
01-Jan-21	30-Jun-21	Buy BSP	Sell BSP	BSP	No	BSP dividends paid in Q2	-	1.050		
01-Jul-21	31-Dec-21	Buy CCP	Sell CCP	CCP	Q3 Receipts	Reinvest only Q3 dividends			0.180	0.046
01-Jan-22	30-Jun-22	Buy BSP	Sell BSP	BSP	No	BSP dividends paid in Q2	-	1.340		
01-Jul-22	31-Dec-22	Buy CCP	Sell CCP	CCP	Q3 Receipts	Reinvest only Q3 dividends			0.134	0.102

Double-dip strategy resulted in Big-time Alpha!

Our analysis revealed that, assuming dividend reinvestment during the whole investment period, K100,000 invested in a Double-dip strategy by oscillating between BSP and CCP during the period from 1 July 2017 through to 31 December 2022 would have grown to **K354,804** during the investment period, a cash multiple of **3.54x**.

The portfolio would have yielded an IRR of **25.86%** over the holding period.

This compares with a portfolio value of K221,506 for a portfolio based on a BSP buy-and-hold strategy and K203,744 for a CCP buy-and-hold portfolio (2.2x and 2.04x respectively).

The BSP-only portfolio had a 15.54% IRR over the investment period and the CCP-only portfolio yielded 13.80% IRR.

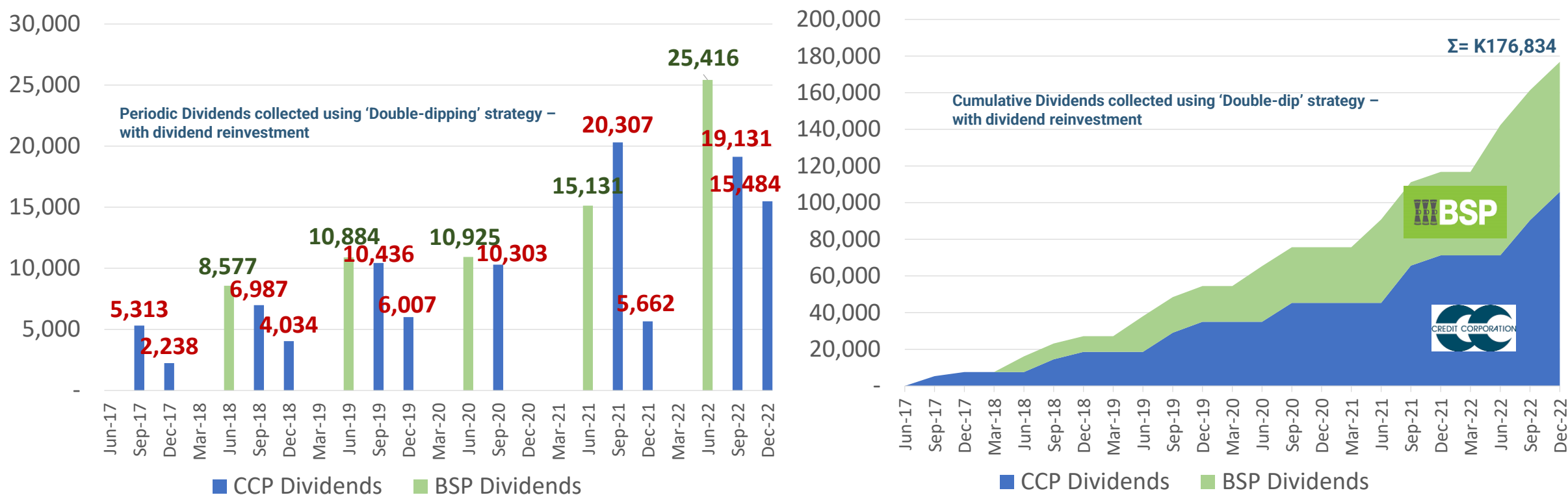
Portfolio Analysis: <u>WITH Dividend Reinvestment</u>						
	Start	End	IRR	Cash Multiple	Investment Amount	31 Dec 2022 Portfolio Value
BSP Only	30-Jun-17	31-Dec-22	15.54%	2.22x	100,000.00	221,506.09
CCP Only	30-Jun-17	31-Dec-22	13.80%	2.04x	100,000.00	203,744.60
Double Dip Strategy	30-Jun-17	31-Dec-22	25.86%	3.55x	100,000.00	354,804.36

Portfolio Analysis: <u>NO Dividend Reinvestment</u>						
	Start	End	IRR	Cash Multiple	Investment Amount	31 Dec 2022 Portfolio Value
BSP Only	30-Jun-17	31-Dec-22	15.68%	1.94x	100,000.00	194,001.00
CCP Only	30-Jun-17	31-Dec-22	13.33%	1.77x	100,000.00	176,762.50
Double Dip Strategy	30-Jun-17	31-Dec-22	24.57%	2.51x	100,000.00	251,329.89

Key Assumptions:

- 1) K100,000 invested on 1 July 2017. Investment Period ends 31 Dec 2022.
- 2) Three strategies:
 - Buy-and-hold BSP shares for duration
 - Buy-and-hold CCP shares for duration
 - Buy BSP every 1 Jan, Sell BSP every 30 Jun, Buy CCP every 1 July, Sell CCP every 31 Dec

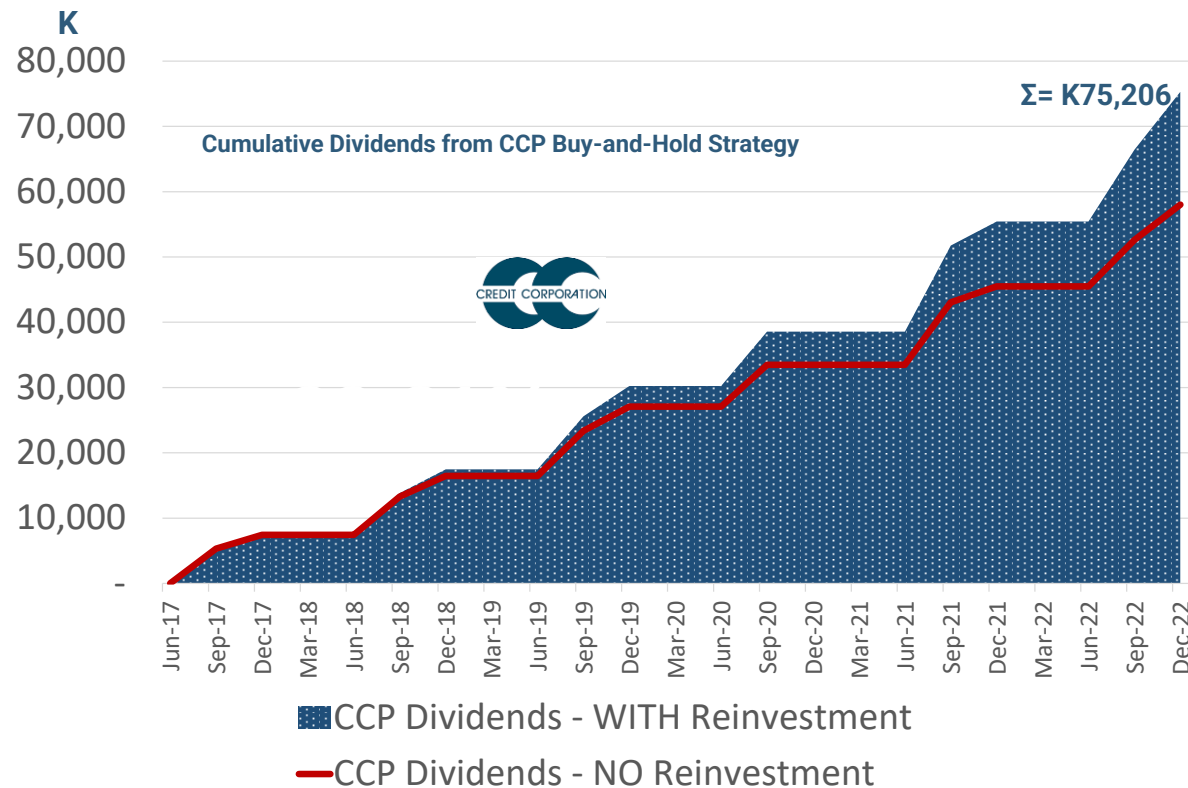
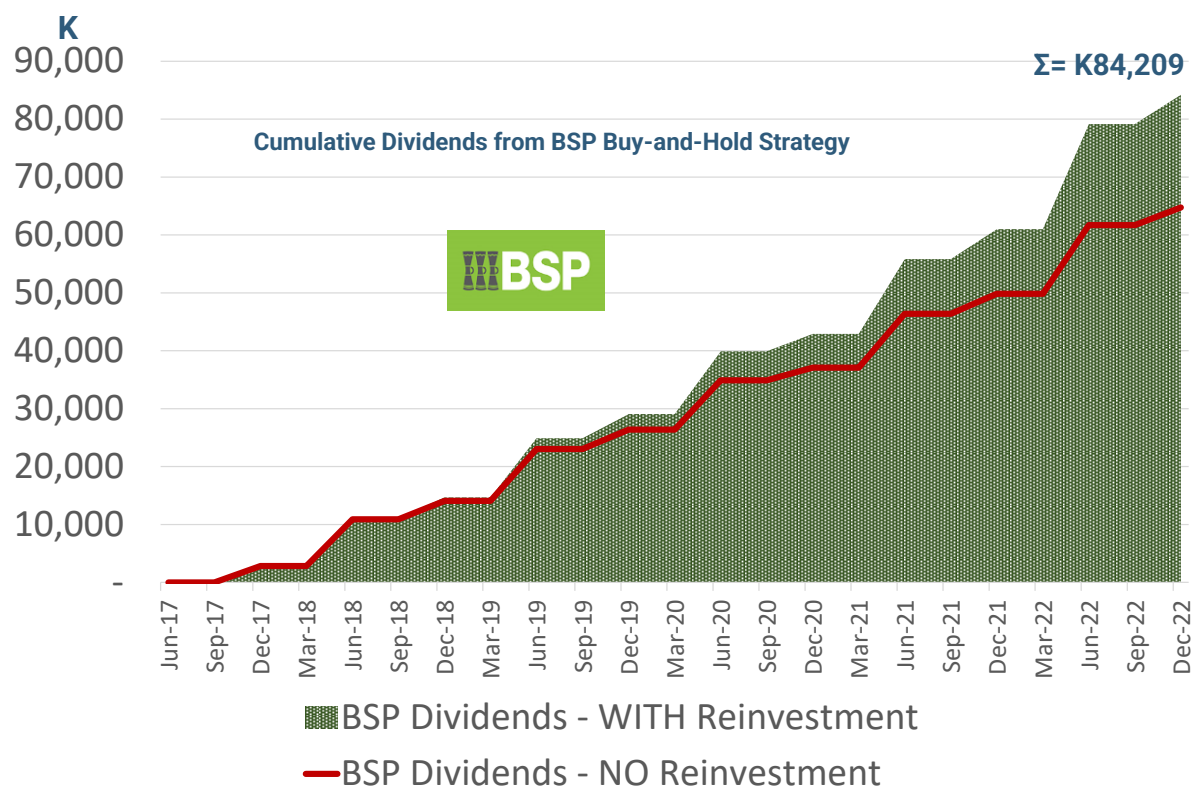
BSP dividends through Green AND Blue channels..



The 'Double-dip' strategy is premised on the alpha value attributable to the collection of 3 out of 4 annual distributions from BSP and CCP. The only distribution that is not collected is the BSP interim dividend which is typically declared in Q3 and paid in Q4 when the portfolio is invested in CCP shares.

CCP makes its final dividend payment in Q3 and its interim dividend payment in Q4. These payments are driven, to a large extent, by the receipt of the final BSP dividends by CCP in Q2. Hence the notion of double-dipping.

Strategy captured more than combined dividends...

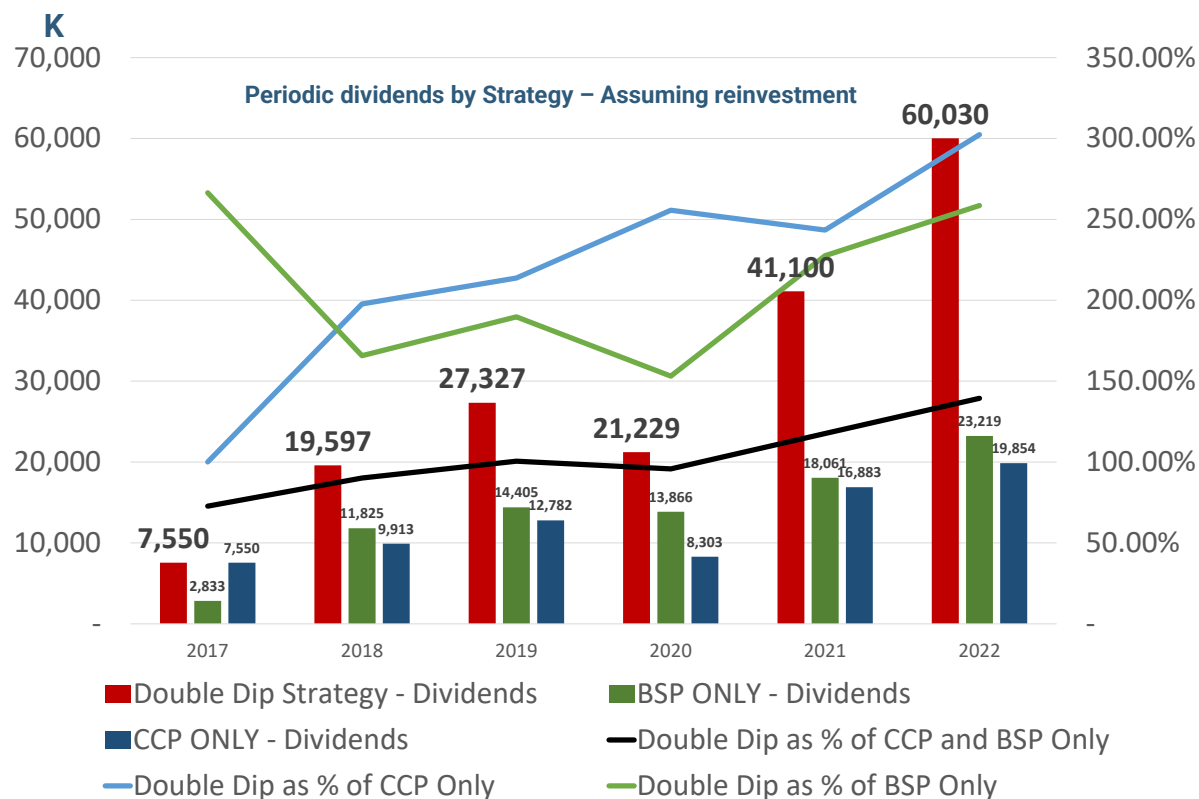


Cumulative dividends from the BSP Buy-and-Hold strategy (assuming dividend reinvestment) totals **K84,209**.

Cumulative dividends from the CCP Buy-and-Hold strategy (assuming dividend reinvestment) totals **K75,206**.

Cumulative dividends from the 'Double-dip' strategy (assuming dividend reinvestment) totals **K176,834**.

...and 300% of CCP dividends run-rate at end...



This indicates that (on an ex post basis) the Double-dip strategy would have allowed investors to net more than the combined value of dividends from the other two strategies.

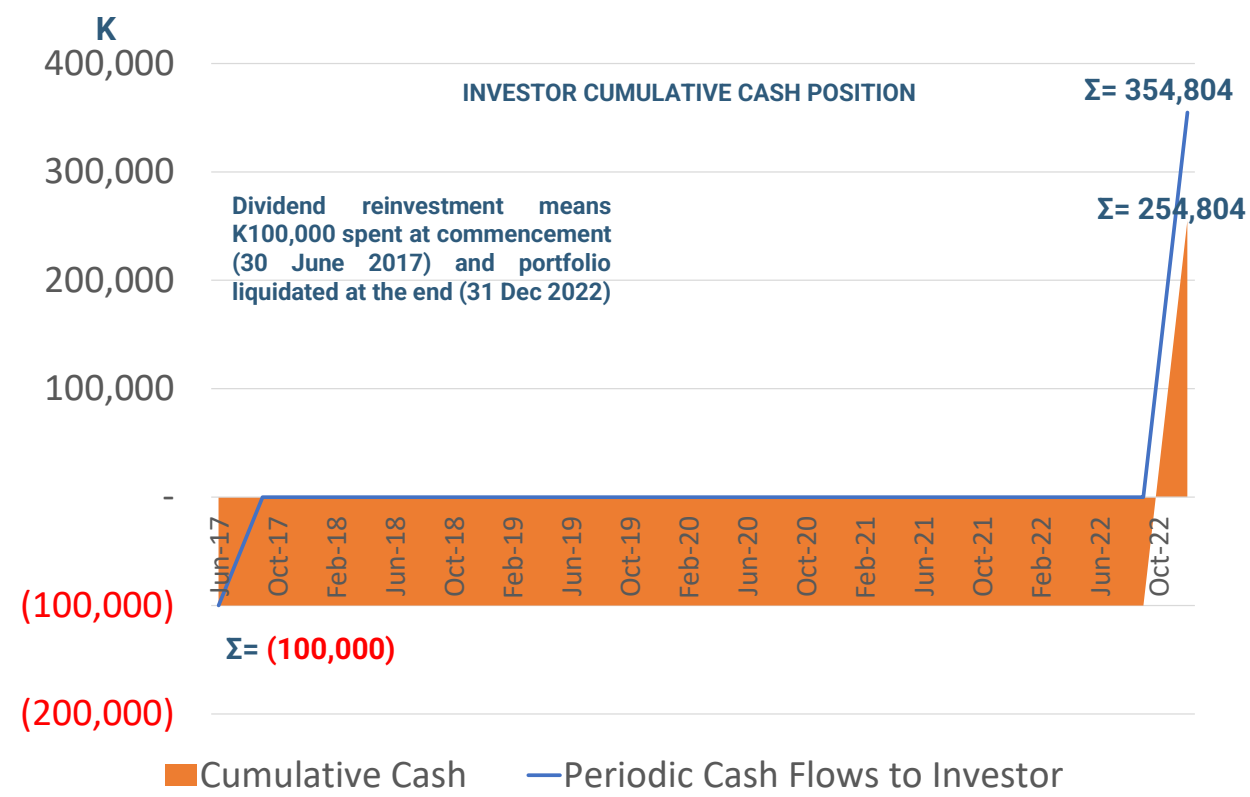
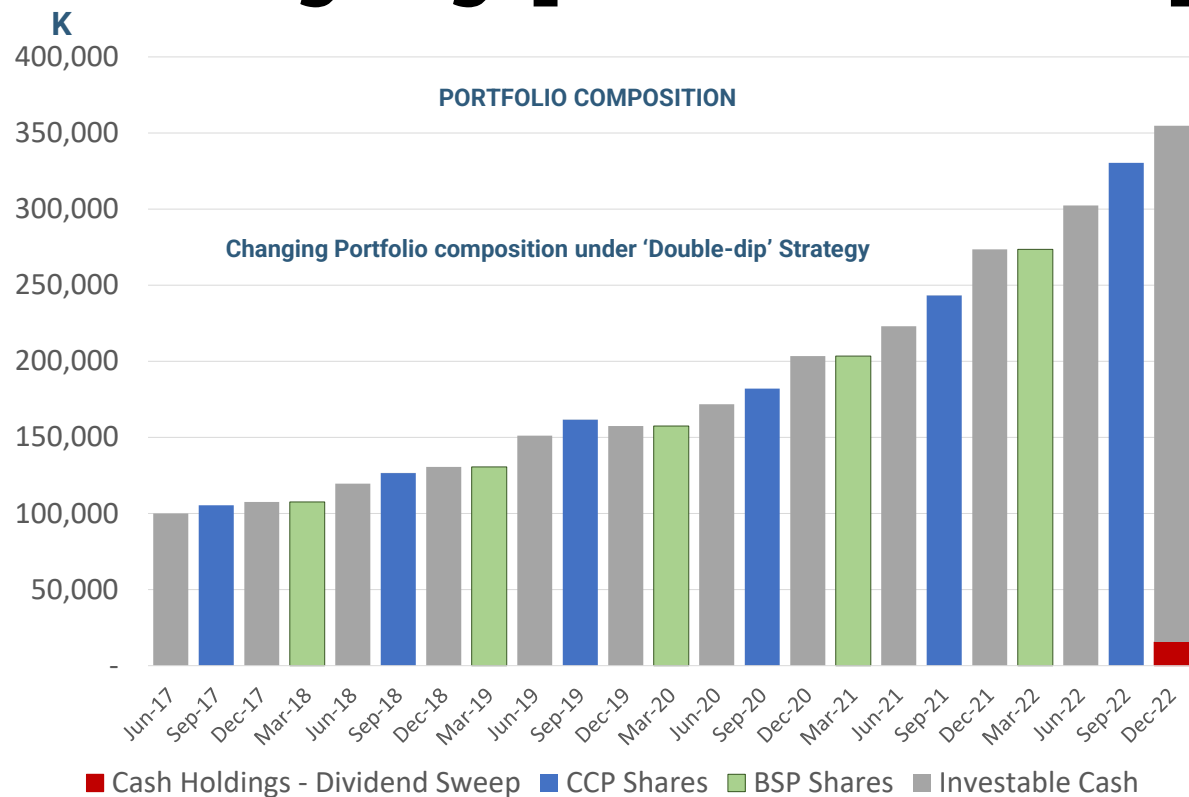
The reason for this is the fact that the dividend yields are so much higher (notwithstanding the fact that investors under the Double-dip strategy would miss out on the BSP interim dividend each year) that the reinvestment of these dividends achieve a strong compounding effect. **The market does not seem to factor this in securities prices during the year.**

CCP Buy-and-Hold						
Financial Year	2017	2018	2019	2020	2021	2022
Portfolio Value	107,550	117,464	122,106	163,947	178,223	203,745
Number of Shares	67,219	73,415	81,404	86,288	96,337	102,433
Dividend Income	7,550	9,913	12,782	8,303	16,883	19,854
Yield % - Net of DWHT	7.02%	8.44%	10.47%	5.06%	9.47%	9.74%
Yield % - Gross	8.26%	9.93%	12.32%	5.96%	11.14%	11.46%

BSP Buy-and-Hold						
Financial Year	2017	2018	2019	2020	2021	2022
Portfolio Value	103,906	122,776	156,302	173,568	195,670	221,506
Number of Shares	10,712	11,920	13,291	14,464	15,960	17,443
Dividend Income	2,833	11,825	14,405	13,866	18,061	23,219
Yield % - Net of DWHT	2.73%	9.63%	9.22%	7.99%	9.23%	10.48%
Yield % - Gross	3.21%	11.33%	10.84%	9.40%	10.86%	12.33%

Double-dip Strategy						
Financial Year	2017	2018	2019	2020	2021	2022
Portfolio Value (excl. dividends sweep)	107,550	130,585	157,450	203,442	273,568	354,804
Dividend Income	7,550	19,597	27,327	21,229	41,100	60,030
Yield % - Net of DWHT	7.02%	15.01%	17.36%	10.43%	15.02%	16.92%
Yield % - Gross	8.26%	17.66%	20.42%	12.28%	17.67%	19.91%
Double Dip as % of CCP and BSP Combined	72.71%	90.15%	100.52%	95.76%	117.62%	139.37%
Double Dip as % of CCP Only	100.00%	197.68%	213.79%	255.67%	243.44%	302.36%
Double Dip as % of BSP Only	266.48%	165.73%	189.71%	153.10%	227.57%	258.53%

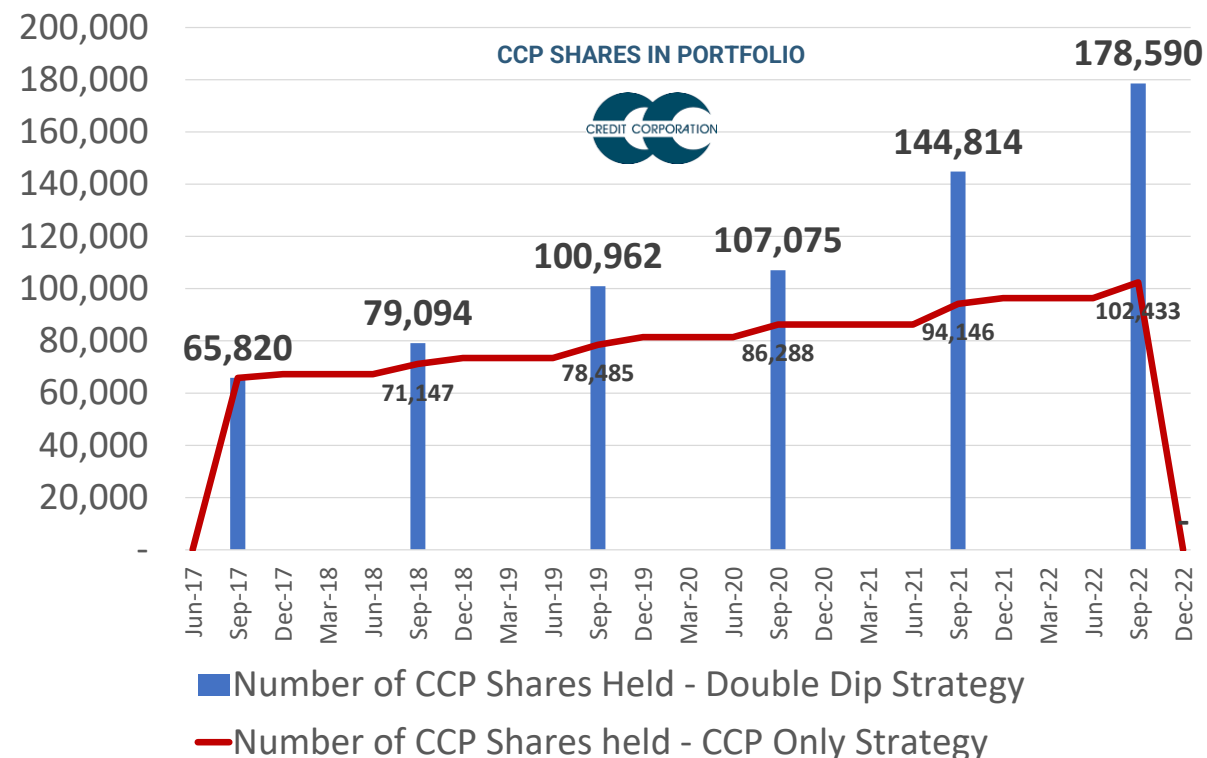
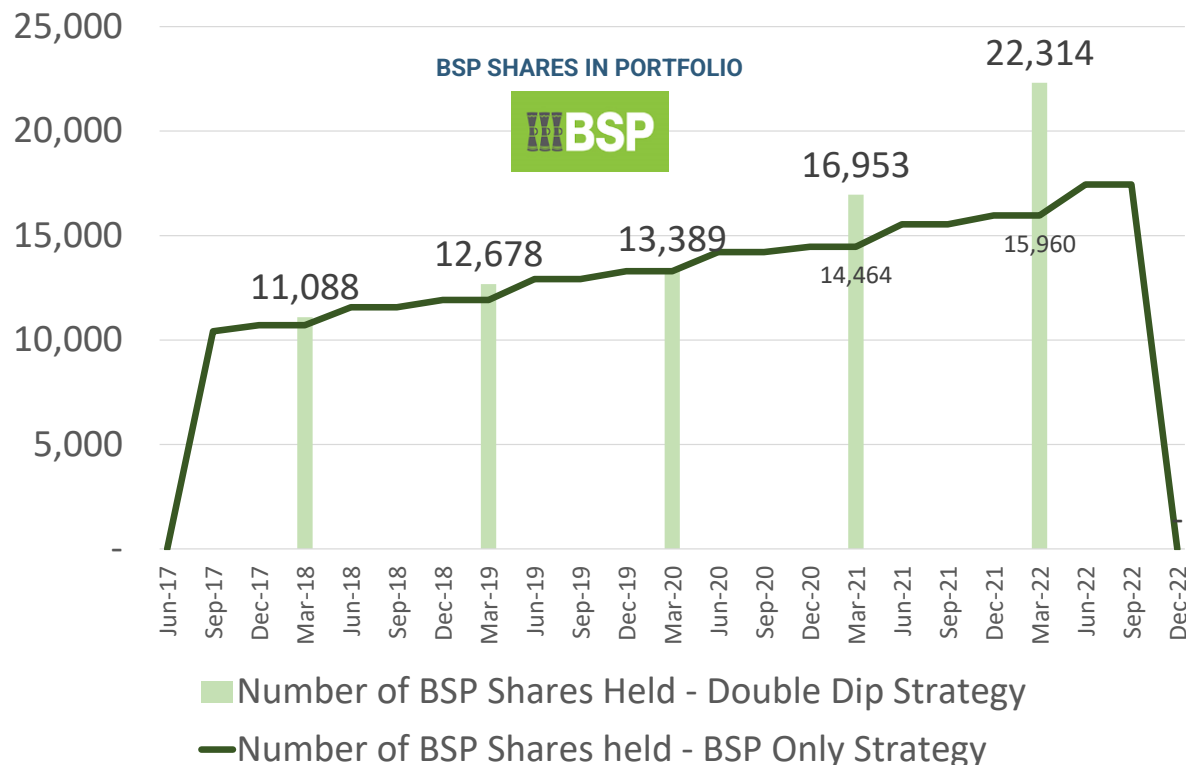
Changing portfolio composition...



The nature of the Double-dip portfolio is such as to see the investor holding BSP shares at the end of Q1, Cash at the end of Q2, CCP shares at the end of Q3 and Cash at the end of Q4.

We have assumed all investment activities occur at the start and at the end of each period. We have not explored whether returns could have been further optimized by intra-period decisions. Hindsight is 20/20 and we are looking for high-level trading strategies that can be replicated *ex ante*.

Reinvestment results in more BSP and CCP shares



Reinvesting dividends into the acquisition of additional shares results in a growing shareholding in each of the scenarios, be that the Double-dip, the BSP Buy-and-Hold or the CCP Buy-and-Hold.

However, given the greater dividend flows to the portfolio from the Double-dip strategy, this would allow investors to grow their shareholdings at an accelerated rate. By the end of Q3 2022, investors would own 76k more CCP shares under the Double-dip strategy than they would have under a simple CCP Buy-and-Hold strategy with dividend reinvestment.

.....so – what’s stopping us?

Hindsight is perfect 20/20 vision! It is tempting to see the above analysis and immediately conclude that we must adjust our trading to avail the demonstrated alpha in the Double-dip strategy.

NOT SO FAST!

We have looked at *ex post* data points, meaning that we have retrofitted our strategy to historical trading data. There is no guarantee that the strategy will work into the future – meaning that the documented relationships and patterns will hold going forward.

Our strategies are impacted by the Assumptions we have made and the Risks we have ignored:

ASSUMPTIONS:

- Markets are efficient and frictionless
- No transaction costs
- No tax issues (other than Dividend Withholding Taxes)
- Adequate market liquidity to execute trading strategy
- CCP will remain exposed to BSP going forward
- BSP and CCP will continue to pay distributions
- BSP and CCP will continue timing of dividends

REALITIES:

- Trading on PNGX not always efficient – rarely frictionless
- All traders incur at least SOME transaction costs
- Investors have differing tax circumstances
- Liquidity on PNGX is not always assured
- CCP may well increase, reduce or eliminate BSP exposure
- Both BSP and CCP may change dividend payment rate
- Either or both companies may alter dividend cycle

What is the significance of dividend reinvestment?

How does our analysis of the Double-dip strategy change if we run the analysis on the basis that dividends are swept by investors and not reinvested in the portfolio?

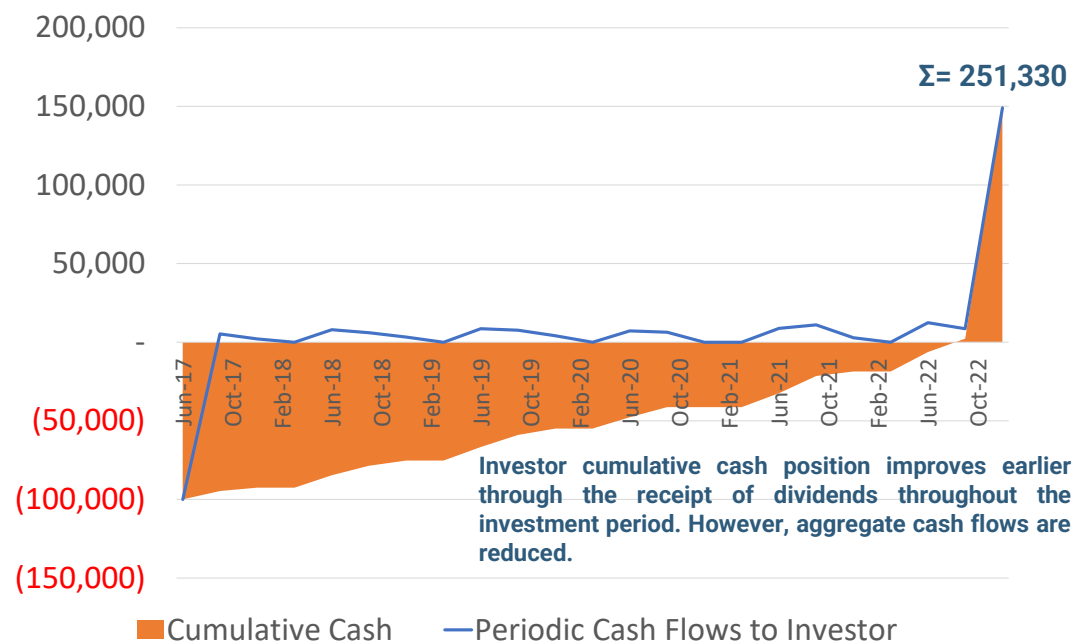
This scenario, effectively assumes investors invest dividends in exogenous assets or employ dividends for personal consumption.

Without dividend reinvestment, the Double-dip portfolio grows from an initial K100,000 investment in July 2017 to **K251,330** by 31 December 2022.

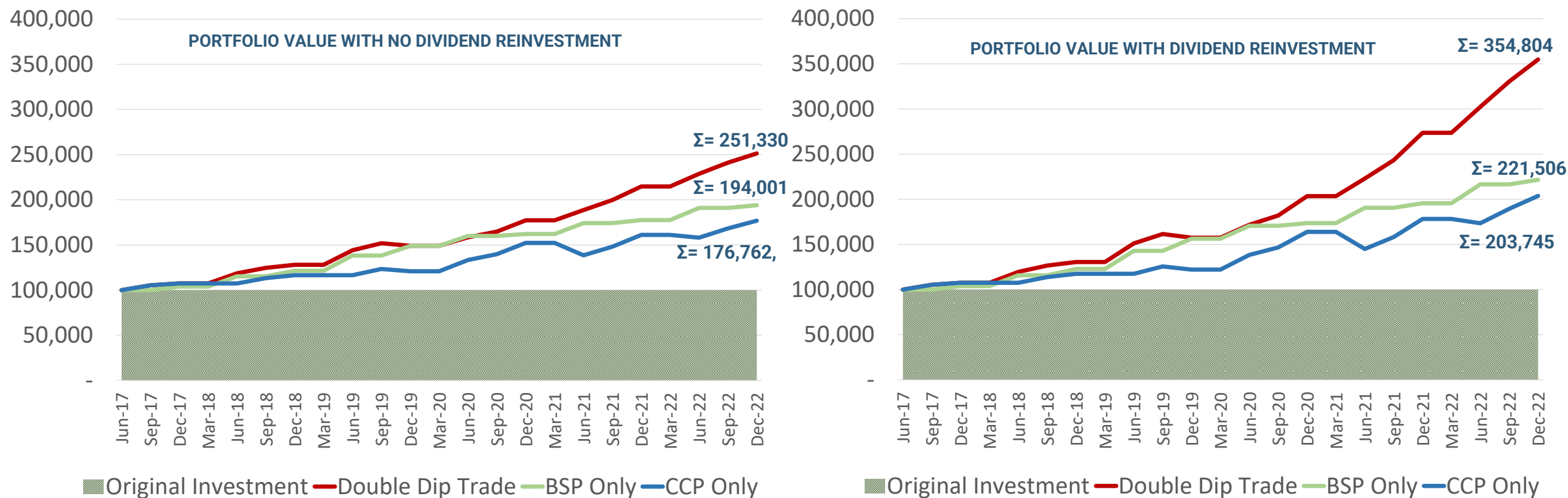
This represents a cash multiple of **2.51x** and is still considerably higher than the 1.94x from the BSP Buy-and-Hold portfolio and 1.77x from the CCP Buy-and-Hold portfolio.

The no reinvestment Double-dip portfolio would have yielded an IRR of **24.57%** over the holding period. IRR holds up better than the cash multiple because although less cash accrues from the portfolio to the investor, the investor accesses the dividend cash earlier which drives up the return.

Portfolio Analysis: <u>NO Dividend Reinvestment</u>						
	Start	End	IRR	Cash Multiple	Investment Amount	31 Dec 2022 Portfolio Value
BSP Only	30-Jun-17	31-Dec-22	15.68%	1.94x	100,000.00	194,001.00
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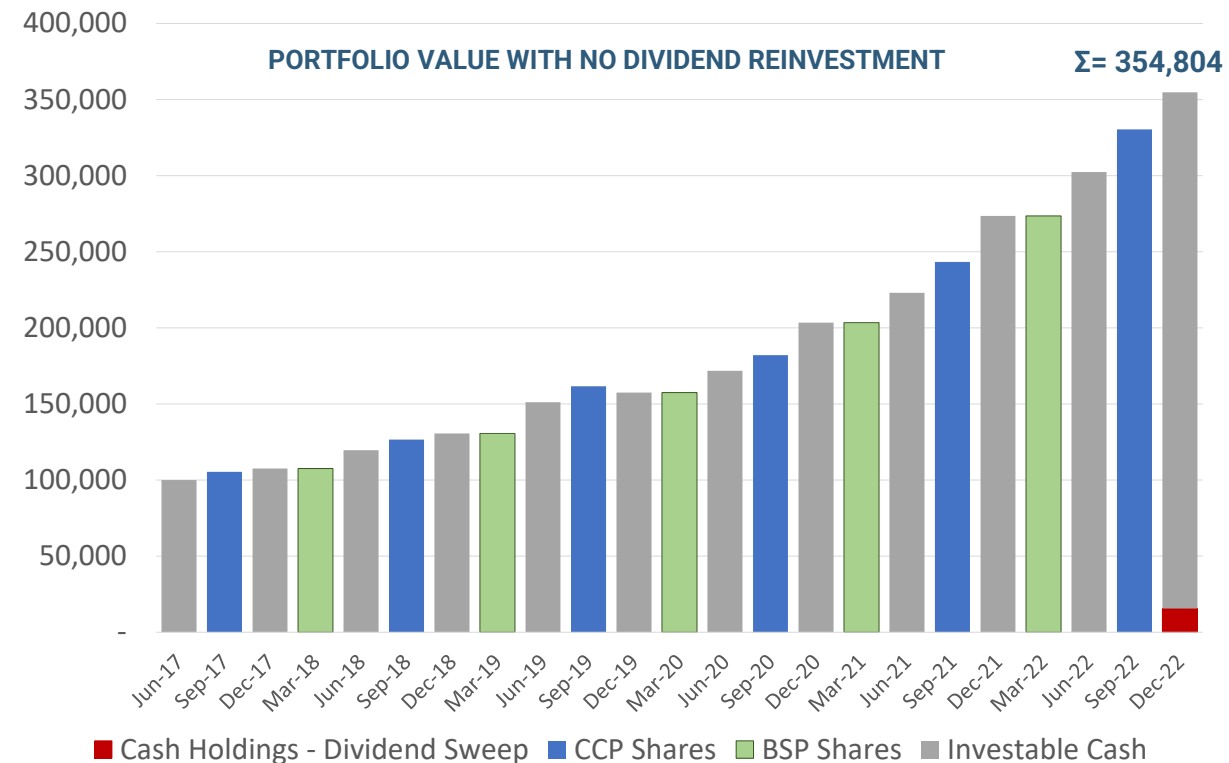
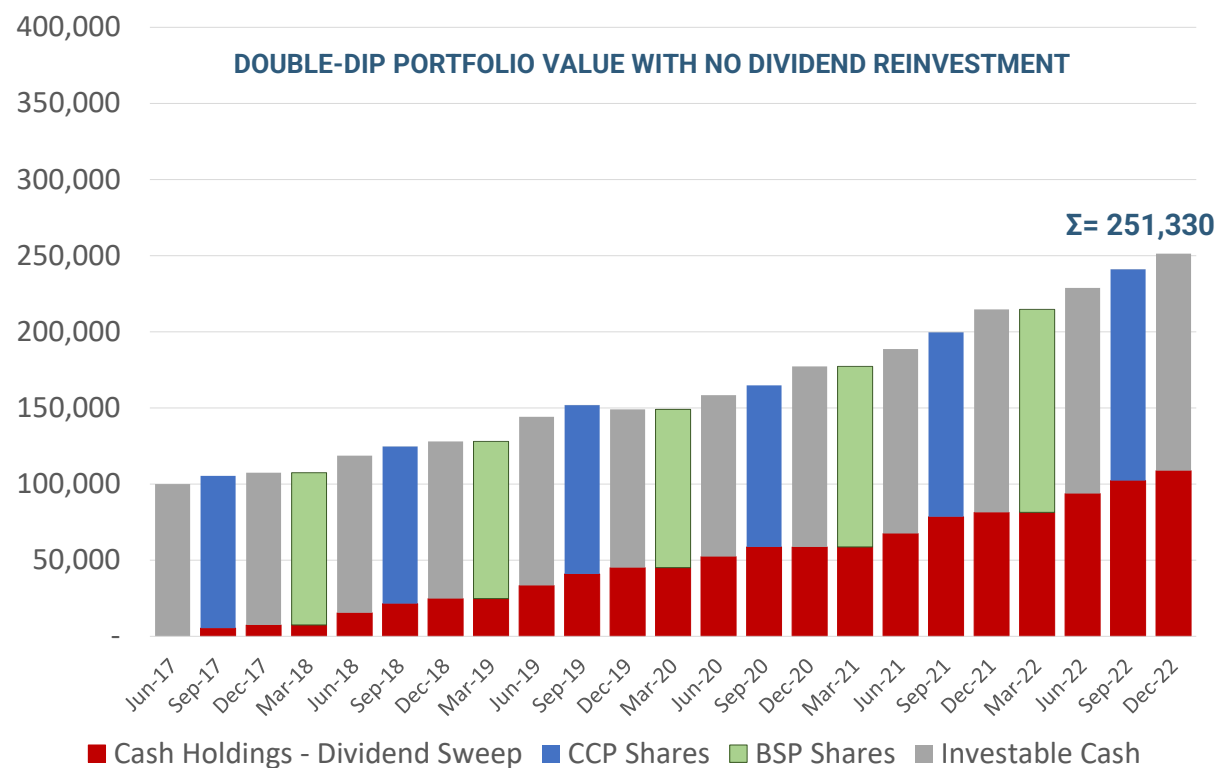
...a flatter curve but still considerable alpha...



Dividend reinvestment has an amplifying effect on the excess returns on the Double-dip portfolio, however there is no doubt that investors would have been ahead if they employed the strategy under both scenarios.

This is a reflection of the historically predictable pattern of dividends from BSP and CCP and the fact that BSP and CCP share prices may not have reflected the transparent relationship. The market's inefficient valuation of near-term dividends is also a key factor.

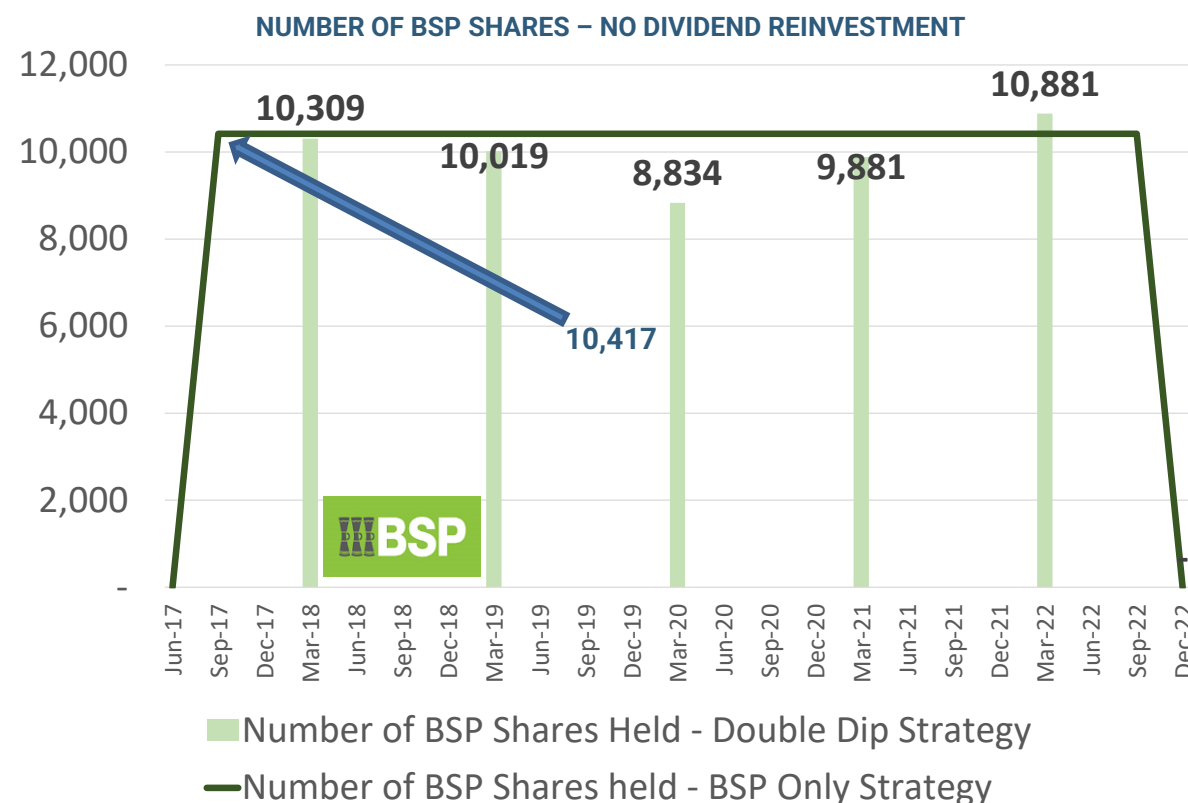
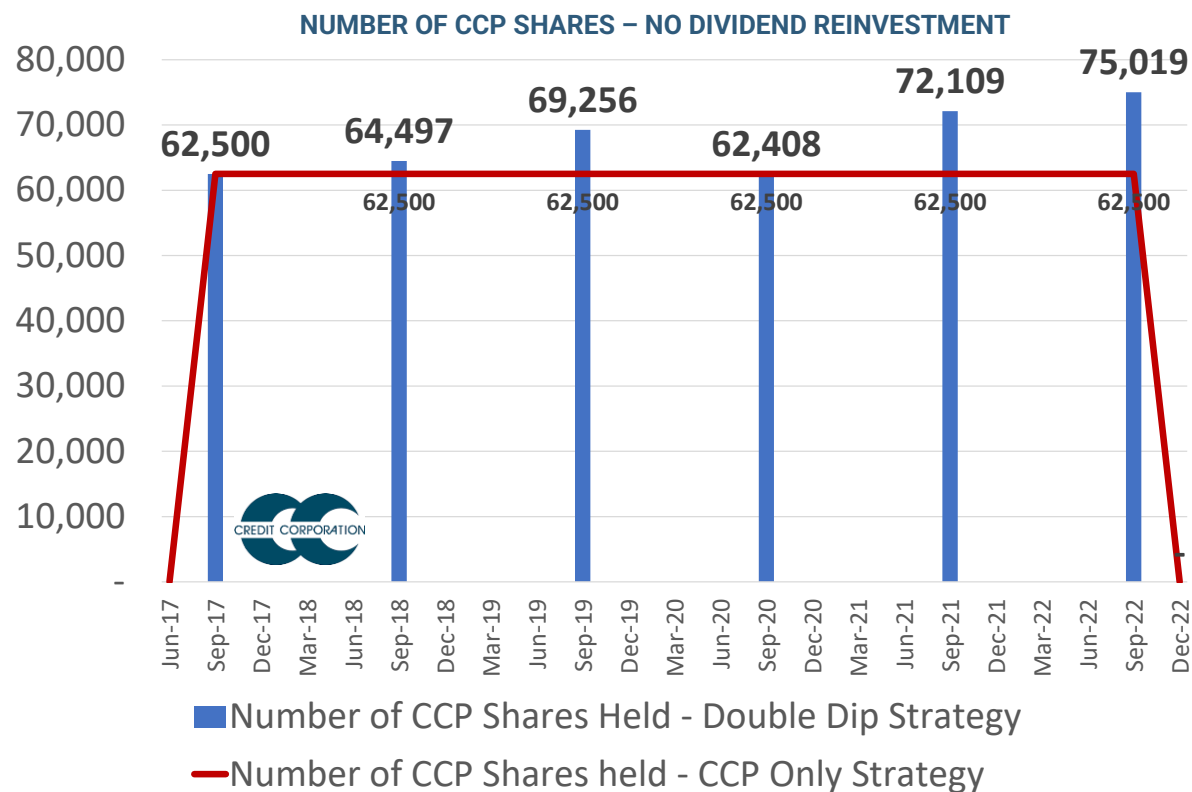
...and earlier cash flow to investors...



The above charts clearly illustrate the impact on the overall Double-dip portfolio of dividend reinvestment.

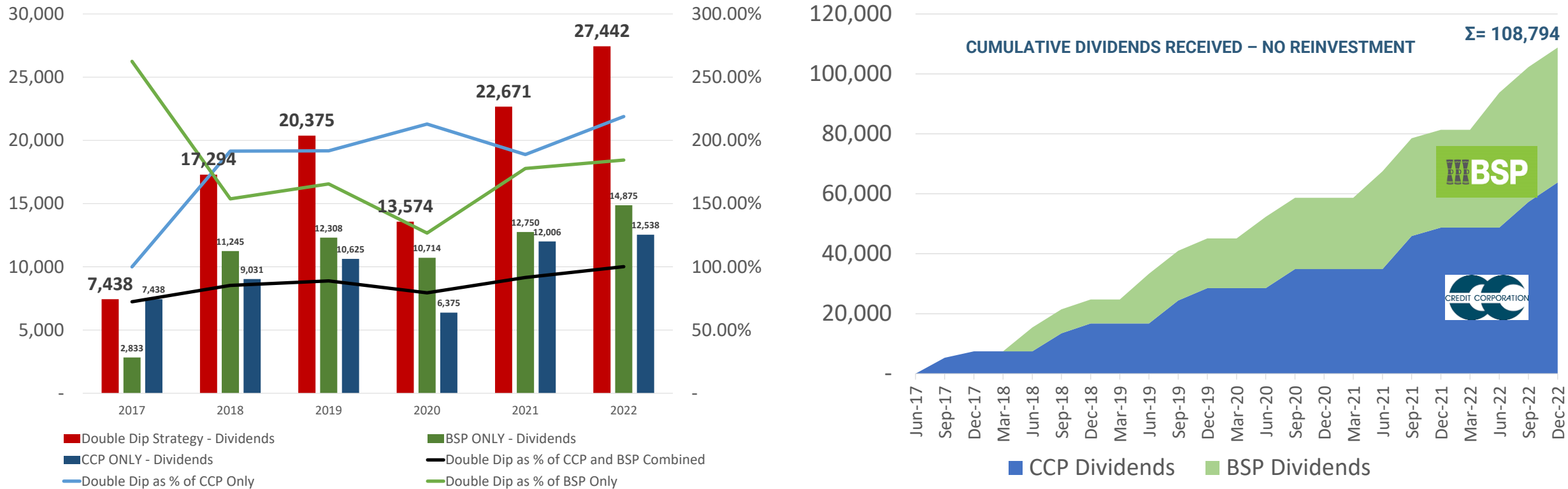
However, it is important to note that the aggregate IRR under No Reinvestment (24.57%) is only marginally lower than the Dividend Reinvestment portfolio (25.86%).

...number of shares is more stable...



With no reinvestment of dividends, the number of shares held from time to time in BSP or CCP under the Double-dip strategy varies only to the extent that periodic changes in the BSP and CCP share price results in variability in the number of shares acquired.

...and dividends vary a little less...



Without dividend reinvestment during the investment period, total dividends received during the 2022 financial year under the Double-dip strategy would have been K27,442, compared with K60,030 under the dividend reinvestment strategy.

What should I do now?

Although our original thesis that significant incremental returns were available to investors by seeking to double-dip BSP dividends by holding BSP during the Jan – Jun window and CCP during the Jul – Dec window during the period from 30 June 2017 through 31 December 2022, we need to be careful in assuming that the same will apply going forward. The answer to our question above may very well be: ABSOLUTELY NOTHING!

The purpose of this paper is to continue to build on investors understanding of the PNGX market and the securities trading on that market. This will allow all of us to better understand what makes the market move as well as to articulate and define some of the weaknesses in the market that will gradually disappear as it becomes more researched and more liquid. **It bears repeating that:**

- Past performance is no guarantee of future performance
- The Double-dip strategy depends on past relationships and dynamics between BSP and CCP subsisting
- A more efficient and liquid PNGX market is likely to predict and gradually eliminate alpha returns from trades that are premised on factors other than earnings and distributions from individual securities (ie. If we all attempt the Double-dip trade, our very volumes will eliminate the excess returns through changes in security prices)

- BSP and CCP may diverge in terms of activities and ownership into the future. It is also possible that BSP or CCP changes the timing and manner of their dividend payments
- Transaction costs and taxes may have significant impacts on our analysis and the efficacy of the strategy
- Active portfolio management is not for everybody
- The Double-dip strategy does not in any way mitigate poor performance by the underlying businesses of BSP and CCP. It only impacts on the relative returns.
- Always speak to your investment advisor before trading

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