

Managing Financial Risks at the Research Foundation

Introduction

The Research Foundation faces risk in every transaction it processes and every decision it makes. It is important to understand the financial risks inherent in the RF's business in order to mitigate and manage the risks. This document describes the roles of the people responsible for managing financial risks, describes the various categories of risk, and identifies strategies in place for mitigating and managing financial risks.

The Treasurer periodically releases a "Financial Risk Assessment" that helps bring to light those financial activities that require action to eliminate the risk or transition it away from the organization.

Roles

The key roles involved with managing financial risk at the RF are:

- 1. The Board of Directors
- 2. Central Office Management
- 3. Campus Management

The *Board of Directors* is responsible for the organization's fundamental approach to managing financial risk.

Central office management is responsible for implementing internal controls to mitigate, manage and monitor risks. The CFO/treasurer is responsible for identifying financial risks and informing the board finance committee on the current risk environment.

Campus management is responsible to implement policies and procedures defined by the board and central office management.

Financial Risks

Each category of financial activity carries its own objective and risks.

Balance Sheet

- Assets. Objective: Preserve the RF's assets.
- Liabilities. Objective: Know how much the liability is and ensure the RF has funds or plans to cover it.
- **Net Assets**. Objective: Not spend more than the RF earns and set aside some funds for contingencies.

Statement of Activities

- **Revenue.** Objective: Recognize revenue in appropriate business period.
- **Expenditures.** Objective: Record legitimate business expenses in the appropriate business period.

Statement of Cash Flows

• **Cash Flow.** Objective: Manage cash to comply with OMB 2 CFR Part 200, manage day –to-day requirements, maximize investment return and minimize debt.

All Financial Statements

• Affiliated Corporations. Objective: Support related entities while mitigating risk to the RF and accurately report financial relationships.

The section below describes the risks and the controls put in place at each level: board, central office management and campus management to mitigate, manage, monitor or make do with the risk.

- *Mitigate*: Risks that are likely to happen and have a high impact must be eliminated or transferred away from the RF.
- *Manage:* Risks that either have a large impact but are not likely to happen –or– are likely to happen but have a low impact must be managed by implementing controls, buying insurance or entering into financial contracts.
- *Monitor*. Risks that have a moderate impact and moderate likelihood must be monitored. For these risks, controls are in place and failures are covered by self-funded reserves.
- *Make do with*: Risks that have a low likelihood of occurring and a low impact are accepted; failures are covered with operating funds.

Source: "Risk Management, A Risk Mapping Guide from AFP" produced by the Association for Financial Professionals

Balance Sheet

Assets

Objective: Preserve the RF's assets.

1. Cash and Cash Equivalents: funds maintained in the checking account to pay for payroll and accounts payable.

High-Level Risks: Lose cash, lack of liquidity, lose assets due to foreign currency exchange

Controls

Level	Controls	Primary risk manager/level/ materiality
Board	Define authority for establishing bank accountsDefine investment policy and guidelines	
	 Require double signature on checks exceeding \$100,000 	
	 Appoint campus operations managers Define policy on responsibility for losses	
Central office	Perform centralized banking	
management	• Define policy and procedure for establishing RF bank accounts	
	Maintain computerized business system	
	Train and support campus staff	
	Review daily cash sheet	
	Process all wires centrally	
Campus	 Comply with policy and procedures 	
management	 Authorize project bank accounts 	Monitor
	Monitor bank accounts	\$5,000 to \$100,00
	Maintain operating reserves	

2. Accounts receivable: sponsored expenditures in advance of cash receipts

High-Level Risk: Don't bill and/or can't collect on expenditures made

Level	Controls	Primary risk manager/level/ materiality
Board	 Appoint campus operations managers Define policy on responsibility for losses Define "at risk" policy 	
Central office Management	Define policies and procedures for decentralized location award establishment and billing/collections	

Level	Controls	Primary risk
		manager/level/

		materiality
	 Perform centralized award establishment and billing/collections 	
	Maintain computerized business system	
	 Train and support campus staff 	
	 Monitor aged and unbilled awards 	
Campus Management	 Assess creditworthiness of sponsors when establishing awards 	
	• Authorize award establishment and budget	
	Monitor billed, aging, and unbilled awards	Manage
	 Maintain an operating reserve 	\$20,000 to millions
	 Negotiate contracts with advances 	

3. Advances to others: agency fund (campus-related organizations such as affiliated corporations, clinical practice plans, campus foundations) expenditures in advance of cash receipts

High-Level Risk: Campus-related organizations don't reimburse RF for expenditures made

Controls		
Level	Controls	Primary risk manager/level/ materiality
Board	 Appoint campus operations managers Define policy on responsibility for losses 	
Central office management	 Require contract with agency Establish policies governing agency awards (cash-driven) Maintain computerized business system Train and support campus staff 	
Campus management	 Authorize award establishment and budget Monitor activity Maintain an operating reserve Negotiate contracts with advances 	Monitor \$1,000s to \$1 million

4. Operating, endowment & planned giving pool investments

High-Level Risks: Market, liquidity, interest rate, concentration of credit, foreign currency, custodial credit

Level	Controls	Primary risk manager/level / materiality
Board	Define authority and document in investment policy and guidelines	

	Charter finance and investment committees to include responsibility for managing risks	Manage \$1,000 to millions
Central office Management	 Establish investment decision-making framework to carry out board policies Comply with policy Produce monitoring report 	
Campus management	Participate on MO finance committee	

5. Retiree health investments

High-Level Risks: Market, liquidity, interest rate, concentration of credit, foreign currency, custodial credit

Controls

Level	Controls	Primary risk manager/le vel/ materiality
Board	 Define authority and document in investment policy and guidelines Charter finance and investment committees to include rresponsibility for managing risks 	Manage \$1,000 to millions
Central office Management	 Establish investment decision-making framework to carry out board policies Comply with policy Produce monitoring report 	
Campus management	Not applicable	

6.Fixed Assets: 35 State Street building, central office and campus administrative equipment

High-Level Risk: Lose asset

Controls Level	Controls	Primary risk manager/level
		/ materiality
Board	 Appoint campus operations managers Define policy on responsibility for losses Approve purchases of real property 	
Central office management	Define policies and procedures for property Management and comply with OMB regulations Define policies and procedures for insurance	

	Contract with SUNY for computerized business system to track fixed assets Train and support campus staff Buy insurance policies	
Campus management	 Comply with policies and procedures Pay for insurance coverage Perform inventory Monitor activity 	Make do with \$1,000 to \$100,00

7. Other Assets: Deferred compensation 457 plan and interest rate swap

High-Level Risk: Loss of asset

Controls		
Level	Controls	Primary risk manager/le vel/ materiality
Board	1.Approve benefit plan	
	 Define authority and document in investment policy and guidelines 	
Central office	Manage vendor	
Management	Monitor activity and develop policies and	
	procedures	Monitor
	Establish investment decision-making	\$1000-
	framework to carry out board policies	\$50,000
Campus	Comply with policies and procedures	
management		

Liabilities

Objective: Know how much the liability is and ensure the RF has funds or plans to cover it.

8. Accounts payable and accrued expenses (AP)

High-Level Risks: Pay for goods and services not received or no money to cover expenditures

Level	Controls	Primary risk manager/level/ materiality
Board	 Appoint campus operations managers Define policy on responsibility for losses 	
Central office management	 Define policies and procedures for purchasing and accounts payable Maintain computerized business system 	

	 Train and support campus staff Estimate liability of financial statement based on statistics 	
Campus management	 Comply with policies and procedures Authorize purchases and expenditures Review all expenses exceeding \$25,000 Monitor activity Maintain a reserve 	Make do with \$1,000 - \$500,000 (some campuses have larger materiality)

9. Accounts payable and accrued expenses: self-funded benefit cost incurred but not recorded (IBNR) for graduate student health, prescription drugs, dental and vision insurance costs

High-Level Risk: No money to pay claims

Controls

Level	Controls	Primary risk manager/level/ materiality
Board	Define benefit policyDefine policy on responsibility for losses	
Central office management	 Establish fringe benefit cost recovery policy Manage fringe benefit pool Manage vendor Define policies and procedures and comply with OMB regulations Monitor unpaid claims activity Purchase insurance (stop loss for individual claims above \$200,000) Negotiate fringe benefit rate Maintain a Letter of Credit of \$4.2 million as collateral for Health Insurance 	Monitor \$200,000
Campus management	 Follow policies and procedures Support employees with benefit administration Ensure award budgets use current fringe benefit rate 	

10. Accounts payable and accrued expenses: cost of potential claims under self-funded workers' compensation plan

High-Level Risk: No money to pay claims -8-

Level	Controls	Primary risk manager/level/ materiality
Board	Define policy on responsibility for losses	
Central office management	 Establish fringe benefit cost recovery policy Manage fringe benefit pool Manage vendor Define policies and procedures Monitor unpaid claims activity Purchase insurance (stop loss for claims above \$100,000) Negotiate fringe benefit rate Maintain two Letters of Credit of \$1 million and \$1.6 million as collateral for claims 	Monitor \$10,000 to \$100,000
Campus management	 Comply with policies and procedures Support employees and resolve issues Ensure award budgets use current fringe benefit rate 	

11. **Accrued compensation:** pay due to employees at end of financial period and accrued sick leave

High-Level Risk: No money to pay employees what is owed to them

Controls Level	Controls	Primary risk manager/level/ materiality
Board	 Define salary plan and sick leave accrual policy Define sick leave accrual policy and fringe benefit pool funding sick leave over 30 days Appoint campus operations managers Define policy on responsibility for losses 	
Central office management	 Define policies and procedures for human resources and payroll Maintain computerized business system Train and support campus staff Monitor 	
Campus management	 Comply with policies and procedures Appoint people to awards with sufficient budget Monitor sick leave accruals and payroll activity Maintain operating reserve 	Monitor \$1,000 to \$100,000

12. Accrued vacation: funds due to employees at end of financial period for accrued but unused vacation leave

High-Level Risk: No money to pay employees what is owed to them

Controls Level	Controls	Primary risk
Level	Controls	manager/level/ materiality
Board	 Define vacation accrual benefit policy Define policy on payments from fringe benefit pool to terminated employees for vacation accruals Appoint campus operations managers Define policy on responsibility for losses 	
Central office management	 Define policies and procedures Maintain computerized business system Train and support campus staff Negotiate fringe benefit rate with a component to cover terminated vacation 	
Campus management	 Comply with procedures Use computerized business system or track independently Monitor activity vacation accruals for accuracy Maintain operating reserve Ensure award budgets use current fringe benefit rate 	Monitor \$10,000

13. Deferred revenue: advances from sponsors

High-Level Risk: Can't carry out project for which sponsor has provided money

Level	Controls	Primary risk manager/level/ materiality
Board	 Appoint campus operations managers Define policy on responsibility for losses 	
Central office management	 Define policies and procedures for sponsored programs administration Maintain computerized business system Train and support campus staff 	
Campus management	 Comply with policies and procedures Review all proposals to ensure campus can meet sponsor requirements Authorize awards nd budgets Monitor surplus accounts activity 	Monitor \$1,000 to millions

14. **Deposits held for others:** advances from agency funds, planned giving and endowment funds

High-Level Risk: Funds not available to cover the requirements

Level	Controls	Primary risk manager/level/ materiality
Board	 Appoint campus operations managers Define policy on responsibility for losses Define policy on planned giving Authorize quasi endowments 	
Central office management	 Define policies and procedures for planned giving administration Require contract with agent Maintain computerized business system 	
Campus management	 Comply with procedures Maintain operating reserves Monitor agency activities 	Monitor \$1,000 to millions

15. Post-retirement benefit obligation: funds to pay cost of health insurance for RF retirees

High-Level Risk: No money to pay future claims

Level	Controls	Primary risk manager/level/ materiality
Board	Define retiree health benefit and	Manage
	contributions levels	\$60 million
	Define retiree health insurance funding policy	unfunded
Central office	Define fringe benefit cost recovery policy	
management	Manage fringe benefit pool	
	Manage the vendor providing the benefit	
	 Monitor claims for accuracy 	
	Negotiate fringe benefit rate	
Campus	Ensure award budgets use current fringe	
management	benefit rate	

16. Long-term debt: 35 State Street mortgage and capital leases

High-Level Risk: No money to pay back money borrowed

Controls		
Level	Controls	Primary risk manager/level/ materiality
Board	Authorize all debtApprove Financial Plan	
Central office management	 Perform centralized debt management Develop and implement Financial Plan Monitor central office budget for funds to make payments 	Monitor \$1 million/year

Campus	Not applicable	
management		

17. Line of credit: \$80 million authorized line of credit (LOC) to support sponsored program activities

High-Level Risk: No funds available to pay interest, campus unable to recover funds from sponsors to pay on termination date

Controls

Level	Controls	Primary risk manager/level/ materiality
Board	 Authorize all debt Authorize maximum for line of credit 	
	 Appoint campus operations managers Define policy on responsibility for losses 	
Central office management	 Define policies and procedures for borrowing on line of credit Manage banking relationship and cash flow. Monitor activity Produce quarterly report 	Manage \$80 million
Campus management	 Authorize awards and budgets Request borrowing from LOC Comply with policies and procedures 	

18. Other liabilities: Deferred compensation plan 457 & contingent liabilities

High-Level Risk: For 457 plans: assets don't equal liability. For contingent liabilities: no funds available to pay potential claims

Controls		
Level	Controls	Primary risk manager/level/ materiality
Board	 2.Approve benefit plan Define authority and document in investment policy and guidelines Define authority for Risk Management 	
Central office management	 Manage vendor Establish investment decision-making framework to carry out board policies Purchase insurance to cover potential claims for any contingent liabilities Annually monitor all outstanding legal issues for potential liability to be recorded in the Audited Financial Statements 	Monitor \$100-\$1million
Campus management	Comply with policies and procedures	

Net Assets

Objective: Not spend more than the RF earns and set aside some funds for contingencies.

19. Net assets

High-Level Risk: No working capital

Level	Controls	Primary risk manager/level/ materiality
Board	 Define corporate reserve funding policy Define investment reserve policy Approve Financial Plan 	Manage \$million
Central office management	 Develop and implement Financial Plan Manage working capital Maintain reserves Develop policies and procedures for RF- funded awards Maintain computerized business system Train and support campus staff 	
Campus management	 Comply with policies and procedures Maintain campus reserves Support central office with cash flow forecasting 	

Statement of Activities

Revenue

Objective: recognize revenue in appropriate business period

1. **Sponsored Program Direct Revenue.** Revenue recorded when expenditures made from sponsored program awards.

High-Level Risk: Expenditures made during defined business period later identified as unallowable.

Level	Controls	Primary risk manager/level/ materiality
Board	Define revenue recognition policy	
Central office management	 Define sponsored program expenditure criteria Maintain computerized business system Monitor recorded revenue and account classifications Train and support campus staff 	

Campus management	 Comply with policies and procedures, use appropriate account classifications for accurate revenue recording Develop direct and indirect costing policies Review direct expenditures for reasonableness, allowability and allocability 	Monitor
	reasonableness, anowability and anocability	

2.Sponsored Program F&A Revenue. Revenue recorded when expenditures made from sponsored program awards.

High-Level Risk: Incorrect rate applied or expenditures made during defined business period later identified as unallowable

Controls		
Level	Controls	Primary risk manager/level/ materiality
Board	Define revenue recognition policy	
Central office	Maintain computerized business system	
management	Maintain burdening schedules	
	Monitor recorded revenue	
	 Train and support campus staff 	
Campus	Comply with policies and procedures	
management	Develop direct and indirect costing policies	Monitor

3. Royalties. Revenue recorded is based on cash received (don't record receivables or intangible assets)

High-Level Risk: Licensee not paying royalties, patent infringements

Controls		
Level	Controls	Primary risk manager/level/ materiality
Board	Define revenue recognition policy	
	 Patent Policy Board, defines TTO policies 	
Central office management	 Develop and implement Technology Transfer procedures Engage legal counsel for infringement cases Maintain computerized business system 	Monitor
	 Maintain computenzed business system Monitor recorded revenue Train and support campus staff 	
Campus management	 Comply with policies and procedures Support TTO activities Decentralized campus comply with Patent Policy 	

4. Investment Income. Revenue recorded based on change in market value (gains/losses), dividend or interest payable date.

High-Level Risk: Misstatement of market value of investments, under or over recorded unrealized gains

Controls

Level	Controls	Primary risk manager/level/ materiality
Board	 Define revenue recognition policy & investment guidelines Hire custodian, investment consultants and investment managers 	
Central office management	 Implement investment guidelines Monitor investment performance & recorded revenue Maintain computerized business system 	Monitor
Campus management	•	

5. **Other Revenue.** Includes agency fees, equity distributions from LLC, gifts, third party service center, and sale of assets. Revenue recorded on agency fee based on calculation of rate applied to direct expenditures. Revenue recorded for all other on cash receipts.

High-Level Risk: Unrecorded or over recorded, unrelated to the mission

Level	Controls	Primary risk manager/level/ materiality
Board	Define revenue recognition policy	
Central office management	 Monitor recorded revenue and account classifications Maintain computerized business system Support campus develop of rates Monitor for relationship to mission 	
Campus management	 Comply with policies and procedures Develop & apply appropriate rates UBIT review 	Monitor

Expenditures

Objective: record legitimate business expenses in the appropriate business period.

6. Sponsored program expenses

High-Level Risk: Expenditures made during defined business period later identified as unallowable

Level	Controls	Primary risk manager/level/ materiality
Board		
Central office management	 Develop policies and procedures Maintain computerized business system Maintain cash management system to comply with OMB 2 CFR Part 200 	
Campus management	Ensure direct expenditures are reasonable, allowable and allocable	Monitor

7. Administration and support expenses

High-Level Risk: not appropriate business expenses, reputation risk, misclassified costs

Controls

Level	Controls	Primary risk manager/level/ materiality
Board	 Develop RF funded policies to comply with 1977 agreement 	
Central office management	 Maintain computerized business system Develop policies and procedures for RF funded expenditures 	
Campus management	 Scrub accounts to ensure allowable for the F&A proposal 	Monitor

9. Agency direct expenses. Agency direct expenditures are NOT recorded on the RF's financial statement. These cost are recorded in the RF IRS 990

High-Level Risk: reputation risk, related party transactions

Controls	
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Level	Controls	Primary risk manager/level/ materiality
Board		
Central office management	Maintain computerized business systemDevelop boilerplate contracts	
Campus management	 Use boilerplate contracts Comply with agency specific cost policies per contract 	Monitor

Statement of Cash Flows

Objective: Manage cash to comply with OMB 2 CFR Part 200 , manage day -to-day requirements, maximize investment return and minimize debt.

1. Cash Flow from Operations

High-Level Risk	insufficient cash to	cover payments
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Control

Level	Controls	Primary risk manager/level/ materiality
Board	Develop annual financial budget to ensure working capital, availability of capital	
Central office management	 Develop an annual cash flow plan for sponsored programs, corporate expenditures, agency activity and fringe benefit pool 	
	 Maintain computerized business system to support the treasury function Maintain cash management system to comply with OMB 2 CFR Part 200 	
Campus management	Monitor cash disbursements to ensure budget exists	Manifer
	 Monitor sponsors' advances and timely billing Monitor agency advances and minimize receivables. Monitor corporate expenditures to ensure allocation exists and actual vs. forecasted 	Monitor
	revenue is sufficient to cover cash disbursement	

2. Cash Flow from Financing Activities

High-Level Risk: debt capacity is insufficient to cover capital needs

Controls

Level	Controls	Primary risk manager/level/ materiality
Board	 Develop annual financial budget to ensure working capital, availability of capital 	
Central office management	 Develop an annualcash flow plan for sponsored programs, corporate expenditures, agency activity and fringe benefit pool Maintain computerized business system Maintain cash management system to monitor capital requirements Manage relationship with bond rating agencies Identify appropriate debt instrument to meet capital need 	Monitor

	Develop financial plan to cover deb	ot costs
Campus	Comply with debt policies and proc	edures
management		

3. Cash Flow from Investing Activities

High-Level Risk: insufficiently managing investment risk and insufficient investment return to meet cash requirements.

Controls	Controlo	Drimonyriol
Level	Controls	Primary risk manager/level/ materiality
Board	 Develop annual financial budget to ensure plan for investment pools Develop investment spending formula 	
Central office management	 Develop an annual cash flow plan for operations and identify funds available for investment Maintain computerized business system Maintain cash management system to monitor cash requirements vs. funds available for investment Monitor annual financial budget 	Monitor
Campus management	Comply with debt policies and procedures	

All Financial Statements

Affiliated Corporations

Objective: Support related entities while mitigating risk to the RF and accurately report financial relationships.

1. Consolidation of financial activity for single member affiliated corporations

High-Level Risk: controlling interest in the entity, inaccurate financial data

Level	Controls	Primary risk manager/level/ materiality
Board	Approve all affiliated corporations	
Central office management	 If single member, the entity is required to provide AFS and IRS 990 filing Monitor entities' financial activity and ensure timely reporting of data for consolidation requirement Review AFS and IRS tax returns Maintain computerized system 	Monitor

	 Monitor activity quarterly and assess the financial transactions to ensure appropriate transparency reporting in RF financial statement Review board minutes for commitment and contingency with potential financial risk to the RF Review affiliated significant contracts for potential financial risks to the RF. 	
Campus management	•	

2. Corporate expenditures (RF-funded) support entity

Note: Classified as administration and support in Statement of Activities

High-Level Risk: controlling interest in the entity, misclassification of expenditures, misclassified asset (if LLC)

Controls

Level	Controls	Primary risk manager/level/ materiality
Board	Approve all affiliated corporations	
Central office management	 Monitor entity to ensure RF support is minimal 	
Campus management	 Classify cost appropriately to comply with RF policies and procedures Certify F&A cost proposals to validate cost are not in the calculation 	Monitor

3. Agency relationship

High-Level Risk: credit risk, campus ability to cover losses

Classified on Balance Sheet; deposit held for other or advances to others

Controls		
Level	Controls	Primary risk manager/level/ materiality
Board	Approve all affiliated corporations	
Central office management	 Develop boilerplate agency agreements Monitor activity quarterly to review activity to ensure appropriate transparency reporting in RF financial statement 	
Campus	Comply with RF policies and procedures	

management	Ensure funds are received timely	
	Review all activity to ensure arms-length	Monitor
	transactions (related party transaction	
	requirement in RF IRS 990)	

4. Sponsored Program Activity

Note: Classified balance sheet: deferred revenue, A/R, classified in statement of changes: sponsored revenue and expense

High-Level Risk: not an arms length transaction

Controls		
Level	Controls	Primary risk manager/level/ materiality
Board	 Approve all affiliated corporations 	
Central office management	 Develop boilerplate agreements and conflict of interest policy Monitor all activity quarterly to ensure appropriate transparency reporting in RF financial statements 	
Campus management	 Document all contracts are arms length transactions and report any potential conflict of interest Comply with RF policies and procedures 	Monitor

5. Non-Sponsored Program Activity

Note: Classified on statement of changes: other revenue, support expense

High-Level Risk: not an arms length transaction

Level	Controls	Primary risk manager/level/ materiality
Board	Approve all affiliated corporations	
Central office management	 Develop boilerplate agreements and conflict of interest policy Monitor all activity quarterly to ensure appropriate transparency reporting in RF financial statement 	
Campus management	 Document all contracts are arms length transactions and report any potential conflict of interest Comply with RF policies and procedures 	Monitor