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Why Sound Risk Transfer Systems are Essential to America's Efforts to Meet its Social Objectives

Well-designed risk transfer systems make it possible for countries and/or jurisdictions to improve their standard of living by scaling up and balancing a combination of productivity and/or increases in intangible assets. When done correctly, the scaling and balancing creates an aggregate net increase in value (i.e., that more than offsets the costs associated with the risk) (1). Conceptually, the standard of living for society improves when value increases on a net basis for the population in aggregate (2).

This paper examines the dynamics of risk transfer systems important to assuring the sustainability of such systems. To that end, the paper outlines high-level guidelines for prudent design and introduces twenty principles for optimizing results under these systems. While the paper looks at both private voluntary risk transfer systems and government-run transfer systems, the recommendations are most relevant to the latter.

THE CHALLENGE: GOVERNMENT RISK TRANSFER SYSTEMS OFTEN DO NOT ACHIEVE THE SCALING AND BALANCING REQUIRED TO PRODUCE AGGREGATE NET INCREASES IN VALUE.

Merriam-Webster defines "risk" as, "…the possibility of loss or injury; peril." Sickness; accidents; property damage; theft; and career issues including education and retirement are all examples of possible "peril" associated with the potential for economic loss, that is a "risk" a person or entity may wish to transfer, in whole or in part, to a third party.

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Many risk transfers in society occur in private markets such as homeowners insurance (3), life insurance and many others. These are by and large voluntary markets in which the consumers ascertain whether they want homeowners or life insurance, and if so in what amount and from which insurer. In these markets, insurers are reasonably free to determine whether they want to offer insurance to a given individual and if so, at what price and under what conditions.

In other cases, society has expressed an interest in assuring that certain risks are covered and has established government policies to implement that interest either through a social insurance program (4) or by requiring private markets to operate in ways that will assure the intended risk transfers are accomplished. Social Security is an example of a social insurance program in which the risk of being impoverished in old age is transferred from workers and their beneficiaries to the government. Participation in this risk transfer system is mandatory for most U.S. workers and taxes are mandatorily imposed. The mechanism by which the transfer is accomplished (i.e., the payment of benefits) is codified in law and regulatory rules adjudicated by a government agency.

The two most prevalent examples of private market utilization to achieve societal objectives are automobile insurance and health insurance. Most states impose a requirement on individuals to carry auto insurance as a condition of being licensed to drive. But beyond the requirement to carry insurance, the marketplace operates largely as a private market between individuals and their selected insurer and auto insurers remain free to price and underwrite according to sound practices.

The challenge today lies not with whether or not society has a legitimate interest in assuring that certain risk transfers occur, but rather with the increasing reliance on risk transfer systems that lead to unintended consequences and poor results.

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The insurance programs that provide individual health benefits, however, are different. The ACA and many state laws impose a number of restrictions on the market between individual health insurance purchasers and insurance companies. In particular, mandated benefits are much more comprehensively defined than in auto insurance and the common underwriting and pricing practices used by insurers in markets such as life, auto and homeowners insurance are specifically prohibited in the market for individual insurance.

The challenge today lies not with whether or not society has a legitimate interest in assuring that certain risk transfers occur, but rather with the increasing reliance on risk transfer systems that lead to unintended consequences and poor results. This can be true regardless of the mechanism used to accomplish the risk transfer. For example, Social Security and Medicare are significantly underfunded to support the benefits promised, leading to deficits for future generations to address. Medicaid, in addition to generational funding considerations, is displacing other state funding priorities including education, putting financial hardship on participating providers of care, and inducing higher healthcare costs for individuals and employers in private markets.

THE OPPORTUNITY: THE PRINCIPLES, GUIDELINES AND MANAGERIAL DISCIPLINES THAT HAVE PROVEN SUCCESSFUL IN PRODUCING AGGREGATE NET INCREASES AND SUSTAINABILITY IN PRIVATE MARKET RISK TRANSFER SYSTEMS CAN WORK IN GOVERNMENT RISK TRANSFER SYSTEMS.

In private voluntary markets, risk transfer systems are designed to conform with proven principles. Insurers design their products and practices accordingly, as it is in their interest that the market remain viable and the insurer remain solvent.

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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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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.

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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.

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- 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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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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