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Consistent Dividend Growth Investment Strategies

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Abstract

We investigate whether firms in the United Kingdom that have a long, uninterrupted history of dividend growth outperform the broader equity market. It is observed that firms with in excess of 10-years consistent growth have returned considerably more than the equity market as a whole, with the additional benefits of lower volatility and smaller drawdowns. A size effect exists amongst these firms with lower market-capitalization firms demonstrating improved risk-adjusted returns.

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The importance of dividend income and its reinvestment in achieving strong equity returns has been well documented. In the 2006 *Barclays Equity Gilt Study* it is reported that if £100 had been invested in UK stocks in 1899, and all dividend income reinvested, it would be worth £13,311 in real terms in 2006. The same £100 without reinvestment of income would be worth just £213. Whilst the consistency of income in aggregate has long been viewed as an attractive proposition, it is only recently that this issue has been studied more intensively at the individual stock level. Recent years have seen the emergence of exchange traded funds (ETF) in the US that consist solely of equities that have a history of consistent dividend increases.[2] These ETFs include the S&P Dividend Aristocrats that require 25-years of consistent dividend growth for inclusion and the Mergent Dividend Achievers that stipulate 10-years of continuous growth. It is reported that not only have these strategies outperformed comparable benchmark indices such as the S&P 500 but they have also done so with lower volatility.[3]

This is not the first time that stock strategies have been derived using dividend-based rules. Perhaps the most famous is the "Dogs of the Dow" approach devised by O'Higgins and Downes (1992). Essentially this seeks to capture the well-researched return premium that has been attributable to stocks with a high dividend yield (see Keim, 1985, and Christie, 1990, for more details) by choosing the stocks with the largest yields from within the Dow Jones Industrial Average, holding them for a year and then repeating the methodology. Whilst this approach has generated excess returns relative to the index, it has also suffered from higher volatility and frequently failed to beat the index when risk-adjustment and transaction costs were included (see McQueen et al, 1997, and ap Gwilym et al, 2005).

In aggregate, the US has seen a trend away from companies paying dividends during the last quarter of a century. Both Fama and French (2001) and DeAngelo et al (2004) describe how the proportion of US industrial firms making distributions fell from around two-thirds in 1978 to just one-fifth in 2000. Recent years have seen something of a mini-revival, as documented by Julio and Ikenberry (2004), but the level remains historically depressed. To some extent the demise of dividends is not quite as intense as outwardly suggested. For example, DeAngelo et al (2004) also find that dividend payments in real terms increased during the period of their study but that many of the smaller firms that previously paid dividends had been acquired or dropped out of the sample for other reasons. The new listings during the period failed to pay sufficient dividends to make up the shortfall and the

[2] "You Can Temper Scary Times With Dividend-Paying Stocks", *USA Today*, 11th August 2006.
[3] "S&P Launches High Yield Dividend Aristocrats Index", *Standard & Poors* press release, 9th November 2005.

percentage of payers declined, although the large payers grew by so much that the aggregate payment kept increasing. This has lead to a concentration of dividends amongst relatively few US stocks.

The United Kingdom has a history of firms paying dividends, even though it too has experienced a (less dramatic) decline in the latter part of the twentieth century. Benito and Young (2001) report that in 1979 around 95% of UK firms paid dividends, which fell to 75% in 1999. Intermediate troughs in payments were also observed during periods of recession. As in the US, there have been signs in recent years of resurgence in dividend payments with the proportion of payers starting to increase again.[4]

The aim of this paper is to investigate the relationship between consistent dividend growth and stock returns. We focus on the UK market since the high proportion of dividend payers is likely to enable the formation of well-diversified portfolios of stocks. In particular, we examine the number of years of consistent growth required before outperformance, if any, is captured and how the return performance compares with firms that pay inconsistent dividends or no dividends at all. Furthermore, we introduce additional filters, such as dividend yield, to the sample of dividend growers in an effort to discern whether there are any 'value' or 'growth' effects also present.

Data and Methodology

The data is obtained from the London Share Price Database (LSPD) for the period 1975-2006. A firm is classified as a dividend payer if it paid a cash dividend, regular or otherwise, during the previous twelve months. If the firm pays out a greater cash dividend in the most recent twelve months compared to the prior twelve months then it is classified as having had a year of dividend growth. All dividends are measured net of tax, as this is the usual convention for companies to report. The assessment of dividend growth is made annually at the end of each calendar year. If a firm initiates a dividend payment within the year, this does not constitute a year of dividend growth. All firms within the LSPD are eligible for inclusion within the sample with the exception of investment trusts and other similar investment vehicles.

Portfolios are formed at the beginning of each calendar year on an equally weighted basis unless otherwise stated in the text, and held for a period of twelve months before rebalancing

[4] "Smaller Caps Top Dividend Pay-Out Chart", *Financial Times*, 16th June 2005.

occurs. If a firm within a portfolio is delisted but there is value remaining, e.g. it is acquired, then the value is reinvested amongst the other constituents. Should a firm be delisted but there is no value remaining, e.g. it becomes bankrupt, then a full 100% loss is assumed and is taken in the month that the 'death' is recorded in the LSPD. If a firm that has been a consistent dividend growth firm cuts its dividend during a year, it remains held in the portfolio until the end of the 12 months when rebalancing takes place.

Consistent Dividend Growth

There are a number of good reasons why investors should favour companies that have a consistent history of increasing dividends. Firstly, one of the components in Gordon's (1962) constant growth valuation model is the growth term. It takes a much greater leap of faith to assume a future growth rate when there has been no precedent set in recent years compared to a stock that has a long-term growth rate already demonstrated. Secondly, Lintner (1956) observes that management only raise dividends when they believe that earnings have permanently increased. This implies that firms that continually increase their payments envisage a positive outlook for profitability. Thirdly, Barth et al (1999) show that firms with a pattern of increasing earnings have been accorded higher price-earnings ratios after controlling for growth and risk. Given that in the long-run dividends and earnings are inexorably linked, this appears to bode well for the valuations of consistent dividend payers. Finally, Arnott and Asness (2003) demonstrate that, in aggregate, higher dividend payouts are consistent with higher future earnings growth. Walker (2005) supports the case for investments in consistent payers. In the 10 years to April 2005, it is stated that a basket of US securities with at least 10-years of consistent dividend growth outperformed the S&P 500 by 3.28% per annum coupled with the advantage of two percentage points lower volatility.

Table 1 reports the annual returns for portfolios formed according to varying minimum requirements of consistent dividend growth length; 5, 10, 15 and 20 years. Data is only available for all companies within the LSPD from 1975 onwards hence abbreviated histories exist for the 15 and 20-year portfolios. Benchmarks for the broader market are also shown, in this case the components of the FTSE All-Share Index, widely considered as the standard broad-based index for the UK market, as labelled by the LSPD, and also all the components of the LSPD which additionally includes a large number of small- and micro-cap firms (in both cases excluding investment trusts). The benchmark portfolios are formed using the same methodology as previously described for the dividend portfolios. For comparative purposes, the left-hand side of the table shows the results when portfolios were formed on an equally weighted basis with the right-hand side showing market-capitalization weighted portfolios.

Compound annual growth rates (CAGR) are shown at the bottom of the table for various periods.

Considering the equally weighted results first, it is noticeable that, irrespective of the minimum requirement for dividend growth, the returns are higher for the consistent growth portfolios compared to the benchmarks. Whilst the CAGR, regardless of the time period, are higher for 10-year portfolios compared to 5-year portfolios, there is no continuation of this pattern for 15 or 20-years. A second point of note is the performance of the dividend portfolios during the bear market years of 2001-02. The consistent growth firms had positive returns during 2001 and relatively small losses in 2002, particularly when compared to the benchmarks. Of these, the All-LSPD portfolio probably performed better due to the "small-firm" effect with a far larger number of these stocks than the All-Share index.

The market-weighted results present a very different picture. The CAGR for the consistent dividend portfolios falls below the benchmark in most cases. In addition, the 10-year portfolios no longer always outperform the 5-year groups. Furthermore, returns during 2001-02 now also look similar to the broader market performance.

Table 2 provides more detailed performance statistics for the various portfolios. For the equally weighted portfolios, the consistent dividend portfolios have lower volatility than the benchmarks. In Panel C, lower volatility is reported as the minimum length of dividend growth increases. The reduced variance of returns is consistent with the US findings of Walker (2005) discussed earlier. This combination of higher returns and less variance leads to much improved Sharpe ratios for the dividend portfolios compared to the benchmarks. A minor detraction for the growth portfolios is that they are more negatively skewed than the benchmarks, particularly the All-LSPD portfolio. We note that investors prefer high first and third moments and low second and fourth moments (e.g. Scott and Horvath, 1980). Whilst the growth portfolios have lower variance of returns, they also experience lower drawdowns. The worst period for the 10-year portfolio during 1986-2006 saw a drawdown (on an end of month basis) of 30.42% compared to 42.98% for the All-Share and 44.92% for the All-LSPD. From 1991 onwards the worst drawdown for the 10-year growth portfolio was 23.72%. These lower drawdowns are also reflected in lower Ulcer indices, which measure the depth and duration of drawdowns from peaks.[5] Low Ulcer indices make the strategy particularly attractive to investors who may need to draw on capital, for example at retirement, and who want to avoid large changes in portfolio valuation since they may not have the investment

[5] See Martin and McCann (1989) for a detailed explanation.

flexibility to wait for valuations to recover. Finally, the last row of each panel displays the Martin ratio for each period. This is calculated in the same fashion as the Sharpe ratio except the Ulcer index replaces the standard deviation. Again, the Martin ratio values are superior to the benchmarks.

When market-capitalization portfolios are formed, the evidence changes once more. The returns decline and the volatility increases, leading to much lower Sharpe ratios, which are close to the values for the benchmarks. For example, in 1986-2006, the 10-year Sharpe ratio falls from 0.58 on an equally weighted portfolio to just 0.25 on the market-capitalization weighted portfolio. The relative decline is even greater in the 1991-2006 and 1996-2006 time frames. The higher volatility is also accompanied by increases in the maximum drawdowns of around 10-15%, plus higher Ulcer index levels and lower Martin ratios. The conclusion is rapidly drawn that for consistent dividend portfolios to be successful they should be formed on an equally weighted basis; otherwise there is no real advantage in diverting from the benchmark. The equal versus value-weighted issue might in itself explain some of the outperformance of comparable US ETFs versus the market-capitalization approach of the S&P 500 described by Walker (2005).

With dividend strategies such as the “Dogs of the Dow”, one problem is that the portfolios hold relatively few stocks, sometimes as few as five, and this leads to high volatility that mitigates the benefits of any additional return.[6] In contrast, the dividend growth portfolios have many more constituents. The 5 and 10-year portfolios have an average of 297 and 127 companies respectively at the beginning of each annual period. The numbers decrease for the 20-year portfolio, but an average of 32 firms implies that the benefits of diversification are captured. Problems with diversification may well be more relevant to the market-weighted portfolios. The average proportion in the 10-year portfolios of the largest 10 firms by market capitalization is 58.4% of the total market value of the portfolios. This has been on a rising trend since 1985, consistent with the concentration of dividends observed by DeAngelo et al (2004) and Ferris et al (2006) in the UK, reaching a peak of 77.9% at the beginning of 2005.

The performance of consistent dividend growth portfolios is not driven by small-cap or micro-cap stocks. Figure 1 shows the average proportions of stocks with 10 or more years of consistent growth ranked by market value decile from all stocks in the LSPD. The distribution is heavily skewed to the large-cap end of the spectrum. One-third of all firms are in the largest decile, 58% in the largest two deciles, nearly three-quarters in the top three deciles

[6] See McQueen et al (1997) and ap Gwilym et al (2005) for more details.

and over 90% in the top of half of firms by market value. This suggests that transaction costs should not be unreasonable in executing such a strategy, as bid-ask spreads should be narrow and reasonable quantities of shares can be transacted without undue slippage. In addition, because the qualification for joining the portfolios is quite arduous in terms of the time duration required to qualify, the turnover of stocks at annual rebalancing is relatively low.

Despite the evidence of Figure 1, Tables 1 and 2 suggest that size is likely to be influential. The equally weighted portfolios markedly outperformed the market-capitalization weighted equivalents. Table 3 investigates this further by reporting findings from forming quartiles based on market value from those stocks with 10 or more years of consistent dividend growth. As expected, the CAGR is negatively related to market capitalization. In addition, the volatility of the smaller quartiles is also lower, along with the maximum drawdowns. This leads to markedly higher Sharpe and Martin ratios for the smallest two quartiles compared to the larger equivalents. Small, consistent dividend-growing stocks thus look to have been an attractive investment historically.

The Level of Dividends

Whilst the stipulation for inclusion in the consistent growth portfolios is the continual increasing of distributions to shareholders, it says nothing about the level of dividends that firms pay. It could be that firms have extremely low dividend yields, either because of low payout ratios or because stock prices have been bid up to extreme valuations. Figure 2 suggests that this is not the case. The dividend yield on the equally weighted consistent growth portfolio is actually quite similar to that of an equally weighted portfolio of stocks from the All-Share Index;[7] in fact on an annual average basis it has been slightly higher, with a net yield of 3.38% versus 3.20% for the All-Share Index. It can be seen that the yields have largely tracked each other except for the growth portfolio yield becoming a little lower during the early 1990's and the reverse happening around the end of the twentieth century. As an aside, there is some explanatory power in the difference between the two yields with regards to the relative returns of the two portfolios as shown in Equation 1.

[7] An equally weighted portfolio of stocks from the All-LSPD components has a much lower dividend yield since it includes a large number of stocks from the junior Alternative Investment Market where dividend payments are made far less frequently.

$$(R_{10} - R_{ALL}) = 0.95 + 8.03(D_{10} - D_{ALL}) \qquad \text{Adj-}R^2 = 17.1\% \qquad \text{Equation 1}$$

where, R_{10} is the annual return on the equally weighted portfolio of stocks with 10 or more years of consistent growth, R_{ALL} is the annual return on the equally weighted portfolio of stocks from the All-Share Index and D_{10} and D_{ALL} are the respective dividend yields at the beginning of each year.

In an effort to explain the differences between the consistent growth stocks and the rest of the stock universe, Table 4 splits the stocks into four categories; non-dividend payers,[8] stocks which pay dividends but with 4 years or less of consistent growth, those with 5 to 9 years of consistent growth and those with 10 years or more. The most immediate observation is the exceptionally poor performance of the zero-dividend firms, particularly those larger ones that were in the All-Share Index. Not only were returns comparatively low but also the volatility was much higher relative to the dividend paying firms. The maximum drawdown was an eye-watering 85% for the All-Share constituents, with accompanying extreme Ulcer index levels. Amongst the dividend paying firms there is actually little difference in overall return, though the consistent payers exhibit lower volatility and smaller drawdowns. This in turn leads to more favourable Sharpe and Martin ratios. It thus appears that a significant portion of the improvement in absolute return of the consistent dividend growth stocks can be attributed to the avoidance of non-paying firms.

The underperformance of zero-dividend stocks is somewhat surprising. Keim (1985) in the US and Morgan and Thomas (1998) in the UK have previously documented a “U-shaped” relationship between dividend yield and returns, whereby high yield and non-paying stocks have the highest returns. It should be noted however, that Keim (1985) required 60-months of data before a firm qualified for inclusion. When Morgan and Thomas (1998) reduced the qualifying period from 60-months to just 12-months, the performance of zero-dividend firms was considerably worse. This latter result is more comparable with our findings given that no qualification period is imposed for firms to be eligible for study; if a firm has not paid a dividend since listing it is classed as a zero-dividend firm regardless of when it became quoted.

Figure 3 displays the monthly cumulative performance of the four categories of firm in Table 4 since the end of 1985. There are two distinct peaks in the zero-dividend line around the

[8] This group includes any stock that has failed to pay a dividend in the past twelve months irrespective of whether it is a new listing that has less than twelve months of history.

broader market tops of 1987 and 2000. In addition, there are also observable troughs around 1992 and 2002. The performance of zero-dividend stocks thus seems particularly susceptible to variations in the start and end points of data used in any study. In contrast, the dividend portfolios have largely tracked each other through the oscillations of the market. The highest and lowest minimum consistent growth portfolios have crossed each other on a number of occasions over the studied time period although the latter was more volatile. Interestingly, the 5-9 year portfolio has never taken the lead. Whilst the disparity between payers and non-payers is very large, it does not necessarily equate that all zero-dividend stocks are poor investments. It does seem reasonable that if low quality businesses are being brought to the market there is a high degree of likelihood that they will inhabit the non-paying class of stock. Bernstein (2005) argues that it is far harder to manipulate cash dividends than accounting earnings and thus it is plausible that dividends contain information over and above that of profits alone.

Additional Dividend Filters

Having observed the performance of consistent dividend growth stocks in aggregate it seems reasonable to consider whether the *rate* of growth is useful to investors for selecting stocks as a sub-group. According to Gordon's (1962) constant growth model, given two stocks with identical dividend yields, the one with the higher growth rate should trade at a higher price. Historically, however, it has been well documented that "value" stocks have outperformed "growth" firms with investors overpaying for the latter (e.g. Fama and French, 1998).

Table 5 reports the performance of stocks with a minimum of 10-years consistent dividend growth divided into quartiles based on their historic dividend growth rates over the previous 1 and 5 years for the period 1986-2006. In terms of both 1-year and 5-year growth rates, it is the third quartile that is the best performer in both absolute and risk-adjusted returns. The quartile with the highest growth rates is the worst performer by some distance in both cases. This is consistent with investors paying excessively for the fastest growing businesses; however, apart from this the relationship is one of improved absolute and risk-adjusted returns based on the historical growth rate.

To further investigate the "value" and "growth" aspects of consistent dividend growth stocks we now consider whether any additional filtering using dividend yield can lead to enhanced results. As in Table 5, we use stocks that have at least 10 years of consistent growth and form quartiles based on dividend yield (with yields being based on the total cash payments made in the previous twelve months). Table 6 displays the results, with the conventional observation being made that high dividend yield stocks have outperformed the lowest by a fairly wide margin of 5.2% per annum for the period 1986-2006. The monotonic relationship between yield and return is consistent with previous evidence by, amongst others, Keim (1985) and Morgan and Thomas (1998). As dividend yield increases, so does the volatility of returns. After accounting for this, the higher yield portfolios still produce higher Sharpe ratios than lower yield groups. In terms of maximum drawdown, it is actually the lowest yield quartile that suffers the most. It also has the highest Ulcer index of any group and the lowest Martin ratio. The highest yield quartile has the largest drawdown of the remaining three but the Ulcer index is not especially elevated. It also has the largest Martin ratio. When the performance is compared of the highest yield quartile with that of the entire universe of 10-year or more growth stocks in Panel A of Table 2, it is noticed that whilst the high yield portfolio does produce over 150bps of extra return, the Sharpe ratio is 0.60 and the Martin ratio is 1.09 which are very similar to the values of the aggregate 10-year portfolio at 0.58 and 1.08 respectively.

The far-right column of Table 6 displays the results for a portfolio that includes all stocks within the 10-year portfolio but with the portfolio weights set at the beginning of each annual period according to the relative dividend yields of the constituents. This yield-weighted portfolio again performs very similarly to the equally weighted portfolio for the period 1986-2006. The average return of 15.43% is comparable with the 15.48% of the equally weighted portfolio, although the volatility is a little higher and leads to a lower Sharpe ratio. There is little difference in the Ulcer indexes and Martin ratios of the two weighting methods. It remains clear though, that both are far superior to the market-capitalization weighted approach.

The final filter examined is a combination of the value and growth approaches. One metric that has been used by investment professionals is the price-earnings-growth (PEG) ratio. There are no definitive rules as to what the ideal value of the PEG ratio should be, but lower numbers are preferable to higher numbers. Lynch (1993) suggests that investors should not buy stocks that have a price-earnings ratio in excess of the growth rate of earnings, i.e. a stock with a PEG below 1 is attractive. Whilst there has been relatively little work published on the PEG ratio as an investment tool, studies by Peters (1991) and Easton (2002) have suggested a negative relationship does exist between the PEG ratio and returns. The problems with applying PEG filtering to the universe of stocks are that, firstly, a good number of stocks have no earnings and hence no PEG and, secondly, a stock that goes from losses one year to profits the next has an incalculable PEG whilst stocks that are emerging from depressed earnings can also have misleading values.

However, the sample of consistent dividend growers lends itself to this sort of analysis because many of the problems discussed previously have already been overcome. To ensure that all firms qualify we test a variant of the PEG ratio, namely the price-dividend-growth ratio (PDG). It is calculated in exactly the same way as the PEG ratio except that it uses the price-dividend ratio (the inverse of the dividend yield) instead of the price-earnings ratio and the growth rate is the five-year compound annual average increase in dividends. Table 7 displays the results from forming quartiles on the PDG ratio using stocks with 10 or more years of consistent dividend growth. The relationship does appear to be somewhat comparable with previous evidence, with a lower PDG ratio being associated with higher returns. When risk is accounted for, the results appear much weaker, because the Sharpe ratio for the highest PDG portfolio is greater than that of the lowest. The second quartile portfolio has the best risk-adjusted statistics of all quartiles. This approach looks to be less effective than using dividend yield alone.

Conclusion

This paper investigates the effectiveness of investment strategies based on holding portfolios of UK stocks with a history of consistent dividend growth. We find that consistent dividend payers have outperformed the wider market on an equally weighted basis for 1986-2006, particularly when the minimum requirement is set at 10 years of continuous growth. In addition, these stocks have a lower variance of returns and have suffered smaller drawdowns over shorter durations. All the benefits were lost, however, when market-capitalization weighted portfolios were formed rather than equally weighted. In part, this may have been due to a loss of diversification as a few large stocks dominated, particularly in recent years, as there has been a concentration of dividends. It is observed that a considerable portion of the excess returns available to equally weighted consistent dividend portfolios can be attributed to the avoidance, by definition, of any non-paying stocks during the period studied. Whilst there have been periods of spectacular outperformance by zero-dividend firms, over the full period of 1986-2006 they have demonstrated relatively poor returns coupled with markedly higher volatility than dividend paying firms.

The introduction of additional filters produced mixed results. In terms of overall dividend growth, we observe that the companies in the highest quartile of historic growth did not perform especially well. Apart from this, there were greater returns available to purchasing stocks with higher historical growth up to the third quartile on both an absolute and risk-adjusted basis. We also find that higher returns were attainable when firms were ranked according to dividend yield, however, the higher yield portfolios also attracted higher volatility and there was essentially no difference between these portfolios and the aggregate portfolio with 10 or more years' consistent dividend growth. When all the firms in the 10-year growth portfolio were yield-weighted, the results were very similar to the equally weighted method albeit with a little more volatility. They remained far superior to the market-capitalization weighting approach. Finally, when a filter based on the price-dividend-growth (PDG) ratio was imposed, in an attempt to combine the value and growth approaches, the results offered no evidence of excess returns to the perceived more favourable low PDG portfolio.

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Table 1

Annual Returns for Consistent Dividend Growth Portfolios Between 1986-2006

Year	Equally-Weighted						Market Capitalization-Weighted					
	Min. No. of Years of Consistent Dividend Growth				All-Share Comp.	All-LSPD Comp.	Min. No. of Years of Consistent Dividend Growth				All-Share Comp.	All-LSPD Comp.
	5-Years	10-Years	15-Years	20-Years			5-Years	10-Years	15-Years	20-Years		
1986	32.11	32.07	-	-	32.51	48.14	21.95	23.05	-	-	26.58	30.75
1987	19.47	20.01	-	-	18.97	34.02	6.22	6.81	-	-	9.15	9.69
1988	19.75	21.64	-	-	15.60	16.67	11.09	11.90	-	-	11.16	11.07
1989	19.45	22.54	-	-	19.01	11.73	36.96	38.01	-	-	35.95	35.33
1990	-17.77	-13.06	-	-	-17.62	-27.40	-9.07	-4.98	-	-	-8.93	-10.09
1991	22.22	20.08	21.08	-	16.36	12.81	22.46	27.52	30.82	-	20.66	19.62
1992	9.97	12.67	18.27	-	12.14	3.13	11.85	19.78	18.69	-	20.19	18.98
1993	29.31	28.57	31.51	-	36.74	56.31	14.47	5.24	15.91	-	28.35	26.40
1994	1.01	2.32	-2.44	-	-3.49	3.18	-6.53	-6.16	-7.31	-	-5.51	-5.24
1995	17.54	15.90	23.10	-	18.33	15.31	26.50	28.58	33.98	-	24.31	23.27
1996	16.47	15.80	15.01	14.95	16.81	18.77	16.58	15.14	15.43	15.20	16.43	15.28
1997	10.80	11.50	13.51	15.63	10.36	8.79	22.15	23.10	28.33	29.17	24.54	24.84
1998	-4.50	-2.54	-2.42	-1.81	-3.89	-5.58	9.40	15.84	17.07	20.47	13.62	11.25
1999	35.99	25.21	13.01	21.09	44.64	80.84	17.51	2.53	-4.26	-0.29	23.27	22.05
2000	7.99	9.09	7.00	3.51	0.96	2.86	4.27	8.01	6.80	1.01	-2.29	-2.49
2001	5.52	5.06	6.91	13.66	-13.28	-14.89	-11.56	-13.57	-10.33	-6.47	-13.08	-10.86
2002	-11.00	-6.20	-2.37	-1.31	-24.29	-20.44	-24.15	-19.72	-20.36	-18.08	-22.64	-22.92
2003	38.53	30.27	25.35	20.41	40.97	48.90	22.35	18.32	17.49	16.48	20.90	20.25
2004	27.56	28.55	28.73	27.87	18.72	19.35	13.94	19.04	20.12	15.47	12.80	12.49
2005	21.85	28.22	27.32	27.67	24.96	13.24	14.88	10.36	18.43	16.64	22.17	20.36
2006	29.35	33.43	30.72	27.64	26.55	13.04	25.19	22.31	16.29	16.81	17.09	17.06
CAGR												
1986-2006	14.80	15.48	-	-	12.31	13.47	10.75	11.01	-	-	12.08	11.67
1991-2006	15.31	15.49	15.31	-	12.31	13.48	10.24	10.08	11.24	-	11.48	10.91
1996-2006	15.18	15.44	14.22	14.89	10.97	12.05	8.95	8.28	8.53	8.82	9.09	8.67

Table 2

Performance Statistics for Consistent Dividend Growth Portfolios Between 1986-2006

	Equally-Weighted						Market Capitalization-Weighted					
	Min. No. of Years of Consistent Dividend Growth				All-Share Comp.	All-LSPD Comp.	Min. No. of Years of Consistent Dividend Growth				All-Share Comp.	All-LSPD Comp.
	5-Years	10-Years	15-Years	20-Years			5-Years	10-Years	15-Years	20-Years		
Panel A: 1986-2006												
Compound Annual Average Return	14.80	15.48	-	-	12.31	13.47	10.75	11.01	-	-	10.82	11.67
Annualized Standard Deviation (%)	14.56	14.64	-	-	17.14	17.32	15.68	15.85	-	-	15.70	15.69
Skewness	-1.00	-1.00	-	-	-0.86	-0.47	-1.00	-0.99	-	-	-1.03	-1.04
Sharpe Ratio	0.53	0.58	-	-	0.31	0.37	0.24	0.25	-	-	0.24	0.30
Maximum Drawdown (%)	29.50	30.42	-	-	42.98	44.92	39.92	38.17	-	-	41.59	39.44
Ulcer Index (%)	8.59	7.83	-	-	12.72	16.93	11.94	11.08	-	-	12.69	12.12
Martin Ratio	0.90	1.08	-	-	0.41	0.38	0.31	0.36	-	-	0.30	0.38
Panel B: 1991-2006												
Compound Annual Average Return	15.31	15.49	15.31	-	12.31	13.48	10.24	10.08	11.24	-	11.48	10.91
Annualized Standard Deviation (%)	12.94	12.84	12.43	-	15.80	15.49	13.61	13.83	14.07	-	13.52	13.56
Skewness	-0.48	-0.44	-0.46	-	-0.42	0.05	-0.49	-0.62	-0.54	-	-0.51	-0.49
Sharpe Ratio	0.74	0.76	0.77	-	0.42	0.50	0.33	0.31	0.39	-	0.42	0.38
Maximum Drawdown (%)	24.88	23.72	22.57	-	42.98	44.92	39.92	38.17	37.63	-	41.59	39.44
Ulcer Index (%)	7.12	6.50	6.60	-	12.55	13.78	11.79	10.74	10.89	-	12.93	12.02
Martin Ratio	1.34	1.50	1.45	-	0.52	0.56	0.38	0.40	0.50	-	0.44	0.43
Panel C: 1996-2006												
Compound Annual Average Return	15.18	15.44	14.22	14.89	10.97	12.05	8.95	8.28	8.53	8.82	9.09	8.67
Annualized Standard Deviation (%)	12.48	12.42	11.64	11.31	15.42	15.56	13.94	13.72	13.78	14.18	13.24	13.21
Skewness	-0.97	-0.84	-0.90	-0.89	-0.84	-0.06	-0.77	-0.99	-0.89	-0.68	-0.88	-0.87
Sharpe Ratio	0.81	0.84	0.79	0.87	0.38	0.49	0.28	0.23	0.25	0.26	0.30	0.27
Maximum Drawdown (%)	24.88	23.72	22.57	21.88	42.98	44.92	39.92	38.17	37.63	33.60	41.59	39.44
Ulcer Index (%)	7.72	7.02	7.11	6.06	14.23	15.98	13.82	12.53	12.72	10.12	15.12	13.99
Martin Ratio	1.31	1.48	1.29	1.62	0.41	0.44	0.28	0.31	0.27	0.37	0.27	0.26

N.B. All performance statistics were calculated using monthly returns. The Sharpe ratio was measured as the excess return of the portfolio over 3-month UK Treasury Bills divided by the standard deviation of returns. The Ulcer Index and Martin ratio are calculated following the method of Martin and McCann (1989).

Table 3

Performance Statistics for Firms Equally-Weighted with 10 or more Years of Consistent Dividend Growth Ranked According to Size 1986-2006

	Size Quartile			
	1 (Small)	2	3	4 (Large)
Compound Annual Average Return	17.36	16.58	14.84	11.12
Annualized Standard Deviation (%)	14.14	15.29	17.87	17.10
Skewness	-0.65	-0.72	-0.71	-0.72
Sharpe Ratio	0.73	0.62	0.44	0.24
Maximum Drawdown (%)	29.36	28.91	32.14	44.27
Ulcer Index (%)	8.97	8.22	8.90	12.78
Martin Ratio	1.15	1.16	0.88	0.32

Table 4

Performance Statistics for Firms Ranked According to Dividend Status and Number of Years of Consistent Payment 1986-2006

	Number of Years of Consistent Dividend Growth							
	All-Share Components				All-LSPD Components			
	Non-Payers	0 - 4	5 - 9	10 or more	Non-Payers	0 - 4	5 - 9	10 or more
Compound Annual Average Return	3.18	13.13	12.31	14.27	9.76	15.34	14.15	15.48
Annualized Standard Deviation (%)	25.66	17.71	15.88	15.44	24.18	15.97	14.73	14.64
Skewness	-0.18	-0.90	-0.87	-0.93	0.84	-0.74	-0.91	-1.00
Sharpe Ratio	-0.15	0.34	0.33	0.47	0.11	0.52	0.48	0.58
Maximum Drawdown (%)	85.49	37.49	31.81	30.70	74.01	38.93	28.69	30.42
Ulcer Index (%)	47.08	11.87	9.83	8.18	42.00	13.09	9.15	7.83
Martin Ratio	-0.08	0.51	0.54	0.88	0.06	0.63	0.77	1.08

Table 5

Performance Statistics for Firms with 10 or more Years of Consistent Dividend Growth Ranked According to Historical Dividend Growth Rates 1986-2006

	1-Year Dividend Growth				5-Year Dividend Growth			
	1 (Low)	2	3	4 (High)	1 (Low)	2	3	4 (High)
Compound Annual Average Return	14.40	15.64	17.51	13.26	15.45	15.62	17.03	12.98
Annualized Standard Deviation (%)	15.54	14.93	15.16	16.61	14.20	14.97	15.71	17.17
Skewness	-0.66	-0.89	-0.89	-0.91	-1.00	-0.85	-0.85	-0.69
Sharpe Ratio	0.47	0.58	0.69	0.37	0.59	0.57	0.64	0.35
Maximum Drawdown (%)	29.94	27.95	30.49	37.18	28.68	28.81	30.91	39.14
Ulcer Index (%)	8.55	8.37	7.49	11.28	9.22	7.78	7.18	12.71
Martin Ratio	0.86	1.03	1.40	0.55	0.91	1.10	1.39	0.47

Table 6

Performance Statistics for Firms with 10 or more Years of Consistent Dividend Growth Ranked According to Dividend Yield 1986-2006

	Dividend Yield				Yield Weighted Total
	1 (Low)	2	3	4 (High)	
Compound Annual Average Return	11.88	14.84	16.06	17.09	15.43
Annualized Standard Deviation (%)	14.81	15.24	15.99	16.74	15.44
Skewness	-0.94	-1.05	-0.71	-0.50	-0.82
Sharpe Ratio	0.33	0.51	0.56	0.60	0.54
Maximum Drawdown (%)	38.57	30.03	30.00	34.68	29.83
Ulcer Index (%)	11.87	7.81	9.25	9.19	8.05
Martin Ratio	0.41	1.00	0.98	1.09	1.04

Table 7

Performance Statistics for Firms with 10 or more Years of Consistent Dividend Growth Ranked According to Price-Dividend-Growth Ratio 1986-2006

	Price-Dividend Growth Ratio			
	1 (Low)	2	3	4 (High)
Compound Annual Average Return	16.48	16.23	13.79	14.83
Annualized Standard Deviation (%)	17.58	15.65	15.39	13.40
Skewness	-0.49	-0.72	-1.07	-1.22
Sharpe Ratio	0.54	0.59	0.44	0.58
Maximum Drawdown (%)	30.27	28.48	33.13	29.75
Ulcer Index (%)	8.90	8.24	8.37	8.75
Martin Ratio	1.06	1.12	0.81	0.89

Figure 1.

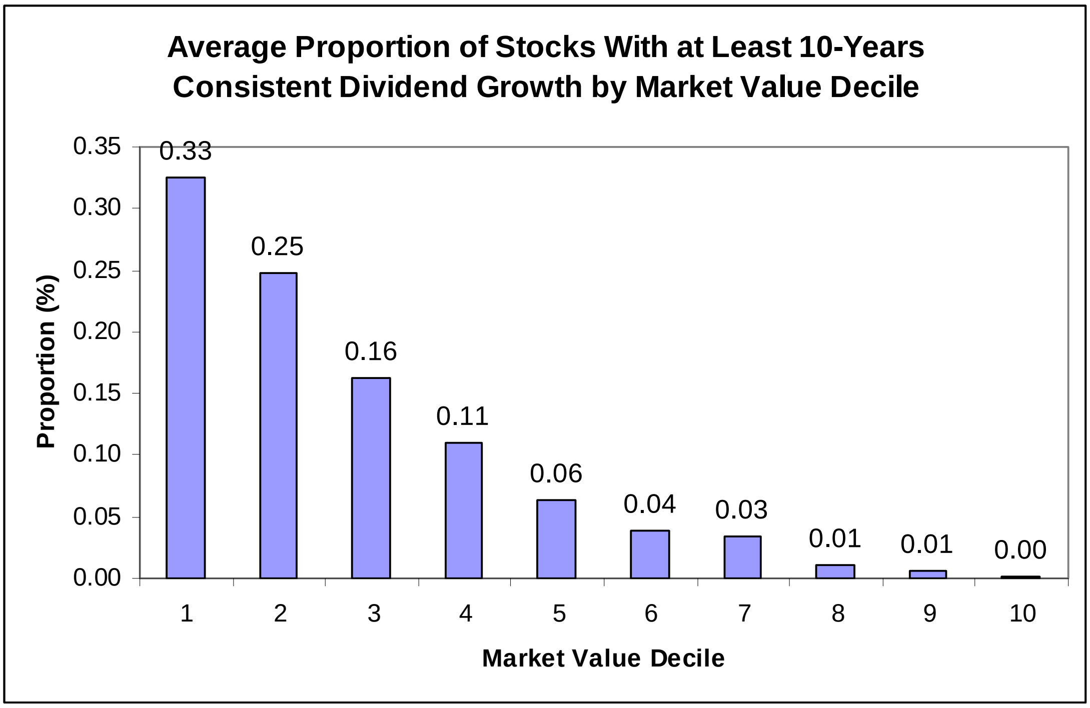

Average Proportion of Stocks With at Least 10-Years Consistent Dividend Growth by Market Value Decile
Proportion (%)
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0.33
0.25
0.16
0.11
0.06
0.04
0.03
0.01
0.01
0.00
1
2
3
4
5
6
7
8
9
10
Market Value Decile

Figure 2.

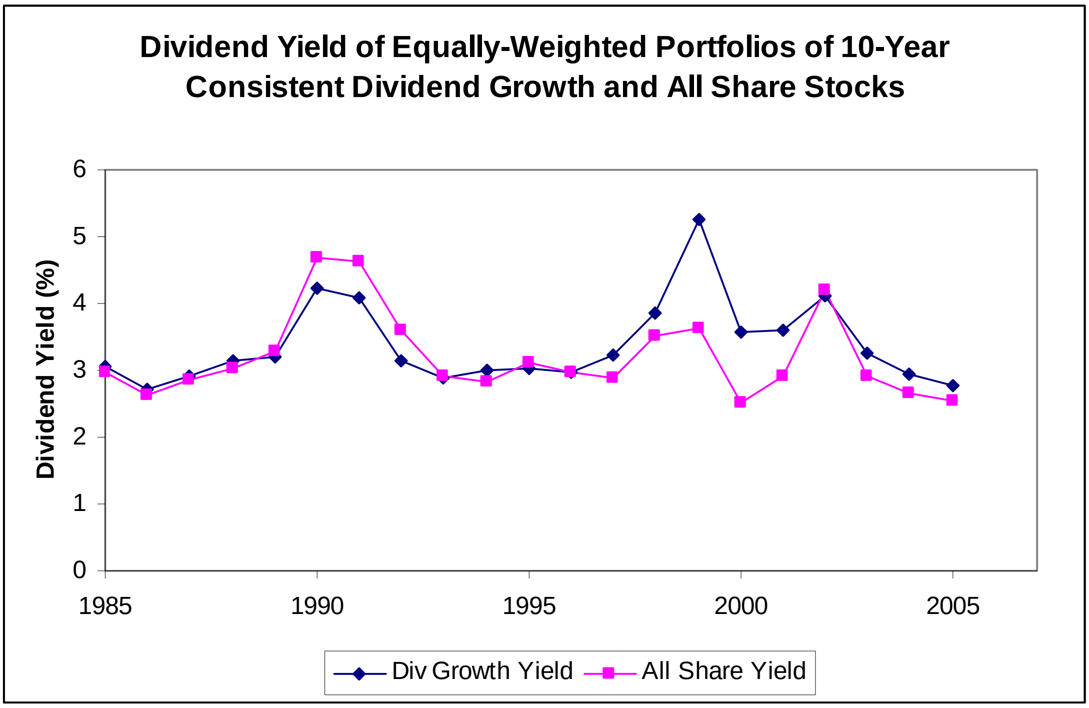
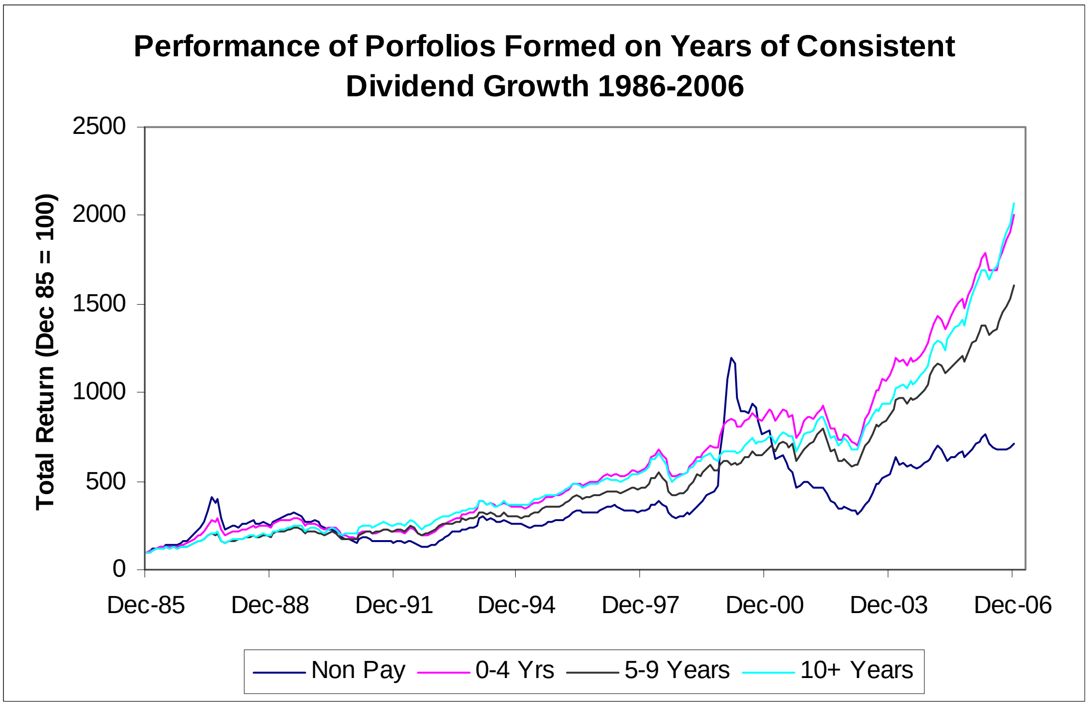

Dividend Yield of Equally-Weighted Portfolios of 10-Year Consistent Dividend Growth and All Share Stocks
Dividend Yield (%)
0
1
2
3
4
5
6
1985
1990
1995
2000
2005
Div Growth Yield
All Share Yield

Figure 3.



Performance of Porfolios Formed on Years of Consistent Dividend Growth 1986-2006
Total Return (Dec 85 = 100)
2500
2000
1500
1000
500
0
Dec-85
Dec-88
Dec-91
Dec-94
Dec-97
Dec-00
Dec-03
Dec-06
Non Pay
0-4 Yrs
5-9 Years
10+ Years