## Background materials to the paper "So what is *Capital in the 21st century?*"

### The development of computers

Background to page 4 and Footnote 7 of the article.

# Table 1.Typical characteristics of computers in 1967, 2004 and 2015

	Computer used by MIT	Laptop	Smartphone
Indicator and unit	1967	2004	2015
Processor speed (unit: MIPS)	0,25	1 000	18 200
Memory (unit: KByte)	144	256 000	16 777 216
Retail price (unit: USD in 2003)	\$ 11 000 000	\$ 2 000	\$ 399

*Note.* The three devices presented in the three columns above do not differ only in the above three parameters (processor speed, memory and price), but also in the functions they can serve. The 1967 computer could be used only for calculations. Today's smartphone can be used for many other functions: taking photos, video recording, browsing the internet, oral and written communication, storing data ; one could make a long list.

*Sources.* Columns 1 and 2 are from Kurzweil's book (2014, p. 102). The author himself used to work on the 1967 MIT computer. He did not disclose in the book data of which 2004 laptop he presented. We picked the data of a 2015 smartphone arbitrarily, those of iPhone 5S. The source of the data on the latter are:

Type: http://www.amazon.com/Apple-iPhone-5s-Unlocked-Cellphone/dp/B00F3J4B5S

Processor speed (MIPS) <u>https://www.frc.ri.cmu.edu/~hpm/book97/ch3/processor.list.txt</u> Memory (Kbyte): <u>https://www.apple.com/iphone/compare/</u>

Price: The 2015 price (USD; conversed to the 2003 price): <u>http://www.amazon.com/Apple-iPhone-5s-Unlocked-Cellphone/dp/B00F3J4B5S</u>

Table 1 was compiled by Ádám Kerényi.

## Technical development during the post-socialist transition

Background to page 7 and Footnote 9 of the article.

#### Table 2.

Appearance of modern communication technology in European Union member states [Earlier 15 member states (EU-15) compared to the 10 new, post-socialist member states (EU-10)]

		Country				
Indicator	Unit of measurement	group	1995	2001	2007	2012
GDP	per capita, at current	EU-15	26155	24289	47946	46109
	price (dollar)	USA	28782	37274	48062	51457
		EU-10	6632 <sup>1</sup>	7407	17543	18067
Internet users	per 100 persons	EU-15	3	32	67	79
		USA	9	49	75	79
		EU-10	$1^2$	16	54	70
Broadband subscription	per 100 persons	EU-15	n.d.	2	23	30
		USA	n.d.	4	23	28
		EU-10	n.d.	1	14	21
Mobile phone subscription	per 100 persons	EU-15	7	77	117	127
		USA	13	45	82	96
		EU-10	2	45	112	134
Scientific and technical	per one million persons	EU-15	495	562	620	n.d.
journal articles		USA	726	669	697	n.d.
		EU-10	126	176	237	n.d.
Cutting edge technology	% of production for	EU-15	16 <sup>3</sup>	20	13	13
export	export	USA	16	20	13	13
		EU-10	54	9	11	11

*Note*. The data are simple means in the country groups. For the missing data (n.d.) see the Source. Source: World Bank (2015): World Development Indicators. http://wdi.worldbank.org/tables

<sup>1</sup> No data about Lithuania.

<sup>2</sup> No data about Latvia and Lithuania <sup>3</sup>No data about Belgium and Luxemburg.

<sup>4</sup> No data about Malta.

## Appendix – Definitions of the indicators from the World Bank (2015)

#### GDP per capita:

GDP per capita is gross domestic product divided by midyear population. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in current U.S. dollars.

#### Internet users:

Internet users are people with access to the worldwide network.

#### Fixed (wired) broadband subscriptions:

Fixed (wired) broadband subscriptions refers to subscriptions to high-speed access to the public Internet (a TCP/IP connection), at downstream speeds equal to, or greater than, 256 kbit/s. This includes cable modem, DSL, fiber-to-the-home/building and other fixed (wired)-broadband subscriptions. This total is measured irrespective of the method of payment. It excludes subscriptions that have access to data communications (including the Internet) via mobile-cellular networks. It excludes technologies listed under the wireless broadband category.

#### Mobile cellular subscriptions:

Mobile cellular telephone subscriptions are subscriptions to a public mobile telephone service that provide access to the PSTN using cellular technology. The indicator includes (and is split into) the number of postpaid subscriptions, and the number of active prepaid accounts (i.e. that have been used during the last three months). The indicator applies to all mobile cellular subscriptions that offer voice communications. It excludes subscriptions via data cards or USB modems, subscriptions to public mobile data services, private trunked mobile radio, telepoint, radio paging and telemetry services.

#### Scientific and technical journal articles:

Scientific and technical journal articles refer to the number of scientific and engineering articles published in the following fields: physics, biology, chemistry, mathematics, clinical medicine, biomedical research, engineering and technology, and earth and space sciences.

#### **High-technology exports**:

High-technology exports are products with high R&D intensity, such as in aerospace, computers, pharmaceuticals, scientific instruments, and electrical machinery.

Table 2 was compiled by Branyicki Réka.

## Some data about the wealthiest Americans

Tables 4, 5, and 6 below are background to Footnotes 24 and 16 (pp. 10 and 18) of the article.

The	The first 50 places of the ,,Forbes400" in 2014, 2013 and 2012				
	2014		2013		2012
#1	GATES, Bill	#1	GATES, Bill	#1	GATES, Bill
#2	BUFFETT, Warren	#2	BUFFETT, Warren	#2	BUFFETT, Warren
#3	ELLISON, Larry	#3	ELLISON, Larry	#3	ELLISON, Larry
#4	KOCH, David	#4	KOCH, David	#4	KOCH, David
#4	KOCH, Charles	#4	KOCH, Charles	#4	KOCH, Charles
#6	WALTON, Christy	#6	WALTON, Christy	#6	WALTON, Christy
#7	WALTON, Jim	#7	WALTON, Jim	#7	WALTON, Jim
#8	BLOOMBERG, Michael	#8	WALTON, Alice	#8	WALTON, Alice
#9	WALTON, Alice	#9	WALTON, S. Robson	#9	WALTON, S. Robson
#10	WALTON, S. Robson	#10	BLOOMBERG, Michael	#10	BLOOMBERG, Michael
#11	ZUCKERBERG, Mark	#11	ADELSON, Sheldon	#11	BEZOS, Jeff
#12	ADELSON, Sheldon	#12	BEZOS, Jeff	#12	ADELSON, Sheldon
#13	PAGE, Larry	#13	PAGE, Larry	#13	PAGE, Larry
#14	BRIN, Sergey	#14	BRIN, Sergey	#13	BRIN, Sergey
#15	BEZOS, Jeff	#15	MARS, Forrest Jr.	#15	SOROS, George
#16	ICAHN, Carl	#15	MARS, Jacqueline	#16	MARS, Forrest Jr.
#17	SOROS, George	#15	MARS, John	#16	MARS, Jacqueline
#18	BALLMER, Steve	#18	ICAHN, Carl	#16	MARS, John
#19	MARS, Forrest Jr.	#19	SOROS, George	#19	BALLMER, Steve
#19	MARS, Jacqueline	#20	ZUCKERBERG, Mark	#20	ALLEN, Paul
#19	MARS, John	#21	BALLMER, Steve	#21	ICAHN, Carl
#22	BLAVATNIK, Len	#22	BLAVATNIK, Len	#22	DELL, Michael
#23	KNIGHT, Phil	#23	JOHNSON, Abigail	#23	KNIGHT, Phil
#24	HAMM, Harold	#24	KNIGHT, Phil	#24	BREN, Donald
#25	DELL, Michael	#25	DELL, Michael	#25	BLAVATNIK, Len
#26	ERGEN, Charles	#26	ALLEN, Paul	#26	PERELMAN, Ronald
#27	ALLEN, Paul	#27	PERELMAN, Ronald	#27	JOHNSON, Abigail
#28	POWELL, Laurene Jobs.	#28	BREN, Donald	#28	PAULSON, John
#29	COX, Anne Chambers.	#29	COX, Anne Chambers.	#28	POWELL, Laurene Jobs.
#30	DALIO, Ray	#30	MURDOCH, Rupert	#28	SIMONS, James
#31	BREN, Donald	#31	DALIO, Ray	#28	TAYLOR, Jack
#32	PERELMAN, Ronald	#32	ERGEN, Charles	#32	COX, Anne Chambers.
#33	MURDOCH, Rupert	#33	HAMM, Harold	#33	DALIO, Ray
#34	TAYLOR, Jack	#34	SIMONS, James	#33	KAISER, George
#35	PAULSON, John	#35	POWELL, Laurene Jobs.	#35	HAMM, Harold
#36	JOHNSON, Abigail	#36	PAULSON, John	#36	KINDER, Richard
#37	SIMONS, James	#36	TAYLOR, Jack	#36	MURDOCH, Rupert
#38	BEAL, Andrew	#38	ANSCHUTZ, Philip	#36	ZUCKERBERG, Mark
#39	SOON-SHIONG, Patrick	#39	KINDER, Richard	#39	ERGEN, Charles
#40	ANSCHUTZ, Philip	#40	KAISER, George	#40	COHEN, Steve
#41	KINDER, Richard	#40	SIMMONS, Harold	#41	BEAL, Andrew

Table 3.The first 50 places of the "Forbes400" in 2014, 2013 and 2012

#42	KAISER, George	#42	BEAL, Andrew	#42	OMIDYAR, Pierre
#42	SCHWARZMAN, Stephen	#43	COHEN, Steve	#43	LAUDER, Leonard
#44	COHEN, Steve	#44	JOHNSON, III. Edward	#44	ANSCHUTZ, Philip
#44	MUSK, Elon	#45	SOON-SHIONG, Patrick	#45	SCHMIDT, Eric
#46	TEPPER, David	#46	NEWHOUSE, Samuel Jr.	#46	NEWHOUSE, Samuel Jr.
#47	BUTT, Charles	#47	BUTT, Charles	#47	GOODNIGHT, James
#48	NEWHOUSE, Samuel Jr.	#47	OMIDYAR, Pierre	#47	SOON-SHIONG, Patrick
#49	SCHMIDT, Eric	#49	MARSHALL, Elaine	#49	SIMMONS, Harold
#50	PETERFFY, Thomas	#49	SCHMIDT, Eric	#50	BUTT, Charles

Source.

2014: <u>http://www.forbes.com/forbes-400/list/2/#tab:overall\_header:archivedWorth\_sortreverse:true</u> 2013: <u>http://www.forbes.com/sites/edwindurgy/2013/09/16/the-complete-list-of-the-forbes-400-members/</u>

2012: http://www.therichest.com/rich-list/nation/richest-people-in-united-states/ Find further sources in the personal data sheets (Table 4 below).

Table 3 was compiled by Kerényi Ádám.

#### Table 4.

#### Personal data sheets

Data on those listed among the Forbes wealthiest American billionaires and mentioned by the name in the paper "So what is *Capital in the 21st century?* Some notes on Piketty's book" will be presented here in personal data sheets, in an alphabetical order. The data sheet contains the billionaire's name, wealth, rank on the Forbes400 list in successive years, value of their "self-made" indicator (see the explanation on pp. 19-20 of the article) and the sources of the data.

Data	a sheet	
1.	Name:	Jeffrey P. BEZOS
2.	Rank number in Forbes400	
	in 2014:	#15
	in 2013:	#12
	in 2012:	#11
3.	Wealth, according to the Forbes list:	30,5 B \$
4.	Self-made score:	8
5.	Company, bank or other financial institution related:	
	Sector (according to Forbes400):	Technology
	Company name:	Amazon.com Inc.
6.	Source of wealth, according to the	Innovator
	classification described on pp. 14-19:	
7	Information source of answer to Question 6:	
	Forbes personal profile:	http://www.forbes.com/profile/jeff-
		bezos/?list=forbes-400
	Bloomberg personal data sheet:	http://www.bloomberg.com/research/s
		<pre>tocks/people/person.asp?personId=218</pre>
		<u>119&amp;ticker=AMZN</u>
	Wikipedia entry about the person:	https://en.wikipedia.org/?title=Jeff_Be
		ZOS
	Wikipedia entry about the company or	
	institution:	https://en.wikipedia.org/?title=Amazo
		<u>n.com</u>
	Company website (including the history of the	http://www.amazon.com/
	company):	
	Personal website:	
	Other information:	https://www.ted.com/speakers/jeff_be
		ZOS

Dat	a sheet	
1.	Name:	Leonard BLAVATNIK <sup>1</sup>
2.	Rank number in Forbes400	
	in 2014:	#22
	in 2013:	#22
	in 2012:	#25
3.	Wealth, according to the Forbes list:	21,5 B \$
4.	Self-made score:	9
5.	Company, bank or other financial institution related:	
	Sector (according to Forbes400):	Energy
	Company name:	Access Industries
6.	Source of wealth, according to the	Head of a giant corporation with a
	classification described on pp. 14-19:	large income
7	Information source of answer to Question 6:	
	Forbes personal profile:	http://www.forbes.com/profile/len-
		<u>blavatnik/</u>
	Bloomberg personal data sheet:	http://www.bloomberg.com/research/s
		tocks/private/person.asp?personId=11
		66326&privcapId=2447151&previous
		CapId=42973605&previousTitle=SK
		%20Capital%20Partners
	Wikipedia entry about the person:	https://en.wikipedia.org/wiki/Leonard
		<u>_Blavatnik</u>
	Wikipedia entry about the company or	
	institution:	https://en.wikipedia.org/wiki/Access_I
		ndustries
	Company website (including the history of the	http://www.accessindustries.com/abou
	company):	<u>t/</u>
	Personal website:	
	Other information:	http://www.forbes.com/forbes-
		400/#tab:overall_industry:Energy

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<sup>&</sup>lt;sup>1</sup> Született Leonid Valentinovich Blavatnik

Data	sheet	
1.	Name:	Michael R. BLOOMBERG
2.	Rank number in Forbes400	
	in 2014:	#8
	in 2013:	#10
	in 2012:	#10
3.	Wealth, according to the Forbes list:	35 B \$
4.	Self-made score:	8
5.	Company, bank or other financial institution related:	
	Sector (according to Forbes400):	Media
	Company name:	Bloomberg LP
6.	Source of wealth, according to the	Innovator
	classification described on pp. 14-19:	
7	Information source of answer to Question 6:	
	Forbes personal profile:	http://www.forbes.com/profile/michae
		<u>l-bloomberg/?list=forbes-400</u>
	Bloomberg personal data sheet:	http://www.bloomberg.com/research/s
		tocks/private/person.asp?personId=16
		0213&privcapId=160210&previousCa
		pId=160210&previousTitle=Bloomber
		<u>g%20L.P</u> .
	Wikipedia entry about the person:	https://en.wikipedia.org/wiki/Michael_
		Bloomberg
	Wikipedia entry about the company or	
	institution:	https://en.wikipedia.org/wiki/Bloombe
		<u>rg_L.P</u> .
	Company website (including the history of the	http://www.bloomberg.com/company/
	company):	<u>bloomberg-</u>
		facts/?utm_source=bloomberg-menu
	Personal website:	
	Other information:	He wrote a book about his life:
		https://www.nytimes.com/books/first/
		b/bloomberg-bloomberg.html

Data	sheet	
1.	Name:	Donald BREN
2.	Rank number in Forbes400	
	in 2014:	#31
	in 2013:	#28
	in 2012:	#24
3.	Wealth, according to the Forbes list:	15,1 B \$
4.	Self-made score:	8
5.	Company, bank or other financial institution related:	
	Sector (according to Forbes400):	Real Estate
	Company name:	The Irvine Company
6.	Source of wealth, according to the	Head of a giant corporation with a
	classification described on pp. 14-19:	large income
7	Information source of answer to Question 6:	
	Forbes personal profile:	http://www.forbes.com/profile/donald-
		bren/
	Bloomberg personal data sheet:	http://www.bloomberg.com/research/s
		tocks/private/person.asp?personId=16
		8319&privcapId=168302&previousCa
		pId=99399790&previousTitle=Efficie
		nt%20Power%20Conversion%20Corp
		oration
	Wikipedia entry about the person:	https://en.wikipedia.org/wiki/Donald_
		Bren
	Wikipedia entry about the company or	
	institution:	https://en.wikipedia.org/wiki/Irvine_C
		<u>ompany</u>
	Company website (including the history of the	https://www.irvinecompany.com/histo
	company):	rical-timeline
	Personal website:	
	Other information:	http://www.forbes.com/forbes-
		400/#tab:overall_industry:Real%20Est
		ate

Data	a sheet	
1.	Name:	Sergey BRIN
2.	Rank number in Forbes400	
	in 2014:	#14
	in 2013:	#14
	in 2012:	#13
3.	Wealth, according to the Forbes list:	31 B \$
4.	Self-made score:	9
5.	Company, bank or other financial institution	
	related:	
	Sector (according to Forbes400):	Technology
	Company name:	Google Inc.
6.	Source of wealth, according to the	Innovator
	classification described on pp. 14-19:	
7	Information source of answer to Question 6:	
	Forbes personal profile:	http://www.forbes.com/profile/sergey-
		brin/?list=forbes-400
	Bloomberg personal data sheet:	http://www.bloomberg.com/research/s
		tocks/people/person.asp?personId=534
		604&ticker=GOOG
	Wikipedia entry about the person:	https://en.wikipedia.org/wiki/Sergey_
		Brin
	Wikipedia entry about the company or	
	institution:	https://en.wikipedia.org/wiki/Google
	Company website (including the history of the	http://www.google.hu/about/company/
	company):	history/
	Personal website:	
	Other information:	http://www.forbes.com/forbes-
		400/#tab:overall_industry:Technology

Data	a sheet	
1.	Name:	Warren E. BUFFETT
2.	Rank number in Forbes400	
	in 2014:	#2
	in 2013:	#2
	in 2012:	#2
3.	Wealth, according to the Forbes list:	\$67 B
4.	Self-made score:	8
5.	Company, bank or other financial institution	
	related:	
	Sector (according to Forbes400):	Investment
	Company name:	Berkshire Hathaway
6.	Source of wealth, according to the	Outstanding personality in the
	classification described on pp. 14-19:	financial sector
7	Information source of answer to Question 6:	
	Forbes personal profile:	http://www.forbes.com/profile/warren-
		buffett/?list=forbes-400
	Bloomberg personal data sheet:	http://www.bloomberg.com/research/s
		tocks/people/person.asp?personId=255
		253&ticker=BRK/A
	Wikipedia entry about the person:	https://en.wikipedia.org/?title=Warren
		<u>_Buffett</u>
	Wikipedia entry about the company or	https://en.wikipedia.org/wiki/Berkshir
	institution:	<u>e_Hathaway</u>
	Company website (including the history of the	http://www.berkshirehathaway.com/
	company):	
	Personal website:	
	Other information:	http://www.bloomberg.com/billionaire
		s/profile/warren-buffett

Data	a sheet	
1.	Name:	Lawrence J. ELLISON
2.	Rank number in Forbes400	
	in 2014:	#3
	in 2013:	#3
	in 2012:	#3
3.	Wealth, according to the Forbes list:	\$51,6 B
4.	Self-made score:	9
5.	Company, bank or other financial institution	
	related:	
	Sector (according to Forbes400):	Technology
	Company name:	Oracle Corporation
6.	Source of wealth, according to the	Innovator
	classification described on pp. 14-19:	
7	Information source of answer to Question 6:	
	Forbes personal profile:	http://www.forbes.com/profile/larry-
		ellison/?list=forbes-400
	Bloomberg personal data sheet:	http://www.bloomberg.com/research/
		<pre>stocks/people/person.asp?personId=8</pre>
		7411&ticker=ORCL
	Wikipedia entry about the person:	https://en.wikipedia.org/?title=Larry
		<u>_Ellison</u>
	Wikipedia entry about the company or	https://hu.wikipedia.org/wiki/Oracle
	institution:	<u>_Corporation</u>
	Company website (including the history of the	http://www.oracle.com/us/corporate/
<u> </u>	company):	history/index.html
	Personal website:	
	Other information:	

Data	a sheet	
1.	Name:	Bill GATES
2.	Rank number in Forbes400	
	in 2014:	# 1
	in 2013:	# 1
	in 2012:	# 1
3.	Wealth, according to the Forbes list:	\$81 B
4.	Self-made score:	8
5.	Company, bank or other financial institution	
	related:	
	Sector (according to Forbes400):	Technology
	Company name:	Microsoft Corporation
6.	Source of wealth, according to the	Innovator
	classification described on pp. 14-19:	
7	Information source of answer to Question 6:	
	Forbes personal profile:	http://www.forbes.com/profile/bill-
		gates/?list=forbes-400
	Bloomberg personal data sheet:	http://www.bloomberg.com/research/
		<pre>stocks/people/person.asp?personId=1</pre>
		81600&ticker=MSFT
	Wikipedia entry about the person:	https://en.wikipedia.org/?title=Bill_
		Gates
	Wikipedia entry about the company or	
	institution:	https://en.wikipedia.org/?title=Micro
		soft
	Company website (including the history of the	https://www.microsoft.com/hun/new
	company):	s/cegprofil/microsoft-tortenete/
	Personal website:	http://www.gatesnotes.com/
	Other information:	http://www.bloomberg.com/billionai
		res/profile/bill-gates

Data	a sheet	
1.	Name:	Harold G. HAMM
2.	Rank number in Forbes400	
	in 2014:	#24
	in 2013:	#33
	in 2012:	#35
3.	Wealth, according to the Forbes list:	\$18,7 B
4.	Self-made score:	10
5.	Company, bank or other financial institution	
	related:	
	Sector (according to Forbes400):	n.d. <sup>2</sup>
	Company name:	Continental Resources, Inc.
6.	Source of wealth, according to the	Head of a giant corporation with a
	classification described on pp. 14-19:	large income
7	Information source of answer to Question 6:	
	Forbes personal profile:	http://www.forbes.com/profile/harold-
		hamm/?list=forbes-400
	Bloomberg personal data sheet:	http://www.bloomberg.com/research/s
		tocks/people/person.asp?personId=186
		<u>6477&amp;ticker=CLR</u>
	Wikipedia entry about the person:	https://en.wikipedia.org/wiki/Harold_
		<u>Hamm</u>
	Wikipedia entry about the company or	https://en.wikipedia.org/wiki/Continen
	institution:	tal_Resources
	Company website (including the history of the	http://www.contres.com/about/timelin
	company):	<u>e</u>
	Personal website:	
	Other information:	http://www.reuters.com/investigates/s
		pecial-report/revised-company-
		history-may-help-oil-baron-hamm-
		avoid-record-divorce-payout/

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ágazati listájában nem került besorolásra, egyébként az olaj- és gázipar

Data	a sheet	
1.	Name:	Abigail Pierrepont JOHNSON
2.	Rank number in Forbes400	
	in 2014:	#36
	in 2013:	#23
	in 2012:	#27
3.	Wealth, according to the Forbes list:	\$13,3 B
4.	Self-made score:	2
5.	Company, bank or other financial institution	
	related:	
	Sector (according to Forbes400):	Investment
	Company name:	Fidelity Investments
6.	Source of wealth, according to the	innovator, inheritor
	classification described on pp. 14-19:	
7	Information source of answer to Question 6:	
	Forbes personal profile:	http://www.forbes.com/profile/abigai
		<u>l-johnson/?list=forbes-400</u>
	Bloomberg personal data sheet:	http://www.bloomberg.com/research/
		<pre>stocks/private/person.asp?personId=</pre>
		<u>4932377&amp;privcapId=163894</u>
	Wikipedia entry about the person:	https://en.wikipedia.org/wiki/Abigail
		<u>_Johnson</u>
	Wikipedia entry about the company or	https://en.wikipedia.org/wiki/Fidelity
	institution:	<u>Investments</u>
	Company website (including the history of the	https://www.fidelity.com/
	company):	
	Personal website:	
	Other information:	http://www.forbes.com/forbes-
		400/#tab:overall_industry:Investmen
		<u>ts</u>

Data	a sheet	
1.	Name:	Edward C. JOHNSON, III.
2.	Rank number in Forbes400	
	in 2014:	#65
	in 2013:	#44 <sup>3</sup>
	in 2012:	#52
3.	Wealth, according to the Forbes list:	\$7,3 <sup>4</sup> B
4.	Self-made score:	5
5.	Company, bank or other financial institution	
	related:	
	Sector (according to Forbes400):	Investments
	Company name:	Fidelity Investments
6.	Source of wealth, according to the	innovator, inheritor
	classification described on pp. 14-19:	
7	Information source of answer to Question 6:	
	Forbes personal profile:	http://www.forbes.com/profile/edwar
		<u>d-johnson-iii/</u>
	Bloomberg personal data sheet:	http://www.bloomberg.com/research/
		<pre>stocks/private/person.asp?personId=</pre>
		<u>163902&amp;privcapId=22265442</u>
	Wikipedia entry about the person:	https://en.wikipedia.org/wiki/Edward
		_Johnson,_III
	Wikipedia entry about the company or	https://en.wikipedia.org/wiki/Fidelity
	institution:	<u>Investments</u>
	Company website (including the history of the	https://www.fidelity.com/
	company):	
	Personal website:	
	Other information:	http://www.forbes.com/forbes-
		400/#tab:overall_page:2_industry:In
		vestments

<sup>&</sup>lt;sup>3</sup> Nem szerepel 2014-ben a TOP50-ben <sup>4</sup> FORBES400 adat 2014-ben

Data	a sheet	
1.	Name:	Michael JORDAN
2.	Rank number in Forbes400	
	in 2014:	# <sup>5</sup>
	in 2013:	#
	in 2012:	#
3.	Wealth, according to the Forbes list:	\$1,0 B
4.	Self-made score:	n.d.
5.	Company, bank or other financial institution related:	
	Sector (according to Forbes400):	n.d.
	Company name:	n.d.
6.	Source of wealth, according to the	Star
	classification described on pp. 14-19:	
7	Information source of answer to Question 6:	
	Forbes personal profile:	http://www.forbes.com/profile/micha
		<u>el-jordan/</u>
	Bloomberg personal data sheet:	
	Wikipedia entry about the person:	https://en.wikipedia.org/wiki/Michae
		l_Jordan
	Wikipedia entry about the company or	
	institution:	
	Company website (including the history of the	
	company):	
	Personal website:	
	Other information:	

\_\_\_\_\_

<sup>&</sup>lt;sup>5</sup> No. 1741 on the FORBES list (but absent from the FORBES400 list)

Data	ı sheet	
1.	Name:	George LUCAS
2.	Rank number in Forbes400	
	in 2014:	#114
	in 2013:	#109
	in 2012:	#120
3.	Wealth, according to the Forbes list:	\$4,3 B
4.	Self-made score:	8
5.	Company, bank or other financial institution	
	related:	
	Sector (according to Forbes400):	Media
	Company name:	Lucasfilm Ltd. LLC
6.	Source of wealth, according to the	Star
	classification described on pp. 14-19:	
6G	Is the source of wealth known:	No.
7	Information source of answer to Question 6:	
	Forbes personal profile:	http://www.forbes.com/profile/george-
		lucas/?list=forbes-400
	Bloomberg personal data sheet:	http://www.bloomberg.com/research/s
		tocks/private/person.asp?personId=90
		<u>2494&amp;privcapId=7774176</u>
	Wikipedia entry about the person:	https://en.wikipedia.org/wiki/George_
		Lucas
	Wikipedia entry about the company or	https://en.wikipedia.org/wiki/Lucasfil
	institution:	<u>m</u>
	Company website (including the history of the	http://lucasfilm.com/our-story
	company):	
	Personal website:	
	Other information:	http://www.forbes.com/forbes-
		400/#tab:overall_page:2_industry:Med
		ia

Data	a sheet	
1.	Name:	Larry PAGE
2.	Rank number in Forbes400	
	in 2014:	#13
	in 2013:	#13
	in 2012:	#13
3.	Wealth, according to the Forbes list:	31,5 B \$
4.	Self-made score:	8
5.	Company, bank or other financial institution	
	related:	
	Sector (according to Forbes400):	Technology
	Company name:	Google Inc.
6.	Source of wealth, according to the	Innovator
	classification described on pp. 14-19:	
7	Information source of answer to Question 6:	
	Forbes personal profile:	http://www.forbes.com/profile/larry-
		page/?list=forbes-400
	Bloomberg personal data sheet:	http://www.bloomberg.com/research/s
		tocks/people/person.asp?personId=534
		<u>594&amp;ticker=GOOG</u>
	Wikipedia entry about the person:	https://en.wikipedia.org/wiki/Larry_Pa
		ge
	Wikipedia entry about the company or	
L	institution:	https://en.wikipedia.org/wiki/Google
	Company website (including the history of the	http://www.google.hu/about/company/
	company):	history/
L	Personal website:	
	Other information:	http://www.forbes.com/forbes-
		400/#tab:overall_industry:Technology

Data	asheet	
1.	Name:	Thomas P. PETERFFY
2.	Rank number in Forbes400	
	in 2014:	#50
	in 2013:	#65
	in 2012:	#77
3.	Wealth, according to the Forbes list:	\$9,1 B
4.	Self-made score:	10
5.	Company, bank or other financial institution	
	related:	
	Sector (according to Forbes400):	Investments
	Company name:	Interactive Brokers Group
6.	Source of wealth, according to the	Innovator and outstanding
	classification described on pp. 14-19:	personality in the financial sector
7	Information source of answer to Question 6:	
	Forbes personal profile:	http://www.forbes.com/profile/thoma
		s-peterffy/?list=forbes-400
	Bloomberg personal data sheet:	http://www.bloomberg.com/research/
		<pre>stocks/people/person.asp?personId=3</pre>
		0176335&ticker=IBKR
	Wikipedia entry about the person:	https://en.wikipedia.org/wiki/Thoma
		<u>s_Peterffy</u>
	Wikipedia entry about the company or	https://en.wikipedia.org/wiki/Interact
	institution:	ive_Brokers_Group
	Company website (including the history of the	https://www.interactivebrokers.com/
	company):	en/?f=%2Fen%2Fgeneral%2Fabout
		<u>%2Fabout.php</u>
	Personal website:	
	Other information:	http://www.forbes.com/forbes-
		400/#tab:overall_page:2_industry:In
		vestments

Dat	a sheet	
1.	Name:	George SOROS
2.	Rank number in Forbes400	
	in 2014:	#17
	in 2013:	#19
	in 2012:	#15
3.	Wealth, according to the Forbes list:	24 B \$
4.	Self-made score:	10
5.	Company, bank or other financial institution related:	
	Sector (according to Forbes400):	Investment
	Company name:	Soros Fund Management
6.	Source of wealth, according to the	Outstanding personality in the
	classification described on pp. 14-19:	financial sector
	Forbes personal profile:	http://www.forbes.com/profile/george-
		<u>soros/</u>
	Bloomberg personal data sheet:	http://www.bloomberg.com/research/s
		tocks/private/person.asp?personId=16
		42886&privcapId=4245068&previous
		CapId=6659326&previousTitle=Intern
		ational%20Crisis%20Group%20%28T
		<u>he%29</u>
	Wikipedia entry about the person:	https://en.wikipedia.org/wiki/George_
		Soros
	Wikipedia entry about the company or	
	institution:	https://en.wikipedia.org/wiki/Soros_F
		und_Management
	Company website (including the history of the company):	
	Personal website:	http://www.georgesoros.com/
	Other information:	http://www.forbes.com/forbes-
		400/#tab:overall_industry:Investments

Data	a sheet	
1.	Name:	Steven SPIELBERG
2.	Rank number in Forbes400	
	in 2014:	#151
	in 2013:	#151
	in 2012:	#125
3.	Wealth, according to the Forbes list:	\$3,6 B
4.	Self-made score:	8
5.	Company, bank or other financial institution	
	related:	
	Sector (according to Forbes400):	Media
	Company name:	DreamWorks Studios
6.	Source of wealth, according to the	Star
	classification described on pp. 14-19:	
7	Information source of answer to Question 6:	
	Forbes personal profile:	http://www.forbes.com/profile/steven-
		spielberg/
	Bloomberg personal data sheet:	http://www.bloomberg.com/research/s
		<pre>tocks/private/person.asp?personId=16</pre>
		2749&privcapId=6461746&previousC
		apId=6689794&previousTitle=Tri-
		Artisan%20Capital%20Partners,%20L
		LC
	Wikipedia entry about the person:	https://en.wikipedia.org/wiki/Steven_S
		pielberg
	Wikipedia entry about the company or	https://en.wikipedia.org/wiki/DreamW
	institution:	<u>orks</u>
	Company website (including the history of the	http://www.dreamworksstudios.com/a
	company):	bout/history
	Personal website:	
	Other information:	http://www.forbes.com/forbes-
		400/#tab:overall_page:2_industry:Med
		ia

Data	Data sheet		
1.	Name:	Oprah WINFREY	
2.	Rank number in Forbes400		
	in 2014:	#190	
	in 2013:	#184	
	in 2012:	#145	
3.	Wealth, according to the Forbes list:	\$3,0 B	
4.	Self-made score:	10	
5.	Company, bank or other financial institution		
	related:		
	Sector (according to Forbes400):	Media	
	Company name:	HARPO Entertainment Group	
6.	Source of wealth, according to the	Star	
	classification described on pp. 14-19:		
7	Information source of answer to Question 6:		
	Forbes personal profile:	http://www.forbes.com/profile/oprah-	
		winfrey/	
	Bloomberg personal data sheet:	http://www.bloomberg.com/research/sto	
		cks/private/person.asp?personId=16424	
		<u>2&amp;privcapId=164235</u>	
	Wikipedia entry about the person:	https://en.wikipedia.org/wiki/Oprah_Wi	
		nfrey	
	Wikipedia entry about the company or	https://en.wikipedia.org/wiki/Harpo_Pro	
	institution:	ductions	
	Company website (including the history of the		
	company):		
	Personal website:		
	Other information:	http://www.imdb.com/company/co0093	
		<u>748/</u>	

Data	asheet	
1.	Name:	Mark ZUCKERBERG
2.	Rank number in Forbes400	
	in 2014:	#11
	in 2013:	#20
	in 2012:	#36
3.	Wealth, according to the Forbes list:	34 B \$
4.	Self-made score:	8
5.	Company, bank or other financial institution	
	related:	
	Sector (according to Forbes400):	Technology
	Company name:	Facebook Inc.
6.	Source of wealth, according to the	Innovator
	classification described on pp. 14-19:	
7	Information source of answer to Question 6:	
	Forbes personal profile:	http://www.forbes.com/profile/mark-
		<u>zuckerberg/</u>
	Bloomberg personal data sheet:	http://www.bloomberg.com/research/s
		<pre>tocks/people/person.asp?personId=207</pre>
		<u>65910&amp;ticker=FB</u>
	Wikipedia entry about the person:	https://en.wikipedia.org/wiki/Mark_Zu
		ckerberg
	Wikipedia entry about the company or	
	institution:	https://en.wikipedia.org/?title=Facebo
		<u>ok</u>
	Company website (including the history of the	https://en.wikipedia.org/wiki/History_
	company):	of_Facebook
	Personal website:	http://zuckerbergfiles.org/
	Other information:	

Table 4 was compiled by Ádám Kerényi.

#### Table 5.

#### An explanation of the self-made score

The self-made score was first published in 1982 in the Forbes400 list presenting the wealthiest 400 Americans. Since then the lists have continuously appeared. In 2014 first, the editors of Forbes decided to supplement the billionaires' presentation with a new indicator illustrating on a 1-10 scale how far the billionaire started accumulating wealth at the beginning of his/her career. Those having the highest value (10) grew up in a modest environment, and managed to overcome serious difficulties, "rags to riches." Those having the lowest value (1) were born with the silver spoon in their mouth. Table 5 contains methodological explanations and also examples, Figures 1 and 2 show the distribution of the top billionaires in 2014.

Self- Made Score	Methodological explanation	Example	Top 50 (in 2014 and 2013)
1	inherited the wealth, did not work to increase it	Laurene Powell Jobs	Christy Walton, Alice Walton and Laurene Powell Jobs
2	inherited the wealth, served a role in managing it	John Mars	Anne Cox Chambers, John Mars, Jacqueline Mars, Forrest Mars Jr and Jim Walton
3	inherited the wealth, contributed marginally to increase it	Abigail Johnson	Abigail Johnson
4	inherited the wealth, contributed significantly to increase it	Robson Walton	Robson Walton
5	inherited a small or mid-sized wealth, increased it into a 10-digit fortune	Charles Koch	Charles Koch, David Koch, Edward III Johnson, Charles Butt, Samuel Newhouse Jr, and George Kaiser
6	did not establish the firm, but an employed asset manager did	Steve Ballmer	Eric Schmidt and Steve Ballmer
7	Self-made person, who received considerable support from his/her parents	Rupert Murdoch	Philip Anschutz. Rupert Murdoch and Ronald Perelman
8	Self-made person, who comes from the middle or upper-middle class	Bill Gates	Bill Gates. Warren Buffett. Michael Bloomberg. Jeff Bezos. Mark Zuckerberg, Larry Page, Phil Knight, Charles Ergen, Michael Dell, Paul Allen, Ray Dalio, Donald Bren, James Simons, Jack Taylor, Stephen Schwarzman, Elon Musk, Richard Kinder, Andrew Beal, Steve Cohen, David Teppe and Pierre Omidyar
9	Self-made person, who comes from the working class, and made a fortune from almost nothing	Sergey Brin	Patrick Soon-Shiong, Larry Ellison, Len Blavatnik, John Paulson és Sergey Brin
10	Self-made person, who comes from the working class, made a fortune from almost nothing, and faced serious difficulties	George Soros	Thomas Peterffy, Harold Hamm, Carl Icahn, George Soros and Sheldon Adelson

Figure 1 Forbes400 distribution of the Self-Made score in the top 50 (2014)

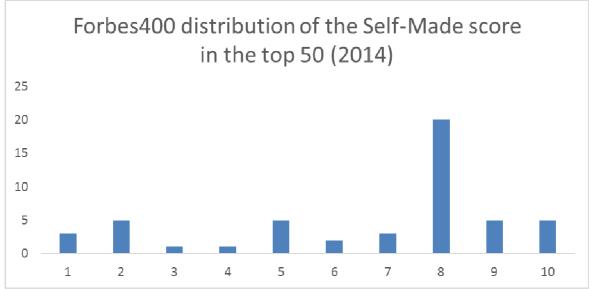
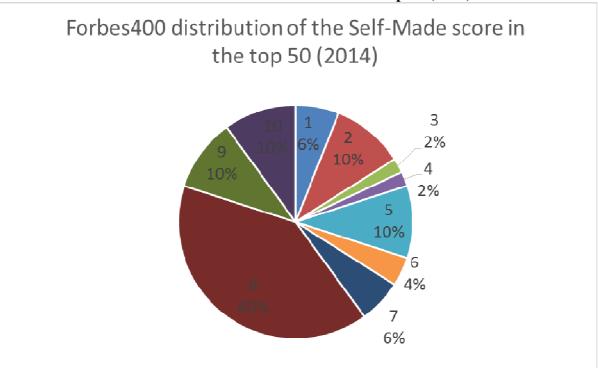


Figure 2 The distribution of the Self-Made score in the Forbes400 top 50 (2014)



#### Reference

Fontevecchia, Agustino. 2014. "The New Forbes400 Self-Made Score: From Silver Spooners To Bootstrappers" Forbes. <u>http://www.forbes.com/sites/afontevecchia/2014/10/02/the-new-forbes-400-self-made-score-from-silver-spooners-to-boostrappers/</u>