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**Foreign Ownership, Royalty Payments
and Expropriation of Minority Shareholders:**

Evidence from India

by

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*Associate Professor,
T.A Pai Management Institute,
Manipal-576104, Karnataka, India
Phone: 0820- 2701436, email: adityajadhav@tapmi.edu.in*

M Durga Prasad

*Associate Professor,
T.A Pai Management Institute,
Manipal-576104, Karnataka, India
Phone: 0820- 2701025, email:
durgaprasad@tapmi.edu.in*

P Srikanth

*Associate Professor,
T.A Pai Management Institute,
Manipal-576104, Karnataka, India
Phone: 0820- 2701077, email:
psrikanth@tapmi.edu.in*

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**T. A. PAI Management Institute
Manipal – 576104, Karnataka**

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*Associate Professor,
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Manipal-576104, Karnataka, India.*

Phone: 0820- 2701436, email: adityajadhav@tapmi.edu.in

M Durga Prasad

*Associate Professor,
T.A Pai Management Institute,
Manipal-576104, Karnataka, India.
Phone: 0820- 2701025, email:
durgaprasad@tapmi.edu.in*

P Srikanth

*Associate Professor,
T.A Pai Management Institute,
Manipal-576104, Karnataka, India.
Phone: 0820- 2701077, email:
psrikanth@tapmi.edu.in*

Abstract: This paper examines the expropriation of minority shareholders invested in listed subsidiaries of foreign firms by excess royalty payments by the subsidiaries to their parent multinational companies (MNC). Using the data of 4673 Indian firms over a period of 12 years, we examine the impact of royalty payment on firm performance viz., asset turnover ratio, net profit margin and return on capital employed to investigate the same. We document that royalty payments made by foreign subsidiary firms is higher than the royalty payments made by Indian firms. We also report that royalty payments have a negative impact on firm performance viz., asset turnover, net profit margin and return on capital employed. We also report that the negative impact of royalty payment on firm performance is more severe in case of foreign subsidiary firms in comparison to domestic firms. The results summarized above clearly show that royalty payment impacts firm performance negatively. The reduced net earnings cash-flow to the parent MNC is off-set by higher royalty payment. But the minority shareholders are left with reduced earnings indicating expropriation through royalty payments.

Keywords: Royalty payments, foreign subsidiaries, shareholder expropriation, emerging markets

Note: This working paper received from RPC and authors on 24th Nov 2015. Hence, it is added to library collection as 2015 publication. The original paper received by author had tables at the end. However, this formatted paper have them in their respective places for the purpose of continuity and convenience.

Foreign Ownership, Royalty Payments and Expropriation of Minority Shareholders: Evidence from India

I. Introduction

This paper examines the expropriation of minority shareholders invested in listed subsidiaries of foreign firms by excess royalty payments by these subsidiaries to their parent multinational companies (MNCs). We examine the impact of royalty payment on firm performance viz., asset turnover ratio, net profit margin and return on capital employed to investigate the same.

Multinational companies invest through the subsidiary route to obtain access to resources, markets or to reduce taxes. With time the subsidiary evolves into a full-fledged company and lists on the stock exchange to completely gain from access to domestic markets. The parent MNC generally demands fees from the subsidiary in the form of royalty for the technology and brands owned by the parent MNC which are used the subsidiary. The MNC also gets the share of the subsidiaries profits in the form of dividend payments. Royalty payments are a pre-tax expense to the subsidiary whereas as dividend is a post-tax distribution of earnings making royalty payments preferable.

Retained earnings remain under the control of the company management which is representative of parent MNC. On the contrary if the parent MNC repatriates its earnings through dividends, the profits also need to be distributed amongst the minority shareholders. Royalty payments allow the MNC to repatriate earnings without being distributed amongst the minority shareholders. Hence MNCs will demand higher royalty payments for their technology from the subsidiaries. On December 22, 2014 the Commerce Ministry said it would consider introduction of the caps on royalty payments (Seth, 2013)¹. The outflows on account of royalty and fee for technical services, taken together, accounted for 16 to 33 per cent of the foreign direct investment (FDI) inflows between 2009-10 and 2012-13. Given the quantum of outflow of funds, the commerce ministry obviously is worried in the form of royalty and fees for technical services.

¹ Seth, Dalisha, *High royalty payments by Indian arms of MNCs alarm government*, ET Bureau, Dec 23, 2013 available at http://articles.economictimes.indiatimes.com/2013-12-23/news/45510124_1_royalty-payments-abb-india-nestle-india

The minority shareholders of these royalty-paying companies are also concerned as the increase in royalty payments depresses the returns for shareholders and results in unequal distribution of wealth between promoter MNCs and minority shareholders. On the other hand the management of the subsidiaries and the parent MNCs claim that the royalty levels are appropriate given the sophistication and value of the intellectual capital shared with the subsidiaries. Following this debate we examine whether royalty payments are being used to expropriate funds from the subsidiaries to parent MNCs. In particular, we study the royalty payments by foreign subsidiaries and comparable Indian firms to examine the issue of expropriation.

Our study is a contribution to existing strand of prior research which has focused on the benefits and drawbacks accruing to either parent MNC or the domestic industry as a result of foreign investment. We differ from the prior research as we focus on the benefits and drawbacks accruing to the minority shareholders investing in the listed subsidiaries of foreign MNCs. Our study is a contribution to existing strand of corporate governance literature which is focused on expropriation of shareholders. We differ from the prior literature as we focus on expropriation of minority shareholder by foreign MNCs. Our study is similar to Atanansov, Boone and Haushalter (2010) as we also focus on expropriation of minority shareholder by the parent company. We differ from them as we focus on expropriation by foreign MNC through royalty payments.

We analyze royalty payment decisions of 4673 Indian firms over a period of 12 years from 2002 to 2013. We document that royalty payments made by foreign subsidiary firms is higher than the royalty payments made by Indian firms. We also report that royalty payments have a negative impact on firm performance viz., asset turnover, net profit margin and return on capital employed. We also report that the negative impact of royalty payment on firm performance is more severe in case of foreign subsidiary firms in comparison to domestic firms.

The next section details hypothesis formulation. Section III explains the data and methodology employed and Section IV reports the results. Section V concludes.

II. Hypothesis Formulation

Foreign investment research has focused on two strands of literature. The first strand looks at the benefits and drawbacks of foreign investment to the multinational companies. Multinational companies benefit from foreign investment in subsidiaries through access to resources, access to new markets and tax benefits. Their decisions are also dependent upon the

institutional structure of the host country and probability of asset expropriation by host country governments. The other strand of literature focuses on the benefit and drawback of foreign investment to the host country. The host country benefits from foreign investment in the form of technology dispersion and spill-over (positive market externalities) effect. The competition effect indicates the exit of domestic firms in the market due to the entry of the foreign players.

Sin, (1990) examines the impact of tax issues on the decision of establishing a foreign subsidiary. The results indicate that lower taxes in the host country and taxation treaties play an important role deciding subsidiary location, especially when the taxes of the home country are high and repatriation of earnings from host country is allowed. Agarwal and Ramaswami, (1992) state that choice of foreign market location depends upon the three key benefits viz., ownership advantage to the parent firm, location advantages of market and resources and internationalization advantages of integrated business transactions. Rugman and Verbeke (2001) find that subsidiary specific advantages of low taxes, access to resources or access to markets are the basis of identifying the process of interaction and structure of relationship between the parent and subsidiary. These factors form the basis of whether the parent company enters the foreign market through licensing, exporting, joint venture or solo venture. Makino, Lau and Yeh (2002), find that the firms motivation to expand into foreign market, host country regulations and the firm's capability to adjust to these regulations impact the choice of subsidiary location.

Truitt (1970), examines the process of nationalization of assets and expropriation of multinational companies by host countries, especially the less developed countries and state that the probability of expropriation through nationalization and access to legal recourse plays an important role finalizing subsidiary locations. Durnev, Errunza and Molchanov (2010), examine the impact of host country government support in maintaining property rights and increasing corporate transparency on growth of subsidiaries. They find that countries with low level of regulatory protection and less corporate transparency negatively impact subsidiary growth. Duanmu (2014), state that possibility of expropriation of assets by host country has a significant impact on the decision to setup subsidiaries in foreign country but this risk can be reduced by leveraging the political influence of the home-country. Pan, Teng, Supapol, Lu, Huang and Wang (2014) says the level of ownership in an overseas subsidiary has been an important issue in international business and firms prefer higher ownership for subsidiaries located in favorable foreign institutional environments.

Gorg and Greenway (2004) reviewed studies conducted to analyse the effect of FDI on the development of host country resulting from the spill-over effects of the foreign investments. They identify the key sources of spill-over but find that the empirical evidence supporting the spill-over effects are not significant. Barrios et al., (2005) examined the performance of foreign firms and domestic firms in Ireland. They find that in the initial period of FDI, the competition effect is dominant but in the later stages the positive market externalities come into play and due to the knowledge spill-over, increase is seen in the efficiency of the domestic firms and industry as a whole. A similar study conducted in China by Xu et al., (2006) states that when the reforms started in China in 1978, the performance of foreign firms was far better than the Chinese firms. After 20 years of reform, the research has empirically proved that the Chinese firms have bridged the gap and are performing equally well as the foreign firms. Blalock and Simon (2009) study the effect of downstream FDI on the benefits accrued by domestic firms in Indonesia. They conclude that firms with higher levels of absorptive capacity (weaker production capabilities) and greater complimentary capabilities benefit from FDI.

Das (1997), states that when developing economies are deregulated allowing FDI, foreign firms undertake offensive strategies so as to obtain a strong position in these newly developing economies. The domestic firms get hurt by these strategies in the initial period but if properly supported might respond to these offensive strategies by rejuvenating themselves through development in production processes and products so as to sustain this foreign onslaught. Mien (1999) examines the relationship between FDI and trade orientation in the Malaysian manufacturing sector and find that even though FDI has contributed to the growth of the Malaysian manufacturing sector, it has also resulted in higher levels of market concentration. A study by Khawar (2003) in Mexico has concluded that foreign firms are more productive than the domestic firms and hence have better performance especially in the initial stages. Wang and Li (2007) find curvilinear relationships between FDI and the spill-over effects. They find that spill-over effects (captured in the terms of increasing efficiency resulting from best-practices and new technologies) are positive in the initial period. At higher levels the spill-over effects turn negative harming the domestic firms. Hence they advise strengthening the domestic firms while attracting FDI for growth.

Most of the prior research has focused on either the issues related to the investing multinational company or the domestic firms of the industry in which the foreign investment is being made. There is dearth of research focused on the benefits of foreign ownership to minority shareholders of the foreign subsidiaries especially those which are listed on the stock

exchanges of the host country. Emerging markets such as India are characterized by high promoter ownership (La Porta, Lopez-de-Silanes and Shleifer (1999)). The key agency issue in emerging markets is the expropriation of minority shareholders by owner-managers of the firm. The owner-managers have control and executive powers of the firm. Firm control coupled with weak implementation of corporate governance laws in India permits such owner-managers to take self-serving decisions without much opposition from the minority shareholders (Shleifer and Vishny (1997) and Chakrabarti, Megginson and Yadav, (2008)). Even though most of the prior research in corporate governance is focused on expropriation by owner-managers having significant promoter ownership, Atanasov, Boone and Haushalter (2010) show that even parent companies having block ownership in their subsidiaries utilize their control to expropriate minority shareholders in their companies.

Foreign firms set-up subsidiaries to access resources, markets or for obtaining tax benefits. As the subsidiary evolves over time, the subsidiary accesses the domestic capital markets to maximize its location advantage and lists on the local stock exchanges. Domestic investors prefer investing in stock of such foreign subsidiaries as they are expected to provide better returns resulting from their better technology and capabilities. The listed subsidiaries have to follow domestic regulations related to profit and dividend distribution. Any profit which is retained remains under the control of the company management which is mainly the representative of foreign parent company. On the contrary if the parent company intends to repatriate its earnings through dividends, the profits need to be distributed amongst the minority shareholders too. Royalty payments provide the parent company to repatriate earnings without being distributed amongst the minority shareholders. Hence parent companies will demand higher royalty payments for their technology from the subsidiaries. This discussion leads to the following hypothesis.

Hypothesis 1

Royalty payment for foreign subsidiary firms is higher than that for domestic firms.

Even though the foreign subsidiary firms have to pay higher royalty payments to their parent companies, they obtain access to better technology, cheap capital and better resources in return. Access to such resources should result in better performance by foreign subsidiary firms in comparison to domestic firms. Hence we expect that royalty payments should result

into higher performance by foreign subsidiary firm. This discussion leads to the following hypothesis.

Hypothesis 2

Royalty payment for foreign firms adds higher value to their performance in comparison to the Indian firms.

III. Data Sources and Sample Description

We obtain the data for this study from the PROWESS database maintained by the Center for Monitoring Indian Economy (CMIE). The data on foreign ownership, ownership classification, National Industrial Classification, 1998 (NIC) codes and firm financial data are obtained from PROWESS. Our data spans the period financial year 2001-02 to financial year 2012-13. Our initial sample consists 5038 non-financial firms listed on the Bombay Stock Exchange and the National Stock Exchange. After deleting firms due to absent data we finally end-up with 4673 listed firms for a period of 12 years resulting into 46362 firm year observations. Out of the 4673 firms 212 are foreign subsidiary firms as classified by CMIE PROWESS with foreign ownership more than 51% whereas around 1723 firms have significant foreign ownership i.e. foreign ownership which is at least half that of the Indian promoters.

Table 1: Descriptive statistics of variables for the firms under analysis

Variable	Mean	Median	Max	Min	Std. Dev.	N
AGE	3.087	3.045	5.01	0.000	0.652	46348
Age	21.91	21.00	150.00	1.00	1.92	46348
Export Intensity	0.157	0.001	473.67	0.000	2.360	46348
Foreign Holding	0.038	0.000	0.97	0.000	0.134	46348
Leverage	0.463	0.246	316.00	0.000	3.294	46348
Marketing Intensity	0.049	0.016	72.29	0.000	0.667	46348
Royalty Payment %	0.24	0.00	476.92	0.00	3.38	46348
Size	536.49	478.15	3186105.87	0.10	7.87	46348

Notes: This table provides selected descriptive statistics for the sample under analysis. Std. Dev. stands for Standard Deviation. Min stands for minimum value and max stands for maximum value.

Table 1 provides the descriptive statistics for our sample. The average age of the sample firms is 22 years. The mean export intensity is around 16% whereas the median is near 0 indicating very few export oriented firms. The mean foreign holding is around 4%. The mean leverage is

46% whereas the average marketing intensity is 5%. The mean royalty payment i.e. the ratio of royalty paid to sales is 0.24% whereas the median is 0. The mean size is Rs.536.5 million.

We define royalty payment as a ratio of royalty paid during the year to the net sales during the year. We define foreign holding as the total proportion of issued shares held by foreign promoters. We also use a dummy variable having value 1 if a firm is classified as foreign firm and 0 otherwise. To classify a firm as foreign firm we use two criteria. We first consider all firms classified as foreign firms by Prowess as foreign owned subsidiary firms. We also consider firms having foreign promoter holding at least half of that of the Indian promoter holdings as foreign firms. To examine whether foreign ownership impacts royalty payments we conduct the following unbalanced panel regression analysis with royalty as the dependent variable and foreign ownership dummy and firm variables as independent variables.

$$\begin{aligned}
 & \text{Royalty}_{it} = \alpha_0 + \alpha_1 \text{Foreign Holding}_{it} + \alpha_2 \text{Size}_{it} + \alpha_3 \text{Age}_{it} + \alpha_4 \text{Leverage}_{it} + \alpha_5 \text{Marketing Intensity}_{it} + \alpha_6 \text{Export Intensity}_{it} \\
 & + \alpha_7 \text{ROCE}_{it} + \alpha_8 \text{Net Profit Margin}_{it} + \alpha_9 \text{Asset Turnover}_{it} + \alpha_{10} \text{Year} + \alpha_{11} \text{Industry} + \alpha_{12} \text{Firm} + \epsilon_{it}
 \end{aligned}
 \tag{eq. 1}$$

We also conduct the above analysis with foreign holding as the independent variable so as to understand the impact of foreign ownership percentage on royalty payment decisions.

$$\begin{aligned}
 & \text{Foreign Holding}_{it} = \beta_0 + \beta_1 \text{Size}_{it} + \beta_2 \text{Age}_{it} + \beta_3 \text{Leverage}_{it} + \beta_4 \text{Marketing Intensity}_{it} + \beta_5 \text{Export Intensity}_{it} \\
 & + \beta_6 \text{ROCE}_{it} + \beta_7 \text{Net Profit Margin}_{it} + \beta_8 \text{Asset Turnover}_{it} + \beta_9 \text{Year} + \beta_{10} \text{Industry} + \beta_{11} \text{Firm} + \epsilon_{it}
 \end{aligned}
 \tag{eq. 2}$$

To further examine the impact of royalty payment on firm performance we conduct a unbalanced panel regression with firm performance indicators as dependent variable and royalty payments as independent variables. We use asset turnover ratio, net profit margin and return on capital employed as three performance measures for our analysis. The asset turnover ratio is the ratio of net sales to average assets of the firm and is indicator of the efficiency of the firm. Net profit margin is the ratio of net profit to net sales and is an indicator of bottom line efficiency of firm. Return on capital employed is the ratio of operating profit to capital employed by the firm and is an indicator of the operating efficiency of the firm. We also control for foreign ownership, age, size, leverage, marketing intensity and export intensity. The unbalanced panel regression is as follows.

$$\begin{aligned}
 & \beta_1 \text{ is the coefficient of } \text{ROA}_{it} \text{ and } \beta_2 \text{ is the coefficient of } \text{ROE}_{it} \text{ and } \beta_3 \text{ is the coefficient of } \text{ROA}_{it} \text{ and } \beta_4 \text{ is the coefficient of } \text{ROE}_{it} \\
 & \text{and } \beta_5 \text{ is the coefficient of } \text{ROA}_{it} \text{ and } \beta_6 \text{ is the coefficient of } \text{ROE}_{it} \text{ and } \beta_7 \text{ is the coefficient of } \text{ROA}_{it} \text{ and } \beta_8 \text{ is the coefficient of } \text{ROE}_{it}
 \end{aligned}
 \tag{eq. 3}$$

We also intend to examine whether the impact of royalty varies for foreign firm in comparison to domestic firms. To examine the same we conduct unbalanced panel regression with firm performance indicators as dependent variable and royalty payment and foreign ownership dummy as dependent variables. To differentiate the royalty impact for foreign firms we also include the royalty payment and foreign dummy interaction term in the regression. The unbalanced panel regression is as follows.

$$\begin{aligned}
 & \beta_1 \text{ is the coefficient of } \text{ROA}_{it} \text{ and } \beta_2 \text{ is the coefficient of } \text{ROE}_{it} \text{ and } \beta_3 \text{ is the coefficient of } \text{ROA}_{it} \text{ and } \beta_4 \text{ is the coefficient of } \text{ROE}_{it} \\
 & \text{and } \beta_5 \text{ is the coefficient of } \text{ROA}_{it} \text{ and } \beta_6 \text{ is the coefficient of } \text{ROE}_{it} \text{ and } \beta_7 \text{ is the coefficient of } \text{ROA}_{it} \text{ and } \beta_8 \text{ is the coefficient of } \text{ROE}_{it}
 \end{aligned}
 \tag{eq. 4}$$

IV. Results

We first compare the royalty payments and performance variables for foreign firms and domestic firms using independent sample t-test. The results indicate that royalty payment for foreign firm is significantly higher than that for domestic firm. We also find that the net profit margin for foreign firms is lower than the net profit margin for domestic firms. We do not find significant difference between the asset turnover ratio and return on capital employed for foreign and domestic firms.

Table 2: Comparison of royalty payment and firm performance measures amongst foreign firms and domestic firms

Variable	Foreign firm	Domestic firm	Difference	t-stat
Royalty (%)	0.29	0.18	0.11	2.74**
Asset turnover	1.02	1.03	-0.01	0.36
Net profit margin	-2.66	-0.42	-2.24	-2.26*
Return on capital employed	0.05	0.06	-0.01	-0.65

Notes:

** , * , ^b denote statistical significance at the 1%, 5% and 10% levels respectively in a two tailed test.

This table compares the royalty payment and performance measure by foreign firms with domestic firms. We consider three performance measures viz., asset turnover, net profit margin and return on capital employed.

Even though the t-test results show that royalty payment for foreign firms is higher than that for domestic firms, the results might be influenced by other firm variables as well as time and industry. To ascertain the same we examine the impact of foreign ownership on royalty payments using an unbalanced panel regression after controlling for other variables. The results

are provided in table 3. Panel A provides the results for the regression. The results indicate that royalty payments for foreign firms are higher than that for domestic firms. We also find that larger firms tend to pay higher royalties and firms with higher exports pay lower royalties as such firms might be well equipped with in-house technologies and may not need imported technologies.

Panel B provides results for unbalanced panel regression conducted to examine the impact of foreign holding proportion on royalty payments after controlling for appropriate firm variables. The results show that for every % increase in foreign holding the royalty payment increases by 0.66%. The impact of other variables is similar to that of Panel A. These results clearly show that royalty payment by foreign firms is higher than that for domestic firms ascertaining our first hypothesis.

Table 3: Results for the unbalanced panel regression examining the impact of foreign ownership on royalty payments

	Panel - A		Panel - B	
Foreign Ownership Indicator	Foreign Dummy		Foreign Holding	
Variable	Coefficient	t-Statistic	Coefficient	t-Statistic
Constant	16.29	2.42*	20.54	3.03**
Foreign Ownership Indicator	0.12	5.29**	0.66	11.86**
Firm Age	0.01	0.59	0.01	0.39
Firm Leverage	0.01	-0.48	0.01	-0.28
Firm Size	0.05	9.66**	0.04	7.08**
Marketing Intensity	0.02	1.39	0.02	1.39
Export Intensity	-0.01	-2.40*	-0.02	-2.38*
R-squared	0.16		0.17	

Notes

** , * , ^b, denotes statistical significance at the 1%, 5% and 10% levels in a two tailed test, respectively.

This table reports the results of the unbalanced panel regression examining the impact of firm ownership on royalty payments. Panel A uses foreign ownership dummy as the foreign ownership indicator and panel B uses foreign holding proportion as the foreign ownership indicator. The unbalanced panel regression controls for year effect and industry effect.

To further examine the impact of royalty payments on firm performance we conduct a series of unbalanced panel regression with firm performance indicators as dependent variable and royalty payments as independent variables. We use asset turnover ratio, net profit margin and return on capital employed as three performance measures for our analysis. The results are provided in table 4.

Table 4: Results for the unbalanced panel regression examining the impact of royalty payment on firm performance

Performance Measure	Asset Turnover		Net Profit Margin		Return on Capital Employed	
	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat
Constant	-23.02	-5.66**	-401.77	-2.51*	5.91	1.29
Royalty Payment	-0.58	-3.38**	-5.91	-1.85 ^b	-0.12	-3.91**
Foreign Holding	0.25	4.56**	1.17	0.38	0.03	0.76
Firm Age	-0.02	-1.75 ^b	-1.05	-1.85 ^b	0.01	0.73
Firm Leverage	0.20	1.46	-4.35	-1.88 ^b	-0.01	-1.44
Firm Size	-0.02	-1.25	-0.47	-2.32*	0.03	4.33**
Marketing Intensity	-0.04	-3.14**	-4.59	-0.90	-0.01	-2.03*
Export Intensity	-0.01	-1.65 ^b	-0.05	-0.70	0.01	0.18
R-squared	0.31		0.12		0.10	

Notes

** , * , ^b , denotes statistical significance at the 1%, 5% and 10% levels in a two tailed test, respectively.

This table reports the results of the unbalanced panel regression examining the impact of royalty payments on firm performance. We consider three performance measures viz., asset turnover, net profit margin and return on capital employed. The unbalanced panel regression controls for year effect and industry effect.

The asset turnover analysis regression results indicate that royalty payment has a negative impact on asset turnover. This clearly shows that as royalty payment increases firm efficiency decreases. Interestingly, we document a positive impact of foreign holding on asset turnover ratio indicating that as foreign ownership increases the asset turnover and efficiency of the firm increases. We also record a negative impact of age, marketing intensity and export intensity on the asset turnover. The net profit margin regression analysis indicates that royalty payment has a negative impact on net profit margin of the firm. We also record a negative impact of age, leverage and size on net profit margin of the firm. The return on capital employed analysis also indicates a negative impact of royalty payments on return on capital employed of the firm. We also record a negative impact of marketing intensity on return on capital employed of the firm. The results clearly indicate that royalty payments impact firm performance negatively. Royalty payment is an expense and is expected to reduce operating profit and net profit of the firm. But at the same time royalty payment provides access to better technology and brands for such firms and it is expected that the increase in firms earnings through this access should offset the royalty payment expense resulting in better performance.

We also intend to examine whether the impact of royalty varies for foreign firm in comparison

to domestic firms. To examine the same we conduct unbalanced panel regression with firm performance indicators as dependent variable and royalty payment and foreign ownership dummy as dependent variables. To differentiate the royalty impact for foreign firms we also include the royalty payment and foreign dummy interaction term in the regression. The results are provided in table 5.

Table 5: Results for the unbalanced panel regression examining the differential impact of royalty payments by foreign firms on firm performance

Performance Measure	Asset Turnover		Net Profit Margin		Return on Capital Employed	
	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat
Constant	-21.53	-5.82**	-283.20	-1.68 ^b	6.29	1.41
Royalty Payment	-1.00	-4.12**	1.48	0.33	-0.16	-2.08*
Foreign Dummy	-0.03	-1.38	-2.75	-2.22*	-0.01	-0.38
Royalty x Foreign Dummy	0.65	2.40*	-9.20	-1.89 ^b	0.07	0.78
Firm Age	-0.02	-1.38	-0.94	-1.71 ^b	0.01	0.76
Firm Leverage	0.20	1.46	-4.36	-1.89 ^b	-0.01	-1.44
Firm Size	-0.01	-1.05	-0.53	-2.31*	0.03	4.25**
Marketing Intensity	-0.04	-3.16**	-4.60	-0.90	-0.01	-2.04*
Export Intensity	-0.01	-1.66 ^b	-0.05	-0.75	-0.01	0.14
R-squared	0.33		0.11		0.10	

Notes

** , * , ^b , denotes statistical significance at the 1%, 5% and 10% levels in a two tailed test, respectively.

This table reports the results of the unbalanced panel regression examining the differential impact of royalty payments by foreign firms on firm performance. The royalty payment and foreign dummy interaction term captures the differential impact. We consider three performance measures viz., asset turnover, net profit margin and return on capital employed. The unbalanced panel regression controls for year effect and industry effect.

The asset turnover ratio analysis results indicate that royalty payment has a negative impact on asset turnover ratio. The interaction variable coefficient is positive indicating that even though the royalty payment impact for general firms is negative the royalty payment impact for foreign firms is higher than that for domestic firms. Even though the interaction term coefficient is positive the net effect for royalty payment for foreign firms is still negative. In case of domestic firm increase in royalty payment by 1% reduces asset turnover by 1%. For foreign firm increase in royalty payment by 1% reduces asset turnover by 0.35%. We also record a negative impact of marketing intensity and export intensity on the asset turnover.

The royalty payment coefficient for net profit margin analysis is not significant. We find a negative coefficient for the foreign dummy indicating that net profit margin for foreign firms is lower than that for domestic firms. The interaction term coefficient is also negative indicating a higher negative impact of royalty payments on net profit margin for foreign firms in comparison to domestic firms. We also record a negative impact of age, leverage and size on net profit margin of the firm. The return on capital employed analysis also indicates a negative impact of royalty payments on return on capital employed of the firm. We do not find significant impact of foreign ownership dummy and the interaction term on return on capital employed. We also record a negative impact of marketing intensity on return on capital employed of the firm. The results clearly indicate that not only do royalty payments impact firm performance negatively but this impact is more severe in case of foreign firms. The higher negative impact of royalty payments is reducing the returns available to the shareholders of the firm. At the same time increased royalty payments indicate higher pre-tax cash-flow to the parent foreign company. Hence whereas the reduced net cash-flow to the parent foreign company is off-set by higher royalty payment, the minority shareholders are left with reduced earnings. This indicates expropriation of minority shareholder through royalty payments.

V. Conclusion

In this study we investigate expropriation by parent foreign companies through royalty payments of minority shareholders in their listed Indian subsidiaries. Using the data of 4673 listed firms across 12 years we report the following results:

1. The royalty payments made by foreign subsidiary firms is higher than the royalty payments made by Indian firms.
2. We report that royalty payments have a negative impact on firm performance viz., asset turnover, net profit margin and return on capital employed.
3. We also report that the negative impact of royalty payment on firm performance is more severe in case of foreign subsidiary firms in comparison to domestic firms.

The results summarized above clearly show that rather than impacting firm performance positively through increased earnings, royalty payment impacts firm performance negatively. The reduced net cash-flow to the parent foreign company is off-set by higher royalty payment. But the minority shareholders are left with reduced earnings indicating expropriation through royalty payments.

VI. References

- Agarwal, Sanjeev and Sridhar N. Ramaswami (1992), Choice of foreign market entry mode: Impact of ownership location and internationalization factors, *Journal of International Business Studies*, 23, 1-27.
- Atanasov, Valdimir, Audra Boone and David Haushalter (2010), Is there shareholder expropriation in the United States? An analysis of publicly traded subsidiaries, *Journal of Financial and Quantitative Analysis*, 45, 1-26.
- Barrios, Salvador, Holger Gorg and Eric Strobl (2005), Foreign direct investment, competition and industrial development in the host country, *European Economic Review*, 49, 1761-1784.
- Blalock, Garrick and Simon, Daniel H. (2009), Do all firms benefit equally from downstream FDI? The moderating effect of local suppliers' capabilities on productivity gains, *Journal of International Business Studies*, 40, 1095-1112.
- Chakrabarti, Rajesh, Bill Megginson and Pradeep Yadav (2008), Corporate governance in India, *Journal of Applied Corporate Finance*, 20, 59-72.
- Das, Ranjan (1997), Defending against MNC offensives: Strategy of the large domestic firm in a newly liberalizing economy, *Journal of Management Decision*, 35, 605-618.
- Duanmu, Jing-Lin (2014), State-owned MNCs and host country expropriation risk: The role of home state soft power and economic gunboat diplomacy, *Journal of International Business Studies*, 45, 1044-1060.
- Durnev, Art, Vihang Errunza and Alexander Molchanov (2010), Property rights protection, corporate transparency and growth, *Journal of International Business Studies*, 40, 1533-1562.
- Gorg, Holger and David Greenway (2004), Much ado about nothing? Do domestic firms really benefit from foreign direct investment? *The World Bank Research Observer*, 19, 171-197.
- Khawar, Mariam (2003), Productivity and foreign direct investment: evidence from Mexico, *Journal of Economic Studies*, 30, 66-76.
- La Porta, Rafael, Florencio Lopez-de-Silanes and Andrei Shleifer (1999), Corporate ownership around the world, *Journal of Finance*, 54, 471-517.
- Makino, Shige, Ching-Ming Lau and Rhy-Sang Yeh (2002), Asset exploitation vs. asset seeking: Implication for location choice of foreign direct investment from newly industrialized economies, *Journal of International Business Studies*, 33, 403-421.
- Mien, Bernard Tai Khjun (1999), Foreign direct investment and pattern of trade, *Economic and Political Weekly*, 34, 38-49.

- Pan. Y., Teng, L., Supapol, A. B., Lu, X., Huang, D., & Wang, Z., (2014). Firms' FDI ownership: The influence of government ownership and legislative connections, *Journal of International Business Studies*, 45, 1029-1043.
- Rugman, Alan M. and Alain Verbeke (2001), Subsidiary specific advantages in multinational enterprises, *Strategic Management Journal*, 22, 237-250.
- Shleifer, Andrei and Robert W. Vishny (1997), A survey of corporate governance, *Journal of Finance*, 52, 737-783.
- Sin, Hans-Werner (1990), Taxation and the birth of foreign subsidiaries, *National Bureau of Economic Research, Working Paper – 3519*, 1-47.
- Truitt, Frederick J. (1970), Expropriation of foreign investment: Summary of post World War II experience of American and British investors in the less developed countries, *Journal of International Business Studies*, 01, 21-34.
- Wang, Chengqi and Li Yu (2007) Do Spillover Benefits Grow with Rising Foreign Direct Investment? An Empirical Examination of the Case of China, *Applied Economics*, 39, 397-405.
- Xu, Dean Pan, Wu Changqi Yigang and Bennett Yim (2006), Performance of domestic and foreign-invested enterprises in China, *Journal of World Business*, 41, 261-274.

Appendix A

Variable Definitions

Variable	Definition
Age	Natural log of the period between incorporation date of the firm and announcement date of the project in years
Asset Turnover Ratio	It is the ratio of net sales of the firm to average total assets for the year.
Export Intensity	It is the ratio of net exports to net sales for the year.
Foreign Ownership Dummy	Dummy variable capturing foreign ownership. Dummy variable takes value 1 if firm classified as foreign firm or 0 otherwise. Firms are classified as foreign firms if they have been classified so by Prowess or firms having foreign promoter holding at least half of that of the Indian promoter holdings.
Foreign holdings	The ratio of total number of shares held by the foreign promoters of the firm to the total number of outstanding shares issued by the firm
Firm Size	Natural log of total assets of the firm in Rs. crore.
Industry Dummy	Captures the industry affiliation (core operating industry) of the announcing firm using the NIC code.
Leverage	Leverage is the ratio of total debt to the total assets of the firm
Marketing Intensity	Marketing intensity for the year is the ratio of marketing expenses incurred during the three years (current year and past two years) to the total sales during the year.
Net Profit Margin	It is the ratio of profit after tax to the net sales for the year.
Return on Capital Employed	Return on capital employed is the ratio of operating profit of the firm (EBITDA) to the long term capital employed. The long term capital employed is the difference between total assets of the firm and the current liabilities incurred during the period.
Royalty Payment	It is the ratio of royalty paid during the year to the net sales for the year.