14. (2.5 points)

The value of an insurance company's investment portfolio increased significantly during the year. The current portfolio is composed of 70% common stock and 30% bonds.

The company is considering acting on <u>one</u> of the following options before the end of the year:

Option	
1	Maintain the investment holdings.
2	Liquidate the current year's gains, and use all the proceeds to purchase needed office equipment.
3	Liquidate the current year's gains, and use all the proceeds to pay stockholder dividends.

a. (1.5 points)

Assess the impact on the current year's change in Statutory Policyholders' Surplus associated with each option.

b. (1 point)

Company management wants to reduce the asset risk charges in its risk-based capital (RBC) calculation while maintaining a reasonably high investment return and net income. Propose two investment portfolio changes that would help achieve this.

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14) Sample Answer

<u>Part a – Option 1:</u>
Model Solution 1 - Increase in unrealized capital gains would increase the surplus. Increase in net deferred taxes due to increase in unrealized gains would decrease surplus.

Model Solution 2 - Surplus Increases: Unrealized Capital Gains increase - increases surplus, deferred tax liability increase - decreases surplus

Model Solution 3 - Surplus Increases: Market Value of stocks increase - increases surplus, deferred tax liability increase - decreases surplus

<u>Part a – Option 2:</u>
Model Solution 1 - Increase in realized gains increases surplus. Payment of taxes on realized gains decreases surplus. Increase in non-admitted asset value from purchase of office furniture decreases surplus.

Model Solution 2 – Surplus Decreases: Capital Gains increase - increases surplus, Taxes increase - decreases surplus, Non-Admitted assets increase - decreases surplus

Model Solution 3 – Surplus Decreases: Investment Gain net of taxes increase - increases surplus, Non-Admitted assets increase - decreases surplus

Model Solution 4 – Surplus Increases: Capital Gains increase - increases surplus, Taxes increase - decreases surplus, EDP is admitted - no change in surplus

Model Solution 5 – Surplus Increases: Investment Gain net of taxes increase - increases surplus, EDP is admitted - no change in surplus

Model Solution 6 – Surplus Decreases: Capital Gains increase - increases surplus, Taxes increase - decreases surplus, Expenses increase - decreases surplus

Model Solution 7 – Surplus Decreases: Investment Gain net of taxes increase - increases surplus, Expenses increase - decreases surplus

<u>Part a – Option 3:</u>
Model Solution 1 - Increase in realized gains increases surplus. Payment of taxes on realized gains decreases surplus. Payment of stockholder dividends decreases surplus.

Model Solution 2: Surplus Decreases: Capital Gains increase - increases surplus, Taxes increase - decreases surplus, Dividends decrease surplus

Model Solution 3: Investment Gain net of taxes increase - increases surplus, Dividends decrease surplus

<u>Part b – The following reasons were given credit</u>

- Re-invest the current year's gains more heavily in investment-grade bonds, rather than in stocks. In the RBC calculation, common stock carries a 15% charge while bonds of NAIC Class 1-5 carry lower charges. However, this will potentially lower the investment return, so the company will need to assess the impact to investment return of making this shift

- Move from common stocks to investment grade bonds. Investment grade bonds have a lower RBC charge than common stocks.
- Move from common stocks to bonds (1-5). Bonds (1-5) have a lower RBC charge than common stocks.
- Move from junk bonds or bond class 6 to bonds (1-5). Bonds (1-5) have a lower RBC charge than class 6.
- Depending on the market, diversify the portfolio by purchasing real estate rather than common stock (or NAIC Class 6 bonds). The RBC asset charge for real estate is 10%. Since this charge is less than the 15% for common stock and 30% for Class 6 bonds, if the company feels the real estate investment will yield returns that it is comfortable with, this will lower the asset RBC charge.
- Diversify the bond portfolio / purchase more bonds. As long as the bonds being added to the portfolio are from new issuers (relative to the current portfolio) and are not US Government bonds or bonds of subsidiaries/affiliates/parents, this will decrease the "bond size adjustment" factor which amplifies the asset charge for bonds.
- Diversify bonds to reduce the bond size adjustment factor.
- Invest in preferred stock rather than common stock. The charges for preferred stock vary by NAIC Class but most classes of preferred stock carry a lower charge than the 15% common stock charge.
- Move from common stocks to preferred stocks. Preferred stocks have a lower RBC charge than common stocks.
- Decrease holdings in top 10 issuers to reduce the asset concentration factor.
- Move from junk bonds or bond class 6 to common stock. Common Stock has a lower RBC charge than class 6.
- Move the investments in common stock to preferred stock. These have a much lower charge than common stock (15%) because they are less likely to default.
- Shift from common stock to bonds rated investment grade (or really any besides class 6 because C6 charge = 30%, stocks = 15%).
- Shift from common stock to preferred stock, again as long as investment grade because charge is < 15%.
- Purchase bonds from more issuers to lower bond size adjustment factor.
- They can reduce the amount of stocks and bonds they have in their 10 largest holders. This will reduce the asset concentration factor.
- Moving from class 6 to bonds to stocks will reduce RBC (lower %) and generally have higher yield.

Examiner's Report

Part a:
Most candidates lost significant credit for ignoring the impact of taxes (deferred in option 1) on surplus. Another common error was to discuss the reductions in surplus for options 2 and 3 without mentioning the initial increase because of the capital gains. Some candidates assumed after-tax

proceeds were being used to buy office equipment or pay dividends. This results in no change for options 2 and 3. No points were deducted for this assumption.

Part b:

Candidates were typically successful at presenting two changes to reduce the asset risk charges but often did not present a reason. A change that would reduce the asset risk charges and why the change would improve RBC was necessary for full credit. No credit was given to changes that would not reduce the RBC charge. Half-credit was possible for changes that would reduce the RBC charge and also reduce investment income. One common example was convert stocks to cash because RBC charge is lower for cash. Some candidates lost credit for stating buy more bonds because RBC is lower without stating what asset RBC's charge was being compared with.

Another common mistake was "diversify holdings to reduce the factor". For the bond size adjustment factor, it was necessary to state the factor name for full credit. The asset concentration factor is only reduced if the top 10 holdings are reduced, diversification alone is not enough.