

Chapter 2

The most powerful Asian transnational corporations

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The chapter attempts to assess the development determinants and prospects of Asian transnational corporations while taking into account the requirements of building competitiveness in the modern global economy. The chapter has been divided into five subchapters.

The first one outlines the changes that have been taking place in the modern economy and their consequences in building competitiveness of a transnational corporation. The second subchapter focuses on the attributes of transnational corporations (TNCs) which determine the development potential of the most powerful transnational corporations (Top-TNCs). The chapter emphasizes the significance of the integrated influence of attributes in the exploration of the multi-layer capital of the corporate system. The third subchapter describes the essence of the system-based nature of a modern corporation capital, indicating the necessity of using appropriate methods of assessing the development determinants and prospects of Top-TNCs.

The fourth subchapter positions the Asian Top-TNCs against the leading global corporations. The study incorporates the analysis of their positions in the following international rankings: *The Forbes Global 2000*, *The World Investment Report*, *The 100 Top Brands*. The subsequent subchapter presents the assessment of their development potential using two synthetic indicators: the author's indicator of the ability to create added value and the 9-parameter MAC measure created for *The World's Most Admired Companies* ranking. The chapter ends with conclusions

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drawn from the research conducted for the period 2006–2018, determining the top 10 non-financial Asian corporations and the positions of corporations of the *Asian Emerging Markets Economies* (the A-EMEs).¹

2.1. The determinants of building international competitiveness in the 21st century – implications for the assessment of development potential of corporations

The 21st century brought a radical change in the determinants of building international competitiveness. Currently, its key challenge includes the exploration of the knowledge capital of the whole multi-layer structure of a given organization, or the use of the resources collected on various levels and their simultaneous development (exploration).

The analyses of the pillars of strategies of the most powerful corporations indicate² that the most dynamically developing agents put much pressure on the role of knowledge and innovation (theory of innovation, key competences, behavioural concepts). They also treat the diversity of the global environment as a source of possible advantages, making use of its potential through a systematic increase of internationalization in a business (theory of international production, foreign direct investment theory).

However, what appears to be the most important is the introduction of the following qualities into the management model: the understanding of the essence of cooperation,³ glocalization⁴ and orchestration⁵ in order to build adequate relations

1 A-EMES include: China with Hong Kong, India, Indonesia, Korea, Malaysia, Pakistan, the Philippines, Taiwan, Thailand. *MSCI World Quality Index* [2019], <https://www.msci.com/documents/10199/> (accessed: 30.09.2019). The research included corporations from A-EMES and additionally TNCs from: Japan, Singapore.

2 M. Rosińska-Bukowska [2012], *Rozwój globalnych sieci biznesowych jako strategia konkurencyjna korporacji transnarodowych*, Wydawnictwo Uniwersytetu Łódzkiego, Łódź.

3 P. Ritala, A. Golnam, A. Wegmann [2014], *Coopetition-based business models: The case of Amazon.com.*, „Industrial Marketing Management”, vol. 43, pp. 236–249; P. Klimas [2015], *Structural Face of Competition, Cooperation and Coopetition Inside Business Networks*, „Argumenta Oeconomica”, vol. 1 (34), pp. 127–155; Y.D. Lou [2005], *Toward Coopetition within a Multi-national Enterprise: A Perspective from Foreign Subsidiaries*, „Journal of World Business”, vol. 40 (1), pp. 71–90.

4 V. Roudometof [2016], *Theorizing glocalization: Three interpretations*, „European Journal of Social Theory”, vol. 19 (3), pp. 391–408.

5 P. Hurmelinna-Laukkanen, S. Nätti [2018], *Orchestrator types, roles and capabilities – A framework for innovation networks*, „Industrial Marketing Management”, vol. 74.

and structures (theories of: agglomeration, mergers and acquisitions, organization and management). That signifies the necessity to abandon traditional competition based on market strength and dominance of a single agent. What is, instead, required is the creation of connections that improve innovation, the refinement of learning procedures, the search for new methods of implementing skills and the adaptation of organization methods and forms as well as management structures to fit the dynamic changes occurring within the corporation.

In the modern model of building the competitiveness of Top-TNCs, the exploration of knowledge resources of an organization as a whole is of fundamental significance. In this model, the development potential is based on combining opposites – cooperation and competition (coopetition); localization and globalness (glocalization); standardization and adaptation (interculturalism). Putting pressure on qualitative changes regarding both processes and products, particularly the quality of interaction infrastructure, is indispensable. Regular modifications to the mechanism of system coordination and regulation aim to improve the transfer of knowledge from all types of stakeholders. To maintain a balanced, long-term development of a corporation, the system control mechanism must involve the participation of all stakeholders.

Taking into account these requirements demands a 4C systemic approach, based on comprehensiveness, corporateness, congruence and creativity. Comprehensiveness is a holistic approach to fulfil tasks. Corporateness is the ability to build all-level permanent coalitions, the immanent features of which must include the possibility to coexist. As a consequence, the system responsible for the effective building of international competitiveness in the 21st century must be based on congruence, ensuring a harmonious coexistence with a multicultural global environment and a multitude of stakeholder groups. Creativity is a paradigm pillar of the international competitiveness of corporations⁶ perceived as such, understood as combining skills and key competences, innovativeness and social responsibility, diversity of organization forms and cultural dissimilarities into a single change-inspiring system, the aim of which is to obtain the effect of synergy. The measure of system effectiveness is the ability to create added value, understand the ideas of social and economic values and co-create values.⁷

Since the above-mentioned principles have been considered fundamental in the 21st century, it is necessary to take another look at the capital of corporations as a system enabling continual adjustments, an immanent feature of which is change itself. Meeting these requirements is possible thanks to the appropriate structure of the

6 M. Rosińska-Bukowska [2016], *The Model of Competitiveness Assessment of Coopetition Network Systems – Competition and Cooperation of Enterprises in the Global Economy*, “Journal of Economics and Management”, vol. 24 (2), pp. 5–13.

7 G. Johnson, K. Scholes [1999], *Exploring Corporate Strategy*, Prentice Hall Europe, London, pp. 215–217; M.E. Porter, M.R. Kramer [2011], *The Big Idea: Creating Shared Value*, “Harvard Business Review”, vol. 89 (1–2), pp. 62–77.

system of resources and the modifications to the concept of managing them. In this aspect, understanding the essence of the systemic model of corporation resources and the holistic concept of managing a corporation is crucial. Taking into account the fact that the requirement of long-term competitiveness in the 21st century is a skilful exploration of intellectual capital which, in turn, helps increasing economic capital, the assessment based solely on purely economic parameters does not provide a full image of an agent's development abilities in a dynamically-changing economy.

TNCs have always built their power by adjusting their structures and functioning principles accordingly to the challenges arising in the environment. They have the ability to benefit from the differences in the distribution of the production factors (natural resources, capital, work) and the specificity of policies of individual countries. A corporation's success is largely based on its ability to find its own development concept on the basis of its attributes, or an effective composition of the necessary qualities in each of the layers of the accumulated capital.

In order to depict the methods of implementing the principles of building international competitiveness by Top-TNCs, both a system of attributes determining their development potential and its role as a mechanism transmitting environmental impulses have been presented. Further on a description of the layers of corporation capital, divided into five subsystems – two that encompass economic capital and three presenting intellectual capital – has been provided, depicting them as a foundation of resources enabling the fulfilment of the 4C systemic approach. As a result it has been emphasized that the areas of analyses necessary to obtain a comprehensive picture of a corporation's development determinants and prospects must be expanded by referring to parameters such as, for instance: social responsibility, innovativeness, management of human resources, creation of sales value on the basis of intangible assets, range of internationalization (assets, employment), quality of products/services and global competitiveness.

2.2. System of corporation attributes as the foundation of development potential

A classic definition of “transnational corporations” (TNCs) indicates that these agents manage a globally-organized production and service network and control major economic areas through capital commitment. A dynamic increase in the number of such agents has begun in the mid-1970s.⁸ Since then, corporations have undergone major changes.

⁸ M. Rosińska-Bukowska [2017], *Strategic changes in transnational corporation as an adjustment to the challenges of the 21st Century*, “Entrepreneurial Business and Economics Review”, vol. 5 (2), pp. 143–157.

When differentiating between TNCs and traditional corporations, it is crucial not only to accentuate the organizational complexity of an agent, but also the specificity of corporate identity based on coopetition, orchestration and glocalization. The ability to implement the 4C systemic approach (comprehensiveness, corporateness, congruence, creativity) is a real challenge for the most powerful modern corporations (Top-TNCs), enabling a long-term ability to create added value and making it possible to shape social and economic values.

The essence of TNC development comes down to their specific philosophies of expansion. Their strength is the result of their ability to adapt to the changing environment thanks to the abilities of integration and coordination of diverse, globally dispersed activities, taking into account the knowledge capital of the system created. Modern TNCs begin to abandon centralization, specialization and standardization and replace them with diversity, flexibility and creative approach to challenges.⁹ As a result, the developed mechanism transmitting the impulses of the dynamically changing environment is of crucial significance to the efficiency and long-term competitiveness. This system incorporates the intertwining qualities of a given agent that determine its development potential – the attributes of TNCs. For the purposes of this work, it is crucial to understand the essence of interactions between these attributes and their inseparable nature as a single foundation determining development potential. These attributes,¹⁰ as a system of connected vessels, create an agent’s ability to explore a multi-layer corporate system (figure 2.1.).

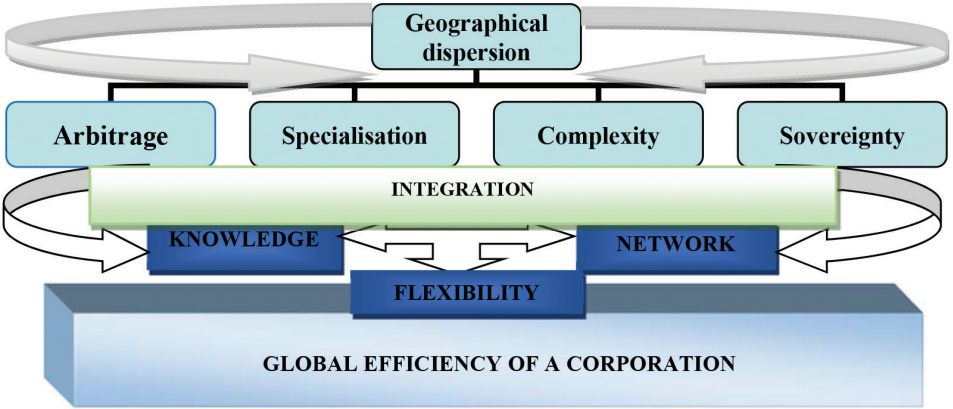


Figure 2.1. The system of the attributes of transnational corporations
Source: own elaboration

9 A. Toffler [1985], *Trzecia Fala*, PIW, Warszawa, pp. 15–35.
10 Attributes of TNCs: *global efficiency, geographical dispersion, arbitration, complexity, specialization, integration, knowledge, networks, flexibility, sovereignty.*

At present, the essence of a corporation's development capital is not only the ability to transfer capital, but the distribution of its resultant knowledge (technology, qualifications, organization, management and marketing methods) outside of the TNC's home country.¹¹ Therefore, it is not resource ownership that is the crucial aspect, but the ability to act systemically, that is organize, integrate and efficiently coordinate actions of various units in the process of fulfilling the adopted development strategy, which aims to create added value.¹² The system of attributes, which acts as a structure of connected vessels, ensures a TNC's effective transfer of skills, production capabilities, competences, capital, brands, marketing concepts as well as organizational and management formulas. It makes it possible for corporations to explore tangible and intangible assets. This is how corporations implement the instructions of the *Business Performance Management* (BPM) concept,¹³ the modern version of which¹⁴ relates to the management of the whole organization and emphasizes the necessity to determine the subsequent action stages (purposes), by indicating the requirement of adjusting competences to the evolving purposes in order to obtain satisfactory results.

Therefore, the unique resources of TNCs are created during the interactions within the organization system and on the borders between the agent and its environment. The resources of the corporate system are created, divided, transferred, adapted and changed in order to maintain competitiveness in a dynamic environment. The fundamental determinants of a corporation's development include market structure, participant actions, their network of relationships and the effects of their cumulative influence. In the 21st century, the pillars of Top-TNC development are coopetition, orchestration, glocalization and congruence. As a consequence, the study assessing the position and developmental prospects of Top-TNCs must refer to all layers that make up an organization's capital, including both tangible and intangible assets of the system.

11 M. Wilkins [1998], *Multinational Corporations. An Historical Account*, in: R. Kozul-Wright, R. Rowthorn (eds.), *Transnational Corporations and the World Economy*, Wider-McMillan Press-St. Martin's Press, London-New York, pp. 6–95.

12 P. Dicken [2007], *Global Shift: Mapping the Changing Contours of the World Economy*, Sage Publications Ltd, London.

13 M. Beer, R.A. Ruth [1976], *Employee Growth Through Performance Management*, "Harvard Business Review", July–August, pp. 59–66; I.B. Pugna, F. Albescu, D. Babeanu [2009], *The Role of Business Intelligence in Business Performance Management*, "Annals of the University of Oradea, Economic Science Series", vol. 18 (4).

14 In their primary form, the concept by Beer and Ruth concerned staff management and was not systemic in nature.

2.3. Systemic nature of corporation capital – layers, parameters, potential assessments

Capital is a specific economic category capable of both increasing and relying on the collected resources, used not only to attain goals, but also to develop a given agent's business.¹⁵ An immanent feature of capital perceived as such is its systemic nature, which means that the layers of capital are a system of connected vessels. This system, as a whole, is responsible for increasing prosperity as well as a stable and long-term development of the corporation.

This work focuses on the role of individual layers of corporation capital in the co-creation of added value. The presented model of its division encompasses the classic foundation of economic capital — market and financial capitals — and takes up the challenge of providing a holistic description of the categories of intellectual capital that determine the efficiency of TNC's actions. Corporation capital can be divided into five subsystems described as follows:

- market capital — coordination of the allocation of rare resources during the production and sales of goods and services; reflects possible combinations of their most efficient use in a given moment – global production systems;
- financial capital — flows of the financial capital; responsible for maintaining the agent's financial liquidity (both current and long-term);
- innovation capital — source of modern solutions and innovative techniques in the production process; the analysis of the expenditure for research and development and the number of new projects generated; providing the possibility of improving individual offers (products and operations), especially regarding key competences;
- organizational capital — systematic modifications of the global chain of the creation of added value, due to the creation of paths of structural adjustments; making use of the opportunities provided by the international environment; exchange of labour resources (quantitative perspective) into human capital that generates added value (qualitative perspective);
- institutional capital — includes norms, habits, institutions that determine the value systems of a given civilization circle, country, region, society, etc.; responsible for skilfully meeting the requirements of multi-institutional global environment and the ability to creatively utilize its potential.

Human capital is purposefully considered not a part of intellectual capital, but a factor that permeates and dynamizes the whole system. Human capital is an indispensable factor that bonds the whole organization together. Therefore, it should not be treated as a separate subsystem, but an immanent superior feature, without which the functioning of both the whole corporation and each of its individual

15 P.L. Bernstein [2007], *Capital Ideas Evolving*, John Wiley & Sons, Inc., Hoboken, New Jersey, p. 23.

parts would be impossible. In the table 2.1. are presented the elements constituting core components of each of the five layers that make up corporation capital (the role of human capital is visible in each of them).

Table 2.1. Corporate capital system

Layer	Subject of research	Concept of the assessment of a given category	Accumulated Economic Capital (AEC)
1	2	3	
Market capital	Market activity: assets, sales, employment, profits	<u>Market resources</u> <ul style="list-style-type: none"> – Assets value (A) – Employment (E) – Sales value (S) – Profit (P) – Sales Growth (SG) – Growth of total Assets (AG) – Employment Growth (EG) – Netto Profit Growth (NPG) <u>Market efficiency</u> <ul style="list-style-type: none"> – Return on Equity (ROE) – Return on Assets (ROA) – Return on Sales (ROS) – Employee Effectiveness (EE) 	
Financial capital	Financial flows: accounting equation; long-term and current financial status	<u>Financial potential</u> Index analysis: <ul style="list-style-type: none"> – Share Price Growth (SPG) – Earnings Per Share (EPS) – Market Value (MV) – Weighted Average Cost of Capital (WACC) – Discounted Cash Flow (DCF) – Free Cash Flow (FCF) – Cash Flow Per Share of company (CFPS) – Cash Flow Return On Investment (CFROI) – Return On Equity (ROE) <u>Financial efficiency</u> <ul style="list-style-type: none"> – relation between Profit and Return On Equity (P/ROE); – long-term volume and dynamics of profits; – profit per stock share of a given TNC against alternative options in terms of capital investment (comparing EPS on a given market). 	

1	2	3	
Innovation capital	<p>Potential for innovation: research and development foundation</p>	<p><u>Innovation</u></p> <ul style="list-style-type: none"> – R&D investments: profitability of R&D expenditures; relationship between asset productivity (S/A) and the dynamics of expenditures for R&D; expenditures for the R&D zone per single employee; – position in innovation rankings (Most Innovative Companies – MIC). <p><u>Creativity</u></p> <ul style="list-style-type: none"> – potential of human capital: volume (against the sector), education, submissions of innovations; – intellectual capital: components, role in a system; – the creation of standards: position in a sector. 	Intellectual Capital (IC)
Organizational capital	<p>Management system: target market, segmentation and an offer portfolio; competitive potential – key competences; organizational and technological changes</p>	<p><u>Organization structure</u></p> <ul style="list-style-type: none"> – global layout of an agent's activeness (geographical divisions); – organization of the structure of a production and service system (product divisions); – evolution of the organization and management model; transnationality index (TNI); geographical spread index (GSI); – mergers and acquisitions (M&As); transaction number, value, dynamics and types: vertical, horizontal, conglomerate; – joint venture; the number and specificity of contracts signed; – relation structures. <p><u>Brand strategy</u></p> <ul style="list-style-type: none"> – brand portfolio; – sum of the value of brands in the agent's portfolio; – Brand Value (BV); – part of Brand Value in Market Value (BV/MV). 	

Table 2.1 (cont.)

1	2	3	
Institutional capital	<p>Development model: mission; stakeholders; pillars of strategy; sustained development; long-term competitive position</p>	<p><u>Networks</u></p> <ul style="list-style-type: none"> connections between units that participate in a network: perception of a network as a brand vs. total market value of the business system (against the means in a sector). <p><u>Full-form internationalization</u></p> <ul style="list-style-type: none"> network activeness (outside the orchestrator's home country): percentage of the assets, sales, employment of network members abroad against the sector. <p><u>Oligopolization</u></p> <ul style="list-style-type: none"> the network's ability to impose models, arising due to the network's participation in sector sales (with the use of the HHI). <p><u>Strategy</u></p> <ul style="list-style-type: none"> pillars of strategy as a reflection of the quality of the development model adapted to meet the challenges of sustained development. 	Intellectual Capital (IC)

Source: own elaboration based on: M. Rosińska-Bukowska [2012], *Rozwój globalnych sieci biznesowych jako strategia konkurencyjna korporacji transnarodowych*, Wydawnictwo Uniwersytetu Łódzkiego, Łódź, pp. 106–108

This classification of capital subsystems aims to emphasize the necessity of adopting a systemic approach in assessing a corporation's development potential. It is crucial to value the economic and non-economic layers of TNC capital and understand the permanence of the relations between them.

Economic capital makes it possible to create added value thanks to the dynamics of intellectual capital, which utilizes the structure of relations within a system and congruence with the environment. The systemic nature of TNC capital indicates that factors essential for its increase include not only the financial and production subsystems, but also, to the same degree, the subsystems of intellectual capital based on: innovation, creativity, networking, internationalization, striving for the creation of added value while maintaining the principles of sustainable development, social responsibility as well as building economic and social value.

The systemic nature of capital makes it possible for Top-TNCs to obtain a unique array of resources on the basis of the synergy effect, occurring thanks to the combination of: the ability to create new technological and organizational solutions, creative management of human resources, reinforcement and expansion of brand portfolios for diverse recipients, creation of an institution of avoiding market mechanism by combining externalization with internalization, globalization with localness, competition with cooperation. It means that it is necessary to include these elements in the assessments of development determinants and prospects for the 21st century Top-TNCs.

2.4. Asia's largest companies in international rankings

Rankings classify transnational corporations according to varying criteria. Most take into account several parameters, usually easily measurable economic ones. In order to study the development determinants and prospects of Asian corporations, this work makes use of *The Global 2000*, a ranking by the prestigious "Forbes" magazine; *The World Investment Report* (WIR), a ranking issued by the United Nations Conference on Trade and Development and *The Best Global Brands (Top 100 Brands)* – Interbrand, a classification of the most valuable brands in the world.

The Global 2000 is a list which juxtaposes a corporation's market value, sales, profits and assets. The top positions change often, although the classified group of agents is usually relatively stable throughout longer periods of time. In *The World Investment Report* the ranks are based on the values of foreign assets, which is crucial when assessing a TNC's ability to explore diverse opportunities provided by the international market. Reports also provide data on: the value of assets, sales and employment (in general and abroad) as well as the transnationality index (TNI) and internationality index (II). *Top 100 Brands* can be considered an assessment of the quality of goods and services offered by TNCs. The ranking takes into account 100 of the most valuable brands in the world from various business sectors. Therefore, these rankings depict various aspects of TNC activities. Their analysis makes it possible to determine a list of Top-TNCs of a given country/region which require in-depth research of their development potential (in accordance with previously established requirements of international competitiveness in the 21st century).

In tables 2.2., 2.3., 2.4. positions (with basic data) of Asian TNCs in the top 100 of *The Global 2000* (the ranking lists 2000 agents) are presented. Attention has been paid not only to the change in the position of Asian corporations, but also to the changes in the top 10s of a given ranking.

Table 2.2. Asian TNCs in the top 100 of *The Global 2000 (2018)* on the background of Top10 ranking

Position in 2018	Company name	Sales value (S) (bln USD)	Profits (P) (bln USD)	Assets value (A) (bln USD)	Market value (MV) (bln USD)
1	2	3	4	5	6
1	Industrial and Commercial Bank of China (ICBC)	151.4	42.0	3473.2	229.8
2	China Construction Bank	134.2	35.0	3016.6	200.5
3	Berkshire Hathaway	222.9	24.1	620.9	409.9
4	JP Morgan Chase	102.5	24.2	2513.0	306.6
5	Wells Fargo	97.6	21.9	1943.4	274.4
6	Agricultural Bank of China	115.7	27.8	2816.0	149.2
7	Bank of America	92.2	16.6	2196.8	231.9
8	Bank of China	113.1	24.9	2611.5	141.3
9	Apple	217.5	45.2	331.1	752.0
10	Toyota Motor	249.9	17.1	412.5	171.9
15	Samsung Electronics	174.0	19.3	217.1	254.3
16	Ping An Insurance Group	106.6	9.5	801.0	100.8
21	China Mobile	106.8	16.4	218.9	225.3
25	China Petroleum & Chemical	255.7	7.0	216.7	105.1
30	Mitsubishi UFJ Financial	49.2	8.2	2589.8	83.9
34	Bank of Communications	53.0	10.1	1209.2	62.2
37	Nippon Telegraph & Tel	105.0	7.4	180.3	92.2
38	Softbank	82.1	8.3	213.2	78.6
42	China Merchants Bank	44.5	9.4	855.1	66.4
45	Japan Post Holdings	123.7	3.1	2522.1	55.1
52	China Life Insurance	82.8	2.9	388.7	98.1
55	Postal Savings Bank of China	48.0	6.0	1189.4	55.2
63	Industrial Bank	4.3	8.1	872.1	45.1

1	2	3	4	5	6
64	Shanghai Pudong Development	40.1	8.0	842.8	50.5
71	China State Construction Engineering	140.8	4.9	201.4	43.2
72	Citic Pacific	49.1	5.6	933.6	41.4
74	Honda Motor	127.9	3.9	161.8	51.4
75	China Minsheng Banking	40.2	7.2	848.7	43.7
78	China Citic Bank	39.7	6.3	853.5	43.1
84	Sumitomo Mitsui Financial	30.5	5.2	1648.8	48.1
90	Mizuho Financial	29.0	6.0	1752.3	44.4
95	Nissan Motor	105.9	4.5	157.3	38.4
98	Hon Hai Precision	135.2	4.6	80.4	54.4
102	PetroChina	214.8	1.2	344.9	204.5
104	Hyundai Motor	80.7	4.7	148.1	34.2
108	SAIC Motor	112.7	4.8	85.0	43.5

Source: own elaboration based on: *The Global 2000/2018*,
<https://www.forbes.com/global2000/list> (accessed: 15.03.2019)

Table 2.3. Asian TNCs in the top 100 of *The Global 2000 (2012)* on the background of Top10 ranking

Position in 2012	Company name	Sales value (S) (bln USD)	Profits (P) (bln USD)	Assets value (A) (bln USD)	Market value (MV) (bln USD)
1	2	3	4	5	6
1	Exxon Mobil	433.5	41.1	331.1	407.4
2	JP Morgan Chase	110.8	19.0	2265.8	170.1
3	General Electric	147.3	14.2	717.2	213.7
4	Royal Dutch Shell	470.2	30.9	340.5	227.6
5	Industrial and Commercial Bank of China (ICBC)	82.6	25.1	2039.1	237.4

Table 2.3 (cont.)

1	2	3	4	5	6
6	HSBC Holdings	102.0	16.2	2550.0	164.3
7	PetroChina	310.1	20.6	304.7	294.7
8	Berkshire Hathaway	143.7	10.3	392.6	202.2
9	Wells Fargo	87.6	15.9	1313.9	178.7
10	Petrobras-Petroleo Brasil	145.9	20.1	319.4	180.0
25	Toyota Motor	228.5	4.9	358.3	147.9
36	Mitsubishi UFJ Financial	53.3	7.0	2478.8	74.5
45	Nippon Telegraph & Tel	124.0	6.1	226.6	40.6
59	Honda Motor	107.5	6.4	137.7	70.8
64	Sumitomo Mitsui Financial	45.9	5.7	1654.9	47.8
85	Nissan Motor	105.5	3.8	128.7	48.1
95	Mitsubishi Corp	62.6	5.6	136.6	39.7
98	Mizuho Financial	32.2	5.0	1934.4	40.6

Source: own elaboration based on: *The Global 2000/2012*,
<http://www.forbes.pl/rankingi/najwieksze-firmy-swiata-2012,26185> (accessed: 18.04.2012)

Table 2.4. Asian TNCs in the top 100 of *The Global 2000* (2006) on the background of Top10 ranking

Position in 2006	Company name	Sales value (S) (bln USD)	Profits (P) (bln USD)	Assets value (A) (bln USD)	Market value (MV) (bln USD)
1	2	3	4	5	6
1	Citigroup	120.32	24.64	1494.04	230.93
2	General Electric	149.70	16.35	673.30	348.45
3	Bank of America	85.39	16.47	1291.80	184.17
4	American Intl Group	106.98	11.90	843.40	172.24
5	HSBC Group	76.38	12.36	1274.22	193.32
6	ExxonMobil	328.21	36.13	208.34	362.53
7	Royal Dutch/Shell Group	306.73	25.31	216.95	203.52
8	BP	249.47	22.63	206.91	225.93

1	2	3	4	5	6
9	JPMorgan Chase	79.90	8.48	1198.94	144.13
10	UBS	78.25	10.65	1519.40	105.69
12	Toyota Motor	173.09	10.93	227.05	175.54
32	Nippon Telegraph & Tel	100.82	6.63	167.67	60.38
44	Mizuho Financial	27.96	5.85	1325.23	93.81
48	Samsung Electronics	79.18	10.42	66.01	104.22
52	PetroChina	46.95	12.43	73.68	172.23
62	Mitsubishi UFJ Financial	23.50	3.16	1024.44	143.01
63	Honda Motor	80.71	4.54	85.72	54.65
77	China Pet & Chem (Sinopec)	70.32	4.35	56.78	57.05
98	Tokyo Electric Power	47.09	2.11	124.98	36.59

Source: own elaboration based on: *The Global 2000/2006*, The World's Biggest Public Companies; http://www.forbes.com/lists/2006/18/Rank_3.html (accessed: 06.03.2010)

When analysing the data in *The Global 2000* ranking, a major improvement of the position of Asian corporations is visible. In 2018, the top 100 included 28 Asian TNCs, in 2012 – 10, and in 2006 – only 9. In 2018, as many as 5 Asian TNCs held positions in the top 10 of the ranking, while in 2012 – only 2 were listed and in 2006 there were none. It should be mentioned that financial corporations dominate in the top 10 of this ranking (8 out of 10 in 2018). In 2018, a Chinese national financial power, *The Industrial and Commercial Bank of China* (ICBC), took the first place once again, while the rest of the Chinese „Big Four” took positions in the top 10. China (and Hong Kong) had as many as 309 companies in the *Global 2000/2018*, Japan – 223 (the United States took the highest number of positions with 575 companies). When “Forbes” published the ranking for the first time, the *Global 2000/2003*, China and Hong Kong held merely 43 positions on the list, while the USA occupied as many as 776.¹⁶

The systematic promotion of Asian corporations in *The Global 2000* is, therefore, major. However, such analysis of the ranks does not appear to have much use when studying the development determinants and prospects in the sense of an agent's long-term competitiveness. Its major flaw is the combined classification of financial and non-financial corporations, since the value levels of their assets are almost incomparable. When focusing on non-financial corporations, it can be

16 A. Murphy, J. Ponciano, S. Hansen, H. Touryalai [2000], *Global 2000. The World's Largest Public Companies*, <https://www.forbes.com/global2000/#6686b98f335d> (accessed: 09.08.2019).

1	2	3	4	5	6	7	8	9	0
China Ocean Shipping Corp Ltd (COSCO)	40	84 419	109 044	74	40 435	52 230			
Tencent Holdings Limited	45	77 594	119 824						
Mitsubishi Corporation	55	68 378	149 254	19	109 657	153 044	35	48 328	96 559
China National Offshore Oil Corp (CNOOC)	56	67 282	173 408						
State Grid Corp. of China	62	60 000	585 299						
China National Chemical Corp.n (ChemChina)	67	56 241	121 444						
Marubeni Corporation	82	48 367	61 470	85	36 512	63 351	73	23 788	40 969
Sony Corporation	89	45 051	189 416	82	37 492	150 874			
China Minmetals Corp	98	42 790	131 338						
Tata Motors Ltd	99	42 146	50 844						
CITIC Group				36	71 512	514 847			
Petronas – Petroliam Nasional Bhd				76	38 907	150 435	56	30 668	85 201
Sumitomo Corporation				88	35 419	83 186			
ITOCHU Corporation				96	32 306	75 589			
Hitachi Ltd							72	23 905	89 653
Hyundai Motor Company							90	19 581	76 064
Matsushita Electric Industrial Co., Ltd.							96	19 043	66 389
Singtel Ltd							99	18 678	21 288

Source: own elaboration based on: WIR2019 Web Table 19 The world's top 100 non-financial MNEs, ranked by foreign assets, 2018; WIR2013 Web

Table 28 The world's top 100 non-financial TNCs, ranked by foreign assets, 2012; WIR2008, Annex table A.I.15, The world's top 100 non-financial TNCs, ranked by foreign assets, 2006. <https://unctad.org/en/Pages/DIAE/World%20Investment%20Report/Annex-Tables.aspx>

(accessed: 12.06.2019)

seen that Asian Top-TNCs listed in the top 100 of the ranking belong mostly to the automotive sector (Toyota, Honda, Nissan, Mitsubishi). In 2018, Samsung Electronics, a representative of the electronics sector, took a high 15th place (while in 2006 it was in the 48th position).

Another ranking analysed in terms of the positions of Asian TNCs is *The World Investment Report (WIR)*. Financial and non-financial corporations are classified in different WIR rankings and, therefore, they do not have the same flaw as *The Global 2000*. By referring to the *Top100 non-financial TNCs WIR*, the international activeness of corporations can be assessed, since the ranking lists TNCs in order of the size of their foreign assets (table 2.5.).

In the whole WIR2019 ranking (data from 2018), 19 out of the listed 100 TNCs are Asian corporations (including 2 in the top 10), in 2012 (WIR2013) there were 13 of them (including 1 in the top 10), while in 2006 (WIR2008) — 11 (including 1 in the top 10). It suggests that although the advancement of Asian corporations is visible, their potential for the exploration of global business space is still fairly limited. Additionally, what may attract the reader's attention is the fact that Asian corporations that have improved their positions and taken high places in the ranking are mostly automotive, such as Toyota, Honda or Nissan. Aside from them, the only Asian corporations maintaining their positions in the top 100 of the WIR in 2006–2018 were multi-sector holding companies: Mitsubishi, Marubeni, Hutchison. Corporations in the electronics sector, such as Samsung, Sony, Hitachi or Matsushita, have never had stable positions, similarly to the automotive Hyundai and Tata.

Another ranking which helps assessing the position of Asian corporations among the most powerful global competitors is the classification of the most valuable global brands (table 2.6.).

Table 2.6. Asian brands among the most valuable global brands — (values given in billions of USD) in the years 2006–2018 according to *The Best Global Brands (Top 100 Brands)*

Brand name	Ranking position in 2018	Brand Value (2018)	Brand Value (2017)	Brand Value (2016)	Brand Value (2015)	Brand Value (2012)	Brand Value (2011)	Brand Value (2010)	Brand Value (2008)	Brand Value (2006)
1	2	3	4	5	6	7	8	9	10	11
Samsung	6	59.9	56.2	51.8	45.3	32.9	23.4	19.5	17.7	16.2
Toyota	7	53.4	50.3	53.6	49.0	30.3	27.8	26.2	34.0	27.9
Honda	20	23.7	22.7	22.1	23.0	17.3	19.4	18.5	19.1	17.0
Hyundai	36	13.5	13.2	12.5	11.3	7.5	–	–	–	4.1

1	2	3	4	5	6	7	8	9	10	11
Nissan	40	12.2	11.5	11.1	9.1	5.0	3.8	–	–	3.1
Canon	55	10.4	9.8	11.1	11.3	12.0	11.7	11.5	10.9	10.0
Sony	59	9.3	8.5	8.3	7.7	9.1	9.9	11.4	13.6	12.7
Huawei	68	7.6	6.7	5.8	4.9	–	–	–	–	–
Kia	71	6.9	6.9	6.3	5.7	4.1	–	–	–	–
Panasonic	76	6.3	6.0	6.4	6.4	5.8	5.0	4.3	4.3	4.0
Nintendo	99	4.7	–	–	–	7.1	7.7	9.0	8.8	6.6
Subaru	100	4.2	–	–	–	–	–	–	–	–
Lenovo	–	–	4.0	4.0	4.1	–	–	–	–	–
Lexus	–	–	–	–	–	–	–	–	3.6	3.1
LG	–	–	–	–	–	–	–	–	–	3.0

“–” The brand was not included in the *Top 100 Brands* ranking in a given year.

Source: own elaboration based on: *The 100 Top Brands* [2006–2007], BusinessWeek, August 6, 2007, pp. 59–64 (pdf); *The Best Global Brands* [2008], <https://www.interbrand.com/best-brands/best-global-brands/2008/ranking/>; *The Best Global Brands* [2009], http://www.interbrand.com/Best_Global_Brands.aspx (accessed: 16.04.2010); *The Best Global Brands* [2010–2018], <http://www.interbrand.com/en/knowledge/best-global-brands-2010.aspx>; <https://www.interbrand.com/best-brands/best-global-brands/2016/ranking/>; <https://www.interbrand.com/best-brands/best-global-brands/2017/ranking/>; <https://www.interbrand.com/best-brands/best-global-brands/2018/>; <https://www.interbrand.com/best-brands/best-global-brands/2019/ranking/> (accessed: 14.09.2019)

The presented analysis of the value of Asian brands over the years 2006–2018 indicates that out of the 100 perceived as the most valuable brands in the world, 15 are Asian; 7 of them are automotive brands while 8 belong to the electronics sector in the broad sense. Corporations that own them have also taken top positions in some of the international rankings discussed earlier. Therefore it can be said that apart from a strong representation of the financial sector (*Forbes Global 2000* classification), Asia also currently boasts a major competitive position in the automotive and electronics sectors. From the perspective of Top-TNC positions, it remains merely a contender for the global top positions in other fields, although it systematically and dynamically begins to force its way in.

When summarizing the analyses conducted on the basis of international rankings of Top-TNCs, a statement may be made that the position of Asian corporations improves by the year. The Asian TNCs that have taken strictly top positions in individual rankings maintain and even strengthen their positions. Yet, since the listed classifications — *The Top 100 Global Brands*, *The Forbes Global 2000*, *The World*

Investment Report — focus on selected parameters, it is hard to explicitly assess the ability of Asian corporations to adapt to the constantly changing environment and, therefore, determine their perspectives for long-term development. It would require in-depth synthetic studies of individual business sectors, which would make it possible to recognize the real development potential of Asian TNCs in specific fields.

2.5. Asian corporations in light of the research that utilizes a synthetic measure

In light of the theory presented in earlier subchapters regarding the essential attributes of the functioning of Top-TNC as a system of connected vessels and indicating the significance of the systemic nature of corporation capital in building long-term competitiveness, it appears reasonable to utilize multi-faceted research to identify the agents best prepared to face modern challenges. The positioning of Asian Top-TNCs against the leading global corporations has been done on the basis of synthetic indices.

A measure calculated by “Fortune” on the basis of nine parameters and used to identify *The World’s Most Admired Companies* (MAC) was used as reference. The values of the MAC indicator for leaders of sector-specific rankings were juxtaposed with the positions of Asian corporations in the same rankings. Additionally, an authorial indicator of the creation of added value was calculated – it encompasses five parameters, illustrating five layers of corporation capital that constitute the pillars of the system of building competition. In both cases, the research is sector-specific, which makes it possible to make comparisons. The work focuses on the study of the automotive and electronics sectors. The basis for the selection of these sectors was the fact that, as the analysis of international rankings (tables 2.2.–2.6.) has proven, the representatives of these sectors are the strongest non-financial Asian corporations.

Referring to *The World’s Most Admired Companies* (MAC) is reasonable, since the areas under study reflect the enumerated requirements for building competitiveness in the 21st century. A corporation’s position in the MAC is the result of a complex assessment¹⁷ of: the ability to attract and retain talented employees; quality of management; social responsibility to the community and the environment;

17 Currently 9 parameters: the ability to attract and retain talented people; the quality of management; social responsibility to the community and the environment; innovativeness; quality of products or services; wise use of corporate assets; financial soundness; long-term investment value; effectiveness of doing global business. Up until 2008 there were only 8 parameters.

innovativeness; quality of products and services; wise use of corporate assets; financial soundness; long-term investment value; the effectiveness of running a global business. The list of 50 of the most admired corporations is prepared on the basis of the aggregated measure of their development potential. Companies are selected for the MAC list via the *Fortune 1000* and *Global 500* lists. The number of TNCs in a business sector oscillates between the minimum 6 and the maximum 15. To obtain their position, TNCs need to have an income of approximately 10 billion USD and be among the best in their sector in terms of income size. The more agents in a given sector competing in an international arena, the more companies there are in a given industry group.¹⁸ For the purposes of sector-specific rankings, the general score of a TNC is calculated on the basis of an average of the results of each of the 9 parameters – each calculated by ascribing a score from zero (“weak”) to ten (“perfect”). Corporations with the best results in a given industry sector are deemed “the most admired”. However, it should also be mentioned that the interpretation of the significance of each quality is left to the respondents.

In tables 2.7., 2.8. and 2.9. the values of the MAC measure of the Asian corporations ranked in the motor vehicles sector as well as the computers and electronics sector are presented. Out of all sectors, Asian corporations are the strongest representatives of these — which appears to be in accordance with the research results presented earlier in light of the *Forbes*, UNCTAD and *Interbrand* rankings.

Table 2.7. The most admired Asian automotive corporations (against the ranking leader) according to *The World’s Most Admired Companies* in the years 2006–2018

Company name	2018	2016	2014	2012	2010	2008	2006
	MAC value (position in the industry ranking in a given year)						
1	2	3	4	5	6	7	8
BMW (leader)	7.02 (2)	6.60 (2)	7.68 (1)	7.12 (2)	6.94 (1)	7.88 (1)	7.07 (2)
Toyota (leader)	7.91 (1)	7.70 (1)	6.96 (2)	6.04 (4)	5.20 (3)	7.86 (2)	7.51 (1)
Honda Motor	5.55 (6)	5.50 (5)	5.44 (6)	5.10 (8)	5.32 (2)	6.80 (4)	6.33 (3)

¹⁸ “Respondents are asked to identify the 10 companies they admire most, regardless of industry, from a list of companies that ranked in the top 25% of all companies the previous year; ranked in the top 3 within their industry the previous year (top 4 for non-U.S. companies); or a company that ranked among the top 50 All-Stars last year and did not make any of the above cuts. Excluded are companies on last year’s list that were not admired, i.e., did not rank in the top 50% of their industry, and companies on this year’s list that were not on last year’s list”. Korn Ferry Institute [2018], *Reports & Insights FORTUNE World’s Most Admired Companies*, January 19, 2018, <https://www.kornferry.com/institute/fortune-worlds-most-admired-companies-2018> (accessed: 09.09.2019).

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Table 2.7 (cont.)

1	2	3	4	5	6	7	8
Nissan Motor	5.17 (8)	5.10 (8)	–	5.05 (9)	3.08 (10)	6.12 (7)	6.04 (4)
Hyundai Motor	5.40 (10)*	5.60 (4)	5.40 (8)	5.87 (6)	4.49 (5)	5.56 (14)	5.39 (9)
Suzuki Motor					3.83 (9)	5.85 (9)	4.70 (13)
Mazda Motor					3.76 (13)	5.66 (12)	5.51 (7)
Dongfeng Motor					3.11 (14)		
Shanghai Automotive				3.76 (13)			

*according to MAC 2019

Source: own elaboration based on: *The World's Most Admired Companies* in years 2006–2019

Table 2.8. The most admired Asian electronics corporations (against the ranking leader) according to *The World's Most Admired Companies* in the years 2006–2018

Company name	2018	2016	2014	2012	2010	2008	2006
	MAC value (position in the industry ranking in a given year)						
1	2	3	4	5	6	7	8
General Electric (leader)	6.40 (2)*	6.40 (2)	7.17 (1)	6.82 (1)	7.07 (1)	8.40 (1)	8.29 (1)
Samsung Electronics	6.70 (2)	6.40 (3)	6.99 (2)	6.50 (2)	6.74 (2)	6.48 (6)	6.88 (3)
LG Electronics	5.93 (7)		5.54 (5)	4.74 (12)	5.79 (7)	6.41 (7)	6.39 (6)
Sony	6.13 (6)	5.90 (6)		5.98 (4)	6.29 (4)	7.01 (2)	6.53 (5)
Panasonic (Matsushita Electric)		6.00 (5)		5.48 (7)	5.92 (6)	6.20 (10)	6.12 (11)
Mitsubishi Electric	5.92 (11)***8		5.58 (8)*** (13 in 2014)	4.72 (13)	5.48 (12)	6.05 (12)	6.29 (8)
Hitachi		5.80 (8)		4.76 (11)	5.38 (13)	6.17 (9)	6.16 (10)
Toshiba				5.37 (8)	5.67 (9)	6.30 (8)	6.22 (9)
Sharp				5.10 (10)	5.49 (11)	6.16 (11)	6.29 (7)
Sumitomo Electric				4.60 (14)	5.18 (14)	5.84 (13)	6.12 (11)

1	2	3	4	5	6	7	8
Sanyo Electric						5.53 (14)	5.60 (13)
Hon Hai Precision Industry						5.22**	5.21 (15)

* Siemens – leader; **sector change; *** according to MAC 2015; **** according to MAC 2019

Source: own elaboration based on: *The World's Most Admired Companies* in years 2006–2019

Table 2.9. The most admired Asian computer corporations (against the ranking leader) according to *The World's Most Admired Companies* in the years 2006–2018

Company name	2018	2016	2014	2012	2010	2008	2006
	MAC value (position in the industry ranking in a given year)						
Apple (leader)	8.53 (1)	8.60 (1)	7.94 (1)	8.42 (1)	7.95 (1)	7.42 (1)	7.31 (3)*
Canon	6.05 (6)	5.50 (8)	5.94 (6)	6.01 (5)	6.12 (6)	6.56 (7)	6.88 (6)
Fujitsu	5.80 (6)	6.10 (4)	5.91 (7)	5.41 (9)	5.06 (13)	5.29 (12)	5.83 (14)
Asustek Computer	5.78 (7)	6.10 (4)**	6.20 ***	–	5.00 (14)	4.85 (15)	–
Lenovo Group	5.58 (9)****	6.50 (3)	6.30 (3)	5.16 (10)	5.21 (11)	5.05 (13)	–
NEC	–	–	–	4.90 (12)	4.93 (15)	6.34 (11)	5.84 (13)
Acer	–	–	–	4.62 (16)	5.60 (19)	–	–

* IBM – leader (7,67); **sector change; *** according to MAC 2015; **** according to MAC 2019

Source: own elaboration based on: *The World's Most Admired Companies* in years 2006–2019

The analysis has shown that in 2006 there were 81 Asian TNCs in the MAC ranking; 64 out of them were Japanese (20% of them were the most admired corporations in their sectors), 8 Chinese, 6 South Korean, 2 Singaporean, 1 Taiwanese.¹⁹ In 2008, 79 Asian corporations took their places in the ranking: 53 Japanese corporations (22 in the top positions of their sectors), as many as 14 Chinese corporations, but none classified as the most admired TNCs; 6 South Korean (including 3 leaders), 2 Singaporean (both leaders), 3 Taiwanese (pretenders) and 1 Indian corporation (pretender). Therefore, it should be emphasized that Asia has been dynamically entering the competitive fight for the top positions in individual sectors for a decade.

¹⁹ *Fortune Global Most Admired Companies* [2006], <https://money.cnn.com/magazines/fortune/globalmostadmired/countries/S.html> (accessed: 25.09.2019).

In-depth studies make it possible to notice that the positions of the most admired corporations in the world in 2008 were held only by 27 Asian companies and as many as 90 TNCs from the United States. The analysis of the newest (2019) *World's Admired Companies* ranking proves that the Asian TNC with the highest position is the 18th – Singapore Airlines. Despite the fact that half of the biggest technological companies are Chinese, the topmost place achieved by a Chinese company (the Alibaba company) was 34th, although the company is perceived as a rival of the second place holder – Amazon (the biggest retailer in the world).²⁰ The two subsequent Chinese TNCs are Tencent Holdings and Qingdao Haier. In the automotive sector, the Japanese Toyota may be the leader, but despite Honda, Nissan and Hyundai being in the top 8 of the most admired corporations, all of them hold places in the second half of the ranking (positions 5, 6 and 7, respectively, that is pretenders). In 2019, the three most admired Asian corporations in the electronics sector were: Samsung, LG and Sony (places 2, 4 and 7, respectively). In 2019, in the computer sector, Asian corporations were no match for the American leaders (Apple, Dell, HP) and take the 5th, 6th and 7th position: Canon, Asustek and Lenovo, respectively.

In conclusion, the study on the basis of the MAC 2006–2019 has shown that among the most admired global companies in the automotive and widely-perceived electronics sectors there are few Asian Top-TNCs with stable and secure positions. They include: Toyota, Honda, Nissan, Hyundai as well as Samsung, LG, Sony and Canon. Some of the studied corporations have a large potential, however they need to not only systematically adjust their offers, but also modify their management models in accordance with the presented standards, in order to threaten the positions of long-standing leaders of individual industry sectors. The group includes: Lenovo, Asustek, Hitachi, Mitsubishi, Suzuki and Mazda.

To assess the development determinants and prospects of Asian TNCs, the most admired corporations of the automotive and electronics sectors have been studied again using a different a synthetic measure: *the Synthetic Indicator of Creation of Added Value* – SICAV. The concept of assessing the ability to create added value is based on the assumption that each layer of a corporation's capital participates in the long-term development potential. The effective fulfilment of strategy signifies: the increase in profits, volume, market value, brand value, research and development expenditures, internationalization indices etc. However, in order to assess a TNC's potential for increasing the ability to create added value, a comprehensive assessment of these parameters is of highest significance. Therefore, those parameters were taken into account in the measure, while maintaining the principle of referring to each individual layer and in the end emphasizing: the profitability of equity, expenditures on research and development referred to employment, the range of

20 J. Koetsier [2019], *Apple Most-Admired Global Company, Says Fortune*, <https://www.forbes.com/sites/johnkoetsier/2019/01/22/> (accessed: 02.09.2019).

drawing upon the multi-cultural potential of human capital, arbitrage abilities that are the result of locating assets on the international market, the significance of intangible assets for the ability to create sales value.

The use of SICAV requires the calculation of five parameters: $[ROE]$, $[(R\&D)/E]$, $[(MV - SE)/S]$, $[AVA/A]$, $[EA/E]$. Return on equity (ROE) is a synthetic measure of the market and financial potential, or several interacting business aspects. To value the influence of innovation and structural as well as institutional changes on the improvement of competitive position, two indices were included: the expenditures on research and development per employee $[(R\&D)/E]$ and the percentage of intangible assets in the creation of sales value $[(MV - SE)/S]$. When accentuating the significance of a corporation's multi-level connection system, the internationalization of assets and employment has been referred to – the research includes the percentage of assets abroad in the value of total assets $[AVA/A]$ as well as the percentage of employment abroad in employment in general $[EA/E]$. Thus, the appreciation of the role of the global arrangement of value chains, investment locations, including the structure of strategic alliances, mergers and international acquisitions, or the resources, experiences and competences of the corporate system was attempted.

SICAV fulfils the requirements of long-term aggregated assessment of a corporation's development determinants and prospects against its main competition in a given industry sector. An advantage of SICAV is the use of comparable quantitative data published in international reports and obtaining parameters that, through their correct aggregation, provide the image of all crucial components reflecting individual layers of a corporation's capital.

In table 2.10. SICAV values (2007–2018) for the automotive sector are presented, while values for the electronics sector are presented in table 2.11. The research took into account the companies whose offers compete with those of the studied Asian TNCs.

Table 2.10. Synthetic indicator (SICAV) for the examined group of automotive sector TNCs

Company name	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1	2	3	4	5	6	7	8	9	10	11	12	13
General Motors	0.000	1.000	0.249	0.640	0.522	0.447	0.266	0.673	0.764	0.823	0.518	0.753
Ford Motor	0.723	0.677	0.866	0.000	0.555	0.755	0.680	0.961	0.745	0.876	0.740	0.816
Volkswagen	0.765	0.828	0.819	1.000	0.583	0.659	0.349	1.000	0.805	0.698	0.599	0.537
BMW	0.790	0.073	0.224	0.612	0.832	1.000	0.950	0.881	0.673	0.722	0.635	0.697
Daimler	0.590	0.000	0.000	0.067	0.296	0.417	0.185	0.604	0.707	0.626	0.681	0.670
Renault	0.825	0.487	0.072	0.723	0.703	0.713	0.223	0.716	0.749	0.917	0.872	1.000

Table 2.10 (cont.)

1	2	3	4	5	6	7	8	9	10	11	12	13
Fiat	0.807	0.788	0.528	0.422	1.000	0.752	1.000	0.872	0.746	0.957	1.000	0.886
Toyota	0.947	0.345	0.134	0.322	0.000	0.000	0.437	0.896	1.000	1.000	0.798	0.869
Nissan	0.710	0.572	0.549	0.487	0.613	0.339	0.627	0.927	0.884	0.965	0.815	0.851
Honda	1.000	0.613	1.000	0.815	0.489	0.598	0.726	0.937	0.782	0.869	0.738	0.759
Hyundai	0.525	0.124	0.373	0.189	0.278	0.549	0.210	0.678	0.737	0.818	0.767	0.523
Mitsubishi	0.716	0.057	0.504	0.569	0.039	0.023	0.000	0.000	0.000	0.000	0.000	0.000

Source: own elaborations. Interpretation of results: 1,000 – leader, 0,000 – lowest position

Table 2.11. Synthetic indicator (SICAV) for the examined group of electronic sector TNCs

Company name	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Philips	0.500	0.399	0.497	0.624	0.498	0.536	0.398	0.000	0.015	0.348	0.144	0.509
GE	0.550	0.284	0.701	0.575	0.523	0.510	0.429	0.451	0.265	0.604	0.226	0.000
Apple	0.530	0.530	0.766	0.597	0.593	0.752	0.372	0.652	0.564	0.609	0.652	1.000
Intel	0.196	0.270	0.638	0.415	0.359	0.372	0.293	0.415	0.305	0.687	0.948	0.723
Microsoft	0.542	0.470	0.815	0.552	0.401	0.465	0.567	0.412	0.602	0.601	0.753	0.842
IBM	0.668	0.386	0.812	0.837	0.832	1.000	0.854	0.922	0.767	0.759	0.893	0.960
Electrolux	0.853	0.535	1.000	0.909	0.614	0.815	0.650	0.887	0.596	0.808	0.997	0.996
Siemens	0.637	0.301	0.658	0.337	0.517	0.462	0.272	0.727	0.493	0.507	0.644	0.813
Samsung	0.000	0.155	0.774	0.577	0.449	0.565	0.595	0.325	0.281	0.252	0.580	0.729
Hitachi	0.088	0.256	0.000	0.325	0.633	0.756	0.450	1.000	0.441	0.386	0.599	0.900
Sony	1.000	1.000	0.861	1.000	1.000	0.930	1.000	0.706	1.000	1.000	1.000	0.907
LG	0.215	0.000	0.500	0.000	0.000	0.000	0.000	0.286	0.000	0.000	0.000	0.426

Source: own elaborations. Interpretation of results: 1,000 – leader, 0,000 – lowest position

The results of the multi-faceted research (SICAV) indicate that in the automotive sector Asian corporations that are deemed the most admired in the MAC study really begin to determine the standards for the industry. Their positions are strong and stable. Japanese Mitsubishi Motor was included in the study in order to check whether a company that is known on the automotive market, but has no position among the top MAC, really has no chance with its rivals that change their pillars of development in accordance with the modern requirements. However,

the results are not as unambiguous in the electronics sector. There were more corporations studied (which was supposed to, for example, reflect the competition for Samsung's extensive offer: Apple, Siemens, Philips, Electrolux), which resulted in a shuffle. An electronics sector in the broad sense actually remains leaderless, although the Japanese Sony is the closest to fulfilling the role. In this case, a question that needs answering is to what extent can the agents with wide and diverse offers be juxtaposed with those focused on a small section of market activities. The dilemma became clear during the MAC analyses, where the top positions changed yearly and some corporations migrated between the sectors.

In conclusion, the study focused on the positioning of Asian Top-TNCs against the leading world corporations that remain their direct competitors (including studying the competition of individual TNC product division with a wide offer). On the basis of the study of TNCs in the automotive and electronics sector, it can be claimed that the most admired Asian Top-TNCs (included in the MAC) belong to the global top in these areas, since they base their development prospects on the synergy of economic and intellectual capitals, which was confirmed by the study using SICAV.

2.6. The most powerful Asian non-financial transnational corporations

The research conducted proves that the most powerful Asian non-financial transnational corporations (top 10) are the automotive Toyota Motor (Japan), Honda Motor (Japan), Nissan Motor (Japan), Hyundai Motor (South Korea) and in the electronics sector: Samsung Electronics (South Korea), LG Electronics (South Korea), Sony (Japan), Canon (Japan), Lenovo Group (China), Panasonic/Matsushita Electric (Japan). Therefore, the top 10 includes 4 corporations from the *Asian Emerging Markets Economies* (the A-EMEs). The use of international rankings made it possible to initially determine the position of Asian corporations in the global economy. The financial and market states (*The Global 2000*), the position on the international market (*The World Investment Report*), building the values of product brands (*The Top 100 Global Brands*) were the essential foundations for the assessment of development determinants.

The assessment of development prospects taking into account the requirements of competitiveness in the 21st century required references to studies based on synthetic measures that cumulate parameters regarding the system of Top-TNC attributes. Two concepts of aggregated assessment were utilized. The first one involved the study of: human capital, management quality; social responsibility,

innovativeness, the quality of products/services; the use of corporate assets, financial stability, long-term investment value, business efficiency on the international market (*The World's Most Admired Companies* – MAC). The second one was the study of: the return on equity, expenditures for research and development per one employee, the range of drawing upon the multi-cultural potential of human capital, arbitrage abilities that are the result of locating assets on the international market and the significance of intangible assets for the ability to create sales value (*Synthetic Indicator of Creation of Added Value* – SICAV).

By using the above-mentioned concepts of MAC and SICAV, which attempt to meet the challenge of assessing development prospects of TNCs on the basis of the co-existing determinants responsible for the effectiveness of utilizing the range of resources owned (including capital from both the economic layers that constitute the competence base and the intellectual layers with the multiplier effect), it has been determined that in the automotive sector, the Asian TNCs – Toyota Motor, Honda Motor, Nissan Motor and Hyundai Motor – are considered the most admired and start setting standards in the industry. Their positions are stable and secure as a result of them adopting an expansion strategy suitable to meet new challenges.

A characteristic feature of their strategy is the pressure put on the foundations of financial condition but also, equally, attention to human capital (all categories of stakeholders). The new approach is also expressed through the manner of offer presentation, for instance: presenting elements that increase road safety as key qualities or the use of alternative drive sources. These elements influence customer reviews and increase corporation value. What may be surprising (in light of the research) is that Asian corporations pay much less attention to product and service innovation than their European or American rivals (Hyundai appears the weakest, but so does, e.g., Nissan).

The study of the corporations in the electronics sector has shown that the most admired Asian corporations – Samsung, LG, Sony – become involved in direct competition among the most powerful corporations of the sector. Innovativeness, management of human resources, product quality are the main strong points of Samsung and Sony.²¹ It should be mentioned that in terms of innovation and management of human resources Asian TNCs (such as, e.g. Canon) remain far behind in comparison with other corporations. In the computers sector, Asian Canon, Asustek and Lenovo are no match for the American leaders (Apple, Dell, HP).

In the zone of new technologies, in the broad sense, a dynamic growth of the young companies from the A-EMEs (Asustek, Lenovo, HTC, Huawei) is clearly visible, which may indicate that they build their pillars of growth on the basis of modern concepts (the systemic 4C approach) from the start. On the other hand, research

21 *The World's Most Admired Companies* [2019], <https://fortune.com/worlds-most-admired-companies/2019/> (accessed: 28.09.2019).

has shown that several of the Asian (Japanese) corporations present on the international market for years now, e.g. Hitachi, Mitsubishi, Suzuki, Mazda, have troubles maintaining their positions in the global top rankings. They face the key challenge of not merely refining their products/services, but also remodelling the development concept to meet the requirements of competitiveness in the 21st century.

In conclusion, the study conducted has confirmed that for the Asian TNCs to obtain leading positions in individual sectors, an accumulation of a sufficient multi-layer economic and intellectual capital is required, as is a proper exploration of all its components, both material and non-material. The improvement of market positions of Asian TNCs (including those from the A-EMEs) as a result of the implementation of the rules of building competitiveness in the 4C model is clearly visible. Putting emphasis on the more ecological approach to corporation management translates into a systematic improvement in the position (e.g. Kia, Huawei, Asustek, Lenovo).

The presented analysis for 2006–2018 indicates that Asia currently boasts a major competitive position among non-financial corporations in the automotive and electronics sectors, which is confirmed by all analyses conducted. For instance, among 100 brands perceived as the most valuable in the world, 7 brands out of the 15 Asian ones are automotive, while 8 belong to the electronics sector. Their owners take the leading positions in each of the mentioned international rankings. Strong position of Asian TNCs in the automotive and electronics sectors has also been confirmed by the studies conducted with the use of synthetic measures.

When analysing the research results for corporations from the A-EMEs, strong position of Korean agents is easily discernible (Samsung, LG, Hyundai, Kia) and so is the growing potential of Chinese companies (Lenovo, Huawei) or Taiwanese ones (Asustek, HTC). However, 50% of the Asian non-financial companies in the global top are still Japanese corporations. Thus, it is clear that a change in economic leadership in a region is not visible right away, since an international business is perceived from the angle of the most powerful agents in a given sector (Top-TNCs).

It should be mentioned that *Forbes Global 2000/2019* lists as many as nine automotive corporations from the A-EMEs, including: seven Chinese (SAIC Motor, Dongfeng Motor Group, Guangzhou Automobile Group, BYD, Great Wall Motor, BAIC Motor, Chongqing Changan Auto) and two Indian ones (Tata Motors, Mahindra & Mahindra). However, their positions in the ranking are low.²² *Forbes Global 2000/2019* for the computers sector also lists two Chinese corporations, Legend Holding and Unisplendour as well as six Taiwanese ones: Quanta Computer, Compal Electronics, Wistron, Inventec, Innolux and Asustek Computer. All

22 SAIC Motor – 100, Dongfeng Motor Group – 618, Guangzhou Automobile Group – 658, BYD – 737, Tata Motors – 769, Great Wall Motor – 842, BAIC Motor – 927, Mahindra & Mahindra – 973, Chongqing Changan Auto – 1642.

of them hold low positions (Legend took the highest position of 677).²³ Although the first four places are held by American leaders, Asian Top-TNCs, including 8 corporations from the A-EMEs, took the subsequent ten positions in this sector.

Asian Top-TNCs have swiftly climbed their way to the top of the financial sector. The in-depth research presented in this work did not encompass financial corporations, yet a reference to the *Forbes Global 2000* classification makes it possible to determine that the whole Chinese “Big Four” (*Industrial and Commercial Bank of China, China Construction Bank, Agricultural Bank of China, Bank of China*) are in the very top of financial giants.²⁴ The financial sector is much more susceptible to outside factors than the non-financial sector. In the classic production and service (non-financial) areas, entering the global top of the most powerful players demands meeting several requirements simultaneously. Therefore, to obtain a real assessment of development determinants and prospects, a multi-faceted approach is needed. To maintain international competitiveness, a corporation must be able to systematically explore all capital layers, both economic and intellectual. Therefore, on the basis of international rankings based on the classic quantitative parameters, a selection of the most powerful corporations in a given sector can be determined. Those corporations require in-depth study in order to evaluate their long-term development prospects. This concerns corporations in all areas/regions/countries.

Conclusions

In conclusion, in accordance with the requirements of building competitiveness in the 21st century, modern corporations must base their development potential on the strength of qualitative changes — to the management process, the production of innovative goods and services, the co-creation of values together with their institutional environment.²⁵ For the Top-TNCs, a flexibility-ensuring strategy

23 Legend Holding – 677, Unisplendour – 1882 and as many as six Taiwanese: Quanta Computer – 939, Compal Electronics – 1463, Wistron – 1579, Inventec – 1773, Innolux – 1934, Asustek Computer – 1971.

24 Eleven subsequent Chinese banks are classified in the *Global 2000 Forbes 2019* in the *Major Banks* category.

25 E. Hoddy [2018], *Critical realism in empirical research: employing techniques from Grounded theory Methodology*, “International Journal of Social Research Methodology”, vol. 22; M. Srivastava, A. Tranklin, L. Martinette [2013], *Building a Sustainable Competitive Advantage*, “Journal of Technology Management and Innovation”, vol. 8 (2); M. Rosińska-Bukowska [2019], *Human Capital and Intellectual Capital in Modern International Business – Based on Studies of the Strategies of Transnational Corporations*, “Comparative Economic Research”, vol. 22 (2), pp. 141–158.

based on balancing expenditures and benefits, determining a hierarchy of purposes, the sequence of key actions and the pace of their realization are the essence of success. Asian corporations, especially those from the A-EMEs (China, India, Taiwan), have quickly understood these requirements and are successfully implementing them as pillars of their strategies, which may accelerate their expansion in the nearest future.

The study conducted in these chapter has confirmed that the Asian TNCs obtain leading positions in global economy using a combination of a multi-layer economic and intellectual capital. The presented analysis for 2006–2018 indicates that Asia currently boasts a major competitive position of non-financial corporations (especially in the automotive and electronics sectors) and financial TNCs (although they were beyond the scope of these chapter). The improvement of positions of Asian TNCs is a result of the implementation of the rules relating to building competitiveness on the basis of network connections. The network approach requires cooperation and in the case of corporations it is based on the development of foreign direct investment (FDI) and international mergers and acquisitions (M&As) – these issues are the subject of the next part of this monograph (chapter 3).