

1. APPENDIX

Excel picture 1. Income Statement of Netflix

P&L source

	31Dec2015	31Dec2016	31Dec2017
USD in millions except per share data	Act	Act	Act
revenues	6 780	8 831	11 693
cost of revenues	(4 591)	(6 030)	(7 660)
gross profit	2 188	2 801	4 033
gross margin	32,3%	31,7%	34,5%
marketing	(824)	(991)	(1 278)
technology and development	(651)	(852)	(1 053)
general and administrative	(407)	(578)	(864)
operating expenses	(1 882)	(2 421)	(3 194)
operating income	306	380	839
interest expense	(133)	(150)	(238)
interest and other income (expense)	(31)	31	(115)
income before income taxes	141,9	260,5	485,3
provision for (benefit from) income taxes	(19)	(74)	74
net income	123	187	559
earnings per share:			
basic	0,29	0,44	1,29
diluted	0,28	0,43	1,25
weighted-average common shares outstanding:			
basic	426	429	432
diluted	436	439	447

Excel picture 2. Balance Sheet of Netflix

BS source

	31Dec15	31Dec16	31Dec17
USD in millions, exc. Share & per share	Act	Act	Act
Assets			
current assets:			
cash and cash equivalents	1 809	1 468	2 823
short-term investments	501	266	-
current content assets, net	2 906	3 726	4 311
other current assets	215	260	536
total current assets	5 432	5 720	7 670
non-current content assets, net	4 313	7 275	10 371
property and equipment, net	173	250	319
other non-current assets	285	341	652
total non-current assets	4 771,0	7 866,3	11 342,8
total assets	10 203	13 587	19 013
Liabilities and Stockholders' Equity			
current liabilities:			
current content liabilities	2 789	3 633	4 173
accounts payable	253	313	360
accrued expenses	140	198	315
deferred revenue	346,7	443,5	618,6
total current liabilities	3 529,6	4 586,7	5 466,3
non-current content liabilities	2 026,4	2 894,7	3 329,8
long-term debt	2 371,4	3 364,3	6 499,4
other non-current liabilities	52,1	61,2	135,2
total non-current liabilities	4 449,8	6 320,2	9 964,5
total liabilities	7 979,4	10 906,8	15 430,8
commitments and contingencies (note 5)			
stockholders' equity:			
preferred stock, \$0,001 par value; 10mn shares	-	-	-
common stock, \$0,001 par value; 4,990mn shares	1 324,8	1 599,8	1 871,4
accumulated other comprehensive loss	(43,3)	(48,6)	(20,6)
retained earnings	941,9	1 128,6	1 731,1
total stockholders' equity	2 223,4	2 679,8	3 582,0
total liabilities and stockholders' equity	10 202,9	13 586,6	19 012,7
BS check	-	-	-

Excel picture 3. Cash Flow Statement of Netflix, cash flows from operations and investing.

CF source

USD in millions	31Dec15 Act	31Dec16 Act	31Dec17 Act
cash flows from operating activities:			
net income	123	187	559
adj. to reconcile net income to net cash used in operating activities:			
additions to streaming content assets	-5 772	-8 653	-9 806
change in streaming content liabilities	1 162	1 773	900
amortization of streaming content assets	3 405	4 788	6 198
amortization of DVD content assets	79	79	61
D&A of property, equipment and intangibles	62	58	72
stock-based compensation expense	125	174	182
excess tax benefits from stock-based compensation	-80	-65	0
other non-cash items	32	41	57
foreign currency remeasurement loss on long-term debt	0	0	141
deferred taxes	-59	-47	-209
changes in operating assets and liabilities:			
other current assets	19	47	-234
accounts payable	52	32	75
accrued expenses	49	69	114
deferred revenue	72	97	178
other non-current assets and liabilities	-18	-52	-74
net cash used in operating activities	-749	-1 474	-1 786
cash flows from investing activities:			
acquisitions of DVD content assets	-78	-77	-54
purchase of property and equipment	-91	-108	-173
other assets	-2	-1	-7
purchase of short-term investments	-372	-187	-75
proceeds from sale of short-term investments	259	282	320
proceeds from maturities of short-term investments	105	140	23
net cash provided by (used in) investing activities	-179	50	34

Excel picture 4. Cash Flow Statement of Netflix, cash flows from financing activities

cash flows from financing activities:			
proceeds from issuance of debt	1 500	1 000	3 021
issuance costs	-18	-11	-32
proceeds from issuance of common stock	78	37	88
excess tax benefits from stock-based compensation	80	65	0
other financing activities	-1	0	0
net cash provided by financing activities	1 640	1 092	3 077
effect of exchange rate changes on cash and cash equivalents	-16	-9	30
net increase (decrease) in cash and cash equivalents	696	-342	1 355
cash and cash equivalents, beginning of year	1 114	1 809	1 468
cash and cash equivalents, end of year	1 809	1 468	2 823
supplemental disclosure:			
income taxes paid	28	27	114
interest paid	112	139	213
increase (decrease) in investing activities included in liability	-5	28	-33

Excel picture 5. Main income statement line item projections of Netflix

P&L assumptions

				Case scenarios:				
				Case 1: Optimistic case				
				Case 2: Base case				
				Case 3: Worst case				
Selected case				1				
	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
\$ in millions	Actual	Actual	Actual	Forecast	Forecast	Forecast	Forecast	Forecast
Revenues	6 780	8 831	11 693	15 551	20 839	28 132	37 697	50 137
y-o-y growth %	-	30,3%	32,4%	33%	34%	35%	34%	33%
Case 1				33%	34%	35%	34%	33%
Case 2								
Case 3								
Other revenues	-	-	-	-	-	-	-	-
y-o-y growth %	0%	0%	0%	0%	0%	0%	0%	0%
Case 1				0%	0%	0%	0%	0%
Case 2								
Case 3								
Cost of goods sold	(1 328)	(1 378)	(1 594)	(1 711)	(1 875)	(2 251)	(2 450)	(2 758)
% of revenues	-20%	-16%	-14%	-11%	-9%	-8%	-7%	-6%
Case 1				-11%	-9%	-8%	-7%	-6%
Case 2								
Case 3								
Operating expenses	(1 882)	(2 421)	(3 194)	(4 199)	(5 626)	(7 596)	(10 178)	(13 537)
% of revenues	-28%	-27%	-27%	-27%	-27%	-27%	-27%	-27%
Case 1				-27,0%	-27,0%	-27,0%	-27,0%	-27,0%
Case 2								
Case 3								
D&A	(3 547)	(4 925)	(6 330)	(8 398)	(11 253)	(15 191)	(20 357)	(27 074)
% of revenues	-52%	-56%	-54%	-54%	-54%	-54%	-54%	-54%
Case 1				-54%	-54%	-54%	-54%	-54%
Case 2								
Case 3								
Interest expenses	(133)	(150)	(238)	(262)	(288)	(317)	(349)	(384)
y-o-y growth %	-	13,1%	58,7%	10%	10%	10%	10%	10%
Case 1				10%	10%	10%	10%	10%
Case 2								
Case 3								
Extraordinary items	(31)	31	(115)	-	-	-	-	-
% of revenues	0%	0%	-1%	0%	0%	0%	0%	0%
Case 1				0%	0%	0%	0%	0%
Case 2								
Case 3								
Taxes	(19)	(74)	74					
% of EBT	14%	593%	33%	-21%	-21%	-21%	-21%	-21%
Case 1				-21%	-21%	-21%	-21%	-21%
Case 2								
Case 3								

Excel picture 6. Main balance sheet line item projections of Netflix

BS assumptions

\$ in millions	FY15 Actual	FY16 Actual	FY17 Actual	FY18 Forecast	FY19 Forecast	FY20 Forecast	FY21 Forecast	FY22 Forecast
Trade receivable	-	-	-	-	-	-	-	-
Days receivables (DSO)	-	-	-	-	-	-	-	-
Inventory	-	-	-	-	-	-	-	-
Days inventory (DIO)	-	-	-	-	-	-	-	-
Trade payable	253	313	360	367	402	483	525	591
Days payables (DPO)	68,7	81,7	81,2	77,2	77,2	77,2	77,2	77,2
PP&E	4 486	7 525	10 690	12 587	16 867	22 770	30 512	40 580
as a % of revenues	66,2%	85,2%	91,4%	80,9%	80,9%	80,9%	80,9%	80,9%
Other assets	500	602	1 189	1 262	1 692	2 284	3 060	4 070
as a % of revenues	7,4%	6,8%	10,2%	8,1%	8,1%	8,1%	8,1%	8,1%
Other liabilities	4 867	6 589	7 638	10 976	14 707	19 855	26 606	35 385
as a % of revenues	71,8%	74,6%	65,3%	70,6%	70,6%	70,6%	70,6%	70,6%

Excel picture 7. Income Statement output model, historical and forecasted

P&L

	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
\$ in millions	Actual	Actual	Actual	Forecast	Forecast	Forecast	Forecast	Forecast
Revenues	6 780	8 831	11 693	15 551	20 839	28 132	37 697	50 137
Other revenues	-	-	-	-	-	-	-	-
Total Revenues	6 780	8 831	11 693	15 551	20 839	28 132	37 697	50 137
Cost of goods sold	(1 328)	(1 378)	(1 594)	(1 711)	(1 875)	(2 251)	(2 450)	(2 758)
Gross Margin	5 452	7 453	10 098	13 841	18 963	25 882	35 247	47 380
Operating expenses	(1 882)	(2 421)	(3 194)	(4 199)	(5 626)	(7 596)	(10 178)	(13 537)
EBITDA	3 570	5 032	6 904	9 642	13 337	18 286	25 069	33 843
D&A	(3 547)	(4 925)	(6 330)	(8 398)	(11 253)	(15 191)	(20 357)	(27 074)
EBIT	23	107	574	1 244	2 084	3 095	4 712	6 769
Interest expenses	(133)	(150)	(238)	(262)	(288)	(317)	(349)	(384)
Extraordinary items	(31)	31	(115)	-	-	-	-	-
EBT	(141)	(12)	220	982	1 796	2 778	4 363	6 385
Taxes	(19)	(74)	74	(206)	(377)	(583)	(916)	(1 341)
Tax rate	14%	593%	33%	-21%	-21%	-21%	-21%	-21%
Net Income	(161)	(86)	294	776	1 419	2 194	3 447	5 044

Excel picture 8. Balance Sheet output model, historical and forecasted

Balance Sheet

	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
\$ in millions	Actual	Actual	Actual	Forecast	Forecast	Forecast	Forecast	Forecast
Intangible assets	2 906	3 726	4 311	4 311	4 311	4 311	4 311	4 311
PP&E	4 486	7 525	10 690	12 587	16 867	22 770	30 512	40 580
Financial assets	501	266	-	-	-	-	-	-
Inventory	-	-	-	-	-	-	-	-
Trade receivable	-	-	-	-	-	-	-	-
Other assets	500	602	1 189	1 262	1 692	2 284	3 060	4 070
Cash and equivalents	1 809	1 468	2 823	4 973	5 450	6 377	8 099	10 911
Total Assets	10 203	13 587	19 013	23 133	28 319	35 741	45 982	59 872
Trade payable	253	313	360	367	402	483	525	591
Other liabilities	4 867	6 589	7 638	10 976	14 707	19 855	26 606	35 385
Financial liabilities	2 858	4 005	7 433	7 433	7 433	7 433	7 433	7 433
Shareholders' equity	2 223	2 680	3 582	4 358	5 776	7 971	11 418	16 462
Total Liabilities & Equities	10 203	13 587	19 013	23 133	28 319	35 741	45 982	59 872
Check	-	-	-	-	-	-	-	-

Excel picture 9. Forecasted cash flows of Netflix

Cash Flow

		FY16	FY17	FY18	FY19	FY20	FY21	FY22
		Actual	Actual	Forecast	Forecast	Forecast	Forecast	Forecast
\$ in millions								
EBIT	P&L	107	574	1 244	2 084	3 095	4 712	6 769
Operating taxes	P&L	633	192	(261)	(438)	(650)	(990)	(1 421)
Operating tax rate		593%	33%	-21%	-21%	-21%	-21%	-21%
NOPAT		740	765	983	1 646	2 445	3 723	5 347
Add-back D&A	P&L	4 925	6 330	8 398	11 253	15 191	20 357	27 074
Gross Cash Flow		5 665	7 096	9 381	12 899	17 636	24 079	32 421
Inventory	BS	-	-	-	-	-	-	-
Trade receivables	BS	-	-	-	-	-	-	-
Trade payables	BS	59	47	7	35	80	43	66
Investments in working capital		59	47	7	35	80	43	66
Investments in other assets/liabilities	BS	1 619	463	3 264	3 303	4 556	5 974	7 770
Capex	BS	(7 964)	(9 496)	(10 294)	(15 532)	(21 095)	(28 098)	(37 143)
Other investments	BS	(585)	(318)	-	-	-	-	-
Extraordinary items	P&L	31	(115)	-	-	-	-	-
UFCF		(1 174)	(2 325)	2 357	705	1 177	1 998	3 114
Interest expenses	P&L	(150)	(238)	(262)	(288)	(317)	(349)	(384)
Delta Oper taxes vs. Taxes	P&L	(707)	(118,1)	55	61	67	73	81
Delta Financial liabilities	BS	1 147	3 428	-	-	-	-	-
Delta Equity incl. dividends	BS, P&L	543	608	-	-	-	-	-
Net Cash Flow		(342)	1 355	2 150	477	927	1 722	2 811
Opening cash		1 809	1 468	2 823	4 973	5 450	6 377	8 099
Closing cash		1 468	2 823	4 973	5 450	6 377	8 099	10 911
Check		1 468	2 822,8	4 973	5 450	6 377	8 099	10 911
		-	-	-	-	-	-	-

Excel picture 10. Classic DCF Valuation of Netflix

DCF Valuation

WACC	12,3%							
g	3,9%							
				1,0	2,0	3,0	4,0	5,0
				FY18	FY19	FY20	FY21	FY22
\$ in millions	FY15	FY16	FY17	Forecast	Forecast	Forecast	Forecast	Forecast
UFCF				2 357	705	1 177	1 998	3 114
Discount factor (WACC)				0,89	0,79	0,71	0,63	0,56
PV of UFCF				2 099	559	831	1 256	1 744

DCF Valuation		
PV of Cash flows	6 489 \$	23% of Enterprise value
Continuing value	38 515 \$	
PV of Continuing value	21 563 \$	77% of Enterprise value
Enterprise value	28 051 \$	
-Financial liabilities	(7 433) \$	
+Cash	2 823 \$	
Equity value	23 441 \$	
Equity value per share	53,8 \$	

WACC					
	4%	10%	16%	20%	
g	1%	94 408	28 609	15 880	12 003
	2%	138 776	31 563	16 699	12 442
	3%	271 880	35 361	17 644	12 933
	4%	2 667 746	39 845	18 628	13 427

CAPM	12,9%
risk-free rate	3,05%
beta	1,8
market risk premium	5,5%
WACC	12,3%
weight of equity	0,9
cost of equity	12,9%
weight of debt	0,1
cost of debt	3,7%

Excel picture 11. Main company data and financial ratios

Company Data		Profitability ratios	
Share price	261	Profit margin	86,4%
Shares outstanding	436	Adj. profit margin	32,2%
Market Cap	114 007	ROA	1,5%
Enterprise Value	118 617	ROE	8,2%
Current EBITDA	6 904	ROIC	4,1%
EV / EBITDA multiple	17		
Current Financial Liabilities	7 433	Liquidity Ratios	
Tax rate	21%	Current ratio	0,5
		Interest Coverage ratio	2,4
		Debt/EBITDA	1,1
		Debt/Equity	2,1
peer group		Profit Margin per Industry	
Hulu		Software (entertainment)	67%
HBO Go		Entertainment	42%
Amazon Instant Video		Cable TV	61%
Google and Apple (due to similar BS)		Broadcasting	53%
		Average	56%
		ROE per Industry	
		Software (entertainment)	15%
		Entertainment	22%
		Cable TV	36%
		Broadcasting	82%
		Average	39%
		ROIC per industry	
		Software (entertainment)	19%
		Entertainment	26%
		Cable TV	14%
		Broadcasting	24%
		Average	21%

Excel picture 12. Altman Z Score model of Netflix

Altman Z Score of Netflix

Key model inputs		Key model ratios	
Working capital	3 207	A	0,12
Retained earnings	2 942	B	0,11
Total assets	25 974	C	0,06
EBIT	1 605	D	0,25
Book value of equity	5 238		
Total liabilities	20 735		
Altman Z Score Result =			1,86

Excel picture 13. Key financial data breakdown of Netflix per segment and fiscal year

USD in millions, FY17	Domestic str.	International str.	Domestic DVD	Consolidated business performance
Total subscribers in thousands:	54,8	62,8	3,4	118
Revenues	6 153	5 089	450	11 693
Cost of revenues	3 319	4 138	203	7 660
Marketing	553	725	0	1 278
Contribution profit	2 280	227	248	2 755
Profit margin	37%	4%	55%	24%
Other operating expenses				1 916
Operating income				839
Other income (expense)				-353
Benefit from income taxes				-74
Net income				559
D&A	2 757	3 441	61	6 258

USD in millions, FY16	Domestic str.	International str.	Domestic DVD	Consolidated business performance
Total subscribers in thousands:	49,4	44,4	4,1	94
Revenues	5 077	3 211	542	8 831
Cost of revenues	2 856	2 911	263	6 030
Marketing	383	608	0	991
Contribution profit	1 839	-309	280	1 810
Profit margin	36%	-10%	52%	20%
Other operating expenses				1 430
Operating income				380
Other income (expense)				-119
Benefit from income taxes				74
Net income				187
D&A	2 338	2 451	79	4 867

USD in millions, FY15	Domestic str.	International str.	Domestic DVD	Consolidated business performance
Total subscribers in thousands:	44,7	30,0	4,9	75
Revenues	4 180	1 953	646	6 780
Cost of revenues	2 487	1 780	324	4 591
Marketing	318	506	0	824
Contribution profit	1 376	-333	322	1 364
Profit margin	33%	-17%	50%	20%
Other operating expenses				1 058
Operating income				306
Other income (expense)				-164
Benefit from income taxes				19
Net income				123
D&A	1 905	1 500	79	3 485

Excel picture 14. Preliminary Netflix data for subscriber-based valuation

Netflix data for valuation FY2017		
Current # of subscribers	118	
Prior year's # of subs.	94	
Difference between new & prior # of sub.	24	
Total revenue	11 693	
Current revenue/subscriber	99,4	
Prior year's revenue/subscriber	94,1	
Total opex + costs	-10 854	
Operating income	839	
Total cash and cash equivalents	2 823	
Total debt	6 499	
% of opex associated with new subs.	26%	
% of opex that are spent on company	50%	
% of opex spent on current users	24%	
Corporate tax rate	21%	
Inflation rate	2,9%	
Risk-free rate	3,05%	
# of shares outstanding	436	
Perpetuity growth rate	3,9%	

If we compare this model to the classic DCF, we can already conclude that forecasts are more detailed and accurate, given that we found out several important points, including the lifetime and the renewal rate of a subscriber.

The 26% of opex associated with new subscribers, represents marketing and production of new content.

The 24% of opex associated with current/existing subscribers represents T&D expenses and production of new content.

The rest, including G&A and D&A are corporate expenses - 50%.

Excel picture 15. Data on existing and new subs. Including value of current subs and sensitivity analysis

Data on existing subs.

subscriber lifetime (years)	8	According to some statistics published by the UK, a person spends 10 years of watching TV etc. on aver.
subscriber renewal rate	100%	this means that Netflix does not lose subscribers, calculated by subtracting the difference between cur
Revenue/subscriber growth rate	5,6%	
Services costs as % of revenues	24%	

Data on new subs.

Cost of acquiring subs.	118,64
Subscriber growth rate for first 5 years	25%
Subscriber growth rate for next 5 years	15%

Value of current subscribers

Revenue	99,44
Opex	23,87
Operating income	75,58
Operating income after tax	59,71
y-o-y growth rate in revenue/subscriber	5,6%
y-o-y growth rate in opex/subscriber	2,45%
Discount rate (cost of capital)	12,30%
Subscriber lifetime	8
Full life probability	100,0%
Value/subscriber	379,69
Total value of all current subscribers	44 645

	3	4	5	6	7	8	9	10	11	12
91%	-45	14	70	123	173	220	265	308	349	387
92%	-42	20	78	133	185	235	282	327	369	409
93%	-38	26	86	144	199	251	300	346	391	432
94%	-35	32	96	156	213	267	319	367	413	457
95%	-31	39	105	168	228	285	338	389	437	483
96%	-27	46	116	182	244	303	360	413	463	511
97%	-23	54	127	196	261	323	382	438	490	540
98%	-18	62	139	211	279	344	406	464	519	571
99%	-13	71	151	227	299	367	431	492	550	605
100%	-8	80	164	244	319	390	458	522	583	640

8 <https://www.independent.co.uk/news/media/tv-radio/average-watching-tv-briton-10-years-life-resea>
again showing that Netflix does not lose subscribers

Excel picture 16. Value of future subscribers, value of all subscriber and equity value

Value of future subscribers

Acquisition cost of subscribers	118,64
Value/new subscriber	261,05

Period	0	1	2	3	4	5	6	7	8	9	10
Total subscribers	118	147	191	250	327	428	507	595	698	818	959
New subscribers	0	29	44	59	77	101	79	88	103	120	141
Value/new subscriber	261	269	276	284	293	301	310	319	328	338	347
Value added by new subscribers		7 896	12 188	16 722	22 584	30 431	24 596	28 068	33 641	40 543	48 891
Continuing value	159 122										
PV		7 031	9 664	11 807	14 199	17 037	12 262	12 460	13 298	14 271	65 200
Total value added by new subscribers	177 229										

Value drag of operating expenses on company

Opex on company	-5 427	-5 560	-5 696	-5 836	-5 979	-6 125	-6 275	-6 429	-6 587	-6 748	-6 913
After-tax opex on company		-4 392	-4 500	-4 610	-4 723	-4 839	-4 957	-5 079	-5 203	-5 331	-5 461
Continuing value	-67 543										
PV		-3 911	-3 568	-3 255	-2 970	-2 709	-2 471	-2 255	-2 057	-1 876	-22 882
Total value drag of opex on company	-47 955										

Total value of Netflix

Value of current subscribers	44 645
Value of future subscribers	177 229
Value drag of opex on company	-47 955
Cash and cash equivalents	2 823
Total debt	6 499
Equity value of Netflix	170 242
Estimated price per share of Netflix	390