

# Corporate Performance and Foreign Activities of Multinational Firms

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*This paper examines the relationship between corporate performance and degree of internationalization in multinational firms. The management efficiency is found to be significantly related to the international business activities and firm characteristics. The correlation after the global financial crisis is also examined. Some factors those appear to affect the management performance have showed different influence after the global crisis. There is evidence that the short-term strategy changes during the economic downturn have diverse impact on the firm performance.*

*Keywords: performance, internationalization, FDI*

## INTRODUCTION

Investors have been using several methods (i.e., return, cash flow, stock price, etc.) to measure the firm performance. Economic value-added measure (EVA) and market value-added measure (MVA) are also two popular methods that can measure the performance. There are arguments among researchers (Sheikholeslami, 2001; Dodd and Johns, 1999; Stern, Stewart and Chew, 1995) which method is a better method to measure the economic profit. The economic value added is more of a performance metric that looks at the firm profit, whereas the market value added is more of a wealth metric because it looks at the equity value of the firm and measures the value added to the entire firm since the inception. The components of the MVA include the corporate's market value, making it not a suitable candidate for the measure of management performance. It should be used to measure the corporate wealth in long run. Since the components of the economic value added are derived from the business income and cost of a given year, EVA is considered a superior measure for short-term corporate performance than market value added. Therefore, the economic value added is employed in this paper as a measure of corporate performance because it focuses on the profitability and management efficiency.

Previous studies have linked the internationalization to performance and innovation (Contractor 2007; Glaum and Oesterle 2007; Ruigrok et al. 2007; Carlsson 2006; Contractor et al. 2003; Hitt et al. 1997; Oesterle 1997; Hitt et al. 1994; Grant et al. 1988). They provide mixed evidence that expanding business overseas can bring both advantages and disadvantages to the firms. The agency problem will be less severe when there is low level of information asymmetry and stakeholders have better access to information (Peng and Jiang 2010, Kirchmaier and Grant 2005). Since the information asymmetry caused by uncertainty and complexity of tasks of internationalization can worsen the conflicts of interests between managers and shareholders, some researchers (Ruigrok and Wagner 2003; Sanders and Carpenter 1998) suggest that internationalization can reduce the firm innovation and performance due to the agency conflict.

On the other hand, many studies have shown great benefits of globalization (Von Zedtwitz and Gassmann 2002; Gomes and Ramaswamy 1999; Tallman and Li 1996). Expanding to new markets can help lower costs and increase return. Foreign diversification is a good alternative in expanding the business because it can help multinational corporations exploit foreign market opportunities and gain greater benefits, like diversifying risks and achieving economies of scales. Firms will have access to resources required for research and development operation (Kobrin 1991). Riahi-Belkaoui (1999) shows that the value of firms with high social responsibility can increase with internationalization. Prior studies (Rajan and Zingales, 1995, Harris and Raviv, 1991) show that large firms tend to have easy access to capital supply and fail less often. Globalization can help firms gain easy access to raw material and new knowledge from multiple countries. They can experience positive benefits and will not be limited to the market imperfection.

Shareholder wealth maximization is an important goal for management. It is management's responsibility to seek ways to increase the net worth of shareholders and increase the firm value. International diversification is away to help achieve the goals because it can bring positive gains to the firms. When agency conflict is not presented, management is expected to expand the markets and bring positive experience to the firms. Tsao and Lien (2013) examine family-managed firms in Taiwan that their family members actively participate in the firm's management. They find that internationalization can positively influence the firm's innovation and performance because family firms do not face severe agency conflicts of interest between managers and shareholders.

During the past decades, there are substantial advances in international market integration. Markets have been well-connected around the world. Many multinational corporations have increased their market operations oversea. They highly participate in international activities and accept payments denominated in foreign currencies. The level of global activities has been increasing consistently. When firms invest in proactive foreign direct investment projects, they focus on enhancing corporate growth and diversifying the risks. By expanding their investments oversea, they can have more access to capitals from many countries, more channels of market connection, and more choices of currencies to raise fund. Since internationalization can increase the corporate value (Morck and Yeung 1991; Kim and Lyn 1986; Errunza and Senbet 1981), management of multinational corporations is expected to actively increase the international activities to boost the corporate value and performance.

This paper also examines the change in corporate performance after the global crisis. The subprime mortgage crisis in 2007 and the decline in consumer spending have slowed down the domestic and European economy. The U.S. had a deep recession with elevated unemployment, while the Eurozone was struggle with its economic crisis. The global economic slowdown was the result of the great recession, banking impairments and crisis in Europe. Many countries around the world were affected by the severe long-lasting consequences of this multinational financial crisis. MNCs had to rethink about their corporate strategies and international operations to survive the economic downturn. It is possible that the economic fluctuation can lead to the change in level of international involvement, and management may perform differently during and after the crisis.

## **DATA AND MODEL SPECIFICATION**

The sample consist of 347 S&P firms that have no missing data items or negative shareholders equity. The firm specific factors, including, growth opportunity, cash flow, dividend payout, firm size, return and sales denominated in foreign currencies, are obtained from COMPUSTAT, 10-Q reports, and 10-K reports. The interest rates, including thirteen-week Treasury bill rates, and thirty-year Treasury bond rates, are obtained from International Monetary Fund and COMPUSTAT. The sample period ranges from 1999 to 2019. The possible lags in the data availability are adjusted because the macroeconomic data are not available on a continuous basis (Estrella and Mishkin, 1998). They usually have informational lag and are available after the period covered by the data. On the other hand, the firm characteristics data usually have no informational lag and are available on a continuous basis. Thus, when the firm specific factors and the macroeconomic data are employed in the models, the possible data lags must be adjusted and the observations available as of the end of a given period are assigned to that specific time period.

The economic value-added measure (EVA) is calculated from the difference between net operating working capital (NOPAT) and the firm's operating capital. The corporate cost of operation is computed by using the weighted average cost of capital of the firm multiply by to total capital amounts.

$$PFMC_{i,t} = NOPAT_{i,t} - (WACC_{i,t} * Total\ Capital_{i,t}) \quad (1)$$

The long-term estimated equation is:

$$PFMC_{i,t} = \alpha + b_1 TFSALES_{i,t} + b_2 MKBK_{i,t} + b_3 CFPS_{i,t} + b_4 SIZE_{i,t} + b_5 DIV_{i,t} + b_6 INT_t + \varepsilon_t \quad (2)$$

The variables in the model are: 1) PFMC, the measurement of management performance, 2) TFSALES, the fraction of total foreign sales to total sales, 3) MKBK, the market-to-book ratio, 4) CFPS, the logarithm of cash flow per share, 5) SIZE, the logarithm of total assets, 6) DIV, the dividend payout ratio, 7) INT, the interest rates of thirteen-week Treasury bill (TBILL), and thirty-year Treasury bond (TBOND).

## EMPIRICAL RESULTS

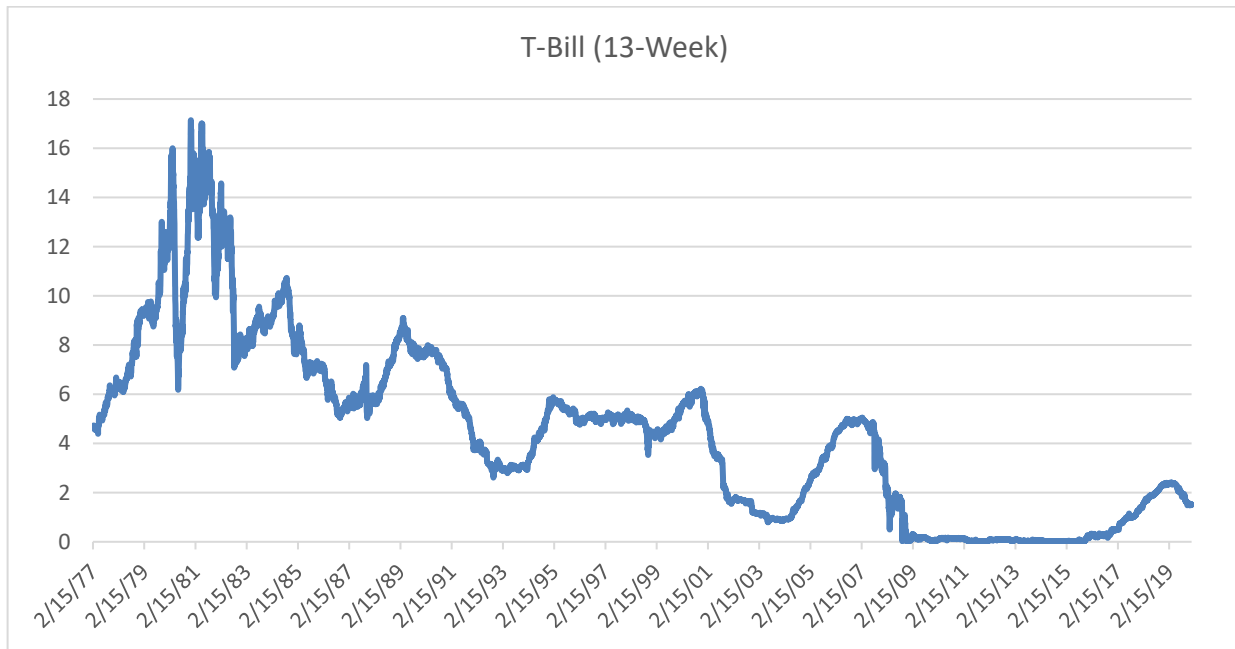
Table 1 presents descriptive statistics of corporate performance measure, foreign sales, growth opportunity, cash flow per share, firm size, dividend-payout ratio, short-term and long-term interest rates. The variables in the table are: 1) PFMC, the economic value-added measure, 2) TFSALES, the fraction of total foreign sales, 3) MKBK, the market-to-book ratio, 4) CFPS, the logarithm of cash flow per share, 5) SIZE, logarithm of total assets, 6) DIV, the dividend payout ratio, and 7) TBILL, the interest rate of thirteen-week Treasury bill, and 8) TBOND, the interest rate of thirty-year Treasury bond. Data Sources are COMPUSTAT, 10-Q reports, 10-K reports, and International Monetary Fund. The sample consists of 347 S&P industrial firms and the sample period is 2007-2019.

**TABLE 1**  
**DESCRIPTIVE STATISTICS**

	PFMC	TFSALES	MKBK	CFPS
Mean	2359.768	45.454	6.527	2.963
Median	2685.368	46.131	3.853	1.683
Maximum	4261.392	100.000	163.340	8.196
Minimum	142.073	0.096	0.686	1.580
Std. Dev.	1601.348	23.620	13.547	2.926
	SIZE	DIV	TBILL	TBOND
Mean	9.931	32.075	1.762	4.148
Median	9.858	27.700	1.152	4.354
Maximum	12.186	52.542	6.220	6.742
Minimum	8.412	16.547	0.003	1.938
Std. Dev.	0.604	13.833	1.848	1.110

**FIGURE 1**  
**THE MOVEMENT OF INTEREST RATES DURING 1977-2019**

*Panel A: Thirteen-Week Treasury Bill Rates*



*Panel B: Thirty-year Treasury Bond Rates*



The mean and median of economic value-added measure for the sample firms are \$2,359.77 millions and \$2,685.37 millions, respectively. Although the sample firms have most of their revenues denominated

in domestic currencies, about 45% of their sales occurred in foreign markets. On average, the sample consists of profitable MNCs. The mean and median of logarithm of cash flow per share are 2.963 and 1.683, respectively; indicating that the sample firms do not have loss from operations. Those sample multinational firms are large and have strong foundation. They are not easy to fail. The average logarithm of total assets is 9.931. They have high dividend payout ratio with the median payment around 28%. The maximum dividend payout ratio is as high as 52% of their net income. The average short-term interest rate during the sample period is around 1.8%, and the average long-term rate is around 4.1%. After the crisis in 2007, the US interest rates have dropped sharply. The shorter-term economic indicator, like the thirteen-week Treasury bill rates, has dropped at a higher rate than the thirty-year Treasury bond rates. Figure 1 shows the movement of thirteen-week Treasury bill rates (Panel A) and thirty-year Treasury bond rates (Panel B) during 1977-2019.

### Long-Run Relationships

Table 2 presents the results from regressions relating management performance measure in long-run during the period of 1999-2019 to internationalization and a set of control variables. The dependent variable is the corporate performance which is measured by the economic value added.

**TABLE 2**  
**REGRESSION RESULTS OF LONG-RUN MODEL**

	PFMC					
	(1)	(2)	(3)	(4)	(5)	(6)
TFSALES	81.833***	70.137***				
	<i>15.940</i>	<i>16.271</i>				
MKBK	-56.694***	-55.885**	-49.209**	-48.317***	-52.917***	
	<i>18.077</i>	<i>21.269</i>	<i>19.323</i>	<i>16.565</i>	<i>17.701</i>	
CFPS	-224.624			-156.564		-61.093
	<i>189.556</i>			<i>165.818</i>		<i>144.964</i>
SIZE			292.487***	454.916***	462.772***	353.860***
			<i>76.089</i>	<i>109.681</i>	<i>115.904</i>	<i>83.219</i>
DIV						-42.864
						<i>36.642</i>
TBILL			-37.600			
			<i>169.642</i>			
TBOND				-344.145*	-407.715*	
				<i>177.027</i>	<i>194.491</i>	

*Notes: The table reports the coefficients and standard errors. The standard errors are italicized and presented in the row below the coefficient estimates. \* indicates significance at the 10% level; \*\* indicates significance at the 5% level; and \*\*\* indicates significance at the 1% level.*

The positive coefficient in the variable TFSALES indicates that corporate performance can increase with the degree of international involvement. Multinational corporations that actively participate in international activities can achieve great performance in increasing the firm value. Results also show that firm size is another determinant of the corporate performance. The positive relationship between total assets and the performance measure indicates that larger corporations performs better than their smaller counterparts. This may be because they have more capital and less likely to fail. Moreover, larger firms are usually well-diversified in term of their financing and investment.

There is no evidence that firms with high growth opportunity perform well during the sample period. Firms that are attractive to investors do not show a positive sign of added value to the EVA. Those firms are usually big spenders. They have many projects to invest, and investors expect them to show high return from the investment. They may add value to the firms in long-term. However, when the corporate performance measure is measured by the EVA, this can show a negative impact to the firm. It is possible that if the corporate performance is measured in a different way, like market value-added measure which is the difference between market value of stock and total equity, there may be a positive relationship between the performance and growth opportunity.

The relationship between corporate performance and dividend payout ratio is non-significant, indicating that firms that pay high dividends to investor may not perform well during the sample period. The management performance is unrelated to the level of dividends paid. The amounts of cash flow per share also do not indicate the high level of performance. Although all results show negative effect on the economic value-added measure, they are not significant at 10% level.

There is an inverse relationship between the economic value-added measure and the long-term interest rates at 10% significant level, indicating that the thirty-year Treasury bond rates can negatively affect the management performance in long-run. Note that regression results only show the correlation between dependent and independent variables, and do not imply the causality.

**TABLE 3**  
**REGRESSION RESULTS OF LAGGED DEPENDENT VARIABLE MODEL**

	PFMC						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TFSALES	70.731**	91.255***	82.264**				
	<i>24.160</i>	<i>16.908</i>	<i>27.850</i>				
MKBK	-56.040**	-59.188**	-64.751**	-46.470***	-44.597**	-51.057***	
	<i>22.386</i>	<i>18.158</i>	<i>21.870</i>	<i>15.187</i>	<i>14.984</i>	<i>16.568</i>	
CFPS		-237.561	-283.473	-128.792	-121.987		-71.984
		<i>187.568</i>	<i>164.156</i>	<i>159.968</i>	<i>159.265</i>		<i>156.289</i>
SIZE				338.155***	317.291***	302.590***	393.175***
				<i>52.798</i>	<i>75.229</i>	<i>75.137</i>	<i>89.321</i>
DIV							-42.641
							<i>40.770</i>
PFMC(-1)	-0.010	-0.141	-0.195	-0.151	-0.147	-0.039	-0.146
	<i>0.301</i>	<i>0.174</i>	<i>0.259</i>	<i>0.150</i>	<i>0.159</i>	<i>0.247</i>	<i>0.156</i>
TBILL					104.500		
					<i>185.915</i>		
TBOND			214.501				
			<i>483.258</i>				

*Notes: The table reports the coefficients and standard errors. The standard errors are italicized and presented in the row below the coefficient estimates. \* indicates significance at the 10% level; \*\* indicates significance at the 5% level; and \*\*\* indicates significance at the 1% level.*

### Lagged Relationships of Corporate Performance

This section examines whether the measure of corporate performance in the last period can affect the performance of the firm in the following period. The lagged term of the economic value-added measure is included in all models.

The estimated equation in lagged dependent variable is:

$$\text{PFMC}_{i,t} = \alpha + b_1 \text{TFSALES}_{i,t} + b_2 \text{MKBK}_{i,t} + b_3 \text{CFPS}_{i,t} + b_4 \text{SIZE}_{i,t} + b_5 \text{DIV}_{i,t} + b_6 \text{PFMC}_{i,t-1} + b_7 \text{INT}_t + \varepsilon_t \quad (3)$$

where the  $\text{PFMC}_{i,t-1}$  measures the management performance in the previous period.

The regression results of lagged dependent variable effect are presented in Table 3. The table reports the estimates from regressions of corporate performance of current period on that of the prior period and a set of control variables. Corporate performance for any given period and is not correlated with the measure of other time periods. Results show no correlation between management performance during any consecutive periods. Although the coefficient in the variable  $\text{PFMC}(-1)$  shows a negative sign in all models, the results are not significant at 10% level. The economic value-added measure is considered a good measure of a company's economic success or failure over a specific period of time and is independent of other measures. The finding in columns (1)-(7) supports that management performance during a given period is not influenced by that of the previous period.

### Error Correction Model

This section shows the results of the estimated short-run effects of change in corporate performance and change in the degree of international involvement.

The short-term estimated equation is:

$$\Delta \text{PFMC}_{i,t} = \alpha + b_1 \Delta \text{TFSALES}_{i,t} + b_2 \Delta \text{MKBK}_{i,t} + b_3 \Delta \text{CFPS}_{i,t} + b_4 \Delta \text{SIZE}_{i,t} + b_5 \Delta \text{DIV}_{i,t} + b_6 \text{INT}_t + \varepsilon_t \quad (4)$$

The changes in dependent and independent variables are calculated as the difference between the value of the variables in the current period and the value in the prior period.

$$\Delta X_t = X_t - X_{t-1}$$

where  $X_t$  and  $X_{t-1}$  represents the factors employed in the models at different time periods.

The regression results of the change in the explanatory variables on the change in economic profit are presented in Table 4. The variables in the table are: 1)  $\Delta \text{PFMC}$ , the change in economic value added, 2)  $\Delta \text{TFSALES}$ , the change in fraction of total foreign sales, 3)  $\Delta \text{MKBK}$ , the change in market-to-book ratio, 4)  $\Delta \text{CFPS}$ , the change in logarithm of cash flow per share, 5)  $\Delta \text{SIZE}$ , the change in logarithm of total assets, 6)  $\Delta \text{DIV}$ , the change in dividend payout ratio, 7)  $\text{TBILL}$ , the interest rate of thirteen-week Treasury bill, and 8)  $\text{TBOND}$ , the interest rate of thirty-year Treasury bond.

In short-term, the increase in the firm's foreign activities can help boost the economic profit a little. The coefficients in the variable  $\Delta \text{PFMC}$  are positive, indicating that the change in degree of international involvement increases with the change in management performance. Although the results are not significant at 1% level, the regression models in columns (1)-(4) all show positive sign. For the market-to-book variable, results in all columns support that the growth opportunity continues to play a significant role in short run. There is strong evidence that the change in market-to-book ratio is negatively correlated with the corporate performance. Multinational firms with high growth opportunity do not perform well in both short-run and long-run during the sample period.

**TABLE 4**  
**REGRESSION RESULTS OF SHORT-RUN MODEL**

	ΔPFMC					
	(1)	(2)	(3)	(4)	(5)	(6)
ΔTFSALES	462.206	765.309*	832.921	869.872*		
	<i>560.718</i>	<i>452.785</i>	<i>561.139</i>	<i>503.521</i>		
ΔMKBK	-46.768***	-74.632**	-74.539**	-74.133*	-68.272**	-69.125**
	<i>5.858</i>	<i>25.903</i>	<i>27.554</i>	<i>31.300</i>	<i>22.569</i>	<i>24.394</i>
ΔCFPS		-393.391**	-384.349*	-392.100*	-325.449*	-337.683*
		<i>156.217</i>	<i>171.062</i>	<i>182.499</i>	<i>158.872</i>	<i>164.151</i>
ΔSIZE					6226.209	4326.726
					<i>6852.285</i>	<i>11463.460</i>
ΔDIV						
TBILL			-73.933			83.847
			<i>220.538</i>			<i>219.258</i>
TBOND				-60.963		
				<i>167.840</i>		

	ΔPFMC					
	(7)	(8)	(9)	(10)	(11)	(12)
ΔTFSALES						
ΔMKBK	-69.125**	-67.547**	-110.765***	-111.159***	-110.491***	-45.492***
	<i>24.394</i>	<i>24.939</i>	<i>32.650</i>	<i>35.238</i>	<i>34.998</i>	<i>6.461</i>
ΔCFPS	-337.683*	-325.481*	-284.770*	-295.750*	-284.974*	
	<i>164.151</i>	<i>162.788</i>	<i>151.316</i>	<i>158.302</i>	<i>160.880</i>	
ΔSIZE	4326.726	8805.650	6922.615	5263.869	7143.477	12182.810
	<i>11463.460</i>	<i>10816.570</i>	<i>7334.082</i>	<i>12212.040</i>	<i>10742.330</i>	<i>8174.549</i>
ΔDIV			78.723*	78.080*	78.334*	
			<i>36.680</i>	<i>39.771</i>	<i>41.449</i>	
TBILL	83.847			72.969		
	<i>219.258</i>			<i>219.640</i>		
TBOND		-56.250			-4.891	
		<i>150.657</i>			<i>146.079</i>	

*Notes: The table reports the coefficients and standard errors. The standard errors are italicized and presented in the row below the coefficient estimates. \* indicates significance at the 10% level; \*\* indicates significance at the 5% level; and \*\*\* indicates significance at the 1% level.*

There is evidence that the change in cash flow per share decreases with the change in corporate performance. The change in dividend policies can also affect the corporate performance in short term. The regression results in Table 4 shows significant short-term effect at 10% level. This finding suggests that



multinational firms that perform well during the sample period can afford to pay larger amounts of dividends to investors. Firm size is not a major determinant of the short-term corporate performance. Although the positive coefficients in all models indicate that the increase in total assets can bring in more capital to help funding the projects and increase the economic profit, the relationship between the change in firm size and the change in economic value-added measure is not significant at 10% level.

The next section examines the results of regression models after the global crisis in 2007. The results will then be compared to those of the full sample period.

### Long-Run Relationships (After Crisis)

The long-run regression results of management performance measure during 2007-2019 are presented in Table 5. There is strong evidence that the international business activities can help increase the firm performance during the crisis. The positive coefficients in the degree of international participation suggests that globalization is a key to help businesses survive through the recession. Results in columns (1), (2) and (5) are significant and support the results shown earlier in Table 2. During the economic downturn, it appears that dividend policies also play an important role. Paying high dividend over a long time period can damage the value added to the firm. It may be fine to use dividends to attract investors for a short time period. However, continuing to pay dividends for a long time when the economy is unstable may reduce the corporate performance.

**TABLE 5**  
**REGRESSION RESULTS OF LONG-RUN MODEL (AFTER THE CRISIS)**

	PFMC				
	(1)	(2)	(3)	(4)	(5)
TFSALES	79.228**	73.462***			79.497**
	<i>19.464</i>	<i>11.127</i>			<i>26.682</i>
MKBK	-66.381**	-64.229***	-40.922**	-54.132***	-59.471*
	<i>14.214</i>	<i>10.090</i>	<i>16.789</i>	<i>16.821</i>	<i>39.622</i>
CFPS	-87.542		-95.752		
	<i>104.656</i>		<i>156.034</i>		
SIZE			275.247***	410.901***	360.999**
			<i>65.004</i>	<i>41.369</i>	<i>115.347</i>
DIV				-67.573**	-73.821*
				<i>24.364</i>	<i>34.699</i>
TBILL			42.025		
			<i>152.967</i>		
TBOND				315.490	
				<i>240.115</i>	

*Notes: The table reports the coefficients and standard errors. The standard errors are italicized and presented in the row below the coefficient estimates. \* indicates significance at the 10% level; \*\* indicates significance at the 5% level; and \*\*\* indicates significance at the 1% level.*

**TABLE 6**  
**REGRESSION RESULTS OF SHORT-RUN MODEL (AFTER CRISIS)**

	ΔPFMC				
	(1)	(2)	(3)	(4)	(5)
ΔTFSALES	501.077	759.303	1517.931	513.864	
	<i>574.983</i>	<i>450.590</i>	<i>737.537</i>	<i>557.697</i>	
ΔMKBK	-48.699***	-75.080**	-78.070**	-136.340**	-72.606**
	<i>4.572</i>	<i>27.407</i>	<i>28.068</i>	<i>35.819</i>	<i>26.771</i>
ΔCFPS		-410.483*	-458.420**	-306.951	-365.028*
		<i>180.263</i>	<i>148.167</i>	<i>238.889</i>	<i>171.428</i>
ΔSIZE					8478.074
					<i>13215.770</i>
ΔDIV				119.495*	
				<i>49.784</i>	
TBILL			-889.774		
			<i>557.954</i>		
TBOND					

	ΔPFMC				
	(6)	(7)	(8)	(9)	(10)
ΔTFSALES					
ΔMKBK	-72.531*	-71.896*	-146.041**	-146.464**	-146.189**
	<i>30.239</i>	<i>33.619</i>	<i>33.826</i>	<i>40.289</i>	<i>37.894</i>
ΔCFPS	-365.030*	-371.093*	-263.032	-262.479	-262.576
	<i>197.658</i>	<i>207.590</i>	<i>186.150</i>	<i>210.594</i>	<i>226.349</i>
ΔSIZE	7744.126	10975.080	8448.244	8697.523	8325.002
	<i>16733.260</i>	<i>16607.810</i>	<i>13392.770</i>	<i>17746.320</i>	<i>17955.290</i>
ΔDIV			141.626**	142.393*	141.843*
			<i>44.054</i>	<i>53.783</i>	<i>51.663</i>
TBILL	109.038			-37.058	
	<i>378.572</i>			<i>354.803</i>	
TBOND		-76.811			3.790
		<i>262.411</i>			<i>191.980</i>

*Notes: The table reports the coefficients and standard errors. The standard errors are italicized and presented in the row below the coefficient estimates. \* indicates significance at the 10% level; \*\* indicates significance at the 5% level; and \*\*\* indicates significance at the 1% level.*

The market-to-book ratio still shows an inverse effect on the economic profit after the financial crisis. The growth opportunity usually brings in the advantage in long run to investors. It will increase the market value of the equity, not the economic profit. There is a positive correlation between firm size and the

performance measure, indicating that larger corporations will always perform better than their smaller counterparts in all economic conditions. They are well-established firms with strong foundation. The larger amounts of capital on hand can help them fund the existing and/or new projects, and better survive through the economic downturn than the smaller firms.

### **Short-Run Relationships (After Crisis)**

Table 6 presents the short-run regression results during 2007-2019. There is no evidence that the degree of international involvement is related to the economic value added. The firms that heavily participate in international activities do not bring in large economic profit to investors. The coefficients in the variable  $\Delta$ TFSALES do not show significant results, indicating that there is no correlation between the corporate performance and change in international business pattern during the economic downturn. The increase change in revenue from foreign market cannot help the firm to boost its performance in short term. The fluctuation in economic condition may offset the benefit that the firm usually get from widen its business globally.

The change in growth opportunity and cash flow continue to decrease with the economic profit during the unstable economic condition. Free cash flow sometimes can cause the agency conflicts. Usually, firms would maintain higher level of cash during the unstable economic condition. Since the firms tend to spend the cash flow more liberally than necessary when they have extra cash on hand, it is possible that management may use the excess cash flow to expand the firm size or projects even though that action can damage the corporate value.

Larger firms also do not have any advantage compared to the smaller counterparts after the crisis. The results show no relationship between the change in total assets and the change in corporate performance. However, firms that perform well during the economic downturn can still keep paying higher rate of dividends to the investors and attract new investors. The increase change in dividend payout ratio is positive correlated with the change in the economic value-added measure in the short run.

## **CONCLUSION**

This paper examines the correlation between the firm's international activities and the economic value added, which is one of the popular performance measures. There is strong evidence to support that the degree of international involvement can help improve the firm performance. Multinational corporations that heavily engage in international activities tend to perform well and earn larger amounts of revenues from foreign markets. Those firms with greater amounts of sales denominated in foreign currencies are well diversified and can perform better than their counterparts. However, the short-term change in global diversification strategy cannot help the firms gain better advantage during the unstable economic condition. Global investment will yield a good return in long run, not short run. This advantage cannot help increasing the short-term performance of the firm during the economic downturn.

Internationalization is a useful tool to help multinational corporations to survive the economic fluctuation. Firms need to have a long-term plan for the global diversification in order to enjoy the benefit even when the economic condition is unstable. This study is a preliminary effort to link the corporate's global activities and the added value. It serves as a first step in understanding the relationship in multinational firms. Future research can focus on other measurements of management performance or the degree of international participation.

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