

DOES THE DOG OF THE DOW STRATEGY OUTPERFORM THE MARKET IN LATIN AMERICA?

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ABSTRACT

This study analyzes the performance of the Dogs of Dow (DoD) investment strategy in Latin American stock markets from 1995 to 2011 and determines if the performance varies on growth and recession periods. The following countries were analyzed: Argentina, Brazil, Chile, Colombia, Mexico and Peru. Our findings suggest that the DoD outperforms the market, on an absolute and on a risk-adjusted basis, in all Latin American countries except Mexico. The results are significant in both statistical and economic terms. In general, the performance of DoD in different sub-periods is in line with the overall period, indicating that the DoD has a superior performance in both growth and recession periods.

Keywords: *Dogs of Dow; value stocks; dividend yield; Latin America.*

1. INTRODUCTION

The first article published on the Dogs of the Dow Jones (DoD) investment strategy was prepared by Slatter (1988). The author analyzed the total return of 10 stocks with the highest dividend yield of the New York Stock Exchange from 1973 to 1988 and noted that the return of this portfolio was greater than the return of the Dow Jones. From that work, the DoD strategy was largely popularized by Bary (1993, 1994), O'Higgins and Downes (1991) and publications such as *Beating the Dow* and *American Investment Guide*.

The rationale of the “value stock” investment strategy is to buy assets that are cheap relative to a measure of value, such as asset book value, profit, cash flow or dividend. The opposite strategy is the selection of a portfolio of growth stocks.

Fama and French (1998) studied the average return of stocks with high and low book-to-market in 13 countries and found that the return of value stocks exceeded that of growth stocks by 7.68%. Other studies seek explanations for the superior performance of value stocks when compared to growth stocks. Haugen (1995) argues that the market overestimates the profit growth of companies with low book-to-market and underestimates the profit growth of companies with high book-to-market. So when the prices are adjusted, the value stocks tend to have returns higher than growth stocks.

One of the most widely used measures of value is the dividend yield. There are studies in various countries on the performance of stocks with high dividend yield (Slatter (1988), O'Higgins and Downes (1991), McQueen, Shields and Thorley (1997), Dubois (1997), Filbeck Visscher (2003), Leal, Carvalho and Austin (2000), Carvalho (2001), Prather and Webb (2001)). Many studies show that investing in stocks with high dividend yield not only has higher returns but also has lower risk when compared to market indices.

This paper studies the performance of the DoD strategy in Latin America. We analyze the returns of stocks with high dividend yield in Argentina, Brazil, Chile, Colombia, Mexico and Peru. We consider four versions of the DoD strategy: the stock with the highest dividend yield (Top 1), the stock with the second highest dividend yield (PPP - Penultimate Profit Potential), the five stocks with the highest dividend yield (Top 5), and the ten stocks with the highest dividend yield (Top 10).

We also analyze the performance of the DoD strategy during recession and growth periods. The literature suggests that the DoD behavior and performance can vary in different macroeconomic scenarios. Campbell and Vuolteenaho (2004) show that value stocks are sensitive to permanent market movements and growth stocks are sensitive to temporary market movements.

Our findings suggest that the DoD outperforms the market, on an absolute and on a risk-adjusted basis, in all Latin American countries except Mexico. The results are significant in both statistical and economic terms. In general, the performance of DoD in different sub-periods is in line with the overall period, indicating that the DoD has a superior performance in both growth and recession periods.

This study is structured as follows. The next section presents the literature review on value and growth stocks and on the DoD strategy. Section 3 shows the data and methodology. The results of the DoD strategy in each country are present in Section 4. The fifth section concludes the paper.

2. LITERATURE REVIEW

2.1. Value and Growth Stocks

The DoD strategy belongs to the group of investment strategies in value stocks. In general, value stocks have high dividend yield, low growth rates, and low market price relative to the book value. Growth stocks have opposite characteristics.

There is evidence that value stock strategies, based on the book-to-market, price/earnings and cash flow/price ratios, have superior returns when compared to growth strategies. Fama and French (1998) studied the average return of stocks with high and low book-to-market in 13 countries from 1975 to 1995. On average the return of the value stocks exceeded that of growth stocks by 7.68%. The superior performance of value stocks was found in 12 of the 13 countries studied.

Fama and French (1992) argue that the higher returns of value stocks are a compensation for the risk. Lakonishok et al. (1994) argue that the risks of value stocks are not higher and propose that the under-valuation of value stocks is due to behavioral characteristics.

Capaul, Rowley and Sharpe (1993) show that value stocks with high book-to-market have higher returns than growth stocks in several countries. The authors suggest that the superior performance of value stocks is not due to the fact that these stocks are more sensitive to market movements. They show that the Sharpe ratio of value strategies is higher than that of growth stocks in all countries studied.

Studies in behavioral finance use psychology theories to explain the different returns of value and growth stocks. DeBondt and Thaler (1985) explain that when investors receive good or bad news, they are optimistic in the case of growth stocks and pessimistic in the case of value stocks. So when the market adjusts these reactions, the value stocks with lower investor expectations tend to have better performance, while growth stocks tend to have worse performance.

Macedo (1995) argues that the superior returns of value strategies are related to the fact that investors tend to have high expectations for growth stocks and low expectations for value stocks. Haugen (1995) argues that the market overestimates the growth rate of low book-to-market companies and underestimates the growth rates of high book-to-market companies. That is, there are low expectations around value stocks. However, when prices are adjusted, the value stocks tend to have returns higher than growth stocks.

Campbell, Polk and Vuolteenaho (2010) disagree that growth stocks have lower returns only because investors have high expectations on them, and argue that value stocks are sensitive to permanent market movements (market impact on cash flow) and growth stocks are sensitive to temporary market movements (impact on risk premiums).

Griffin and Lemmon (2002) analyze the relationship between the book-to-market ratio, bankruptcy risk and stock return. Among the companies with high bankruptcy risk, the difference between the returns of companies with high and low book-to-market is more than twice the difference between the other companies.

Baker and Wurgler (2006) study the effect of investor sentiment on stock returns. If low growth is expected, the returns are higher for smaller firms, with high volatility, small profit and dividends. However, if high growth is expected, the effects are just the opposite.

Doukas, Kim and Pantzali (2002) examine whether investors' expectations about growth (value) stocks are systematically optimistic (pessimistic). The results do not support the idea that value stocks outperform growth stocks because of the difference in financial performance of both types of firms.

He, Lee and Wei (2009) compare the implied volatility of options of value and growth stocks. They find that there is difference between the implied volatility of value and growth stocks, and that the investors' reaction to new information for growth stocks is higher than for value stocks.

Gulen, Xing, Zhang (2010) find that, during high volatility conditions, the expected premium for value stocks is more sensitive to incorporate the economic news than the premium for growth stocks. Thus, the difference of premium is variable over time, peaking at times of high volatility.

2.2 *Dogs of the Dow Strategy*

The concept of the DoD strategy is to invest in stocks that are cheap relative to the dividend flow. Slatter (1988) examined the total return of 10 stocks with the highest dividend yield in the US stock market from 1973 to 1988. While the return of the Dow Jones during this period was 10.8%, the DoD return reached 18.4%. It is noteworthy that the author did not analyze the effect of transaction costs and taxes.

O'Higgins and Downes (1991) presented an analysis of the DoD strategy in the US stock market. In the period analyzed (1973-1991) the return of the market index was 10.43% compared to 16.61% of the DoD strategy. Considering a cost of rebalancing of 3% of the portfolio, the return of the DoD strategy would drop to 16.03%, reaffirming the superior return of this strategy.

McQueen, Shields and Thorley (1997) compared the performance of the DoD with the Dow Jones from 1946 to 1995. The authors tested the strategy using the 10 stocks with the highest dividend yield. The results indicated that the DoD return was higher than the Dow Jones before adjusting the risk. However, after adjusting for risk, transaction costs and taxes, the DoD did not have a return higher than the market index.

Domian, Louton and Mossman (1998) demonstrated that the DoD behavior in the 1964-1997 period is consistent with the hypothesis of exaggerated market reaction. The authors compared the performance of the DoD in different periods and noted that, even during the 1987-1988 crisis, the higher returns are explained by the overreaction, but, after that period, the strategy did not outperform.

McQueen and Thorley (1997) studied the "Foolish Four" strategy, based on a subset of the stocks with high dividend yield, and concluded that the strategy did not outperform the market after adjusting for risk, transaction costs and taxes. Hirschey (2000) argues that there is no evidence of abnormal returns of the DoD in the U.S. When returns are adjusted for taxes and rebalancing costs, the DoD strategy did not outperform the Dow Jones in the period 1961-1998.

The study of the DoD strategy is not restricted to the academia and to the US market. Some financial institutions, such as Merrill Lynch, Prudential and Morgan Stanley, performed empirical studies that supported the strategy. Further, many academics became interested in the study of this strategy in different countries.

Dubois (1997) found that the European version of the DoD was quickly disseminated, and Vissher and Filbeck (2003) analyzed the strategy in Canada. Leal, Carvalhal and Austin (2000) studied the performance of the DoD in Brazil and the U.S and the results showed little evidence of DoD's higher performance in both countries. Carvalhal (2001) analyzed the DoD strategy in several Latin American countries from 1994 to 1999, and concluded that the DoD outperformed the market in all countries except Brazil, but the results were not statistically significant.

3. DATA AND METHODOLOGY

Our sample consists of the largest markets in Latin America: Argentina, Brazil, Chile, Colombia, Mexico and Peru. The DoD performance was analyzed from January/1995 to December/2011, for a total of 204 monthly observations for each country. This period was chosen because it is the beginning of inflationary stability for most Latin American countries. In the case of Colombia and Peru, the analysis was done from January/1996 to December/2011 and January/1998 to December/2011, respectively, due to lack of data availability.

Market indices from each country were: Merval (Argentina), Ibovespa (Brazil), IGPA (Chile), IGBC (Colombia), IPC (Mexico) and IGBVL (Peru). Total monthly returns were calculated (adjusted for dividends, bonuses, splits, etc.) in dollars, based on month-end prices.

The monthly risk-free rate used was: Tasa Interes Basica (Argentina), CDI (Brazil), Tip 365 (Chile), Interbancaria DEA (Colombia), Tasa de Int Mx 28 (Mexico) and Ope Interbancária SOL (Peru). The data come from the Economatica database.

The implementation of the DoD strategy was performed as follows. On the last day of each year, all liquid stocks (with at least one trade per month) were ranked according to the dividend yield (dividend in the last 12 months divided by the year's closing price). Then we formed equally-weighted portfolios by investing in stocks with high dividend yields and kept the portfolio for one year. At the end of this period, the portfolio was rebalanced with the new stocks with high dividend yields.

We tested four versions of the DoD: the stock with the highest dividend yield (Top 1), the stock with the second highest dividend (PPP - Penultimate Profit Potential), the five stocks with the highest dividend yield (Top 5), and the ten stocks with the highest dividend yield (Top 10).

Then we calculated the average return of each DoD strategy, the market index and risk-free rate. We run statistical tests of differences to verify if the DoD performance exceeds the market before and after adjusting for risk. To measure the performance after the risk, we used the Sharpe ratio calculated on the market index. It is noteworthy that the performance of the DoD was analyzed after transaction costs and taxes associated with the implementation of the strategy.

We also performed the analysis in different sub-periods in order to check if the performance of the DoD strategy varies growth and recession periods. The sub-periods were chosen according to the presence or not of crises in Latin American or worldwide: 1995-1998 (crises in Mexico, Asia and Russia); 1999-2002 (crises in Brazil, Argentina, Internet bubble, September 11 attacks and accounting scandals in the US); 2003-2007 (world economic growth) and 2008-2011 (crises in the US and Europe).

4. Results

4.1. Argentina

Table 1 shows the performance of the DoD in Argentina. All DoD strategies outperformed the market before and after adjusting for risk from 1995 to 2011. The average dollar return of the market index was 0.1% per month, compared to the returns of the various DoD strategies ranging from 1.0% to 1.9% per month. All differences are statistically and economically significant. Besides the superior returns the most diversified DoD strategies (Top 5 and 10) also had lower standard deviation (9.4% and 9.00%, respectively) than the market (11.3%).

The table also shows the beta and Sharpe ratio (calculated relative to the market index). All betas are smaller than 1, indicating that the DoD strategies had low market risk. The Sharpe index indicates that all DoD strategies had risk-adjusted returns higher than the market.

The performance of the DoD strategies during the different sub-periods (1995-1998; 1999-2002; 2003-2007; 2008-2011) did not have significant differences. In recession periods, the DoD strategies fell less than the market and had even positive returns. On the other hand, in growth periods, DOD strategies rised more than the market.

For example, from 1999 to 2002 (crises in Brazil, Argentina and the United States), the average dollar return on the market index was -2.1% per month, compared to the result of the various DoD strategies ranging from -2.5% to -1.2% per month. More recently, during the sub-prime crisis (2008-2011), the market index had an average return of -0.4% per month, and the DoD strategies achieved significant positive returns (1.5% to 2.4% per month). From 2003 to 2007 the market rose on average 2.5% per month, while the DoD strategies rose from 2.8% to 5.2% per month.

4.2. Brazil

Table 2 shows the performance of the DoD in Brazil. All DoD strategies outperformed the market before and after adjusting for risk from 1995 to 2011. The average dollar return of the market index was 0.9% per month, compared to the result of the various DoD strategies ranging from 1.5% to 3.0%. All return differences are significant at 1%.

Unlike the Argentine market, all DoD strategies presented standard deviation (16.2% to 111.0%) higher than the market (12.2%). Even for the most diversified DoD strategies, the variability of returns was larger than the market. Despite the higher standard deviations, the Sharpe ratios indicate that all DoD strategies had risk-

adjusted returns higher than the market. It is also worth noting that, except for the Top 1, the betas of the DoD strategies were smaller or close to 1.

The performance of the DoD strategies varied widely in the sub-periods. When the Ibovespa presented average negative returns, the DoD strategies had positive returns. For example, from 1999 to 2002, the average dollar return on Ibovespa was -1.2% per month, compared to the result of the various DoD strategies ranging from -0.3% to 3.4% per month. More recently, from 2008 to 2011, the market index had an average return of -0.4% per month, and the DoD strategies had returns of -0.3% to 2.8% per month. In both periods, the DoD strategies presented absolute and risk-adjusted returns higher than the market.

When Ibovespa had positive returns, the results were different for the sub-periods 1995-1998 and 2003 to 2007. From 1995 to 1998, the Brazilian market had a slightly positive average return (0.2% per month) while the DoD strategies, except for the Top 10, had negative returns. In the period 2003-2007, the average performance of DoD strategies (5.3% to 8.9% per month) was significantly higher than Ibovespa (4.1% per month).

4.3. Chile

Table 3 shows the performance of the DoD in Chile. All DoD strategies, except for the Top 1, outperformed the market from 1995 to 2011. The average dollar return of the market index was 0.5% per month, compared to the result of the DoD strategies (except Top 1) ranging from 0.8% to 1.6% per month. All return differences are statistically and economically significant.

All betas are smaller than 1, indicating that the DoD had low market risk. However, DoD strategies were more volatile than the market index. The Sharpe ratios indicate that the DoD strategies, except for the Top 1, had risk-adjusted returns higher than the market, especially the most diversified strategies (Top 5 and 10).

The DoD performance varied in the sub-periods. When the IGPA had negative returns the DoD strategies generally had positive returns. From 1999 to 2002, the DoD average return ranged from 0.3% to 1.7% per month, while the IGPA fell on average 0.2% per month. The same behavior occurred from 1995 to 1998, where the DoD strategies (except Top 1 and PPP) rose from 0.1% to 0.3% per month and the IGPA fell 1.2% per month.

During macroeconomic growth periods, most DoD strategies had returns higher than IGPA. For example, in the 2003-2007 period, with the exception of Top 1, the average performance of DoD strategies (2.4% to 3.6% per month) was significantly higher than the IGPA (2.4% per month). Since 2008, the performance of the most diversified DoD strategies (Top 5 and 10) has also been better than IGPA before and after adjusting for risk.

4.4. Colombia

Table 4 shows the performance of the DoD in Colombia. All DoD strategies, except for Top 1, outperformed the market index from 1996 to 2011. The average dollar return of the market index was 0.9% per month compared to the result of the DoD strategies (except Top 1) of 1.4% per month.

All betas were smaller than 1, indicating that the DoD had low market risk. The Sharpe ratios indicate that DoD strategies, except Top 1, had risk-adjusted returns higher than the market. The performance of the DoD strategies in different sub-periods behaved in line with the whole period. At all times, at least three DoD strategies outperformed the market.

4.5. Mexico

Table 5 shows the performance of the DoD in Mexico. Unlike other countries, the evidence of superior performance of DoD strategies is weak. From 1995 to 2011, only the Top 5 strategy had an average return (1.2% per month) higher than the market (0.9% per month), before and after adjusting for risk. All other return differences were not statistically significant.

All betas (except PPP) are smaller than 1, indicating low market risk, but the DoD strategies had higher return variability compared to the market. The Sharpe ratios near zero indicate that the DoD strategies did not have risk-adjusted returns above the market.

The performance of the DoD strategies varied in different sub-periods and, in general, there was no evidence of excess returns. The only exception is the period from 1999 to 2002, in which all DoD strategies had average returns (1.3% to 2.8% per month) higher than the market (0.8% per month). In all other periods, no more than

two DoD strategies had returns higher than the market (Top 1 and 5 from 1995 to 1998; PPP from 2003 to 2007, and Top 5 and 10 from 2008 to 2011).

4.6. Peru

Table 6 shows the performance of the DoD in Peru. All DoD strategies outperformed the market before and after adjusting for risk from 1998 to 2011. The average dollar return of the market index was 1.4% per month, compared to the result of the various DoD strategies ranging from 2.4% to 3.0% per month. All return differences were statistically and economically significant.

All betas were lower than 1, indicating that the DoD had low market risk. However, most DoD strategies had standard deviation higher than the market. The Sharpe Index indicates that all DoD strategies had risk-adjusted returns higher than the market.

The performance of the DoD did not vary significantly in the sub-periods and was consistently higher than the market. When the market had negative returns, the DoD strategies in general fell less and sometimes the returns were even positive. For example, in the 1999-2002 period, the average dollar return for the various DoD strategies ranged from 0.7% to 4.0% per month, while the market fell an average of 0.1% per month.

In growth periods, all DoD strategies had returns higher than the market, both before and after adjusting for risk. From 2003 to 2007, the average performance of the DoD strategies (4.9% to 5.8% per month) was higher than the market (4.6% per month) and the same has been happening more recently since 2008.

5. CONCLUSION

The literature on investing in value stocks is vast. However, only a few studies have analyzed the performance of stocks with high dividend yield in Latin America. This study analyzes the performance of a portfolio of stocks with high dividend yield in Argentina, Brazil, Chile, Colombia, Mexico and Peru from 1995 to 2011.

The concept of the Dogs of the Dow (DoD) is investing in value stocks with the highest dividend yield. There are several versions of the strategy: the stock with the highest dividend yield (Top 1), the stock with the second highest dividend (PPP - Penultimate Profit Potential), the five stocks with the highest dividend yield (Top 5), and the ten stocks with the highest dividend yield (Top 10).

Our results show that the DoD strategy outperformed the market in all countries except Mexico, both before and after adjusting for risk, transaction costs and taxes. The results were statistically and economically significant. In general, the DoD performance in different sub-periods was in line with the entire period, indicating that the DoD strategies have superior return during both growth and recession periods.

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Table 1 – Monthly Dollar Performance of DoD Strategies in Argentina

Panel A: 1995 to 2011						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	1.1%	1.9%	1.1%	1.0%	0.1%	0.1%
Standard Deviation	14.3%	12.1%	9.4%	9.0%	11.3%	4.0%
Beta	0.68	0.55	0.66	0.67	1.00	0.11
Sharpe	0.08	0.15	0.14	0.10		0.00
Panel B: 1995 to 1998						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	0.4%	1.7%	0.4%	0.4%	-0.1%	0.6%
Standard Deviation	11.5%	12.4%	10.6%	9.6%	10.6%	0.3%
Beta	0.84	0.69	0.91	0.88	1.00	0.00
Sharpe	0.07	0.17	0.10	0.14		0.06
Panel C: 1999 to 2002						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	-1.6%	-2.5%	-1.2%	-1.4%	-2.1%	-0.9%
Standard Deviation	20.3%	11.9%	12.1%	12.5%	15.0%	8.0%
Beta	0.63	0.44	0.62	0.68	1.00	0.18
Sharpe	0.02	-0.03	0.10	0.09		0.08
Panel D: 2003 to 2007						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	3.0%	5.2%	3.2%	2.8%	2.5%	0.5%
Standard Deviation	7.7%	12.6%	5.9%	4.6%	8.2%	1.9%
Beta	0.37	0.59	0.48	0.39	1.00	0.1
Sharpe	0.06	0.23	0.12	0.05		-0.26
Panel E: 2008 to 2011						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	2.1%	2.4%	1.5%	1.6%	-0.4%	0.1%
Standard Deviation	15.9%	10.0%	8.5%	8.3%	10.5%	1.4%
Beta	0.86	0.52	0.64	0.64	1.00	0.07
Sharpe	0.19	0.29	0.30	0.33		0.05

Table 2 – Monthly Dollar Performance of DoD Strategies in Brazil

Panel A: 1995 to 2011						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	2.7%	1.5%	3.0%	3.0%	0.9%	1.0%
Standard Deviation	111.0%	16.2%	26.9%	16.6%	12.2%	5.5%
Beta	2.75	0.57	1.07	0.85	1.00	0.32
Sharpe	0.02	0.04	0.09	0.16		0.03
Panel B: 1995 to 1998						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	-1.9%	-1.1%	-0.1%	0.3%	0.2%	1.6%
Standard Deviation	22.7%	17.2%	10.1%	7.9%	12.3%	0.9%
Beta	0.57	0.06	0.36	0.36	1.00	0.01
Sharpe	-0.09	-0.06	-0.03	0.01		0.12
Panel C: 1999 to 2002						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	2.9%	-0.3%	3.3%	3.4%	-1.2%	-0.7%
Standard Deviation	226.7%	20.3%	52.8%	30.9%	15.9%	8.9%
Beta	6.07	0.77	1.87	1.29	1.00	0.45
Sharpe	0.02	0.05	0.10	0.20		0.04
Panel D: 2003 to 2007						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	8.9%	5.3%	5.6%	5.3%	4.1%	2.5%
Standard Deviation	20.7%	13.1%	8.3%	7.2%	8.6%	3.9%
Beta	0.47	0.27	0.55	0.61	1.00	0.34
Sharpe	0.23	0.08	0.19	0.21		-0.26
Panel E: 2008 to 2011						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	-0.3%	1.4%	2.8%	2.4%	-0.4%	0.7%
Standard Deviation	11.4%	13.8%	10.4%	9.1%	11.4%	5.1%
Beta	0.69	0.87	0.75	0.69	1.00	0.38
Sharpe	0.01	0.18	0.51	0.52		0.15

Table 3 – Monthly Dollar Performance of DoD Strategies in Chile

Panel A: 1995 to 2011						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	0.0%	0.8%	1.6%	1.5%	0.5%	0.2%
Standard Deviation	11.3%	11.1%	8.2%	7.1%	6.1%	3.0%
Beta	0.76	0.99	0.93	0.92	1.00	0.34
Sharpe	-0.05	0.03	0.18	0.22		-0.07
Panel B: 1995 a 1998						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	0.0%	-1.6%	0.3%	0.1%	-1.2%	0.2%
Standard Deviation	12.4%	14.0%	9.9%	9.2%	6.5%	1.6%
Beta	0.41	1.28	1.01	1.14	1.00	0.14
Sharpe	0.10	-0.04	0.20	0.24		0.25
Panel C: 1999 to 2002						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	0.3%	1.7%	1.2%	1.2%	-0.2%	-0.5%
Standard Deviation	11.8%	8.9%	7.0%	6.3%	5.2%	2.7%
Beta	1.05	0.63	0.79	0.90	1.00	0.37
Sharpe	0.05	0.22	0.23	0.34		-0.10
Panel D: 2003 to 2007						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	0.4%	2.4%	3.6%	3.2%	2.4%	0.8%
Standard Deviation	8.5%	10.5%	7.3%	5.3%	4.6%	2.4%
Beta	0.78	0.92	0.87	0.70	1.00	0.34
Sharpe	-0.25	0.01	0.20	0.20		-0.45
Panel E: 2008 to 2011						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	-0.8%	0.5%	1.0%	1.0%	0.6%	0.1%
Standard Deviation	13.0%	10.6%	8.5%	7.4%	7.6%	4.6%
Beta	0.94	0.96	0.94	0.84	1.00	0.47
Sharpe	-0.13	-0.02	0.08	0.10		-0.11

Table 4 - Monthly Dollar Performance of DoD Strategies in Colombia

Panel A: 1996 to 2011						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	0.4%	1.4%	1.4%	1.4%	0.9%	0.6%
Standard Deviation	14.3%	12.2%	9.2%	8.4%	9.0%	3.4%
Beta	0.93	0.82	0.87	0.85	1.00	0.2
Sharpe	-0.04	0.05	0.11	0.16		-0.04
Panel B: 1996 to 1998						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	-0.9%	1.5%	0.0%	0.2%	-1.1%	0.9%
Standard Deviation	15.4%	9.9%	8.2%	9.0%	8.1%	2.6%
Beta	1.27	0.40	0.89	1.00	1.00	0.08
Sharpe	0.02	0.25	0.30	0.37		0.26
Panel C: 1999 to 2002						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	0.2%	-0.7%	-0.4%	-0.4%	-0.8%	-0.4%
Standard Deviation	18.4%	14.1%	11.6%	8.7%	8.9%	2.6%
Beta	1.37	1.17	1.15	0.89	1.00	0.09
Sharpe	0.07	0.01	0.06	0.12		0.04
Panel D: 2003 to 2007						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	1.2%	4.7%	4.1%	3.9%	3.8%	1.2%
Standard Deviation	12.2%	14.1%	8.5%	7.6%	9.7%	3.0%
Beta	0.69	0.80	0.68	0.71	1.00	0.17
Sharpe	-0.25	0.07	0.04	0.01		-0.32
Panel E: 2008 to 2011						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	0.6%	-0.5%	1.1%	1.2%	0.4%	0.5%
Standard Deviation	11.5%	7.8%	7.6%	8.0%	8.3%	4.8%
Beta	0.67	0.64	0.79	0.89	1.00	0.41
Sharpe	0.02	-0.14	0.17	0.31		0.02

Table 5 – Monthly Dollar Performance of DoD Strategies in Mexico

Panel A: 1995 to 2011						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	0.9%	0.8%	1.2%	0.9%	0.9%	0.6%
Standard Deviation	13.8%	24.7%	9.9%	9.4%	8.8%	3.2%
Beta	0.54	1.04	0.81	0.86	1.00	0.25
Sharpe	0.00	0.00	0.04	0.01		-0.05
Panel B: 1995 to 1998						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	1.5%	-2.0%	0.5%	-0.3%	-0.2%	0.8%
Standard Deviation	12.3%	17.9%	10.8%	12.1%	11.7%	4.4%
Beta	0.44	0.87	0.79	0.87	1.00	0.26
Sharpe	0.13	-0.12	0.13	-0.01		0.12
Panel C: 1999 to 2002						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	2.8%	2.6%	1.5%	1.3%	0.8%	1.0%
Standard Deviation	15.4%	15.4%	7.7%	9.0%	8.8%	2.4%
Beta	0.50	0.66	0.52	0.67	1.00	0.14
Sharpe	0.13	0.13	0.09	0.06		0.02
Panel D: 2003 to 2007						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	1.4%	3.7%	2.5%	2.0%	2.6%	0.5%
Standard Deviation	14.2%	9.8%	5.1%	5.3%	5.3%	1.8%
Beta	0.20	0.49	0.57	0.73	1.00	0.21
Sharpe	-0.08	0.11	-0.02	-0.15		-0.46
Panel E: 2008 to 2011						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	-2.2%	-1.7%	0.0%	0.5%	0.0%	-0.1%
Standard Deviation	12.7%	44.0%	14.7%	10.8%	8.9%	3.9%
Beta	0.86	1.92	1.19	1.06	1.00	0.36
Sharpe	-0.22	-0.04	0.01	0.10		-0.01

Table 6 – Monthly Dollar Performance of DoD Strategies in Peru

Panel A: 1998 to 2011						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	3.0%	2.4%	2.8%	2.6%	1.4%	0.5%
Standard Deviation	14.8%	15.3%	9.3%	7.6%	8.9%	1.4%
Beta	0.88	0.87	0.84	0.69	1.00	0.06
Sharpe	0.12	0.07	0.25	0.23		-0.11
Panel B: 1998						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	-4.8%	0.2%	-0.6%	-0.6%	-0.9%	0.1%
Standard Deviation	27.6%	18.9%	13.9%	10.2%	14.1%	1.5%
Beta	1.62	0.62	0.85	0.60	1.00	0.02
Sharpe	-0.24	0.07	0.05	0.04		0.07
Panel C: 1999 to 2002						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	4.0%	0.7%	1.4%	0.8%	-0.1%	0.5%
Standard Deviation	16.7%	10.8%	5.9%	5.8%	5.8%	1.4%
Beta	0.92	0.80	0.56	0.67	1.00	0.09
Sharpe	0.26	0.09	0.29	0.20		0.12
Panel D: 2003 to 2007						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	4.9%	5.4%	5.8%	4.9%	4.6%	0.6%
Standard Deviation	10.6%	14.9%	7.9%	6.8%	7.5%	1.0%
Beta	0.03	0.61	0.61	0.59	1.00	0.04
Sharpe	0.02	0.05	0.17	0.05		-0.56
Panel E: 2008 to 2011						
	TOP1	PPP	TOP5	TOP10	Market	Risk Free
Average Return	1.8%	0.9%	2.0%	3.0%	0.4%	0.5%
Standard Deviation	18.2%	22.7%	13.9%	10.5%	13.0%	2.1%
Beta	1.00	1.03	0.93	0.70	1.00	0.06
Sharpe	0.11	0.03	0.25	0.43		0.01