



A SNAPSHOT OF THE WORLD OF GLOBAL MULTINATIONALS – AN INDUSTRY BASED ANALYSIS OF FORTUNE GLOBAL 500 COMPANIES

OGREAN Claudia

Lucian Blaga University of Sibiu, Romania

Abstract:

For better or for worse, the “corporations rule the world” assertion is nowadays more actual and accurate than ever before, as multinational companies represent the undisputable engine of the globalization process, and the latter continuously (re)creates the background against which global multinationals are flourishing, while reinforcing their “domination”. Since 1995, the Fortune Global 500 ranking (FG 500) annually provides a comprehensive and eloquent image of the world of global multinationals; the merits of the FG 500 ranking go beyond the synchronic approach of the characteristics of global multinationals (in terms of revenues, profits, assets and employees – by sector, industry and country), as it also favors diachronic analysis and comparisons – which are essential for strategists in identifying evolving trends and substantiating corporate strategies able to lead to sustainable competitiveness. The paper aims to determine the contribution of sectors to FG 500 ranking in 2016, on one hand, and to emphasize on some industry-based dynamics in FG 500 – by comparatively analyzing the 2016 and 1996 rankings, on the other hand.

Key words: Fortune Global 500 companies; sectors’ contribution to FG 500; industry-based dynamics in FG 500

1. Introduction

Started more than twenty years ago – the first data being available since 1995 (<http://fortune.com/global500/1995/>) – Fortune Global 500 (FG 500) is the “annual ranking of the largest 500 corporations worldwide as measured by total revenue” (<http://fortune.com/global/500/>). The latest FG 500 survey – released in 2016 – has revealed that “the world’s 500 largest companies generated \$27.6 trillion in revenues and \$1.5 trillion in profits in 2015. Together, this year’s Fortune Global 500 companies employ 67 million people worldwide and are represented by 33 countries” (<http://fortune.com/global500/>). When giving them a closer look, these apparently quite impressive values no longer look so appealing, because: (a). total revenues have declined 11.5%; (b). total profits have declined 11.2%; (c). “total shareholder equity

shrank for the Global 500, by 2.6% to \$14.7 billion” – comparative to the previous year (Tkaczyk, Jones, & Donnelly, 2016).

However, the 500 corporations in FG 500 not only represent “the <<unit of analysis>> for research in international business” (Rugman, & Girod, 2003) – aiming at exploring: the controversy surrounding MNEs: are they regional or global? (Rugman, & Brain, 2003); “outward investment by Chinese MNCs” (Deng, 2004); “multinational enterprises and the global economy” (Dunning, & Lundan, 2008); “MNE geographic scope” (Asmussen, 2009); and so on – but they also serve as benchmark for a variety of other fields: “corporate expatriate HRM policies, internationalization, and performance” (Peterson, Sargent, Napier, & Shim, 1996); “the global urban hierarchy” (Godfrey, & Zhou, 1999); “trends in sustainability reporting” (Kolk, 2003); “diffusion and success factors of mobile marketing” (Scharl, Dickinger, & Murphy, 2005); “the geography of corporate philanthropic disaster response” (Muller, & Whiteman, 2009).

The strategic management field is interested in identifying the strategies of FG 500 companies, together with their specific determinants and consequences – in papers addressing issues such as: “strategic and financial performance implications of global sourcing strategy” (Murray, Kotabe, & Wildt, 1995); “strategic planning in a turbulent environment” (Grant, 2003); “the global strategy of emerging multinationals from China” (Peng, 2012); “the regional and global competitiveness of multinational firms” (Rugman, Oh, & Lim, 2012); “strategic operations management” (Brown, Bessant, & Lamming, 2013).

But the realities and trends characterizing the world of global multinationals are not only important for the FG 500 companies and their strategic approaches; they provide valuable insights on the (general and industry) environmental opportunities and threats, while “setting global standards” that cannot be ignored by any strategist in search for sustainable competitiveness into a global, complex world – as: (a). the key dimensions of globalization, as is it today, are “context, complexity and connectedness” (Bevan, & Gitsham, 2009); (b). “global complexity” (Urry, 2003) defines each entity’s parameters of evolution; (c). academia analyzes “the butterfly defect: how globalization creates systemic risks, and what to do about it” (Goldin, & Mariathasan, 2014) and argues about “the inclusion of complexity in management discourse” (Gorzeń-Mitka, & Okręglika, 2015).

Against this background, in the following sections the paper will explore the contributions of sectors to FG in 2016, and will make some industry-based comparisons between 2016s’ FG 500 and 1996s’ FG 500 – which will lead to the conclusions of the paper and the sketching of the future research directions.

2. Contributions of sectors to FG 500 in 2016

The contributions of sectors to FG 500 in 2016 (Figures 1-2 and Annex 1) can be summarized as follows:

- **Top 3 sectors by category** – number of companies, revenues, profits, assets, and employees:

- The Financials sector is categorically leading in all aspects: it contributes by 22.8% to the number of companies in FG 500, while earning 22.4% of the revenues, hiring 16.3% of the employees, and especially holding 75% of the assets and appropriating 40% of the profits;
- The Energy sector ranks the second in terms of number of companies in FG 500 (17.6%), revenues (20%), assets (7.6%), and employees (14.5%), while being only the eight in terms of profits (2.7%);
- The Motor vehicles and parts sector ranks the third in terms of number of companies in FG 500 (6.8%), revenues (8.8%) and assets (2.7%), while being the forth in terms of profits (7.6%) and the fifth (8%) in terms of employees (8%);
- The Technology sector ranks the second in terms of profits (12.8%), while being the forth in terms of number of companies (6.6%), revenues (7%), assets (1.9%), and employees (8.6%);
- The Health care sector ranks the third in terms of profits (8.8%), while being the sixth in terms of number of companies (4.6%), the seventh in terms of revenues (4.2%) and assets (1.4%), and the twelfth in terms of employees (3.1%);
- The Retailing sector ranks the third in terms of employees (8.9%), while being the sixth in terms of revenues (4.6%) and profits (4%), the eighth in terms of assets (0.8%), and the eleventh in terms of number of companies (3.6%).
- **Average values by category** – revenues, profits, assets, and employees:
 - Revenues in FG 500: \$55268.12M. The average revenues per company in eight sectors are above this average – Motor vehicles & parts (\$71669.3M); Retailing (\$70705.7M); Telecommunications (\$67832.6M); Energy (\$62933.0M); Engineering & construction (\$58684.4M); Technology (\$58472.1M); Food & drug stores (\$58125.3M); and Household products (\$55288.7M) – while 13 sectors register average revenues per company below this average – Financials (\$ 54280.2 M); Wholesalers (\$ 51553.2 M); Health care (\$ 49943.9 M); Aerospace & defense (\$ 45095.3 M); Industrials (\$ 44988.5 M); Food, beverage & tobacco (\$ 43714.9 M); Chemicals (\$ 42905.7 M); Apparel (\$ 41842.7 M); Transportation (\$ 39313.3 M); Media (\$ 36523.3 M); Materials (\$ 35881.4 M); Hotels, restaurants & leisure (\$ 25170.7 M); and Business services (\$ 22882.7 M).
 - Profits in FG 500: \$ 2962.71 M. The average profits per company in ten sectors are above this average – Media (\$ 6840.3 M); Technology (\$ 5740.7 M); Health care (\$ 5661.0 M); Household products (\$ 5379.7 M); Financials (\$ 5203.0 M); Telecommunications (\$ 4652.7 M); Food, beverage & tobacco (\$ 3450.6 M); Chemicals (\$ 3399.4 M); Motor vehicles & parts (\$ 3303.1 M); and Retailing (\$ 3298.9 M) – while 11 sectors register average profits per company below this average – Apparel (\$ 2411.3 M); Aerospace & defense (\$ 2405.0 M); Hotels, restaurants & leisure (\$ 2227.0 M); Transportation (\$ 1881.5 M);

Industrials (\$ 1389.3 M); Food & drug stores (\$ 1270.5 M); Engineering & construction (\$ 1250.5 M); Energy (\$ 458.3 M); Wholesalers (\$ 327.4 M); Business services (\$ 325.0 M); Materials (\$-378.9 M).

- Employees: 133727. The average number of employees per company in 11 sectors are above this average – Hotels, restaurants & leisure (452903); Retailing (329670); Transportation (221656); Food & drug stores (201338); Telecommunications (180828); Engineering & construction (178313); Technology (173475); Aerospace & defense (162575); Motor vehicles & parts (157430); Industrials (144498) – while 11 sectors register an average number of employees per company below this average - Household products (121294); Food, beverage & tobacco (116853); Energy (110032); Apparel (105389); Materials (104391); Financials (95654); Health care (88800); Media (76767); Chemicals (65910); Business services (45929); Wholesalers (45729).
- Assets: with the Financials sector holding 75% of the assets in FG 500, the average assets per company in this sector is \$ 778648.7 M. Three other sectors register average assets per company above \$ 100000 M – Telecommunications (\$ 148704.9 M); Transportation (\$ 112809.8 M); and Energy (\$ 102414.8 M) – for 11 of them the average assets per company is between \$ 100000 M and \$ 50000 M – Motor vehicles & parts (\$ 92755.9 M); Household products (\$ 74306.0 M); Industrials (\$ 72017.7 M); Engineering & construction (\$ 71975.5 M); Health care (\$ 70750.0 M); Technology (\$ 69837.5 M); Media (\$ 67360.3 M); Aerospace & defense (\$ 58458.3 M); Chemicals (\$ 55692.0 M); Materials (\$ 52639.2 M); and Retailing (\$ 50814.1 M) – and, finally, six sectors register assets average per company below \$ 50000 M – Food, beverage & tobacco (\$ 49345.3 M); Apparel (\$ 38509.3 M); Food & drug stores (\$ 36185.1 M); Wholesalers (\$ 32517.1 M); Hotels, restaurants & leisure (\$ 22468.7 M); and Business services (\$ 11408.3 M).

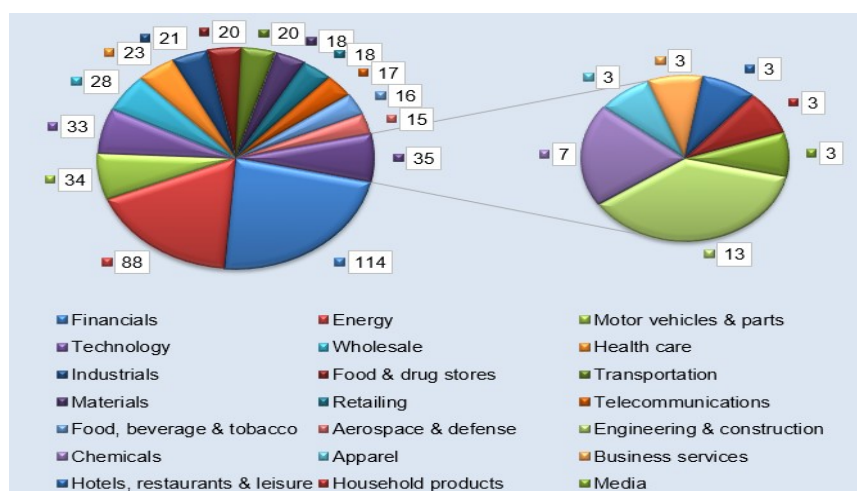


Figure 1. FG 500 – 2016: Number of companies by sector

(Source: <http://fortune.com/global500/>)

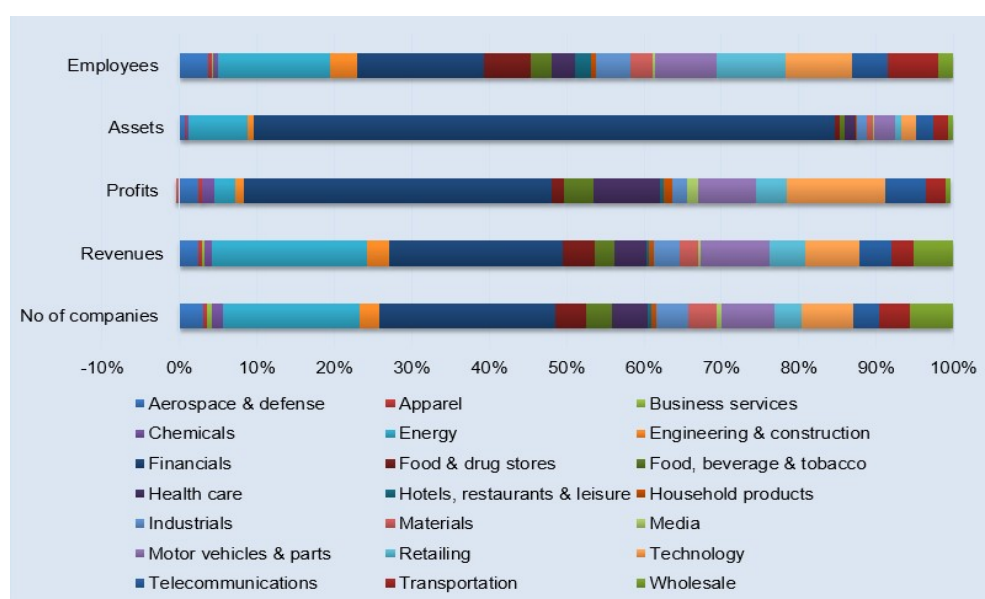


Figure 2. Contribution of Number of companies, Revenues, Profits, Assets, and Employees in FG 500 – 2016 – by sector

(Source: <http://fortune.com/global500/>)

The combination – by sector – of two categories (revenues and profits, on one hand, and number of companies and profits, on the other hand) for the 2016's FG 500 companies reveals that:

- As concerns Revenues and Profits (Figure 3): among the most “balanced” sectors are: Engineering & construction; Transportation; Industrials; Retailing; and Telecommunication. Among the sectors with the highest discrepancies between revenues and profits are: (a). in terms of the lowest profits as compared to their revenues: Energy; Wholesalers; and Motor vehicles and parts; (b). in terms of the highest profits as compared to their revenues: Health care; Media; Technology; and Hotels, restaurants & leisure.
- As concerns Number of companies and Profits (Figure 4): among the most “balanced” sectors are: Food & drug stores; Industrials; Materials; and Motor vehicles & parts. Among the sectors with the highest discrepancies between number of companies and profits are: (a). in terms of the lowest profits as compared to the number of companies: Energy; and Wholesalers; (b). in terms of the highest profits as compared to the number of companies: Health care; Household products; Media; and Technology.

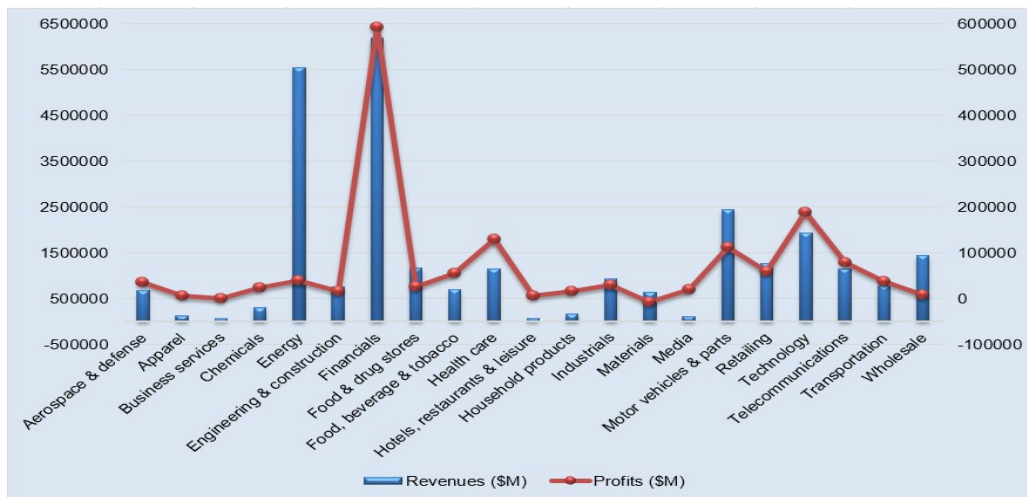


Figure 3. FG 500 – 2016: Revenues & Profits – by sector

(Source: <http://fortune.com/global500/>)

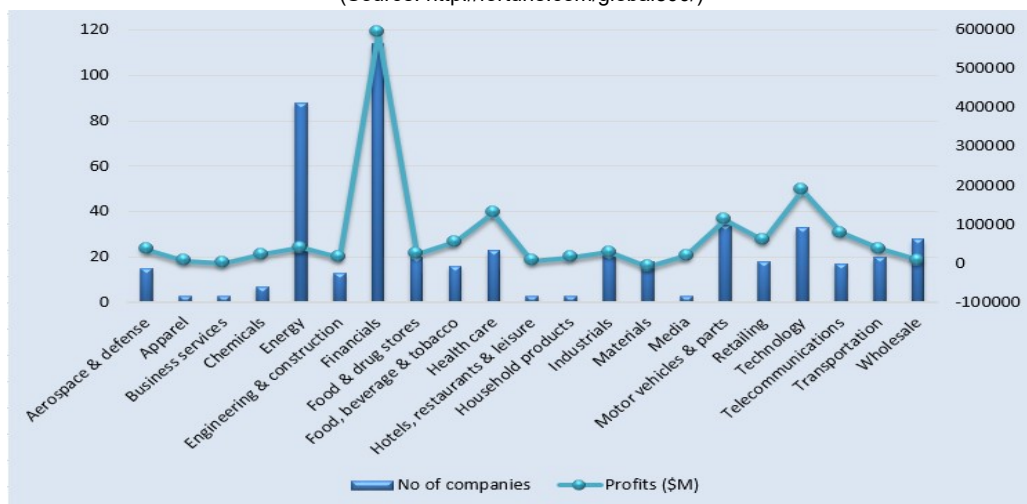


Figure 4. FG 500 – 2016: Number of companies & Profits – by sector

(Source: <http://fortune.com/global500/>)

Considering the industry criterion when combining the same two pairs of categories (revenues and profits, on one hand, and number of companies and profits, on the other hand) for the 1996's FG 500 – the second year of available data on the FG 500 companies (Annex 2), it results that:

- As concerns Revenues and Profits (Figure 5): among the most “balanced” industries are: Aerospace and defense; Airlines; Energy; Hotels, casinos, resorts; Insurance: property and casualty (mutual); Metal products; and Shipping. Among the industries with the highest discrepancies between revenues and profits are: (a). in terms of the lowest profits as compared to their revenues: Commercial banks; Motor vehicles and parts; and Trading; (b). in terms of the highest profits as compared to their revenues: Pharmaceuticals; Petroleum refining; and Chemicals.

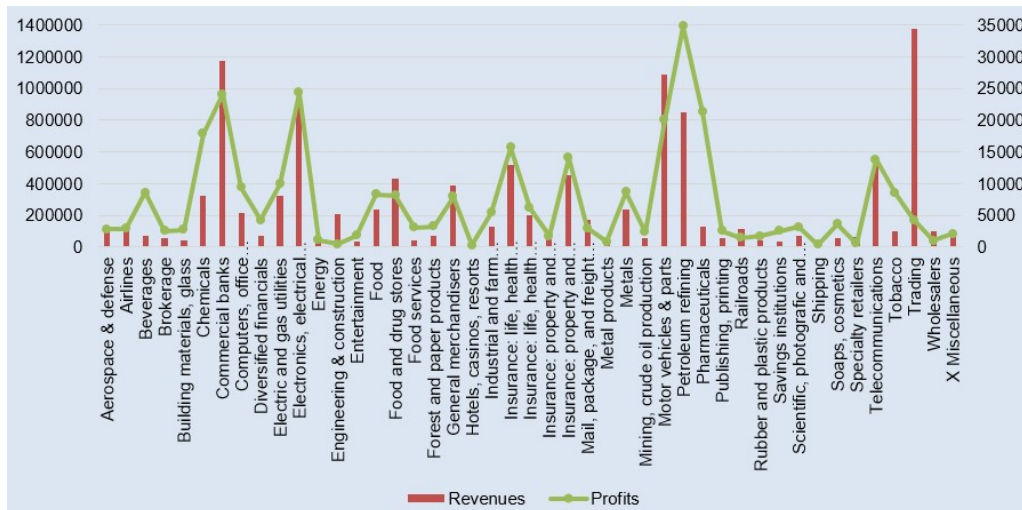


Figure 5. FG 500 – 1996: Revenues & Profits – by industry

(Source: <http://archive.fortune.com/>)

- As concerns Number of companies and Profits (Figure 6): among the most “balanced” industries are: Energy; Publishing, printing; Entertainment; Rubber and plastic products. Among the industries with the highest discrepancies between number of companies and profits are: (a). in terms of the lowest profits as compared to the number of companies: Commercial banks; Trading; and Food and drug stores; (b). in terms of the highest profits as compared to the number of companies: Chemicals; Petroleum refining; Pharmaceuticals; and Electronics, electrical equipment.

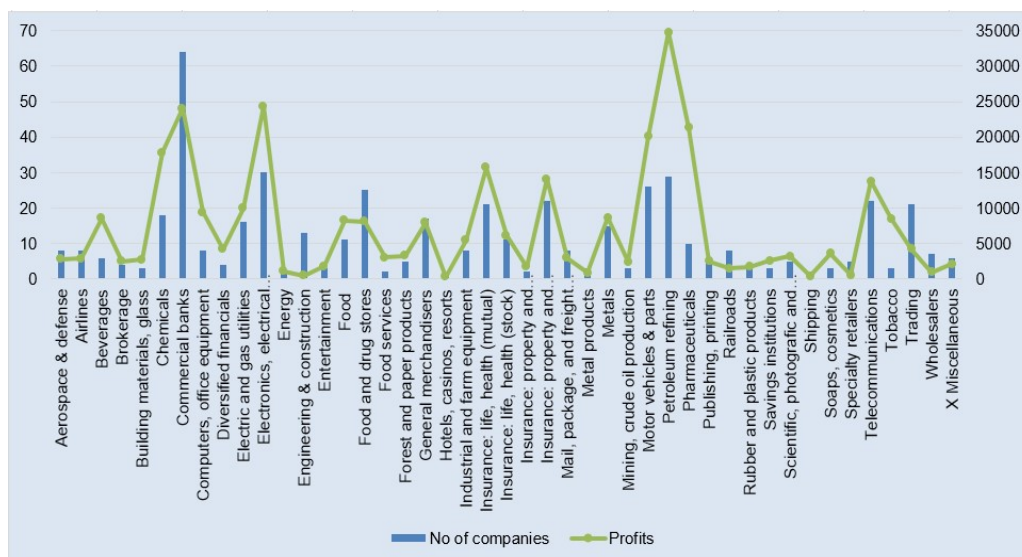


Figure 6. FG 500 – 1996: Number of companies & Profits – by industry

(Source: <http://archive.fortune.com/>)

3. Industry-based comparisons between 2016s' FG 500 and 1996s' FG 500

Since 1996 (the second year of available data on the FG 500 companies), the evolution of the global multinationals has been quite spectacular (Annex 3): FG 500 companies' profits have increased by 458.14%, their assets have increased by 368.09%, while their revenues have registered an increase by 242.86%, and their employees a 190.39% increase.

a. Top 10 companies in FG 500 – 2016 comparative to 1996

As regards the Top 10 companies in FG 500 in 1996 (Table 1 and Annex 3): the Trading companies from Japan were the undisputable leaders – not only Top 3 (Mitsubishi, Mitsui and Itochu), but also the fifth (Sumitomo) and sixth (Marubeni) positions of Top 10 were adjudicated by Japanese Trading companies; three companies belonging to the Motor vehicles and parts industry – two from USA (General Motors and Ford Motor) and one from Japan (Toyota Motor) – together with two companies operating into the Petroleum refining industry – an USA one (Exxon) and a Netherlander one (Royal Dutch/Shell Group) – completed the 1996 Top 10 of FG 500.

The situation looks completely different in 2016 (Table 1 and Annex 3): the USA General merchandiser Walmart, followed by two Chinese companies operating into the Utilities (State Grid) and Petroleum refining (China National Petroleum) industries are making the Top 3. None of the Trading industry companies is present in Top 10 FG 500 in 2016 anymore, while the Petroleum refining industry has took the lead, with five companies in Top 10 (the Chinese companies China National Petroleum and Sinopec Group, the British BP, the Netherlander Royal Dutch Shell and the USA Exxon Mobil); two of these companies (Royal Dutch Shell and Exxon Mobil), together with a Motor vehicle and parts one (the Japanese Toyota Motor) are the only companies present in both Top 10 (Toyota Motor also remaining the only Japanese company in Top 10 in 2016). A second Motor vehicle and parts company (the German Volkswagen), and a Computers, office equipment company (Apple, USA) are closing the 2016 Top 10.

Table 1. Top 10 companies in FG 500 – 2016 comparative to 1996

1996 Top 10	Coun- try	Industry	2016 Top 10	Coun- try	Industry
1. Mitsubishi	JPN	Trading	1. Walmart	USA	General Merchandisers
2. Mitsui	JPN	Trading	2. State Grid	CHN	Utilities
3. Itochu	JPN	Trading	3. China National Petroleum	CHN	Petroleum Refining

4. General Motors	USA	Motor Vehicles and Parts	4. Sinopec Group	CHN	Petroleum Refining
5. Sumitomo	JPN	Trading	5. Royal Dutch Shell	NLD	Petroleum Refining
6. Marubeni	JPN	Trading	6. Exxon Mobil	USA	Petroleum Refining
7. Ford Motor	USA	Motor Vehicles and Parts	7. Volkswagen	DEU	Motor Vehicles and Parts
8. Toyota Motor	JPN	Motor Vehicles and Parts	8. Toyota Motor	JPN	Motor Vehicles and Parts
9. Exxon	USA	Petroleum Refining	9. Apple	USA	Computers. Office Equipment
10. Royal Dutch/Shell Group	NLD	Petroleum Refining	10. BP	GBR	Petroleum Refining

(Source: <http://fortune.com/global500/1996/>; <http://fortune.com/global500/>)

When examining the contribution of these Top 10 companies to total FG 500 – 2016 comparative to 1996 – (Annex 3), it results that it has decreased in terms of: revenues (from 13.27% to 10.34%), profits (from 8.27% to 7.99%), and assets (from 3.5% to 3.11%), and it has quite significantly increased in terms of employees (from 4.34% to 10.38%).

b. Industry dynamics in FG 500 – number of companies in 2016 comparative to 1996

At a first glance, in terms of number of companies – by industry – in FG 500 – 2016 comparative to 1996 (Annex 4), the following observations could be made:

- The FG 500 companies' lists encompass 45 industries in 1996 and 53 industries in 2016;
- 31 industries are present (under exactly the same name) in both lists, gathering 369 companies in 1996 and 353 companies in 2016 respectively; out of them:
 - Seven industries are present with the same number of companies: Insurance: property and casualty (mutual) and Shipping (2 companies); Entertainment (3 companies); Airlines and Computers, office equipment (8 companies); and Engineering & construction (13 companies).
The Miscellaneous category gathers 6 companies both in 1996 (belonging to the following sectors: Health care; Advertising; Transportation equipment; Real estate; Textiles; and Waste management) and in 2016 (belonging to the following sectors: Health care; Apparel; Industrials; Food, beverages & tobacco; Business services; Materials).
 - For 11 industries the number of companies in FG 500 has increased in 2016 comparative to 1996: Food services (from 2 to 3 companies); Energy (from 2 to 13 companies); Building materials, glass (from 3 to 4 companies); Mining, crude oil production (from 3 to 19 companies); Diversified financials (from 4 to 6 companies); Specialty retailers (from 5 to 11 companies); Aerospace &

- defense (from 8 to 15 companies); Pharmaceuticals (from 10 to 13 companies); Insurance: life, health (stock) (from 11 to 24 companies); Motor vehicles & parts (from 26 to 34 companies); and Petroleum refining (from 29 to 32 companies).
- For 13 industries the number of companies has decreased in 2016 comparative to 1996: Electronics, electrical equipment (from 30 companies to 17); Food & drug stores (from 25 companies to 20); Insurance: property and casualty (stock) (from 22 companies to 16); Telecommunications (from 22 companies to 17); Insurance: life, health (mutual) (from 21 companies to 8); Trading (from 21 companies to 12); Chemicals (from 18 companies to 7); General merchandisers (from 17 companies to 7); Metals (from 15 companies to 13); Food (production) (from 11 companies to 7); Mail, package, and freight delivery (from 8 companies to 6); Railroads (from 8 companies to 4); and Beverages (from 6 companies to 3).
 - 14 industries in 1996 and 21 industries in 2016 do not have a(n exact) correspondent into the other year ranking – due to reasons such as: (a). changes in / redefinition of / industry classification – i.e., the two industries of 1996 Commercial banks and Savings were replaced by a single one in 2016 (Banks: commercial and savings); four different industries have replaced in 2016 the 1996 Wholesalers industry (Wholesalers: diversified; Wholesalers: food and grocery; Wholesalers: healthcare; and Wholesalers: electronics and office equipment); the 1996's Utilities: gas and electric industry was replaced by the Utilities industry in 2016; and so on; (b). the disappearance of some industry – i.e., Publishing, printing; and Scientific, photographic and control equipment – and the emergence of some totally new industries – i.e. Information technology services; Network and other communication equipment; Internet services and retailing; Temporary help. Thus:
 - 14 industries were represented in 1996s' FG 500 list and they are no longer present *tel quell* in 2016s' FG 500 list: Commercial banks – 64 companies in 1996; Utilities: electric and gas – 16 companies; Industrial and farm equipment – 8 companies in 1996; Wholesalers – 7 companies; Forest and paper products; Publishing, printing; and Scientific, photographic and control equipment – 5 companies; Brokerage – 4 companies; Metal products; Rubber and plastic products; Savings institutions; Soaps, cosmetics; and Tobacco – 3 companies; Hotels, casinos, resorts – 2 companies in 1996.
 - The 21 “new industries” in 2016 are: Banks: commercial and savings – 53 companies in 2016; Utilities – 18 companies; Industrial machinery – 8 companies; Health care: insurance and managed care; and Wholesales: healthcare – 6 companies; Food consumer products; and Real estate – 5 companies; Information technology services; Network and other communication equipment; Pipelines; Semiconductors and other electronic components; and Wholesalers: electronics and office equipment – 4 companies; Computer software; Health care: medical facilities; Household and

personal products; Internet services and retailing; Wholesalers: diversified; and Wholesalers: food and grocery – 3 companies; Apparel; Construction and farm machinery; Oil and gas equipment, services; and Temporary help – 2 companies in 2016.

c. Top 10 industries in FG 500 by number of companies – 2016 comparative to 1996

The examination of the two series of Top 10 industries – by number of companies in FG 500 – 2016 and 1996 respectively (Table 2) – reveals that:

seven industries have been present in both the reference years (with different rankings and/or number of companies): Commercial banks; Electronics, electrical equipment; Petroleum refining; Motor vehicles & parts; Food & drug stores; Telecommunications; and Insurance: property and casualty (stock); the three industries which have no longer been present in 2016 comparative to 1996 – Insurance: life, health (mutual); Trading; and Chemicals – have been replaced by: Insurance: life, health (stock); Mining, crude oil production; and Utilities;

a number of 278 companies in 1996 (55.6%) and 250 companies in 2016 (50%) have made the Top 10 industries – by number of companies in FG 500; out of them: 107 companies (38.5%) in 1996, and 93 companies (37.2%) in 2016 are belonging to the Financials sector. If considering the entire FG 500, these (107 and 93) companies belonging to the Financials sector – count for 21.4% in 1996 and 18.6% in 2016 respectively.

Table 2. Top 10 industries in FG 500 – by number of companies

1996 – Top 10 Industries	No of companies	2016 – Top 10 Industries	No of companies
1. Commercial banks	64	1. Banks: commercial and savings	53
2. Electronics, electrical equipment	30	2. Motor vehicles & parts	34
3. Petroleum refining	29	3. Petroleum refining	32
4. Motor vehicles & parts	26	4. Insurance: life, health (stock)	24
5. Food & drug stores	25	5. Food & drug stores	20
6. Insurance: property and casualty (stock)	22	6. Mining, crude oil production	19
7. Telecommunications	22	7. Utilities	18
8. Insurance: life, health (mutual)	21	8. Electronics, electrical equipment	17
9. Trading	21	9. Telecommunications	17
10. Chemicals	18	10. Insurance: property and casualty (stock)	16

(Source: <http://fortune.com/global500/1996/>; <http://fortune.com/global500/>)

4. Conclusions

FG 500 ranking represents, each year, an indicator of the status and evolution of global businesses, which are operating into an increasingly complex and globalized world. Among the most significant conclusions the (comparative) examination of 1996 and 2016 FG 500 rankings has revealed are the following:

- the Top 3 sectors by category in 2016's FG 500 is categorically dominated, on all the four categories – number of companies, revenues, profits, assets, and employees – by The Financials sector; other sectors that score highly, being the second or the third on at least one category are: Energy; Motor vehicles and parts; Technology; Health care; and Retailing;
- the average values by category are not necessarily the best performance indicators: three categories support an average-based evaluation – as, for each one of them, related to the FG 500 average, about a half of the sectors rank above the average and a half of them below it (10 sectors above and 11 sectors below as concerns both profits and employees; and 8 sectors above and 13 sectors below as concerns revenues) – while the fourth is much more diverse (the Financials sector register average assets per company more than three times higher than the average value of the next sector, Telecommunications);
- if combining – by sector – two categories in 2016's FG 500: among the sectors with the highest profits as compared to their revenues are: Health care; Media; Technology; and Hotels, restaurants & leisure; among the sectors with highest profits as compared to the number of companies are: Health care; Household products; Media; and Technology;
- if combining – by industry – two categories in 1996's FG 500: among the industries with the highest profits as compared to their revenues are: Pharmaceuticals; Petroleum refining; and Chemicals; among the industries with highest profits as compared to the number of companies are: Chemicals; Petroleum refining; Pharmaceuticals; and Electronics, electrical equipment;
- the two lists of Top 10 companies in FG 500 – 2016 and 1996 – look totally different, illustrating major shifts in the world of global multinationals: if, in 1996, five companies were Trading companies, three companies were belonging to the Motor vehicles and parts industry and two companies were operating into the Petroleum refining industry, in 2016: five companies out of Top 10 belong to the Petroleum refining industry, two companies operate into the Motor vehicle and parts industry, while the Utilities, General merchandiser, and Computers, office equipment industries are present each with one company;
- the contribution of Top 10 companies to total FG 500 – 2016 comparative to 1996 has decreased in terms of: revenues, profits, and assets, and it has quite significantly increased in terms of employees;
- the FG 500 companies' lists encompass 45 industries in 1996 and 53 industries in 2016: (a). 31 industries are present (under exactly the same name) in both lists – out of them: seven industries are present with the same number of companies, for

11 industries the number of companies in FG 500 has increased, while for 13 industries the number of companies has decreased in 2016 comparative to 1996; (b). 14 industries in 1996 and 21 industries in 2016 do not have a(n exact) correspondent into the other year ranking – due to reasons such as: changes in / redefinition of / industry classification; the disappearance of some industry; and the emergence of some totally new industries;

- seven industries are present in both Top 10 industries in FG 500 – by number of companies – 2016 comparative to 1996 – Commercial banks; Electronics, electrical equipment; Petroleum refining; Motor vehicles & parts; Food & drug stores; Telecommunications; and Insurance: property and casualty (stock);
- around a half of the number of companies in FG 500 are gathered, in both the reference years, by the Top 10 industries – by number of companies, while almost 40% of them are belonging to the Financials sector.

Future research directions will consider: analyzing the dynamics of specific industries represented in FG 500 – drivers, status and forecasting; identifying the relationships between company specific factors and industry specific factors in determining the strategies of FG 500 companies; and evaluating the potential impacts of the industry-based dynamics in FG 500 on the corporate and competitive strategies of “non-global/non-multinational” companies.

5. References

- Asmussen. C. G. (2009). Local, regional, or global? Quantifying MNE geographic scope. *Journal of International Business Studies*. 40(7). 1192-1205.
- Bevan, D., & Gitsham, M. (2009). Context, complexity and connectedness: dimensions of globalization revealed. *Corporate Governance: The international journal of business in society*, 9(4), 435-447.
- Brown, S., Bessant, J. R., & Lamming, R. (2013). *Strategic operations management*. Routledge.
- Deng. P. (2004). Outward investment by Chinese MNCs: Motivations and implications. *Business Horizons*. 47(3). 8-16.
- Dunning, J. H., & Lundan, S. M. (2008). *Multinational enterprises and the global economy*. Edward Elgar Publishing.
- Fortune Global 500. <http://fortune.com/global500/>.
- Fortune Magazine (1996). Fortune's Global 500 ranked within industries. http://archive.fortune.com/magazines/fortune/fortune_archive/1996/08/05/215443/index.htm.
- Fortune Magazine (1996). http://www.fortunechina.com/fortune500/c/1996-11/01/content_9659.htm.
- Godfrey. B. J., & Zhou. Y. (1999). Ranking world cities: multinational corporations and the global urban hierarchy. *Urban Geography*. 20(3). 268-281.
- Goldin, I., & Mariathan, M. (2014). *The butterfly defect: How globalization creates systemic risks, and what to do about it*. Princeton University Press.
- Gorzeń-Mitka, I., & Okręglicka, M. (2015). Managing Complexity: A Discussion of Current Strategies and Approaches. *Procedia Economics and Finance*, 27, 438-444.

- Grant, R. M. (2003). Strategic planning in a turbulent environment: Evidence from the oil majors. *Strategic Management Journal*, 24(6), 491-517.
- Kolk. A. (2003). Trends in sustainability reporting by the Fortune Global 250. *Business strategy and the environment*. 12(5). 279-291.
- Muller. A., & Whiteman. G. (2009). Exploring the geography of corporate philanthropic disaster response: A study of Fortune Global 500 firms. *Journal of Business Ethics*. 84(4). 589-603.
- Murray, J. Y., Kotabe, M., & Wildt, A. R. (1995). Strategic and financial performance implications of global sourcing strategy: A contingency analysis. *Journal of International Business Studies*, 181-202.
- Peng. M. W. (2012). The global strategy of emerging multinationals from China. *Global Strategy Journal*. 2(2). 97-107.
- Peterson. R. B., Sargent. J., Napier. N. K., & Shim. W. S. (1996). Corporate expatriate HRM policies, internationalization, and performance in the world's largest MNCs. *MIR: Management International Review*. 215-230.
- Rugman, A. M., Oh, C. H., & Lim, D. S. (2012). The regional and global competitiveness of multinational firms. *Journal of the Academy of Marketing Science*, 40(2), 218-235.
- Rugman, A. M., & Brain, C. (2003). Multinational enterprises are regional, not global. *Multinational Business Review*, 11(1), 3-12.
- Rugman. A., & Girod. S. (2003). Retail multinationals and globalization: the evidence is regional. *European Management Journal*. 21(1). 24-37.
- Scharl. A., Dickinger. A., & Murphy. J. (2005). Diffusion and success factors of mobile marketing. *Electronic commerce research and applications*. 4(2). 159-173.
- Tkaczyk, C., Jones, S., & Donnelly, G. (2016). *Everything You Need to Know About the Global 500 in 6 Charts*. Fortune, <http://fortune.com/2016/07/22/global-500-in-6-charts/>.
- Urry, J. (2003). *Global complexity*. Cambridge: Polity.

Annex 1. FG 500 companies – by sector – 2016: number of companies, revenues, profits, assets and employees

Sectors	No of companies	Revenues (\$M)	Profits (\$M)	Assets (\$M)	Employees
Aerospace & defense	15	676429	36075	876875	2438630
Apparel	3	125528	7234	115528	316166
Business services	3	68648	975	34225	137786
Chemicals	7	300340	23796	389844	461367
Energy	88	5538106	40331	9012503	9682811
Engineering & construction	13	762897	16256	935682	2318067
Financials	114	6187938	593147	88765952	10904500
Food & drug stores	20	1162505	25410	723702	4026769
Food, beverage & tobacco	16	699439	55209	789524	1869655
Health care	23	1148710	130204	1627250	2042402
Hotels, restaurants & leisure	3	75512	6681	67406	1358708
Household products	3	165866	16139	222918	363881
Industrials	21	944758	29175	1512371	3034464
Materials	18	645866	-6820	947506	1879031
Media	3	109570	20521	202081	230300
Motor vehicles & parts	34	2436756	112305	3153702	5352621
Retailing	18	1272703	59381	914654	5934065
Technology	33	1929578	189444	2304639	5724680
Telecommunications	17	1153155	79096	2527983	3074075
Transportation	20	786265	37629	2256196	4433126
Wholesalers	28	1443489	9166	910478	1280400
TOTAL	500	27634058	1481354	118291019	66863504

(Source: <http://fortune.com/global500/>)

Annex 2. FG 500 companies – by industry – 1996: number of companies, revenues, profits

Industry	No. of comp.	Revenues	Profits
Aerospace & defense	8	122954	2784
Airlines	8	104200	2896
Beverages	6	69115	8568
Brokerage	4	54871	2533
Building materials, glass	3	40858	2709
Chemicals	18	323203	17840
Commercial banks	64	1173039	24074
Computers, office equipment	8	216609	9412
Diversified financials	4	67979	4233
Electric and gas utilities	16	321643	9951
Electronics, electrical equipment	30	889206	24336

Energy	2	26352	1091
Engineering & construction	13	210419	477
Entertainment	3	32837	1826
Food	11	234532	8266
Food and drug stores	25	429485	8112
Food services	2	40216	3033
Forest and paper products	5	70709	3253
General merchandisers	17	386074	7958
Hotels, casinos, resorts	2	24628	280
Industrial and farm equipment	8	128138	5420
Insurance: life, health (mutual)	21	520962	15686
Insurance: life, health (stock)	11	200284	6160
Insurance: property and casualty (mutual)	2	50118	1681
Insurance: property and casualty (stock)	22	452661	14108
Mail, package, and freight delivery	8	168844	2950
Metal products	3	37009	848
Metals	15	233748	8677
Mining, crude oil production	3	53211	2389
Motor vehicles & parts	26	1087251	20080
Petroleum refining	29	849039	34814
Pharmaceuticals	10	131166	21302
Publishing, printing	5	58521	2486
Railroads	8	112878	1483
Rubber and plastic products	3	44339	1746
Savings institutions	3	37916	2542
Scientific, photographic and control equipment	5	71308	3160
Shipping	2	19609	407
Soaps, cosmetics	3	54039	3578
Specialty retailers	5	65693	578
Telecommunications	22	513285	13793
Tobacco	3	97710	8510
Trading	21	1378179	4228
Wholesalers	7	97506	978
X Miscellaneous	6	76041	2112
TOTAL	500	11378384	323348

(Source: http://archive.fortune.com/magazines/fortune/fortune_archive/1996)

Annex 3. Top 10 companies in FG 500 – 2016 comparative to 1996

1996 Top 10	Country	Industry	Revenues (\$M)	Profits (\$M)	Assets (\$M)	Employees
1. Mitsubishi	JPN	Trading	184365.2	346.2	91920.6	36000
2. Mitsui	JPN	Trading	181518.7	314.8	68770.9	80000
3. Itochu	JPN	Trading	169164.6	121.2	65708.9	7182
4. General Motors	USA	Motor Vehicles and Parts	168829	6881	217123.4	709000
5. Sumitomo	JPN	Trading	176530.7	210.5	50268.9	6193
6. Marubeni	JPN	Trading	161057.4	156.6	71439.3	6702
7. Ford Motor	USA	Motor Vehicles and Parts	137137	4139	243283	346990
8. Toyota Motor	JPN	Motor Vehicles and Parts	111052	2662.4	106004.2	146855
9. Exxon	USA	Petroleum Refining	110009	6470	91296	82000
10. Royal Dutch / Shell Group	NLD	Petroleum Refining	109833.7	6904.6	118011.6	104000
1996 Top 10			1509497.3	28206.3	1123826.8	1524922
Total 1996			11378387	323338.8	32136549.7	35119851

(Source: <http://fortune.com/global500/1996/>)

2016 Top 10	Country	Industry	Revenues (\$M)	Profits (\$M)	Assets (\$M)	Employees
1. Walmart	USA	General Merchandisers	482130	14694	199581	2300000
2. State Grid	CHN	Utilities	329601	10201	478539	927839
3. China National Petroleum	CHN	Petroleum Refining	299271	7091	621242	1589508
4. Sinopec Group	CHN	Petroleum Refining	294344	3595	317006	810538
5. Royal Dutch Shell	NLD	Petroleum Refining	272156	1939	340157	90000
6. Exxon Mobil	USA	Petroleum Refining	246204	16150	336758	75600
7. Volkswagen	DEU	Motor Vehicles and Parts	236600	-1520	414858	610076
8. Toyota Motor	JPN	Motor Vehicles and Parts	236592	19264	422029	348877
9. Apple	USA	Computers. Office Equipment	233715	53394	290479	110000
10. BP	GBR	Petroleum Refining	225982	-6482	261832	79800
2016 Top 10			2856595	118326	3682481	6942238
Total 2016			27634058	1481354	118291019	66863504

(Source: <http://fortune.com/global500/>)

Annex 4. Number of companies in FG 500 – by industry – 2016 comparative to 1996

Industries – number of companies in FG 500	1996	2016
Aerospace & defense	8	15
Airlines	8	8
Apparel	-	2
Banks: commercial and savings	-	53
Beverages	6	3
Brokerage	4	-
Building materials, glass	3	4
Chemicals	18	7
Commercial banks	64	-
Computer software	-	3
Computers, office equipment	8	8
Construction and farm machinery	-	2
Diversified financials	4	6
Electronics, electrical equipment	30	17
Energy	2	13
Engineering & construction	13	13
Entertainment	3	3
Food & drug stores	25	20
Food (production)	11	7
Food consumer products	-	5
Food services	2	3
Forest and paper products	5	-
General merchandisers	17	7
Health care: insurance and managed care	-	6
Health care: medical facilities	-	3
Hotels, casinos, resorts	2	-
Household and personal products	-	3
Industrial and farm equipment	8	-
Industrial machinery	-	8
Information technology services	-	4
Insurance: life, health (mutual)	21	8
Insurance: life, health (stock)	11	24
Insurance: property and casualty (mutual)	2	2
Insurance: property and casualty (stock)	22	16
Internet services and retailing	-	3
Mail, package, and freight delivery	8	6
Metal products	3	-

Metals	15	13
Mining, crude oil production	3	19
Miscellaneous	6	6
Motor vehicles & parts	26	34
Network and other communication equipment	-	4
Oil and gas equipment, services	-	2
Petroleum refining	29	32
Pharmaceuticals	10	13
Pipelines	-	4
Publishing, printing	5	-
Railroads	8	4
Real estate	-	5
Rubber and plastic products	3	-
Savings institutions	3	-
Scientific, photographic and control equipment	5	-
Semiconductors and other electronic co	-	4
Shipping	2	2
Soaps, cosmetics	3	-
Specialty retailers	5	11
Telecommunications	22	17
Temporary help	-	2
Tobacco	3	-
Trading	21	12
Utilities: gas & electric	16	-
Utilities	-	18
Wholesalers	7	-
Wholesalers: diversified	-	3
Wholesalers: food and grocery	-	3
Wholesalers: healthcare	-	6
Wholesalers: electronics and office equipment	-	4
TOTAL	500	500

(Source: <http://fortune.com/global500/1996/>; <http://fortune.com/global500/>)