AN ANALYSIS OF THE DAY OF THE WEEK EFFECT AND THE JANUARY EFFECT ON THE STOCK EXCHANGE OF MAURITIUS

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ABSTRACT
This study investigates the day of the week effect and the January effect on the Stock Exchange of Mauritius (SEM). Positive and statistically significant Wednesday and Friday effects are observed. Surprisingly we also find a positive and significant Monday effect but smaller in magnitude. The extra returns may not seem to be economically significant, but when analysed on a yearly basis, they adequately compensate for market frictions, ranging from 3.83 to 4.65 per cent. When the size effect and the book-to- market equity effect are controlled for, only the Friday effect remains statistically significant. There is no January effect on the SEM. We find a significant positive September effect at market level (with an extra return of around 6 per cent) and even when using the Fama and French model as a benchmark, providing an extra return of 5.2 per cent. Most of the companies in the sample release their audited accounts in September.

Key words: Stock Exchange of Mauritius, day of the week effect, January effect

JEL classification: G 14, G 15.

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I. INTRODUCTION

The Stock Exchange of Mauritius (SEM) started operations in July 1989. It is composed of an Official Market and of a Development and Enterprise Market [formerly the Over the Counter market (OTC)]. The trading activity of the exchange is administered by the Stock Exchange of Mauritius Limited. The regulatory body is the Financial Services Commission (FSC). On the Official Market, the number of listed companies (equities) grew from six at December 1989 to 41 at December 2006 and the market capitalization increased from around 93.26 to 3,540.60 million dollars over the same period. Table 1 below gives the market highlights. The SEMDEX is the index of all listed ordinary shares and it is a value-weighted index. There are eleven stock broking companies in operation.

Table 1
Stock Exchange of Mauritius: Market Highlights

	1989	**1991**	**1994**	**1997**	**1999**	**2001**	**2004**	**2006**
No. of Listed Companies (Equities)	6	19	34	42	43	40	40	41
Mkt Cap (Rsbillion)[1]	1.44	4.86	28.54	36.93	41.73	32.15	67.03	116.98
Mkt Cap ($)[2]	93.26	309.52	1,578.32	1,754.63	1,643.31	1,601.85	2,395.78	3,540.6
Turnover Ratio (%)	0.97	1.67	5.45	8.11	4.74	10.24	4.21	5.12
SEMDEX	117.34	154.17	476.1	391.12	435.69	340.92	710.77	1,204.46
P/E Ratio	6.56	6.12	20.11	12.86	8.98	5.91	9.93	11.95
Div Yield (%)	5.42	5.11	2.08	3.62	5.03	8.30	4.84	3.66

(Source: SEM Factbooks, various issues and author's computations)
1 market capitalization in billion rupees, to 2 d.p.
2 market capitalization in million US dollars, to 2 d.p.

This study contributes to the existing literature in several ways. First, it analyses stock market anomalies within an asset pricing model framework and in an emerging African stock market context. Second, the research will be valuable to fund managers, portfolio managers, arbitrageurs and the investing public at large. It will also provide valuable insights to market participants,

regulators and policy makers. The study also investigates the opportunities for abnormal return on the SEM.

II. OBJECTIVES OF THE STUDY

To test whether the day of the week effect, and the January effect persist when analysed within an asset-pricing model. This strand of research has not been done at least for emerging markets. This study therefore integrates two significant areas of research: asset pricing and stock market anomalies. This study investigates whether the calendar anomalies persist when the size effect and the value premium as per the Fama and French (1993) three-factor model are controlled for. The possible profit opportunities on the SEM in terms of both economic and statistical significance are also investigated.

III. LITERATURE REVIEW

The study of stock market anomalies has been one of the most captivating areas of financial market research during the last decades. Anomalies are empirical results that seem to be inconsistent with maintained theories of asset-pricing behavior. They indicate either market inefficiency (profit opportunities) or inadequacies in the underlying asset-pricing model Schwert (2003). However, many of these studies have concentrated on US and European markets and a limited number on the Asian stock exchanges. Unfortunately, research on emerging African stock markets is scarce see Chukwuogor,(2007).

(i) Evidence on Monday Effect and Day of the Week Effect

Many empirical works have been conducted to test the existence of the Monday effect. Cross (1973)[2] using the Standard and Poors Composite Index found that the mean return on Friday was 0.12%, but was -0.18% on Mondays. French (1980)[3] analysed the daily Standard and Poors 500 returns and found that the average Monday return was -0.17% and the mean return was positive for all other days of the week, with Wednesday and Friday having the highest returns. Gibbons and Hess (1981) found a negative annualised return of 33.5% on Monday. Clare, Ibrahim and Thomas (1995) using Kuala Lumpur Stock Exchange Composite Index (KLSE) data showed that the average Monday return was -0.109%. Alexakis and Xanthakis, (1995) examined the day of the week effect in the Greek stock market showing Monday and Tuesday negative average returns. Brusa, Liu and Schulman (2000) found that average Monday return for the DJIA is -0.130% and for the NYSE Composite is -0.150%. Mehdian and Perry

[2] In Ariel (1987)
[3] See Ariel (1987)

(2001) examined the Monday effect in five major US equity indices, and confirmed that Monday returns are significantly negative and are lower than returns during the rest of the week.

A number of explanations have been put forward to explain the weekend effect. According to the information release hypothesis, information released during the week tends to be positive and information released over weekends tends to be negative. Another explanation is that the delay between the trade date and the settlement date create an interest-free loan until settlement. Friday buyers get two extra days of free credit, creating an incentive to buy on Fridays. Miller (1988) attributes the negative returns over weekends to a shift in the broker-investor balance in buy and sell decisions.

(ii) January Effect and Month of the Year Effect

A number of studies have also found that returns in January tend to be much higher compared to other months. Rozeff and Kinney (1976) conducted a rigorous study documenting the existence of a January effect in the US. They found that the average return for the month of January was 3.48 per cent. However, for the remaining 11 months of the year it was only 0.42 per cent. Keim (1983) showed that the average difference between risk-adjusted returns of small and large firms is about 0.7% per day during January. Keim and Stambaugh (1984) found that mean close-to-close returns of small firms on Monday in January are positive and related to firm size. Schultz (1985) using Dow Jones Average found an average difference between the abnormal returns for small and large firms of 8% during the first five days of January. Furthermore, he showed that after adjustment for market returns, stockholders earned an extra 15% return for holding small firm stocks for just the first nine days of January. A more recent study carried out by Schwert (2003), documents the turn-of-the-year effect for the period 1962 to 2001. He estimates the January effect to be 0.4 per cent per day over the periods 1980-1989 and 1990-2001, which is about half the size of the estimate over the 1962-1979 period. Thus, the January effect is still present in the U.S.

The January effect has been found to be present in other countries as well. Nassir and Mohammad (1987) and Balaban (1995) provide evidence that in Malaysia and Turkey, respectively, the average January returns were significantly positive and higher than in other months. Ho (1999), using daily returns for the period January 1975 to November 1987, found that six out of eight emerging Asian Pacific stock markets exhibit significantly higher daily returns in January than in other months. Fountas and Segerdakis (2002) tested for seasonal effects in stock returns (the January effect anomaly) using monthly stock returns in eighteen emerging stock markets for the period 1987 to 1995. They found very little evidence in favour of this effect in the emerging markets. Maghayereh

(2003) find no evidence of monthly seasonality as well as January effect in the Amman Stock Exchange (Jordan).

Brown et. al (1983) claimed that the tax loss hypothesis largely explains the January effect. However, the tax-loss explanation of the January effect has been heavily challenged. For instance, Gultekin and Gultekin (1983) studied the stock markets of 15 different countries, including UK, which has a tax year-end in April, and Japan with no capital gains tax. In all the markets January returns were relatively higher than the rest of the year. Balaban (1995) reports a January effect for Turkey although it does not have any capital gains tax.

The theoretical explanation of the January effect can be summarized in three strands of thought. The first explanation of this effect was provided by the tax-loss selling hypothesis. The second explanation of the January effect suggests that abnormal returns in January are due to new information provided by firms at the end of the year. The third explanation is based on the existence of a positive January risk-return trade off.

Some anomalies are found to be correlated with the size effect. For example, the size effect is closely linked to the January effect in the United States. Keim (1983) found that one quarter of the extra returns earned by the smallest firm in the U.S. was during the first five trading days of January. It is therefore appropriate to control for the size effect and possibly the value premium when testing for such anomalies. In that context it is best to use an established model, which is the Fama and French (1993) three-factor model. The model says that the expected return on a portfolio in excess of the risk free rate is explained by the sensitivity of its return to three factors: (i) the excess return on a broad market portfolio, (ii) the difference between the return on a portfolio of small stocks and the return on a portfolio of large stocks (SMB) and (iii) the difference between the return on a portfolio of high-book-to-market stocks and the return on a portfolio of low-book-to- market stocks (HML). The model[4] is as follows:

$$(R_{pt}) = R_f + ß_p[(R_{mt}) - R_f] + s_p(SMB) + h_p(HML) + \varepsilon_{pt} \qquad (1)$$

Empirical evidence supporting the model is widespread [see Fama and French (1998), Faff (2001), Maroney and Protopapadakis (2002), Drew and Veeraraghavan (2002) and Gaunt (2004)].

IV. DATA AND METHODOLOGY

The share price and market index data for the study have been obtained from the Stock Exchange of Mauritius. However, the data was not in a form suitable for empirical analysis. So the database had to be prepared. Companies'

[4] Note this study is not about testing the Fama and French three-factor model on the Stock Exchange of Mauritius. For that, see Bundoo (2006). The model is being used as a benchmark.

annual reports' were obtained from the listed companies for the years 2004 to 2006. In all, annual reports for 37 out of the 41 listed companies were obtained. Daily share prices were used and daily returns were computed over the period January 2004 to December 2006. Note throughout, the daily returns are estimated as follows:

$R_{i,t} = \ln(P_{i,t} / P_{i,t-1})$

where,

$R_{i,t}$ is the return of company i on day t

$P_{i,t}$ is the price of company i on day t

$P_{i,t-1}$ is the price of company i on day t-1

(i) Market Model with Calendar Effects

This model is used to estimate the betas of the listed companies by taking into account the day of the week effect and the January effect. The augmentation is done by first taking into account the day of the week effect. Next the January effect is investigated.

$$R_{i,t} = \beta_i R_{m,t} + \alpha_{1i}MON + \alpha_{2i}TUES + \alpha_{3i}WED + \alpha_{4i}THURS + \alpha_{5i}FRI + e_{i,t} \quad (2)$$

where $R_{i,t}$ = return on share i at time t

$R_{m,t}$ = market return at time t

$e_{i,t}$ = the error term

β, α_1 to α_5 = are coefficients

MON to FRI are dummy variables, which equal 1 on that day, zero otherwise.

$$R_{i,t} = \alpha_i + \beta_i R_{m,t} + \gamma_{i,JAN}D_{JAN} \quad (3)$$

D_{JAN} = a dummy variable which equals one in January, zero otherwise.

The above models are also run with the market return as the dependent variable.

(ii) Controlling for Size and Book to Market Equity effects

The Fama and French three factor model is also similarly augmented to take into account the January effect and the day of the week effect respectively. The stocks are divided into two classes: stocks of small market equity and stocks of big market equity as per the Fama and French methodology. The median size of the whole sample is used as the breakpoint. Fama and French (FF) classified the stocks into three groups of portfolios; one of low book-to-market equity (BE/ME) ratio, one of medium BE/ME ratio and the last being of high BE/ME ratio. They pointed out that there was no reason that tests should be sensitive to this choice. Following this argument and given our small sample size, only two

classes of book equity-to-market equity (BE/ME) value (low BE/ME and high BE/ME) will be created.

Using this type of classification, it is possible to construct four portfolios: WHS (High book/Small mkt cap[5]), WHB (High book/Big mkt cap), WLS (Low book/Small mkt cap) and WLB (Low book/Big mkt cap). Value-weighted returns are then calculated for each portfolio for each day over the period 2004 to 2006.

The regressions showing serial correlation were corrected using the Cochrane-Orcutt procedure. Those showing heteroscedasticity were corrected using the White's heteroscedasticity consistent variances and standard errors. Thin trading was taken into account by using the Dimson's (1979), Aggregate Coefficient Method.

V. ANALYSIS OF RESULTS

In section A, the day of the week effect is tested mainly to see whether there is a negative Monday effect and positive Wednesday and Friday effects. This is done at both company level and market index level. Then the January effect at both company and market index level is investigated. In the analysis, other month of the year effects at market level are explored. Section B presents and discusses the results of a similar analysis as above using the Fama and French three-factor model as the benchmark.

A) Investigation of the Day of the Week Effect and January Effect

(i) Day of the Week Effect

The table below reports the daily mean and standard deviation for the five trading days of the week. As it can be seen, the highest daily return is observed on Wednesday, followed by Friday. Suprisingly, Monday also records a positive daily return. Yet the coefficient of variation for Wednesday is the lowest and for Friday second lowest. This is a first indication that higher returns on Wednesdays and Fridays cannot be explained by higher risk on these days. Next the day of the week effect is investigated at company level and market level.

Table 2
Daily Mean and Standard Deviation of Return for Market Index

Market Return	Mon	Tues	Wed	Thurs	Fri
Mean	0.000816	0.000499	0.001015	0.000841	0.000961
Std Deviation	0.003774	0.004189	0.003971	0.004450	0.004409
CV	4.625	8.39479	3.912315	5.29132	4.587929

(Source: Author's Computations)

[5] 'mkt cap' stands for market capitalization.

Table 3
Day of the Week Effect at Company Level and for the Market

CODE	Beta (β)	Mon	Tues	Wed	Thurs	Fri
BANKS AND INSURANCE						
BAI	0.56751 (3.9032)					
MCB	0.80087 (7.2367)					
MEI	0.10052 1. 22 2. 09	0.001433 (1.9548)		0.0015625 (2.1335)		
MUA	0.35072 (1.8100)		-0.0030096 (-1.7530)			
SBM	0.80909 (7.9721)					
SWAN	0.25754 (3.6926)			0.0010906 (1.7799)		0.0013591 (2.2351)
COMMERCE						
COURTS	0.31166 (1.6264)					
HM	0.26536 (1.7563)					0.0031609 (2.3823)
HWF						0.0014396 (1.7137)
IBL	0.69366 (6.1489)					
ROGERS	0.55595 (6.0121)					
SHELL	0.63914 (4.8526)	-0.002294 (-1.8647)				
INDUSTRY						
PIM		0.0014460 (1.7554)				
UBP	0.12446 (2.0972)					

Table 3 Day of the Week Effect at Company Level and for the Market Continued						
INVESTMENTS						
BMH	0.50131 (0.57729)	0.017889 (2.3727)				
FINCORI	0.73707 (5.1244)					0.0024843 (1.9939)
GIDC	0.12017	0.0013623 (1.6830)		0.0023194 (2.8710)		
NIT	0.25410 (2.5810)	-0.001526 (-1.7188)				0.0014585 (1.6583)
PAD	0.63578 (5.1594)			0.0033155 (2.9578)		
POLICY	0.58992 (4.3735)					
UDL	0.75768 (4.0524)					0.0043010 (2.5414)
LEISURE & HOTELS						
NMH	0.64725 (7.4396)					
SUNRES	0.22417 (2.8672)					
SUGAR						
HF	0.38768 (2.0351)					0.0041970 (2.5510)
AT MARKET LEVEL						
SEMDEX t-statistic p-value (R^2 = .074566)		.7975E-3 2.2597 [.024]		.9621E-3 2.7333 [.006]	.9692E-3 2.7456 [.006]	.8994E-3 2.5739 [.010]

(Source: Author's Computations; NB: Only coefficients which are statistically significant at the 10% level or better are reported.)

We see that only six companies record a Monday effect, which is statistically significant at the 10% level or better. Four companies however, show a positive Monday effect. One company shows a significant negative Tuesday effect. This could be due to the time zone hypothesis. This is in conformity with Alexakis and Xanthakis (1995) showing Tuesday negative returns. Only four companies show a statistically significant Wednesday effect. Seven companies record a positive and statistically significant Friday effect. The magnitude of the positive Wednesday and Friday effects range from 0.13591 percent to 0.43010 percent.

An interesting issue is to investigate whether we observe the same tendencies when we analysed the day of the week effect at the market level. When the Semdex return is run on the trading days of the week, we find

surprisingly a positive and statistically significant Monday effect. We also find a statistically positive and stronger effect for Wednesday, Thursday and Friday. They range from 0.07975 per cent to 0.09692 per cent.

Table 4
Measuring the Economic Significance of the Daily Effect

Market Index				
	Monday	**Wednesday**	**Thursday**	**Friday**
Extra Daily Return %	0.07975	0.09621	0.09692	0.08994
Extra Yearly Return %	3.828	4.61808	4.65216	4.31712

Initially the extra returns may not seem to be economically significant, yet when analysed on a yearly basis, they compensate adequately for market frictions. The transaction costs amount to 1.25 per cent and comes to 2.50 per cent for round trip. The results in terms of magnitude and statistical significance are generally in conformity with those reported in the literature.

(ii) Testing for the January Effect

Table 5
Investigating the January Effect at Company and Market Level

CODE	**constant**	***Beta (β)***	**January**	**CODE**	**constant**	***Beta (β)***	**January**
BANKS AND INSURANCE				**INVESTMENTS**			
BAI		.55313 (3.8065)		FINCORP		.75425 (5.5025)	
MCB	.5583E-3 (1.6902)	.79964 (8.5983)		GIDC	.8771E-3 (1.9042)		
MEI	.0012567 (3.5970)	.087744 (1.0690)		LIT	.8832E-3 (2.6011)		
MUA		.36943 (1.9085)		NIT	.25102 (2.5537)		
SBM		.81961 (8.0760)		PAD	.0012443 (1.9305)	.64230 (5.2530)	.0036274 (1.6932)
SWAN	.7396E-3 (2.5732)	.24309 (3.4731)		POLICY		.58286 (4.3392)	
				UDL	.0019164 (2.5522)	.77942 (4.1737)	

Table 5 Investigating the January Effect at Company and Market Level Contd.							
COMMERCE				**LEISURE & HOTELS**			
COURTS		.32416 (1.6952)		ASL			.0034864 (1.7920)
HM		.28205 (1.9210)	-.004657 (-1.8049)	NMH		.64685 (7.4639)	
ROGERS		.53980 (5.9394)	.0021514 (1.6078)	SUNRES		.22428 (2.9057)	.0022472 (1.8100)
SHELL		.62049 (4.7253)		**SUGAR**			
INDUSTRY				HF		.42247 (2.2180)	.0024578 (2.4400)
GCIVIC	.7404E-3 (1.9958)			MTMD		.48115 (3.8317)	
UBP		.11795 (1.9843)		MOUNT		.29066 (2.0217)	
				TRANSPORT			
				AMTS		.24133 (1.9534)	.0049047 (2.5549)
SEMDEX	.6969E-3 4.4271		.00117962.1993				

(Source: Author's Computations; NB: Only coefficients which are statistically significant at the 10%
level or better are reported.)

When investigating for the January effect, we find that only 7 companies record a January effect with one of them showing a negative January effect with statistical significance at 10 per cent level or better. The constant term is capturing the effect of the remaining eleven months of the year. We can see that eight companies record a positive effect for the other months of the year, with statistical significance at 10% level or better.

However, when the January effect is investigated at market level, we find that is it significant at the 5 per cent level and with a coefficient of 0.0011796. However, for the remaining months of the year, the effect is stronger in terms of magnitude (0.6969E-3) and also statistically significant at the one per cent level.

(iii) Month of the Year Return

The results above prompted us therefore to delve further by analyzing the daily return by month of the year. The table below gives information on the mean daily return and standard deviation of return for the different months of the year. It can be seen that the highest mean return is surprisingly in September

(0.2402 per cent), followed by January (0.1847 per cent) and August (0.1523 per cent).

Table 6
Daily Market Return by Month

Month	JAN	FEB	MAR	APR	MAY	JUN
Daily Mean	0.001847	0.000781	0.000412	-0.0004	0.000161	0.000975
Std Deviation	0.003614	0.004224	0.003522	0.004198	0.002995	0.003727

Month	JUL	AUG	SEP	OCT	NOV	DEC
Daily Mean	0.000575	0.001523	0.002402	-0.00027	0.001159	0.000138
Std Deviation	0.002628	0.00399	0.006454	0.004083	0.002084	0.002919

(Source: Author's computations)

Next to assess the statistical significance of the daily return by month, the Semdex return is regressed on the 12 months of the year. The results are reported as per Table 7 below. We can clearly see that September has the highest statistical significance, followed by August and January. It seems there is a predominant September effect in Mauritius. This will be further investigated at the portfolio level.

Table 7
Investigating the Month of the Year Effect on the SEM

Dependent variable is **RSEMDEX**		
Month	**Coefficient**	**T-Ratio[Prob]**
JAN	.0015258	**2.1035[.036]**
FEB	.9102E-3	1.2642[.207]
MAR	.2433E-3	.35877[.720]
APR	-.5954E-3	-.87178[.384]
MAY	.4210E-3	.62529[.532]
JUN	.0010380	1.5528[.121]
JUL	.3524E-3	.51993[.603]
AUG	.0015408	**2.3057[.021]**
SEP	.0024614	**3.4393[.001]**
OCT	-.2647E-3	-.31676[.752]
NOV	.0011358	1.3139[.189]
DEC	.3357E-3	.40585[.685]
R-Bar-Squared	.098511	
DW-statistic	1.9996	

(Source: Computed by Author)

However, a variable deletion test indicates that only September remains significant as reported per Table 8 below, with statistical significance at the one

per cent level. This will be taken into account when analyzing the Fama and French three factor model regressions for the four portfolios.

Table 8
Investigating the Month of the Year Effect

Dependent variable is **RSEMDEX**		
Regressor	**Coefficient**	**T-Ratio[Prob]**
K	.3957E-3	1.4928[.136]
JAN	.0010896	1.4080[.160]
AUG	.0011459	1.5911[.112]
SEP	.0021016	**2.7439 [.006]**
DEC	-.8794E-4	-.10089[.920]
R-Bar-Squared	.080940	
DW-statistic		1.9999

(Source: Computed by Author)

Table 9
Measuring Economic Significance of the Month of the Year Effect

Semdex	**January**	**September**
Daily Extra Return %	0.15	0.24
Yearly Extra Return %	3.0	6.0

Using the original regression, we observe that January provides an additional return of 3 percent and September 6 percent. From the above analysis, it can be concluded that the January anomaly is quite minimal on the SEM. Fountas and Segerdakis (1999) found very little evidence in favour of this effect in the emerging stock markets. Similar results were found by Maghayereh (2003).

We have also observed a significant September effect. Many companies in the sample have their financial yearend 30th of June and they three months after that to file their audited accounts with the Registrar of Companies and many of them start to release their audited accounts in the press towards first and second week of September itself. As discussed with the stockbrokers, this is the main reason for the September effect, like a "good news" earnings announcement.

B) Investigation of Stock Market Anomalies using the Fama and French three Factor Model

(i) Analysing Day of the Week Effect

Next the day of the week effect is analysed within this FF Three Factor model framework. The standard FF three-factor model is augmented to investigate the day of the week effect. For two portfolios, WBH and WSL, we

find a positive and statistically significant Friday effect, with an extra return on Fridays of about 0.11 per cent. The market factor and the size and book-to-market equity factors also remain significant at the one per cent level.

Table 10A
Investigating Day of the Week Effect at Portfolio level

Dependent variable is WBH		
Regressor	**Coefficient**	**T-Ratio[Prob]**
RSEMDEX	.32722	6.3357[.000]
SMB	-.63211	-33.2847[.000]
HML	.63191	33.4171[.000]
MON	.4939E-3	1.1508[.250]
TUES	.5333E-4	.12450[.901]
WED	.5907E-3	1.3768[.169]
THURS	.4314E-3	.99889[.318]
FRI	.0010711	**2.5191[.012]**
R-Bar-Squared	**.70190**	
DW-statistic	**2.0037**	

(Source: Computed by Author)

Table 10B
Investigating Day of the Week Effect at Portfolio level

Dependent variable is WSL		
Regressor	**Coefficient**	**T-Ratio[Prob]**
RSEMDEX	.32722	6.3357[.000]
SMB	.36789	19.3716[.000]
HML	-.36809	-19.4653[.000]
MON	.4939E-3	1.1508[.250]
TUES	.5333E-4	.12450[.901]
WED	.5907E-3	1.3768[.169]
THURS	.4314E-3	.99889[.318]
FRI	.0010711	**2.5191[.012]**
R-Bar-Squared	.37783	
DW-statistic	2.0000	

(Source: Computed by Author)

For the other two portfolios, we find no day of the week effect. We can deduce that the FF three-factor model is quite robust to the day of the week anomaly. In fact, for two portfolios (WBH and WSL), only the Friday effect is statistically significant, providing an extra return of 5.14 per cent on an annual

basis. Except for the Friday effect, the size and the value premium subsume most of the day of the week effects.

(ii) Investigating the January Effect and Month of the Year Effect

Finally, the January effect is investigated with the FF model framework. When we augment the model by the January dummy, it was not found to be significant for any of the portfolios. There was no January effect. This result confirms the earlier finding at company level and subsequently market level where no January effect was found. Given our previous knowledge on a possible September effect, the model is augmented to incorporate this effect. For two portfolios, WSL and WBH, we observe a September effect of 0.26 per cent and statistically significant at the one per cent level, providing an extra yearly return of 5.2 per cent.

Table 11
Investigating Month of the Year Effect at Portfolio Level

Portfolios	const	SEMDEX	SMB	HML	SEPT	Adj. R^2
WSL	.3278E-3 1.2440[.214]`	.31967 6.2217[.000]	.37102 19.5982[.000]	-.34137 -19.6875[.00	.0026137 3.2720[.001]	.38483
WBH	.3278E-3 1.2440[.214]	.31967 6.2217[.000]	-.62898- 33.2236[.000]	.65863 33.3251[.000]	.0026137 3.2720[.001]	.68443
(Source: Computed by Author)						

VII. CONCLUSION

This paper has investigated the day of the week effect and the January effect on the Stock Exchange of Mauritius. Unlike other studies, this has been done at both the company level and market level. In the analysis, at a later stage, we also control for the size effect and the value premium to see whether these calendar anomalies persist. The sample period is from January 2004 to December 2006. At the market level, positive and statistically significant Wednesday and Friday effects are noted. Suprisingly, a positive and statistically significant Monday effect is observed, though smaller in magnitude. They are also economically significant, ranging from 3.83 per cent to 4.65 per cent. However, when analysed in an augmented model, which takes into account the size effect and the value premium, except for two portfolios, the day of the week effect disappears. In fact, for two portfolios, only the Friday effect is statistically significant, providing an extra return of 5.14 per cent on an annual basis. It can be concluded that except for the Friday effect, the size and the value premium subsume most of the day of the week effects. No January effect is found on the

SEM. However, a significant September effect is observed, which do not disappear even when controlling for size and value.

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