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State of Illinois Funding Status

<i>System</i>	<i>Assets (June 2002)</i>	<i>Projected Liab. (June 2002)</i>	<i>Unfunded Liability</i>	<i>Funding ratio</i>
1 0000 0%				
2 00 00 0%				
3 _____	0 _____	0 _____	0 _____	1% _____
4 0000 5%				

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Historical annual returns of asset classes (1927 – 2002)

<i>Asset class</i>	<i>Average</i>	<i>Std. Dev.</i>
1 0% 0%		
2 1 3		
3 1 2		
4 5 0		
5 _____ 9 0		

1 **2** **3** **4** **5**

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Illinois State Board of Investment - Asset allocation guidelines

<i>Asset class</i>	<i>Distribution</i>
1 0%	
2 0%	
3 0%	
4 1%	
5 5%	

Identify the stakeholders in this case. What are the risks to these stakeholders?

- State of Illinois
- Bondholders
- Pensioners
- State of Illinois

Quantify the risks of the State of Illinois pension obligation bond issue.

- Risk of default
- Risk of interest rate changes
- Risk of inflation
- Risk of currency fluctuations
- Risk of credit rating changes
- Risk of liquidity
- Risk of market volatility
- Risk of political instability
- Risk of economic downturn
- Risk of natural disasters
- Risk of terrorism
- Risk of cyberattacks
- Risk of pandemics

Year	Bonds	Real Estate	Intl Stock	Sm Stocks	Lg Stocks	Debt Pmt	EOY Total
1	100			10	0		
2	100			10	10		
3	100			10	10		
4	100			10	10		
5	100			10	10		
6	100			10	10		
7	100			10	10		
:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:

What are some problems with this analysis?

- Lack of diversification
- Over-reliance on bonds
- Ignoring inflation risk
- Ignoring currency risk
- Ignoring political risk
- Ignoring economic risk
- Ignoring natural disaster risk
- Ignoring terrorism risk
- Ignoring cyberattack risk
- Ignoring pandemic risk

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Journal of Risk and Insurance

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Journal of Finance

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Journal of Pension Economics and Finance