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THE CHALLENGE: ADDRESSING RESPONSIBLY THE FINANCIAL DEMANDS INCURRED AS A RESULT OF THE COVID 19 PANDEMIC July 2021

On June 1, 2020, the Committee for a Responsible Federal Budget (CRFB) issued a letter in support of "...the development of a framework to help deal with the national debt once we have moved past the immediate health and economic crises caused by the COVID-19 pandemic." CRFB CEO, Maya MacGuineas, prefaced the organization's support by noting, "To control a dangerous virus and prevent significant economic damage, Congress made the right call in rapidly approving trillions of dollars in fiscal aid to fight the pandemic and recession. However, we entered this crisis with an already unstable debt situation, and given that we will borrow more to help deal with this emergency, it will make getting our debt under control even more important in the coming years." [Emphasis added.]

THE OPPORTUNITY: IMPROVE THE DESIGN, APPLICATION, AND AMORTIZATION OF GOVERNMENTAL COVID 19 EXPENDITURES

The Concerned Actuaries of the U.S. (CAUS) applaud both CRFB's action and Ms. MacGuineas' comments. The CAG has invested heavily in the development of a tool designed to improve holistic analysis of the American healthcare system. That tool, the Comparative Actuarial Assessment Model (CA2M), regularly indicates that one of the major systemic challenges in the healthcare system lies in the system's inability or willingness to measure actual outcomes against original goals and assumptions (see attachment). We believe that greater use of an actuarial principle proven effective in avoiding and managing debt responsibly would have a profoundly positive impact on getting governmental debt "under control."

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RELEVANT ACTUARIAL PRINCIPLE: MANAGEMENT SYSTEMS AND IMPLEMENTATION MUST BE EVALUATED AND ADJUSTED TO ASSURE ALIGNMENT WITH GOALS, ASSUMPTIONS, AND CAPACITY TO MEET EXPECTATIONS.

Compliance with accepted and proven actuarial principles is universally accepted as an essential component in the responsible management of private sector insurance companies. In today's insurance company, for example, financial value assessments include an analysis of future earning power using models of the company's current business and expected new business. Those models are developed and tested to assure future reliability. Assumptions related to mortality, persistency, expenses, investment earnings, etc. are measured against and aligned with past experience adjusted by any changes required in future management.

Actuarial discipline such as this underpins most successful long-term business management. CAUS believes that wider and more consistent governmental adoption of the actuarial principle that drives such discipline would significantly improve the management, alignment, and outcomes of the recent multi-Trillion program designed to address the major financial and economic issues resulting from the COVID 19 pandemic.

In a managed financial (actuarial) system, for example, specific expectations related to the $2 trillion expenditure would be clearly identified along with timelines and projected outcomes. Regular examinations of performance and alignment amongst goals, assumptions, and outcomes would then be undertaken and indicated adjustments in management systems and other areas could then be highlighted for discussion and appropriate action.

Mr. Neil Barofsky, the former inspector general for the Troubled Asset Relief Program (TARP) raised the issue of oversight of the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), writing in April of this year, "Who will conduct oversight of this staggering amount of taxpayer money? We need to ensure that this

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government aid is not being stolen, wasted, or given to political cronies. And we need to make sure that the public is aware of how and to whom those trillions are distributed. In short, we need watchdogs. As it prepares for more relief in the wake of vast economic ruin caused by Covid-19, Congress has leverage – and must use it."

Congress included oversight mechanisms in the CARES Act establishing both a Special Inspector General for Pandemic Recovery and a Pandemic Response Accountability Committee comprised of existing Inspector Generals. The question now is how those designated offices will execute their responsibilities. CAUS believes that they cannot determine whether or not the trillions added to governmental (i.e., taxpayer) debt are achieving the sustainable, equitable, and transparent goals of the program without actuarial discipline.

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Socially motivated risk transfer systems can and should be expected to meet similar standards. More specifically, as societal risk transfer systems strive to adequately protect populations vulnerable to a specified risk from unacceptable harm arising from that risk, they can and should do so:

- transparently;
- fairly and equitably such that the system avoids placing an unfair or unaffordable burden on any group; and
- responsibly, which will require the risk transfer systems be designed and managed to be sound and sustainable for the long run (5).

All risk transfer systems require trade-offs. Societal risk transfer systems involve large, complex populations and dealing with the magnitude and complexity requires large, complex trade-offs. Consider, for example, the need to grapple with questions such as:

- Is there such a thing as too much risk being transferred?
- Can there be too much coverage? (e.g., suppose all out-of-pocket medical expenses are covered, even for families whose assets and income would allow a certain proportion of those expenses to be afforded without undue hardship. In such a case, would the cost of the transfer be higher than need be to meet the basic social purpose?)
- Are the incentives for prudent use of resources ineffective for those individuals whose benefit is disproportionately high compared to their need (given wealth and income)? If so, does that result in higher, unnecessary, ineffective consumption and even higher costs?
- Does such “over insurance” significantly increase the likelihood that the system will lead to a diminution in aggregate economic value, by requiring higher contributions to sustain it and delivering less efficient benefits?

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Ron Colby FSA - Mark Litow, FSA
INFO@CONCERNEDACTUARIES.ORG

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How well the trade-offs measure up to the goals referenced above depends ultimately on whether or not they have been designed in compliance with proven principles, guidelines and managerial disciplines and to that end, prudently designed government-directed risk transfer systems would:

1. Clearly define the risk that will be the subject of transfer, consistent with society's interest and priorities. For example, in the United States, an individual is protected against losing the money they have put into a qualified bank account (FDIC insured to $250,000). However, there is typically no corresponding protection against losing the money the individual voluntarily invested in speculative securities.
2. Identify the population of individuals who should be the subject of the risk transfer (i.e., those who cannot afford the adverse financial consequences of the specified adverse events if they occur and who are not able to accomplish an appropriate transfer of that risk on their own).
3. Specify the level of benefit needed to protect those individuals from the specified risk.
4. Specify whether subsidies (6) will be needed in order for the transfer to be affordable to the target population.
5. Avoid unnecessary benefits or benefits beyond the level of the targeted social need.
6. Carefully consider the design of the transfer system in light of all the fundamental principles subsequently listed later in this paper.
7. Be regularly monitored to ascertain whether the intended results are being achieved and to assure adverse unintended consequences have been avoided.
8. Modify provisions consistent with a changing environment whether due to inflation, life expectancy, health status, changes in treatment patterns or some other reason.

WWW.CONCERNEDACTUARIES.ORG
Ron Colby FSA - Mark Litow, FSA
INFO@CONCERNEDACTUARIES.ORG

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Ron Colby FSA - Mark Litow, FSA

INFO@CONCERNEDACTUARIES.ORG

Adjustments to any system should be made as required to keep it functioning in a sound, sustainable fashion. This step requires periodic analyses performed holistically, considering all significant implications to all affected constituencies.

PRINCIPLES TO GUIDE THE DESIGN AND MANAGEMENT OF RISK TRANSFER SYSTEMS

The twenty principles cited below emanate from actuarial science, economics, accounting, medicine and the legal professions. Some of these principles address minimization of negative actions, some optimization of positive actions, and still others reflect balancing of competing interests. In all cases, achieving and subsequently maintaining intended outcomes requires a careful design and monitoring relative to all of these items.

Actuarial Principles

- Moral Hazard: Too much insurance or risk taking relative to need increases disproportionate risk transfer, or reduces net value. This item is a negative action, which requires avoidance.
- Adverse Selection: Allowing one party an inappropriate advantage per a contract or agreement creates a lopsided scenario that leads to disproportionate risk transfer, which reduces value. This item is a negative action, which requires avoidance.
- Risk Classification: This principle requires appropriate categorization of risk based on achieving reasonably homogeneous sub populations. This process is a positive action, and the better the classification, the greater the net value created. (See Actuarial Standard of Practice #12 for much greater detail).
- On-going refinement of Risk Classes: This item requires recognition of changes in the environment, such as increasing the age of eligibility with advancing life expectancy under Social Security. It is a positive step that requires maintaining proportionate risk transfer (assuming that is already true), or moving toward that status if not true.

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- Actuarial Soundness: This item requires a holistic balancing of all of the elements of a system. The optimal scenario is one where all issues that would increase disproportionate or inadequate risk transfer are minimized, and ones that promote proportionate risk transfer are enhanced.

Economic Principles

- Value: This principle underpins the core purpose of a risk transfer system, or changing net value in a positive manner. Success of a system is ultimately dependent on its achievement, which is dependent on reasonably following all of the other principles.
- Supply and Demand: Any risk transfer system requires enough flexibility to encourage supply and demand simultaneously. That requires enough incentives and controls to encourage proportionate coverage. If supply and demand are not in balance, market distortions that will stress a risk transfer system are inevitable.
- Monetary: This principle requires a currency that allows a stable trade or balanced system to support risk transfers.
- Cash Flows: This principle requires a banking and amortization system (in balance) that can support cash flows necessary to support risk transfer systems.

Accounting Principles

- Revenue Recognition: This item recognizes how revenues occur over time consistent with transactions that occur under the risk transfer system. (Positive Action)
- Expenditure Recognition: This item recognizes how expenditures occur over time consistent with transactions that occur under the risk transfer system. (Negative Action)
- Matching of Revenue and Expenditures: This principle is a balancing item that sets out how revenues and expenditures occur within the same risk transfer system over time.

WWW.CONCERNEDACTUARIES.ORG
Ron Colby FSA - Mark Litow, FSA
INFO@CONCERNEDACTUARIES.ORG

WWW.CONCERNEDACTUARIES.ORG
Ron Colby FSA - Mark Litow, FSA
INFO@CONCERNEDACTUARIES.ORG

- Cost Basis: This principle relates to the reporting of profits/losses on capital gains or other items over time. (Balancing item)
- Objectivity: This principle is a balancing item that relates to accounting for the risk transfer system over time as adjustments occur to asset/liability valuations, including the need for more or less revenues or expenditures.

Medical Principles

- Autonomy: This principle requires that the patient have the information and capability necessary to makes choices regarding their treatments (Positive Action).
- Justice: This principle is a balancing item wherein all patients have the ability to access proven treatments, but carry the burden for experimental treatments.
- Beneficence: This item requires that the procedures/treatments provided are for the purpose of helping the patient. It also requires continual training of medical personnel, with the purpose being a net benefit. (positive action)
- Non-maleficence: This principle is a balancing item that requires a procedure/treatment not harm the patient or others in society (except possibly in a "right to try" situation.)

Legal Principles

- Accountability: This principle is a balancing item that requires that laws be enforced and applied uniformly.
- Fairness: This principle is a balancing item recognizing that laws be just, reflect separation of powers, and protect property, contractual and personal rights.

Conclusion

Risk transfer systems are an important component of a functioning society. Properly designed, they can create opportunities that lead to a better life for many. But if improperly designed or managed, they can perform poorly, cost more than necessary and ultimately become

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a drag on societal resources and even standard of living. Even the best-designed systems will need to adapt and change over time as the environment in which these systems operate. Therefore, a well-functioning management system, with periodic reevaluation, is equally critical to the continued success of such systems.

FOOTNOTES

1. For instance, if one enters into a loan at 5% interest, the future value created via that loan whether for a business, education, or buying a house, must exceed the extra cost paid for that loan. Obviously, there can be circumstances under which such a net value increase does occur and other circumstances under which it does not.

2. Value (Merriam-Webster): the monetary worth of something. A risk transfer system may increase total societal economic wealth or output (be of net positive value) or diminish total societal economic wealth or output (be of negative value). A risk transfer system, particularly one that involves subsidies, will invariably be of economic benefit to certain individuals or entities and impose an economic cost on others. To determine the total net effect across all of society, analysis should go beyond the simple arithmetic of a dollar transferred from one individual becoming a dollar of benefit to a different individual. Indirect effects, including incentives, disincentives and gains or losses in productivity should be taken into account. It is important to understand whether the transfer system is having a net positive or negative impact on value when all the various pluses and minuses are summed across all affected individuals.

3. Homeowner insurance, for example, might appeal to a homeowner not able to afford the cost of fully rebuilding their house in the event of total or significant damage from a fire or storm. Buying a policy from an insurance company that will cover the cost of rebuilding the home in the event of such a loss enables the homeowner to transfer the risk of the unaffordable catastrophic loss to the insurance company in exchange for a more affordable, regular premium.

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Ron Colby FSA - Mark Litow, FSA
INFO@CONCERNEDACTUARIES.ORG

4. Social insurance is a public insurance program that protects against certain economic risks such as the loss of income due to sickness, old age or unemployment. Participation is compulsory. The government is the entity to which the risk is transferred.

5. Sound (Merriam-Webster): solid, firm, stable. Sustainable (Merriam-Webster): capable of being maintained at length without interruption or weakening; lasting. If a risk transfer system is not designed in a sound and sustainable manner, the cost of maintaining such a system may become unaffordable in the long run, or crowd out possible funding for other important societal priorities. One element to consider in the design of a risk transfer system is whether it will lead to a long-term increase in or diminution of overall societal economic value. A system that diminishes aggregate economic value is unlikely to be sustainable in the long run, or at least will be less sustainable than a better-designed system would be.

6. "Subsidy" describes a payment made by the government to support an individual or entity. In the private-market homeowners insurance illustrated in this paper, the individual is likely paying from their own pocket the full cost of the premium charged by the insurance company – no subsidy is involved. In the case of Social Security, the pensions of many low-wage workers and their beneficiaries are subsidized – the value of the pension received exceeds the amount of taxes paid into the system by and on behalf of those individuals. To make up for this, taxes paid by and on behalf of higher-wage workers exceed the value of the pensions they will receive.

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Ron Colby FSA - Mark Litow, FSA
INFO@CONCERNEDACTUARIES.ORG