

## **Impacts of dynamic managerial capability and international opportunity identification on firm performance**

MOSTAFIZ, Md Imtiaz, SAMBASIVAN, M and GOH, SK

Available from Sheffield Hallam University Research Archive (SHURA) at:

<https://shura.shu.ac.uk/25047/>

---

This document is the Accepted Version [AM]

### **Citation:**

MOSTAFIZ, Md Imtiaz, SAMBASIVAN, M and GOH, SK (2019). Impacts of dynamic managerial capability and international opportunity identification on firm performance. *Multinational Business Review*. [Article]

---

### **Copyright and re-use policy**

See <http://shura.shu.ac.uk/information.html>

## List of Table

**Table 1** Data characteristics of the sample ( $N = 390$ )

| Characteristics       | Number of<br>Enterprises | Percentage (%) | Cumulative |
|-----------------------|--------------------------|----------------|------------|
| <i>No of employee</i> |                          |                |            |
| < 150                 | 3                        | 0.7            | 0.7        |
| 151 - 200             | 7                        | 1.7            | 2.6        |
| 201 - 500             | 92                       | 23.6           | 26.2       |
| 501 - 1000            | 84                       | 21.6           | 47.7       |
| 1001 - 2000           | 103                      | 26.4           | 74.1       |
| > 2001                | 101                      | 25.9           | 100        |
| <i>Firm age</i>       |                          |                |            |
| 1 to 5                | 78                       | 20             | 20         |
| 6 to 10               | 92                       | 23.58          | 43.58      |
| 11 to 15              | 93                       | 23.85          | 67.43      |
| 16 to 20              | 79                       | 20.26          | 87.7       |
| More than 20          | 48                       | 12.3           | 100        |

**Table 2** Descriptive statistics, correlation matrix of constructs and CFA summary

| <b>Constructs in the model</b>               | <b>1</b>          | <b>2</b>          | <b>3</b>          | <b>4</b>          | <b>5</b>         | <b>6</b>          |
|--|-------------------|-------------------|-------------------|-------------------|------------------|-------------------|
| (1) Managerial human capital                 | <b>0.816</b>      |                   |                   |                   |                  |                   |
| (2) Managerial social capital                | 0.529**           | <b>0.790</b>      |                   |                   |                  |                   |
| (3) Managerial cognition                     | 0.241***          | 0.289***          | <b>0.774</b>      |                   |                  |                   |
| (4) International opportunity identification | 0.547**           | 0.417**           | 0.420**           | <b>0.780</b>      |                  |                   |
| (5) Financial Performance                    | 0.318**           | 0.326**           | 0.180**           | 0.164**           | <b>0.936</b>     |                   |
| (6) Non-financial performance                | 0.357**           | 0.423**           | 0.488**           | 0.416**           | 0.217***         | <b>0.766</b>      |
| <b>Control variables</b>                     |                   |                   |                   |                   |                  |                   |
| Firm size                                    | 0.640**           | 0.574**           | 0.518**           | 0.598**           | 0.441**          | 0.575**           |
| Firm age                                     | 0.572**           | 0.528**           | 0.473**           | 0.547**           | 0.411**          | 0.526**           |
| Environmental dynamism                       | -0.160**          | -0.192**          | -0.168**          | -0.198**          | 0.012            | -0.219**          |
| Mean Score                                   | 20.50             | 72.54             | 39.87             | 43.73             | 7.72             | 44.10             |
| Standard Deviation                           | 3.36              | 8.84              | 4.95              | 6.20              | 1.5              | 5.7               |
| Skewness: Statistics (Std. Error)            | -0.057<br>(0.124) | -0.194<br>(0.124) | -0.244<br>(0.124) | -0.142<br>(0.124) | 0.918<br>(0.124) | -0.289<br>(0.124) |
| Kurtosis: Statistics (Std. Error)            | -0.464<br>(0.247) | 0.003<br>(0.247)  | -0.317<br>(0.247) | -0.657<br>(0.247) | 0.905<br>(0.247) | -0.409<br>(0.247) |
| VIF  | 1.859             | 2.237             | 2.255             | 2.381             | 1.142            | 2.738             |

Note: Diagonal is the square root of the AVE;

\*\*Correlations significant at the 0.05 level (two-tailed)

\*\*\*Correlations significant at the 0.01 level (two-tailed)

**Table 3** Summary of standard loadings, CR, AVE, MSV, ASV, and maximum reliability (H)

| Items/Constructs   | Std. loadings<br>(critical ratio) | $\alpha$ | CR    | AVE   | MSV   | ASV   | Max<br>Reliability(H) |
|--|-----------------------------------|----------|-------|-------|-------|-------|-----------------------|
| <b>Managerial human capital</b>  |                                   | 0.884    | 0.888 | 0.666 | 0.432 | 0.364 | 0.954                 |
| 1. Prior entrepreneurial experiences   | 0.767 (18.034)                    |          |       |       |       |       |                       |
| 2. Prior managerial experiences:   | 0.883 (22.418)                    |          |       |       |       |       |                       |
| 3. Prior academic education  | 0.739 (17.060)                    |          |       |       |       |       |                       |
| 4. Training experiences  | 0.866                             |          |       |       |       |       |                       |
| <b>Managerial social capital</b>   |                                   | 0.956    | 0.956 | 0.621 | 0.523 | 0.380 | 0.977                 |
| 1. Top manager at buyer firms.   | 0.801 (17.007)                    |          |       |       |       |       |                       |
| 2. Top manager at supplier firms.  | 0.790 (16.652)                    |          |       |       |       |       |                       |
| 3. Top manager at competitor firms   | 0.811 (17.883)                    |          |       |       |       |       |                       |
| 4. Political leader in various levels of the government.   | 0.786 (17.009)                    |          |       |       |       |       |                       |
| 5. Officials in industry bureaus.  | 0.795 (17.402)                    |          |       |       |       |       |                       |
| 6. Officials in regulatory and supporting organizations such as tax bureaus, state banks, commercial administration bureaus, and the like. | 0.774 (17.163)                    |          |       |       |       |       |                       |
| 7. I assumed that he or she would always look out my interest.   | 0.781 (18.006)                    |          |       |       |       |       |                       |
| 8. I assumed that he or she would go out of his or her way to make sure I was not adversely affected.                                      | 0.796 (17.565)                    |          |       |       |       |       |                       |
| 9. I felt like he or she cared what happened to me.  | 0.787 (17.550)                    |          |       |       |       |       |                       |
| 10. I believed that this person approached his or her job with professionalism and dedication.   | 0.798 (16.605)                    |          |       |       |       |       |                       |
| 11. Members of my business network believe that the needs of the whole network should take priority over personal needs.                   | 0.811 (17.642)                    |          |       |       |       |       |                       |
| 12. Members of your business network accept decisions taken within the network even when they have different opinions                      | 0.748 (17.692)                    |          |       |       |       |       |                       |
| 13. Problem-solving by many members of a business network give better results that those by individuals.                                   | 0.786                             |          |       |       |       |       |                       |
| <b>Managerial cognition</b>  |                                   | 0.908    | 0.912 | 0.584 | 0.518 | 0.385 | 0.982                 |
| 1. It is important for our company to internationalize rapidly   | 0.643 (13.890)                    |          |       |       |       |       |                       |
| 2. Internationalization is the only way to achieve our growth objective.   | 0.774 (15.111)                    |          |       |       |       |       |                       |
| 3. We will, have to internationalize in order to succeed in the future.  | 0.796 (15.692)                    |          |       |       |       |       |                       |
| 4. The growth we are aiming at can be achieved mainly through internationalization.  | 0.795 (14.174)                    |          |       |       |       |       |                       |
| 5. The entrepreneur of the company is willing to take the company to the international markets.  | 0.832 (16.280)                    |          |       |       |       |       |                       |
| 6. The company's management uses a lot of time in planning international operations.   | 0.794 (16.065)                    |          |       |       |       |       |                       |
| 7. The company's management sees the whole world as a one big marketplace.   | 0.770                             |          |       |       |       |       |                       |
| <b>International opportunity identification</b>  |                                   | 0.929    | 0.925 | 0.511 | 0.518 | 0.510 | 0.985                 |
| 1. How many international business ideas did you identify in the past three years?   | 0.714 (15.304)                    |          |       |       |       |       |                       |
| 2. How many international business opportunities did you identify in the past three years?   | 0.793                             |          |       |       |       |       |                       |
| 3. How much did you modify/develop an international opportunity from idea generation to opportunity identification?                        | 0.832 (13.753)                    |          |       |       |       |       |                       |
| 4. How many recognized international business opportunities were considered as novel or innovative?  | 0.704 (13.302)                    |          |       |       |       |       |                       |
| 5. How many novel or innovative ideas were considered feasible and desirable?  | 0.746 (14.149)                    |          |       |       |       |       |                       |
| 6. How many international opportunities have you pursued in the past three years?  | 0.718 (13.295)                    |          |       |       |       |       |                       |
| 7. How much are you able to shift organizational resources to capitalize on emerging opportunities in international markets?               | 0.766 (13.477)                    |          |       |       |       |       |                       |
| 8. How quickly can you respond to changes in the international market and adapt to respond to external opportunities?                      | 0.813 (12.276)                    |          |       |       |       |       |                       |
| <b>Financial performance</b>   |                                   | 0.932    | 0.934 | 0.875 | 0.106 | 0.072 | 0.988                 |
| 1. Return on assets  | 0.949                             |          |       |       |       |       |                       |
| 2. Return on equity  | 0.922<br>(19.473)                 |          |       |       |       |       |                       |
| <b>Non-financial performance</b>   |                                   | 0.919    | 0.919 | 0.587 | 0.523 | 0.504 | 0.920                 |
| 1. New product and service introduction in international markets.  | 0.788 (13.394)                    |          |       |       |       |       |                       |

|  |                |
|--|----------------|
| 2. Time to market for new product and service internationally.                 | 0.755 (12.380) |
| 3. Number of successful new product and service in international markets.      | 0.798 (12.916) |
| 4. Global reach (i.e., presence in strategically located countries worldwide). | 0.758 (12.162) |
| 5. International reputation of the firm.                                       | 0.744 (12.732) |
| 6. Gaining a foothold in international markets.                                | 0.763 (11.821) |
| 7. Success of main international business.                                     | 0.791 (12.762) |
| 8. Success of main international business from competitor perspective.         | 0.731          |

---

Notes: Critical ratio greater than 1.96 is significant at  $**p < .05$ ,  $***p < 0.001$   
n.s.: not significant

**Table 4** HTMT correlation ratio

| Construct  | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8 |
|--|-------|-------|-------|-------|-------|-------|-------|---|
| Managerial human capital   | -     |       |       |       |       |       |       |   |
| Managerial social capital  | 0.642 | -     |       |       |       |       |       |   |
| Managerial cognition   | 0.575 | 0.515 | -     |       |       |       |       |   |
| International opportunity identification   | 0.569 | 0.621 | 0.748 | -     |       |       |       |   |
| Financial performance  | 0.325 | 0.326 | 0.191 | 0.159 | -     |       |       |   |
| Non-financial performance  | 0.668 | 0.722 | 0.718 | 0.714 | 0.216 | -     |       |   |
| Scope of accelerated internationalization  | 0.668 | 0.607 | 0.599 | 0.591 | 0.303 | 0.702 | -     |   |
| International opportunity identification * scope of accelerated internationalization | 0.060 | 0.044 | 0.064 | 0.049 | 0.208 | 0.049 | 0.052 | - |

**Table 5** Model fit statistics

| Model                | $\chi^2$ | $df$ | $\chi^2/df$ | (RMSEA) | RMSEA<br>(90% C.I.) | GFI   | CFI   | NFI   | RFI   | IFI   | TLI   | SRMR   | PCLOSE |
|----------------------|----------|------|-------------|---------|---------------------|-------|-------|-------|-------|-------|-------|--------|--------|
| Measurement<br>Model | 1446.453 | 795  | 1.819       | 0.046   | 0.042 –<br>0.050    | 0.854 | 0.947 | 0.819 | 0.882 | 0.948 | 0.943 | 0.0386 | 0.965  |
| Structural<br>Model  | 1719.848 | 981  | 1.753       | 0.044   | 0.041 –<br>0.047    | 0.846 | 0.947 | 0.882 | 0.876 | 0.947 | 0.942 | 0.0374 | 0.998  |

**Table 6** Results of hypothesized relationships in SEM model

| Hypotheses | Std. Estimates | Critical ratio | p Value | Conclusions   |
|------------|----------------|----------------|---------|---------------|
| H1         | 0.062 n.s      | 1.084          | 0.255   | Not supported |
| H2         | 0.317***       | 5.953          | 0.000   | Supported     |
| H3         | 0.535***       | 9.566          | 0.000   | Supported     |
| H4a        | -0.012n.s.     | -0.80          | 0.201   | Not supported |
| H4b        | -0.060**       | -1.93          | 0.022   | Not supported |
| H4c        | -0.101**       | -2.06          | 0.025   | Not supported |
| H5a        | 0.013n.s.      | 0.92           | 0.243   | Not supported |
| H5b        | 0.065**        | 2.954          | 0.002   | Supported     |
| H5c        | 0.110**        | 2.823          | 0.002   | Supported     |
| H6         | -0.024n.s.     | -0.771         | 0.472   | Not Supported |
| H7         | 0.106**        | 2.569          | 0.020   | Supported     |

Notes: Critical ratio greater than 1.96 is significant at \*\* $p < .05$ , \*\*\* $p < 0.001$   
n.s.: not significant



Table 7 Standardized direct, indirect, and total effects of exogenous variable in SEM model

|  |          | Endogenous variable                      |       |         |                       |        |         |                           |        |         |
|--|----------|--|-------|---------|-----------------------|--------|---------|---------------------------|--------|---------|
| Type of effects                            |          | International opportunity identification |       |         | Financial performance |        |         | Non-financial performance |        |         |
|  |          | Beta                                     | C.R.  | p Value | Beta                  | C.R.   | p Value | Beta                      | C.R.   | p Value |
| Managerial human capital                   | Direct   | 0.062n.s                                 | 1.084 | 0.319   | 0.079n.s              | 1.034  | 0.944   | 0.194*                    | 3.287  | 0.002   |
|  | Indirect | -  | -     | -       | -0.012n.s             | -0.8   | 0.201   | 0.013                     | 0.92   | 0.243   |
|  | Total    | 0.062n.s                                 | 0.984 | 0.319   | -0.007n.s             | -0.078 | 0.942   | 0.207**                   | 3.285  | 0.000   |
| Managerial social capital                  | Direct   | 0.316**                                  | 5.953 | 0.000   | 0.242*                | 3.086  | 0.023   | 0.347**                   | 6.297  | 0.000   |
|  | Indirect | -  | -     | -       | -0.060*               | -1.93  | 0.022   | 0.065*                    | 2.954  | 0.002   |
|  | Total    | 0.316**                                  | 4.87  | 0.000   | 0.114n.s              | 1.676  | 0.111   | 0.409**                   | 7.57   | 0.000   |
| Managerial cognition                       | Direct   | 0.535**                                  | 9.566 | 0.000   | 0.004n.s              | 0.055  | 0.694   | 0.278**                   | 4.717  | 0.000   |
|  | Indirect | -  | -     | -       | -0.101*               | -2.06  | 0.025   | 0.110*                    | 2.82   | 0.002   |
|  | Total    | 0.535**                                  | 8.629 | 0.000   | -0.133*               | -2.111 | 0.034   | 0.385**                   | 8.02   | 0.000   |
| International opportunity identification   | Direct   |  |       |         | -0.166*               | -2.013 | 0.031   | 0.203**                   | 3.562  | 0.000   |
|  | Indirect |  |       |         | -                     | -      | -       | -                         | -      | -       |
|  | Total    |  |       |         | -0.189*               | -2.12  | 0.031   | 0.203**                   | 3.562  | 0.000   |
| International opportunity identification * | Direct   |  |       |         | 0.106*                | 2.569  | 0.043   | -0.024n.s                 | -0.771 | 0.479   |
|  | Indirect |  |       |         | -                     | -      | -       | -                         | -      | -       |
|  | Total    |  |       |         | 0.106*                | 2.569  | 0.043   | -0.024n.s                 | -0.705 | 0.479   |

Notes: Critical ratio greater than 1.96 is significant at \* $p < .05$ , \*\* $p < 0.001$   
n.s.: not significant