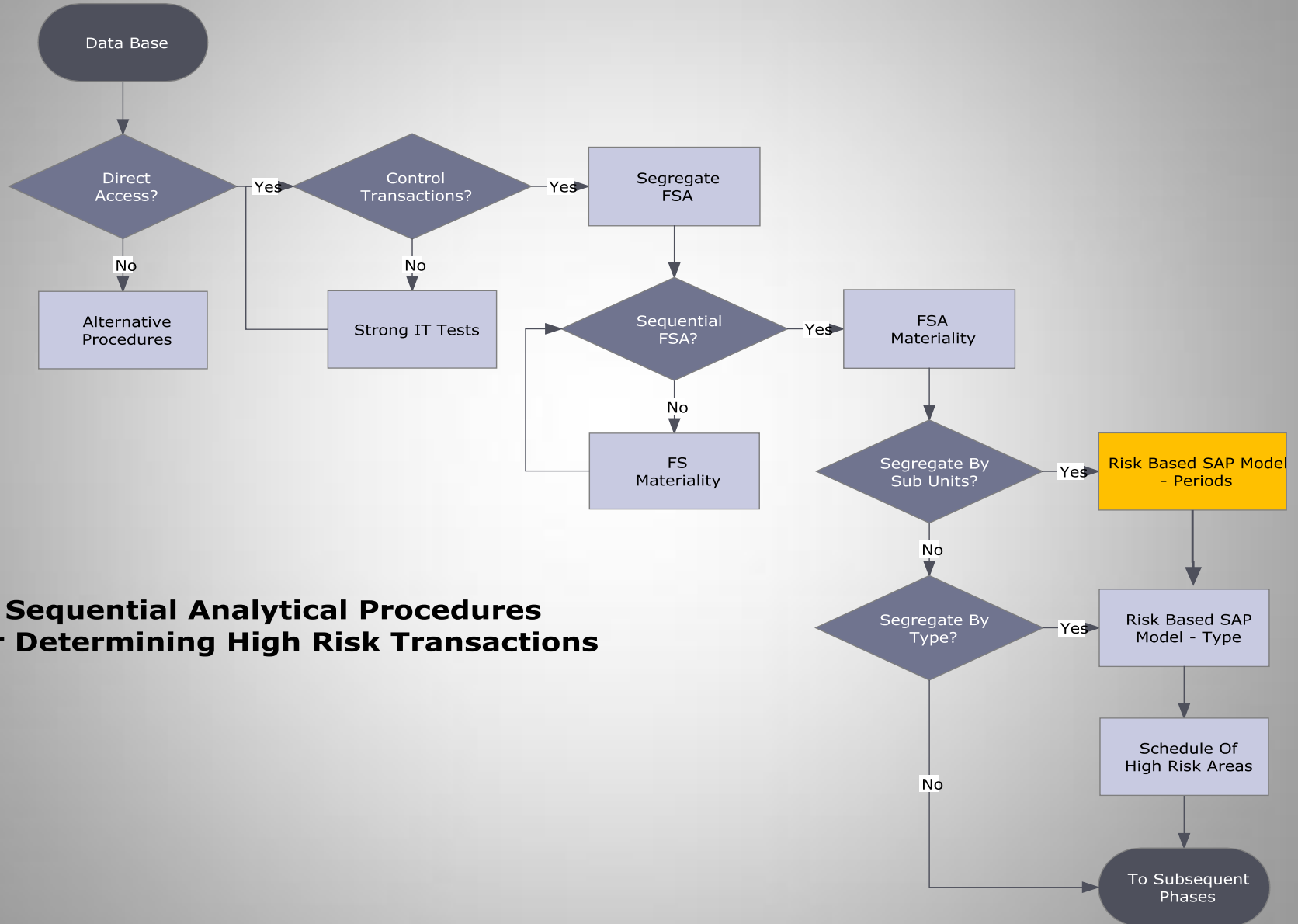


**Substantive Analytical Procedure (SAP) for  
Measuring Financial Statement Area (FSA)  
Audit Risk Using Sequential Records Directly  
from Entities' Data Base**

**Benedetto Bongiorno CPA, CRE**

# Overall Process



## Sequential Analytical Procedures For Determining High Risk Transactions

# Components Of Risk Based SAP Model

- Bifurcate FS Transactions By Debits & Credits
- Bifurcate FSA Transactions By Debits & Credits
- Determine The Highest Correlated Sequence
  - Credit Cards – Daily
  - Retail Sales – Weekly
  - Real Estate – Monthly
- Establish Comparative Reporting Periods
  - Year to Year
  - Quarter to Quarter
- Establish Audit Risk Platform
  - Model Identification
  - Base Data Set

# Components Of Risk Based SAP Model

- Key Components For Audit & IT Control Risk Beta
  - Stationary Model
  - Non Stationary Model
  - Financial Volatility Model
  - Identification of Maximum Exposure To Loss Model
  - Trend Identification Model
- Risk Measurement Index
  - Low Risk (0 to .50)
  - Moderate Risk (.51 to 1.0)
  - High Risk (Above 1.0)
- Strata Of High Risk Population

# Risk Based SAP Model Conclusions

Risk Summary of FSA Debit Transactions	
Category	Results
Risk Index	0.118
FSA Transactions Mean	84,323.422
FSA Materiality Percent	0.050
Planned FSA Materilaity Value	45,163,624.684
Risk Based FSA Materiality Value	40,391,318.583

# Risk Based SAP Model Conclusions

Risk Summary of FSA Credit Transactions	
Category	Results
Risk Index	0.089
FSA Transactions Mean	-18,985.077
FSA Materiality Percent	0.050
Planned FSA Materilaity Value	-44,400,400.447
Risk Based FSA Materiality Value	-40,770,678.386

# Risk Based SAP Model Conclusions

Current Debit Transactions	Values
Population By All Debit Units	237,983.000
Population By Strata Debit Units	59,512.000
Total Value of All Debit Units	3,684,891,721.330
Total Value of Strata Debit Units	3,652,468,279.890
All Debit Units Mean Value	15,483.844
Strata Debit Units Mean Value	61,373.644

# Risk Based SAP Model Conclusions

## Current Period FS Debit Strata of Maximum Exposure

Population Strata	Upper Dollar Level	Maximum Exposure	Strata Total	Materiality
Strata One	44.	123,974.	981,073.	184,244,586.
Strata Two	161.	459,409.	5,327,642.	184,244,586.
Strata Three	1,025.	2,886,605.	26,114,726.	184,244,586.
Strata Four	132,826,850.	2,990,858,007.	3,652,468,280.	184,244,586.



# Risk Based SAP Model Conclusions

Current Credit Transactions	Values
Population By All Credit Units	132,178.000
Population By Strata Credit Units	33,045.000
Total Value of All Credit Units	-3,684,891,618.250
Total Value of Strata Credit Units	-3,643,730,579.560
All Credit Units Mean Value	-27,878.252
Strata Credit Units Mean Value	-110,265.716

# Risk Based SAP Model Conclusions

Current Period FS Credit Strata of Maximum Exposure

Population Strata	Upper Dollar Level	Maximum Exposure	Strata Total	Materiality
Strata One	-68.	-107,520.	-952,076.	-184,244,581.
Strata Two	-356.	-563,289.	-5,561,507.	-184,244,581.
Strata Three	-2,545.	-3,984,705.	-34,647,455.	-184,244,581.
Strata Four	-108,655,001.	-2,554,564,053.	-3,643,730,580.	-184,244,581.

## Questions

- Currently In Use? – *YES*
- Compliance With AS5? – *Yes*
- Is it an Efficient Way to Audit? – *Yes*
- Integrate Process With Documentation? – *Yes*
- Is This a Silver Bullet for all Audits? *No, Must Be Tailored by Specifics of Industry and Company.*
- Is it an Effective Way to Integrate New SAS & AS Pronouncements into Audits? – *Yes*
- Can It Be Adapted As Internal Control Process - *Yes*