

Hello!

Welcome to the **Stocks app!**
Please sign in to use the application.

E-mail

John

Password

SIGN IN

New here? To protect your privacy, please
create your account. It's free and only takes
about a minute.

CREATE ACCOUNT



Create an account

Name

John

E-mail

Password

Avatar



CHOOSE DIFFERENT

CREATE ACCOUNT



Select your avatar





John L. Freeman



Stock value prediction



How it works



Menu item



Settings

1.28
e price

RESET

ore ▼

10

20 %



Value prediction

Stock code

Citybank

Exchange

CALCULATE



c



C whisperer selection 1

C: Citybank

IPCC: Infinity Property & Casualty

DISCK: Discovery Communications Inc

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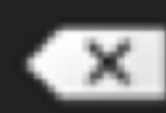
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Next



Value prediction

Period

2015 - 2027

\$20

Current price

\$51.28

Est. future price

ROE

PRICE

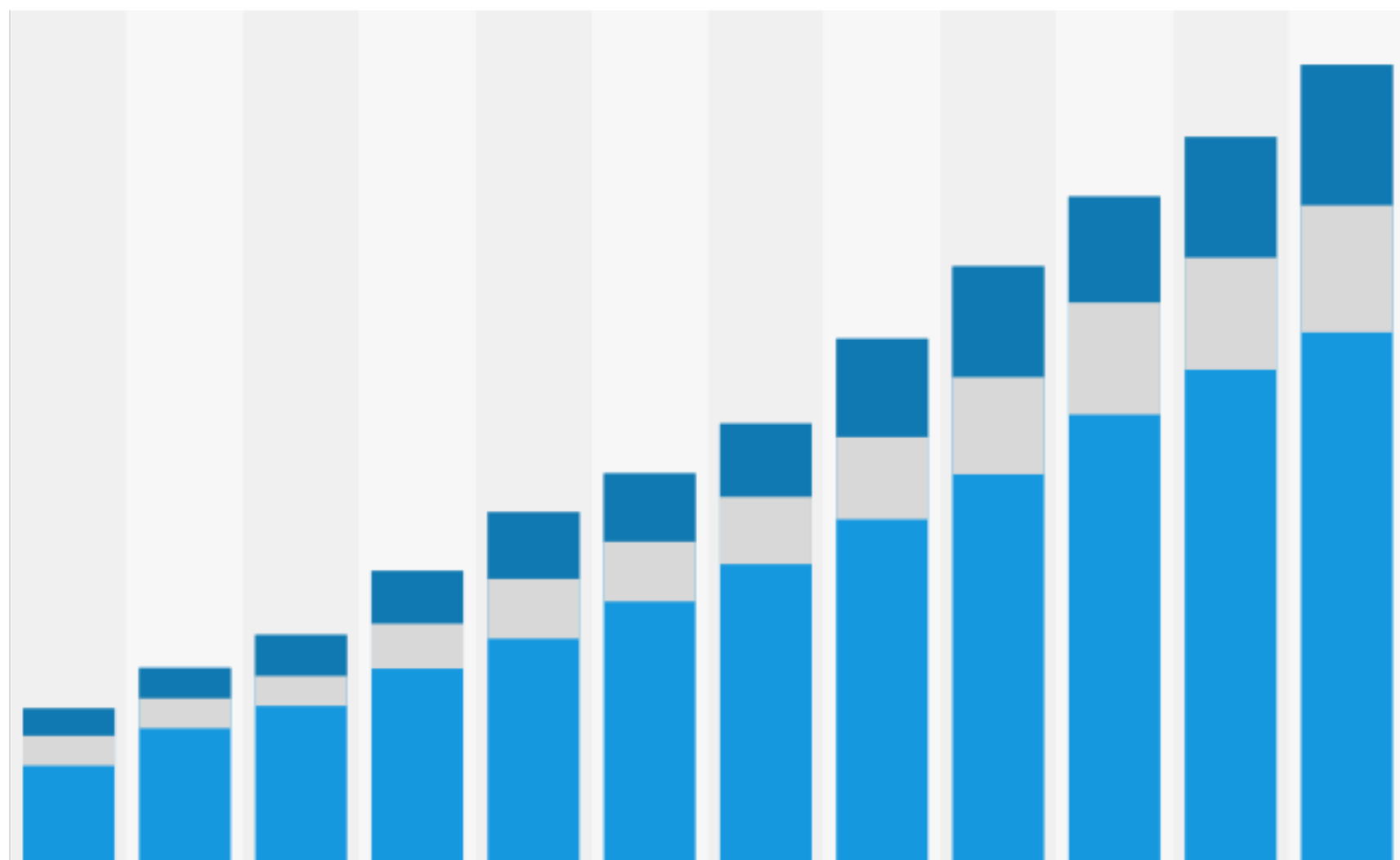
TABLE

RESET

ROE value prediction

Mon Oct 19

show more



PE



ROE



Dividend Payout



Value prediction

Period

2015 - 2027

\$20

Current price

\$51.28

Est. future price

ROE

PRICE

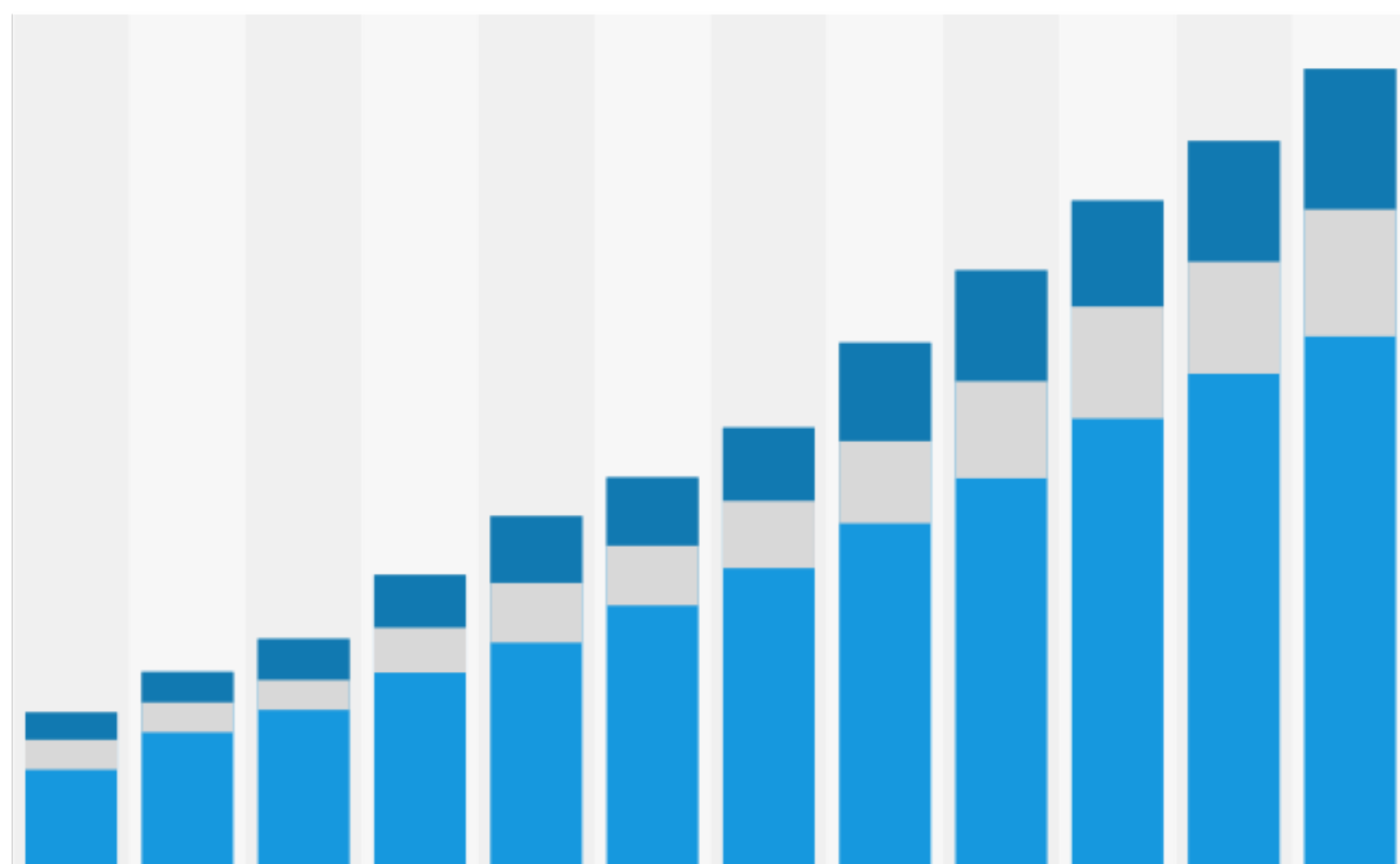
TABLE

RESET

ROE value prediction

Mon Oct 19

show less ^



Dividends \$42.28

Retained earnings \$4.00

Equity \$5.00

Accumulated dividends per share \$18.53

Future price including dividends \$70.41

Compounding return \$13.41



Value prediction

Period

2015 - 2027

\$20

Current price

\$51.28

Est. future price

ROE

PRICE

TABLE

RESET

ROE value prediction

Mon Oct 19

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Year	Equity	ROE [%]	Earnings	Retained E
1	\$10.00	20.00	\$2.00	\$1.00
2	\$10.00	20.00	\$2.00	\$1.00
3	\$10.00	20.00	\$2.00	\$1.00
4	\$10.00	20.00	\$2.00	\$1.00
5	\$10.00	20.00	\$2.00	\$1.00
6	\$10.00	20.00	\$2.00	\$1.00
7	\$10.00	20.00	\$2.00	\$1.00
8	\$10.00	20.00	\$2.00	\$1.00
9	\$10.00	20.00	\$2.00	\$1.00
10	\$10.00	20.00	\$2.00	\$1.00

PE



ROE



Dividend Payout



Value prediction

Period

2015 - 2027

\$20

Current price

\$51.28

Est. future price

ROE

PRICE

TABLE

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ROE value prediction

Mon Oct 19

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Year	Dividends	PE	Stock price
1	\$1.00	\$10.00	\$20.00
2	\$1.00	\$10.00	\$20.00
3	\$1.00	\$10.00	\$20.00
4	\$1.00	\$10.00	\$20.00
5	\$1.00	\$10.00	\$20.00
6	\$1.00	\$10.00	\$20.00
7	\$1.00	\$10.00	\$20.00
8	\$1.00	\$10.00	\$20.00
9	\$1.00	\$10.00	\$20.00
10	\$1.00	\$10.00	\$20.00

PE



ROE



Dividend Payout





How can I estimate a company's future stock price and the compounding annual return?

John

We know!

Tap on each step to find out more.

Step 1:

Calculate the future earnings and dividends using the Return on Equity ratio

Step 2:

Calculate the future stock price using the Price to Earnings ratio

Step 3:

Calculate total returns that include dividends

Step 4:

Calculate the compounding stock return from today's price to future price



Step 1: What is the Return on Equity ratio?

John

“Return on Equity” is defined as:

The amount of net income returned as a percentage of shareholders equity.

Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

OVERVIEW





How to calculate Return on Equity (ROE)?

For example, a company has equity of \$500M and this years profit is \$100M.

$$\text{ROE} = \frac{\text{Profit}}{\text{Equity}} = \frac{\$100\text{M}}{\$500\text{M}} = 20 \%$$



But how to do I calculate future earnings using the Return on Equity calculation?

John

To calculate profit, turn the ROE equation around to:

$$\text{Profit} = \text{ROE} \times \text{Equity}$$





Using Return on Equity to calculate Profit Estimate for one year:

\$500M Equity

\$100M Profit
 $\text{Equity} * \text{ROE}$
 $\$500 * 20\%$

Profit split
in half

\$500M Equity

\$50M
Retained
Earnings

\$100M
Dividend

Now future Equity has increased
by \$50M, by retaining half of the
profit, to \$550M



Yay! I get to keep some money as
a dividend!

John

OVERVIEW





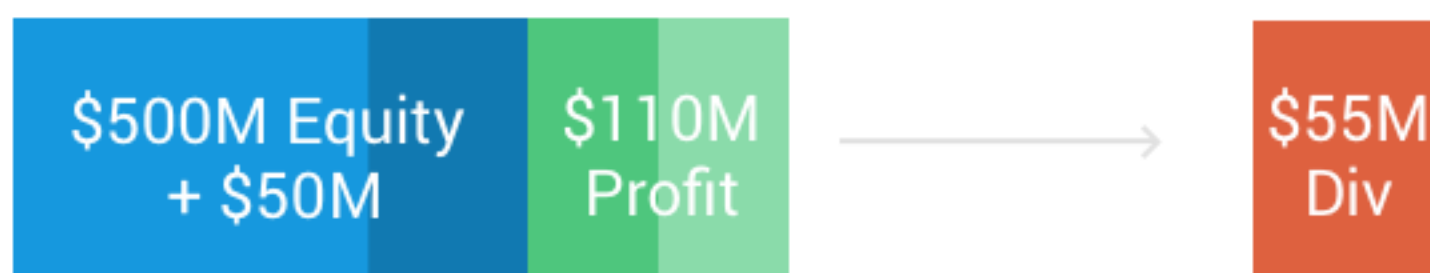
Using Return on Equity to calculate Profit estimate, over 10 years.

Remember, in this example, half of the profit is paid out as dividends each year.

2015



2016



2017



⋮ After 10 years

2025



OVERVIEW



FINISH >



Step 2: But how do I calculate the future stock price from future earnings?

John

I know!

Since we know the future earnings, we can use the **Price to Earnings ratio** calculation to determine the **future stock price**.



What is the Price to Earnings ratio?

The price to earnings ratio (PE Ratio) is the measure of the share price relative to the annual net income earned by the firm per share. PE ratio shows current investor demand for a company share.

$$\text{The PE ratio} = \frac{\text{Stock Price (per share)}}{\text{Earnings (per share)}}$$

OVERVIEW





From Step 1, the profit increased from \$100M to \$259M over the 10 years. If the company has 50M shares, the the earnings per share increased from \$2 to \$5.19.



If the future PE remains at 10, what is the future stock price?

John

By rearranging the PE ratio calculation, the equation becomes:

Future Stock price
= PE ratio x future Earnings per Share

Future Stock price
= $10 \times \$5.19 = \51.90



Step 3: Now we can calculate the total return by including all the dividends to the future stock price.

John

We've just calculated the future stock price that is **\$51.90**.

The sum of dividends over the 10 years totals \$926M. Since the company has 50M shares, the total dividends per share = **\$18.53**.

The total return for this stock is the sum of the future stock price and the dividends per share. In this example, the total = **\$70.43**.

$$\begin{array}{|c|} \hline \$51.90 \\ \hline \text{Future price} \\ \hline \end{array} + \begin{array}{|c|} \hline \$18.53 \\ \hline \text{Div} \\ \hline \end{array} = \$70.43$$

OVERVIEW

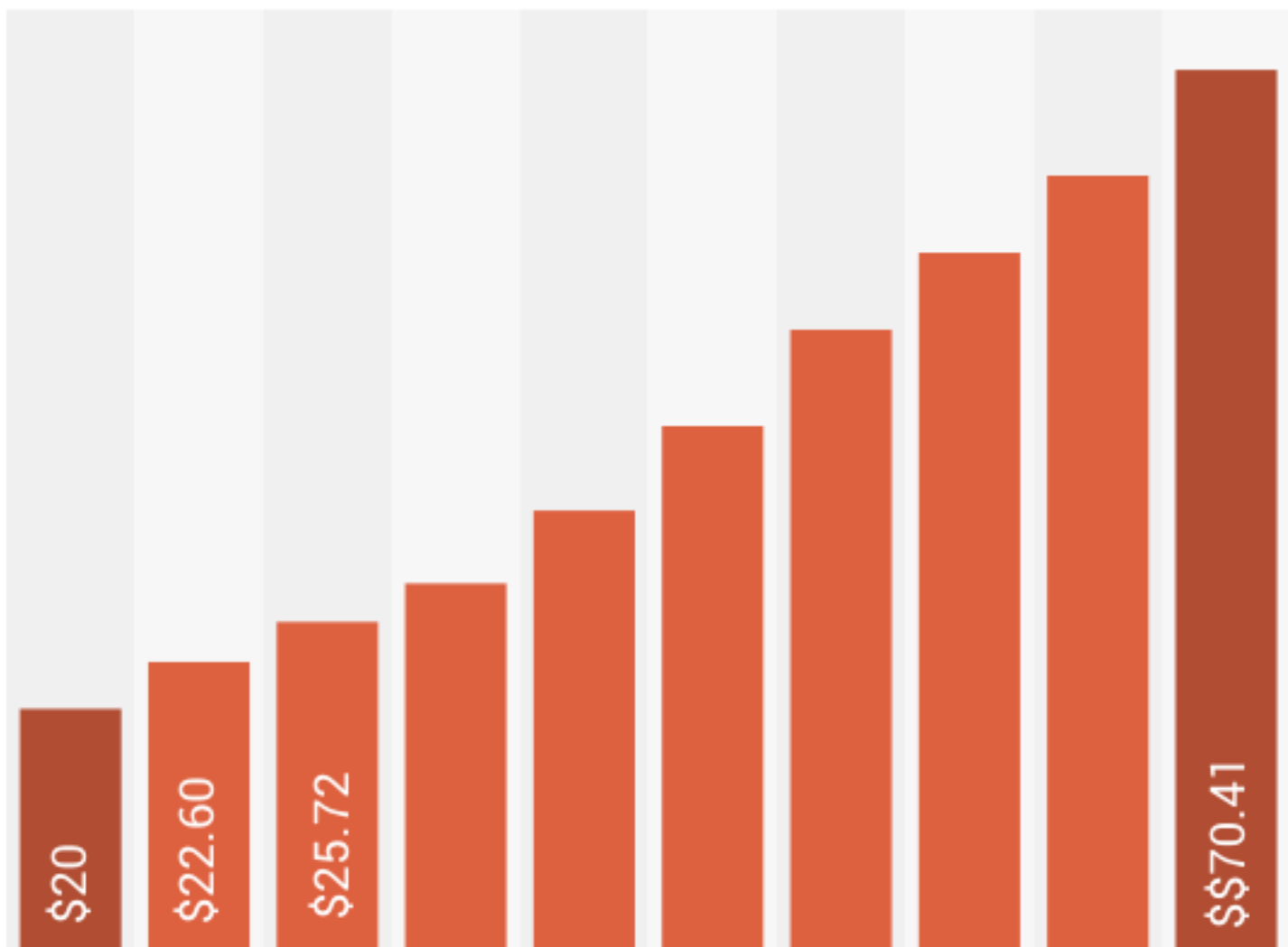




Step 4: What is the annual return to make a stock go from \$20 to \$70.41 over a 10 year period?

John

Answer: 13.41 %



OVERVIEW





We estimated that the **future stock price** would **increase from \$20 to \$51.87**.

The **compounding return**, including dividends over a 10 year period was **13.41 %**.



Well done!

Let's start using the app!

START

OVERVIEW

