

THE IMPACT OF FOREIGN PROPERTY ON THE PERFORMANCE OF MOROCCAN COMPANIES DURING COVID19 CRISIS: THE CASE OF COMPANIES LISTED ON THE CASABLANCA STOCK EXCHANGE

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Abstract

In this study, we analyzed the impact of foreign ownership on the performance of Moroccan companies during the COVID19 crisis. The analysis was based on the study of the performance of companies listed on the Casablanca Stock Exchange on the basis of the criterion of foreign participation. The methodology deployed made it possible to compare local companies with foreign companies during the period from 19-11 to 19/06, we found a comparability of performance between the two groups of companies.

Keywords: Performance-Casablanca Stock Exchange-Foreign Participation-Covid19

INTRODUCTION

In the face of the COVID19 pandemic, the world has plunged into a lockdown that has brought the global economy to a virtual standstill. Forecasts that the world will post a -3% recession in 2020, compared with +2.9% in 2019, its sharpest contraction since the 2008-09 financial crisis. In terms of international trade, non-industrialized countries (or countries in transition) have seen their trade deficits worsen, as have countries with a high proportion of oil and oil products. Exports have also suffered from the collapse in world market prices due to the gap between supply and demand.

At the microeconomic level, the economy has been faced with a transformation in consumption practices, and the rise in precautionary behavior has had a direct impact on market liquidity and economic activity. Once again, companies found themselves with large inventories, leading to a halt in activity or a downturn in the most favorable cases. To mitigate the impact of the crisis on their economies, governments have taken a number of measures, including converting several production units, increasing liquidity on the market, and granting loans to affected structures at virtually zero interest rates... The last economic crisis in 2008 showed that some business groups and foreign-owned companies are more resilient to the crisis than local companies (Joachim Wagner & John Philippe Weche Gelübcke., 2008). This can be explained by the fact that foreign direct investment significantly develops the liquidity level, leverage and profitability of target companies and promotes exports, output and real wages (Wang & Chen., 2014). In the Japanese context, FDI had a negligible impact on performance indices, however, they favorably impact company performance at later stages (Nakano & Nguyen., 2013).

Foreign direct investment remains a privileged means of creating economic growth and employment, by complementing local savings and investment. For emerging and developing countries, FDI represents a key element in boosting their transitions by amplifying their contributions to the global value chain. Local firms also benefit indirectly in vertically connected industries. The uniqueness of the current financial crisis lies in the exogeneity of the elements that were at its origin, creating conditions that are rather different from what the financial system had previously experienced, which has had a negative impact on the reactive behavior of companies and the system in general.

The absence of reliable future projections and the ever-increasing need for liquidity are driving companies to look for alternatives that can guarantee their survival. The resources available to the company will guide its behavior during this period, and therefore its chances of survival. The rivalry between foreign subsidiaries and local firms is a perfect illustration of this situation of access to resources. According to Alfaro and Chen (2011), in their study *Response of multinational subsidiaries to the crisis relative to local establishments*, establishments with strong vertical and financial links to their parent companies were more resilient. This is to be expected, since companies with strong vertical links have access to demand that enables them to sell off their production and guarantee a level of operation and consequently inflows and a lower rate of short-time working than other companies without this privilege. Financial ties enable the company to access more credit through swaps, or to benefit from balancing subsidies or current account advances.

1. AROUND FOREIGN OWNERSHIP AND CORPORATE PERFORMANCE

1.1 Main theoretical sources:

Several studies have examined the effect of ownership through the use of agency theory, but for companies operating in emerging and developing economies, this perspective does not fully explain the diversity of the ownership-performance nexus. Eisenhardt (1989) and Oliver (1997) point out that agency theory presents a partial view of the world, and advocate the fusion of agency theory, resource theory and institutional theory. For this reason, we decided to adopt a multi-theoretical approach, incorporating elements of agency theory, resource theory and institutional theory.

1.1.1 Agency theory:

Agency theory studies the relationships that arise when shareholders' and managers' objectives diverge, and when shareholders find it difficult to control managers' activities. Managers will only act in shareholders' interests if the right incentives are in place. There is no perfect incentive system, but it's easy to see what won't work. Managers who neglect shareholders' interests can be ousted by powerful shareholders, which presupposes that shareholders have an interest in monitoring agents' behavior. However, shareholders differ in the way they allocate resources in terms of incentives and monitoring. Shareholders who hold minimal shares of capital, their contribution to decision-making is negligible. Dharwadkar, George and Brandes (2000), argue that firms in emerging

economies are characterized by unique agency problems, arising from incongruent shareholder objectives, in addition to traditional agency problems.

Problems of incongruence between shareholders' objectives are originally due to expropriation in weak governance contexts, when large or majority owners take control of the company and deprive minority owners of the right to appropriate returns on their investments (Claessens & al, 2000; Lemmon & Lins, 2003).

Dharwadkar et al (2000) have developed a matrix that summarizes the impact of different categories of ownership on firm performance, taking into account agency issues. The matrix takes into account the identity and extent of ownership. Quadrant 1 represents dispersed-outside shareholders, whose impact on performance is moderate due to their limited ability to control because of high coordination costs and asymmetric information problems (Coffee, 1991; Black, 1998). Quadrant 2 relates to dispersed-internal shareholders, characterized by a distorted incentive structure and compromises their ability to undertake an effective monitoring exercise (Claessens & al. 2000; Sarkar & Sarkar, 2000; Khanna & Palepu, 2000), hence their impact on performance will be lower. Quadrant 3 represents the concentrated-internal type, where concentrated shareholding provides greater incentives to manage a company's affairs effectively, and gives opportunity and means to minority shareholders (Bebchuk & al., 2000; Claessens & al., 2000; Wiwattanakantang, 2001; Joh, 2003; Lemmon & Lins, 2003), so the impact on performance is moderate. Quadrant 4 represents the concentrate-outside type, their impact is superior as long as shareholders are able to mitigate the expropriation of minority shareholders while at the same time maximizing the benefit of risk bearing in relation to incentive harmonization and monitoring (Shleifer and Vishny, 1986; Chibber and Majumdar, 1999; Dharwadkar et al., 2000; Allen and Phillips, 2000).

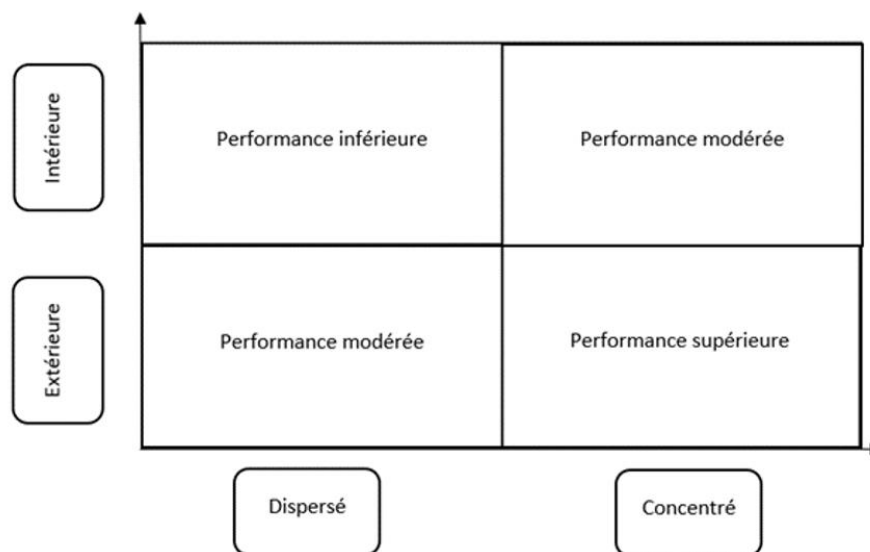


Figure 1: Property/performance matrix

1.1.2. Resource theory:

Resource theory associates the possession of a competitive advantage with the exclusive possession of tangible, inimitable resources. To maintain this advantage, the company must ensure the value, scarcity, inimitability and organization of its resources (Barney, 1991). The theory will help to explain differences in profitability that cannot be explained by differences in industry conditions (Peteraf, 1993). The nature of shareholders, foreign or local, financial or strategic, considerably affects the nature of resources, so the impact of divergent shareholder types on company performance differs according to the type of resources. Financial-foreign shareholders aim for short-term performance, neglecting the long-term development of the business, which has a negative impact on its value-creation potential and therefore on its survival. This type of shareholder prefers to withdraw rather than engage in a monitoring process (Coffee, 1991; Aguilera and Jackson, 2003). Financial-domestic shareholders focus solely on achieving short-term performance, which has a negative effect on the company's management, rather than engaging in strategic actions. Strategic investors, whether local or foreign, are motivated by non-financial objectives, and aim for sustainable business development that will increase the company's resilience to external shocks.

1.1.3. Institutional theory:

Institutional theory examines the social aspect within which business activities are embedded. It summarizes the effect of socio-cultural norms, values, regulation and the legal system on the organization and its behavior. Emerging and developing economies suffer from imperfections in capital, product and recruitment markets, creating institutional voids that characterize the absence of the specialized intermediaries who provide these services in developed economies. This situation represents an opportunity for companies with the resources and skills to fill this institutional gap, as in the case of multinational firms.

1.2 Review of empirical work:

Several studies have addressed the impact of foreign ownership on firm performance in different economic contexts, Laura Alfaro and Maggie Xiaoyang Chen (2012) examined the difference in establishment performance during the global crisis (supreme crisis), with a particular focus on the role of foreign ownership, the study would sample over 12 million establishments in 53 countries. They used a lagged-variable model based on three types of variables, variables measuring production links, variables measuring financial links and control variables.

The variables measuring production links examine the input-output relationship between the subsidiary's main product and that of the parent company. They had identified three groups according to the type of existing relationship: horizontal, vertical and independent, taking into account the intensity of productive links.

The financial linkage variables measure the intensity of intra-firm financial linkage in each industry. They used the ratio of ownership in the subsidiary to total assets. The ratio measures the brilliance of financial integration by the parent company's industry. Another

measure is represented by the share of capital held that is not financed by the cash flows generated and those.

Control variables measure economic level (Sales; Productivity; Age; Status of different products; Export status, all lagged two years).

The study shows that in times of crisis, foreign subsidiaries (on average) showed a sales growth rate three points higher than that of local companies, while in normal times foreign subsidiaries and their local counterparts put in a comparable performance.

1.2.1. The role of production links:

They found that foreign subsidiaries with vertical links to their parent companies had outperformed local companies during the crisis, with a 23% difference in growth rate, but had performed comparably well in non-crisis times.

Subsidiaries with horizontal links performed better in non-crisis periods, but were comparable with their local counterparts in times of crisis.

1.2.2. The role of financial ties:

Subsidiaries had an additional source of support, with a one-point increase in investment translating into 4.6% more growth.

Monica Singhanian, Neha Saini, and Puneet Gupta (2015) focused on the empirical analysis of the financial performance of Indian companies receiving FDI. The analysis was conducted using a dynamic model on a sample of 254 companies (industrial; basic materials; agribusiness; technology and telecommunication), over the period from 2005 to 2014. For performance measurement, they took two major indicators, operating income and Tobin's Q. Dependent variables are lagged values, percentage of foreign ownership and leverage in terms of short-term and long-term debt. Control variables are sales as an independent variable and sales evolution as an indicator variable for growth, asset tangibility, size and age.

The results of the study are based on a competitive analysis of the three types of capital inflows. They found that the impact of foreign investment on firm performance is undeniable, and that an increase in foreign ownership is associated with an increase in firm market capitalization. In general, foreign investors can contribute to shareholder value, indicating that real company performance needs time to manifest the benefits of foreign capital inflows.

Makoto Nakano and Pascal Nguyen (2013) in their paper "Foreign ownership and firm performance: evidence from Japan's electronics industry" addressed the effect of foreign ownership on firm performance in the electronics industry. The sample included all companies listed on the Tokyo Stock Exchange during the period 1998-2011, with the initial count of 205 companies, the number was reduced to 198 due to lack of data. The performance measures adopted were: ROA and Tobin's Q, to reduce the effect of outliers, they took LOG (Q), 4 standard control variables, firm size, asset tangibility, capital expenditure and R&D expenditure. Company size was measured by the log of total

assets, tangibility was calculated by the ratio of tangible assets to total assets, R&D and capital expenditure were related to total assets.

The study was carried out in two parts: the first involved deploying the panel method using the fixed-effect model, and the second involved deploying the dynamic model.

1.2.2. The fixed-effect model:

The results showed that investment in fixed assets was associated with high operating performance, while the proportion of fixed assets on the balance sheet was associated with high performance, while the proportion of fixed assets on the balance sheet was associated with lower performance. This means that companies that can rapidly depreciate and replace their fixed assets will be able to maintain their competitive advantages, leading to high operating performance.

On the other hand, R&D investment was significantly associated with lower operating performance. Moreover, this negative effect was more consistent in the post-Subprime period. In contrast, company size had no effect on ROA over the entire study period.

1.2.2. The dynamic model:

For ROA, the coefficient of foreign ownership was insignificant throughout the period, in contrast to the results obtained with the fixed-effect model, showing that firm effects were time-varying and positively correlated with foreign ownership.

On the contrary, the influence of R&D remained significantly negative, particularly in the post-Subprime period.

With regard to Tobin's Q, the same results as the fixed-effect model were validated: foreign ownership had a favorable effect, while investment in fixed assets had a negative effect on company capitalization, which contradicts the results of the fixed-effect model.

2. RESEARCH PROBLEM AND METHODOLOGY

2.1 The problem:

The purpose of this study will be to verify these findings in the Moroccan context: does foreign shareholding have a favorable impact on company performance in the context of the COVID19 crisis?

The problem will be addressed in two stages:

The first stage will be dedicated to studying the impact of foreign participation on company performance during the COVID19 crisis by answering the following question, what impact did foreign participation have on company performance during the COVID19 crisis?

The second stage will be dedicated to explaining the situation raised during the first stage, by identifying the foundations of performance in foreign and local companies we will have a clear idea of the explanations that could respond to the results of the comparison made.

2.2. Research methodology:

Our sample is made up of companies listed on the Casablanca stock exchange, from which we have excluded financial institutions (banks and insurance companies) and UCITS (Undertakings for Collective Investment in Transferable Securities) due to their particular management characteristics, and consequently a different definition of performance. In the end, we ended up with 55 companies.

The next step is to classify companies according to the level of foreign shareholding, which is set at 10% of ordinary shares or voting rights¹, according to the OECD: "*an incorporated or unincorporated enterprise in which a foreign investor holds at least 10% of the ordinary shares or voting rights determines the existence of a direct investment relationship. Effective decision-making power in management, corresponding to a stake of at least 10%, means that the direct investor is able to influence or participate in the management of a company; it does not necessarily require absolute control by the foreigner*". The classification resulted in the creation of two groups: group1, comprising 32 companies with a foreign shareholding of no more than 10%, and group2, comprising 23 companies with a foreign shareholding of more than 10%.

The study will be broken down into two sub-sections, the first of which will focus on setting up a comparative study of the groups' performance, while the second will be devoted more to explaining the discrepancies raised in the first section.

The first part will be dedicated to analyzing the performance of companies during the COVID19 crisis. To do this, we will analyze the evolution of the stock prices of the two groups over a period running from the appearance of the first case infected by COVID19 (19/11/2019) to 19/06/2020. The performance of the two groups will be compared by establishing an index summarizing the performance of each group. To avoid representation bias due to divergent stock liquidity, we have chosen the market-capitalization-weighted index. The index is calculated as follows

IndexT₀ = Capitalization / Number of shares issued

$$\text{IndexT} = \text{IndexT}_{-1} * ((\sum P_{i,t} * \text{NAC}_{i,t-1}) / (\sum P_{i,t-1} * \text{NAC}_{i,t-1}))$$

Where Index t-1 is the value of the index in the previous period;

n is the number of securities in the index ;

P_{i,t} is the price of the stock at period t ;

And NAC_{i,t-1} the number of shares outstanding at t-1.

To compare the two indices, we'll compare their trends, since we're dealing with two different groups, and comparing the raw values of the indices will be biased. The comparison will be established by means of a t-test to determine whether there are divergences between the two groups.

The second part of the study will address the differences raised in the first part. The aim is to determine the foundations of the performance of the two groups, by studying the development of their performance during the pre-covid19 period. The panel method will

be the most appropriate means of achieving this, and the study interval will be between 2013, to avoid the effect of the *subprime crisis*, and 2018, a year before the appearance of COVID19.

2.2.1 Definition of variables:

2.2.1.1 Performance measurements:

We will use the same performance measures used in most studies to investigate the impact of foreign ownership on company performance.

Tobin's Q, the market's measure of a company's performance, is calculated as follows:

$$\text{Tobin's Q} = \text{Market value} / \text{Replacement value of fixed capital}$$

To reduce the effect of outliers, we'll use LOG (Q).

Return on economic assets (ROA) is the accounting measure of performance. It measures a company's efficiency in generating profits from its assets. It is calculated as follows:

$$\text{ROA} = \text{Net income} / \text{Total assets}$$

2.2.1.2 Control variables:

The main control variable is the existence of foreign shareholding, which will be marked as 1 if foreign shareholding is between 10% and 20%, 2 if shareholding is between 20% and 50%, 3 if foreign shareholding exceeds 50%, and 0 if foreign shareholding is absent or less than 10%.

Table 1: Level of foreign participation

| Coding | Level of foreign participation |
|--------|--------------------------------|
| 0 | Less than 10% of sales |
| 1 | Between 10% and 20%. |
| 2 | Between 20% and 50% |
| 3 | Over 50% reduction |

Source: Compiled by us

The other control variables are debt ratio (LTDA) measured by the ratio of long-term debt divided by total assets, company size (SIZE) calculated by the logarithm of total assets, company age (AGE) calculated by the logarithm of company age, sales (SALES) and sales growth rate (SALESG).

3. RESULTS AND DISCUSSION

This section presents the descriptive analyses, the result of the comparison between companies according to the foreign ownership criterion, and a study of their performance during the pre-COVID19 period, with the aim of providing explanations for the situation raised.

3.1 The first part:

After collecting stock price data for all the companies in our sample, we calculated a weighted index for each of the two groups to represent their financial performance over the period from 19/11/2019 to 19/06/2020. The graph below shows the evolution of the two indices.

Table 2: Descriptive statistics

| | N | Average | Standard deviation | Minimum | Maximum |
|---------------------|-----|-------------|--------------------|-------------|-------------|
| EE Index | 151 | 154,0457532 | 17,97431823 | 118,5381273 | 179,2133651 |
| EL index | 151 | 23,37690595 | 2,00393002 | 18,53132816 | 28,49517853 |
| Evolution EE | 150 | 0,12% | 2,38% | -10,39% | 7,28% |
| Evolution EL | 150 | -0,03% | 2,00% | -8,06% | 6,30% |

Source: by us

Over the study period, the stock market value of EEs significantly exceeded that of EL (6 times). In terms of share price trends, the EE index was less stable than the EL index. The value of the EE index ranged from 156.38 to 144.85, with its steepest fall at 118.54 and its steepest rise at 179.21. The EL index was fairly stable, fluctuating between 28.5 and 18.5, with an average variation of 0.12%.

The first graph models the evolution of the two indices over the period, while the second plots the evolution of the growth rate of each of the two indices, giving a clearer idea of the performance of the two groups over this period and a solid basis for comparison.

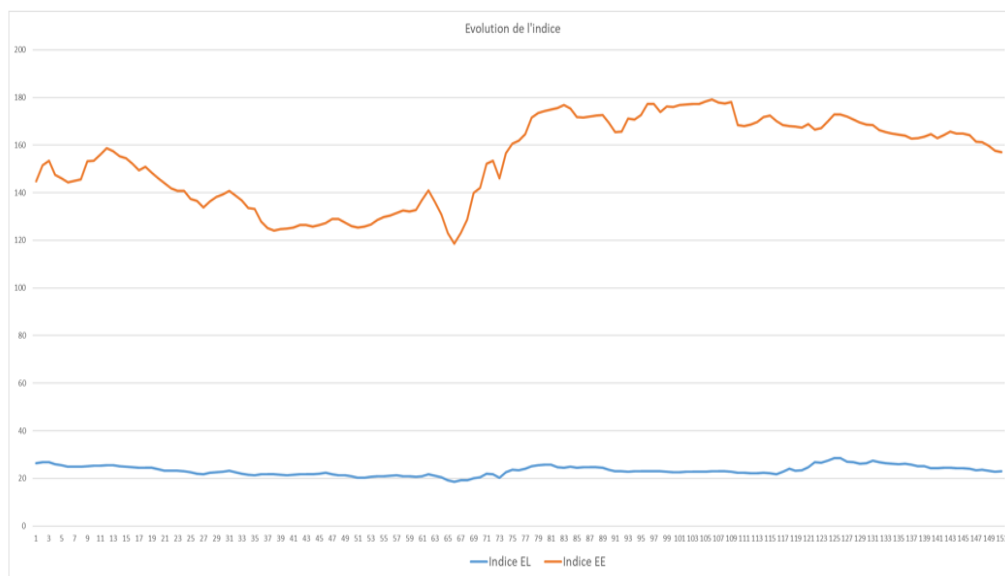


Figure 2: Index evolution

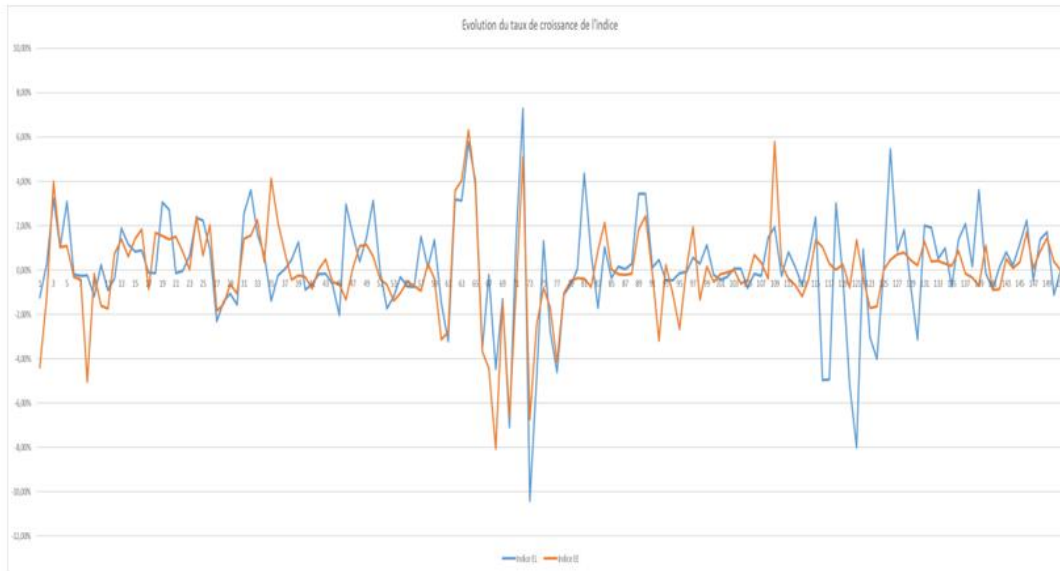


Figure 3: Evolution of the index growth rate

The two graphs don't allow us to decide whether there are differences between the two groups, so we'll use the independent-sample t-test. First, we analyze the normality of the distribution, using the Q-Q plot.

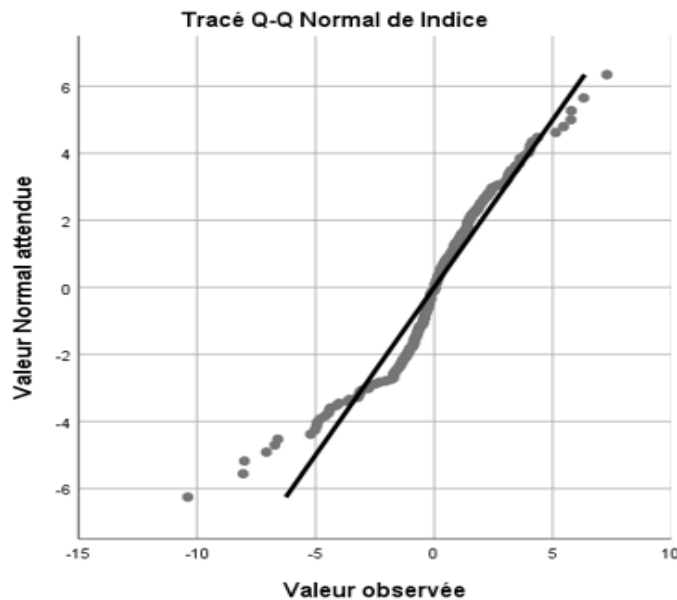


Figure 4: Q-Q plot

The Q-Q plot shows that the sampled distribution follows a normal distribution, so we can proceed with the test.

Test des échantillons indépendants

| | | Test de Levene sur l'égalité des variances | | Test t pour égalité des moyennes | | | | | | |
|--------|---------------------------------|--|------|----------------------------------|---------|------------------|--------------------|----------------------------|---|-----------|
| | | F | Sig. | t | ddl | Sig. (bilatéral) | Différence moyenne | Différence erreur standard | Intervalle de confiance de la différence à 95 % | |
| | | | | | | | | | Inférieur | Supérieur |
| Indice | Hypothèse de variances égales | 2,127 | ,146 | ,605 | 298 | ,546 | 0,15379% | 0,25415% | -0,34637% | 0,65395% |
| | Hypothèse de variances inégales | | | ,605 | 289,427 | ,546 | 0,15379% | 0,25415% | -0,34643% | 0,65401% |

Figure 5: Comparison result

The result of the test of homogeneity of variances is not significant ($\text{sig} > 0.05$), so we deduce that there are no divergences between foreign and local companies, which leads us to admit that foreign and local companies had a comparable performance during the study period. Several hypotheses emerge, the first relating to the nature of the current crisis, the second to the nature of the companies, and the third a hybrid hypothesis.

Unlike previous world crises, the COVID19 crisis is exogenous to the economic system, a health crisis that has spread to the economic sphere. The economy has been faced with a collapse in demand, leading to panic and protectionist behavior on the part of all economic players, with foreign companies no longer able to benefit from the advantages of vertical and horizontal links, and the global value chain suspended for the time being.

The performance of local companies is comparable to that of foreign companies, given the difference in size, a situation that can be explained by the composition of local companies: three quarters of local companies are family-owned, these companies are strategically oriented towards the long term, with good management of the asset structure and low recourse to debt (Arrègle & Mari, 2010). Mari, 2010), the adoption of these strategies does not draw out the full potential of the business, but transforms it into increasingly solid resilience and autonomy, in the face of crises these businesses showed a high level of performance compared to their counterparts, in the Canadian context, Canadian family businesses showed better Tobin's Q performance indicators during the 2008 financial crisis, both when the business is controlled by the family and when it is run by the family (Gauthier, 2013).

Without an idea of the basis of the performance of each of the two groups, we cannot have precise explanations for this situation, hence the interest in studying their performance during the pre-COVID19 period.

3.2 The second part:

Studying the performance fundamentals of local and foreign companies will provide valid explanations for the situation of performance comparability during the crisis period.

Table 3: Descriptive statistics

| | Variable | Obs | Average | Standard deviation | Min | Max |
|----|----------|-----|-----------|--------------------|-----------|----------|
| EE | ROA | 138 | 3.489855 | 11.47248 | -62.6 | 35.85 |
| | LTDA | 91 | .1428497 | .1858725 | .0008841 | .6530885 |
| | SIZE | 138 | 12.22658 | 1.85672 | 8.098643 | 15.7204 |
| | AGE | 138 | 3.700079 | .6028511 | 2.484907 | 4.51086 |
| | SALES | 134 | 467848.5 | 740484.7 | 0 | 3771010 |
| | SALESG | 110 | -.0190578 | .2787608 | -.8615412 | 1.846154 |
| | FO | 138 | 2.304348 | .7507534 | 1 | 3 |
| | LogQ | 136 | 1.858922 | 1.224344 | -.3564461 | 5.027867 |
| EL | ROA | 191 | 5.662304 | 6.718937 | -19.48 | 26.9 |
| | LTDA | 148 | .1341678 | .1022727 | .000489 | .3797365 |
| | SIZE | 191 | 11.77339 | 1.439587 | 8.503094 | 15.26526 |
| | AGE | 192 | 3.722258 | .5923542 | 1.94591 | 4.59512 |
| | SALES | 190 | 176328.2 | 209410.4 | 4099 | 1159519 |
| | SALESG | 158 | .0065189 | .3235112 | -1 | 2.697633 |
| | FO | 191 | 0 | 0 | 0 | 0 |
| | LogQ | 189 | 2.027936 | .8929508 | -1.565395 | 3.911933 |

Source: *Elaborated by ourselves*

On average, local companies have a higher economic profitability than foreign companies, with a difference of over 2 points. This difference is reflected in their stock market performance. The sales of foreign companies are double those of local companies, but they evolve negatively. We can see that even at a higher sales level and comparable size to their local counterparts, EEs have a lower accounting and stock market performance. On average, the two groups are similar in terms of their use of debt, with the behavior of EEs being more dispersed.

ROA for foreign companies averages 3.5%, although the distribution of values is a little flat, with a standard deviation of 11.5%. This shows that EEs have different levels of performance, which can be explained by the fact that they belong to specific sectors of activity and are company-specific. Foreign shareholding is average, with a value of 2.3.

The two tables below show the correlation matrix between the different variables, for the two study groups.

Table 4: EE correlation matrix

| Variable | LTDA | AGE | SALES | SIZE | SALESG | FO | LogQ |
|----------|---------|---------|--------|--------|---------|--------|--------|
| LTDA | 1.0000 | | | | | | |
| AGE | -0.4237 | 1.0000 | | | | | |
| SALES | -0.0276 | -0.2311 | 1.0000 | | | | |
| SIZE | 0.3473 | -0.2845 | 0.6918 | 1.0000 | | | |
| SALESG | 0.0484 | -0.1191 | 0.0990 | 0.1693 | 1.0000 | | |
| FO | 0.1179 | 0.0815 | 0.4692 | 0.5127 | -0.1648 | 1.0000 | |
| LogQ | -0.1358 | 0.1615 | 0.4488 | 0.4575 | 0.2229 | 0.3493 | 1.0000 |

Source: by us

Table 5: EL correlation matrix

| Variable | LTDA | AGE | SALES | SIZE | SALESG | FO | LogQ |
|----------|---------|---------|--------|--------|--------|--------|--------|
| LTDA | 1.0000 | | | | | | |
| AGE | 0.1198 | 1.0000 | | | | | |
| SALES | 0.3407 | -0.1836 | 1.0000 | | | | |
| SIZE | 0.3627 | -0.2247 | 0.8090 | 1.0000 | | | |
| SALESG | -0.0064 | -0.0502 | 0.0899 | 0.0680 | 1.0000 | | |
| FO | . | . | . | . | . | 1.0000 | |
| LogQ | -0.0425 | 0.0322 | 0.4103 | 0.3743 | 0.0803 | . | 1.0000 |

Source: compiled by us

In both cases, there is a strong correlation between the SALES variable and the SIZE variable. To avoid multi-collinearity, we're going to build two models, alternating the use of the SALES and SIZE variables. The choice between the fixed-effect model and the variable-effect model will be made on the basis of the results of the HAUSMAN test (see appendices).

Table 6: EL panel regression

| | EL | | | |
|------------|-----------------------------|----------------------------|-----------------------------|----------------------------|
| | ROA | | Q from TOBIN | |
| | Model 1 (SALES var deleted) | Model 2 (SIZE var removed) | Model 1 (SALES var deleted) | Model 2 (SIZE var removed) |
| LTDA | -23.84248*** (-4.63) | -25.09459*** (-5.13) | -1.246286 (-1.25) | -.0841468 (-0.09) |
| SIZE/SALES | -.2599945 (-0.45) | 3.86e-06 (1.14) | 1.109407*** (3.44) | 1.55e-06* (1.82) |
| AGE | 1.082069 (0.78) | 1.183823 (0.84) | -2.837602*** (-2.95) | -2.500049** (-2.49) |
| SALESG | 4.182136*** (5.22) | 4.357091*** (5.29) | .0942599 (0.73) | .0634433 (0.43) |
| FO | | | | |
| LogQ | 2.231997*** (4.12) | 1.95203*** (3.67) | | |
| R-sq | | | | |
| Within | 0.3746 | 0.4130 | 0.1731 | 0.0968 |
| Between | 0.5000 | 0.4605 | 0.0588 | 0.0049 |
| Overall | 0.4460 | 0.4374 | 0.0466 | 0.0039 |
| F-value | | | 13.30 | 11.27 |

***, ** and * indicate significance at 1%, 5% and 10% respectively.

Source: par notre soin

The table above shows the results of the regression of ROA and Tobin's Q for local companies. There is a significant unfavorable relationship between ROA and the weight of long-term debt: an increase of 1% leads to a fall in ROA of over 23%, while sales growth has a very significant favorable effect on ROA, with a lower weighting for Tobin's Q. From these results, we can deduce that recourse to long-term debt will have a negative impact on the company's ability to create added value, so it would be beneficial to keep the debt ratio at a controllable level.

It can be said that non-use or low recourse to long-term credit allows the company to preserve its management autonomy, enabling it to run its business efficiently, thereby reducing agency costs. ELs are characterized by their domestic shareholder base. The limited recourse to debt and the financial market (share compartment) enables a concentration of power to be maintained. Referring to the ownership/performance matrix, this type of ownership enables moderate performance to be developed, this moderate level being explained by the agency costs generated by minority shareholders' access to decision-making.

The internal nature of the shareholders, their long-term commitment and the limited recourse to external financing means that they have a better knowledge of the business, giving them access to unique resources and skills enabling them to develop and preserve competitive advantages, and consequently build a solid performance that is resilient to external shocks.

The in-house character and good knowledge of the field of activity help to build up knowledge of the jurisdiction in force, as well as of legislative loopholes, which can be beneficial to the company.

Tobin's Q model has shown that the stock market performance of companies is favorably linked to company size, and to a lesser degree to sales, while age has a very significant unfavorable effect on market capitalization.

This situation can be explained by the lack of interest that may exist between the company's strategic vision and that of investors on the financial market, which amounts to encouraging local companies to adopt a vision of perpetuating their business rather than making substantial profits in the short term.

Table 7: EE panel regression

| EE | | | | |
|------------|-----------------------------|----------------------------|-----------------------------|----------------------------|
| | ROA | | Q from TOBIN | |
| | Model 1 (SALES var deleted) | Model 2 (SIZE var removed) | Model 1 (SALES var deleted) | Model 2 (SIZE var removed) |
| LTDA | -15.45909** | -27.1694*** | -.6944672 | .5785984 |
| | (-2.49) | (-3.25) | (-0.89) | (0.75) |
| SIZE/SALES | 1.201025 | -.0000153** | .5634136*** | 6.48e-07** |
| | (1.21) | (-2.06) | (3.80) | (2.04) |
| AGE | .1327138 | 5.116566 | .3733251 | .4060419 |
| | (0.06) | (0.57) | (1.01) | (1.04) |
| SALESG | 3.914937 | 3.943988 | 1.187566*** | 1.414069*** |
| | (1.16) | (0.92) | (3.56) | (4.04) |
| FO | -3.028894* | | -.1281922 | .0684577 |
| | (-1.70) | | (-0.39) | (0.20) |
| LogQ | 2.778899*** | 3.425522** | | |
| | (2.79) | (2.65) | | |
| R-sq | | | | |
| Within | 0,3121 | 0.3825 | 0.3780 | 0.2603 |
| Between | 0.4504 | 0.0000 | 0.3830 | 0.3085 |
| Overall | 0.3735 | 0.0009 | 0.3095 | 0.3046 |
| F-value | | 5.42 | | |

***, ** and * indicate significance at 1%, 5% and 10% respectively.

Source: by us

The results of the regression of ROA and Tobin's Q for foreign companies show an unfavorable relationship between the weight of long-term debt and ROA. The same is true for foreign ownership, but at a lower level of significance, while stock market performance has a favorable effect on accounting performance.

We can therefore see that using debt to finance long-term activity has a negative impact on accounting performance, something that can be explained by the orientation of foreign stakeholders, which according to the results, degrades the value of ROA. External stakeholders (in relation to the business sector) are short-term oriented and try to extract the maximum potential from the company without paying attention to its survival and sustainability, often at a time when the company's ability to generate profits is deteriorating, these shareholders take their shares and leave, with reference to the ownership/performance matrix these are dispersed-external shareholders, their impact on performance is deemed moderate due to their limited ability to control because of high coordination costs and problems of information asymmetry between agent-principal. In cases where power is concentrated among a limited number of external shareholders, the positive impact on company performance is greater. Generally speaking, the companies targeted by foreign investors are those which have already developed competitive advantages and occupied an important place in their markets. These companies will be vulnerable if they adopt the strategic vision of the new shareholders,

limiting themselves to making profits at an exponential rate without paying attention to the changes that may appear in the market and the measures taken by competitors.

The results of Tobin's Q model support these hypotheses, showing that stock market performance is linked mainly to changes in sales and company size, and to a lesser extent to sales achieved.

3.3 The third part:

The first part compared the two groups of companies (EE and EL) over the period from the appearance of the first COVID19 case to 19/06. We found comparability in performance. To explain this situation, we studied the performance of the two groups during the pre-COVID19 period with the aim of identifying the characteristics specific to each group.

As already mentioned, the current crisis is exogenous to the economic system, due to the triggering element that is the new SARS-CoV-2 virus. Companies are undergoing the consequences of a transformation in environmental mechanisms, and are trying to adapt in order to maintain their survival. ELs, which underperformed in normal times, managed to demonstrate a performance comparable to their foreign counterparts, with several factors contributing to this situation. ELs enjoyed the benefits of vertical and horizontal links with their parent companies, as well as easy access to financing when needed. However, this is no longer the case, as companies all over the world suffer from the same problems of redefining environmental factors. Yet transfers between parent companies and subsidiaries are very low, and shareholders are no longer able to provide their companies with funds, as the expected return is no longer sufficient to cover the ever-increasing risk.

EEs are focused on achieving short-term performance, without paying attention to the long term, due to the pressure exerted by stakeholders to remunerate their contributions, and consequently a convergence of vision with management leading to the generation of agency costs resulting from monitoring. ELs with a lower performance in normal periods aim for business continuity to the detriment of their short-term performance, maintaining decision-making independence and aiming to develop the business by acquiring new competitive advantages. This enables ELs to be more resilient to external shocks and thus guarantee greater chances of survival.

The uniqueness of the current crisis and the specific characteristics of each of the two groups were at the root of the comparability of performance during this period, giving a redefinition of performance that is survival.

During the 2008 crisis, Laura Alfaro and Maggie Xiaoyang Chen (2012) found that subsidiaries with vertical links to their parent companies outperformed their local counterparts by 23%, although their performance was comparable in the pre-crisis period. On the other hand, subsidiaries with horizontal links outperformed their local counterparts in the non-crisis period, but had a comparable performance in the crisis period.

In the Japanese context, Makoto Nakano and Pascal Nguyen (2013) showed that foreign ownership had an insignificant effect on corporate ROA throughout the period, while foreign ownership had a favorable effect on corporate market capitalization.

Monica Singhania, Neha Saini, and Puneet Gupta (2015) focused on the empirical analysis of the financial performance of Indian firms receiving FDI, finding that the impact of foreign investment on firm performance is undeniable and that increased foreign ownership is associated with an increase in firm market capitalization.

CONCLUSION

In this study, we analyzed the impact of foreign ownership on the performance of Moroccan companies during the COVID19 crisis. The analysis was based on a study of the performance of companies listed on the Casablanca stock exchange, using the criterion of foreign ownership. The methodology deployed enabled us to compare local companies with foreign companies over the period from 19/11 to 19/06, and we found comparability of performance between the two groups of companies.

The absence of information on the performance fundamentals of the two groups led us to study their performance during the pre-COVID19 period using the panel method, the study was carried out over a 6-year period (2013-2018) adopting ROA and Tobin's Q as performance mediating variables. We found that foreign companies were oriented towards achieving short-term performance, trying to maximize the value expected by stakeholders, and benefited from vertical and horizontal links with their parent companies.

This would give them exclusive access to opportunities that local companies don't have, so this performance would be reflected in their stock market performance. As a result, it would be easier for them to finance themselves either through share issues or bond issues. However, this approach undermines the ability of companies to maintain their performance and thus their survival.

Local companies had a long-term focus and preserved their autonomy of governance, with little recourse to long-term debt and limited reliance on self-financing as the preferred means of financing their business, as well as a focus on developing working practices to develop and protect their competitive advantages. Due to the particular nature of the current crisis and the specific characteristics of each group of companies, foreign companies could no longer benefit from the advantages of links with their parent companies. As a result, we noticed a comparability of performance between the two groups. This confirms the results of studies carried out on the subprime crisis, which showed a superior performance on the part of foreign companies.

The COVID19 crisis will undoubtedly redefine the criteria for choosing where to locate foreign capital. Several countries are pushing their investors to relocate in return for very attractive economic and legal advantages. What would be the impact of such a transformation?

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