Fair Issac Corporation Stock Note

Date: May 16, 2022

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Company: Fair Issac Corporation
Sector: Information Technology
Industry: Software

Website: https://www.fico.com/en
Headquarters: San Jose, CA

Number of Employees: 3,662

Major Shareholders: BlackRock 15.27%, Vanguard 10.36%, Valley Forge Advisors 3.45%

Index Weighting: MXWO 0.02%

Price Target: $488.90

Summary

Fair Issac Corporation (FICO) is a market-leading data analytics company that provides scoring solutions and software globally. The company was founded by engineer Bill Fair and mathematician Earl Issac in 1956; the two met while working at the Stanford Research Institute in Menlo Park, California. FICO has a rich 65-year history of product development, enhancement, and innovation. Today, the company is comprised of two main operating segments including Scores and Software. The scores segment (circa 50% of FY21 revenues) represents FICO's B2B scoring solutions and services, offering clients predictive credit and other scores that are easily integrated into clients' transaction streams and decision-making services. In addition, the scores segment also includes FICO's B2C scoring solutions. The software segment (c. 50% of FY21 revenues) includes pre-configured analytic and decision management solutions designed for specific business needs such as account origination, customer management, fraud detection and others. The software segment also includes the FICO platform, which is a modular software offering designed to support advanced analytic and decision use cases. On the whole, FICO's credit scoring system and software is ingrained in the fabric of all things credit in the U.S. and the company enjoys a market leading position and strong pricing power; however, FICO's competitive positioning is not currently reflected in its current 17.7x EV/EBIT multiple and is optically undervalued.

5-Year Total Returns vs. Benchmarks

FICO has compounded at a healthy 21.8% average annual rate over a five-year lookback, outstripping both the S&P Midcap 400 Index (+8.9%) and the S&P 400 IT Sector GICS Level 1 Index (+13.4%).

Market Capitalization and Summary of Financials

As of the close on March 13, 2022, FICO had a market capitalization of $9.4 billion, which represents a 27.5% discount to its prior twelve quarter average. FICO had net debt of $1.6bn which includes cash of $205.5 million and debt of $1.8 billion including operating leases; thus, FICO has an enterprise value of $11.0 billion as of March 31, 2022.

Enterprise Value ($Mn) As of May 13, 2022	
Share Price	$361.53
Shs Out	26
Mkt Cap	$9,375.21
Cash	$205.52
Debt	$1,842.04
EV	$11,011.72

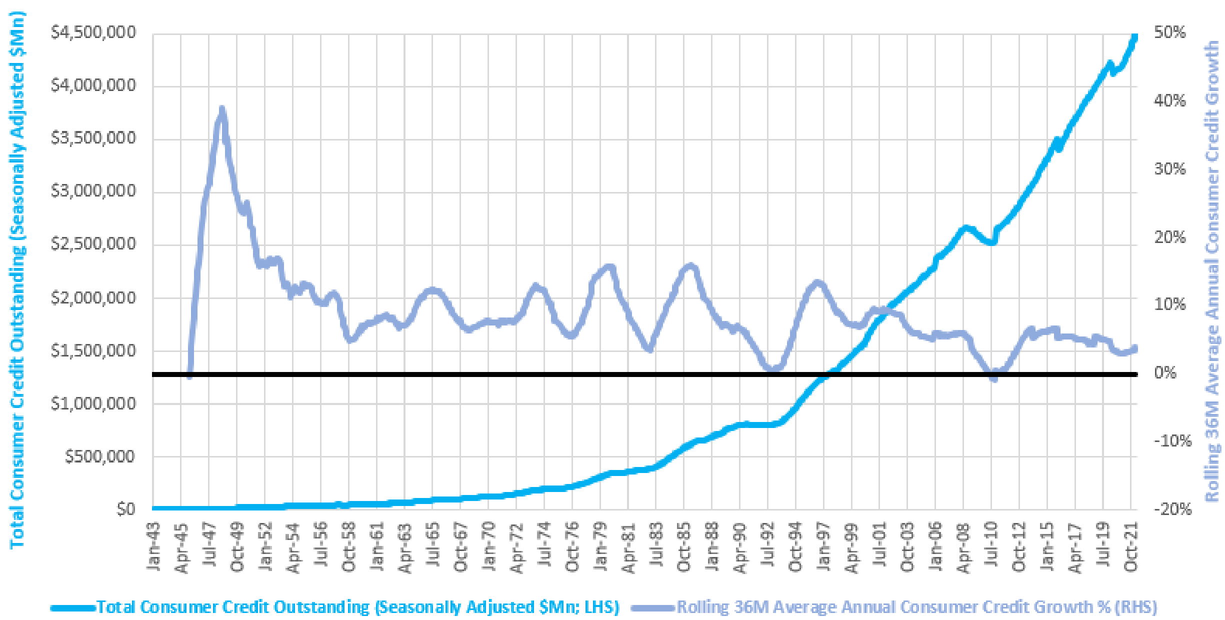
Summary Financials ($Mn)	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21
Revenues	676	743	789	839	881	932	1,000	1,160	1,295	1,317
% Δ		10%	6%	6%	5%	6%	7%	16%	12%	2%
Software Revenue							664	739	766	662
								11%	4%	-14%
Scores Revenue							336	421	529	654
								25%	25%	24%
EBITDA	190	195	195	171	201	213	206	285	350	531
% Δ		3%	0%	-12%	17%	6%	-4%	39%	23%	52%
Software OM								17%	17%	16%
Scores OM								86%	86%	86%

Industry & Competitive Positioning

Industry

There is an estimated $4.5 trillion of consumer credit outstanding the United States per the Federal Reserve as of March 2022, which has increased at an average annual rate of about 4% over the last five annual years ending in 2021. The continued growth in total consumer credit leaves FICO with plenty of white space to operate.

Total Consumer Credit Outstanding: c. $4.5tn and Growing



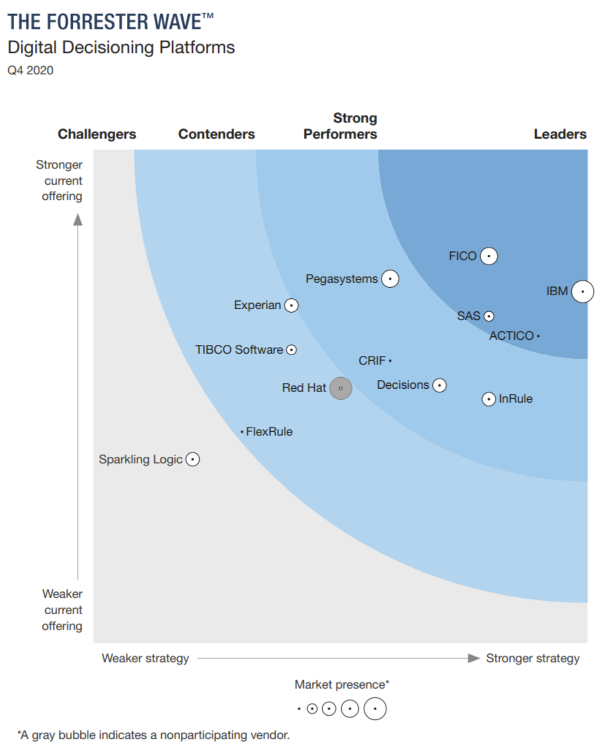
FICO, which was founded 1956, introduced analytic solutions such as credit scoring that have made credit more widely available, not just in the United States but around the world. Since that time, FICO has been a major innovator, having been an early mover in the use of Big Data and mathematical algorithms to predict consumer behavior. Through these analytic software tools, such as the FICO® Score, the standard measure of consumer credit risk in the United States. FICO solutions leverage open-source standards and cloud computing to maximize flexibility, speed deployment and reduce costs. The company also helps millions of people manage their personal credit health.

Competition

On the Scores side of the business, FICO competes with both outside suppliers and in-house analytics teams. Its primary competitors in terms of outside suppliers of scoring models include the three major consumer reporting agencies in the U.S. and Canada – Equifax, TransUnion, and Experian – which are FICO's partners in offering scoring solutions and VantageScore, a JV which was established by the major U.S. consumer reporting agencies. In delivering credit scores, credit reports and consumer credit education direct to consumer, the company competes with likes of Credit Karma, Credit Sesame, Experian, and TransUnion.

With respect to the software component, competition varies by application. For example, in fraud and financial crimes, FICO competes with Nice Actimize, Experian, Pegasystems, BAE Systems Applied Intelligences, SAS, ACI Worldwide, IBM, Feedzai, and Featurespace. Within the customer origination market FICO competes with Experian, Equifax, Moody's, Meridian Link, CGI, and others. In the customer management space, FICO competes mainly with Experian and SAS while in the case of marketing services, the company competes with Pegasystems, Equifax, Experian, SAS, Adobe, and Salesforce.

FICO's industry is constantly changing, but FICO remains innovative and one-step ahead of competitors. As shown below, the company is considered an industry leader with a strong strategy and excellent current offering relative to peers. As FICO has continued to evolve, management has taken initiative by focusing the Scores business, divesting the collections and recovery product line, and transition the software business to a platform-first cloud business, which will allow it to have the potential to dramatically scale.



Barriers to Entry

Fair Isaac has more than 90% of the market share when it comes to consumer credit lending decisions, making it the dominant player in the industry. Further 98.8% of total dollars in U.S. securitizations solely cited FICO scores as the preferred credit risk measure. And, because FICO represents the industry standard, there are high barriers to entry for new companies that want to replicate similar services. In a similar vein, this offers FICO the unique ability to exert pricing power and protect its high gross margins in the mid- to high-70s percent.

FICO has integrated several data sources within its scoring and software analytic frameworks. In doing so, FICO is effectively staving off competition as the switching costs increase; that is, as companies adopt more services using FICO's platforms, they become more entrenched with time. Companies generally do not want to risk lost data and productivity which leads to business disruption. An imperfect data migration could lead to huge amounts of frustration and business risk that would cause any company to think twice about switching from FICO.

We have developed software systems, sometimes known as decision engines and decision rules management systems, which perform the necessary functions to execute a decision strategy. Our software includes very efficient programs for these functions, facilitating, for example, business user definition of extremely complex decision strategies using graphical user interfaces; simultaneous testing of hundreds of decision strategies in "champion/challenger" (test/control) mode; high-volume processing and analysis of transactions in real time; integration of multiple data sources; and execution of predictive models for improved behavior forecasts and finer segmentation. Decision management software is an integral part of our decision management applications, described earlier.

Patents and Trademarks
FICO also protects its business through rule of law via trademarks and patents in the U.S. and select foreign countries. FICO currently holds 190 U.S. and 18 foreign patents, with an additional 82 applications pending. The company also has 31 trademarks registered in the U.S. and select foreign countries.

Customer Base
Today, FICO's institutional end users include 96 of the 100 largest financial institutions in the U.S., 2/3rds of the largest 100 banks of the world, 600 insurers (including nine of the top 10 largest U.S. P&C insurers), more than 300 retailers, and more than 200 government or public agencies. All of the top 10 companies in the Fortune 500 list use one or more of FICO's products. FICO scores are used in 30 countries outside the U.S. to improve credit decisions. On the retail side, over 300 million consumers have free access to FICO Scores and it is estimated that 1 billion credit-invisible consumers could retrieve credit through FICO Scores that leverage alternative data.

Co. Strengths

-Strong and well-tenured management team and BoD which has a history of outperforming peers
-Dominant market position with respect to consumer credit lending decisions and ability to exert pricing power
-Sticky and well-diversified customer-base, and high switching costs: FICO scores are the preferred barometer of credit health in the U.S and remain a key input across in securitizations
-History and culture of innovation: currently transforming to the software component of the company to a platform-first, cloud-based decisioning platform
-Large and consistent buyback program and history of average annual operating margin expansion greater than the 90th percentile of S&P 400 Midcap companies
-Above average return on invested capital relative to peers

Co. Weaknesses

-Subject to volatility of mortgage and auto origination
Partial Mitigant: Mortgage exposure is only c. 7% of current revenues
-Higher leverage than peers
Partial Mitigant: Little to no solvency risk and plenty of runway when considering total liquidity
-Relatively new CTO, Amir Hermelin
Partial Mitigant: Lansing, CEO, and BoD are well-tenured with a strong track record of success
-Roughly 1/3rd of revenues (3-year lookback) are derived from three major credit agencies in the U.S. including Experian, TransUnion and Equifax and the three have created their own credit scoring model, VantageScore.
Partial Mitigant: FICO remains the preferred barometer of consumer credit risk and is firmly ingrained into the fabric of lending in the U.S.

Management & Corporate Governance

Board Structure/Committees

The BoD is chaired by Braden R. Kelly and has a history of producing total returns that outstrip peers as is shown below.

Name	Age	Start	Tenure	% TRA	% Peer TRA
Chairman					
1) Braden R Kelly	51 *	02/24/2016	6.3	23.83	19.61
Board Member					
2) William J Lansing "Will"	63 *	02/2006	16.3	13.90	15.30
3) James D Kirsner "Jim"	78 *	02/07/2007	15.3	15.60	14.43
4) David A Rey	71 *	10/2011	10.6	30.31	20.30
5) Joanna Rees	60 *	02/24/2015	7.3	22.55	17.84
6) Marc F McMorris	53 *	10/28/2015	6.6	22.97	18.71
7) Eva Manolis	58 *	04/02/2018	4.1	21.28	16.10
8) Fabiola R Arredondo De Vara	55	03/04/2020	2.2	-3.56	5.96

Committees of the BoD are shown below by function and composition.

	Name	Title	Age
	Audit		
1)	James D Kirsner "Jim"	Chairman	78 *
2)	Marc F McMorris	Member	53 *
3)	David A Rey	Member	71 *
	Governance, Nominating & Executive		
4)	Braden R Kelly	Chairman	51 *
5)	James D Kirsner "Jim"	Member	78 *
6)	Joanna Rees	Member	60 *
	Leadership Development & Compensation		
7)	Joanna Rees	Chairman	60 *
8)	Fabiola R Arredondo De Vara	Member	55
9)	Braden R Kelly	Member	51 *
10)	Eva Manolis	Member	58 *

FICO has a smaller group of Directors and Executives as compared to peers and longer average tenure by comparison. The Execs are also well-aligned with 73% holding shares, which far exceeds the peer group average 53%. Similarly, the CEO also owns 2x more shares than peers.

Board	Value	Peer Avg
Structure		
# Directors	8	11
% Non-Exec Directors	88	88
Entrenchment		
Average Tenure (Years)	9.01	7.95
# Directors > 5yr Tenure	6	7
# Directors > 10yr Tenure	3	3
Overboarding		
Average # Boards Served	0.43	0.70
Highest # Boards Served	2	2
% Exec Dirs on 2+ Boards	0	0
% Non-Exec Dirs on 3+ Boards	0	3

Executives	Value	Peer Avg
Structure		
# Executives	11	15
Entrenchment		
Average Tenure (Years)	7.55	6.26
CEO Tenure (Years)	10.42	10.35
Ownership		
% Execs Holding Shares	73	53
% CEO Ownership	1.1971	0.6866

The management team is led by William J. Lansin, who has a greater than 10-year tenure in which he has outperformed peers by more than 4% on an average annual basis. Likewise, much of the management and executive team has produced annual total returns that exceed peers.

Name	Age	Start	Tenure	% TRA	% Peer TRA
Chief Executive Officer					
William J Lansing "Will"	63 *	01/26/2012	10.3	24.12	19.44
Chief Financial Officer					
Michael I McLaughlin	57 *	08/03/2019	2.8	0.93	9.52
Chief Technology Officer					
Amir Hermelin		02/09/2022	0.3	-75.51	-61.50
Vice President					
Carrie H Darling		01/28/2019	3.3	16.86	17.38
Treasurer					
Steven P Weber "Steve"		2017	5.3	22.94	19.75
Executive					
Mark Russell Scadina	53	02/2009	13.3	28.82	22.34
James M Wehmann "Jim"	56 *	04/01/2012	10.1	23.22	18.53
Richard S Deal "Rich"	54 *	11/2015	6.5	23.21	18.64
Thomas A Bowers	66 *	09/01/2020	1.7	-11.44	-6.81
Stephanie Covert	42 *	10/01/2020	1.6	-11.03	-6.71
Claus Moldt	58 *	01/06/2022	0.3	-43.67	-61.95

Management/Staff Incentives (Options, Bonuses, etc.)

FICO maintains a long-term incentive plan comprised of stock options, stock appreciation rights, restricted stock awards, stock unit awards, and other share-based awards. Stock option awards have a maximum term of ten years. In general, stock option awards and restricted stock unit awards not subject to market or performance conditions vest annually over four years. Restricted stock unit awards subject to market or performance conditions generally vest annually over three years based on the achievement of specified criteria. At September 30, 2021, there were 5,850,154 shares available for issuance as new awards under the 2021 Plan

Stock Options
FICO uses the Black-Scholes option valuation model to value its stock options incentives. The weighted-average fair value of options granted were $59.63, $99.30, and $139.11 during fiscal 2019, 2020, and 2021, respectively. The aggregate intrinsic value of options outstanding at September 30, 2021 was calculated as the difference between the exercise price of the underlying options and the market price of our common stock for the 0.2 million outstanding options that had exercise prices lower than the $397.93 market price of our common stock at September 30, 2021. The total intrinsic value of options exercised was $99.1 million, $132.6 million and $15.8 million, in fiscal 2019, 2020, and 2021, respectively, determined as of the date of exercise.

Restricted Stock Units (RSUs)
The weighted-average fair value of the RSUs granted were $206.29, $356.66 and $505.70 during fiscal 2019, 2020, and 2021 respectively. The total intrinsic value of the RSUs that vested was $91.2 million, $159.0 million, and $156.6 million, during fiscal 2019, 2020 and 2021, respectively, determined as of the date of vesting.

Performance Share Units (PSUs)
Performance share units ("PSUs") are granted to senior officers and earned based on pre- stablished performance goals approved by the Leadership Development and Compensation Committee of FICO's BoD for any given performance period. The range of payout is zero to 200% of the number of target PSUs, based on the outcome of the performance conditions. The weighted-average fair value of the PSUs granted were $185.05, $354.18 and $506.91 during fiscal 2019, 2020, and 2021, respectively. The total intrinsic value of the PSUs that vested was $19.3 million, $36.5 million and $34.7 million during fiscal 2019, 2020 and 2021, respectively, determined as of the date of vesting.

Market Share Units (MSUs)
Market share units ("MSUs") are granted to senior officers and earned based on FICO's total stockholder return relative to the Russell 3000 Index over performance periods of one, two and three years. FICO estimates the fair value of MSUs granted using the Monte Carlo valuation model and amortize the fair values over the requisite service period for each

vesting tranche of the award. The weighted average fair value of MSUs granted during FY2019, FY 2020, and FY 2021 were $169.46, $249.13, and $471.16, respectively. The total intrinsic value of the MSUs that vested was $21.6 million in FY2019, $44.6 million in FY2020 and $34.5 million in FY2021.

Employee Stock Purchase Plan

FICO offers a 15% discount to employees that buy FICO's stock. During fiscal 2021, a total of 42,402 shares of the company's common stock with a weighted-average purchase price of $389.61 per share were issued. During fiscal 2020, a total of 50,298 shares of common stock with a weighted-average purchase price of $334.21 per share were issued.

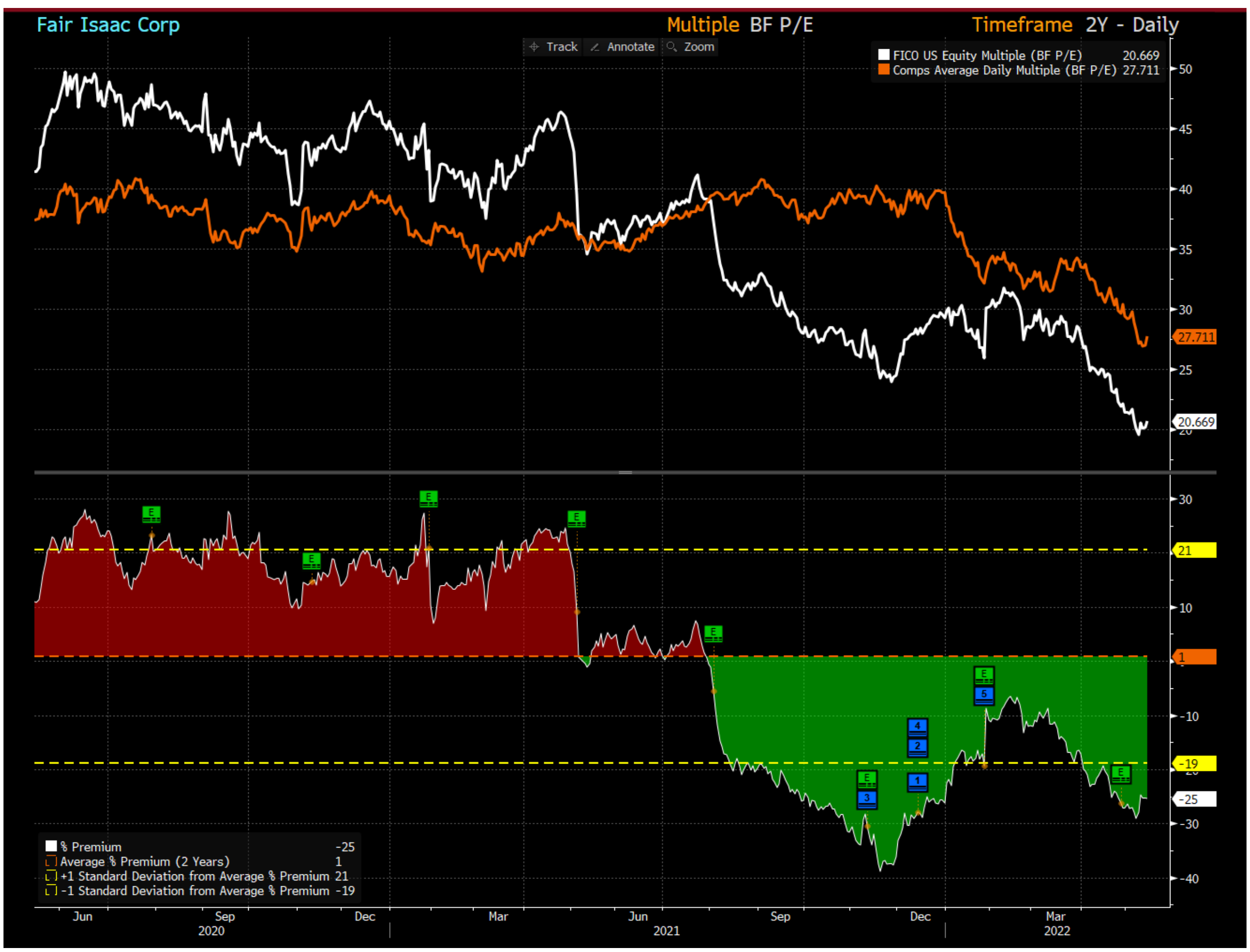
AGM Date & Issues to Raise

TBA – last AGM was March 1, 2022

Valuation

Relative and Absolute Valuation

On blended forward (BF) P/E basis, FICO appears cheap relative to BICS Best Fit peers. Trading at 20.7x next year's EPS and more than one standard deviation lower than its 2-year average premium to peers of 1%. At a normalized average premium to peers level of 28.0x, FICO's implied price would be $489.09, implying more than 35% upside in terms of capital appreciation. Similarly, on a BF EV/EBITDA basis, FICO trades just north of 16x, which appears cheap relative to the peer group average of 19.2x. FICO has historically traded at a 12% premium to its peers, but currently is priced at a 29% discount to the 2-year historical average. A pull to historical average premium to peers of 12%, would imply a BF 21.6x EV/EBITDA and a share price of $508.58, suggesting upside approximately 41%.



Relative to itself, FICO also appears inexpensive. FICO trades on a blended forward P/E of 20.7x, which represents 2.1 standard deviations less than its 2-year historical average blended forward P/E of 37.2x or a 44% discount. At a 37.2x historical average blended forward P/E, FICO would be worth $651.21, implying more than 80% upside in the form of capital appreciation.

Based on a historical average BF EV/EBIT premium to peers of 6%, a pull-to-historical-average-premium would imply circa 35% upside to FICO's current levels, with company valued on a 23.89x BF EV/EBIT basis.

2Yr Historical Average BF EV/EBIT Premium	6%
Projected Pull-to-Premium-Average BF EV/EBIT Multiple	23.9x
Projected Upside	35%

Name	Ticker	BF EV/EBIT
Fair Isaac Corp	FICO US	17.7x
Mean (Excluding FICO US)		22.5x
TransUnion	TRU US	21.7x
MSCI Inc	MSCI US	28.5x
S&P Global Inc	SPGI US	19.7x
Verisk Analytics Inc	VRSK US	23.9x
Equifax Inc	EFX US	21.7x
Morningstar Inc	MORN US	N/A
FactSet Research Systems Inc	FDS US	21.4x
MarketAxess Holdings Inc	MKTX US	25.0x
Open Lending Corp	LPRO US	9.9x
Experian PLC	EXPN LN	18.4x
MarketWise Inc	MKTW US	3.7x
Upstart Holdings Inc	UPST US	31.3x

Financials:
General comment on forecasts including source and earnings revenue

Assumptions (all else equal):
Revenues: Assumed the software component of the business declines at the steady 8-quarter lookback YoY percentage change average of -5.7% while the Scores segment grows at the 8-quarter lookback YoY percentage change average of 21.2%.
Non-GAAP Tax Rate: Assumed a 24.5% quarterly non-GAAP tax rate in line with the prior 8-quarters' average.
CAPEX: Assumed quarterly CAPEX of $5.4mn in line with the fiscal year average from a 7-year lookback perspective in quarterly terms.
Estimated Share Price of Buybacks: Assume 6.5% quarterly share price appreciation in line with the 8-quarter average.
Dividends: Assume no dividends in line with recent history and company policies.
Acquisitions/Divestitures: Assume no acquisitions or divestitures for the time being.
Effective Interest Rate on Debt: Assume effective interest rate on debt of 4.2% slightly above the prior 8-quarter average with rate hikes on the horizon.
Depreciation % of PP&E BoP: Assume 59% depreciation as a % of PP&E in line with prior 8-quarter average.
Amortization as a % of Intangibles BoP: Assume 46% amortization as a % of Intangibles BoP in line with prior 8-quarter average.
Percentage of capex allocated to intangible assets %: Assume 20%

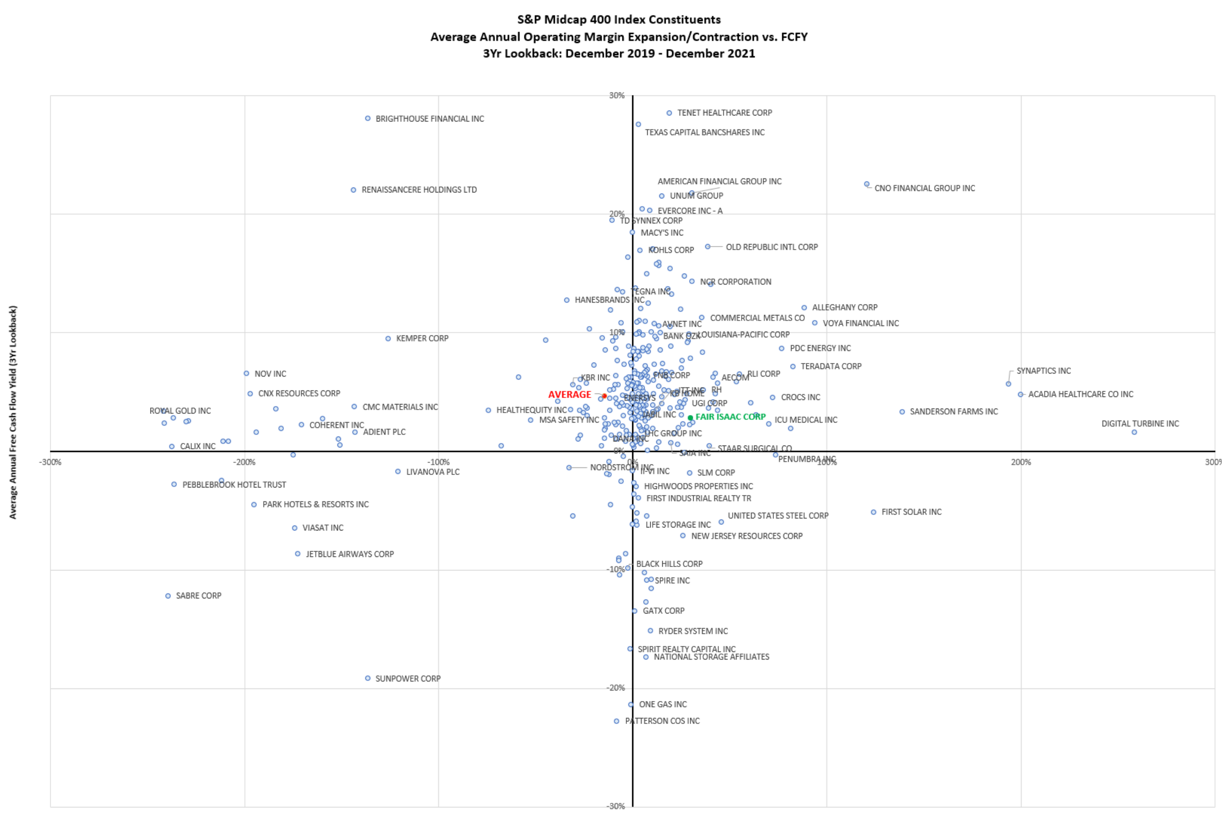
Relative Fundamentals

FICO remains one of the smallest market capitalizations in its peer group despite having one of the highest return-on-invested capital (ROIC) metrics in the peer group at 38.07%, which compares favorably to the average of 13.63%. FICO's sales growth is slow but consistently growing at a circa 16% clip which is about half the growth rate of peers of approximately 30%.

Ticker	Company	Market Cap. ($Mn)	3Yr Average Sales (g)	3Yr Average EBITDA Margin	3Yr Average Operating Margin	ROIC	3Yr Average ROA	3Yr Average ROE
Date	Name	5/13/2022	3/31/2021	3/31/2022	3/31/2022	3/31/2022	3/31/2022	3/31/2022
MKTW US Equity	MARKETWISE INC	$834.15	N/A	N/A	N/A	N/A	N/A	N/A
LPRO US Equity	OPEN LENDING CORP - CL A	$1,648.41	105.58%	61.73%	60.84%	41.74%	N/A	N/A
UPST US Equity	UPSTART HOLDINGS INC	$3,228.72	N/A	13.24%	12.47%	15.22%	N/A	N/A
FICO US Equity	FAIR ISAAC CORP	$9,375.21	15.79%	35.28%	32.57%	38.07%	20.56%	N/A
MKTX US Equity	MARKETAXESS HOLDINGS INC	$9,940.49	11.56%	59.57%	51.40%	21.89%	21.68%	30.01%
MORN US Equity	MORNINGSTAR INC	$10,381.40	29.81%	26.48%	14.39%	9.01%	8.11%	16.57%
FDS US Equity	FACTSET RESEARCH SYSTEMS INC	$14,090.33	20.23%	34.81%	29.00%	21.56%	20.06%	46.53%
TRU US Equity	TRANSUNION	$16,105.80	16.68%	32.62%	19.32%	5.58%	7.99%	24.35%
N/A	AVERAGE	$22,323.07	30.03%	43.20%	35.65%	19.21%	13.63%	70.11%
EFX US Equity	EQUIFAX INC	$24,245.60	26.54%	31.18%	21.28%	10.55%	6.00%	17.97%
EXPN LN Equity	EXPERIAN PLC	$24,861.95	12.88%	33.18%	22.39%	13.01%	8.75%	30.57%
VRSK US Equity	VERISK ANALYTICS INC	$27,823.91	16.76%	65.60%	51.31%	15.68%	9.85%	29.77%
MSCI US Equity	MSCI INC	$33,168.68	34.40%	58.20%	51.55%	26.69%	15.51%	N/A
SPGI US Equity	S&P GLOBAL INC	$114,495.32	40.06%	66.52%	61.29%	11.56%	17.76%	365.11%

FICO's average annual operating margin expansion over a 3-year lookback ending December 2021 of 29.65% is greater than the 90th percentile of S&P 400 Midcap companies 29.65%. However, the company's average annual free cash flow yield over the same time window of 2.84% sits above the 30th percentile of 2.34%, and thus below the median and average of S&P 500 Midcap companies of 4.20% and 4.65%, respectively.

Average Annual Operating Margin Expansion/Contraction vs. Free Cash Flow Yield (FCFY) 3-Year Lookback Ending December 2021		
Metric	Operating Margin Expansion	FCFY
FAIR ISAAC CORP	**29.65%**	**2.84%**
90th Percentile	**29.63%**	**12.01%**
70th Percentile	8.55%	6.52%
Average	**-14.64%**	**4.65%**
50th Percentile / Median	**2.57%**	**4.20%**
30th Percentile	-4.98%	2.34%



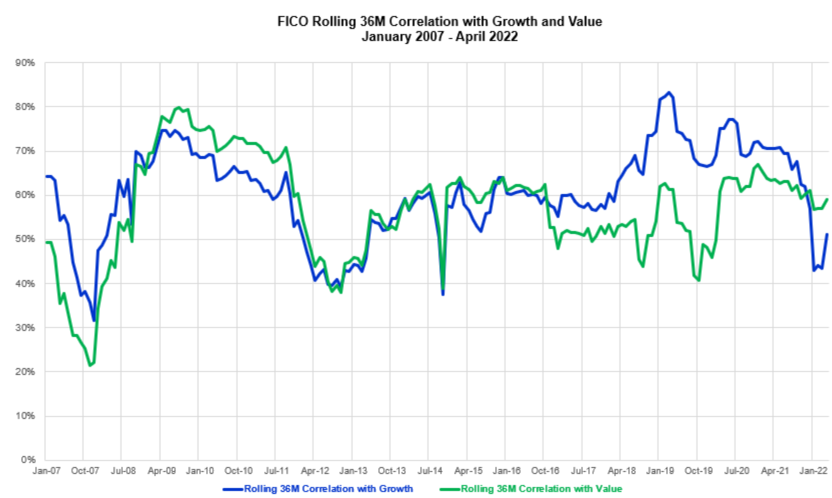
Technicals

The 14-day RSI shows that FICO current prices of $361.53 sits quite close to oversold levels, with a current reading of 39 sitting just above the oversold indication of 30. Similarly, FICO also sits about 5.9% above a possible support level of $341.4 based on Fibonacci retracement levels.

Correlation to Risk Premia Factors

Over a 36-month lookback window from May 2019 to April 2022, FICO had an average pairwise correlation to the momentum, value, minimum volatility, quality, and size factors of 56%, which compares favorably to the average pairwise correlation of the factors of 76%. This suggests that FICO would be additive from a portfolio construction perspective in terms of diversification from a factor perspective, with just a medium degree of positive correlation to factors.

Factor	Average Pairwise Correlation
FICO	56%
Momentum	75%
Value	76%
Average	76%
Min. Vol.	81%
Quality	84%
Size	84%



The correlation matrix below shows that over this same time window, FICO had the most positive linear relationship with the minimum volatility (62% correlation), size (58%), and quality (56%) factors.

Correlation Matrix vs. MSCI iShares USA Factors						
	FICO	***Value***	***Min. Vol.***	***Quality***	***Momentum***	***Size***
FICO	**100%**	**54%**	**62%**	**56%**	**51%**	**58%**
Value	**54%**	**100%**	**78%**	**85%**	**68%**	**93%**
Min. Vol.	**62%**	**78%**	**100%**	**93%**	**84%**	**89%**
Quality	**56%**	**85%**	**93%**	**100%**	**89%**	**95%**
Momentum	**51%**	**68%**	**84%**	**89%**	**100%**	**85%**
Size	**58%**	**93%**	**89%**	**95%**	**85%**	**100%**

Accounting Policies

Revenue Recognition

FICO's revenue is primarily derived from on-premises software and SaaS subscriptions, professional services and scoring services. For contracts with customers that contain various combinations of products and services, FICO evaluates whether the products or services are distinct — distinct products or services will be accounted for as separate performance obligations, while non-distinct products or services are combined with others to form a single performance obligation. For contracts with multiple performance obligations, the transaction price is allocated to each performance obligation on a relative standalone selling price ("SSP") basis. Revenue is recognized when control of the promised goods or services is transferred to our customers.

FICO's on-premises software is primarily sold on a subscription basis, which includes a term-based license and post-contract support or maintenance, both of which generally represent distinct performance obligations and are accounted for separately. The transaction price is either a fixed fee, or a usage-based fee — sometimes subject to a guaranteed minimum. When the amount is fixed, including the guaranteed minimum in a usage-based fee, license revenue is recognized at the point in time when the software is made available to the customer. Maintenance revenue is recognized ratably over the contract period as customers simultaneously consume and receive benefits. Any usage-based fees not subject to a guaranteed minimum or earned in excess of the minimum amount are recognized when the subsequent usage occurs. FICO occasionally sells software arrangements consisting of on-premises perpetual licenses and maintenance. License revenue is recognized at a point in time when the software is made available to the customer and maintenance revenue is recognized ratably over the contract term.

FICO's SaaS products provide customers with access to and standard support for the company's software on a subscription basis, delivered through our own infrastructure or third-party cloud services. The SaaS transaction contracts typically include a guaranteed minimum fee per period that allows up to a certain level of usage and a consumption-based variable amount in excess of the minimum threshold; or a consumption-based variable fee not subject to a minimum threshold. The nature of FICO's SaaS arrangements is to provide continuous access to our hosted solutions in the cloud, i.e., a stand-ready obligation that comprises a series of distinct service periods (e.g., a series of distinct daily, monthly or annual periods of service). FICO estimates the total variable consideration at contract inception — subject to any constraints that may apply — and updates the estimates as new information becomes available and recognize the amount ratably over the SaaS service period.

FICO's professional services include software implementation, consulting, model development and training. Professional services are sold either standalone, or together with other products or services and generally represent distinct performance obligations. The transaction price can be a fixed amount, or a variable amount based upon the time and materials expended. Revenue on fixed-price services is recognized using an input method based on labor hours expended which we believe provides a faithful depiction of the transfer of services. Revenue on services provided on a time and materials basis is recognized by applying the "right-to-invoice" practical expedient as the amount to which FICO has a right to invoice the customer corresponds directly with the value of FICO's performance to the customer.

FICO's B2B scoring services typically include a license that grants consumer reporting agencies the right to use its scoring solutions in exchange for a usage-based royalty. Revenue is generally recognized when the usage occurs. B2C offerings provide consumers with access to their FICO® Scores and credit reports, as well as other value-add services. These are provided as either a one-time or ongoing subscription service renewed monthly or annually, all with a fixed consideration. The nature of the subscription service is a stand-ready obligation to generate credit reports, provide credit monitoring, and other services for our customers, which comprises a series of distinct service periods (e.g., a series of distinct daily, monthly or annual periods of service). Revenue from one-time or monthly subscription services is recognized during the period when service is performed. Revenue from annual subscription services is recognized ratably over the subscription period.

Depreciation/Goodwill:

Depreciation and Amortization
Major renewals and improvements are capitalized while repair and maintenance costs are expensed as incurred. Depreciation and amortization charges are calculated using the straight-line method over the following estimated useful lives:

	Estimated Useful Life
Data processing equipment and software	3 - 6 years
Office furniture and equipment	3 - 7 years
Leasehold improvements	Shorter of estimated useful life or lease term
Equipment under capital lease	Shorter of estimated useful life or lease term

Depreciation and amortization on PP&E totaled $24.2 million, $23.5 million, and $20.3 million during FY2019, FY2020, and FY2021, respectively.

Goodwill
Goodwill is assessed for impairment for each of FICO's reporting units on an annual basis during our fourth fiscal quarter using a July 1 measurement date unless circumstances require a more frequent measurement.

Intangibles
FICO amortizes its finite-lived intangibles over the following estimated useful lives:

	Estimated Useful Life
Completed technology	4 - 10 years
Customer contracts and relationships	5 - 10 years
Trade names	1 year
Non-compete agreements	2 years

No impairment charges on intangible assets that have finite useful lives or other long-lived assets were recognized in FY2019, FY2020 or FY2021.

Contingent Liabilities/Pension Situation

DC Plan
FICO sponsors a 401(k) plan for eligible employees in the U.S. Under this plan, eligible employees may contribute up to 25% of compensation, subject to statutory limits and FICO provides matching contributions. Investment in FICO common stock is not an option under this plan. FICO's contributions into all 401(k) plans, including former-acquired-company-sponsored plans that have since merged into the Fair Isaac Corporation 401(k) plan or have been frozen, totaled $10.3 million, $10.1 million, and $9.8 billion during FY2019, FY 2020, and FY2021, respectively.

Effective Tax Rate & Explanation

FICO's effective tax rates were 11.1%, 8.0%, and 17.1% in 2019, 2020, and 2021, respectively. The increase in FICO's income tax provision in fiscal 2021 compared to fiscal 2020 was due to an increase of pre-tax book income, of which a large amount was due to the gain on divestiture of the Collections and Revenue Business as well as a decrease in excess tax benefits related to share-based compensation. The decrease in FICO's income tax provision in fiscal 2020 compared to fiscal 2019 was due to the excess tax benefits related to share-based compensation.

IFRS Impact

US GAAP

Balance Sheet/Cash Flow

Debt Structure: ST/LT, FX, Rates, Operating leases (length of leases & PV of operating leases)

Ticker	Name	Net Debt/EBITDA (x)	Total Debt/EBITDA (x)	Net Debt/Equity (%)	Total Debt/Total Assets (%)	EBITDA/ Interest Expense (x)
MKTX US Equity	MARKETAXESS HOLDINGS INC	-0.78x	0.24x	-30%	7%	479.64x
LPRO US Equity	OPEN LENDING CORP - CL A	0.02x	0.96x	1%	47%	25.84x
FDS US Equity	FACTSET RESEARCH SYSTEMS INC	0.05x	1.30x	3%	39%	N/A
MORN US Equity	MORNINGSTAR INC	0.26x	1.38x	9%	19%	47.56x
UPST US Equity	UPSTART HOLDINGS INC	0.38x	4.69x	8%	44%	N/A
Median	Median	1.75x	2.73x	9%	44%	11.96x
SPGI US Equity	S&P GLOBAL INC	1.75x	2.73x	18%	31%	40.30x
VRSK US Equity	VERISK ANALYTICS INC	2.29x	2.55x	131%	46%	11.96x
MSCI US Equity	MSCI INC	2.85x	3.38x	N/A	79%	7.75x
FICO US Equity	FAIR ISAAC CORP	3.17x	3.57x	N/A	85%	11.33x
EFX US Equity	EQUIFAX INC	3.30x	3.42x	146%	48%	11.29x
TRU US Equity	TRANSUNION	3.85x	5.02x	113%	52%	10.22x
MKTW US Equity	MARKETWISE INC	N/A	N/A	N/A	2%	-8749.84x
EXPN LN Equity	EXPERIAN PLC	N/A	N/A	N/A	43%	12.80x

FICO has two senior unsecured loans outstanding, including a $600 million revolver, $215 million of which is drawn, and a $296 million term loan. The two senior unsecured loans mature August 19th, 2026 and were issued at L+125bps. FICO is obligated to repay the term loan in consecutive quarterly installments equal to $3.75 million commencing March 31, 2022. Borrowings under both credit facilities can be used for working capital and general corporate purposes and may also be used for the refinancing of existing debt, acquisitions, and buybacks. The two senior unsecured loans outstanding are subjective to restrictive covenants including maintaining a maximum consolidated leverage ratio of 3.50x, with a step up to 4.00x following certain permitted acquisitions; and a minimum interest coverage ratio of 3.00x.

Additionally, FICO has two senior unsecured bonds outstanding including a $400 million 5 ¼ due 05/15/2026 and a $900 million 4 due 06/15/2028. The weighted average coupon and yield of the debt stack are 3.84% and 5.58%, respectively, and all debt is secured through the OpCo. Relative to BICS Best Fit Peers, the company has slightly higher leverage levels, with a Net Debt to EBITDA of 3.17x relative to the median of peers of 1.75x. With free cash flow of $416.2 million as of FYE 2021 and $988.4 million (including the below PV of operating lease) due in more than three years, FICO has plenty of runway; there is little to no solvency risk, particularly when considering FICO also has $385 million of an undrawn revolver available.

FICO also leases office space and data centers under operating lease agreements. Currently, FICO's weighted average remaining lease term is 53 months or around 4.4 years. The present value of the operating leases total c. $77.1 million when applying a 3.64% discount rate.

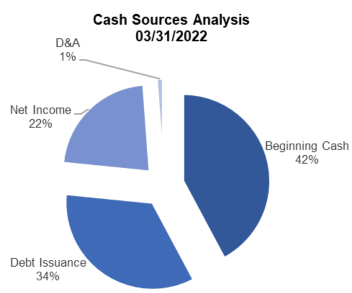
Present Value of Operating Lease ($Thousands)			

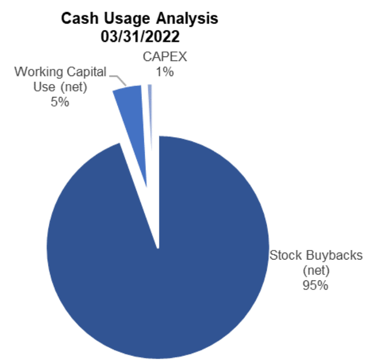
Discount Rate	3.64%

Period	Year	Obligation	PV
0	2022	$24,441	$24,441
1	2023	$19,621	$18,932
2	2024	$14,025	$13,057
3	2025	$8,639	$7,760
4	2026	$7,602	$6,589
5	Therafter	$7,522	$6,291
Total		**$81,850**	**$77,070**

Cash Flow Comment

As shown below, FICO principally uses cash to buyback shares (95%).





Hidden Assets (E.g. Land, property, listed/unlisted investments, other non-core assets, JV's, etc.

N/A

Other Balance Sheet Items E.g. Gains/Losses Directly to Reserves

N/A

Credit Rating

As of 4/30/2018: Moody's Ba2, S&P BB+

Recent Transactions

Acquisitions/Divestitures

Acquisitions
In fiscal 2019, FICO acquired 100% of the equity of eZmCom, Inc. for $18.6 million in cash. FICO recorded $6.0 million of intangible assets which are being amortized using the straight-line method over a weighted average useful life of 4.73 years. The company has allocated $11.2 million of goodwill to its Software segment that is deductible for tax purposes.

Divestitures
On May 4, 2021, FICO sold its C&R business to Jonas Collections and Recovery Inc. ("Jonas"), a company in the Jonas Software operating group of Constellation Software Inc. The decision to sell the C&R business was the result of management's decision to divest certain software products that are not built on FICO® Platform. The sale was completed on June 7, 2021. The gain recognized from the sale was $92.8 million, which was recorded in gains on

product line asset sales and business divestiture. The C&R business was part of FICO's Software segment. In addition, FICO sold all assets related to its cyber risk score operations in October 2020, and sold certain assets related to its Software operations to an affiliated joint venture in China in December 2020. The net gain realized from both transactions was immaterial.