MILLIMAN WHITE PAPER

Comparing health insurance company surplus levels

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There is no generally accepted standard for determining the optimal level of surplus an insurer should hold and whether an insurer is holding too much surplus. A nuanced, case-by-case approach is necessary to evaluate and compare surplus levels.

U.S. health insurers are regulated by the states in which they do business, while also being subject to federal regulations. Regulations cover a broad scope, from market conduct, to rate setting, to plan design, and so on. Each insurance commissioner has the primary responsibility and authority to establish minimums standards for health insurer surplus levels. Regulator concern for the sufficiency of surplus is grounded in the need to protect consumers from insurer insolvency.

While there is a regulatory minimum amount of surplus an insurer must hold, there is no generally accepted standard for determining the optimal level of surplus an insurer should hold and whether an insurer is holding too much surplus. These decisions are made by each company's management on a case-by-case basis to reflect each organization's individual situation and its own assessment of risk.

To ensure the likelihood of insolvency is very low, management usually sets that target at far greater than minimum requirements. Indeed, it is rare that such targets are not many multiples of the regulatory minimum. The target surplus level must be sufficient to ensure the company has a high likelihood of survival in the event of a severe financial shock, such as a sequence of unexpected events (e.g., a recession concurrent with a pandemic followed by record-setting unemployment).

In recent years, policy proposals have been offered in multiple states bringing attention to the question of whether the amount of surplus held by some insurers is "excessive" and should be reduced and whether surplus levels should be restricted in some way to avoid the accumulation of what some consider to be excessive amounts. These discussions can become political in some states, where a higher surplus is perceived to be evidence of excessive health insurance premiums. Some of the policy proposals suggest the funds should be taxed or repurposed to fund general revenues and various public programs, or used to reduce future insurance premiums.

In this white paper, we discuss the basic elements of surplus, including its purpose, uses, and funding. We also examine the various incentives, pressures, and trade-offs that may affect the accumulation of surplus, and short-term and long-term impacts on various stakeholders that could arise under policies designed to limit surplus accumulation. The white paper also explores various surplus accumulation and use scenarios among different kinds of health insurers, including for-profit and nonprofit. These examples demonstrate that a nuanced, company-specific approach is necessary to evaluate and compare surplus levels among health insurers.

No particular policy position is advocated, nor are particular states' policies compared. A particular policy proposal should be evaluated in detail and with the appropriate context.

Surplus concepts

An insurance company's surplus is the difference between its assets and liabilities.[1] Surplus is not tied to any one particular insurance policy or line of business. Indeed, it may have been built over a long period of time through a combination of gains and losses from past insurance policies, investment portfolio performance, capital infusions from a parent company or investors, or by other means. All insurance policies, however, are protected by the surplus, irrespective of the source of surplus or the duration of the insurance contract.

SURPLUS PROVIDES A MARGIN OF SAFETY

An insurance company may expand into a new line of business by, say, entering the individual insurance market for the first time. While the premiums are typically set so that the new product will contribute to surplus over time, those policies are nevertheless immediately protected by the existing surplus, even if they incur operating losses in their first year. The size of existing surplus in relation to the ongoing insurance business

[1] In this paper, I use the general term "surplus" to refer to assets minus liabilities, which most readers understand to be net worth. Sometimes the value is referred to as "capital and surplus" instead, in recognition that a portion of the amount represents capital stock. The section Sources of Surplus discusses the principal components of capital and surplus, which for ease of use are collectively referred to as "surplus" throughout the paper.

may limit the pace of business expansion unless the company decides to take greater risks.

Yearly financial results for health insurers are inherently volatile, and a lot of this variation is due to external drivers that cannot be diversified through volume alone, as well as timing of insurance rate setting compared to emergence of actual experience. Once losses begin, they can continue for several years in a row, making it difficult and slow to return to profitability. This process[2] is one of the key reasons insurers must maintain higher surplus levels.

Notwithstanding the financial volatility of insurance business over time, surplus held by an insurance company can be relied on when rare events occur, including pandemics and other natural disasters, and available surplus can be deployed in unexpected ways. The coronavirus outbreak of 2020 was more financially challenging for healthcare providers than for health insurers in the early months. Beginning in the spring of 2020, some insurers saw large reductions in claim expenses and began to give healthcare providers cash advances in order to alleviate providers' cash flow problems.[3] Providers were suffering a drop in patient revenue as medical procedures were delayed and cancelled by stay-at-home orders. Insurers expected a reasonable chance of collecting these advance payments when patient workloads returned. Because these advance payments essentially shift an insurer's current assets from liquid cash into illiquid, and potentially riskier, long-term provider receivables, such a business decision can only be taken if the insurer's balance sheet is already strong.

SURPLUS MUST GROW AS HEALTHCARE CLAIM LEVELS GROW

Surplus will increase or decrease over time depending on the overall financial performance of the company. However, the protection that it provides to the underlying insurance policies depends on the quantity of policies, their size, and the magnitude of their risks. As the cost of healthcare grows, insurer surplus must also grow in order to scale along with the size of the insurance risk. When healthcare inflation is compounded by other factors, such as membership growth, then surplus must grow even more quickly in order to provide the same measure of protection. A health insurer may therefore be constrained from taking on new business or from setting lower rates. Otherwise surplus may fail to scale with the increasing size of insurance risks or may even be quickly depleted. Company management and the board of directors are responsible for considering current and future surplus levels when making key business decisions, including expanding into new lines of business, products, and service areas.

MINIMUM SURPLUS LEVELS

Risk-based capital (RBC) is the most common standard for setting regulatory minimum surplus requirements.[4,5] RBC is not the same as surplus; instead, it refers to a set of measurements of an insurer's financial statement and is used to express the surplus as a multiple of a minimum standard. This standard is linked formulaically to key financial metrics and therefore increases or decreases along with claim levels and is influenced by dozens of other key metrics that are company-specific and change over time. RBC was developed to enforce consistent regulatory minimum surplus levels, with the primary objective to avoid a precipitous decline into insolvency. The RBC formulas are based on a consideration of the key risks that the company faces (underwriting risk, credit risk, asset risk, business risk, and operational risk).

The regulatory minimum requirement is referred to as the Authorized Control Level (RBC-ACL), and company surplus is frequently measured as a ratio (or percentage) of the RBC-ACL. The key thresholds are shown in Figure 1.

FIGURE 1: KEY RBC-ACL THRESHOLDS

RBC Ratio	Consequence if RBC Ratio falls below…
200% RBC-ACL † Company Action Level	The company is required to file a report with the commissioner, including corrective actions the company intends to take to restore TAC back above 200% RBC-ACL.
150% RBC-ACL Regulatory Action Level	The commissioner may perform examinations of the company and issue an order specifying corrective actions.
RBC-ACL Authorized Control Level	Below this level the state insurance commissioner may take control of the company.
70% RBC-ACL Mandatory Control Level	At this point the commissioner must take control of the company.

† A Company Action Level Event also occurs when the ratio falls below 300% RBC-ACL and there is a >5% loss from insurance operations in the prior year (Health Annual Statement: Page 4 Line 23 / Line 8 = 105%)

[2] While it has become a somewhat dated term, this process has in the past been referred to as the "underwriting cycle."

[3] Daly, Rich (April 13, 2020). Some health plans accelerate hospital payments to provide COVID-19 financial help. Healthcare Financial Management Association: Payment, reimbursement, and managed care. Retrieved August 14, 2020, from https://www.hfma.org/topics/news/2020/04/some-health-plans-accelerate-hospital-payments-to-provide-covid-.html.

[4] See National Association of Insurance Commissioners (NAIC), Risk-Based Capital, available at https://content.naic.org/cipr_topics/topic_risk_based_capital.htm. Most states have adopted RBC as the primary measure to compare the adequacy of surplus, though some states have additional or preexisting standards that are used in combination or instead of RBC.

[5] David Hayes, Rachel Killian, and Shyam Kolli (March 3, 2020). Capital Requirements for Health Insurers. Milliman White Paper. Retrieved August 14, 20920, from https://us.milliman.com/en/Insight/capital-requirements-for-health-insurers.

The RBC ratio is TAC / RBC-ACL. The numerator of the ratio is referred to as the Total Adjusted Capital (TAC), and this represents the combined statutory capital and surplus with adjustments. The amount excludes non-admitted assets, includes deferred tax assets, and makes special adjustments for life and property and casualty (P&C) insurer subsidiaries, if applicable. These adjustments are typically minor for most health insurers, and so the statutory capital and surplus is usually referred to as the numerator when discussing the RBC ratio.

Surplus maintenance and fluctuations

Most insurers define their own "target surplus," based on company management's assessment of risk. The target must be sufficient so that the company can weather a storm, such as a sequence of negative financial outcomes, while avoiding adverse events.

- It is widely considered an adverse event to fall below 200% of RBC-ACL, thus triggering a company action level event.
- The Blue Cross Blue Shield Association requires an RBC ratio above 375% of RBC-ACL, so falling below that amount is also an adverse event for a member company.[6]
- For companies that depend on "A" ratings from one of the primary rating agencies, having surplus fall below the amount required to maintain an "A" is an adverse event.

Depending on the risk tolerance of management and its quantification of risk for the company, the "right" level of surplus as expressed in the target will vary from company to company.

Due to the consequences of a company action level event or worse, most health insurers maintain surplus that would result in an RBC ratio well above 300% of RBC-ACL and intended to remain above that level under a variety of potentially adverse scenarios that could play out over several years. The median multiple for health insurers has recently been between 600% and 700%.[7]

A ONE-YEAR LOSS…

Health insurers strive to maintain ample surplus, well above regulatory minimums, for good reason. For an insurer that offers major medical coverage (including Medicare Advantage), a loss amounting to around 3.5% of annual premium revenue, which is certainly conceivable in a typical year, could reduce the RBC ratio by 100 points (illustrated in Figure 2). This relationship will differ materially across health insurance companies, depending on product mix, provider contracting approach, and numerous other factors.

FIGURE 2: ONE-YEAR REDUCTION OF RBC RATIO BY 100 POINTS

Financial Results	Baseline Year	Next Year	
Annual Premium	$10,000,000,000	$10,000,000,000	
Traditional Loss Ratio	90.0%	95.5%	
Pre-tax Margin	2.0%	-3.5%	
After-tax gain/loss	$130,000,000	-$227,500,000	(1)
Surplus	**Baseline Year-End**	**Next Year-End**	
Capital & Surplus	$2,000,000,000	$1,772,500,000	(2)
RBC-ACL	$333,333,333	$354,718,178	(3)
RBC Ratio	600%	500%	
Change in RBC Ratio		-100%	

Selected metrics affecting H2 Underwriting Risk component of RBC-ACL:

- Underwriting risk factor of 0.09, reflecting comprehensive major medical insurance
- Managed care discount of 20%, reflecting an approximate 90/10 blend between provider contracts based on fee schedules vs. capitation

(1) Annual premium is held constant for this example, and after-tax gain/loss is based on a 35% tax rate.

(2) Combined capital and surplus decreases due to operating losses.

(3) RBC-ACL requirement increases due to higher claim levels.

…A MULTIYEAR RECOVERY

In the example in Figure 2, the reduction in the RBC ratio is caused by both a loss of surplus (decreasing the numerator) and an increase in the RBC-ACL due to higher claim levels (increasing the denominator). Such a scenario is not an extreme case and therefore may be reason enough for a company to target a much higher RBC ratio. Keep in mind that this example only applied to a single year. In reality, the company may face additional headwinds that will delay and complicate restoring surplus levels to the target level: (a) medical cost inflation and enrollment growth will cause the RBC-ACL to increase over time, putting downward pressure on the RBC ratio; and (b) corrective rating actions likely would be delayed because premium rates for the next benefit year must be prepared and filed well before financial reporting is complete.[8] These headwinds are illustrated in Figure 3, which is a continuation of the scenario in Figure 2.

[6] See discussion in Blue Cross Blue Shield Association's June 24, 2014, letter to the interim insurance commissioner in the District of Columbia, available at https://disb.dc.gov/sites/default/files/dc/sites/disb/publication/attachments/Bluecross_Blueshield_Letter.pdf. (accessed June 24, 2020)

[7] Median 668% RBC ratio for all health insurers filing 2018 Health RBC according to the NAIC database, Aggregated Health Risk-Based Capital Data, available at https://www.naic.org/documents/research_stats_rbc_results_health.pdf. (accessed June 24, 2020)

[8] For example, Medicare Advantage rates for the next calendar year must be filed by June; individual insurance rates must be filed on a state-specific timeline, usually by May.

FIGURE 3: MULTIYEAR RESTORATION OF SURPLUS

Year	Y/Y Rate Increase	Cumulative Enrollment Change	Pre-Tax Margin	Year-End RBC
Baseline		100%	2.0%	600%
Year 2	5%	103%	-3.5%	457%
Year 3	5%	103%	0.0%	452%
Year 4	7%	100%	2.0%	483%
Year 5	7%	97%	3.5%	545%
Year 6	5%	94%	3.5%	604%

In Figure 3, the Year 2 loss of -3.5% causes more than a 100 basis point drop in the RBC ratio because revenue has grown year over year from the baseline.[9] Because rates for Year 3 were developed and filed before the losses in Year 2 were fully reported, significant rating actions are delayed until Years 4 and 5, with the margin increasing substantially. When such actions can be taken, insurers face the reality of a competitive marketplace with price-sensitive policyholders. All the losses cannot be recovered in a single year. Instead, insurers have to weigh pricing in higher margins against the likelihood of losing enrollment and market share to competitors. In this example, the RBC ratio is gradually restored above the target level by the end of Year 5 through modestly higher margins and a modest loss of market share, and there is likely to be less market instability caused by this approach. The lengthy time required to restore surplus levels in this manner is the primary reason why health insurers try to hold surplus substantially greater than the regulatory minimum.

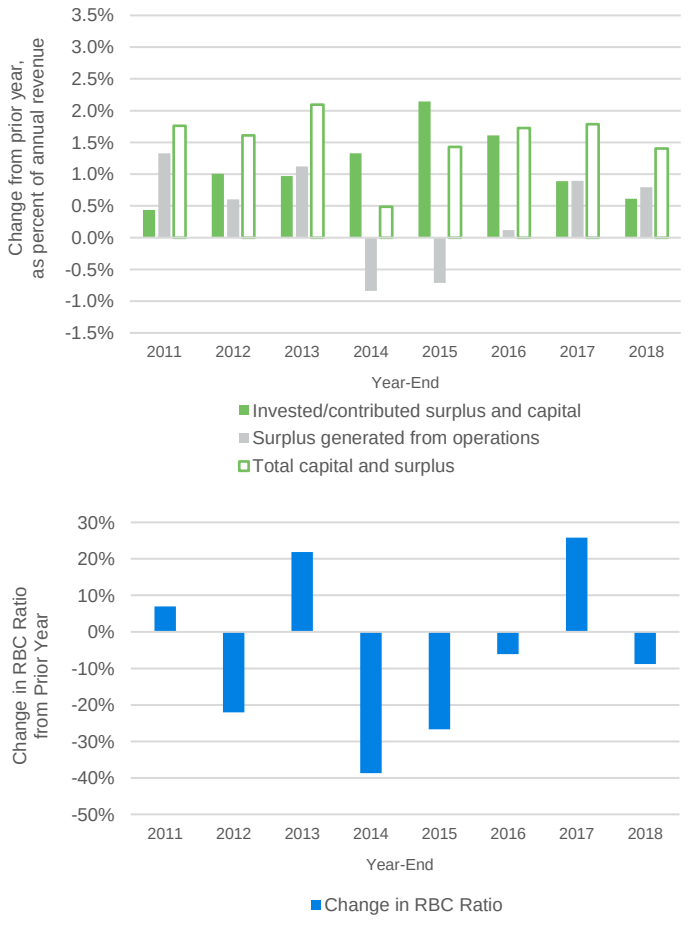
Sources of Surplus

As demonstrated in Figure 3, surplus levels can be restored over time through premium rate actions, but this process can take significant time. Insurers can be met with resistance in the competitive marketplace as well, because policyholders may switch to other insurers when premiums are increased substantially. Regulators may also restrict rate increases through their rate review and approval processes. In reality, when surplus has been reduced substantially, some insurers may resort to outside sources of surplus, such as surplus notes, equity infusions from a parent company, and capital markets. Figure 4 demonstrates these activities over time across a broad cross-section of the industry.[10]

For this cross-section of insurers, surplus and capital contributions from outside sources increased substantially during 2015 and 2016 at a time when there were large underwriting losses. The underwriting losses (driving the "surplus generated from operations" into negative territory) would have decreased total capital and surplus in 2014 and 2015 if it were not for the contributions from outside sources. Even in 2016, underwriting gains were essentially flat, and companies that could do so continued to bring in more capital and surplus from outside sources. As underwriting gains increased again starting in 2017, there was less need to add new capital from outside sources in order to maintain surplus targets. Companies that did not have access to outside capital and surplus would have had to ride through this period on the strength of accumulated surplus.

FIGURE 4: CHANGES IN CAPITAL AND SURPLUS BY PRIMARY SOURCE

(illustrative basket of health insurers)



[9] For simplicity, the illustration in Figure 2 ignored the impact of an increasing revenue base.

[10] The data in Figure 4 are based on an analysis of NAIC statutory annual statements filed by health insurers. The companies included in the analysis are those whose premium revenue source in calendar year (CY) 2018 was primarily from Medicare, Medicaid, and comprehensive major medical products.

This case study demonstrates how significant sources of outside capital and surplus can be for maintaining and restoring surplus levels over time. Among for-profit insurers, surplus is rarely accumulated solely from net profits on insurance products. This is not necessarily true for other companies, such as nonprofit plans, which includes many Blue Cross Blue Shield (BCBS) plans. There are companies for which the main source of surplus is retained earnings.

For more information on the sources of surplus at the level of statutory accounting, please refer to Appendix A.

Proposals to Limit/Regulate Surplus

While there is a generally accepted regulatory minimum RBC-ACL level, providing indicators of a minimum surplus level for insurers on a facts and circumstances basis, insurers often exceed it by significant multiples for good reasons already described above. On the one hand, there is not a generally accepted concept of what constitutes the right amount of surplus or whether a company holds too much surplus. On the other hand, it is possible to evaluate the relationship between surplus and the regulatory minimum on a case-by-case basis.

BCBS plans have been the focus of some states' policies to define "excessive" surplus. This special focus may be tied to the history of how BCBS plans were first incorporated. In some states, regulators have turned down requests for BCBS plans to switch to for-profit status and/or be sold to a for-profit company, citing the "public interest." In particular, when applying one state's conversion statute to a BCBS plan, an attorney general successfully asserted that the insurer's assets were public assets.[11] In another case, an insurance commissioner determined that nonprofit BCBS plans were unique entities subject to special laws and regulations, and that analyzing whether the surplus levels are too high (or "inefficient"), not just whether they are inadequate, is the responsibility of the insurance regulator.[12]

Some regulators, such as in Pennsylvania, have evaluated surplus levels on a case-by-case basis. As discussed in the following section, a case-by-case approach appears to be the only way to reasonably compare and contrast the surplus levels of different companies within a jurisdiction.

Comparing surplus levels among insurers

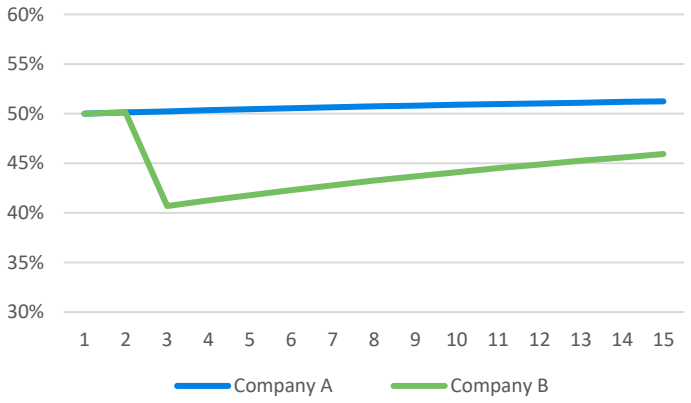
When each company reviews its surplus levels, it may come to different conclusions about what level is appropriate, depending not only on its assessment of insurance risk, but also other considerations. Some of the main considerations are discussed in the sections below.

ENROLLMENT GROWTH RATE AND PLANS FOR FUTURE PRODUCT AND SERVICE AREA EXPANSIONS

It may take many years for a new product to contribute net gains sufficient to build the same surplus that had been built over time by previous products. Therefore, existing surplus can be used to invest in new, innovative products, including the expenses of launching the product, new systems, and infrastructure, and to meet regulatory minimum surplus levels. To illustrate the surplus strain that can occur when a company expands into a new product, Figure 5 compares the surplus levels of two companies. Company A has 5% revenue growth per year. Company B grows at the same rate except for a 25% expansion in Year 3. Both companies retain 2.5% in after-tax margins.

FIGURE 5: COMPARISON OF RELATIVE SURPLUS POSITIONS

Surplus of Company A and Company B as a percentage of annual revenue, by year



[11] Montana Attorney General's order conditionally approving proposed conversion of Blue Cross & Blue Shield of Montana (BCBSMT) and alliance with Health Care Service Corporation (HCSC). See https://media.dojmt.gov/wp-content/uploads/2013/06/Attorney-General-Order-Conditionally-Approving-Proposed-Transaction.pdf (accessed June 24, 2020). After agreeing that BCBSMT assets were public assets and performing a separate appraisal, the HCSC bid was raised from $17.6 million to $40.2 million, and the net proceeds were to be transferred to the Montana Healthcare Foundation.

[12] Refer to the Discussion section of a determination by the insurance commissioner of the Commonwealth of Pennsylvania, available at https://www.insurance.pa.gov/Companies/IndustryActivity/Documents/BCBS_DETERMINATION.PDF (accessed June 24, 2020). Surplus levels were evaluated for nonprofit BCBS plans on a case-by-case basis, taking into consideration the specific risks and circumstances of each company, in addition to RBC concepts.

ACCESS TO CAPITAL

Not all insurers have the same access to new capital. For example, a for-profit insurer may have more ready access to new capital from its owners and new investors, whether privately owned or a public company. On the other hand, a nonprofit insurer will have to rely more on its current surplus levels to invest in new product and enrollment expansions or to absorb unexpected losses. Consequently, the insurer with ready access to new capital may be able to have lower target surplus levels, even paying dividends to owners if the funds are not needed to support investments in new business. However, access to capital and the liquidity available in capital markets will change over time and comes with market-determined expectations about the rate of return, so the relative advantage is difficult to quantify.

NATURE OF ASSETS

Surplus is a single dollar value at one point in time, lacking context about the nature of the underlying assets, but it almost never represents cash sitting idle in a bank account. If one company owns all of its office buildings, then a large part of its assets are illiquid and cannot be quickly turned into cash to pay for claims.

Many financial instruments, including lower-rated bonds as well as equities, are carried at market value and reflect unrealized gains. Other nonfinancial assets, such as the Patient Protection and Affordable Care Act (ACA) risk adjustment transfer payment, can take eight months to three years to settle after the close of a benefit year.

In practice, short-term liabilities are always covered by liquid assets. The nature of assets, including other less liquid asset classes, will impact how management sets the target surplus level.

OWNERSHIP AND AFFILIATE STRUCTURE

The ownership structure is paramount to setting the target surplus level. The type of affiliates, subsidiaries, and parent company of an insurance company can heavily influence the overall approach to surplus, primarily because surplus can, with regulatory approval, be moved around between related parties and related parties can mutually support each other from a risk management perspective.

A fully integrated delivery system may be comprised of a health insurance company that is affiliated (through a common parent company) with a hospital, a medical group, or other entities. Hospitals, in particular, require significant investments in buildings, systems, and other infrastructure, so the parent company may decide to shift surplus out of the insurance company to more capital-intensive affiliates after regulatory minimums are met. There may be affiliated insurance companies in the same state or in other states as well. The parent company will take all of these businesses into consideration when determining how to deploy capital and where surplus should be shifted from one entity to another. Similarly, an insurance organization, either for-profit or nonprofit, may include several affiliated companies providing different types of insurance coverage, taking a different market focus, or serving different aspects of customers' needs. Three examples are shown in Figure 6, describing three insurance companies that exist within very different ownership and affiliate structures.

FIGURE 6: EXAMPLES OF INSURER PROFILES

ABC Company	XYZ Company	QRS Company
Nonprofit insurer	Insurer is part of a fully integrated delivery system	Insurer has out-of-state parent company, publicly traded
No affiliated providers or insurers of significant size	Affiliated with a local hospital and medical group	Affiliated insurers in other states
Holds a significant surplus level; has little access to new capital	Holds a low surplus level, with extra surplus invested in affiliated providers	Holds only regulatory minimum surplus, with extra surplus held by out-of-state parent company

Here are some approaches that may be taken by each kind of company under a few scenarios. These examples do not cover all possibilities or considerations, but are meant to demonstrate how the surplus levels can differ due to the ownership and affiliate structures.

Hypothetical Illustration #1: Times are tough and losses high

- **ABC Company**: As a nonprofit insurer with no significant parent company, there are no immediate sources of capital. ABC has maintained high surplus levels at significant multiples to regulatory minimums in preparation for a rainy day like this. Surplus is gradually restored without rate shocks that dramatically reduce market share. The recovery may unfold like the example in Figure 3 above.
- **XYZ Company**: The company holds low surplus levels, which come under increased pressure as losses mount. In response, well capitalized affiliates provide a surplus note to help restore the surplus to a healthier level. The affiliated hospital and medical group temporarily accept lower reimbursement from XYZ so it can improve its margins and rebuild surplus without having to increase premiums significantly and lose market share.
- **QRS Company**: The company holds low surplus but there are ample sources of capital held by the out-of-state parent company, which also has access to capital markets. The parent can shift surplus to QRS to shore up the RBC ratio. At that point the parent has flexibility: QRS could raise premiums quickly, raise them more gradually to maintain market share, or even withdraw from the market. As a multistate insurer, the parent company can remain viable even if it must withdraw from specific state markets.

Hypothetical Illustration #2: An opportunity to expand into a new kind of insurance, but with strong competition

- **ABC Company**: A high surplus level allows the company to expand its business while maintaining a margin of safety over the increasing capital requirements (see Figure 5 above). Significant marketing, systems, and other expenses are required to invest in the new business and losses are expected until ABC establishes itself in the new business. ABC decides to deploy a portion of its surplus to make that investment.
- **XYZ Company**: The low surplus level held by the company would, under different circumstances, limit the ability to invest in a new line of business. However, because the expansion into new business is intended to also benefit the affiliated hospital and medical group, the providers agree to lower reimbursement and provide a surplus note to strengthen the balance sheet.
- **QRS Company**: The low surplus level held by the company would, under different circumstances, limit the ability to invest in a new line of business. The parent company provides the additional capital from its existing funds or even raises funds in capital markets to help QRS make the investment.

Hypothetical Illustration #3: Healthcare costs are relatively stable and profit margins are relatively high

- **ABC Company**: Profits are used to grow surplus for the inevitable rainy day or for another opportunity for investment.
- **XYZ Company**: A portion of profits are passed on to the parent company after minimum surplus levels are met. XYZ may be able to increase reimbursement to its affiliated hospital and medical group, thereby reducing reported margins on the insurance product while improving margins among its related parties.
- **QRS Company**: A portion of profits are passed on to the parent company after minimum surplus levels are met. These profits may be accumulated in order to be deployed in other markets, paid in dividends to shareholders, or reserved for future contingencies.

ASSESSMENT OF RISK

Insurers will compare their surplus levels to regulatory minimums in their states, seeking a relatively high multiple to provide more safety for the business and ultimately for policyholders. The regulatory minimum will often vary based on the size and nature of the business. For example, a health insurer that has significant risk-sharing arrangements with its healthcare providers may have a lower regulatory minimum surplus level. However, because providers are not required to hold surplus, this insurer may deem it appropriate to hold additional surplus to cover potential provider insolvencies and protect policyholders. As a result, the same amount of surplus may translate to very different multiples of regulatory minimum surplus from one company to another. Regarding the size of the insurer, the regulatory minimum scales with the size of the business and credits some diversification of risks that often come with larger blocks of business. Health insurer financial data has shown that smaller insurers also tend to hold surplus at higher multiples of the regulatory minimum than larger insurers.

REPUTATION FOR SECURITY

If an insurer's multiple drops to a low level relative to its peers, it can cause concern among current or potential policyholders, leading to greater lapses and fewer new enrollments, making it difficult to maintain a healthy market share. For many insurers, ratings published by rating agencies (e.g., S&P) can be a key trigger for capital needs. A weak rating, caused by low surplus levels, can limit opportunities to sell coverage to larger employers and a company's access to capital and loans at competitive rates. Therefore, the need to maintain positive ratings drives the requirement to be adequately capitalized.

BCBS plans are required to have an RBC ratio of at least 375% to remain in the association, and this is significantly above the 200% company action level monitored by state regulators.

Because of these and other considerations, each health insurer will arrive at a different view on its surplus level. Consequently, it is difficult to compare surplus levels between two companies without a detailed review of their circumstances, provider relationships, product mix, future business plans, assets, and ownership structure. RBC provides a more nuanced way to compare surplus, but its focus is primarily on minimum statutory surplus levels. For example, it does not reflect companies' differing access to capital. A company holding surplus at a 200% RBC ratio, with access to ample support from a parent company or to capital markets, is more secure than a company holding the same level of surplus but without the access to outside sources of capital. The RBC ratio alone is not sufficient to differentiate these situations, nor is it intended to be used in that way.

Can surplus be attributed to a source?

When seeking to define "excessive" surplus, the most straightforward motivation may be the desire on the part of regulators to ensure member premiums are fair. Regulators look closely at premiums during the annual rate filing and review cycle, where the unit economics of each policy are disclosed and can be evaluated. The case being made in this paper is that the company surplus level may be a misleading indicator of the appropriateness of current premiums. Instead, a more nuanced, company-specific look at surplus levels is required to understand how surplus has changed over time.

One challenge is that the premium-paying members who may have contributed most to surplus building over the years may not be the same members who will benefit from reduced premiums in the future. They may not even be in the same market. Indeed, a company could have built its surplus over many years as a Medicare Advantage organization (MAO), where the primary revenue source was the Centers for Medicare and Medicaid Services (CMS), and then switched to the individual marketplace in its state, where the premiums are paid for by state residents as well as federal premium subsidies.

Another key challenge is that the change in surplus over time may not be directly caused by gains from insurance operations. The change could be caused entirely or in part by infusions of capital from outside the company. See the Sources of Surplus section and Appendix A.

Figure 7 is an illustration of how surplus may change over time for the three example companies, ABC, XYZ, and QRS. As we have seen, surplus can change because of net income from insurance operations, but it can also change due to contributions from the parent company and for other reasons.

FIGURE 7: STARTING TO ENDING SURPLUS: THREE ILLUSTRATIVE COMPANIES

Contribution Source	Starting Surplus	Operating Gains/Losses & Capital Infusions			Ending Surplus
		Year 1	Year 2	Year 3	
ABC Company	$100				$110
Owner/Parent		NA	NA	NA	
Medicare Policies		$10	$10	$10	
Individual Policies		$10	($50)	$20	
		$20	($40)	$30	
XYZ Company	$100				$90
Owner/Parent		$0	$0	$10	
Medicare Policies		$10	($10)	$10	
Individual Policies		$10	($50)	$10	
		$20	($60)	$30	
QRS Company	$100				$100
Owner/Parent		$0	($25)	($25)	
Medicare Policies		$5	$10	$10	
Individual Policies		$5	$10	$10	
		$10	($5)	($5)	

In this example, **ABC Company** ends the three-year period with a $10 increase in surplus, which comes from gains in Years 1 and 3, offset by losses in Year 2. Cumulatively, the Medicare business contributed $30 and the individual business consumed -$20. On the one hand, it was the Medicare business that consistently contributed to surplus each year. However, it was individual business in Year 3 that contributed the greatest annual amount.

XYZ Company ends the three-year period with a -$10 decrease in surplus, owing primarily to steeper losses in Year 2. The parent company contributed $10 in Year 3, which helped to offset the drop in surplus.

QRS Company ended the three-year period with the same level of surplus. Whereas ABC and XYZ incurred significant losses from operations, QRS had steady income from its insurance business. As surplus grew, additional surplus was transferred out of QRS to the parent company.

The surplus levels for the three companies at the end of Year 3 convey very little context of how they developed over time. A deeper analysis is required to understand what drove the change in surplus over time, from within or outside the company, from which line of business, and from which benefit years.

Gain sharing and gain limiting mechanisms already in place

There are programs in place that seek to share financial results between the payers and plan sponsors and the insurance company, such as the Medicare Part D risk corridor and some state Medicaid program risk corridors. In these cases, the payer (e.g., CMS or the state Medicaid program) can absorb losses in some years and participate in gains during other years.

On the other hand, minimum loss ratio (MLR) requirements, such as Medicare Part C program requirements, the MLR regulations for commercial health insurance, and minimum MLR in some state Medicaid programs, result in the payer, and in some cases policyholders, receiving a rebate or remittance when financial results are very favorable. However, all downside risk is borne by the insurance company.

Toward the goal of limiting excessive premiums, a major advantage of risk corridor and minimum MLR arrangements is that the health plan may have to return excess gains to policyholders. Moreover, the financial performance being shared can be directly attributed to a specific benefit period, insurance product, and risk pool. For example, there can be MLR remittances to CMS under a Medicare Advantage contract occurring at the same time as MLR rebates are paid to individual marketplace members, while a risk corridor is settled with the state Medicaid program.

A health insurer's current surplus level is not an indicator of whether current or proposed premium rates will incur a loss, break even, or lead to gains. Instead, minimum MLR concepts have been incorporated into *prospective* rate setting, such as for actuarial soundness reviews of Medicaid rates[13] or during ACA marketplace rate reviews. In some states, the insurance commissioners enforce a prospective minimum MLR. Here the focus is on expected margins rather than current surplus.

Bidding requirements under CMS's Medicare Advantage program do not establish a maximum surplus for companies that submit bids. Instead, CMS requires that bid margins either be comparable to margins in the company's other, non-Medicare lines of business, if applicable, or developed by "taking into account the degree of risk and capital and surplus requirements" of the company's Medicare Advantage business[14] (the so-called risk-capital-surplus method). In other words, the focus is on setting margins that are consistent with the capital and surplus standards that a company's management is subject to, both from company policy as well as from regulatory minimums that it is subject to in its home state.

Short-term and long-term impacts of restricting surplus

Restricting surplus could potentially take the form of mandatory reductions in future premiums or a direct transfer of surplus to the state government to fund general revenues or various public programs. There are several short-term and long-term impacts that could arise under these policies.

If surplus restriction takes the form of mandatory premium reductions for a year or two, then it can distort the relative market positions of competing insurers in a given market. The company that has to reduce premiums due to "excessive" surplus, may end up gathering more market share, which could cause some competitors to lose their enrollment bases and exit the market. Artificially suppressing rates can create unnecessary churn, or policy lapses among competitor plans, and for no good reason other than a temporary discount in premium. The shift in enrollees, when coupled with potentially deficient rates, may cause the insurer to take sizable losses. If, on the other hand, the insurer's goal is to have inadequate rates to gain market share, something that an insurance regulator might not otherwise approve, then this ends up rewarding the insurer that was deemed to have excessive surplus in the first place.

One form that enrollment disruption could take is through the foreknowledge of an issuer having to artificially lower rates. Such information could incentivize policyholders to make enrollment decisions based more on anticipated discounts and less on other considerations, such as provider network access and quality of coverage. These changes in behavior may run contrary to other policy objectives.

In the case of the individual marketplace, if the insurer reducing premiums also happens to offer the second-lowest-cost silver plan, which indexes all federal premium subsidies, then it can artificially lower subsidies available to consumers for all plans and carriers in the market. After the period of temporary premium reductions is over, there may be an exceptionally large premium

[13] Jill Brostowitz, Scott Jones, & Ian McCulla (June 2016). Medical Loss Ratio (MLR) in the "Mega Reg." Milliman Research Report. Retrieved August 14, 2020, from https://us.milliman.com/en/insight/medical-loss-ratio-mlr-in-the-mega-reg.

[14] See the CMS Instructions for Completing the Medicare Advantage Bid Pricing Tools for Contract Year 2021 (April 10, 2020) for more information about the risk-capital-surplus method. CMS requires that bid margins be comparable to non-Medicare lines of business for which the company has discretion in rate setting if that business represents at least 10% of its overall revenue.

increase when premiums are normalized, because it will combine general cost of care trends with a reversal of the initial discount. Large premium increases can disrupt the market participants, running contrary to other policy objectives the state may have.

If surplus is to be taxed directly, then insurers may take significant steps to avoid the situation, which could unfavorably affect stakeholders. Various forms of financial engineering could be introduced to keep reported surplus within a particular range, but financial engineering can lead to hidden risks with unintended consequences.

For example, a parent company could be established in a more accommodative jurisdiction, which will in turn take surplus off the books of the local insurer. Many insurers today do not have out-of-state parent companies, and creating them for the sole purpose of circumventing a surplus tax may not be the remedy that regulators truly intend. In fact, shifting surplus away from the regulated entity in the state can run contrary to the insurance commissioner's other goals of having strong balance sheets among domiciled insurers. It is important to point out that state insurance department approval is already required in most cases where a transfer of ownership or transfer of surplus is being made. Therefore, while there may be a change of incentive caused by taxing surplus, checks and balances limit such transfers, at least in the short term.

Some insurers may also decide to exit the market altogether, while other insurers don't have this option. National carriers have done this when conditions in a particular state have become unfavorable. National carriers may have a greater capability to wind down or reduce their presence in a particular state and product line when such conditions arise, compared to local insurers. Insurers that have all their business in one state will have less flexibility.

Surplus tax avoidance could also take the form of malinvestment. As we saw in Figure 5 above, the company that expanded into a new product line saw its surplus shrink significantly as a percentage of revenue. Suppose that "excessive" surplus was defined as a multiple of the regulatory minimum. Then a company that is nearing that multiple may be more willing to take on new business or enter new markets, where it has little chance of a sustainable business model. It may have been a more efficient use of available surplus to wait until a more meaningful investment in healthcare delivery could be made or to support emerging marketplaces at the right time and place. By avoiding the incentive to spend surplus at any cost to avoid a tax, consumers and insurers alike may benefit from wiser investments.

Longer-term, artificially reduced surplus levels can increase vulnerability to rare, adverse events. For example, pandemics and cyberattacks are often beyond the range of what are considered typical scenarios. Regulations can change, both at the federal and state levels, after rates are filed, leading to losses that cannot be priced into premiums for another year. Regulatory minimum surplus levels are not intended to reflect every extreme event, but are instead designed to handle significantly adverse developments during typical product planning, pricing, and filing time horizons.

In the case of the COVID-19 pandemic, it is still too early to assess the full range of impacts, including a more significant economic downturn that could unfold over a number of years. In the near term, older and at-risk populations incur higher costs directly linked to the pandemic, and this can put strain on insurers that primarily cover those populations. For other, less at-risk populations, which nevertheless are subject to stay-at-home orders and must practice avoidance and social distancing, there have been significant reductions and deferrals in care, especially elective and nonemergency services. These reductions may cause short-term drops in expenses, but could lead to worse health outcomes over the long term that may increase expenses.

Health insurers will advance lump sum payments to providers to help them with cash flows. Such advances draw on emerging health insurer surplus, and they can be done prudently when that surplus is sufficient. In an economic downturn, if a capitated provider goes out of business, the health insurer is still obligated to pay for covered services performed by other providers, even if the capitated provider was already paid. Although this collectability risk is reflected in the RBC formula,[15] the formula is not intended to adjust to extreme economic conditions, such as a precipitous economic decline and provider revenue disruption. Company management can and should revise its assessment of what level of surplus is needed, rather than relying solely on the RBC formula.

A prolonged economic downturn could cause longer-term investment losses, which directly affects surplus. Enrollment loss can also occur, such as for individual and group insurance, where many consumers may migrate to Medicaid or become uninsured, and this can cause a depletion of surplus as overhead expenses can no longer be covered by the revenue base. Additionally, policyholders undergoing economic strife may have less ability to pay their premiums and cost sharing, and premiums may not be paid in a timely manner. Each change could put strain on surplus levels before the insurer has an opportunity to either change premium levels or restructure its operating expenses.

[15] The RBC formula includes H3: Credit risk, where allowance is made for receivables of many different types based on a risk of reduced payment. Also, the numerator of the RBC ratio, total adjusted capital, excludes non-admitted assets, and therefore implicitly excludes some receivables that have increased collectability risk along with assets that may not be liquid enough to support short-term liabilities.

If, over time, there is a disincentive to holding higher surplus levels, then it can dampen insurers' ability to invest in technology and infrastructure. Major investments in electronic medical records technology, HIPAA compliance, and the ICD-10 conversion are recent examples. Additionally, telehealth and other social distancing infrastructure are being discussed. These kinds of transformational changes cannot be funded by surplus if the primary goal of surplus is only to meet regulatory minimums. By having sufficient surplus, an insurer can better manage the transition and pay for investments, no matter what the focus is of healthcare innovation at a given point in time.

Conclusion

Most insurers have target surplus levels based on management assessment of risk. For good reason, the target is usually far greater than minimum requirements. The target must be sufficient so the company can weather a storm, such as a sequence of negative financial outcomes, while avoiding adverse events, and remain positioned to invest in infrastructure as needed and growth opportunities as they arise. There is no generally accepted definition of "excessive" surplus, though surplus levels can be evaluated and compared on a case-by-case basis.

Surplus is primarily a risk protection reserve, and the risk of insolvency diminishes as surplus increases. Higher surplus levels also provide opportunities to use the funds for alternative investments in healthcare and to expand coverage options in new markets. When evaluating the trade-off between risk protection and investment opportunities, it is necessary to consider the issues outlined in this paper and evaluate the specific circumstances of the company.

Surplus levels may be a misleading indicator of the appropriateness of current premiums. Instead, a more nuanced, company-specific look at surplus levels is required to understand how surplus has changed over time. Setting aside the challenge of defining when surplus has become "excessive," an attempt to restrict this surplus can lead to unexpected or unintended results, including distorted premium levels, financial engineering and riskier financing, the movement of capital to other states and companies, reduced capacity to manage adverse developments, reduced investment, and fewer insurance market participants.

Existing mechanisms such as risk corridors, often used by Medicare and Medicaid, and minimum MLR standards, used in both government and private health plans, have a long track record of sharing the gains of a particular insurance product, without any reference to the surplus of the company. These programs work retrospectively, after the financial results for an insurance product have been reported. As for prospective measures, the rate review process continues to provide insurance regulators opportunities to identify and avoid excessive margins before products are quoted to consumers.

Caveats and limitations

The information in this paper is intended to assist actuaries, health insurance company management, and regulators in their review of health insurer surplus levels. It may not be appropriate for other purposes and should not be relied on as legal interpretation.

This paper is not intended to advocate for any particular policy. This paper reflects my best understanding of current regulations and requirements. Consequently, if these rules and regulations change, then the considerations presented in this paper may no longer be valid. Moreover, this paper is not a comprehensive discussion of all important considerations on this topic.

Material presented in this report is my opinion and is not representative of the views of Milliman. As such, Milliman is not advocating for, or endorsing, any specific views in this report related to taxing or otherwise restricting surplus levels.

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Appendix A: Principal components of surplus

In the illustration shown in Figure 4 above, changes in surplus each year were allocated between amounts generated internally from business operations, such as gains and losses on health insurance policies, and amounts contributed to or invested in the company from outside parties and owners. In this appendix, we discuss some of the components of surplus in more detail.[16]

		Category used in Figure 4		
Component	**Health Annual Statement Location**	**Generated from Operations**	**Invested & Contributed**	**2018 Year-end %**
Capital stock, less treasury stock	Page 3: Lines 26+L27-L32		X	1%
Gross paid-in and contributed surplus	Page 3: Line 28		X	55%
Surplus notes	Page 3: Line 29		X	2%
Surplus funds	Page 3: Line 25+30	X		2%
Unassigned funds	Page 3: Line 31	X		40%
Total capital and surplus	Page 3: Lines 25 to 31 minus Line 32			100%

Note: The distribution of 2018 year-end capital and surplus by component is an average across all insurers in the sample. At the company level, however, this distribution varies widely, especially when comparing companies that have access to outside capital to those that do not.

- **Capital stock:** The par value of shares of common and preferred capital stock, corresponding to shares issued to owners.
- **Treasury stock:** Capital stock that has been issued and subsequently reacquired by the company (e.g., stock buybacks), carried at acquisition cost. Treasury stock is subtracted from capital stock.
- **Gross paid-in and contributed surplus:** The amount of capital received in excess of the par value of the stock issued. This category includes equity infusions by owners, either on the stock market or as a private transaction, and it can take the form of direct cash payments or payments in kind, such as the forgiveness of a payable owed to a parent company. Figure 4 above showed a large increase in cash infusions from owners, driven by this category. The most significant examples were: (a) a provider entity, which was an owner of the insurance company, providing additional capital to improve the balance sheet after large underwriting losses; and (b) a publicly owned holding company transferring some of its capital to a wholly owned insurance company subsidiary in a particular state where large losses had occurred.
- **Surplus notes:** A form of debt that can be treated as surplus instead of reported as debt. Surplus notes are strictly controlled by the state's insurance commissioner and are usually for the purpose of shoring up inadequate surplus. They are characterized by being debt, which is subordinated to all policyholders, claimants, beneficiary claims, and classes of creditors other than surplus note holders. Also, interest and principal payments require approval of the commissioner.

  An example of the use of surplus notes is as follows: an insurance company is expanding into a new line of business, which will help direct more patients to its parent company, a regional hospital system. Because a dramatic increase in membership and claims will strain the insurer's balance sheet for a few years, the hospital agrees to lend money to its subsidiary in the form of a surplus note. The parent is willing to forgo interest payments and accept subordination of the loan because it stands to gain significant patient volume over time if the new line of business is successful. In return, the insurance company gains the ability to grow quickly without a precipitous decline in the RBC ratio.
- **Surplus funds:** These are assignments of surplus to specific contingencies, and the most common over the last several years has been the Health Insurer Fee.[17]

[16] The National Association of Insurance Commissioners provides detailed definitions in Statutory Issue Papers: No. 72 (Statutory Surplus), available at https://www.naic.org/sap_app_updates/documents/072_r.pdf, and No. 41 (Surplus Notes), available at https://www.naic.org/sap_app_updates/documents/041_K.pdf (accessed May 1, 2020).

[17] Under statutory accounting, a portion of the year-end surplus of a health insurer will become a liability on the next day when the "Health Insurer Fee" (Section 9010 of the ACA) comes due. Therefore, the anticipated amount of this fee is recorded as a special surplus fund (e.g., health annual statement, page 3, line 25). This amount appeared in the annual statement of most health insurers at 2019 year-end because the Health Insurer Fee is being assessed in 2020. The Further Consolidated Appropriations Act, 2020, repealed the fee beginning with the 2021 fee year. Therefore, increases in surplus during 2020 that would have accrued to a surplus fund at 2020 year-end for the 2021 fee will instead accrue to the unassigned funds component of surplus.

- **Unassigned funds:** This category accumulates several other items, most notably the net income from business operations, unrealized capital gains and losses on the company's investment portfolio, and deductions for declared stockholder dividends. These amounts accumulate over the company's lifetime. Unassigned funds can be a negative amount if the cumulative net income from insurance products and/or investment performance have been negative, especially after any reductions for past stockholder dividends. It can also be lower if most net income has been passed on to stockholders in the form of dividends instead of retained on the balance sheet.

  It is not uncommon to encounter examples where the unassigned funds is near zero or negative and where the majority of surplus is comprised of paid-in contributions from a parent company, such as a hospital system or an out-of-state corporate parent company, which, for business reasons, chooses to operate the insurance company at very low margins.

When expressed as a single dollar amount, the surplus level does not convey the full story about profitability over time. A high surplus level can arise from capital infusions by parent companies or a low dividend rate over time, not necessarily due to high net income from insurance policies. Conversely, a low surplus level does not necessarily indicate low profit margins on insurance policies over time; surplus could be low because accumulated gains have been paid to owners. For this reason, greater context and a deeper review is necessary in order to get a full understanding of what led to a surplus level.