



# **Risk Based Internal Audit Approach for Capital Planning**

**Stress Test Modeling Symposium- Boston, Massachusetts**

**October 4, 2017**



# Risk Based Internal Audit Approach for Capital Planning

## Agenda

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- Mapping Capital Planning to Audit Entities - Page 5
- Determining Key Areas of Focus- Page 6
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# **Risk Based Internal Audit Approach for Capital Planning**

## **Overall Risk Based Approach for Auditing Capital Planning**

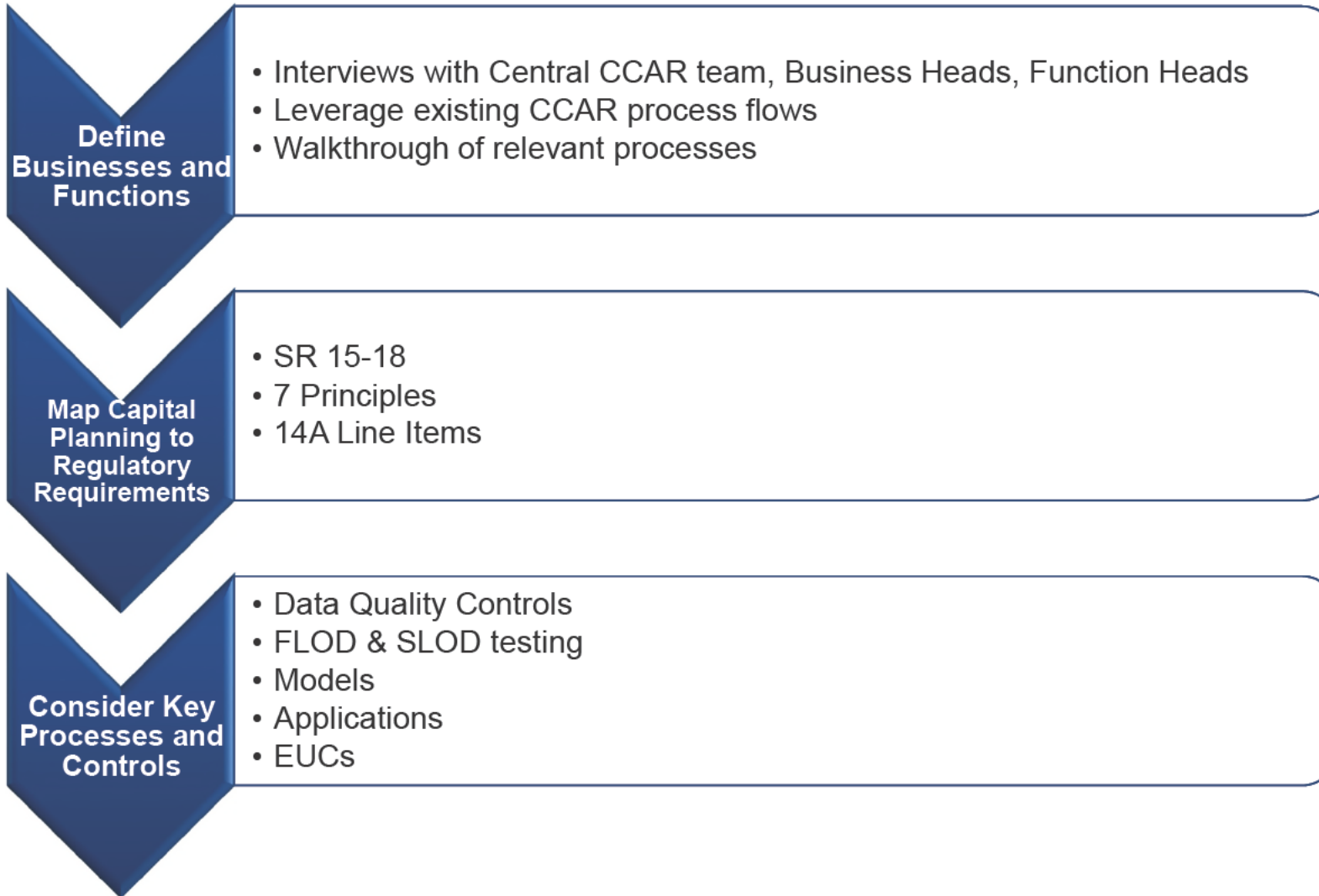
**The Internal Audit function at HSBC has a risk based approach towards audit coverage for all of the processes and controls across the institution**

**The approach towards audit coverage for Capital Planning is no different, except we spend a higher amount of our time and resources on processes and controls for Capital Planning than we do for most other areas.**

**This is due to the complexity and the breadth of activities that impact Capital Planning**

# Risk Based Internal Audit Approach for Capital Planning

Develop a thorough understanding of all aspects of the Capital Planning process



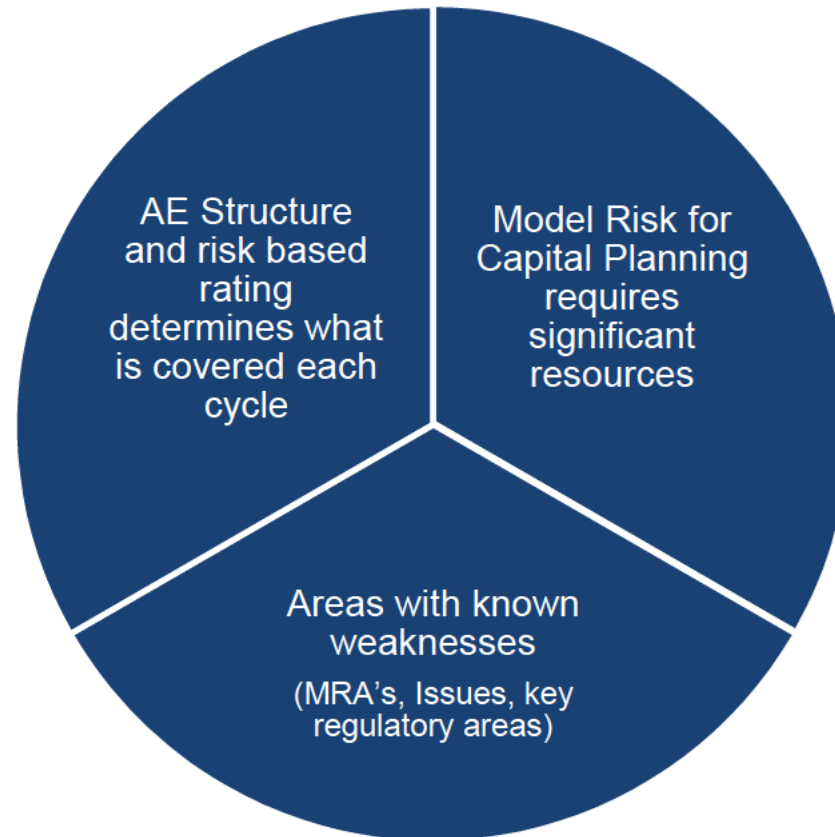
# **Risk Based Internal Audit Approach for Capital Planning**

**The processes and controls for Capital Planning are mapped to our Audit Entities and to existing audits**

- **The capital planning universe is made up of CCAR specific entities along with other entities across the businesses and functions.**
- **Over 10 different audit teams are involved in coverage led by a full time Central CCAR Internal Audit**
- **Capital planning activities are tagged and mapped in the relevant entities**
- **AE ownership should reflect stakeholder engagement model/matrix, i.e. the central CCAR/DFAST audit team should not own all AE's**

# Risk Based Internal Audit Approach for Capital Planning

How does HSBC Internal Audit determine what are the key areas of focus each year?





# Risk Based Internal Audit Approach for Capital Planning

## Internal Audit Coverage of Model Risk

### Coverage

- Model Development – First line of Defense
- Model Validation- Second Line of Defense
- Model Governance for Capital Planning
  - Judgmental or Overlay processes

### Staffing

- There is spike in model audit demands in the months leading up to CCAR submission
- Staff all have Quantitative academic and professional backgrounds
- Supplemented by London Model Audit team and co-source with specialized quantitative skill sets from Consulting firms

## Model Risk

### Sample Selection

- Covers all business and functions with focus on areas considered the riskiest
  - Includes primary, challenger and benchmark models in the sample

### Areas of Focus 2018

- Models for Counterparty Credit, Wholesale, & PPNR
- Overlays and other controls of judgmental processes for ineffective models
- Testing to see model development standards are adequate and consistent across businesses and functions
  - Models for Global Market Shock
  - Pricing models used in stress scenarios

# Risk Based Internal Audit Approach for Capital Planning

## Areas of Focus for HSBC Internal Audit in 2018

Model Risk

Scenario Design

Global Market Shock  
(new)

Process  
Improvements

Data Quality

SLOD/FLOD  
testing

Risk ID

Operational Risk