HOW BIG ARE THE BIG MULTINATIONAL COMPANIES?

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Abstract:

Multinational corporations are increasingly seen as excessively big and powerful, and as having dramatically increased in size and power. This perception has led to the view that the big corporations are threatening democratic institutions of the nation-states and that they pervert the cultural and social fabric of countries.

In this paper we analyse the size of large corporations and the recent trends in this size. Using value-added data (instead of sales) we find that multinationals are surprisingly small compared to the GDP of many nation-states. In addition, if anything, the size of multinationals relative to the size of nations has tended to decline somewhat during the last 20 years. Finally, we argue that there is little evidence that the economic and political power of multinationals has increased in the last few decades.

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1. Introduction

Multinationals are out of favour. This is not the first time. During the 1960s and the 1970s multinational companies, especially the American variety, were seen as institutions increasingly bent on dominating the world. It was the time of the best-selling "The American Challenge" of Jean-Jacques Servan-Schreiber, which became very influential in Europe, and which argued that thanks to sophisticated management methods, large American enterprises would take over Europe and the world. Being large and American was ugly in those days.

Then came the 1980s. Perceptions shifted completely. Instead of being perceived as evil forces, large corporations suddenly became the symbols of progress in an increasingly integrating world. The generations of yuppies were impatient to be hired by the symbols of success of the day, the large corporations, preferably American.

Since a few years the pendulum has swung again. Under the influence of the antiglobalist movement, big multinationals are out of favour. Like in the days of Servan-Schreiber, today's best-selling books on the subject argue that the multinationals have become so big that they threaten our democratic institutions and pervert our culture. In her book "The Silent Takeover" Hertz claims that the big multinationals have become so powerful that they destroy the very fabric of our democratic societies. In the same vein Naomi Klein argues that big corporations don't sell physical but emotional products thereby changing and perverting our cultural landscape.

The starting point of all these analyses is a double claim. First, multinational corporations are very big. The most popular way to express this is that among the 100 biggest "economies" in the world 51 are corporations and only 49 are countries, giving the impression that large corporations are now larger than the average nation-state (see Anderson and Cavanagh(2000) who were the first to use these numbers).

The second claim is that the size of multinationals is greater than ever. It is not difficult to find statistics that will buttress this claim. Indeed, measured in the dollar value of their sales and assets, multinational companies are bigger than ever.

These two empirical claims form the backbone of much of the analysis in the antiglobalist literature surrounding the excessive and pernicious power of multinationals. In this paper we analyse these two claims. First we try to measure the size of the large corporations of the world. In order to make sense we need a benchmark. This will be the nation-state. We will analyse the question of how big the big multinationals are in relation to countries.

Second, we will study how the size of multinationals has evolved relative to the size of the same nation-states. Nobody will question the fact that the big multinationals are bigger than ever, but so are the economies of countries. The relevant question here is how the size of the multinationals has evolved relative to that of countries.

2. The size of large corporations

When comparing the size of corporations to that of nations the sales of these corporations are almost invariably set against the GDP of countries. Thus, when anti-globalists claim that out of 100 economies 51 are corporations and only 49 are countries they compare the sales of corporations with the GDP of nations. Sales and GDP, however, are not comparable. The GDP of a nation is the sum of the values added by each producer. It is not the sum of total sales of these producers. The reason why one does not want to add the total sales of all producers is that this would lead to a lot of double counting. To give a few examples. Bethlehem Steel sells steel wire to Bridgestone during, say 2002. During the same year Bridgestone sells tires to Ford Motor company. The latter then sells cars to final consumers also in 2002. If we add the sales of the steel, the tyre and the car companies we will count the steel wires three times. As a result, we will overestimate the value of what is produced in the country. In order to avoid this overestimation, economists only count the value added in the three companies. They then count steel wire only once, i.e. when produced and sold by Bethlehem Steel. They subtract the value of the steel wire (and of all the other intermediate deliveries) from the sales of Bridgestone and Ford.

Many other examples of double and triple counting can be given when sales are added. Thus, when comparing the size of corporations (using sales) with the size of nations (using GDP) we overestimate the relative size of corporations.

In order to avoid this problem we computed the value added of corporations. The value added is defined as sales minus intermediate deliveries. Alternatively, and equivalently, it can be defined as the sum of the remuneration of labour and capital employed in the firm.

We took the latter definition to compute value added. Unfortunately we could not obtain the relevant information for all corporations. In fact, only a few of them provide enough data from their annual accounts to make the calculation. We, therefore, used a sample of corporations for which data were available. The results for industrial corporations are shown in table 1. We observe that value added accounts for approximately 25% of sales. We used this number to extrapolate to other industrial corporations. Admittedly this is rather crude, but we are confident that the ratio of value added in sales is of a similar order of magnitude in most industrial companies in our sample.

Company	Sales	Value added	Value added/ sales
General Motors	184.632	42.175	22,8%
Ford	170.064	46.802	27,5%
DaimlerChrysler	162.384	44.438	27,4%
Royal Dutch/Shell Group	149.146	36.294	24,3%

148.062

Table 1: Sales and value added in five of the top ten corporations in 2000

Source: computed from companies' annual accounts *Note*: Value added is defined as the sum of total wages, depreciation and amortisation expenses, and profits before taxes

British Petroleum

Average

The data of service companies were more difficult to collect. Contrary to the industrial companies there is also a greater difference between service companies. We found that on average value added in service companies amounted to 35%. We apply this number to all service companies in the sample.

To find the largest corporations in the world we used the "Fortune magazine's Global 500 list" of the year 2000. The source for GDP was the World Bank. We then classified countries and corporations according to value added (GDP). The results are shown in table 2. We now find that of the 100 largest economies, 63 are countries and 37 are corporations. More importantly, among the top 50 economies only 2 (Exxon, Wall Mart) are corporations. But this way of presenting the results does not give a right indication of relative size, because the large countries in the world are much larger than the largest corporations. To give some examples, the US economy is 200 times bigger than the largest corporation; Japan is 100 times bigger, China 20 times bigger than the largest corporation. Even small countries like Belgium, Sweden, Austria are three to five times

22,6%

24,9%

33.536

bigger than the largest multinational. Put more synthetically, the value added produced by the 50 largest corporations represents only 4.5% of the value added produced by the 50 largest countries. Thus, as a whole the big multinationals of this world are a great deal smaller than the present anti-globalist rhetoric has led us to believe. This is made visually very vivid in figure 1 where we present the same information as in table 2. It appears that the big multinationals (dark colour in the figure) belong to the league of the very small countries. (In appendix we produce the same figure, but using sales instead of value added to show that even when we use sales to compare with GDP, the size of multinationals turns out to be smaller than is suggested by the statement that out of 100 economies, 51 are multinationals, and only 49 are countries).

This is not to say that some corporations are not big in relation to some small countries. Wall Mart, the biggest company measured by value added, <u>is</u> bigger than Pakistan, Peru and Algeria; Exxon <u>is</u> bigger than the Czech Republic, New Zealand, and many other small countries. But the impression gained by the anti-globalist rhetoric is that corporations are now typically bigger than the typical country in the world. And this is manifestly incorrect.

Table 2: Countries and corporations classified according to value added/GDP(billion dollars) in 2000

1	USA	9.882,8 51	I	Bangladesh	47,1			
2	Japan	4.677,1 52	2	UAE	46,5			
3	Germany	1.870,1 53	3	General Motors	46,2			
4	United Kingdom	1.413,4 5 4	1	Hungary	45,6			
5	France	1.286,3 55		Ford Motor	45,1			
6	China	1.076,9 56	5	Mitsubishi	44,3			
7	Italy	1.068,5 57	7	Mitsui	41,3			
8	Canada	689,5 5 8	3	Nigeria	41,1			
9	Brazil	595,5 595)	Citigroup	39,1			
10	Mexico	574,5 60		ltochu	38,4			
11	Spain	555,0 6 1	I	DaimlerChrysler	37,5			
12	India	474,3 62	2	Royal Dutch/Shell	37,3			
13	Korea, Rep.	457,2 63	3	BP	37,0			
14	Australia	394,0 6 4	1	Romania	36,7			
15	Netherlands	364,9 65	5	Nippon T&T	36,1			
16	Argentina	285,0 66	5	Ukraine	35,3			
17	Russia	251,1 67	7	Morocco	33,5			
18	Switzerland	240,3 68	3	AXA	32,5			
19	Belgium	231,0 69)	General Electric	32,5			
20	Sweden	227,4 70)	Sumitomo	31,9			
21	Turkey	199,9 7 1	I	Vietnam	31,3			
22	Austria	191,0 72	2	Toyota Motor	30,4			
	Hong Kong	163,3 7 3	3	Belarus	29,9			
24	Poland	162,2 74	1	Marubeni	29,9			
25	Denmark	160,8 75	5	Kuwait	29,7			
26	Indonesia	153,3 76	5	Total Fina Elf	26,5			
27	Norway	149,3 77		Enron	25,2			
28	Saudi Arabia	139,4 78		ING Group	24,9			
	South Africa	125,9 7 9		Allianz Holding	24,9			
	Thailand	121,9 80		E.ON	24,3			
•••	Venezuela	120,5 8 1		Nippon life insurance	23,8			
-	Finland	-		Deutsche Bank	23,5			
	Greece			AT&T	23,1			
	Israel	110,3 8 4	-	Verizon Comm.	22,6			
	Portugal	103,9 85		US Postal Service	22,6			
	Iran			Croatia	22,4			
	Egypt	98,7 87			22,1			
	Ireland	94,4 88	-	CGNU	21,5			
	Singapore			JP Morgan Chase	21,0			
	Malaysia			Carrefour	21,0			
	Colombia			Crédit Suisse	20,8			
	Philippines	-		Nissho Iwai	20,5			
	Chile	70,5 93		Bank of America Corp	20,2			
	Wal-Mart Stores	67,7 9 4	-	BNP Paribas	20,2			
-	Pakistan	61,6 95	-	Volkswagen	19,7			
-	Peru	53,5 96		Dominican Republic	19,7			
	Algeria			Uruguay	19,7 10.5			
-	Exxon	52,6 98	-	Tunisia Slavaa Danuhlia	19,5			
-	Czech Republic			Slovac Republic	19,1			
	New Zealand		J	Hitachi	19,0			
птсе:	rce: World Bank and Fortune Magazine							

Source: World Bank and Fortune Magazine

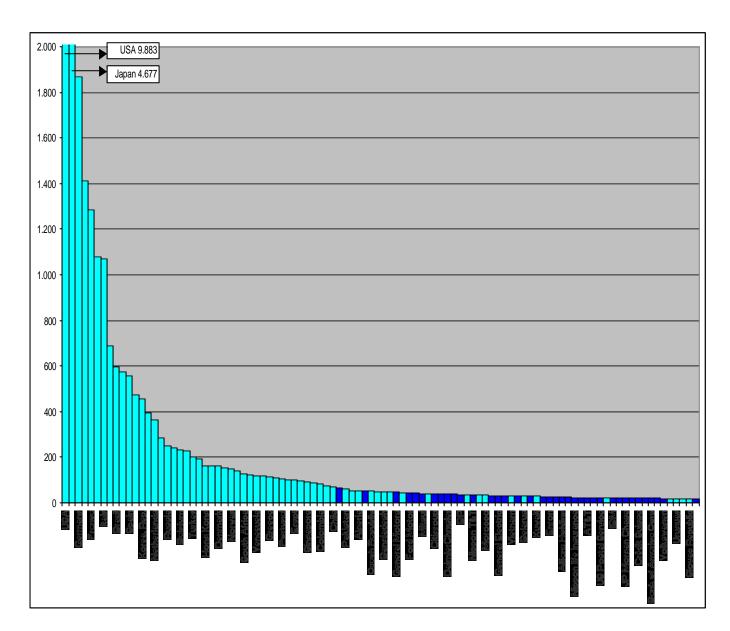


Figure 1: GDP (countries) and value added (corporations) in 2000 (billion \$)

3. Have big multinational become bigger?

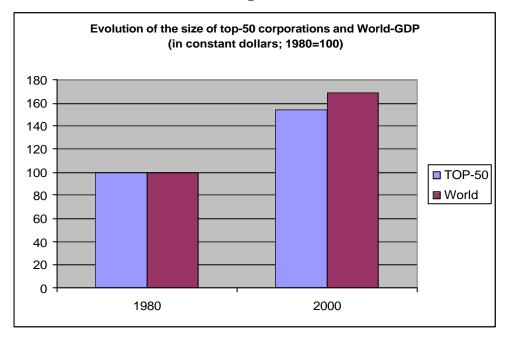
The second claim made by the critics of multinationals is that these have become larger compared to the nation state, thereby threatening the political, social and cultural integrity of these nations. But is it true that multinationals are now larger than in the past compared to countries?

We analyse how the size of industrial corporations has grown relative to the size of countries from 1980 to 2000. Because of a lack of data we could not compute the value added of corporations in the year 1980. We, therefore, reverted to sales. However, since we only look at the growth rate of corporations, this is not as bad as it seems. What we implicitly do is to assume that value added and sales were growing at comparable rates, which is a reasonable assumption to make.

We took the top-50 industrial corporations from the Fortune 500 list in the years 1980 and 2000 and computed the growth of the sales (in constant dollars) of these top-50 corporations during 1980-2000. We compared this number with the growth of the world's GDP over the same period (also in constant dollars). The results are shown in figure 1. The striking aspect of this result is that the world as a whole has grown (slightly) faster than the largest 50 corporations. As a result, in the year 2000 the 50 largest industrial corporations were slightly smaller in relation to World GDP than the 50 largest corporations in 1980.

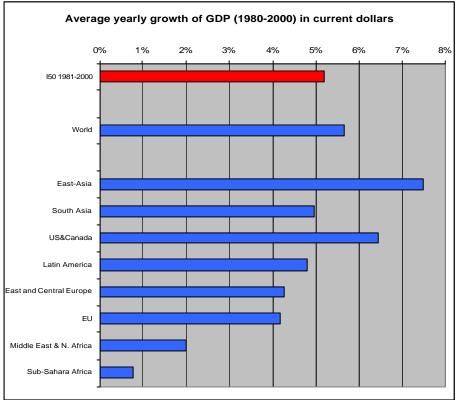
Thus the big multinationals have not become bigger when compared to the world as a whole. Obviously there are large regional differences. Some regions of the world have grown much faster than others. As a result, the big multinationals have shrunk in relative size in some regions (e.g. East-Asia) while they have increased in relative size in other regions (e.g. Africa). We show the regional growth rates in figure 2. The interesting aspect of these regional differences is that the big multinationals have shrunk in relative size in those regions where they have become most active (East Asia) while they have grown in relative size where big multinationals have been relatively absent (Africa). Thus, countries that have followed open door policies have been growing fast so that their size had increased faster than that of the multinationals.

Figure 1



Source: World Bank and Fortune Magazine

Figure 2



Source: World Bank

To sum up. The perception today is that multinationals are overwhelmingly large and that their size has increased dramatically in recent times, thereby threatening the integrity of the nation-states. There is no doubt that multinationals are large and that their size has increased. Surprisingly though multinational companies are not as big as it seems. The 37 largest corporations that appear in the list of the 100 largest economies create value added that represents less than 4% of the value added created by the top 37 countries in that list. Moreover, the multinationals have not become larger in relation to the nation-states during the last twenty years. Why are the perceptions so different from the observed facts? We return to this question in our conclusion.

4. Size and power

The fact that the multinationals are not as big as we thought and that they have not grown faster than the nation states does not say much about the power of these multinationals. The latter may exert considerable power, and this power may have increased. Although size and power are correlated, the correlation is far from perfect. Certainly, the perception today (again) is that the power of multinationals is large and that this power has increased.

Contrary to size, power is difficult to measure. We can only infer indirectly how large this power is. In this connection it is useful to distinguish between economic and political power.

With *economic power* we mean the capacity of corporations to impose a price that exceeds marginal costs, and thereby b make "excess" profits. The extent to which corporations are capable of doing this depends on two factors. One is the degree of substitutability of the products these corporations sell. If consumers have easy alternatives, the corporation will not be able to charge prices much in excess of marginal cost. The second factor is competition. The smaller the number of competitors the higher the capacity of corporations to charge a price above marginal costs, and to make excess profits. In the limit of monopoly power, this capacity is at its highest.

How has the economic power of corporations evolved during the last decades? Economists have done a lot of research on this issue. They have measured economic power by computing concentration indices, i.e. indices that measure the market share of, say, the top four companies in a given market. On the whole the empirical evidence tends to be inconclusive. There is no evidence that these concentration indices have increased systematically. In some sectors, concentration has increased, in others it has declined. For example, not so long ago the domestic telephone company had a local monopoly power in almost all countries in the world. Today, the situation is very different with several telecommunication companies competing in the same markets. In the market for software, concentration seems to have increased with one company, Microsoft, taking an increasing share of the market in many countries.

More than 150 years ago, Marx predicted that capitalism would increasingly ead to monopolies. The anti-globalist movement has espoused the same prediction. Up to now this prediction has not come through. It is unlikely that the anti-globalists will have a better predictive record than Marx.

What about the *political power* of corporations? Has this increased during the last decades? Political power is even more difficult to measure than economic power. In addition, political and economic of corporations are intertwined. The basic power mechanism can be described as follows. A successful corporation is the one, which drives out competitors because of a better and/or cheaper product. The ultimate success a corporation can achieve is to sell a superior product that drives out all the competitors. This successful corporation then achieves a monopoly position. This is not necessarily a problem if new companies can enter the market. The threat of such new entries can be sufficient to prevent the incumbent company from abusing its monopoly power. This incumbent, however, will have a strong temptation to abuse its monopoly position (and to make excess profits) by erecting barriers to entry. The latter can, however, not easily be done except by bribing politicians who can erect legal barriers to entry. Thus, very successful corporations end up investing in political power, so as to maintain and to solidify their hold in a particular market. Has the capacity of corporations to engage in such practices increased? Given the nature of the problem it will be difficult to give a definitive answer.

There is an indirect way to measure the evolution of the political and economic power of corporations. This is to analyse how quickly corporations come and go. In a world where the large corporations remain the same for long periods of time, it is likely that these corporations will be able to develop stronger political networks helping them to better maintain their positions in the market. Conversely, when the companies at the top come and go quickly, their capacity to build up political power will be limited.

In order to get some insight about this issue we analysed how quickly the composition of the top-10, top-20 and top-50 industrial corporations (Fortune list) has changed since 1980. (Because of insufficient data for the period before 1994 we had to restrict this analysis to industrial companies). We show the result in figure 3. This shows how many of the initial companies appearing in the top-10, top-20 and top-50 in 1980 remain in the top in the consecutive years (for a discussion of some methodological issues, see appendix). We find that in twenty years time only about half of the initial companies appearing in these lists have been able to keep their positions. The other half has been replaced by newcomers. Thus the group of large corporations is not a static one. It is continuously changing and renewing itself. This is good news in the sense that a large part of those who were powerful in the past have lost some (or all) of their power, while others who had little power, increased it quickly. All this suggests that corporate power is elusive and can quickly change.

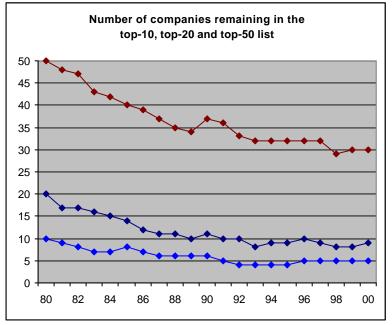


Figure 3

Source: Fortune Magazine

Since 1994 there is also information available for service companies. We did the same analysis for the period 1994-2000 for both the service and the industrial companies. We show the results in figure 4. Although the period is very short, so that strong conclusions

are difficult to derive, it is striking to find that service companies have tended to disappear from the top positions at a faster rate than industrial companies.

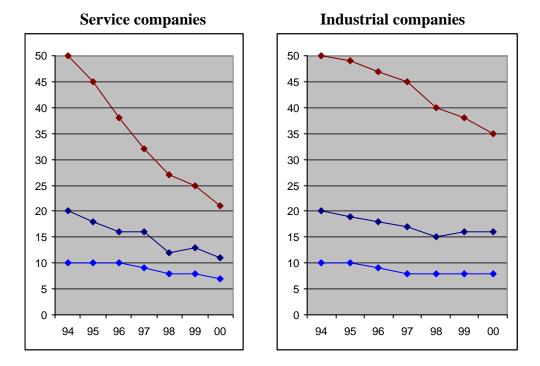


Figure 4: Number of companies remaining in the top-10, top-20 and top-50 lists

Source: Fortune Magazine

Finally, we also analysed the evolution of the dispersion of the size of the companies within each top list. The size concentration within each top list can be used as an indicator of power. The more unequal is the distribution of size within each top list, the greater is the potential power position of the companies at the top of the list. We computed the coefficient of variation and its evolution over time. We show the result in figure 5. It is striking to find that the coefficient of variation has tended to decline during 1994-2000. This suggests that the distributions of the size of companies in the top-10, top-20 and top-50 lists have become more equal. This in turn suggests that the relative power position of those at the top of the list has tended to decline. Again the period is relatively short, so that it is not clear whether this is the result of a trend or a cyclical movement.

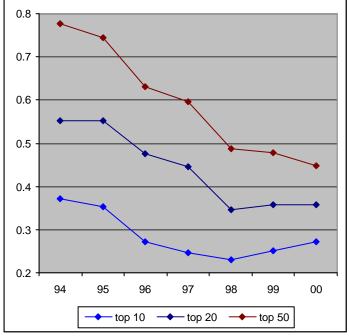


Figure 6: Coefficients of variation of the size of companies

Source: Fortune Magazine

5. Conclusion

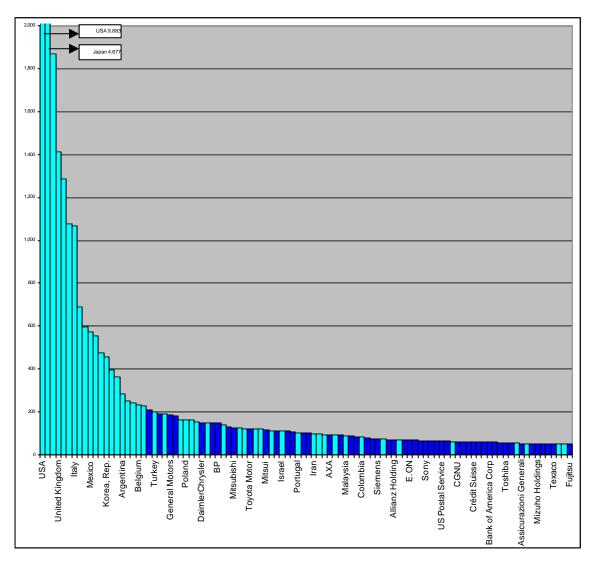
Multinational corporations are increasingly seen as excessively big and powerful, and as having dramatically increased in size and power. This perception has led to the view that the big corporations are threatening democratic institutions of the nation-states and that they pervert the cultural and social fabric of countries.

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Multinationals have not grown in size relative to the nation-states nor have they become more powerful in the last twenty years. And yet the perception is very different. This leads to the conclusion that what has changed is not the economic reality. The big transformation has been in the perception of that reality. Many people now perceive the multinationals as having grown in size and power, while they did not (or not to the same extent) 20 years ago. Why is it that perceptions can change so drastically while the underlying economic reality has changed so little?

A satisfactory answer is difficult to give. The popularity of ideas seems to evolve in a cyclical manner very much like fashion does. During the 1960s and 1970s anti-capitalist ideas were fashionable. They went out of fashion in the 1980s, but came back in full force during the second half of the 1990s. Maybe all this is inevitable in a world where the human mind tries to understand how "the system" functions. Faced with great uncertainty about the functioning of the economy, people try one theory, then discard it to search for one that fits the data better, until the new theory is found wanting. The result of this groping for understanding is that ideas and perceptions are subject to large cyclical movements, even if the underlying reality does not exhibit such movements.

APPENDIX



GDP of countries/ Sales of companies in 2000

Note: dark entries are companies

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