

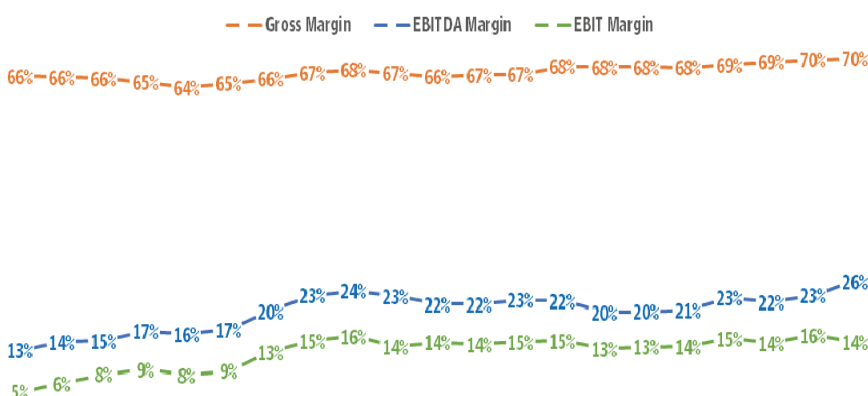
SINGULAR DILIGENCE



John Wiley & Sons (JW.A)

John Wiley & Sons (NYSE: JW.A)

Stock Price: \$47.16



	EV/Sales	EV/Gross Profit	EV/EBITDA	EV/EBIT	EV/Owner Earnings
Scholastic	0.51	0.94	6.76	13.38	10.54
Wolters Kluwer	2.2	3.25	8.74	13.76	13.76
Pearson	2.45	4.37	10.3	20.04	14.61
Thomson Reuters	2.67	NMF	9.75	14.3	14.3
Reed Elsevier	3.61	5.55	11.68	16.55	13.27
Minimum	0.51	0.94	6.76	13.38	10.54
Maximum	3.61	5.55	11.68	20.04	14.61
Median	2.45	3.81	9.75	14.3	13.76
Mean	2.29	3.53	9.45	15.6	13.3
Standard Deviation	1.01	1.7	1.64	2.47	1.45
Variation	44%	48%	17%	16%	11%
John Wiley (Market Price)	1.86	2.66	8.11	12.91	9.72

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Minimum	Maximum	Median	Mean	Standard Deviation	Variation
Sales	273	294	331	363	432	467	508	606	614	734	854	923	974	1,044	1,235	1,674	1,611	1,699	1,743	1,783	1,761	273	1,783	854	949	556	59%
Gross Profit	181	195	218	236	277	303	334	406	414	491	565	614	649	712	841	1,141	1,095	1,165	1,204	1,239	1,229	181	1,239	565	643	389	60%
EBITDA	35	43	49	60	69	79	104	142	149	172	186	201	220	235	250	341	334	391	387	419	463	35	463	186	206	136	66%
EBIT	13	19	27	33	35	41	64	89	95	100	123	129	141	153	161	225	218	258	248	280	253	13	280	123	129	89	69%
Receivables		49	56	61	59	55	61	65	82	104	117	133	148	180	213	202	183	177	170	167		49	213	117	120	58	48%
Inventory		39	43	47	47	42	43	48	60	77	84	84	86	101	116	115	105	102	104	92		39	116	84	75	28	37%
PP&E		43	50	59	67	72	75	86	114	155	177	177	172	190	227	236	246	268	286	287		43	287	172	157	85	54%
Working Liabilities		98	118	133	150	161	176	184	203	223	229	249	278	400	535	514	490	540	561	575		98	575	229	306	174	57%
Net Tangible Assets		34	31	34	24	8	3	16	53	113	148	144	128	70	20	38	43	7	-2	-30		-30	148	34	46	51	110%
MARGINS																											
Gross Profit/Sales	66%	66%	66%	65%	64%	65%	66%	67%	68%	67%	66%	67%	67%	68%	68%	68%	68%	69%	69%	70%	70%	64%	70%	67%	67%	2%	0.02
EBITDA/Sales	13%	14%	15%	17%	16%	17%	20%	23%	24%	23%	22%	22%	23%	22%	20%	20%	21%	23%	22%	23%	26%	13%	26%	22%	20%	4%	0.18
EBIT/Sales	5%	6%	8%	9%	8%	9%	13%	15%	16%	14%	14%	14%	15%	15%	13%	13%	14%	15%	14%	16%	14%	5%	16%	14%	12%	3%	0.27
TURNS																											
Sales/Receivables		6.72	6.43	7.07	7.92	9.25	9.95	9.4	8.98	8.2	7.87	7.35	7.05	6.87	7.85	7.99	9.31	9.82	10.49	10.57		6.43	10.57	7.99	8.37	1.31	16%
Sales/Inventory		8.4	8.48	9.28	9.94	11.98	14.08	12.67	12.18	11.15	11.05	11.65	12.14	12.26	14.49	14.04	16.25	17.06	17.17	19.22		8.4	19.22	12.18	12.82	3.02	24%
Sales/PP&E		7.72	7.33	7.34	6.93	7.1	8.03	7.16	6.42	5.49	5.22	5.49	6.06	6.49	7.38	6.83	6.92	6.51	6.24	6.14		5.22	8.03	6.83	6.67	0.77	12%
Sales/NTA		9.76	11.78	12.84	19.69	64.81	194.46	39.13	13.86	7.57	6.22	6.75	8.12	17.52	82.52	42.16	39.68	245.64	N/A	N/A		6.22	245.64	17.52	48.38	68.8	142%
RETURNS																											
Gross Profit/NTA		643%	766%	822%	1277%	4263%	13027%	2642%	927%	501%	414%	450%	554%	1194%	5625%	2865%	2721%	16965%	N/A	N/A		414%	16965%	1194%	3274%	4705%	1.44
EBITDA/NTA		144%	195%	205%	333%	1328%	4562%	952%	324%	165%	135%	152%	183%	354%	1682%	875%	914%	5451%	N/A	N/A		135%	5451%	333%	1056%	1565%	1.48
EBIT/NTA		79%	107%	103%	172%	811%	2856%	608%	189%	109%	87%	98%	119%	229%	1110%	572%	602%	3498%	N/A	N/A		79%	3498%	189%	668%	999%	1.5
GROWTH																											
Sales		13%	10%	19%	8%	9%	19%	1%	20%	16%	8%	6%	7%	18%	36%	-4%	5%	3%	2%	-1%		-4%	36%	8%	10%	9%	0.92
Gross Profit		12%	8%	17%	9%	10%	21%	2%	19%	15%	9%	6%	10%	18%	36%	-4%	6%	3%	3%	-1%		-4%	36%	9%	11%	9%	0.87
EBITDA		14%	23%	15%	14%	32%	36%	5%	15%	8%	8%	9%	7%	6%	37%	-2%	17%	-1%	8%	11%		-2%	37%	11%	14%	11%	0.8
EBIT		42%	23%	6%	17%	56%	40%	7%	5%	23%	5%	9%	8%	6%	40%	-3%	18%	-4%	13%	-10%		-10%	56%	9%	16%	18%	1.11
Receivables		14%	15%	3%	-9%	-4%	27%	-8%	62%	6%	19%	8%	15%	27%	12%	-21%	4%	-10%	2%	-6%		-21%	62%	6%	8%	18%	2.23
Inventory		11%	6%	12%	-9%	-11%	15%	10%	37%	19%	1%	0%	6%	27%	5%	-6%	-12%	9%	-5%	-19%		-19%	37%	6%	5%	14%	2.75
PP&E		14%	16%	21%	9%	4%	7%	20%	45%	30%	1%	-1%	-5%	27%	13%	-4%	13%	6%	8%	-6%		-6%	45%	9%	11%	13%	1.15
Working Liabilities		38%	8%	17%	9%	6%	12%	-3%	25%	-2%	7%	10%	13%	72%	11%	-18%	11%	9%	-1%	6%		-18%	72%	9%	12%	18%	1.5
Net Tangible Assets		-36%	32%	-8%	-57%	-97%	1149%	344%	214%	81%	4%	-10%	-12%	-83%	-7%	190%	-49%	-151%	-177%	-721%		-721%	1149%	-10%	32%	342%	10.64

DURABILITY 3
 MOAT 4
 QUALITY 6
 CAPITAL ALLOCATION 8
 VALUE 10
 GROWTH 11
 MISJUDGMENT 13
 CONCLUSION 15
 ABOUT THE TEAM 18

SINGULAR DILIGENCE

Geoff Gannon, Writer | Quan Hoang, Analyst | Tobias Carlisle, Publisher

John Wiley (NYSE: JW.A): Really an Academic Journal Publisher

OVERVIEW

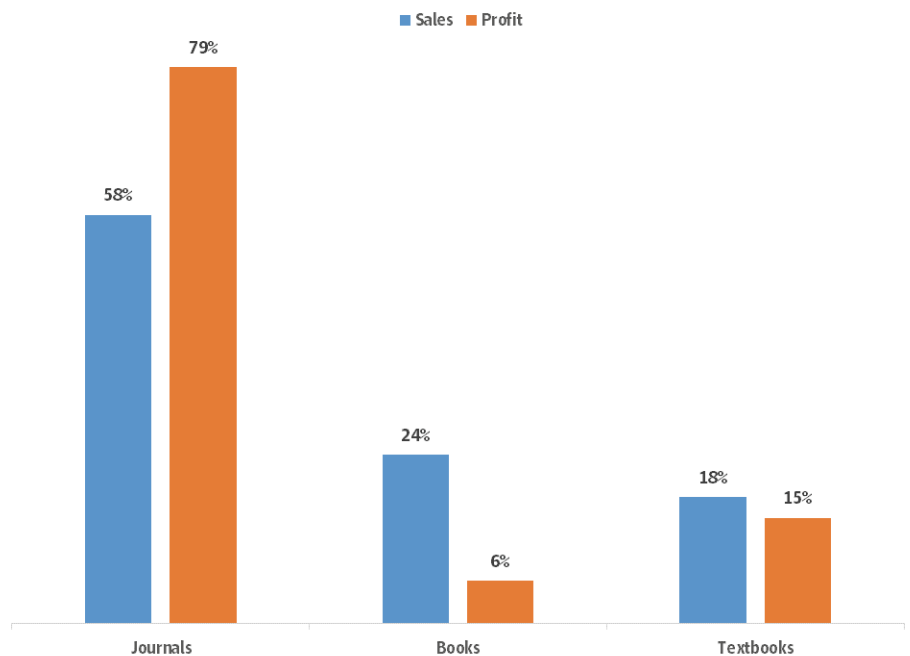
John Wiley is one of the oldest public companies in America. Wiley has been public for more than 50 years. It has been controlled by the same family since its founding in 1807.

In the first part of Wiley’s 206 year history – from 1807 till the Civil War – John Wiley published fiction. The company published works by Herman Melville, Edgar Allan Poe, and Charles Dickens. Williams Halstead Wiley, the third generation family CEO, began the shift toward technical publishing.

The demand for technical books – especially those on mechanical and electrical engineering – increased after the Civil War. This became Wiley’s greatest strength. Wiley was already a leading publisher of science and technology books by the early 1900s. It has remained so for over 100 years.

In the early 1900s, Wiley entered the textbook business. In 1961, Wiley entered the academic journal publishing business. These 3 areas – technical non-fiction books, textbooks, and academic journals – are the company’s three core areas today.

Wiley has always been family controlled. For the first 164 years of its history – from 1807 to 1971 – every CEO was a member of the Wiley family. The company went public in 1962. The Wiley family kept control of the company by issuing



John Wiley’s academic journal business provides 58% of the company’s sales and 79% of its operating profit

two classes of stock. The class B shares have 10 times the votes of the class A shares. The Wiley family owns the vast majority (87%) of the class B stock. As a result, the family has a majority (59%) of the voting power.

However, the company no longer has a Wiley family member as CEO. This tradition ended 40 years ago. Wiley had non-family CEOs during the 1970s and 1980s. Sales increased through the 1980s. But by 1988, Wiley’s profit margin shrank to just 2%.

New management took over in the 1990s. Since 1993, Wiley’s sales grew 10% a year. EBITDA grew 14% a year. While both operating income and free cash flow compounded at 17% a year. This was achieved by focusing on 3 core areas: professional books, textbooks, and academic journals.

Professional books include: those published under Wiley Finance (“Quantitative Value”), For Dummies (“Canning and Preserving for Dummies”), the Culinary Institute of America (“The Art of Charcuterie”), and the Microsoft

Official Academic Course (“Microsoft Operating System Fundamentals”).

Textbooks include: “Intermediate Accounting, 15th Edition”, “Principles of Anatomy and Physiology, 13th Edition”, and “Professional Cooking, 8th Edition”.

Academic journals include: “The Journal of Finance”, “Journal of Accounting Research”, “Production and Operations Management”, “Strategic Management Journal”, “Mass Spectrometry Reviews”, “Advanced Synthesis and Catalysis”, and “International Journal of Numerical Methods in Engineering”.

Each of Wiley’s 3 businesses has a backlist – a list of older titles that are still available – which runs into the thousands. The For Dummies series alone has over 1,800 separate titles. Wiley publishes the #1 most cited journal in 37 different fields. All 3 of Wiley’s markets are made up of thousands of little niches.

Each of these markets is controlled by an oligopoly. Even in areas – like academic journal publishing – where Wiley is very profitable, it is not the most profitable company in that market.

This is due to scale. In each of Wiley’s major business segments – and in publishing generally – there are large scale advantages that encourage consolidation. Gross margins in these businesses are very high. Wiley’s companywide gross margin has been between 64% and 70% in each of the last 20 years. However, the company’s operating margin has been much lower – between 6% and 16%.

These high operating costs make sense given the breadth of a publisher’s business. Wiley’s research segment alone publishes over 1,600 academic journals, 12,000 books, and hundreds of reference works.

The research segment contributes 58% of sales and 79% of profits. The acquisition of Blackwell in 2007 doubled the size of that unit. Professional books contribute about

one-fourth (24%) of Wiley’s total revenue. Operating profit is much lower (6%). The book business is unlikely to increase as a share of Wiley’s overall business. The rest of Wiley’s sales come from the textbook unit. This business contributes 18% of total sales and 15% of profits.

All 3 of Wiley’s business segments could theoretically be consolidated with another publisher operating in the same segment – Reed Elsevier in journal publishing, Pearson in textbooks, etc. – and become instantly more profitable. In some cases, this is purely theoretical. Regulators would block a merger between the 2 journal giants: Elsevier and Wiley-Blackwell.

Scuttlebutt confirms that both Elsevier and Wiley-Blackwell have extraordinary pricing power. University libraries view the offerings of these two companies as essential. They believe the companies already charge them too much. But they also admit they would have to accept any future price increases because these journals are essential.

Wiley’s biggest and best business is journal publishing. Working capital is negative in this business. There is no need for tangible assets. Scale advantages are huge. Reed Elsevier earns considerably more than John Wiley. This is probably due to Reed Elsevier publishing double the journal content Wiley does. Wiley’s journals receive 500,000 submissions and publish 150,000 articles a year while Elsevier’s journals receive 1 million submissions and publish 300,000 articles a year.

There is no reason to believe academic journal publishing will increase as a percentage of GDP in developed economies. The greatest increases in revenue are likely to come from price increases and new journal wins.

Since the merger with academic journal publisher Blackwell, John Wiley has always won more new journal business than it has lost. The average revenue of journal contracts that are not renewed is consistently below that of new business wins. Societies that edit journals seem to prefer the largest publishers.

Textbook and journal publishers trade at high multiples. Textbook publisher Pearson trades at 2.5 times sales and 20 times operating profit. Journal publisher Reed Elsevier trades at 3.6 times sales and 16.6 times operating profit. Meanwhile, John Wiley – despite getting 76% of its sales and 94% of its operating profits from journals and textbooks – trades at just 1.8 times sales and 12.4 times operating profit.

The vast majority of John Wiley’s free cash flow comes from its journal publishing and textbook businesses. The company is unlikely to increase book publishing relative to these units. Even without attributing much value to Wiley’s book business (which still accounts for 24% of sales), the company appears cheap relative to its two closest peers: Reed Elsevier and Pearson.

The closest comparable public company to Wiley’s book business is Scholastic. This leading publisher of children’s books trades at 0.5 times sales and 13.4 times operating profit. Despite being in a totally different part of the business – professional books versus children’s books – the quality of Wiley’s book business is equal to Scholastic. Wiley has higher gross margins but less scale. These two factors even out. If Wiley’s book business was valued the same way Scholastic is, it would be worth just \$277 million. This means Wiley’s entire book business adds just \$4.72 a share to the stock’s appraisal. Well over 90% of Wiley’s value is in its journal and textbooks businesses. Wiley recently sold off its consumer book business (Frommer’s, CliffNotes, etc.). Print books are no longer a focus for the company.

Wiley has announced cost cuts of \$80 million. The majority (\$40 million pre-tax) of these will drop directly to the bottom line. By 2015, these cuts will

permanently add at least 50 cents a year to EPS.

Cost cuts will be the biggest driver of EPS growth over the next few years. Sales are stagnant right now. Wiley's customers are universities and schools who face budget cuts. So, Wiley will have a hard time growing sales over the next few years.

However, Wiley's low price can make up for a few years of stagnant sales. The quality of Wiley's book, textbook, and journal businesses are roughly comparable to those of Scholastic, Pearson, and Elsevier respectively. On a sum of the parts basis, Wiley should trade at \$80 a share to be in line with its peers. At \$45 a share, John Wiley is a relative bargain.

DURABILITY: *Digital Disruption: Hurts Product Sellers; Helps Service Providers*

Analysts often ask publishers about the risk of a fully digital future. In 2010, the then CEO of Wiley, Will Pesce, answered one such analyst's question by saying: "I know people like to use all sorts of other examples about music and this and that. This is not that business. We're not in the music business. We're not in the fiction business. We're in the business of making a difference in the...professional lives of people, and we do that by giving them information that will help them in their careers..."

In 2003, Wiley's book business had twice the sales and produced the same profits as its journal business. Today, the journal business has 2 and a half times the sales of the book business and 5 times the profit.

Wiley transformed itself from a diversified publisher of books, textbooks, and journals to a focused publisher of journals. This was done through mergers, acquisitions, and divestitures. The biggest divestiture was the sale of the consumer book business (Frommer's, Webster's,

CliffNotes, etc.). The biggest acquisition was the purchase of Blackwell.

Wiley's 2007 acquisition of Blackwell was transformative. Without issuing any stock, Wiley paid \$953 million and swallowed a publisher as big as its own journal business. Wiley has added more journals every year since the acquisition. This shift away from book publishing and toward journal publishing moved Wiley from a company of mixed durability to a company focused on the most durable parts of the publishing business: textbooks and academic journals.

The most talked about risk in book publishing is the move to digital. This move has already been completed in the journal business. Says one university press editor: "The digitization of journal publishing happened quickly and quietly over a decade ago, long before Amazon created a real eBook market with the Kindle. It's been a tremendous boon to (the journal publishers) because they can charge significantly higher prices for access to digital content while saving money on printing, binding, warehousing, and shipping. How do they get away with charging higher prices? Think of it this way: back in the Dark Ages (meaning, pre-2000), if you went to Bobst Library to look for a specific article published in a particular journal, it only existed in print format. And it only existed in one very specific place in the library. If someone else was using that particular issue of the journal, or if someone had stolen it, or ripped that article out of the journal, there's no way you could access it. The model was simply one copy per patron and the honor system monitored behavior. Today, every patron of Bobst Library (faculty and students) can access any article from any journal at any time...Therefore publishers like Elsevier, etc. argue that they have added significant value to the journal and can charge more for it. And they have the user stats to back them up."

The key to predicting how disruptive technology will impact a publisher's bottom line is knowing whether the customer sees the publisher as a seller of a product or the provider of a service. More scuttlebutt from the same university press source reveals: "... publishers like Elsevier are morphing into something other than 'just publishers'. They are trying to become 'solutions providers' for academics and researchers. The money they make from publishing operations gets funneled into new initiatives (usually of the software variety) so they can provide tools for researchers...The whole idea is to become more integrated into the daily work flow of an academic. Publishing content gives them an opening into that world, but it also allows them to develop different kinds of relationships and provide different kinds of services."

The biggest risk specific to the journal publishing business is "open access". Open access means making scholarly articles free for readers.

In 2012, Wiley surveyed 10,600 journal article authors about open access. 30% of them had published a "Gold" open access article. A gold open access article is one where the author's university pays the publisher to make the article free to readers. For the 7 out of 10 authors who never published open access, the top 3 complaints were: lack of high profile open access journals (48%), lack of funding to pay for a gold option (44%), and open access journals having inferior quality (34%).

Wiley now offers a gold option in about four out of five (81%) of its journals. Under this option, a university can pay Wiley to make their professor's article open access.

Our university press source downplayed this risk: "The other big issue is the rise of Open Access publishing over the last decade...There's a lot of experimentation going on in this area. Some think this is the way all academic

publishing will happen in the future. I'm not so sure. Publishers like Elsevier and Springer do a lot of open access publishing themselves and it doesn't seem to be hurting their business. I suspect they will do what companies like Microsoft and Google have done in the past: buy out smaller enterprises that pose a threat to their business model and integrate them into their current operations."

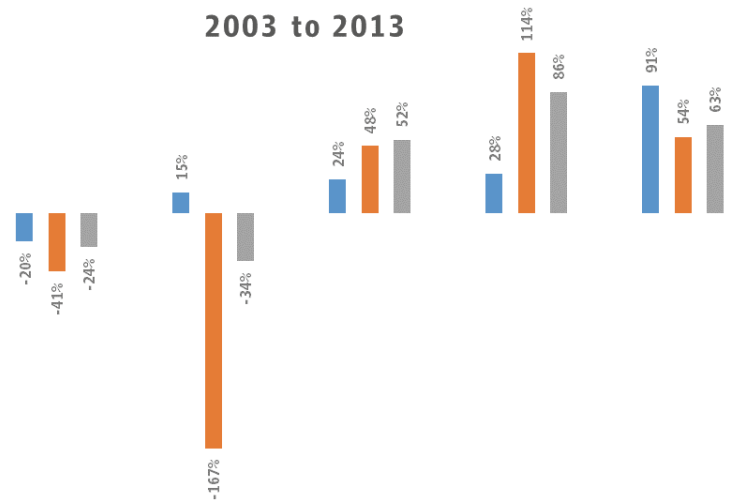
In its 10-K, Wiley justifies 3 software company acquisitions as being part of a deliberate plan: "(Wiley) is transforming portions of its business from a traditional publishing model to being a ...provider of content enabled solutions with a focus on digital products and services. The Deltak, Inscape, and ELS acquisitions, along with the divestment of the company's consumer publishing business are... part of the company's business transformation."

Over 40% of Wiley's sales come from digital products. In the journal business ("Research"), 61% of revenue is digital. In textbooks ("Education"), it is 27%. And in books ("Professional Development"), it is 15%. Wiley's 3 most recent acquisitions – Deltak, Inscape, and ELS – are digital companies.

In 2012, Wiley bought 3 software companies. Wiley paid \$24 million (3 times sales) for Efficient Learning Systems. ELS's key product is online self-study for the CPA (Certified Public Accountant) exam. The company paid \$85 million (4 times sales) to buy Inscape. Most of Inscape's business is workplace training. Wiley's biggest software acquisition was the \$220 million (4 times sales) spent to buy Deltak. That company designs and supports online courses for colleges.

While Inscape and ELS have not (yet) performed well enough to justify their high price to sales ratios, Deltak has. Deltak now has \$68 million in sales. It has higher EBIT margins than the rest of Wiley. And it is growing 20% a year.

2003 to 2013



	Scholastic	Barnes & Noble	Reed Elsevier	Pearson	John Wiley
■ Sales	-20%	15%	24%	28%	91%
■ Profit	-41%	-167%	48%	114%	54%
■ Market Cap	-24%	-34%	52%	86%	63%

Academic publishers are uncorrelated with the consumer book industry

Over 90% of Wiley's profits now come from textbooks, journals, and software that are already partially digital and are well positioned to become fully digital without squeezing the company's profit margin.

Wiley's software company acquisitions further bolster this digital durability. However, the prices of 3 to 4 times sales raise questions about Wiley's capital allocation.

When asked to sum up Wiley's durability, Quan said: "The way I look at the issue is this. Wiley's core strength is its relationship with authors, science societies, and customers (teachers, libraries, and retailers). Technological changes create new methods of distribution, new competitive landscapes, or new customer behaviors. I think the biggest difference between the book business and the journal business is that Wiley has a direct relationship with customers in the journal business. In the book business, they sold books to book stores. Then the digital transition happened, and a big retailer (Amazon) emerged. That moved power from book publishers to Amazon. But that's not the case in the journal business. As long as Wiley or Elsevier are quick enough to experiment with new ways of distribution, they'll stay relevant. Their access to content and direct relationship with customers allows them to protect their business. All the digital initiatives to get more integrated into the daily workflow of an academic are the natural expansion of that strength. I think they used to be solely in the business of selling journals. Digitization gave them the chance to become a service provider on top of selling journals."

MOAT: Wiley Online Library: A Database of 1,156 Frequently Cited Journals

John Wiley's moat is Wiley Online Library. Wiley Online Library is a database of 5 million articles. This database – which grows by 400 articles a day (150,000 articles a year) – is the result of publishing 1,521 journals. Among these 1,521 journals: 1,156 (76%) are frequently cited, 317 (21%) are among the top ten most cited journals in their field, and 37 (2%) are the #1 journal in their field.

These statistics come from the Journal Citation Report. The JCR assigns an impact factor – like a Google PageRank – to the top 10,675 most cited journals.

The 10,675 journals are divided into 232 disciplines. That averages out to 46 journals per discipline. Academics tend to cite papers in something like an 80/20 rule. This means that 80% of citations will tend to point to just 20% of the articles out there. There are often fewer than 50 journals with an impact factor in each discipline. Therefore, the majority (perhaps even 80%) of citations will be pointing to just the top 10 journals in that field.

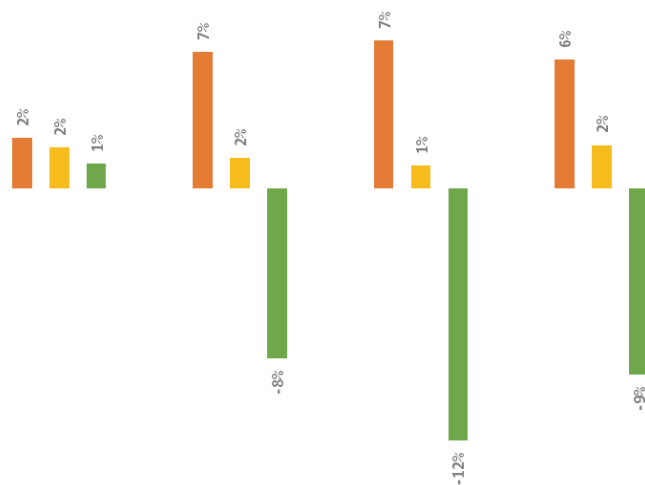
This splits journals into journals that are critically important (#1 journals), journals that are very important (top 10 journals), journals that are somewhat important (journals with an impact factor), and journals that are unimportant (journals without an impact factor). By this logic: Wiley publishes 37 critical journals, 280 very important journals, 839 somewhat important journals, and 365 unimportant journals.

Wiley has an 11% share of journals with an impact factor, a 14% share of top 10 journals, and a 16% share of #1 journals. A university library that did no business with Wiley would be denying its students and faculty access to the top journal in about one out of every 6 subjects.

The Journal Citation report lists 10,675 journals published by 2,550 different publishers. A more realistic assessment of market share comes from measuring the percentage of the most cited journals published by the leading companies. Elsevier and Wiley combined have over a 40% share of the academic journal market.

It is nearly impossible for a new entrant to establish the kind of market position Elsevier and Wiley have. This is caused by five barriers to publishing a bundle of frequently cited journals.

First, there is control of resources. Each journal is a mini-monopoly.



	2008	2009	2010	2011
Impact Factor	2%	7%	7%	6%
Total	2%	2%	1%	2%
No Impact Factor	1%	-8%	-12%	-9%

Since 2007, Wiley has grown the number of impact factor journals it publishes by 5% a year

Wiley’s #1 journals include such specialized titles as: “Mass Spectrometry Reviews”, “Advanced Synthesis and Catalysis”, and the “International Journal of Numerical Methods in Engineering”. Once there is an established leading journal on Mass Spectrometry it is the journal that is most likely to receive the best submissions on that subject. Some journals have held a #1 most cited rank for more than 10 straight years.

Wiley owns 53% of its journals. The other 47% are published in association with a professional society (such as The American Cancer Society). These journals are published under multi-year deals. Since the Blackwell acquisition, Wiley has never lost more than 1% of its journals in a single year. In other words, Wiley retains 99% of its content pipeline from year to year.

The second competitive advantage is customer loyalty. Institutional licenses make up 80% of Wiley’s journal revenue. These licenses gives their students and faculty access to more than one of Wiley’s journals. These end users get in the habit of incorporating Wiley’s journals into their everyday research. If the library switches to a less comprehensive subscription, it upsets the students and faculty who had become habitual users of Wiley’s journals. Libraries are not run for profit. They are run to please students and faculty. When faced with accepting an annual price increase or upsetting students and faculty – the safest choice for the library is taking the price increase.

The third advantage is inelastic demand. The difference in value provided by journals is huge depending on the frequency with which they are cited. Journals are not direct substitutes for each other. So almost every library wants to do business with both Elsevier and Wiley.

The fourth advantage is network effect. Companies like Elsevier and Wiley provide digital access to their journals. As a result, the articles are easier to find and more frequently read by the people most likely to cite them. The perceived quality of a journal is dependent on how frequently it is cited. And how frequently a journal is cited depends on how widely available it is.

The fifth advantage is economy of scale. Wiley has over 5 million articles already. It has been working on a digital platform for its journals since the

1990s. Putting articles into digital form and making them searchable is a sunk cost.

So is the R&D behind a platform like Wiley Online Library. Even with a database twice the size of Wiley's, Elsevier does not spend much more on technology. The same would be true for even smaller companies. The technology costs of creating and maintaining a 500,000 article database are far more than 10% of the cost of a 5 million article database. The per journal, per article, and per user costs of a database are much lower for large databases than small databases. And because users want comprehensive access, the utility of a growing database increases while the cost per user decreases.

There are also economies of scale in the form of bargaining power. A university press editor described bundles this way: "Publishers like Elsevier, etc. are for-profit entities, often publically held, so all they care about is increasing revenue and profit. They have no interest whatsoever in giving libraries a financial break. The largest publishers wield the power...as a former colleague of mine once said, 'the more journals you have, the higher your usage stats are and the more money you can charge.'"

Elsevier and Wiley are in the best position to sell on a combined basis. And as Wiley's CFO explained in 2009: "With respect to selling on a combined license basis, there are price increases associated with those licenses, as there are every year or just about every year. Certainly in the seven years that I've been here, there has been a price increase every year. Price increases are a function of a mix of real price increase and increased content and services."

Economies of scale can be especially important in keeping journals. A professional society has no reason to prefer a small publisher over a large publisher. They can earn more in profits – and make their articles more widely available – by

publishing with one of the biggest companies.

The readership of Wiley's journals is international because the professors who author the journal articles are often writing for a tiny – but worldwide – audience of their peers. North and South America together account for just 38% of Wiley's journal sales. A new entrant would need offices around the world.

The strongest evidence for Wiley's moat is its ability to keep old journals while adding new journals. 5 months after the Blackwell acquisition, Wiley's CEO boasted the company had not lost a single society relationship in the transition.

Since the Blackwell merger, Wiley's new journal wins have always exceeded lost business. In 2009, Wiley signed 32 new journals and lost 9. In 2010, Wiley signed 31 new journals and lost 2. In 2011, Wiley signed 37 new journals with sales of \$9 million and lost 4 journals with sales of \$1 million. In 2012, Wiley signed 24 new journals with sales of \$9 million and lost 7 journals with sales of \$1 million. In 2013, Wiley signed 42 new journals with sales of \$31 million and lost 4 journals with sales of \$7 million. Most of this year's new business came from a single new society deal with the American Geophysical Union. The deal is for 23 journals with sales of \$20 million.

When asked whether Wiley's moat was growing or shrinking, Quan said: "Wiley constantly widens its moat by growing the number of journals with an impact factor." Since the merger with Blackwell, Wiley has grown the number of journals with an impact factor by 5% a year.

QUALITY: *The Best Publishers Combine Must Have Content with Economies of Scale*

A publisher's return on capital depends on: pricing power, economies of scale, and the amount of physical product it holds. Wiley competes in 3 businesses: books (what Wiley calls "professional development"), textbooks (what Wiley calls "education"), and journals (what Wiley calls "research"). The quality of each business can be stated in one of 2 ways. One, the quality of each of Wiley's businesses can be compared to the quality of a competitor in the same market. Two, the quality of Wiley's businesses can be compared to each other.

The gross margins of the 3 businesses show they all have pricing power. Wiley's journal business has a 73% gross margin, the textbook business has a 67% gross margin, and the book business has a 64% gross margin. These high gross margins are the result of Wiley's focus on must have content.

The book business is inferior to Wiley's other 2 businesses in all respects. It has the least pricing power (a 64% gross margin), the least relative scale, and it ties up more capital than either the textbook or journal business.

However, Wiley's book business is not inferior to other publishers. Wiley's book business has a higher gross margin than Scholastic. Scholastic is a much larger publisher (of children's) books than Wiley. As a result, Scholastic earns the same operating margin (5%) that Wiley's book business does despite having a much lower gross margin.

In all 3 businesses, Wiley's strength is its must have content. A publisher – through its agreement with the author – has a mini-monopoly on each book it publishes. This mini-monopoly is the source of publishing's high gross margins. However, the mini-monopoly is least valuable for titles with substitutes.

For example, there is little pricing power in novels. This is because readers

believe even the best novel has substitutes. If “Fifty Shades of Grey” is priced at \$30 and Dan Brown’s “Inferno” is priced at \$15, more people will start to buy the lower priced book. They may prefer one novel over another. But they will not prefer it at any price. Wiley does not compete in mainstream books. They focus on niche content.

Niche content is different. A comparison of the Amazon prices of this year’s bestselling books with Wiley’s finance titles illustrates this point. Three recent value investing titles published by Wiley are: “The Manual of Ideas” (\$24.72 hardcover / \$19.99 Kindle), “Quantitative Value” (\$52.47 hardcover / \$49.99 Kindle), and “Modern Security Analysis” (\$47.49 hardcover / \$42.99 Kindle). There is only one book in Amazon’s top 10 bestselling books that is priced above \$20. That book costs \$88. It is “The Diagnostic and Statistical Manual of Mental Disorders, 5th Edition”. There is no substitute for this manual. It is truly niche content. So it can be priced over \$80 and still be one of the year’s bestsellers. Other bestsellers like “Lean In” (\$12.81 hardcover / \$10.99 Kindle) and Dan Brown’s “Inferno” (\$14.09 hardcover, \$10.99 Kindle) sell an incredible number of units. However, they must be priced at the customary level for such mainstream hits. They have to be available at \$10 to \$15 at Amazon and Barnes & Noble.

Because it sells niche content, Wiley has a higher gross margin than most publishers. However, Wiley lacks scale. Wiley’s customers often buy more from Wiley’s competitors than from Wiley. The university libraries that do the most business with Wiley generally do even more business with Elsevier. The schools that use Wiley textbooks generally use even more textbooks from Pearson. And in books, Wiley is nowhere near the largest supplier to Barnes & Noble or Amazon.

Wiley’s textbook business is higher quality than its book business. It has a 16% operating margin. Wiley does not break out assets by business.



Each of Wiley’s 3 businesses has strong pricing power but lacks the scale of its biggest rival

However, Pearson has sales of 4 times its net tangible assets. The asset turns in Wiley’s textbook business are probably similar. The combination of a 16% EBIT margin and net tangible asset turns of 4 times is a greater than 50% return on net tangible assets. Wiley’s textbook business consistently earns many times its cost of capital.

This is possible only because of the lack of direct competition in textbooks. It takes years to develop a textbook. Says one textbook author: “Writing 2 developmental mathematics books (about 1,600 finished pages) took me 8 years, from signing to publication...” There is no guarantee of success for a textbook’s first edition. But successful textbooks go through many editions. For example, one of Wiley’s most successful textbooks, “Intermediate Accounting” (by Kieso et al.), is now in its 15th Edition. One of the most successful textbooks of all times – Paul Samuelson’s “Economics” – was first published in 1948 and was still selling 300,000 copies a year (every year) more than 25 years later. A 19th edition was published in 2010 (62 years after the first edition appeared).

The average college student spends \$800 a year on textbooks. In 2008, textbooks accounted for 10% to 13% of the total cost of attendance at a public college. At a private university, textbooks are less than 4% of the student’s total cost of attendance each year.

Students are the end users of textbooks. But they are not the decision makers. Textbook marketing is similar to the marketing of new drugs. The publisher’s sales force focuses on getting new editions in the hands of individual professors and their department chairs. Later editions are bought based on personal habit and public reputation. Professors like to teach from new editions of the same textbooks they are used to. And it is always safer to recommend students buy the standard reference in the field than argue for a lesser known book.

Wiley’s best business is its journal business. This is also the business in which Wiley has the most scale. Elsevier is #1. But Wiley is #2. Elsevier has much better profit margins in its journal business (37%) than Wiley (30%). However, neither company uses any net tangible assets in its journal business. So both earn infinite returns on capital.

Physical products – inventory – are the biggest drag on Wiley’s return on capital. Wiley’s capital requirements will change as the company’s 3 different businesses transition to digital. Today, digital revenue makes up 61% of journal sales, 27% of textbook sales, and 15% of book sales. Each unit’s returns on capital should rise as their need for physical products decreases. The transition to digital should free up more cash per dollar of sales. Free cash flow will be abnormally high during the transition.

Wiley’s least digital business is books. The book business has the highest capital requirements and the lowest profit margins. Wiley has less scale than the major book publishers. However, Wiley publishes more must have content than the major publishers. These two factors equal out. So Wiley’s book business is equal in quality to a major publisher like Scholastic.

Wiley’s second least digital business is textbooks. Capital requirements are low. Wiley has a 16% pre-tax margin and can turn its net tangible assets several times a year. The textbook business earns very high returns on capital. It is of equal quality to Pearson.

Wiley’s most digital business is journals. This is also the business in which Wiley has the most scale. Since subscribers pay upfront, in cash – starting in November – for the year ahead, there are no net capital requirements in the journal business. Customer deposits are used in place of shareholder money. Therefore, returns on capital are infinite. Wiley’s profit margin is lower than Elsevier’s because Elsevier is bigger. However, Wiley is the #2 competitor in a business with extraordinary economics and little direct competition. When asked what he thought of this unit’s future prospects, Geoff said: “Wiley’s journal business is almost certain to earn infinite returns on capital while growing sales at 3% a year for a long, long time. The economics are equivalent to a mature, monopoly database company like Dun &

Bradstreet or IMS Health. It’s one of the best businesses in the world. And it’s going to stay that way.”

CAPITAL ALLOCATION: *A Serial Acquirer That Uses Debt (Never Shares) to Grow Inorganically*

The first capital allocation question an investor needs to ask is whether the company’s share count – adjusted for splits – will be higher or lower on the day he sells the stock than on the day he buys the stock. Some companies issue stock to make acquisitions. Some companies pay employees with options. While others are what Charlie Munger calls “cannibals”. They buy back their stock – and thereby lower their share count – year after year.

John Wiley issues stock options. Over the last decade, these options have caused an average dilution of about 1% of shares each year. However, Wiley has also bought back shares. So despite these option grants, Wiley’s share count has not crept up by 1% a year. In fact, the number of shares outstanding are now just 94% of what they were 10 years ago. For this reason, it is best to treat this constant 1% stock option grant as cash compensation. The employees receive payment in options. Wiley then goes out and pays cash for its own stock in the market. Adjustments to EBIT never add back this stock based compensation. These options grants are simply treated like cash compensation.

Wiley never issues stock to make acquisitions. However, the company is not one of Charlie Munger’s “cannibals”. A decade ago, John Wiley had 63 million shares outstanding. Today, the fully diluted number is 59.13 million. That is a reduction in the share count of a little under 6% over 10 years. John Wiley has a strong habit of not issuing shares when acquiring companies. But they have not shown a habit of buying back enough stock to reduce their share count year after year. An investor in John Wiley can count on a stable share count – not a declining share count.

The second capital allocation question an investor needs to ask is how much of his owner earnings are being allocated at the board’s discretion. Today, Wiley pays out 96 cents a share in dividends. Since 1995, Wiley has increased its dividend by 10% to 15% a year. The annual dividend increase has never been less than 5%. Based on their past record, a dividend payment of \$1.05 a share or higher is likely next year. This will eat up about \$62 million of Wiley’s owner earnings.

Wiley’s tax rate averages 25% of net income. Wiley does more business (56% of sales) in Europe, Africa, and the Middle East than it does in North and South America (38%). Corporate taxes are lower in Europe than the United States. Wiley also receives cash before recognizing it as revenue. As a result, Wiley pays no more than 25% of its owner earnings in taxes each year.

Next year, Wiley is likely to have \$336 million in pre-tax owner earnings. Taxes should be no more than \$84 million (25%). Dividends – even if they are increased 10% next year – will only be about \$62 million. That leaves \$190 million for the board to allocate.

The third capital allocation question an investor needs to ask is what the company will choose to do with the owner earnings it retains.

Wiley has two very low return choices. The company has \$660 million in gross debt. They can pay this down. Interest rates are very low. Interest as a percent of Wiley’s net debt was 4.7% last year. Wiley’s second low return choice is adding to its pension fund. At a 7.25% return expectation, Wiley’s pension plan is underfunded by \$206 million. According to Geoff: “Given the yield on long-term bonds and the Shiller P/E, a mix of 50% stocks and 50% bonds, which is Wiley’s target allocation for the fund, may not return much

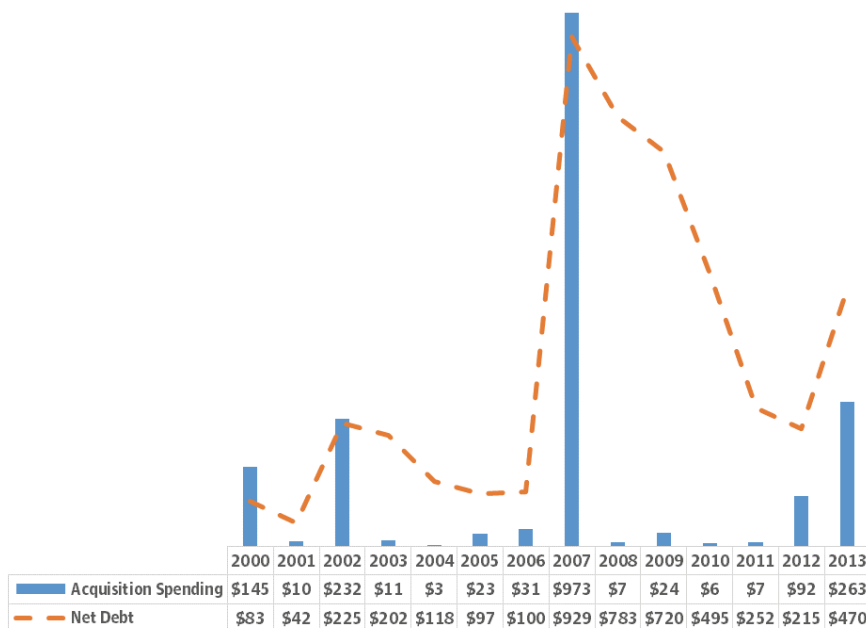
more than 5% a year going forward.”

Wiley is retaining about \$190 million a year in owner earnings. Gross debt is \$660 million. However, the company has \$190 million in cash. So net debt is just \$470 million. The pension plan is underfunded by \$206 million. Taken together, Wiley could choose to devote as much as \$676 million to these low return opportunities. This is between 3 and 4 years of retained owner earnings.

Wiley is not focused on deleveraging right now. The company does not allow cash to build on its balance sheet. Whenever net debt has approached \$100 million, Wiley has begun share repurchases to prevent a buildup of net cash. Wiley’s CFO was explicit about avoiding this cash build during the 2011 Investor Day: “...Allowing that cash to accumulate on a balance sheet is not something we look favorably towards...over the last...two to three years following the acquisition of Blackwell, we appropriately focused on debt reduction...it’s something that we wanted to do internally to de-risk the situation that we’re in with respect to leverage, which was not high levels of leverage relative to what some – many companies do, but certainly high levels of leverage relative to Wiley’s culture and history...we’re not focused on de-levering today. About a year or so ago, we shifted some of our focus and...emphasized some share acquisition.”

If Wiley chooses not to deleverage further, it will spend its \$190 million in retained owner earnings on acquisitions and share buybacks.

Buying back stock at today’s price would eventually generate returns greater than 10% a year. Wiley has accelerated share repurchases. They spent \$87 million on stock buybacks in 2012 and \$74 million in 2013. According to Geoff: “With a lot of debt repayment behind them, there is the possibility of higher than normal share buybacks over the next couple years. If done at today’s prices, these buybacks will create a lot of value. Now is a good time in the capital allocation cycle to buy Wiley stock.”



Since 2000, Wiley spent \$1.83 billion in acquisitions and increased debt by \$387 million

In 2011, Wiley’s CFO made it clear that acquisitions are always the company’s top capital allocation priority: “Acquisitions to the extent we can make those happen...would be certainly our first line in terms of use of excess cash.”

The acquisitions are always done with cash. And – according to Quan – they always “make perfect sense from a qualitative standpoint”. The only concern is price. Wiley focuses on strategic fit and business quality rather than a bargain price.

Wiley paid \$953 million (2.05 times sales) for Blackwell. Margins in the “research” business can be as high 30%. And there are both cost and revenue synergies to combining two journal businesses. At 2 times sales, the pre-tax return on the Blackwell acquisition was probably 10% to 15% a year.

Wiley paid \$220 million (4.07 times sales) for Deltak. This sounds like a very high price. However, Deltak is a growing software company. Margins are much higher than Wiley’s overall corporate average. Since the acquisition, Deltak has grown at a 26% annualized rate. So, Wiley’s price to “forward” sales for Deltak was only 3.24 times sales. Pearson paid 5 times forward sales for Embanet. It is twice the size of Deltak. Designing and supporting online courses is a scalable business. So, Embanet certainly has higher margins than Deltak. However, the scalability of the business also means that as Deltak grows sales it will grow operating profit even faster. There is no evidence Wiley overpaid for either Blackwell or Deltak. Both were reasonably priced relative to similar control purchases and the price-to-sales ratios of publicly traded companies like Reed Elsevier and Pearson.

The acquisitions of Inscape and ELS are less certain. Wiley paid \$85 million (4.25 times sales) for Inscape and \$24 million (3.43 times sales) for Efficient Learning Systems. Unless Wiley can use the acquired content in other ways, estimates of current growth and margins suggest these were not especially high return acquisitions.

When asked to summarize Wiley’s capital allocation habits, Quan said: “They borrowed to make acquisitions and focused on reducing debt after that. So, reducing debt destroys value. Using debt to acquire other companies creates value. The origin of debt is the acquisitions. So, overall, they create value.”

They'll maximize value by keeping a certain level of debt. But having lower debt gives them the flexibility to take advantage of opportunities.”

VALUE: *John Wiley Offers Reed Elsevier Quality at a Scholastic Price*

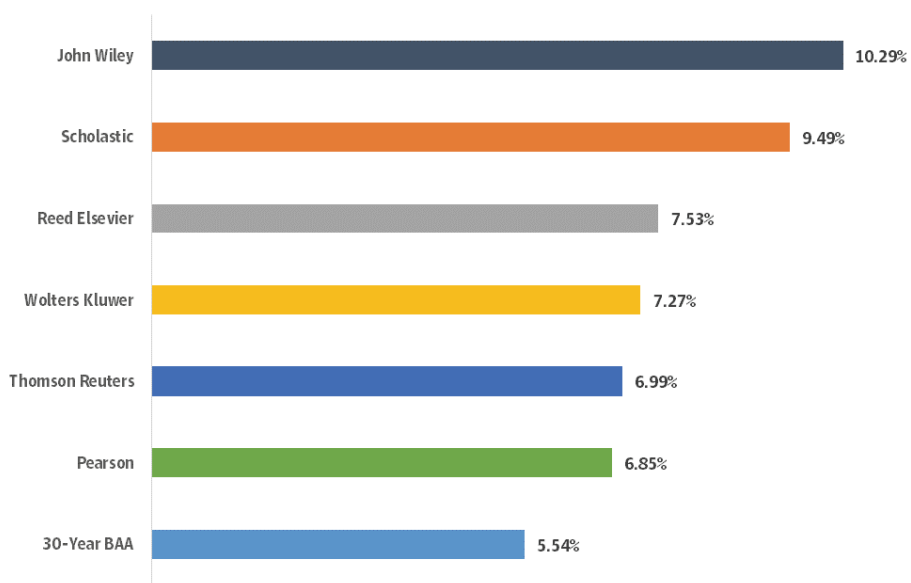
John Wiley is in 3 businesses: books, textbooks, and academic journals. There is no good comparable peer for the book business. Scholastic is one of the very few publicly traded book publishers left. However, Scholastic publishes children's books. John Wiley's pre-tax owner earnings yield – owner earnings divided by enterprise value – is similar to the pre-tax owner earnings yield on Scholastic. The book business contributes about 6% of John Wiley's total operating profits. It is by far the least important segment to correctly value.

The textbook business – which includes software company Deltak because it is a provider of online courses for universities – is about 2.5 times more important than the book business. It contributes 18% of sales. The contribution to profit is similar at 15%.

The best publicly traded comparison for Wiley's textbook business is Pearson. That company owns a bigger competitor of Deltak called Embanet. Some of Wiley's textbooks were purchased from Pearson in a \$58 million deal. The businesses are very similar. Pearson has more scale. However, Wiley's textbook as a whole have a little more pricing power. There is essentially no quality difference between the companies. If it traded separately, Wiley's textbook business should trade at the exact same multiples of earnings, sales, etc. as Pearson now does.

Many publishers have large amortization charges. So the cleanest measures on which to compare publishers are EV/Sales and EV/EBITDA. Although Wiley's business quality is equal to – or even better than – Pearson's, Wiley trades at lower multiples. Pearson

Pre-Tax Owner Earnings Yield



John Wiley trades at a 27% discount to Reed Elsevier and a 34% discount to Pearson

has an EV/Sales ratio of 2.45. Wiley's EV/Sales (1.86) is 24% lower. Pearson's EV/EBITDA is 10.30. Wiley's EV/EITDA (8.11) is 21% lower.

Wiley's overall mix of business is clearly superior in business quality – and future prospects – than the entirety of Pearson. The education businesses are perfectly comparable. The rest of Pearson is inferior to the rest of Wiley. For this reason, Wiley – as a whole – should never trade at a discount to Pearson (as a whole). And yet, the market values each dollar of Wiley's owner earnings at about a 34% discount to Pearson.

Wiley has a business Pearson does not. The academic journal business is the biggest contributor to Wiley's profits. Almost 4 out of every 5 dollars (79%) of Wiley's earnings come from its "research" business. The best publicly traded comparison to Wiley's journal business is Reed Elsevier.

The journal business is Reed Elsevier's best business. It is also Wiley's best business. It only contributes a little under 50% of Reed Elsevier's profits. It contributes nearly 80% of Wiley's profits.

Elsevier's journal business is better than Wiley's. This is entirely due to scale. On the same amount of sales, Elsevier can earn about \$1.25 for every \$1 Wiley earns. Wiley's EBIT margin in the "research" unit is 30% right now. Elsevier's is 37%. Looking at the past record, this is a normal advantage for Elsevier. Wiley always earns about 80% of the profits Elsevier generates on the same dollar of sales.

For this reason, Wiley should trade at about a 20% discount to Elsevier's journal business. However, Elsevier's journal business does not trade as an independent company. The public company – it is actually two public companies, one in the U.K. and one in the Netherlands – that investors can buy gets only 50% of its profits from the journal business. Wiley gets 80% of its profits from the journal business. So while Elsevier is the better journal business, Reed Elsevier – as a complete entity – is not more of a journal business than Wiley. Reed's other businesses are good. But none is better than Wiley's journal business.

Again, the cleanest measures when comparing publishers are EV/Sales and

EV/EBITDA. John Wiley's EV/Sales ratio (1.86) is 48% lower than Reed Elsevier's (3.61). John Wiley's EV/EBITDA ratio (8.11) is 31% lower than Reed Elsevier's (11.68). Wiley's book business makes up 24% of sales. It is inferior to all of Reed Elsevier's businesses. So it is justifiable for Wiley to trade at a discount to Reed Elsevier's EV/Sales ratio. However, most of Wiley's profits come from journals so there is no justification for Wiley trading at a discount to Reed Elsevier's EV/EBITDA ratio.

It is clear that John Wiley should trade at a premium to Scholastic. Books account for virtually all of Scholastic's profits. They account for just 6% of John Wiley's profit. John Wiley's EV/Sales ratio (1.86) is 265% higher than Scholastic's (0.51). However, John Wiley's EV/EBITDA (8.11) is only 20% higher than Scholastic's (6.76). It is possible Scholastic is undervalued. The book business is not just the worst part of the publishing industry. It is also the part investors like least.

There are no publicly traded "pure play" academic publishers. John Wiley is the public company most dependent on journal publishing.

Control purchases of journal publishers are another possible comparison. Wiley itself paid 2.05 times sales for Blackwell in 2007. The increase in Wiley's free cash flow suggests this acquisition was a success at 2.05 times sales. In 2002, private equity firms Candover and Cinven paid exactly 4 times sales for Kluwer's academic publishing business. About 70% of that company's sales were academic journals. That business – Kluwer Academic Publishers – was later combined with Springer's academic publishing business. The seller was Bertelsmann. The companies were combined and at one point were rumored to be for sale at a price of \$2.9 billion (about 2.42 times sales). That was April 2009 – not a good time to exit a private equity deal – and there was no taker at that price.

Earlier this year, EQT Partners was said to be considering an IPO of Springer Science & Business Media

(the combined company's new name) at a price of 3 billion to 4 billion Euros. Instead, Springer was sold to yet another private equity firm. The buyer was BC Partners. The price paid was 3.3 billion Euros (3.36 times sales).

Over the last decade – and in a variety of economic climates – journal publishers have sold in acquisitions at anywhere from 2 to 4 times sales. One of the lowest multiples paid was Wiley's own acquisition of Blackwell.

Wiley's "research" segment had \$1.09 billion in revenue last year. If valued at the 2.05 times sales multiple Wiley paid for Blackwell, Wiley's journal business would be worth \$2.23 billion. If valued at the 4 times sales multiple paid for Kluwer Academic Publishers in 2003, Wiley's journal business would be worth \$4.36 billion. The most recent sale of a journal publishing business – the sale of Springer Science & Business Media to BC Partners – was done at 3.36 times sales. That would value Wiley's journal business at \$3.66 billion. Wiley's total enterprise value is \$3.27 billion. That is the market price of the book business, the textbook business, and the journal business combined. It is less than the price paid by a private equity company for a very comparable peer. That deal happened just 3 months ago. It is likely a private equity buyer would value Wiley's journal business exactly like BC Partners valued Springer.

Wiley is a family company. It is not likely to be sold. And while some consolidation in journal publishing may be allowed there are 3 companies that regulators would probably block from pairing off in any combination: Elsevier, Springer, and Wiley.

However, changes of control can be a good guide to how a long-term owner values a business. Wiley is cheap relative to publicly traded peers. It is also cheap relative to past acquisitions of similar companies.

The best valuation method is always Warren Buffett's "owner earnings". Wiley has announced \$80 million in cost cuts. The majority of these will go to increasing earnings. When this is factored in to Wiley's future results, owner earnings are estimated to be \$336 million. Wiley's enterprise value is \$3.27 billion. This results in a 10.27% pre-tax owner earnings yield. That number is higher than any of Wiley's peers. The group average is about 7%. The 10.27% number is before taxes. It is also before leverage and growth. Wiley shareholders will benefit from a little of both.

GROWTH: *Profits from Journal Publishing Can Grow as Fast as Nominal GDP*

Warren Buffett once explained his investment in Moody's by saying: "... basically the single most important decision in evaluating a business is pricing power. You've got the power to raise prices without losing business to a competitor and you've got a very good business. And if you have to have a prayer session before raising the price by a tenth of a cent, then you got a terrible business. And I've been in both and I know the difference."

John Wiley has pricing power. This is the biggest complaint of university libraries. The Justice Department's decision to allow Wiley to acquire Blackwell prompted an issue brief from the Association of Research Libraries. This brief argued that "an ever shrinking group of large commercial publishers" exercise "market power".

The definition of market power used by the ARL is significant for investors. This group – which essentially represents Wiley's customers – argued that Wiley-Blackwell and other large publishers have "the ability to raise prices faster than inflation would warrant and to maintain bundles that provide so little choice for libraries."

Following the merger of Wiley and Blackwell, 4 publishers control over 50% of the market for science, technology, and medicine (STM) journals. They are:

Elsevier, Springer, Wiley-Blackwell, and Taylor & Francis. The Association of Research Libraries argues that these 4 companies are the only publishers with market power. They believe that these publishers can – because of bundling – squeeze out smaller competitors. In fact, the ARL argues that these 4 publishers have the “market power” needed to continually raise prices on their journals faster than the rate of inflation and to take market share from smaller publishers by forcing the cancellation of those publishers’ titles rather than their own bundles.

A university press editor echoed the ARL’s statement about price increases in the last decade. The ARL claims “the advent of electronic journal formats and large publisher bundles have increased the ability of merging companies to exercise market power to raise prices and direct compensatory cancellations onto other publishers’ journals.”

This second part is key. University library budgets do not increase as fast as the sales – or the profits – of publishers like Elsevier, Wiley, and Springer. The largest publishers increase journal prices. And they have been able to increase journal prices faster than their customers’ budgets have increased. They have done this by taking an ever greater share of these customers’ budgets.

Competition in the journal publishing industry does not work the way it does in many businesses. An advertising agency – for example – would normally have a client entirely to themselves. If Omnicom has the Chrysler account than Chrysler is not also a client of Interpublic. If you have car insurance with Progressive you do not normally have a policy with GEICO as well. That is not how the academic journal business works.

University libraries are normally customers of Elsevier, Springer, Wiley, and Taylor & Francis. They do not choose between these companies. They choose to be a customer of all 4 major publishers.



Since 2007, Wiley’s “Research” segment grew profit by 14% while nominal GDP grew 12%

They are also a customer of a group – much larger in number – of small publishers. Over the last decade, whenever a university library has needed to cancel a journal it has tended to cancel its subscription to one (or many) of those smaller publishers.

This was one of the biggest complaints of the ARL. They argued that “large publisher mergers mean mergers of journal bundles, increasing strains on the market”. And they objected to the Wiley-Blackwell merger on the grounds that “Wiley and Blackwell largely share the customer base for their bundles.” This is critical.

Merging publishers creates a one time scale advantage in terms of costs. It is a very big advantage. And many mergers can be justified on the immediate gains a publisher can make cutting out redundant costs over a few years.

However, the more important advantage – the lasting advantage – in merging Blackwell and Wiley is the increase in bargaining power. Imagine another industry in which a company wants to carry the content of a handful of providers. A good example would be television. It is not enough for Comcast to choose to carry either ESPN or Fox News or HBO or Nickelodeon or Discovery or the Food Network. Comcast wants to carry all those channels. The price Comcast pays depends on many factors. One of those factors is the fact that they are bargaining for each of those channels separately. ESPN is owned by Disney. Fox News is owned by Fox. HBO is owned by Time Warner. Nickelodeon is owned by Viacom. If all of those channels were combined into one bundle and offered to Comcast on that basis, the situation would be different. One, Comcast would end up paying a higher fee for each channel. Two, Comcast would be less likely to cancel any of the channels, because Comcast would have them all blacked out at once. Three, Comcast would be more likely to drop unbundled channels from lesser competitors. The way to get the highest possible price for your content is to bundle all of the content your customer wants most into one package.

According to the ARL: “As ever larger companies exercise ever greater market power, libraries increase journal cancellations. Very often the titles

that are cancelled are not the ones with big price increases. Instead many inexpensive journals from small publishers may be cancelled to cover a large price increase in a single title offered by a large commercial publisher.”

This is because of bargaining power. No matter how inexpensive a journal is it is only protected from cancellation to the extent that it is itself must have content or it is bundled with other must have content. Weak journals can only be protected if they are bundled with strong journals.

The ARL explains: “Bundling significantly magnifies the ability of large publishers to exercise this kind of market power. By making protection from cancellations a feature of their e-journal bundles, they virtually guarantee that other publishers’ titles will be cancelled when the library budget fails to keep up with inflation. The ARL’s 2006 survey of members’ publisher bundles found that in the previous three years 60% of the members had carried out serial cancellations and, of those, more than two-thirds had protected at least one large publisher bundle.”

Growth in the journal publishing business is very valuable. There are 2 reasons for this. One, the business requires no capital to grow. Journal subscription payments work like insurance premiums. As long as billings increase, the amount of cash on hand grows. Wiley gets a small amount of “float” each year that funds expansion.

The second reason growth is so valuable is that journal publishing is a fixed cost business. The marginal cost of publishing one more journal is very low. The profits of major journal publishers always grow faster than sales.

In recent years, university library budgets have grown slower than inflation. However, Wiley’s profits from journal publishing have grown faster than – not just inflation but – nominal GDP.

Since 2007, Wiley grew its journal profits by 3% a year while reducing rather than increasing its net tangible assets. This means free cash flow grew faster than 3% a year. That was achieved despite getting more than half its revenue from slow growing Europe and almost all (93%) of its revenue from countries outside of fast growing Asia.

In the future, Wiley should be able to grow its journal sales – organically – by about the rate of inflation. Journal profits – because they benefit from scale – should be capable of a growth rate near nominal GDP. Net tangible assets will shrink. So, free cash flow growth will exceed profit growth and profit growth will exceed sales growth.

Most companies have to retain earnings to grow. Wiley can grow organically at close to nominal GDP while using all of its retained earnings to make acquisitions and buy back stock. This will cause earnings per share growth to exceed organic sales growth. All of this is possible because of John Wiley’s permanent pricing power.

MISJUDGMENT: *Wiley May Misallocate Capital to Books Instead of Focusing on its Best Businesses*

The greatest risk of misjudging John Wiley is the risk of misjudging future capital allocation. This is not a quantitative issue. It is a qualitative issue. It is a strategic issue. John Wiley has been selling off parts of its books business for years now. Investors could be fooled – because they want Wiley to sell off its books businesses and focus on textbooks and journals – into thinking this trend will continue.

John Wiley has only made acquisitions that fit its 3 cores: technical non-fiction books, textbooks, and journals. Wiley has been in the technical non-fiction book business for about 150 years. It has been in the textbook business for 100 years. And it has been in the journal business for over 50 years.

This lack of change in entering new core categories may cause investors to misjudge the possibility of an acquisition that leaps Wiley into a new area. Wiley’s latest acquisitions have been digital acquisitions. Each has fit very neatly within an existing business.

Wiley has a textbook business. They define it as their “Education” business. It serves colleges and universities. Textbooks are not purely print anymore. Wiley already delivered some of its content digitally. So the acquisition of Deltak appears to be what Chris Zook would call an “adjacent” expansion. Wiley is serving the same sorts of customers it was before. Deltak was “bolted on” – as Warren Buffett would say – to Wiley’s existing education business. This makes the acquisition appear to be part of a continuous – rather than a discontinuous – evolution.

Wiley’s past record and the way Wiley describes its acquisitions tends to reinforce the idea that these acquisitions are a series of small steps in each of its core businesses. Software is not a new core for Wiley. It is an evolutionary move in each of the 3 cores where Wiley has operated for decades.

Wiley’s acquisition record is unusually consistent from a strategic point of view. However, past results are no guarantee of future results. Nor are past actions a guarantee of future actions. Wiley has historically had unusually high levels of continuity in its board and top management. Over Wiley’s entire history, the average CEO has stayed in place for 17 years. The Wiley family has been in control of the company since its founding 206 years ago.

This extraordinarily long record may cause investors to overestimate the extent to which the future will look like the past. Wiley’s acquisition behavior could change suddenly if new strategic ideas gained favor among top management and in the boardroom. This has happened at other companies.

New management often brings new strategic ideas. Sometimes this new management brings bad ideas that prove very destructive.

Just 6 years ago, Barnes & Noble made \$248 million. Wiley made \$153 million. Today, Wiley's "owner earnings" have reached \$336 million. Meanwhile, Barnes & Noble just reported a \$220 million loss.

Barnes & Noble has always been controlled by its founder, Len Riggio. Wiley has always been controlled by its founding family. Barnes & Noble faced much tougher pressure in the transition to digital, because it was a retailer of print books. However, the company's core business has never lost money. The losses are all due to a decision to invest heavily – to bet everything – on the Nook. This was a decision made to keep the company relevant in a future where print books are not relevant.

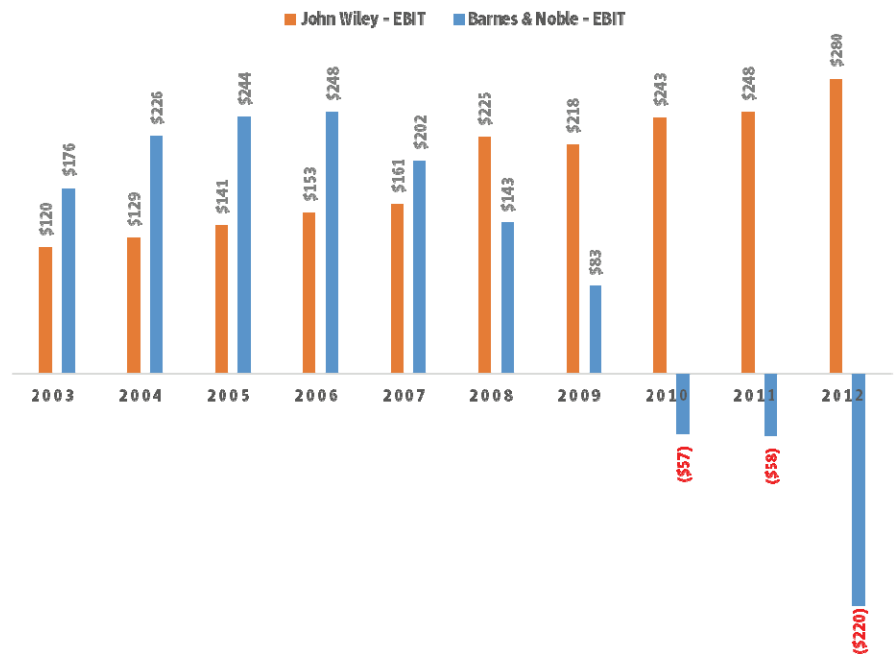
It was a capital allocation decision. And it was an extraordinarily costly one. If B&N had done nothing, its relevance might have declined. But its shareholders would have had plenty of free cash flow to protect their share price.

When Warren Buffett took over Berkshire Hathaway, he redirected capital away from the textile business. That is because Buffett was a value investor. He was not wedded to a specific business.

In the case of Barnes & Noble, Riggio was wedded to a particular business. He was focused on maintaining what he had built. He was also a huge stockholder. But he was not just a stockholder. He had other incentives: control, reputation, legacy, etc.

This is true at all companies. It is easy – as a passive investor – to assume rational capital allocation decisions. In reality, incentives and sentimentality often lead insiders to stay in businesses they should abandon.

John Wiley's book business is a risk. The unit is barely making money. If it were a separately traded public



In 2006, Barnes & Noble had EBIT of \$248 million. Just 6 years later, it lost \$220 million

company, its results would look worse than they do now.

It is possible to quantify the risks the book business poses to an investor in John Wiley shares. If the company is rational in its capital allocation, these risks are small. However, an investor who attempted to quantify the risk of a digital transition at Barnes & Noble would have misjudged the situation. The risk he would have measured was the risk that Kindle would eat into sales of print books. The much bigger risk was the risk that Barnes & Noble would direct all the free cash flow from its stores – and then some – into a totally new business: the Nook.

Seeing how little profit John Wiley's book business delivers may cause investors to misjudge the situation. The big risk is not that John Wiley's book business will decline. The big risk would be if John Wiley fought this decline by allocating more capital towards books. There is zero past evidence to support this. But it is not a guarantee that past behavior patterns predict future actions.

Change – whether technological or societal – often creates pressure for a public company. John Wiley is a controlled company. But it is still a public company. Stock options are used to compensate employees. In fact, John Wiley routinely awards options that are equivalent to transferring 1% of the company to employees each year. Wiley offsets this option issuance through stock buybacks. However, the fact that options rather than cash are used in compensation means that to employees who receive options the stock price becomes critical.

When you are paid in stock options, there is an incentive to please the stock market. There is an incentive to please analysts. At times, there may be an incentive to stay ahead of projected trends.

The pressure to always stay ahead of the next big trend could cause Wiley to make an acquisition that is a poor fit for the company. If Wiley issues shares to do this, shareholders could be terribly harmed. This is because Wiley has a pair of great and durable businesses built around 2 cores: textbooks and journals. Trading pieces of these businesses for anything would usually be a

bad idea. Trading pieces of these 2 franchises for a digital start-up that turns out to be a poor strategic fit would be disastrous.

There is no evidence Wiley will do this. All acquisitions have been done using cash rather than shares. And all acquisitions have been good strategic fits. They have been adjacent to Wiley's core businesses. However, investors may rely too much on the past record.

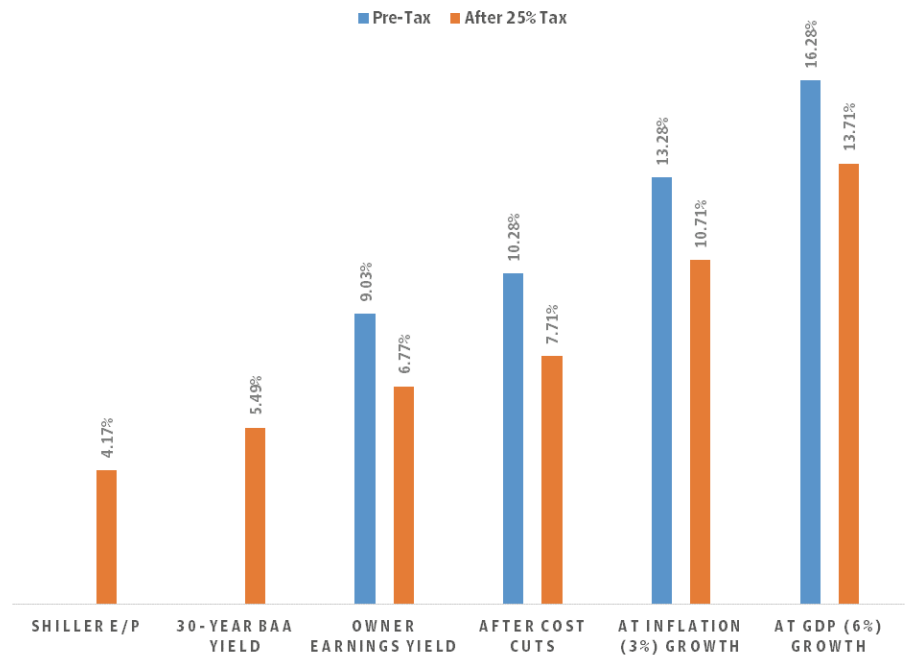
Based on that record, an investor would assume that Wiley will de-emphasize its book business. The company will make acquisitions using cash rather than shares. These acquisitions will be more digital than Wiley itself is today. In other words, capital allocation will move Wiley further in the direction of being a digital publisher focused on academic customers.

The future for that kind of company looks bright. But what kind of company Wiley becomes depends on the decisions made by its board. The board may choose to go in a different direction with its acquisitions than it has in the past and claims it will in the future.

Long-term value investors are the people most likely to mislead themselves about Wiley's future capital allocation plans. They are biased to assume that Wiley will deploy capital the way they would if they controlled the company. Management's decisions will not be purely rational. They will be subconsciously driven by conventional wisdom, sentimental attachment to legacy businesses, and stock option based incentives.

CONCLUSION: *John Wiley Shares Can Return 10% a Year without Leverage*

Investment decisions have to be made based on opportunity costs. Investors must decide whether or not to buy a stock based on their other choices. Right now, their other choices are not as good as they used to be. The 30-year BAA yield – used here as a proxy for the kind of returns available in bonds – is now 5.49%. The average yield since 1919



John Wiley shares offer a 10% annual return in a world of 5% returns

is 7%. The Shiller E/P – the inverse of the P/E, used here as a gauge of normalized earnings on American stocks – is now at 4.17%. The average since the 1880s is 6.06%. Both stock and bond prices are between 25% and 45% more expensive than they have been in the past.

This presents a problem for investors. They can hold cash and hope for the prices of all stocks and bonds to fall. Or they can invest by locking in the best buy and hold returns available now. In some cases, the best buy and hold returns are merely acceptable from an absolute – historical – perspective. However, they are very attractive on a relative – present day alternative – perspective. John Wiley fits this description.

Quan breaks the investment case for John Wiley into 5 points: “One, Wiley has the clearest future among companies we’ve look at. It has a stable business and stable long-term growth. Two, we’re very confident about Wiley’s moat and pricing power. Three, it’s not very cheap but the long-term return – the buy and hold return – is good. Four, capital allocation is important to the long-term return of the investment. And we don’t think they’ll destroy value. Five, near term free cash flow will be higher than our estimate of owner earnings.”

This last point deserves a deeper discussion. Most analysts – even those who are pessimistic on John Wiley’s future – do not disagree about the company’s business quality, pricing power, etc. They simply believe that the company will have a very hard time growing. The Avid Hog is focused on owner earnings. The assumption is that long-term returns from holding a stock come from the free cash flow delivered to shareholders.

Estimates of free cash flow growth can vary widely even where underlying assumptions about market growth are small. For example, many analysts assume university library budgets will grow about 2% a year. How valuable this 2% growth is for John Wiley depends on who captures the additional profit. Many analysts assume 2% customer spending growth will lead to about 2% profit growth at John Wiley. Geoff disagrees: “If you look at past actions, the complaints of research libraries cited in that issue brief, and quotes from our university press editor source, you come to a different conclusion. A 2% increase in research library budgets is most likely to result in something more

like a 3% increase in billings at the top publishers – Elsevier, Springer, and Wiley – and a 1% or lower growth rate at small journal publishers. It is most likely to lead to continual consolidation through pricing increases of bundles from publishers with bargaining power offset by cancellations of journals from small publishers. The industry appears very consolidated and the natural assumption is to assume that consolidation will not increase. But there is about half the market left for the biggest publishers to take. Over time, their piece of the pie can grow faster than their customers' budgets. This can happen because weaker competitors – small publishers – can and will grow sales slower than library budgets."

Many analysts begin with the assumption that sales – and possibly even profits – at Wiley's journal business will grow about as fast as customer budgets. Geoff sees it very differently: "Billings growth at the biggest publishers can run ahead of library budget growth to the extent that billings at small publishers runs behind. It is a zero sum game. Their fixed cost base has always caused profit growth to exceed billings growth. Digitization will cause net tangible assets to decrease as billings grow. For Wiley, this means sales growth can be a bit faster than their customers' budget growth, profit growth can be a bit faster than sales growth, and free cash flow growth can be a bit faster than profit growth. It is not difficult to imagine growth of 3% to 6% a year in free cash flow even if research libraries keep budget growth at 2% a year."

The value of a stock is determined by its free cash flow. The budget growth of customers is important. But it is important only insofar as it creates a sustainable source of free cash flow growth. In fact, many studies have shown that the worst returning businesses tend to have higher sales growth than the best returning businesses. A fast growing industry is not necessary to create adequate free cash flow growth to justify an investment. Sales growth of just 3% a year can certainly justify

an investment in John Wiley, because sales growth translates well into profit growth and profit growth translates very well into free cash flow growth.

All of the estimates throughout this issue of *The Avid Hog* have focused on John Wiley's owner earnings. This is an unleveraged number. It is a cash flow number. But it is not quite synonymous with free cash flow. Free cash flow includes changes in working capital.

As John Wiley transitions to digital, its working capital needs decrease. Net tangible assets recently turned negative. There is no reason to believe they will ever turn positive again. Reed Elsevier's journal business has a very large net tangible asset deficit. It is reasonable to expect John Wiley will have large net tangible asset deficits for the foreseeable future.

This will cause free cash flow to exceed owner earnings. It is a temporary occurrence in the sense that if John Wiley was 100% digital, this trend would stop. It will never reverse. The reduction in working capital is a natural result of a shift from physical products to digital products. Wiley still sells a lot of physical products. So, free cash flow will exceed owner earnings for many, many years to come.

John Wiley does not allow cash to build on its balance sheet. This additional free cash flow – caused by a reduction in working capital – will be used to make acquisitions and buy back stock. Both of these actions will increase free cash flow per share.

John Wiley is not cheap on most valuation measures. The one exception is price to free cash flow. John Wiley's free cash flow yield is close to 9%. This is extraordinarily high. Stocks generally have lower free cash flow yields than earnings yields. Throughout history – and at this moment in time – a free cash flow yield above 6% is unusual. Wiley's free cash flow yield is 9%. It also has a very clear path – by raising prices on existing customers every year – to grow free cash flow by 3% a year.

That is a recipe for a buy and hold return of nearly 12% a year. The return is not certain. It depends on whether Wiley's capital allocation creates or destroys value. However, a value neutral capital allocation policy would be enough to deliver returns for shareholders of as much as 12% a year. There are very few stocks out there today that offer anything like 12% long-term returns.

John Wiley is a great business at a good – but far from great – price. When asked to sum up the investment, Quan said: "John Wiley has one of the clearest futures we've looked at. The book business is what we're likely to misjudge most, but it doesn't contribute much profit. I don't think we have misjudged pricing power. I can't see another business with a wide moat for a durable and necessary product like Wiley. Even without library budget growth, the top 4 publishers can gain market share."

These assumptions lead to a high likelihood of shareholders making at least 10% a year in John Wiley stock without the business using "undue" leverage. That is rare in today's investment environment.

John Wiley & Sons (JW.A)

Appraisal: \$68.10

Margin of Safety: 28%

OWNER EARNINGS	(in millions)
2013 Operating Income (As Reported)	\$199.43
One Time Events	
Gain on Sale of Consumer Publishing Programs	(\$5.98)
+ Restructuring Charges	\$29.29
+ Impairment Charges	\$30.67
= Adjustment for One Time Events	\$53.98
Operating Income (As Reported)	\$199.43
+ Adjustment for One Time Events	\$53.98
= Operating Income (Adjusted for One Time Events)	\$253.41
Non-Cash Charges	
Amortization of Goodwill	\$41.98
Operating Income (Adjusted for One Time Events)	\$253.41
+ Non-Cash Charges	\$41.98
= Operating Income (Adjusted for Non-Cash Charges)	\$295.39
Non-Recognized Cash Receipts	
Growth in Unearned Revenue (Estimated @ 3% a Year)	\$10.89
Operating Income (Adjusted for Non-Cash Charges)	\$295.39
+ Cash Received But Not Yet Recognized	\$10.89
= Operating Income (Adjusted for Cash Receipts)	\$306.28
Pension Expense	
Expected Return on Plan Assets (@ 5%)	\$24.66
- Expected Return on Plan Assets As Reported (@	\$35.78
= Adjustment for Pension Plan Return Expectations	(\$11.12)
Operating Income (Adjusted for Cash Receipts)	\$306.28
+ Adjustment for Pension Plan Return Expectations	(\$11.12)
= Operating Income (Adjusted for Pension Plan Return	\$295.16
Cost Cuts	
Announced Cost Cuts	\$80.00
x ('More than half the \$80 million expected to improve	0.51
Adjustment for Announced Cost Cuts	\$40.80
Operating Income (Adjusted for Pension Plan Return	\$295.16
+ Adjustment for Announced Cost Cuts	\$40.80
= Operating Income (Adjusted for Announced Cost	\$335.96
Owner Earnings (Before Interest and Taxes)	\$335.96

Business Value

John Wiley's business value is \$4,703 million.
 ... Pre-tax owner earnings are \$335.96 million
 ... Fair multiple = 14x pre-tax owner earnings
 ... \$335.96 million * 14 = \$4,703 million

Fair Multiple

John Wiley's business is worth 14x pre-tax owner earnings
 ... Closest peers trade at 13-15x pre-tax owner earnings
 ... Reed Elsevier trades at 13x pre-tax owner earnings
 ... Pearson trades at 15x pre-tax owner earnings
 ... Quan thinks: "Wiley should trade at 20 times free cash flow"
 ... 15x pre-tax owner earnings = 20x after-tax FCF
 ... Wiley's average tax rate is 25%
 ... $15 / (1 - 0.25) = 20$
 ... Geoff thinks: "Wiley's cash flows are as safe as a BAA bond."
 ... 14x pre-tax owner earnings = 7.14% pre-tax yield
 ... Annual price increase is certain (assume 3% inflation)
 ... Return at 14x pre-tax owner earnings = 10.14%
 ... $7.14\% \text{ (yield)} + 3\% \text{ (growth)} = 10.14\%$
 ... Moody's 30-Year BAA bond yield = 5.53%
 ... $10.14\% - 5.53\% = 4.61\%$ (spread over 30-year BAA)
 ... Even w/o price increase: $7.14\% > 5.53\%$
 ... $1 / 0.053 = 18x$ pre-tax owner earnings
 ... 3 methods value John Wiley at 14-18x pre-tax owner earnings
 ... Peer comparison = 14x
 ... Quan's FCF method = 15x
 ... Geoff's BAA method = 18x
 ... 14x pre-tax owner earnings is a fair multiple for John Wiley
 ... All 3 appraisal methods are reasonable
 ... Peer comparison uses relative value of similar stocks
 ... 14x pre-tax owner earnings is the most conservative

Share Value

John Wiley's stock is worth \$68.10 a share
 ... Business value is \$4,703 million
 ... Net debt is \$676 million
 ... Debt: \$660 million
 ... Pension: \$206 million
 ... Cash: \$190 million
 ... \$660 million + \$206 million = \$866 million
 ... \$866 million - \$190 million = \$676 million
 ... Equity value is \$4,027 million
 ... \$4,703 million - \$676 million = \$4,027 million
 ... Equity Value = \$68.10/share
 ... 59.13 million diluted shares
 ... \$4,027 million / 59.13 million = \$68.10

Margin of Safety

John Wiley stock has a 28% margin of safety
 ... Business Value = \$4,703 million
 ... Enterprise Value = \$3,385 million
 ... Discount = \$1,318 million (\$4,703 million - \$3,385 million)
 ... Margin of Safety = 28% (\$1,318 million / \$4,703 million)

	EV/Sales	EV/Gross Profit	EV/EBITDA	EV/EBIT	EV/Owner Earnings
Scholastic	0.51	0.94	6.76	13.38	10.54
Wolters Kluwer	2.2	3.25	8.74	13.76	13.76
Pearson	2.45	4.37	10.3	20.04	14.61
Thomson Reuters	2.67	NMF	9.75	14.3	14.3
Reed Elsevier	3.61	5.55	11.68	16.55	13.27
Minimum	0.51	0.94	6.76	13.38	10.54
Maximum	3.61	5.55	11.68	20.04	14.61
Median	2.45	3.81	9.75	14.3	13.76
Mean	2.29	3.53	9.45	15.6	13.3
Standard Deviation	1.01	1.7	1.64	2.47	1.45
Variation	44%	48%	17%	16%	11%
John Wiley (Market Price)	1.86	2.66	8.11	12.91	9.72
John Wiley (Appraisal Price)	2.67	3.83	11.67	18.59	14

ABOUT THE TEAM



Geoff Gannon, Writer

Geoff is a writer, blogger, podcaster, and interviewer. He has written hundreds of articles for Seeking Alpha and GuruFocus. He hosted the Gannon On Investing Podcast, The Investor Questions Podcast, and The Investor Questions Podcast Interview Series. He wrote the Gannon On Investing newsletter in 2006 and two GuruFocus newsletters from 2010-2012. In 2013, he co-founded The Avid Hog (the predecessor to Singular Diligence) with Quan Hoang. Geoff has been blogging at Gannon On Investing since 2005.



Quan Hoang, Analyst

Quan is a stock analyst. Quan won first prize in Vietnam's National Olympiad in Informatics in 2006. He graduated from Manhattanville College in 2012 with a B.A. in finance and a minor in math. In 2013, Quan co-founded The Avid Hog (the predecessor to Singular Diligence) with Geoff Gannon.



Tobias Carlisle, Publisher

Tobias Carlisle is the founder and managing director of Eyquem Investment Management LLC, and serves as portfolio manager of the Eyquem Fund LP and the separately managed accounts.

He is best known as the author of the well regarded website Greenbackd, the book *Deep Value: Why Activists Investors and Other Contrarians Battle for Control of Losing Corporations* (2014, Wiley Finance), and *Quantitative Value: a Practitioner's Guide to Automating Intelligent Investment and Eliminating Behavioral Errors* (2012, Wiley Finance). He has extensive experience in investment management, business valuation, public company corporate governance, and corporate law.

Prior to founding Eyquem in 2010, Tobias was an analyst at an activist hedge fund, general counsel of a company listed on the Australian Stock Exchange, and a corporate advisory lawyer. As a lawyer specializing in mergers and acquisitions he has advised on transactions across a variety of industries in the United States, the United Kingdom, China, Australia, Singapore, Bermuda, Papua New Guinea, New Zealand, and Guam. He is a graduate of the University of Queensland in Australia with degrees in Law (2001) and Business Management (1999).