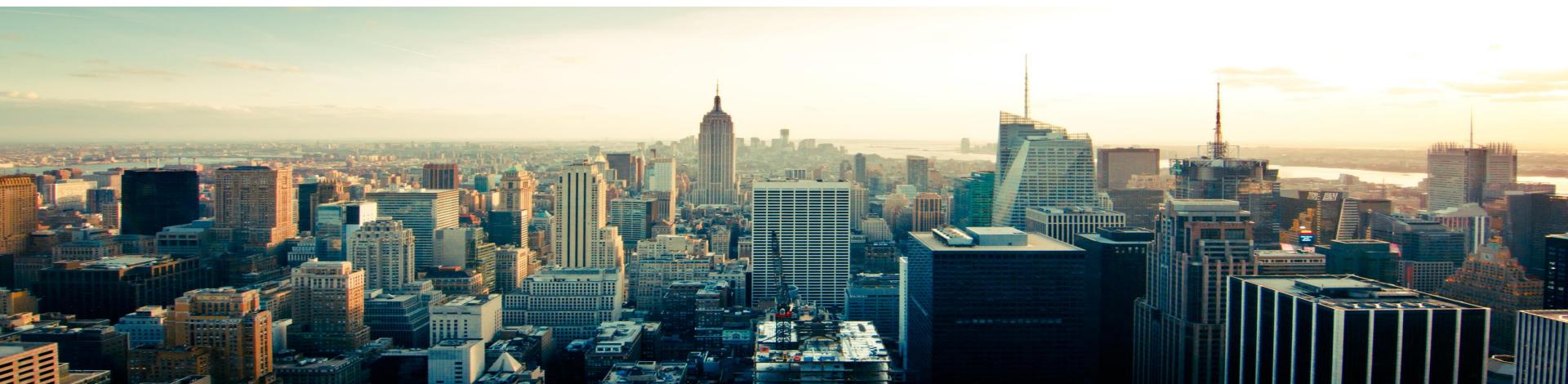


Build Customer Confidence, Deliver Exceptional Value

Analyzing the 5-year risk-return relationships of 20 portfolios
in the financial, healthcare and services sector



Project Goals

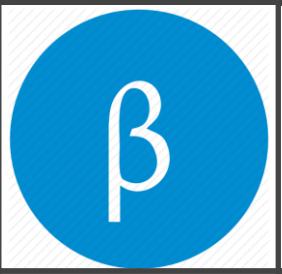
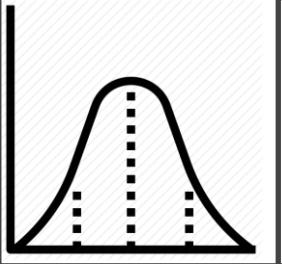


Using Oracle APEX, we seek to answer these few questions:

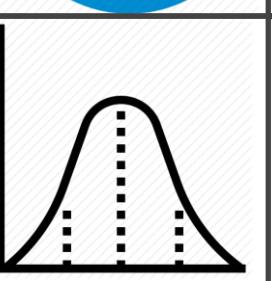
1. Where are our clients from?
2. Which advisor generated the most returns?
3. Which client earned the most in their portfolios?
4. Among the three industry our firm focuses in, which performed the best?
5. What are the returns of our portfolios with volatility $< 65\%$?
6. What is the relationship between return, beta and volatility?

Quick Introduction to Financial Lingo

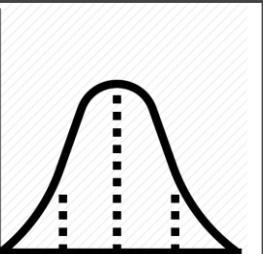


A circular icon with a diagonal striped pattern. Inside the circle is a large blue dollar sign (\$) symbol. Three dark grey arrows of increasing height point upwards from the bottom left towards the dollar sign.	<p>Returns:</p> <p>The percentage change in a stock's closing price. In this case, we averaged out the daily returns throughout five years to arrive at a five-year average return for each company's stock.</p>
 A solid blue circle containing a white Greek letter beta (β).	
 A black line graph of a normal distribution curve. Two vertical dashed lines extend from the peak of the curve down to the x-axis, representing the range of one standard deviation from the mean.	

Quick Introduction to Financial Lingo

	<p>Returns:</p> <p>The percentage change in a stock's closing price. In this case, we averaged out the daily returns throughout five years to arrive at a five-year average return for each company's stock.</p>
	<p>Beta:</p> <p>The correlation between a stock's returns and the market's returns. If beta = 1, then if the market moves up by 1%, the stock's return = +1%, vice versa. This is considered the systematic risk, i.e. how much you are “exposed” to the market.</p>
	

Quick Introduction to Financial Lingo

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	<p>Volatility:</p> <p>The standard deviation of returns. It measures the degree of difference between each return over five years. If a stock has a large volatility, your return would essentially be very unstable, and hence risky.</p>

Using a combination of real-life and generated data to conduct analysis



1

Generated client & advisor information and portfolios

Client Id ↑	Name	Phone	Address	Advisor Id	State
1	Lauritz Jackes	8295558053	30 Transport Avenue	20	NY
2	Starr Bucknill	3125269030	04227 Southridge Center	19	IA
3	Bellina Catherall	4918873425	57335 Loftsgordon Park	18	CT
4	Jeane Le Cornu	6047759371	9752 Lerdahl Drive	17	NY
5	Chet Capes	3637829678	09801 Ridgeway Pass	16	WA
6	Merle Mawhinney	7804792489	8 Everett Plaza	15	NY
7	Kassia Batchelder	1281509282	76933 Bulman Crossing	14	IA
8	Luis Baccup	7667202670	65263 Brentwood Alley	13	NY
9	Agathe Cleworth	953517665	9937 Blue Bill Park Junction	12	WA
10	Nanine Crampsey	2515735363	926 Haas Way	11	WA
11	Ephraim Lebell	9013046059	8 Hoepker Terrace	10	NY
12	Clarita Borthram	4451030554	92 Pine View Pass	9	IA
13	Judith Threlholm	3485041229	1 Hoard Junction	8	CT
14	Danielle Kenlin	4833655182	0478 Red Cloud Court	7	NY
15	Gray Silvers	356823096	2695 Burrows Terrace	6	WA

Created personal information of clients, advisors and randomly allotted 5 companies into each portfolio

2

Yahoo Finance

A screenshot of the Yahoo Finance homepage. It features a search bar at the top with the placeholder "Search for news, symbols or companies". Below the search bar are several financial indices: S&P 500 (2,640.22), Dow 30 (24,231.59), Nasdaq (6,847.59), and Crude Oil (\$75.99). A news banner at the bottom left reads "Submit Your Questions! Live chat: Q&A on ACA 2018 open enrollment". Another news item on the right says "CVS Health is buying Aetna for \$69 billion". The page also includes links for "Finance Home", "Explore", "My Portfolio", "My Screens", "Markets", "Industries", "Originals", "Events", and "Personal Finance".

Retrieved 5-year raw data of company stock closing prices

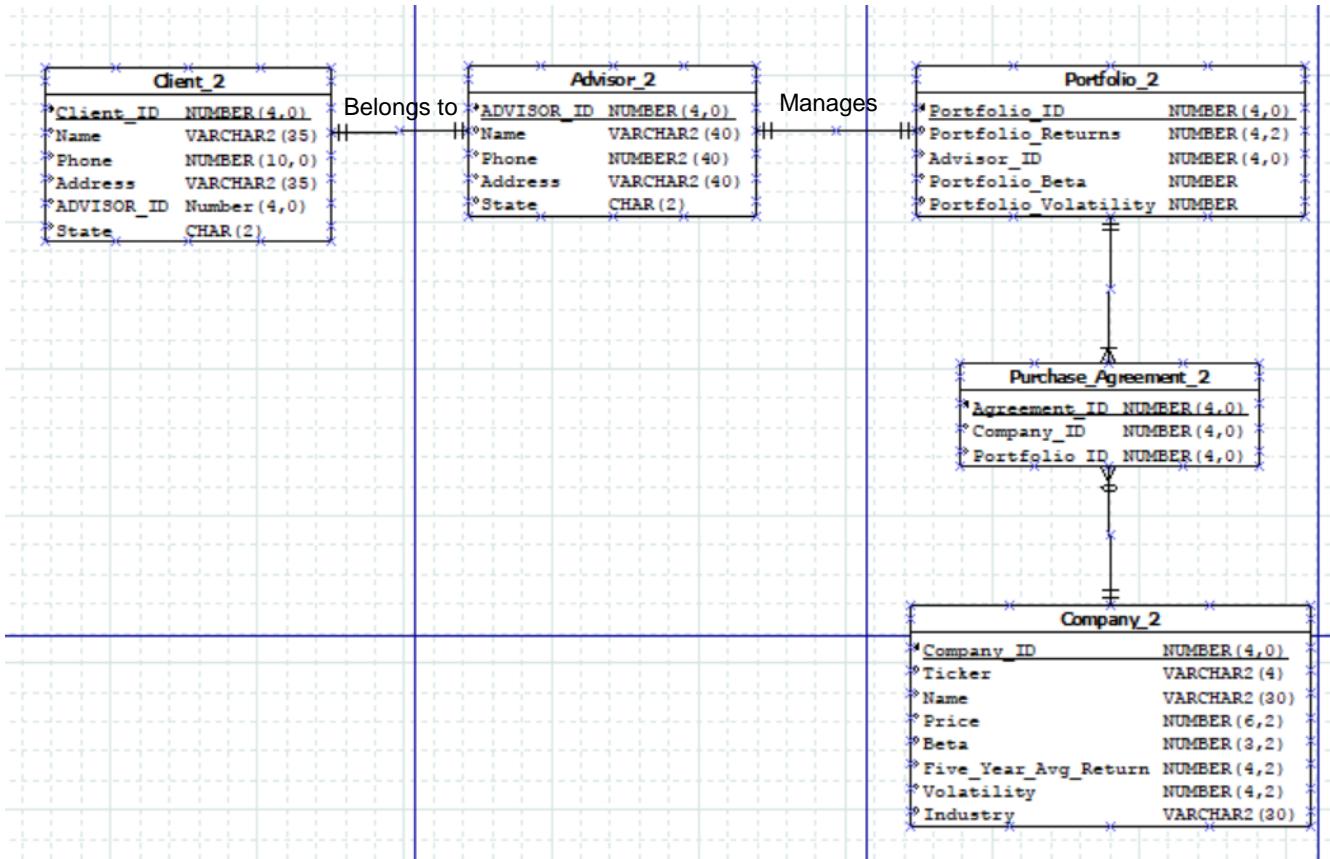
3

Calculation of returns, beta and volatility



Used regression analysis and standard deviation to find out average 5-year beta and volatility of stocks

Entity-Relationship Diagram



Relational Schema

Client_2

Client_ID	Name	Phone	Address	Advisor_ID	State
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Advisor_2

Advisor_ID	Name	Phone	Address	State
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Portfolio_2

Portfolio_ID	Portfolio_Returns	Advisor_ID	Portfolio_Beta	Portfolio_Volatility
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Purchase_Agreement_2

Agreement_ID	Company_ID	Portfolio_ID
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Company_2

Company_ID	Ticker	Name	Price	Beta	Five_Year_Avg_Return	Volatility	Industry
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Link to Application



DATABASE

earmonsuen@gmail.com Log Out

Home Client Table Advisor Table Portfolio Table Purchase Agreement Table Company Table Tables Analysis

South Trust Asset Mangement



Goal

We seek to perform risk and return analytics on clients' portfolios of different stocks.

Analysis details

We are analyzing the portfolios of 20 clients, who are handled by a corresponding 20 advisors over the span of five years. We employed metrics like 5-year average returns, beta and volatility to understand the relationship between risk and return.

<https://apex.oracle.com/pls/apex/f?p=129221:1:11129703498069:::::>

Q&A

