Introduction to trading strategy design, position sizing and optimization

Frank Svarholt - TradeNode AB

By **Montel.no**

www.tradenode.se

Advanced Technical Analysis

Phase 1 Risk and risk management

↓

Phase 2 Understanding chart patterns and indicators

↓

Phase 3 Strategy building

↓

Phase 4 Summary and questions

Risk and Risk management

Find low risk trade opportunities

Assess which trade is worth the risk

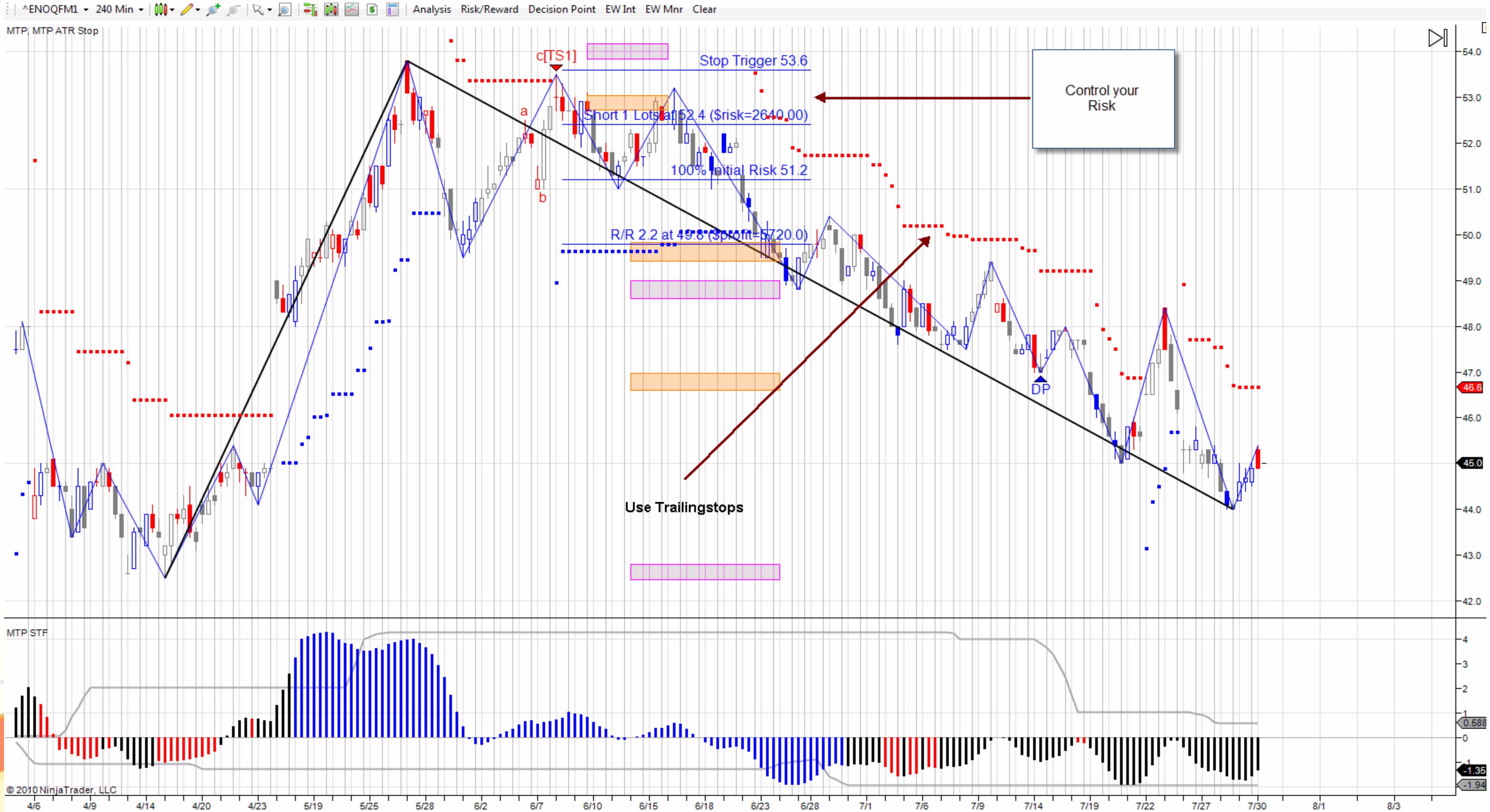
Determine how much to risk on each trade

Control your exit strategy - cut losses/run profits

Choose between real-time or end-of-day trading tools

Master your trades

Control your risk



Position sizeing

The key to make good profits

What is position sizeing

Increase position when you make money

Decrease position when you loose money

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Indicators and chart patterns

Strategy building

Most software have possibility to make a trading strategy

TradeStation

NeuroShell Trader

Ninja Trader

MultiCharts etc.

We will concentrate on using Tradestation 2000i with realtime Montel feed from TradeNode AB.

Strategy building

How to create a strategy?

1. Design and build strategy
2. Back test and evaluate the result
3. Run ”walk forward” testing
4. Trade your strategy

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Strategy building

Signals:

1)Buy ”Next Bar at Open”

2)Buy ”This Bar on Close”

3)Buy ”Next Bar at Highest(High,3)” ”Stop(intrabar Trading)”

4)ExitLong

Simple intrabar strategy

```
Input:B(10),X(10);

Buy Next bar at highest(high,B) Stop;
ExitLong at Lowest (low,X) stop;
```

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Result from simple intrabar strategy

TradeStation Strategy Performance Report - Simple ENOQ FM1.NPE-60 min. (7/1/2008-7/30/2010)

Performance Summary: All Trades

Total Net Profit	$342,442.25	Open position P/L	$0.00
Gross Profit	$959,982.50	Gross Loss	($617,540.25)
Total # of trades	109	Percent profitable	42.20%
Number winning trades	46	Number losing trades	63
Largest winning trade	$80,356.25	Largest losing trade	($47,758.75)
Average winning trade	$20,869.18	Average losing trade	($9,802.23)
Ratio avg win/avg loss	2.13	Avg trade (win & loss)	$3,141.67
Max consec. Winners	6	Max consec. losers	6
Avg # bars in winners	27	Avg # bars in losers	10
Max intraday drawdown	($121,081.25)		
Profit Factor	1.55	Max # contracts held	5
Account size required	$121,081.25	Return on account	282.82%

Performance Summary: Long Trades

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Strategy building

Simple strategy step 2

```
Input:   B(3),    X(3);
Value1 = Elliott(5,35);
If Value1 > 0 then Buy Next Bar at Highest(C + 0.01, B) Stop;
ExitLong at Lowest (Close - 0.01, x) stop;
```

Strategy building

TradeStation Strategy Performance Report - Simple ENOQ FM1.NPE-60 min. (7/1/2008-7/30/2010)

Performance Summary: All Trades

Total Net Profit	$636,637.00	Open position P/L	($1,095.00)
Gross Profit	$1,152,065.75	Gross Loss	($515,428.75)
Total # of trades	392	Percent profitable	43.11%
Number winning trades	169	Number losing trades	223
Largest winning trade	$62,617.25	Largest losing trade	($18,303.25)
Average winning trade	$6,816.96	Average losing trade	($2,311.34)
Ratio avg win/avg loss	2.95	Avg trade (win & loss)	$1,624.07
Max consec. Winners	5	Max consec. losers	8
Avg # bars in winners	4	Avg # bars in losers	1
Max intraday drawdown	($38,222.00)		
Profit Factor	2.24	Max # contracts held	5
Account size required	$38,222.00	Return on account	1665.63%

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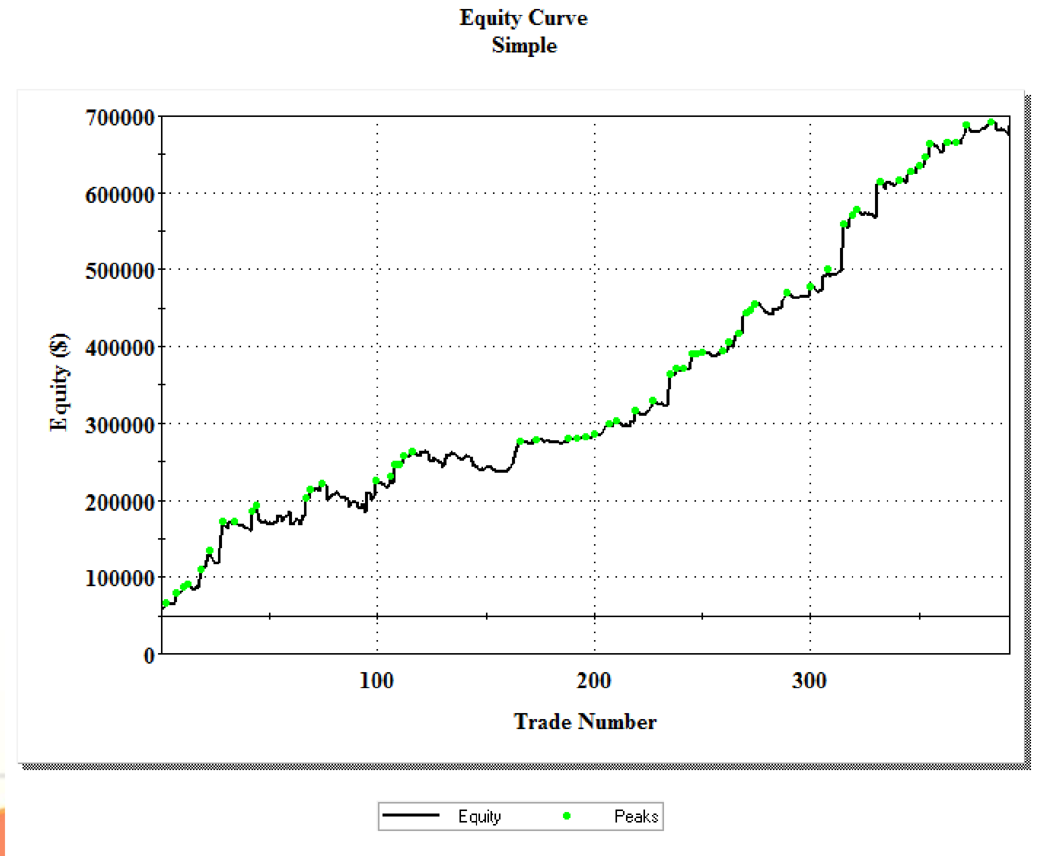
Strategy building



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Strategy building

Simple Strategy Step 3

```
Input:B(5),X(3);

Value1=Elliott(5,35);
Value2=Detrend(C,18);

If Value1>0 and Value2>0  then Buy Next bar at highest(C+B,3)
Stop;
Exitlong at lowest (C-0.01,x) stop;
```

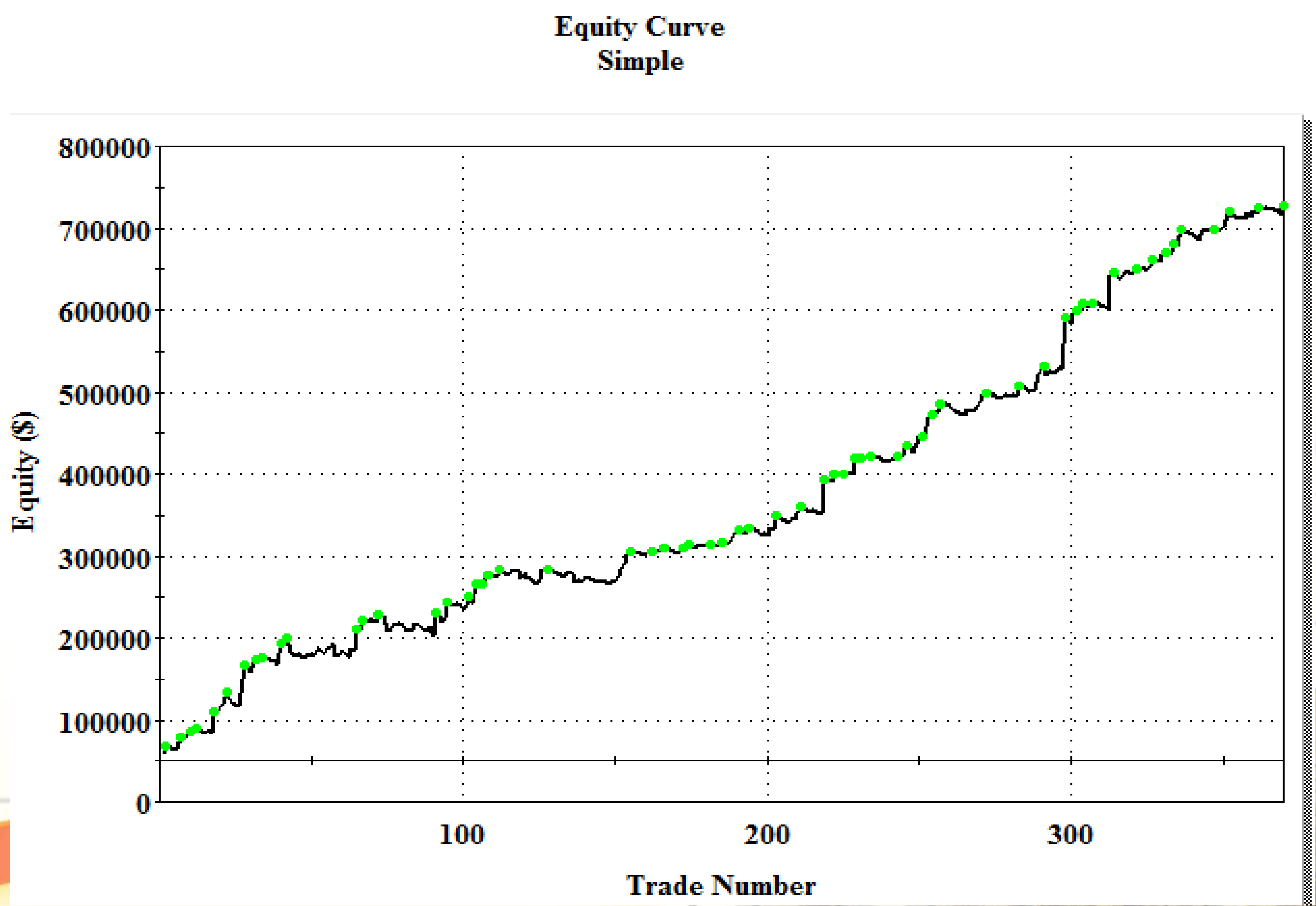
Strategy building

TradeStation Strategy Performance Report - Simple ENOQ FM1.NPE-60 min.

Performance Summary: All Trades

Total Net Profit	$677,958.50	Open position P/L	($1,095.00)
Gross Profit	$1,144,686.75	Gross Loss	($466,728.25)
Total # of trades	370	Percent profitable	44.59%
Number winning trades	165	Number losing trades	205
Largest winning trade	$62,617.25	Largest losing trade	($18,303.25)
Average winning trade	$6,937.50	Average losing trade	($2,276.72)
Ratio avg win/avg loss	3.05	Avg trade (win & loss)	$1,832.32
Max consec. Winners	5	Max consec. losers	8
Avg # bars in winners	4	Avg # bars in losers	1
Max intraday drawdown	($26,362.50)		
Profit Factor	2.45	Max # contracts held	5
Account size required	$26,362.50	Return on account	2571.68%

Strategy building



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Strategy building

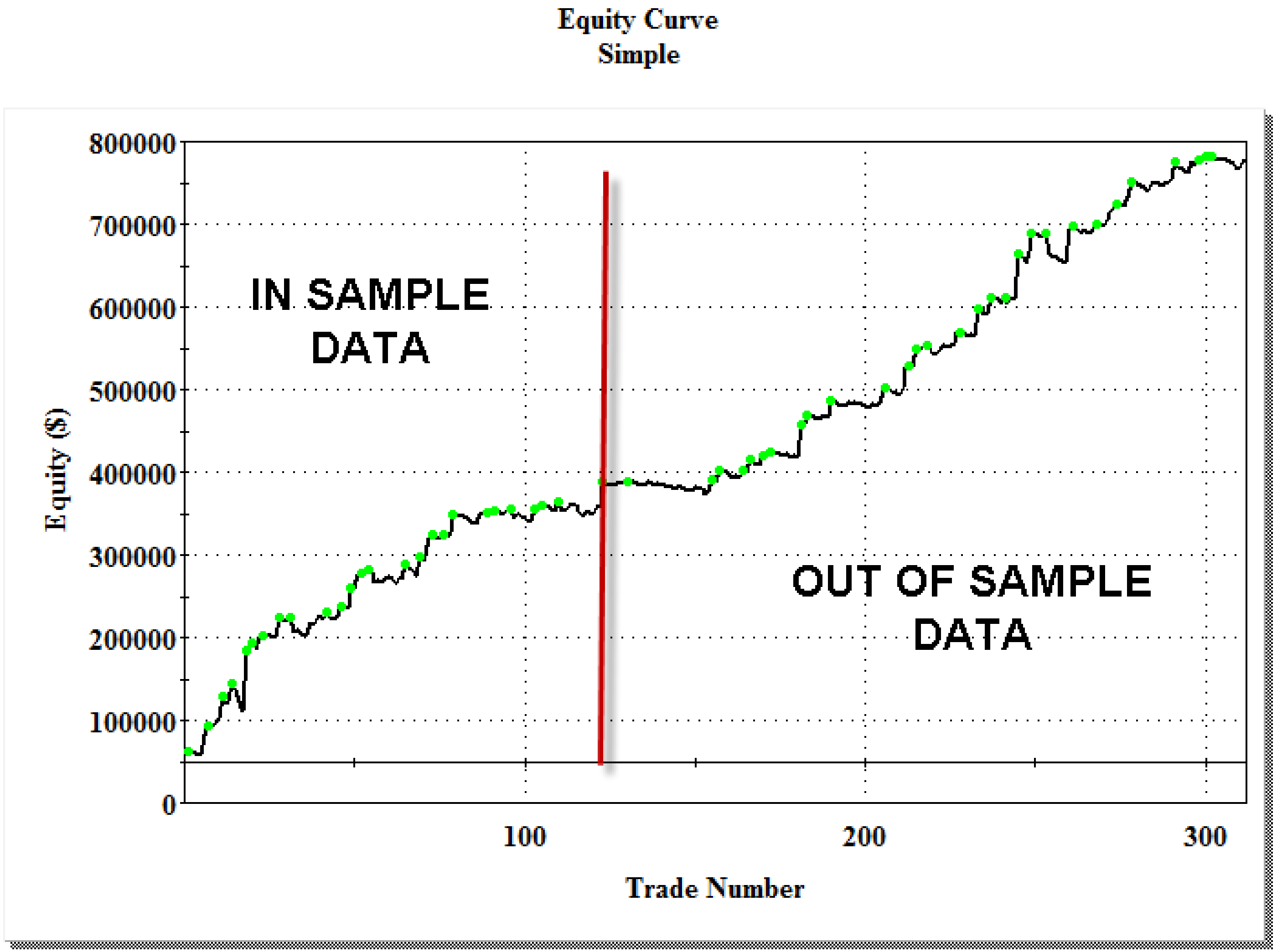
WALK FORWARD TESTING

Optimize system on unseen data

Evaluate

Trade strategy

Strategy building



Strategy building

Walk forward testing is passed

Trade strategy

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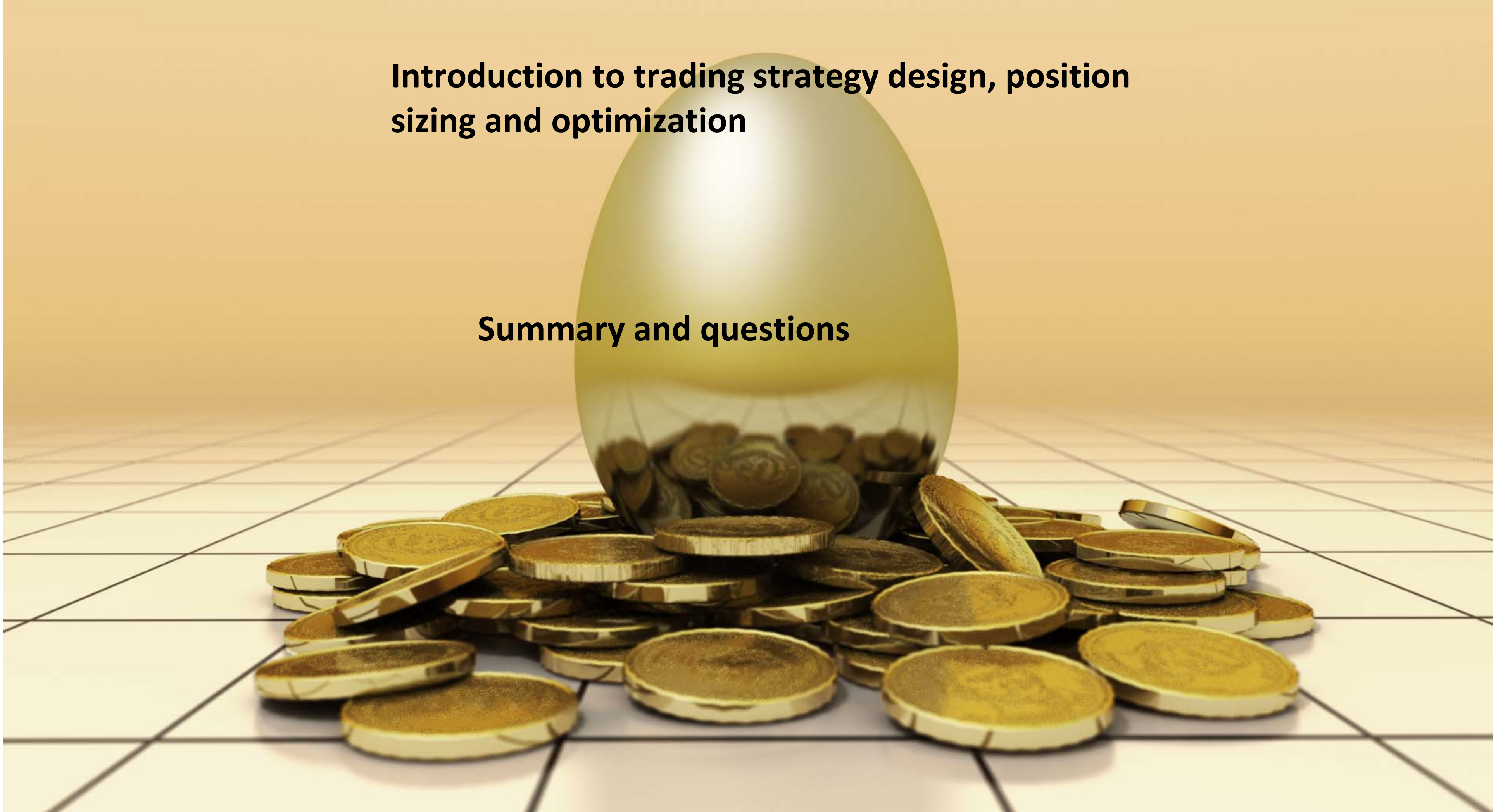

Summary and questions

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