Deutsche Bank AG(DB)

$9.06 (As of 10/14/20)

Price Target (6-12 Months): **$9.50**

Long Term: 6-12 Months | **Zacks Recommendation:** **Neutral**
(Since: 04/07/19)
Prior Recommendation: Underperform

Short Term: 1-3 Months | **Zacks Rank:** (1-5) **2-Buy**
Zacks Style Scores: VGM:F
Value: D | Growth: F | Momentum: A

Summary

On the NYSE, shares of Deutsche Bank have outperformed the industry over the past six months. Deutsche Bank's efforts to improve financials by offloading unprofitable businesses and continued investments in businesses are commendable. Also, the company expects to reduce adjusted costs to €19.5 billion by 2020 through its cost savings efforts is likely to support bottom-line growth. Further, lower CET 1 capital ratio requirement by the ECB is a tailwind. The company's strong and stable funding base, as reflected by rising deposits balance, is a positive factor. Nevertheless, litigation issues related to past misconducts continue and legal costs might deter bottom-line growth. Also, falling fee income and pressure on margins due to low interest rates environment in the domestic economy hinder Deutsche Bank's top-line growth.

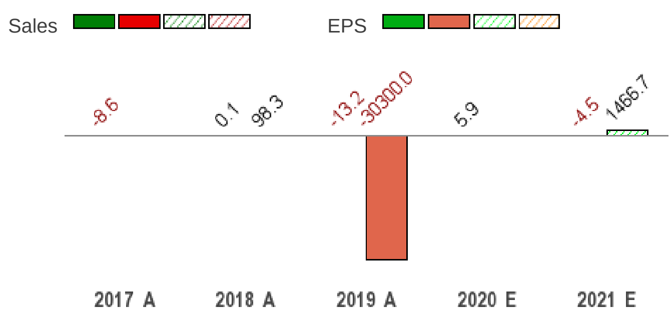
Price, Consensus & Surprise

Source: Zacks Investment Research

Data Overview

52-Week High-Low	**$11.16 - $4.99**
20-Day Average Volume (Shares)	**4,492,582**
Market Cap	**$18.7 B**
Year-To-Date Price Change	**16.5%**
Beta	**1.47**
Dividend / Dividend Yield	**$0.00 / 0.0%**
Industry	**Banks - Foreign**
Zacks Industry Rank	**Bottom 16% (207 out of 248)**
Last EPS Surprise	**NA**
Last Sales Surprise	**NA**
EPS F1 Estimate 4-Week Change	**146.2%**
Expected Report Date	**11/04/2020**
Earnings ESP	**0.0%**
P/E TTM	**NA**
P/E F1	**302.0**
PEG F1	**NA**
P/S TTM	**0.5**

Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of $)

	Q1	Q2	Q3	Q4	Annual*
2021					26,261 E
2020	7,004 A	6,982 A			27,488 E
2019	7,213 A	6,971 A	5,852 A	5,924 A	25,948 A

EPS Estimates

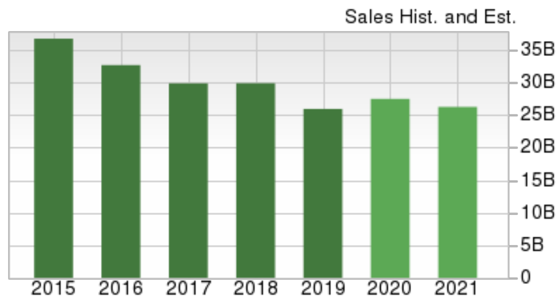
	Q1	Q2	Q3	Q4	Annual*
2021					$0.47 E
2020	$0.02 A	-$0.15 A			$0.03 E
2019	$0.09 A	-$1.86 A	-$0.46 A	-$0.80 A	-$3.04 A

*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 10/14/2020. The reports text is as of 10/15/2020.

Overview

Headquartered in Frankfurt am Main, Deutsche Bank is the largest bank in Germany and one of the largest financial institutions in Europe and the world, as measured by total assets (€1.4 trillion as of Jun 30, 2020). It offers a wide variety of investment, financial and related products and services. Per the restructuring plan announced in July 2019, Deutsche Bank confirmed the following changes to its segmental reporting, with effect from the third quarter of 2019.



- **Corporate Bank** (23% of net revenues in 2019) includes the Global Transaction Bank, which was previously part of the former Corporate & Investment Bank and the German Commercial and Corporate Clients division.
- **Investment Bank** (30%) includes Origination & Advisory and FIC Sales & Trading, which comprises Global Credit Trading, Foreign Exchange, Rates and Emerging Markets Debt businesses.
- **Private Bank** (36%) comprises three business segments. The Private Bank Germany serves private customers and small business clients in Germany. The Private Bank International also serves private and small business clients, as well as commercial and corporate clients in Italy, Spain, Belgium and India. In addition, Private Bank covers Wealth Management clients globally.
- **Asset Management** (10%) operates under the DWS brand. It provides investment solutions to individual investors and institutions with a diversified range of Active, Passive and Alternative Asset Management products and services.
- **Corporate & Other** (0.3%) includes revenues, costs and resources held centrally that are not allocated to the individual business segments.
- **Capital Release Unit** (0.7%) is created to quickly and efficiently dispose of non-strategic or low-return assets, which are no longer consistent with the Bank's strategy, in order to release capital, reduce leverage and related cost and thus create a smaller, simpler and less market-sensitive balance sheet.

In June 2019, Deutsche Bank sold its PCB business in Portugal to ABANCA Corporación Bancaria S.A.

Source: Zacks Investment Research

Reasons To Buy:

> Cost control and several strategic initiatives will support Deutsche Bank's financials. Also, the company's strong capital position and improving deposit balance might aid overall growth.

- Deutsche Bank's efforts in reducing expenses have started bearing fruits. Notably, adjusted costs (excluding litigation, impairments, policyholder benefits and claims, and restructuring and severance expenses) declined at a CAGR of 4.9% over the last three years (ended 2019), with the trend continuing in first six months of 2020. Further, Deutsche Bank targets to reduce adjusted costs to €17 billion by 2022-end. Though management expects higher regulatory compliance costs in the upcoming quarters, it remains committed to counterbalancing the impact through cost saving measures.

- Deutsche Bank remains focused on strengthening its capital position. As of Jun 30, 2020, capital ratios stayed strong. Also, in the stress test conducted by The European Banking Authority (EBA), the bank showed progress in its risk profile and capital position. Further, the company remains on track to achieve its targets – CET 1 ratio of at least 12.5% at the end of 2022 and leverage ratio of about 5%.

- As of Jun 30, 2020, Deutsche Bank had long-term debt of $153.1 billion, and cash and cash equivalents worth $166.2 billion. Therefore, we find the company at an advantageous position if the economic situation worsens further.

- Deposits at Deutsche Bank witnessed a CAGR of 1.3% over the past four years (ended 2019). The rise was recorded mainly due to deposit growth in Private and Commercial Bank segment. Further, the company's loan-to-deposit ratio as of Jun 30, 2020, was 77.1%, reflecting strong and stable funding base. Though deposits declined slightly in the first half of 2020, we believe that same are poised to grow backed by expected improvement in the economy.

- Shares of Deutsche Bank have outperformed the industry on the NYSE over the past six months. With this favorable trend, the company's Zacks Consensus Estimate for the current year has been revised to an earnings of 3 cents from a loss of 9 cents over the past 30 days. Therefore, given the progress on fundamentals and positive estimates revisions, the stock has decent upside potential.

Reasons To Sell:

> A prolonged low interest rate environment keeps margins under pressure. Also, litigation issues due to past misconducts lead to higher legal costs, and remain a key concern for Deutsche Bank.

- Due to the nature of its business, Deutsche Bank is involved in litigation, arbitration and regulatory proceedings in Germany and in a number of jurisdictions outside Germany. Such matters are subject to uncertainties. The bank has shouldered significant legal settlement costs in the past which has adversely impacted its financials. In December 2019, Deutsche Bank was slapped with a fine by the Frankfurt prosecutors related to the investigation of German client interactions with offshore entities established by the German bank's Virgin Islands subsidiary — Regula Ltd. Though the company has resolved a number of legal matters and made progress on several others, a number of cases are yet to be resolved. Hence, the company's financials are expected to be hit by higher legal expenses in the near term.
- Deutsche Bank's net revenues have declined at a CAGR of 8.8% over the last five years (ended 2019). Pressure on margins due to low interest rates, declining fee income along with the bank's involvement in legal hassles is primarily responsible for the falling revenues. Further, challenging business conditions in the domestic economy might deter top-line growth. Notably, net revenues remained stable in first two quarters of 2020.
- Regulatory reforms enacted and proposed in response to the persistent weaknesses in the financial sector, together with increased regulatory scrutiny, require Deutsche Bank to maintain increased capital levels and this could significantly affect its businesses. If the bank is unable to meet capital requirements with an adequate buffer, it could experience the effect of these factors on business and results.

Last Earnings Report

Deutsche Bank Q2 Earnings Rise Y/Y on Higher Revenues

Quarter Ending	06/2020
Report Date	Jul 29, 2020
Sales Surprise	NA
EPS Surprise	NA
Quarterly EPS	-0.15
Annual EPS (TTM)	-1.39

Deutsche Bank reported second-quarter 2020 net income of €61 million ($67.1 million) as against the year-ago quarter's net loss of €3.1 billion. Also, the German lender reported adjusted profit before taxes of €935 million ($1 billion), up 44.7% year over year.

Second-quarter results benefitted from higher net revenues and a decline in expenses. Also, strong capital position was a tailwind. However, a drastic increase in provision for credit losses due to the impacts of the coronavirus outbreak was a major offsetting factor.

Revenues Rise Slightly, Provisions Flare Up

The bank generated net revenues of €6.29 billion ($6.9 billion), up 1% year over year. The upside was primarily due to higher revenues from investment bank.

Provision for credit losses rose substantially to €761 million ($837.1 million) from $161 million in the year-ago quarter.

Non-interest expenses of €5.37 billion ($5.9 billion) were down 23% from the prior-year quarter. Excluding restructuring-related charges, the bank reported adjusted costs of €4.9 billion ($5.4 billion), down 8% year over year.

Segmental Performance

Net revenues at the *Corporate Bank* division of €1.33 billion ($1.5 billion) rose 3% from the year-ago quarter. Higher revenues in global transaction banking led to the rise.

Investment Bank segment's net revenues totaled €2.7 billion ($3 billion), up 46% year over year. Higher revenues from fixed income, particularly debt origination business, along with rise in origination and advisory resulted in the rise.

Private Bank reported net revenues of €2.16 billion ($2.4 billion), down 5% year over year. The fall primarily stemmed from the impact of COVID-19 and ongoing deposit margin compression, which offset the positive impact of continued growth in volumes.

Asset Management segment generated net revenues of €549 million ($603.9 million), down 8% year over year mainly due to the non-recurrence of periodic performance fees relating to an infrastructure fund in the prior-year quarter.

Corporate & Other unit reported negative net revenues of €154 million ($169.4 million) against net revenues of €184 million a year ago.

Capital Release unit reported negative net revenues of €70 million ($77 million) against net revenues of €221 million, reflecting businesses exited or discontinued and the impact of de-risking costs.

Capital Position

Deutsche Bank's Common Equity Tier 1 capital ratio (fully loaded) came in at 13.3% as of Jun 30, 2020, compared with 13.4% in the year-ago quarter. Leverage ratio, on an adjusted fully-loaded basis, was 4.2%, up year over year from 3.9%.

Risk-weighted assets decreased €10 billion in the June-end quarter to €331 billion ($371.6 billion) sequentially.

Outlook for 2020

The company expects post-tax return on average tangible shareholders' equity in 2020 to be negatively affected by costs to execute its strategy as well as the impact of the COVID-19 outbreak on the broader economic environment.

Revenues for the company are expected to be essentially flat in 2020 mainly as a result of continued de-risking activities in the Capital Release Unit. Core Bank revenues are expected to be slightly higher in 2020 than the previous year based on the strong revenue performance in the first half of the year combined with expectations of a gradual recovery of the global economy in the second half of 2020. In addition, Deutsche Bank expects revenues to continue to be impacted from the ongoing low interest rate environment. Although volatility has receded, macroeconomic and market conditions are expected to remain volatile for the remainder of 2020, with substantial uncertainty as to the short and longer-term impacts of the COVID-19 pandemic. It seeks to offset some of these negative impacts through ongoing investment into growth areas.

Provision for credit losses is expected to significantly increase in 2020 due to a continued normalization of provisioning levels, lower recoveries and the impact of the COVID-19 outbreak on Expected Credit Loss estimates. It reaffirmed guidance for provision for credit losses of between 35 and 45 basis points of loans in 2020.

The lender remains on track to deliver adjusted costs of €19.5 billion in 2020. Transformation-related costs of €1.4 billion are expected to be incurred in 2020.

Deutsche Bank expects the litigation and enforcement environment to remain challenging in the short term. For 2020, it expects net litigation charges to exceed the levels experienced in 2019.

Management believes that significant opportunities exist to support clients, which may lead to a temporary increase in risk-weighted assets (RWA). As a result, it expects RWA to be slightly higher in 2020 compared to the prior year.

Post-tax Return on Average Tangible Shareholders' Equity is expected to be affected by costs related to the execution of its strategy as well as the impact of COVID-19 on the broader economic environment.

Medium-Term Target (2022-end)

For the group, post-tax return on tangible equity (RoTE) of 8% is targeted by 2022, given external headwinds, including interest-rate movements in the euro area. Notably, various measures have been implemented by the bank to nullify the impact of lower interest rates to a greater extent. Loan growth, passing through negative interest rates, further optimization of liquidity reserves and using deposit tiering arrangements initiated by the European Central Bank advantageously are some of the measures.

For the Core Bank, excluding the Capital Release Unit, Deutsche Bank anticipates post-tax RoTE target of above 9% in 2022. Cost income ratio of 70% is expected.

Per management anticipations, the interest-rate environment is likely to affect the returns in the Private Bank and Corporate Bank in the mid-term, partly offset by revenue growth in the Investment Bank and Corporate & Other.

The company aims to reduce adjusted costs to €17 billion by 2022.

CET 1 capital ratio is anticipated to be maintained at 12.5%. Also, leverage ratio is likely to be about 5%.

Recent News

Deutsche Bank Provides Guidance For Third Quarter - Sep 22, 2020

At the 2020 Bank of America Annual Financials CEO Conference, James von Moltke — the chief financial officer of Deutsche Bank — said that the investment banking unit is performing well, benefitting from the strong momentum experienced in the first half of the year, which continued into the third quarter 2020.

Also, comparing with the guidance provided by the Wall Street biggies last week, Moltke commented that “We’d be, at this point, at least in line with or ahead of what our peers have guided so far.”

On the other hand, performance of Deutsche Bank’s retail unit and the transaction bank is expected to be hurt by low and negative interest rates environment.

On the cost front, Moltke noted that despite delay in execution of layoffs due to the pandemic, the bank remains on track to achieve its cost-savings target. Also, he said that Deutsche Bank might have to incur higher compensation expenses as attrition rate is low amid the pandemic.

Further, commenting on the merger wave, Moltke said that Deutsche Bank is “working hard to prepare” for the same.

The bank is looking out for cross-border merger opportunities as Moltke cited that domestic deals seem more challenging. Failed merger talks with Commerzbank last year is an example of such deals. In the meantime, Deutsche Bank is engaged in bolstering individual business units by acquiring small businesses that complement them.

BNY Mellon & Deutsche Bank Jointly Develop Digital FX Solution - Jul 8, 2020

The Bank of New York Mellon Corporation has developed a new foreign-exchange (FX) solution enabled by application programming interface (API) in collaboration with Deutsche Bank. This solution aims to reduce the confirmation times for restricted emerging-market currency trades.

The digital solution will also reduce the pre-trade time in emerging-market custody FX considerably, along with lowering operational burden and manual intervention.

The solution is already live in Korea and is being applied to custody FX transactions in Korean Won. The digital solution is likely to be used for the Indonesian Rupiah and the Indian Rupee next. Eventually, it will be launched in other restricted emerging market currencies, which has equity or fixed-income transactions as its underlying.

Further, the solution is expected to facilitate immediate communication between existing bots of the two banks and can likely bring trade remediation closer to the time of execution. It is also expected to decrease price slippage for “clients between the FX leg of a transaction and the equity or fixed-income security trade.”

Jason Vitale, global head of FX at BNY Mellon said, "With this partnership, we are not only seizing an opportunity to alter back-office processing in restricted markets, but more importantly, we are providing front-office users with faster execution and enhanced workflow transparency."

David Lynne, APAC head of Fixed Income & Currencies, and Corporate Bank, at Deutsche Bank noted, "This demonstrates our commitment to market leading execution, at a time when investor participation and focus on costs in these markets are increasing. The collaboration between the two organizations leverages our strengths and expertise in emerging markets, custodial FX, as well as digital work-flow and innovation."

Deutsche Bank Enters Multi-Year Partnership With Google Cloud - Jul 7, 2020

Deutsche Bank in partnership with Alphabet’s Google Cloud is aiming to innovate and introduce the next generation of technology-based financial products. For the moment, the companies have signed a Letter of Intent, with plans to sign a multi-year contract in a few months.

With the partnership, Deutsche Bank aims to transform its IT architecture and will be able to benefit from the engineering capabilities of both companies.

Per the terms discussed by the companies, the multi-year transformation and optimization of the German bank’s current systems will be undertaken in a phased approach. Also, both parties are bound to comply with privacy and data protection regulations to maintain the confidentiality, integrity and availability of customer data and Deutsche Bank’s information assets.

Also, Deutsche Bank will be able to access world-class data science, artificial intelligence and machine learning, which would help it serve its clients better amid the growing demand for digital transactions.

The bank seeks to find a better solution for helping treasury clients, with day-to-day tasks such as cash flow forecasting, improved risk analytics and advanced security solutions to protect clients’ accounts. For the private banking business, digital and intuitive solutions will be the focus to simplify the interactions between customers and employees.

“The partnership with Google Cloud will be an important driver of our strategic transformation,” said Christian Sewing, CEO, Deutsche Bank. “It demonstrates our determination to invest in our technology as our future is strongly linked to successful digitization. It is as much a revenue story as it is about costs.”

Deutsche Bank Mulling to Form New Global Private Bank - Jun 10, 2020

Continuing its restructuring moves, German bank Deutsche Bank is now mulling to combine the company's Wealth Management and Private &

Commercial Business International units, and form a new International Private Bank. The bank targets to serve 3.4 million private, wealth and commercial clients through the new entity.

Though the new division, Deutsche Bank aims to merge globally-connected Wealth Management's clients across Germany, Europe, the Americas, Asia and the Middle East and Africa, along with private clients and small- and medium-sized enterprises in Italy, Spain, Belgium and India. The combined business is likely to hold around 250 billion euros of assets under management and record revenues of about 3 billion euros.

Moreover, Claudio de Sanctis, the recent Global Head of Wealth Management, will head the International Private Bank and serve as CEO EMEA.

Karl von Rohr, Deutsche Bank's president and head of the Private Bank, said, "This exciting combination is the next step in the Private Bank's transformation announced last July. I am delighted that Claudio will lead our new growth pillar. He has made a major contribution since joining Deutsche Bank in December 2018 and possesses all the qualities and energy needed to lead this strategically vital business for Deutsche Bank."

De Sanctis further noted, "With the International Private Bank, we will create a truly global organization with a unique focus on serving entrepreneurial individuals and families with European connectivity as well as a personal banking powerhouse in major Eurozone markets. Combining our internationally focused Private Bank businesses will allow us to develop our market share within and across local markets. We will be able to provide greater access for private banking clients to our wealth management capabilities and to combine forces to offer superior digital services to our private, wealth and commercial clients."

BNP Paribas and Deutsche Bank Receive Approvals - Nov 14, 2019

BNP Paribas and Deutsche Bank announce that the agreement to refer clients and to transfer technology and key staff from Deutsche Bank's Global Prime Finance and Electronic Equities businesses to BNP Paribas has received the necessary approvals and is now unconditional.

Previously, continuing with its restructuring moves, in September 2019, Deutsche Bank has entered a deal with BNP Paribas, per which the former will transfer its prime brokerage business to the latter. The French bank will service Deutsche Bank's Global Prime Finance and Electronic Equities clients.

However, per the agreement, the platform will remain under the German bank till the migration of clients to BNP Paribas is complete. The company expects the transaction to unwind by the end of 2021 with client transactions, IT hardware and software and employees to be transferred over the period.

"We are pleased to have signed the master transaction agreement with BNP Paribas on schedule. This is an important milestone for our Capital Release Unit and attests to the strength of our client offering and technology in these products. We are already making progress and are on the right track to implement this transaction, thereby providing a clear path for clients and staff," said Frank Kuhnke, chief operating officer, Deutsche Bank.

Valuation

Deutsche Bank's shares are up 16.5% in the year-to-date period and 15.5% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Finance sector are down 33.7% and 15.6% in the year-to-date period, respectively. Over the past year, the Zacks sub-industry and sector are down 31.2% and 9.9%, respectively.

The S&P 500 Index is up 8.5% and 16.9% in the year-to-date period and trailing 12-month period, respectively.

The stock is currently trading at 0.27X trailing 12 months book value, which compares to 1X for the Zacks sub-industry, 2.54X for the Zacks sector and 6.07X for the S&P 500 Index.

Over the past five years, the stock has traded as high as 0.55X and as low as 0.16X, with a 5-year median of 0.29X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our $9.50 price target reflects 0.28X book value.

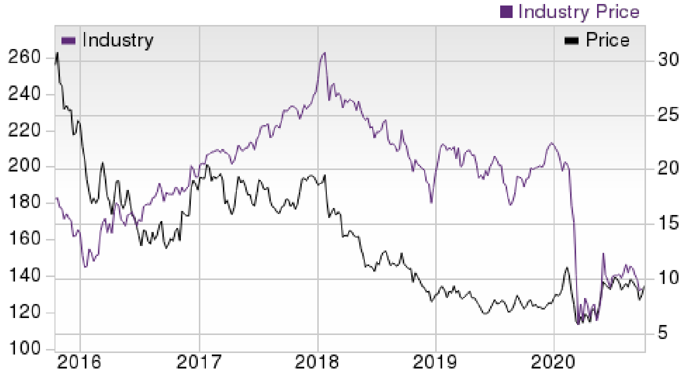
The table below shows summary valuation data for DB

Valuation Multiples - DB

		Stock	Sub-Industry	Sector	S&P 500
P/B TTM	Current	0.27	1	2.54	6.07
	5-Year High	0.55	1.71	2.9	6.2
	5-Year Low	0.16	0.73	1.72	3.75
	5-Year Median	0.29	1.33	2.54	4.89
P/EBITDA TTM	Current	3.27	4.2	13.86	16.47
	5-Year High	9.86	6.77	15.55	16.95
	5-Year Low	0.89	3.11	7.82	10.04
	5-Year Median	4.1	5.38	13.22	13.83
P/S F12M	Current	0.71	2.73	6.14	4.17
	5-Year High	1.04	4.21	6.66	4.31
	5-Year Low	0.46	2.31	4.96	3.18
	5-Year Median	0.66	3.6	6.06	3.67

As of 10/14/2020 *Source: Zacks Investment Research*

Industry Analysis **Zacks Industry Rank:** Bottom 16% (207 out of 248)



Source: Zacks Investment Research

Top Peers

Company (Ticker)	Rec	Rank
Royal Bank Of Canada **(RY)**	Outperform	2
Barclays PLC **(BCS)**	Neutral	3
BanColombia S.A. **(CIB)**	Neutral	3
HSBC Holdings plc **(HSBC)**	Neutral	3
ICICI Bank Limited **(IBN)**	Neutral	3
The PNC Financial Services Group, Inc **(PNC)**	Neutral	3
Standard Chartered PLC **(SCBFF)**	Neutral	3
UBS Group AG **(UBS)**	Neutral	3

The positions listed should not be deemed a recommendation to buy, hold or sell.

Industry Comparison Industry: Banks - Foreign

	DB	X Industry	S&P 500	BCS	IBN	UBS
				Industry Peers		
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	2	-	-	3	3	3
VGM Score	F	-	-	B	F	D
Market Cap	18.72 B	20.84 B	23.88 B	22.68 B	38.38 B	42.13 B
# of Analysts	2	1	14	3	4	2
Dividend Yield	0.00%	2.26%	1.61%	0.00%	0.00%	0.00%
Value Score	D	-	-	B	D	C
Cash/Price	19.93	4.24	0.07	23.80	0.47	4.22
EV/EBITDA	-127.21	-3.52	13.59	-16.22	13.58	3.48
PEG F1	NA	1.98	2.87	8.53	NA	1.70
P/B	0.27	0.71	3.53	0.26	2.02	0.74
P/CF	NA	5.27	13.42	3.10	22.56	6.87
P/E F1	302.00	12.19	22.16	17.05	24.60	9.43
P/S TTM	0.53	1.11	2.64	0.80	2.90	1.40
Earnings Yield	0.33%	8.20%	4.34%	5.93%	4.04%	10.60%
Debt/Equity	2.46	1.17	0.70	4.97	1.66	3.24
Cash Flow ($/share)	-0.94	1.81	6.93	1.68	0.49	1.68
Growth Score	F	-	-	C	D	F
Historical EPS Growth (3-5 Years)	NA%	3.28%	10.41%	2.20%	-16.33%	3.91%
Projected EPS Growth (F1/F0)	100.99%	-35.57%	-2.95%	-75.47%	37.12%	7.02%
Current Cash Flow Growth	-161.61%	4.25%	5.49%	9.46%	150.68%	-8.95%
Historical Cash Flow Growth (3-5 Years)	NA%	5.28%	8.51%	2.46%	-3.60%	5.03%
Current Ratio	0.76	1.01	1.35	1.52	0.99	0.98
Debt/Capital	71.25%	52.82%	42.91%	83.24%	62.36%	76.44%
Net Margin	-7.49%	15.29%	10.28%	4.95%	8.98%	15.29%
Return on Equity	-3.77%	8.25%	14.80%	4.04%	6.64%	8.12%
Sales/Assets	0.02	0.04	0.51	0.02	0.07	0.03
Projected Sales Growth (F1/F0)	5.89%	0.00%	-0.53%	-0.62%	5.43%	34.82%
Momentum Score	A	-	-	A	F	A
Daily Price Change	-0.55%	-0.30%	-0.25%	-0.38%	2.39%	-1.12%
1-Week Price Change	9.18%	3.40%	4.06%	9.25%	7.81%	2.91%
4-Week Price Change	-2.48%	-3.69%	1.91%	-1.13%	9.01%	-6.80%
12-Week Price Change	-7.83%	-7.05%	5.03%	-11.80%	7.02%	-6.88%
52-Week Price Change	15.56%	-26.96%	4.66%	-37.37%	-8.32%	2.95%
20-Day Average Volume (Shares)	4,492,582	145,721	2,074,743	3,223,603	6,243,793	2,836,774
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	4.55%	0.00%	0.00%
EPS F1 Estimate 4-Week Change	146.15%	0.04%	0.00%	4.55%	-1.63%	0.00%
EPS F1 Estimate 12-Week Change	109.52%	3.00%	3.54%	-20.69%	-9.05%	8.44%
EPS Q1 Estimate Monthly Change	NA%	0.00%	0.00%	NA	0.00%	NA

Source: Zacks Investment Research

Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we maintain a balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Value Score	D
Growth Score	F
Momentum Score	A
VGM Score	F

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.

As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

Disclosures

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Investing involves risk; principal loss is possible. There is no guarantee that companies that can issue dividends will declare, continue to pay or increase dividends.

Glossary of Terms and Definitions

52-Week High-Low: The range of the highest and lowest prices at which a stock has traded during the past year. This range is determined based on the stock's daily closing price which may differ from the intra-day high or low. Many investors use it as a technical indicator to determine a stock's current value and future price movement. The idea here is that if price breaks out from the 52-week range, in either direction, the momentum may continue in the same direction.

20-Day Average Volume (Shares): The average number of shares of a company traded in a day over the last 20 days. It is a direct indication of a security's overall liquidity. The higher the average daily trading volume, the easier it is to enter or exit the stock at a desired price with more buyers and sellers being available.

Daily Price Change: This is the percentage difference between a trading day's closing price and the prior trading day's closing price. This item is updated at 9 p.m. EST each day.

1-Week Price Change: This is the percentage change in a stock's closing price over the last 5 trading days. This change reflects the collective buying and selling sentiment over the 1-week period.

A strong weekly price increase for the stock, especially when accompanied by increased volume, is an indication of it gaining momentum.

4-Week Price Change: This is the percentage change in a stock's closing price over the last 20 trading days or past 4 weeks. This is a mediumterm price change metric and an indication of the stock gaining momentum.

12-Week Price Change: This is the percentage change of a stock's closing price over the last 60 trading days or past 12 weeks. Similar to 4-week price change, this is a medium-term price change metric. It shows whether a stock has been enjoying strong investor demand, or if it has been in consolidation, or distress over this period.

52-Week Price Change: This is the percentage change in a stock’s closing price over the last 260 trading days or past 52 weeks. This long-term price change metric is a good reference point for investors. Some investors seek stocks with the best percentage price change over the last 52 weeks, expecting the momentum to continue.

Market Cap: The number of outstanding common shares of a company times its latest price per share. This figure represents a company's size, which indicates various characteristics, including price stability and risk, in which investors could be interested.

Year-To-Date Price Change: Change in a stock's daily closing price in the period of time beginning the first day of the current calendar year through to the previous trading day.

# of Analysts: Number of EPS estimates used in calculating the current-quarter consensus. These estimates come from the brokerage analysts tracking this stock. However, the number of such analysts tracking this stock may not match the number of estimates, as all brokerage analysts may not come up with an estimate or provide it to us.

Beta: A measure of risk commonly used to compare the volatility of a stock to the overall market. The S&P 500 Index is the base for calculating beta and carries a value of 1. A stock with beta below 1 is less risky than the market as a whole. And a stock with beta above 1 is riskier.

Dividend: The portion of earnings a company is expected to distribute to its common shareholders in the next 12 months for each share they own. Dividends are usually paid quarterly. Dividend payments reflect positively on a company and help maintain investors' trust. Investors typically find dividend-paying stocks appealing because the dividend adds to any market price appreciation to result in higher return on investment (ROI). Moreover, a steady or increasing dividend payment provides investors a cushion in a down market.

Dividend Yield: The ratio of a company's annual dividend to its share price. The annual dividend used in the ratio is calculated based on the mostrecent dividend paid by the company. Dividend yield is an estimate of the dividend-only return from a stock in the next 12 months. Since dividend itself doesn’t change frequently, dividend yield usually changes with a stock’s price movement. As a result, often an unusually high dividend yield is a result of weak stock price.

S&P 500 Index: The Standard & Poor's 500 (S&P 500) Index is an unmanaged group of securities considered to be representative of the stock market in general. It is a market-capitalization-weighted index of stocks of the 500 largest U.S. companies. Each stock’s weight in the index is proportionate to its market value.

Industry: One of the 250+ groups that Zacks classifies all stocks into based on the nature of business. These groups are termed as expanded (aka "X") industries and map to their respective (economic) sectors; Zacks has 16 sectors.

Zacks Industry Rank: The Zacks Industry Rank is determined by calculating the average Zacks Rank for all stocks in the industry and then assigning an ordinal rank to it. For example, an industry with an average Zacks Rank of 1.6 is better than an industry with an average Zacks Rank of 2.3. So, the industry with the better average Zacks Rank would get a better Zacks Industry Rank. If an industry has the best average Zacks Rank, it would be considered the top industry (1 out of 250+), which would place it at the top 1% of Zacks-ranked industries. Studies have shown that roughly half of a stock's price movement can be attributed to the industry group it belongs to. In fact, the top 50% of Zacks-ranked industries outperforms the bottom 50% by a factor of more than 2 to 1.

Last EPS Surprise: The percentage deviation of a company's last reported earnings per share from the Zacks Consensus Estimate. Companies with a positive earnings surprise are more likely to surprise again in the future (or miss again if they recently missed).

Last Sales Surprise: The percentage deviation of a company's last reported sales from the Zacks Consensus Estimate.

Expected Report Date: This is an estimated date of a company's next earnings release. The information originated or gathered by Zacks Investment Research from its information providers or publicly available sources is the basis of this estimate.

Earnings ESP: The Zacks Earnings ESP compares the Most Accurate Estimate to the Zacks Consensus Estimate for the yet-to-be reported quarter. The Most Accurate Estimate is the most recent version of the Zacks Consensus EPS Estimate. The idea here is that analysts revising their estimates closer to an earnings release have the latest information, which could potentially be more accurate than what they and others contributing to the consensus had predicted earlier. Thus, a positive or negative Earnings ESP reading theoretically indicates the likely deviation of the actual earnings from the consensus estimate. However, the model's predictive power is significant for positive ESP readings only. A positive Earnings ESP is a strong predictor of an earnings beat, particularly when combined with a Zacks Rank #1 (Strong Buy), #2 (Buy) or #3 (Hold). Our research shows that stocks with this combination produce a positive surprise nearly 70% of the time.

Periods:

TTM: Trailing 12 months. Using TTM figures is an effective way of analyzing the most-recent financial data in an annualized format that helps neutralize the effects of seasonality and other quarter-to-quarter variation.

F1: Current fiscal year. This period is used to analyze the estimates for the ongoing full fiscal year.

F2: Next fiscal year. This period is used to analyze the estimates for the next full fiscal year.

F12M: Forward 12 months. Using F12M figures is an effective way of analyzing the near-term (the following four unreported quarters) estimates in an annualized manner. Instead of typically representing estimates for the full fiscal year, which may not represent the nitty-gritty of each quarter, F12M figures suggest an all-inclusive annualized estimate for the following four quarters. The annualization helps neutralize the potential effects of seasonality and other quarter-to-quarter variations.

P/E Ratio: The price-to-earnings ratio measures a company's current market price per share relative to its earnings per share (EPS). Usually, the trailing-12-month (TTM) EPS, current-fiscal-year (F1) EPS estimate, or forward-12-month (F12M) EPS estimate is used as the denominator. In essence, this ratio shows what the market is willing to pay today for each dollar of EPS. In other words, this ratio gives a sense of what the relative value of the company is at the already reported level of earnings or at a future level of earnings.

It is one of the most widely-used multiples for determining the value of a company and helps comparing its valuation with that of a competitor, the industry group or a benchmark.

PEG Ratio: The price/earnings to growth ratio is a stock's P/E ratio using current fiscal year (F1) EPS estimate divided by its expected EPS growth rate over the coming 3 to 5 years. This ratio essentially determines a stock's value by factoring in the company’s expected earnings growth and is thus believed to provide a more complete picture than just the P/E ratio, particularly for faster-growing companies.

P/S Ratio: The price-to-sales ratio is calculated as a company’s current price per share divided by trailing 12 months (TTM) sales or revenues per share. This ratio shows what the market is willing to pay today for each dollar of TTM sales per share. The P/S ratio is at times the only valuation metric when the company has yet to become profitable.

Cash/Price Ratio: The cash-to-price ratio or Cash Yield is calculated as cash and marketable securities per share divided by the company’s current share price. Like the earnings yield, which shows the anticipated yield (or return) on a stock from earnings for each dollar invested, the cash yield does the same, with cash being the source of return instead of earnings. For example, a cash/price ratio of 0.08 suggests a return of 8% or 8 cents for every $1 investment.

EV/EBITDA Ratio: The EV/EBITDA ratio, also known as Enterprise Multiple, is calculated as a company’s enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by EBITDA (earnings before interest, taxes, depreciation and amortization). Usually, trailing-12-month (TTM) or forward-12-month (F12M) EBITDA is used as the denominator.

EV/Sales Ratio: The enterprise value-to-sales ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by annual sales. It is an expansion of the P/S valuation, which uses market value instead of enterprise value. The EV/Sales ratio is perceived as more accurate than P/S, in part, because the market capitalization does not take a company's debt into account when valuing it.

EV/CF Ratio: The enterprise value-to-cash flow ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by the trailing-12-month (TTM) operating cash flow. It's a measure of how long it would take to buy the entire business if you were able to use all the company's operating cash flow.

The EV/CF ratio is perceived as more accurate than the P/CF ratio, in part, because the market price does not take a company's debt into account when valuing it.

EV/FCF Ratio: The enterprise value-to-free cash flow metric compares a company's enterprise value to its trailing-12-month (TTM) free cash flow (FCF). This metric is very similar to the EV/CF ratio, but is considered a more exact measure owing to the fact that it uses free cash flow, which subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding growth activities and payments to shareholders.

P/EBITDA Ratio: The P/EBITDA ratio is calculated as a company's per share market value divided by EBITDA (earnings before interest, taxes, depreciation, and amortization). This metric is very similar to the EV/EBITDA ratio, but is considered a little less exact measure as it uses market price, which does not take a company's debt into account. However, since EBITDA is often considered a proxy for cash income, the metric is used as a measure of what the market is willing to pay today for each dollar of the company's cash profitability in the trailing 12 months (TTM) or forward 12 months (F12M).

P/B Ratio: The price-to-book ratio is calculated as a company's current price per share divided by its book value (total assets – liabilities – preferred stocks) per share. In short, the book value is how much a company is worth. In other words, it reflects the total value of a company's assets that its common shareholders would receive if it were to be liquidated. So, the P/B ratio indicates whether you're paying higher or lower than what would remain if the company went bankrupt immediately. Investors typically use this metric to determine how a company's stock price stacks up to its intrinsic value.

P/TB Ratio: The price-to-tangible-book value ratio is calculated as a the per share market value of a company divided by the value of its tangible assets (total assets – liabilities – preferred stocks – intangible assets) per share. Tangible book value is the same thing as book value except it excludes the value of intangible assets to get a step closer to the baseline value of the company.

P/CF Ratio: The price-to-cash flow ratio measures a company's per share market price relative to its trailing-12-month (TTM) operating cash flow per share. This metric is used to determine whether a company is undervalued or overvalued relative to another stock, industry or sector. And like the P/E ratio, a lower number is typically considered better from the value perspective.

One of the reasons why P/CF ratio is often preferred over P/E ratio is the fact that operating cash flow adds back non-cash expenses such as depreciation and amortization to net income. This feature helps valuing stocks that have positive cash flow but are not profitable because of large noncash charges.

P/FCF Ratio: The price-to-free cash flow ratio is an extension of P/CF ratio, which uses trailing-12-month (TTM) free cash flow per share instead of operating cash flow per share. This metric is considered a more exact measure than P/CF ratio, as free cash flow subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding activities that generate additional revenues.

Earnings Yield: The earnings yield is calculated as current fiscal year (F1) EPS estimate divided by the company's current share price. The ratio, which is the inverse of the P/E ratio, measures the anticipated yield (or return) from earnings for each dollar invested in a stock today.

For example, earnings yield for a stock, which is trading at $35 and expected to earn $3 per share in the current fiscal year (F1), would be 0.0857 (3/35 = 0.0857) or 8.57%. In other words, for $1 invested in the stock today, the yield from earnings is anticipated to be 8.57 cents.

Investors most commonly compare the earnings yield of a stock to that of a broad market index (such as the S&P 500) and prevailing interest rates, such as the current 10-year Treasury yield. Since bonds and stocks compete for investors' dollars, stock investors typically demand a higher yield for the extra risk they assume compared to investors of U.S. Treasury-backed securities that offer virtually risk-free returns. This additional return is referred to as the risk premium.

Debt/Equity Ratio: The debt-to-equity ratio is calculated as a company's total liabilities divided by its shareholder equity. This metric is used to gauge a company's financial leverage. In other words, it is a measure of the degree to which a company is financing its operations through debt versus its own funds. The higher the ratio, the higher the risk for shareholders.

However, this ratio is difficult to compare across industry groups where ideal amounts of debt vary. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-equity ratio should be compared with other companies in the same industry.

Cash Flow ($/share): Cash flow per share is calculated as operating cash flow (after-tax earnings + depreciation + other non-cash charges) divided by common shares outstanding. It is used by many investors as a measure of a company's financial strength. Since cash flow per share takes into consideration a company's ability to generate cash by adding back non-cash expenses, it is regarded by some as a more accurate measure of a company's financial situation than earnings per share, which could be artificially deflated.

Current Ratio: The current ratio or liquidity ratio is a company's current assets divided by its current liabilities. It measures a company's ability to pay short-term obligations. A current ratio that is in line with the industry average or slightly higher is generally considered acceptable. A current ratio that is lower than the industry average would indicate a higher risk of distress or default. A higher number is usually better. However, a very high current ratio compared to the industry average could be an indication of inefficient use of assets by management.

Debt/Capital Ratio: Debt-to-capital ratio is a company's total debt (interest-bearing debt + both short- and long-term liabilities) divided its total capital (interest-bearing debt + shareholders' equity). It is a measure of a company's financial leverage. All else being equal, the higher the debt-to-capital ratio, the riskier the stock.

However, this ratio can vary widely from industry to industry, the ideal amount of required debt being different. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-capital ratio should be compared with the same for its industry.

Net Margin: Net margin is calculated as net income divided by sales. It shows how much of each dollar in sales generated by a company translates into profit. For example, if a company's net margin is 15%, its net income is 15 cents for every $1 of sales it makes.

A change in margin can reflect either a change in business conditions, or a company's cost controls, or both. If a company's expenses are growing faster than sales, its net margin will decline. However, different net margin rates are considered good for different industries, so it's better to compare net margin rates of companies in the same industry group.

Return on Equity: Return on equity (ROE) is calculated as trailing-12-month net income divided by trailing-12-month average shareholder equity (including reinvested earnings). This metric is considered a measure of how effectively management is using a company's assets to generate profits. For example, if a company's ROE is 10%, it creates 10 cents profits for every $1 shareholder equity, which is basically the company's assets minus debt. A company's ROE deemed good or bad depends on what's normal for its peers or industry group.

Sales/Assets Ratio: The sales-to-assets ratio or asset utilization ratio or asset turnover ratio is calculated as a company's annual sales divided by average assets (average of assets at the beginning of the year and at the year's end). This metric helps investors understand how effectively a company is using its assets to generate sales. For example, a sales-to-assets ratio of 2.5 indicates that the company generated $2.50 in sales for every $1 of assets on its books.

The higher the sales-to-assets ratio, the better the company is performing. However, similar to many other ratios, the asset turnover ratio tends to be higher for companies in certain industries/sectors than in others. So, a company's sales-to-assets ratio should be compared with the same for its industry/sector.

Historical EPS Growth (3-5 Years): This is the average annual (trailing-12-month) EPS growth rate over the last 3-5 years. This metric helps investors see how a company's EPS has grown from a long-term perspective.

Note: There are many factors that can influence short-term numbers — a recession will reduce this number, while a recovery will inflate it. The longterm perspective helps smooth out short-term events.

Projected EPS Growth (F1/F0): This is the estimated EPS growth rate for the current financial year. It is calculated as the consensus estimate for the current fiscal year (F1) divided by the reported EPS for the last completed fiscal year (F0).

Current Cash Flow Growth: It measures the latest year-over-year change in operating cash flow. Cash flow growth tells an investor how quickly a company is generating inflows of cash from operations. A positive change in the cash flow is desired and shows that more 'cash' is coming in than going out.

Historical Cash Flow Growth (3-5 Years): This is the annualized change in cash flow over the last 3-5 years. The change in a longer period helps put the current reading into proper perspective. By looking at the rate, rather than the actual dollar value, the comparison across the industry and peers becomes easier.

Projected Sales Growth (F1/F0): This metric looks at the estimated sales growth for the current year. It is calculated as sales estimate for the current fiscal year (F1) divided by the reported sales for the last completed fiscal year (F0).

Like EPS growth, a higher rate is better for sales growth. A look at a company's projected sales growth instantly tells you what the outlook is for their products and services. However, different sales growth rates are considered good for different industries, so it's better to compare sales growth rates of companies in the same industry group.

EPS F1 Estimate 1-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past week. The change in a company's consensus EPS estimate (or earnings estimate revision) has proven to be strongly correlated with the near-term price movement of its shares. It is an integral part of the Zacks Rank.

If a stock's consensus EPS estimate is $1.10 now versus $1.00 a week ago, that will be reflected as a 10% upward revision. If, on the other hand, it went from $1.00 to 90 cents, that would be a 10% downward revision.

EPS F1 Estimate 4-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past four weeks.

A stock's earnings estimate revision in a 1-week period is important. But it's more meaningful to look at the longer-term revision. And, of course, the 4-week change helps put the 1-week change into proper perspective.

EPS F1 Estimate 12-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past 12 weeks.

This metric essentially shows how the consensus EPS estimate has changed over a period longer than 1 week or 4 weeks.

EPS Q1 Estimate Monthly Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal quarter over the past four weeks.

While the revision in consensus EPS estimate for the current fiscal year is strongly correlated with the near-term price movement of its shares, the estimate revision for the current fiscal quarter is an important metric as well, especially over the short term, and particularly as a stock approaches its earnings date. If a stock's Q1 EPS estimate decreases ahead of its earnings release, it's usually a negative sign, whereas an increase is a positive sign.