

W1_data

2024-07-14

Datos S&P 500

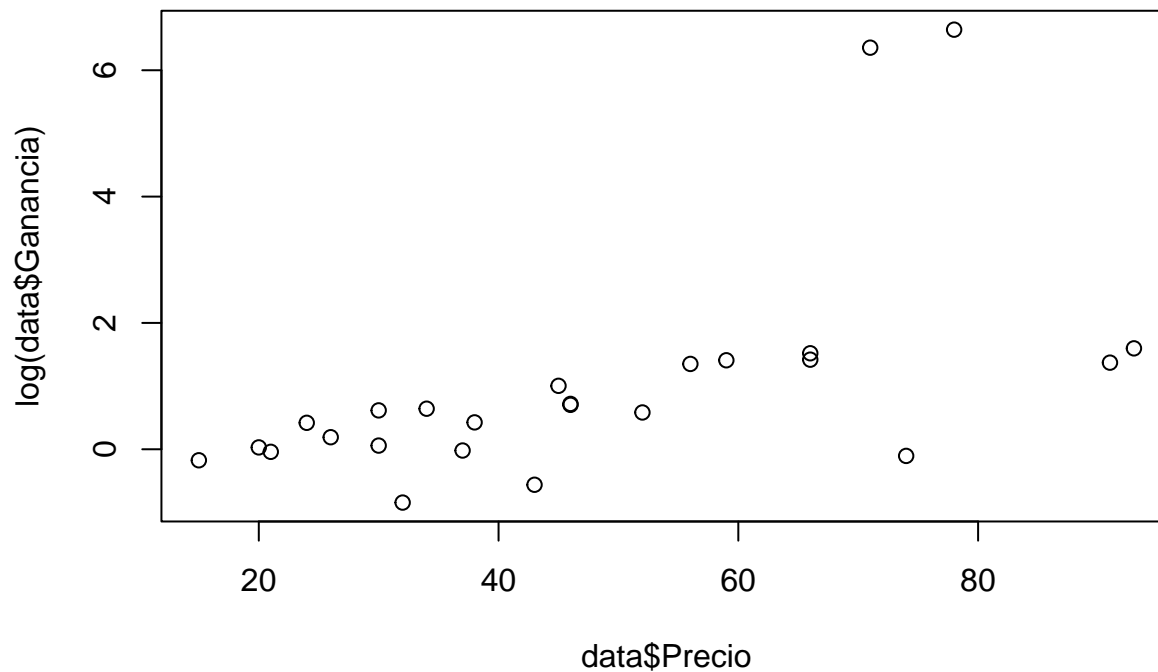
Este conjunto de datos contiene información sobre 25 empresas que forman parte del S&P 500. El S&P 500 consta de 500 empresas elegidas por Standard & Poor's. Estas empresas representan 76% de la capitalización de mercado de todas las acciones de Estados Unidos.

```
setwd('L:/99.Externado courses/01.course material/2024II/metodos/00.data') # Este es el directorio (carpeta)
# la función setwd le da la dirección de esta carpeta a Rstudio para que, cuando se lo indiquemos, busque los datos
# en algunos casos ese camino esta separado con backward slash (\), por lo que puede que necesiten cambiarlo

data <- read.csv('w1_BWS&P.csv') # Luego de haber definido la carpeta en donde se encuentra el conjunto de datos
# debemos cargar esa información a Rstudio. Para ello, vamos a asignar un objeto en el ambiente. En mi caso lo voy a llamar 'data'
# puede ponerle otro nombre (siempre y cuando no incluya espacios en blanco o caracteres extraños).

View(data)
```

Gráficos



Estrcutras de datos

Corte trasnversal

##	Empresa	Bolsa.de.valores	Denominacion.abreviada
## 1	Abbott Laboratories	N	ABT
## 2	Altria Group	N	MO
## 3	Apollo Group	NQ	APOL
## 4	Bank of New York	N	BK
## 5	Bristol-Myers Squibb	N	BMJ
## 6	Cincinnati Financial	NQ	CINF
## 7	Comcast	NQ	CMCSA
## 8	Deere	N	DE
## 9	eBay	NQ	EBAY
## 10	Federated Dept Stores	N	FD
## 11	Hasbro	N	HAS
## 12	IBM	N	IBM
## 13	International Paper	N	IP
## 14	Knight-Ridder	N	KRI
## 15	Manor Care	N	HCR
## 16	Medtronic	N	MDT
## 17	National Semiconductor	N	NSM

## 18	Novellus Systems	NQ	NVLS
## 19	Pitney Bowes	N	PBI
## 20	Pulte Homes	N	PHM
## 21	SBC Communications	N	SBC
## 22	St. Paul Travelers	N	STA
## 23	Teradyne	N	TER
## 24	UnitedHealth Group	N	UNH
## 25	Wells Fargo	N	WFC
##	Posicion.en.Business.Week	Precio	Ganancia
## 1	90	46	2.02
## 2	148	66	4.57
## 3	174	74	0.90
## 4	305	30	1.85
## 5	346	26	1.21
## 6	161	45	2.73
## 7	296	32	0.43
## 8	36	71	577.00
## 9	19	43	0.57
## 10	353	56	3.86
## 11	373	21	0.96
## 12	216	93	4.94
## 13	370	37	0.98
## 14	397	66	4.13
## 15	285	34	1.90
## 16	53	52	1.79
## 17	155	20	1.03
## 18	386	30	1.06
## 19	339	46	2.05
## 20	12	78	767.00
## 21	371	24	1.52
## 22	264	38	1.53
## 23	412	15	0.84
## 24	5	91	3.94
## 25	159	59	4.09

Serie de tiempo

##	Empresa	YEAR	Bolsa.de.valores	Denominacion.abreviada
## 1	Abbott Laboratories	1995	N	ABT
## 2	Abbott Laboratories	1996	N	ABT
## 3	Abbott Laboratories	1997	N	ABT
## 4	Abbott Laboratories	1998	N	ABT
## 5	Abbott Laboratories	1999	N	ABT
## 6	Abbott Laboratories	2000	N	ABT
## 7	Abbott Laboratories	2001	N	ABT
## 8	Abbott Laboratories	2002	N	ABT
## 9	Abbott Laboratories	2003	N	ABT
## 10	Abbott Laboratories	2004	N	ABT
## 11	Abbott Laboratories	2005	N	ABT
## 12	Abbott Laboratories	2006	N	ABT
## 13	Abbott Laboratories	2007	N	ABT
## 14	Abbott Laboratories	2008	N	ABT
## 15	Abbott Laboratories	2009	N	ABT

## 16	Abbott Laboratories	2010		N		ABT
## 17	Abbott Laboratories	2011		N		ABT
## 18	Abbott Laboratories	2012		N		ABT
## 19	Abbott Laboratories	2013		N		ABT
## 20	Abbott Laboratories	2014		N		ABT
## 21	Abbott Laboratories	2015		N		ABT
## 22	Abbott Laboratories	2016		N		ABT
## 23	Abbott Laboratories	2017		N		ABT
## 24	Abbott Laboratories	2018		N		ABT
## 25	Abbott Laboratories	2019		N		ABT
## 26	Abbott Laboratories	2020		N		ABT
## 27	Abbott Laboratories	2021		N		ABT
## 28	Abbott Laboratories	2022		N		ABT
## 29	Abbott Laboratories	2023		N		ABT
## 30	Abbott Laboratories	2024		N		ABT
##	Posicion.en.Business.Week	Precio	Ganancia	X		
## 1	90	46	2.02	NA		
## 2	78	55	4.00	NA		
## 3	98	23	4.00	NA		
## 4	92	48	1.00	NA		
## 5	82	28	3.00	NA		
## 6	91	57	3.00	NA		
## 7	51	39	1.00	NA		
## 8	56	58	3.00	NA		
## 9	65	56	4.00	NA		
## 10	39	52	3.00	NA		
## 11	66	26	1.00	NA		
## 12	24	50	2.00	NA		
## 13	46	27	2.00	NA		
## 14	47	42	4.00	NA		
## 15	62	49	4.00	NA		
## 16	12	29	4.00	NA		
## 17	71	28	3.00	NA		
## 18	51	21	3.00	NA		
## 19	20	57	2.00	NA		
## 20	55	57	4.00	NA		
## 21	83	42	3.00	NA		
## 22	59	60	1.00	NA		
## 23	39	26	1.00	NA		
## 24	35	26	1.00	NA		
## 25	52	31	2.00	NA		
## 26	27	49	2.00	NA		
## 27	74	44	1.00	NA		
## 28	84	24	4.00	NA		
## 29	51	52	4.00	NA		
## 30	32	56	1.00	NA		

Corte trasnversal agrupado

##	Empresa	Year	Bolsa.de.valores	Denominacion.abreviada
## 1	Abbott Laboratories	2010	N	ABT
## 2	Apollo Group	2010	NQ	APOL
## 3	Bristol-Myers Squibb	2010	N	BMJ

## 4	Cincinnati Financial	2010	NQ	CINF
## 5	Deere	2010	N	DE
## 6	eBay	2010	NQ	EBAY
## 7	Federated Dept Stores	2010	N	FD
## 8	Hasbro	2010	N	HAS
## 9	International Paper	2010	N	IP
## 10	Knight-Ridder	2010	N	KRI
## 11	Manor Care	2010	N	HCR
## 12	Medtronic	2010	N	MDT
## 13	Novellus Systems	2010	NQ	NVLS
## 14	Pitney Bowes	2010	N	PBI
## 15	Pulte Homes	2010	N	PHM
## 16	SBC Communications	2010	N	SBC
## 17	St. Paul Travelers	2010	N	STA
## 18	Teradyne	2010	N	TER
## 19	UnitedHealth Group	2010	N	UNH
## 20	Wells Fargo	2010	N	WFC
## 21	Abbott Laboratories	2011	N	ABT
## 22	Apollo Group	2011	NQ	APOL
## 23	Bank of New York	2011	N	BK
## 24	Bristol-Myers Squibb	2011	N	BMJ
## 25	Comcast	2011	NQ	CMCSA
## 26	Deere	2011	N	DE
## 27	eBay	2011	NQ	EBAY
## 28	Federated Dept Stores	2011	N	FD
## 29	Knight-Ridder	2011	N	KRI
## 30	Manor Care	2011	N	HCR
## 31	Medtronic	2011	N	MDT
## 32	National Semiconductor	2011	N	NSM
## 33	Novellus Systems	2011	NQ	NVLS
## 34	Pitney Bowes	2011	N	PBI
## 35	Pulte Homes	2011	N	PHM
## 36	SBC Communications	2011	N	SBC
## 37	St. Paul Travelers	2011	N	STA
## 38	Teradyne	2011	N	TER
## 39	UnitedHealth Group	2011	N	UNH
## 40	Wells Fargo	2011	N	WFC
## 41	Abbott Laboratories	2012	N	ABT
## 42	Altria Group	2012	N	MO
## 43	Bank of New York	2012	N	BK
## 44	Bristol-Myers Squibb	2012	N	BMJ
## 45	Comcast	2012	NQ	CMCSA
## 46	Deere	2012	N	DE
## 47	eBay	2012	NQ	EBAY
## 48	Federated Dept Stores	2012	N	FD
## 49	Hasbro	2012	N	HAS
## 50	IBM	2012	N	IBM
## 51	International Paper	2012	N	IP
## 52	Manor Care	2012	N	HCR
## 53	Medtronic	2012	N	MDT
## 54	National Semiconductor	2012	N	NSM
## 55	Novellus Systems	2012	NQ	NVLS
## 56	Pitney Bowes	2012	N	PBI
## 57	Pulte Homes	2012	N	PHM

## 58	SBC Communications 2012	N	SBC
## 59	UnitedHealth Group 2012	N	UNH
## 60	Wells Fargo 2012	N	WFC
##	Posicion.en.Business.Week	Precio	Ganancia
## 1	90	46	2.02
## 2	174	74	0.90
## 3	346	26	1.21
## 4	161	45	2.73
## 5	36	71	577.00
## 6	19	43	0.57
## 7	353	56	3.86
## 8	373	21	0.96
## 9	370	37	0.98
## 10	397	66	4.13
## 11	285	34	1.90
## 12	53	52	1.79
## 13	386	30	1.06
## 14	339	46	2.05
## 15	12	78	767.00
## 16	371	24	1.52
## 17	264	38	1.53
## 18	412	15	0.84
## 19	5	91	3.94
## 20	159	59	4.09
## 21	90	46	2.02
## 22	174	74	0.90
## 23	305	30	1.85
## 24	346	26	1.21
## 25	296	32	0.43
## 26	36	71	577.00
## 27	19	43	0.57
## 28	353	56	3.86
## 29	397	66	4.13
## 30	285	34	1.90
## 31	53	52	1.79
## 32	155	20	1.03
## 33	386	30	1.06
## 34	339	46	2.05
## 35	12	78	767.00
## 36	371	24	1.52
## 37	264	38	1.53
## 38	412	15	0.84
## 39	5	91	3.94
## 40	159	59	4.09
## 41	90	46	2.02
## 42	148	66	4.57
## 43	305	30	1.85
## 44	346	26	1.21
## 45	296	32	0.43
## 46	36	71	577.00
## 47	19	43	0.57
## 48	353	56	3.86
## 49	373	21	0.96
## 50	216	93	4.94

## 51	370	37	0.98
## 52	285	34	1.90
## 53	53	52	1.79
## 54	155	20	1.03
## 55	386	30	1.06
## 56	339	46	2.05
## 57	12	78	767.00
## 58	371	24	1.52
## 59	5	91	3.94
## 60	159	59	4.09

Panel o olongitudinal

##	Empresa	YEAR	Bolsa.de.valores	Denominacion.abreviada
## 1	Abbott Laboratories	1995	N	ABT
## 2	Abbott Laboratories	1996	N	ABT
## 3	Abbott Laboratories	1997	N	ABT
## 4	Abbott Laboratories	1998	N	ABT
## 5	Abbott Laboratories	1999	N	ABT
## 6	Abbott Laboratories	2000	N	ABT
## 7	Abbott Laboratories	2001	N	ABT
## 8	Abbott Laboratories	2002	N	ABT
## 9	Abbott Laboratories	2003	N	ABT
## 10	Abbott Laboratories	2004	N	ABT
## 11	Abbott Laboratories	2005	N	ABT
## 12	Abbott Laboratories	2006	N	ABT
## 13	Abbott Laboratories	2007	N	ABT
## 14	Abbott Laboratories	2008	N	ABT
## 15	Abbott Laboratories	2009	N	ABT
## 16	Abbott Laboratories	2010	N	ABT
## 17	Abbott Laboratories	2011	N	ABT
## 18	Abbott Laboratories	2012	N	ABT
## 19	Abbott Laboratories	2013	N	ABT
## 20	Abbott Laboratories	2014	N	ABT
## 21	Abbott Laboratories	2015	N	ABT
## 22	Abbott Laboratories	2016	N	ABT
## 23	Abbott Laboratories	2017	N	ABT
## 24	Abbott Laboratories	2018	N	ABT
## 25	Abbott Laboratories	2019	N	ABT
## 26	Abbott Laboratories	2020	N	ABT
## 27	Abbott Laboratories	2021	N	ABT
## 28	Abbott Laboratories	2022	N	ABT
## 29	Abbott Laboratories	2023	N	ABT
## 30	Abbott Laboratories	2024	N	ABT
## 31	Altria Group	1995	N	MO
## 32	Altria Group	1996	N	MO
## 33	Altria Group	1997	N	MO
## 34	Altria Group	1998	N	MO
## 35	Altria Group	1999	N	MO
## 36	Altria Group	2000	N	MO
## 37	Altria Group	2001	N	MO
## 38	Altria Group	2002	N	MO
## 39	Altria Group	2003	N	MO

## 40	Altria Group	2004	N	MO
## 41	Altria Group	2005	N	MO
## 42	Altria Group	2006	N	MO
## 43	Altria Group	2007	N	MO
## 44	Altria Group	2008	N	MO
## 45	Altria Group	2009	N	MO
## 46	Altria Group	2010	N	MO
## 47	Altria Group	2011	N	MO
## 48	Altria Group	2012	N	MO
## 49	Altria Group	2013	N	MO
## 50	Altria Group	2014	N	MO
## 51	Altria Group	2015	N	MO
## 52	Altria Group	2016	N	MO
## 53	Altria Group	2017	N	MO
## 54	Altria Group	2018	N	MO
## 55	Altria Group	2019	N	MO
## 56	Altria Group	2020	N	MO
## 57	Altria Group	2021	N	MO
## 58	Altria Group	2022	N	MO
## 59	Altria Group	2023	N	MO
## 60	Altria Group	2024	N	MO
## 61	Apollo Group	1995	NQ	APOL
## 62	Apollo Group	1996	NQ	APOL
## 63	Apollo Group	1997	NQ	APOL
## 64	Apollo Group	1998	NQ	APOL
## 65	Apollo Group	1999	NQ	APOL
## 66	Apollo Group	2000	NQ	APOL
## 67	Apollo Group	2001	NQ	APOL
## 68	Apollo Group	2002	NQ	APOL
## 69	Apollo Group	2003	NQ	APOL
## 70	Apollo Group	2004	NQ	APOL
## 71	Apollo Group	2005	NQ	APOL
## 72	Apollo Group	2006	NQ	APOL
## 73	Apollo Group	2007	NQ	APOL
## 74	Apollo Group	2008	NQ	APOL
## 75	Apollo Group	2009	NQ	APOL
## 76	Apollo Group	2010	NQ	APOL
## 77	Apollo Group	2011	NQ	APOL
## 78	Apollo Group	2012	NQ	APOL
## 79	Apollo Group	2013	NQ	APOL
## 80	Apollo Group	2014	NQ	APOL
## 81	Apollo Group	2015	NQ	APOL
## 82	Apollo Group	2016	NQ	APOL
## 83	Apollo Group	2017	NQ	APOL
## 84	Apollo Group	2018	NQ	APOL
## 85	Apollo Group	2019	NQ	APOL
## 86	Apollo Group	2020	NQ	APOL
## 87	Apollo Group	2021	NQ	APOL
## 88	Apollo Group	2022	NQ	APOL
## 89	Apollo Group	2023	NQ	APOL
## 90	Apollo Group	2024	NQ	APOL
## 91	Bristol-Myers Squibb	1995	NQ	BMY
## 92	Bristol-Myers Squibb	1996	NQ	BMY
## 93	Bristol-Myers Squibb	1997	NQ	BMY

## 94	Bristol-Myers Squibb	1998	NQ	BMY
## 95	Bristol-Myers Squibb	1999	NQ	BMY
## 96	Bristol-Myers Squibb	2000	NQ	BMY
## 97	Bristol-Myers Squibb	2001	NQ	BMY
## 98	Bristol-Myers Squibb	2002	NQ	BMY
## 99	Bristol-Myers Squibb	2003	NQ	BMY
## 100	Bristol-Myers Squibb	2004	NQ	BMY
## 101	Bristol-Myers Squibb	2005	NQ	BMY
## 102	Bristol-Myers Squibb	2006	NQ	BMY
## 103	Bristol-Myers Squibb	2007	NQ	BMY
## 104	Bristol-Myers Squibb	2008	NQ	BMY
## 105	Bristol-Myers Squibb	2009	NQ	BMY
## 106	Bristol-Myers Squibb	2010	NQ	BMY
## 107	Bristol-Myers Squibb	2011	NQ	BMY
## 108	Bristol-Myers Squibb	2012	NQ	BMY
## 109	Bristol-Myers Squibb	2013	NQ	BMY
## 110	Bristol-Myers Squibb	2014	NQ	BMY
## 111	Bristol-Myers Squibb	2015	NQ	BMY
## 112	Bristol-Myers Squibb	2016	NQ	BMY
## 113	Bristol-Myers Squibb	2017	NQ	BMY
## 114	Bristol-Myers Squibb	2018	NQ	BMY
## 115	Bristol-Myers Squibb	2019	NQ	BMY
## 116	Bristol-Myers Squibb	2020	NQ	BMY
## 117	Bristol-Myers Squibb	2021	NQ	BMY
## 118	Bristol-Myers Squibb	2022	NQ	BMY
## 119	Bristol-Myers Squibb	2023	NQ	BMY
## 120	Bristol-Myers Squibb	2024	NQ	BMY
##	Posicion.en.Business.Week	Precio	Ganancia	
## 1	90	46	2.02	
## 2	78	55	4.00	
## 3	98	23	4.00	
## 4	92	48	1.00	
## 5	82	28	3.00	
## 6	91	57	3.00	
## 7	51	39	1.00	
## 8	56	58	3.00	
## 9	65	56	4.00	
## 10	39	52	3.00	
## 11	66	26	1.00	
## 12	24	50	2.00	
## 13	46	27	2.00	
## 14	47	42	4.00	
## 15	62	49	4.00	
## 16	12	29	4.00	
## 17	71	28	3.00	
## 18	51	21	3.00	
## 19	20	57	2.00	
## 20	55	57	4.00	
## 21	83	42	3.00	
## 22	59	60	1.00	
## 23	39	26	1.00	
## 24	35	26	1.00	
## 25	52	31	2.00	
## 26	27	49	2.00	

## 27	74	44	1.00
## 28	84	24	4.00
## 29	51	52	4.00
## 30	32	56	1.00
## 31	148	66	4.57
## 32	210	69	9.57
## 33	154	72	11.57
## 34	151	71	10.57
## 35	149	68	11.57
## 36	150	67	9.57
## 37	152	69	9.57
## 38	149	70	6.57
## 39	152	71	13.57
## 40	153	67	8.57
## 41	154	69	9.57
## 42	149	70	10.57
## 43	154	71	8.57
## 44	154	70	6.57
## 45	149	70	8.57
## 46	149	70	12.57
## 47	149	70	8.57
## 48	152	67	11.57
## 49	151	68	5.57
## 50	149	70	10.57
## 51	150	69	8.57
## 52	152	72	13.57
## 53	151	68	11.57
## 54	152	72	8.57
## 55	149	69	9.57
## 56	153	67	6.57
## 57	150	70	10.57
## 58	150	72	7.57
## 59	149	69	7.57
## 60	152	71	12.57
## 61	174	74	0.90
## 62	250	75	1.90
## 63	241	77	9.90
## 64	262	76	9.90
## 65	253	76	3.90
## 66	245	78	7.90
## 67	259	78	2.90
## 68	249	78	2.90
## 69	234	79	1.90
## 70	237	78	6.90
## 71	242	79	5.90
## 72	257	79	4.90
## 73	237	79	7.90
## 74	264	77	3.90
## 75	238	76	7.90
## 76	263	76	3.90
## 77	264	76	9.90
## 78	258	75	9.90
## 79	242	79	5.90
## 80	234	76	4.90

## 81	262	75	4.90
## 82	258	76	9.90
## 83	243	77	4.90
## 84	258	77	5.90
## 85	264	76	9.90
## 86	242	78	2.90
## 87	245	78	6.90
## 88	262	79	3.90
## 89	245	77	6.90
## 90	243	77	4.90
## 91	346	26	1.21
## 92	420	29	5.21
## 93	412	29	8.21
## 94	421	28	8.21
## 95	410	27	5.21
## 96	424	27	8.21
## 97	418	27	2.21
## 98	427	28	10.21
## 99	425	27	2.21
## 100	427	30	4.21
## 101	428	29	9.21
## 102	422	29	4.21
## 103	425	29	4.21
## 104	412	29	7.21
## 105	436	30	4.21
## 106	432	29	5.21
## 107	435	28	8.21
## 108	409	28	6.21
## 109	416	28	6.21
## 110	423	30	10.21
## 111	425	29	5.21
## 112	417	31	8.21
## 113	414	28	4.21
## 114	433	32	9.21
## 115	428	32	5.21
## 116	411	32	5.21
## 117	415	29	5.21
## 118	416	31	5.21
## 119	436	30	9.21
## 120	430	30	6.21