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Financial governance and risk management of social security

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Summary

Risk management is a fundamental part of corporate governance, which has become central to modern regulation of most types of financial institution. This paper argues for risk management to be considered as a vital component of the governance of social security institutions and explores some of the features of a risk management structure and some of the risks to which a social security scheme is subject.

Risk is defined as the possibility of something going wrong which will have unfortunate consequences, will undermine the institution's plans or will make it less likely that the institution's objectives will be achieved. Effective risk management requires corporate objectives to be clearly articulated. The management of risk can then be seen as a fundamental element of governing the institution so as to achieve its objectives within an acceptable level of risk.

Risk management of a social security institution includes having in place adequate arrangements for audit and an Audit Committee or similar dedicated structure to monitor and manage both internal and external audit activities. Regular actuarial reviews of the financial situation also form an essential part of risk management.

There needs to be a formal process of identifying, quantifying and managing the risks of the organization. Generally this will best be carried out under the control of a Chief Risk Officer or some other senior official with clear responsibility and accountability for risk management. Once a comprehensive list of risks has been drawn up, risks should be allocated into categories according to whether they can be tolerated and managed, terminated, transferred or transformed.

Social security institutions are subject to some very long-term risks in respect of their liabilities, such as real earnings growth, structural changes in the economy, unemployment, disability, the future growth in the costs of health care and general improvements in longevity for the whole population. Some broad areas of risk for a social security institution are operational risk, liquidity risk, liability risk, economic risk, investment risk, catastrophe risk and political risk.

Each organization needs to develop its own processes for evaluating, monitoring and managing risk, but the process needs to be a formal, regular and ongoing one, supplemented by special studies and investigations into particular risk exposures from time to time. Consideration should be given to making public on a regular basis a summary of the risk evaluation and a report on the steps being taken to manage the risks.

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Introduction

The management of risk is clearly one of the most fundamental elements of the corporate governance of any organization. Social security institutions, whether in the public or private sector, have particularly high levels of risk to manage. Financial institutions in the private sector are now frequently regulated in terms of their processes of risk assessment and risk management, but social security institutions often have much higher levels of liabilities and may control assets of amount comparable to or larger than many financial institutions. Although social security organizations may not be subject to the discipline of financial markets and regulatory requirements, it is important that they should be able to demonstrate an open, transparent and accountable approach to financial governance and risk management.

A first question should be to ask "what is risk?" The answer may not be entirely obvious. A general definition of risk, which could be applied to social security institutions, might be: "the possibility of something going wrong which will have unfortunate consequences, will undermine the institution's plans or will make it less likely that the institution's objectives will be achieved". It is clear that there are many potential facets to risk and that the management of risk can encompass almost everything that a social security institution does.

It would be possible to define risk in terms of both positive and negative outcomes, but the risk of things going better than expected is not usually a risk that has to be guarded against in the same way as is the case for an adverse risk. We will therefore restrict our considerations to risks which have an adverse or undesirable connotation.

Since risk is associated with failure to achieve objectives, the proper management of risk needs to be effectively integrated into the business planning process, whereby clear objectives must be articulated before consideration can be given to the risk of failing to achieve them. The management of risk can then be seen as a fundamental element of the corporate governance of the institution, which can be characterized as "seeking to govern and manage the institution so as to achieve its corporate objectives, within an acceptable level of risk".

Risk, however, is not uni-dimensional, at least in the context of multiple stakeholders. Risk for one stakeholder may automatically imply risk for another stakeholder, in which case there should be a commonality of interest in seeking to mitigate the risk. However, risk for one stakeholder may result in upside potential for another stakeholder, in which case it will be very important to be clear about whose risk we are seeking to manage and control.

Financial governance

"A sound governance structure is essential for the effective investment of social security funds. The governance structure should ensure an appropriate division of operational and oversight responsibilities, and the suitability and accountability of those with such responsibilities."
"The responsibilities of the governing body should be consistent with the overriding objective of the social security scheme, which is to pay the benefits and provide the services promised. The governing body should strive to maintain the financial sustainability of the social security scheme by monitoring and managing all the risks associated with the scheme, including in particular the demographic, financial and broader economic risks. Under the financial system adopted, the contribution level established and investment income should be sufficient to finance the benefits and services, and risk management should be applied in the assessment of the long-term sustainability of the scheme."

The above excerpts are taken from the draft Guidelines for the Investment of Social Security Funds, which are being developed by the Investment Study Group of the International Social Security Association (ISSA) and which will be presented at another session of the 28th General Assembly. Risk management and appropriate systems of control are mentioned in several places within the guidelines, both in relation to the specific aspect of controlling risk within the investment activities of a social security institution, and in relation to the overall responsibilities of the governing body. It is the responsibility of the governing body to ensure that the social security scheme functions as it is intended to do under the guiding legislation, but it is also a fundamental responsibility of the governing body to manage and control the risks of the organization effectively.

Other key aspects of the financial governance of a social security organization include responsibility and accountability for the delivery of services and benefits. This requires the organization to be managed in such a way as to ensure financial viability in the medium to long term, as well as sufficient liquidity and operational capability to collect contributions and pay benefits in the short term. Accountability to the various stakeholders – members of the scheme, employers, pensioners, and government – requires sufficient transparency of operations and accountability mechanisms to enable the stakeholders to hold the governing body to account on a regular basis. This should include independent audit of the financial transactions and investment processes and actuarial review of the scheme's financial viability. The reports of both the auditor and the actuary should be made publicly available, in order to increase the confidence of the stakeholders in the effective management of the scheme and as a commitment to openness and transparency.

Good financial governance would normally require the governing body to establish an effective audit committee, with primary responsibility, on behalf of the governing body, for ensuring that there is an effective programme of internal audit to test the adequacy of systems of internal control, both in respect of financial aspects and more generally. An audit

committee should be made up largely, if not exclusively, of individuals who are independent of the management of the institution and should include individuals with strong financial and risk management expertise. The audit committee should approve the areas of activity selected for special study by the internal audit function and should receive the reports of the internal auditor and ensure that the lessons arising from internal audit studies are effectively learnt and appropriate action implemented. The audit committee should also receive the management letter from the external auditors and satisfy itself that the management of the institution is responding adequately to any specific recommendations from the auditors.

The audit certificate provided by the external auditor should cover not only financial aspects of the accounts, but should also report on whether the management has given attention to the major risks to which the organization is exposed and has put in place adequate systems of control to monitor, mitigate and manage risk within the organization.

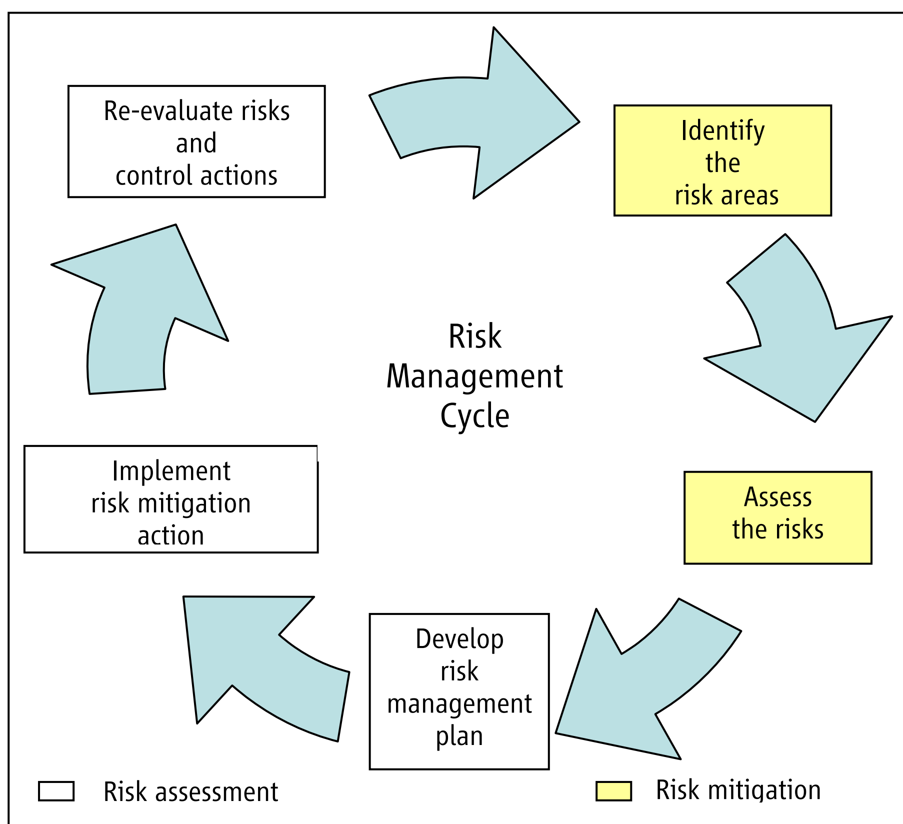
An actuary should be appointed to carry out periodic actuarial reviews of the social security scheme. The actuary should be free of political interference and the report of the actuary should be made public. Normally the actuary would be external to the social security institution, in order to ensure independence and transparency. However, if the reviewing actuary is employed by the entity administering the scheme, or by a government department with responsibilities for supervising or controlling the scheme, then the work of the "in-house" actuary should be subject to external and independent peer review or actuarial audit. There should be appropriate and well-established routes for the actuary to report concerns that the social security scheme is not fulfilling or is unlikely to be able to fulfil its obligations, either in the short term or in the future.

If the social security scheme has accumulated, or is in the process of accumulating, significant assets, whether for working capital, as contingency reserves or as part of the long term strategy for financing the liabilities, then it is essential that appropriate mechanisms be put in place for the governance of the investment processes, both in terms of accountability and propriety, and also to ensure sound decision-making in respect of strategic asset allocation and day-to-day tactical investment management. It would normally be appropriate for the governing body of the social security institution to establish an investment committee to which ongoing responsibility for these aspects can be delegated. This is both to ensure that sufficient detailed attention is paid to the intricacies and complications of investment of social security funds, and also to facilitate the involvement of appropriate expertise by appointing suitably qualified people to the investment committee. It will often also be appropriate to call on the services of investment experts as advisers to the investment committee, or to perform ongoing functions in relation to the investment of the funds and the benchmarking and measurement of investment performance.

The management of risk

Risk has been defined in terms of the possibility of things going wrong, resulting in objectives not being achieved, or achieved only with greater difficulty, so the management of risk should be concerned with the identification, measurement, control and minimization of risks in the relevant systems and processes, to a level commensurate with the "risk appetite" of the organization, or the capacity of the organization to absorb risk, control it or accept its consequences. The risk management process can be illustrated in terms of the diagram in Figure 1. This emphasizes the cyclical nature of the process.

Figure 1. *Risk management process*



Risk management starts with the identification of risk areas and individual risks. It is likely that a significant project will be needed to do this when the process is initiated, and then further risks will be identified as a natural consequence of the emphasis placed on risk management within the organization. Once risks have been identified in broad terms, detailed work will be needed to assess the risks. A well-established process for risk assessment is to develop a risk matrix, in which the risks are grouped into a number of key areas (which would usually correspond to functions within the organization or to the responsibilities of senior managers or individual Board members) and allocated measures of likelihood (i.e. probability of occurrence) and intensity or severity (i.e. the financial or operational significance if the risk event were to occur). A first analysis might simply classify likelihood and severity as high,

medium or low for each risk or risk area, or allocate a number from 1 to 5, say, to each. A crude measure of the ranking of risks can then be obtained from the product of the likelihood rating and the severity rating. A more sophisticated analysis might use more detailed processes of measurement for particular risks, including detailed assessment of financial exposure and probabilities of occurrence, with a system of weighting to combine the different risk factors together.

Once the risk identification and assessment processes have been carried out, the next stage is to develop a risk management plan. This would address each of the risk areas in turn and propose how the risks should be managed. A well-known paradigm for the management of risk is to allocate each risk to one of four categories:

- Tolerate: The risk has been detected, can be monitored satisfactorily and, after appropriate analysis, it is decided that the risk is acceptable and that it would not be cost-effective to take additional risk control measures.
- Terminate: Eliminate the risk through control actions, for example by stopping a particular line of activity, changing a benefit entitlement, ceasing to offer a guarantee or selling an asset.
- Transfer: Contractually shift the risk from one party to another, for example by legal agreement or by means of an insurance contract.
- Transform: Control the risk by modifying its nature to make it safer or more intrinsically manageable, for example by matching offsetting risks together (e.g. through asset/liability management) or entering into contracts which hedge the risk, such as futures, swaps, hedge positions or insurance or reinsurance contracts.

Having developed a risk management plan, the next stage is to implement the risk mitigation actions, particularly in respect of terminating, transferring or transforming risks. An appropriate process of monitoring should also be put in place, both to evaluate the effectiveness of the risk mitigation and control measures and also to monitor carefully the risks which are retained ("tolerated") within the organization. The findings of the monitoring process should be the subject of regular review by the governing body, so that it can be in a position to be able to certify in the institution's annual report and accounts that it has in place appropriate mechanisms to monitor risk and to ensure that risks are properly addressed and managed.

The cycle is completed by moving on from consideration of the monitoring report to revisit the risk identification and assessment process – and so on.

Risk management should be a regular preoccupation of the governing body of the institution, although it may be that certain aspects of risk monitoring may be delegated to the audit committee or another committee with specific risk management responsibilities. There should be a senior executive of the social security organization with specific responsibility for overall

risk management (this could be the Chief Executive Officer or a specific appointment might be made of a Chief Risk Officer or similar position, as is becoming increasingly common in financial services companies), directly accountable to the governing body and with responsibility for ensuring that the governing body is kept continually informed of risk management issues. Each risk category should be allocated to an identified official to manage, with clear accountability to the Chief Risk Officer. From time to time it may be desirable to commission from an independent expert an external review of the risks of the organization and the effectiveness of the risk management processes. Certain aspects of risk management may be singled out for special study and analysis, perhaps on a rolling cycle of major topics.

A broad categorization of risks

It is impossible to provide a unique categorization of the risks facing social security institutions, since this will depend very much on the branches of social security covered and the way in which each scheme is designed and administered. The relative importance of different types of risk may also vary from country to country, because of the circumstances, structures and the availability of particular types of expertise.

The risk management of banks and similar financial institutions often focuses on four main types of risk:

- **Credit risk:** Risk resulting from a counterparty being unable to fulfil its contractual obligations due to financial or other problems.
- **Liquidity risk:** The risk that a transaction cannot be fulfilled at prevailing market prices due to lack of market volume or inability to find a purchaser or physically carry out a sale at short notice.
- **Market risk:** The risk that the organization's ability to meet its objectives is compromised by fluctuations in the market value of the assets held. This may be a true problem of market values at the time assets need to be realized or a "notional" or accounting problem resulting from marking assets to market at a particular point of time for accounting purposes, even though the assets do not need to be realized at that time.
- **Operational risk:** Risk arising from a wide variety of possible administrative failures, including inadequate systems, administrative faults, defective control mechanisms, fraud, asset misappropriation or human error.

Of these, the most important for a social security institution would probably be operational risk, which we will consider in more detail below. Market risk is not generally a major consideration for a social security institution, since it may not be subject to the disciplines of marking assets and liabilities to market and presenting a balance sheet which would reflect significant exposure to the financial markets. Likewise one would not normally expect a social

security institution to be subject to a significant degree of credit risk, since it would not be dependent to any major extent on the performance of counterparties.

On the other hand, social security institutions are subject to some very long-term risks in respect of their liabilities, which are more akin to the liabilities of a life insurance company, although often significantly more dangerous because of exposure to risks which are not generally considered insurable in the private sector (or only on the basis of very conservative pricing and reserving), such as real earnings growth, structural changes in the economy, unemployment, long-term disability, the future growth in the costs of health care and general improvements in longevity for the whole population. Some broad areas of risk which would typically need to be considered for a social security institution would be:

- operational risk;
- liquidity risk;
- liability risk;
- economic risk;
- investment risk;
- catastrophe risk;
- political risk.

Operational risk is critical for all social security institutions. It is difficult to analyze and to mitigate, since it can take many different forms. A few examples may help to illustrate how broad a category of risk it can be:

- computer failure;
- mistakes in record-keeping;
- poor compliance of members/employers with earnings declaration and contribution payment;
- inaccurate allocation of expenses between branches;
- inadequate staffing to maintain operations satisfactorily, for example because of recruitment problems or uncompetitive salaries;
- strikes and other staff unrest;
- weak management;
- fire, earthquake, hurricane or flood compromising the head office;
- fraudulent transactions;
- hostile hacking into the main computer database;
- failure to implement an element of the legislation;
- failure to warn insured persons of an impending change in coverage or benefit accrual;
- unexpected fiscal liabilities;
- litigation challenging disability award decisions;
- failure of risk controls on delegated authorities;
- poor risk management.

The list is virtually endless, as each organization can have its own vulnerabilities in this respect. One of the difficulties of risk management in this area is that problems do not usually repeat themselves. After experiencing one risk event, management will put in place protective mechanisms to try to ensure that it does not happen again. And then something completely different will go wrong.

Liquidity risk can be critical for some social security institutions, since many operate on an essentially pay-as-you-go basis, which means that they do not accumulate significant assets as reserves. However, they must still maintain adequate working capital, since contribution income and benefit expenditure can fluctuate from week to week and month to month as a result of statistical variations, seasonal factors, economic cycle effects and so on. Adjustments to contributions or to benefits take time to put into effect, so it is essential to have a small buffer fund to absorb the impact of short-term variability. This buffer fund must be invested in a way that ensures that the funds can easily be drawn down without suffering capital losses, i.e. held on deposit, some on virtually immediate accessibility, or in very short-dated financial instruments.

Liability risk is an umbrella category which covers anything and everything which can go wrong in relation to the liabilities of the scheme. For a social security scheme promising pension benefits this might include:

- Longevity risk – the risk that pensioners will live longer in the future than in the past.
- Inflation risk – the risk that inflation will erode the value of the benefits or that a commitment to adjust benefits to keep pace with inflation will become too expensive to maintain.
- Incapacity or ill-health retirement risk – the risk of high levels of pension being awarded early to people qualifying for incapacity or ill-health pensions.
- Annuitization risk – the risk of excessive costs of purchasing annuities from insurance companies.
- Expense risk – the risk of excessive administrative expenditure.
- Legislative or regulatory risk – the risk that the rules under which the scheme operates may be changed by legislative action or by decisions of the regulator.

For a health care scheme there would be a different range of liability risks, or some of the above risks would have a somewhat different manifestation:

- Demographic ageing risk – the risk that unit costs will increase rapidly because of an ageing of the covered population.
- Medical expense risk – the risk of excessive inflation of expenditure on medical care because of factors such as the rising price of medicines and drugs, improvements in the available technology and scarcity of specialist professionals.

- Obsolescence risk – the risk of hospitals and clinics and other facilities becoming out-of-date and requiring substantial investment to modernize or replace them.
- Epidemic risk – the risk of a significant epidemic threatening to overwhelm the available resources.
- Prevalence risk – systemic acceleration in the prevalence of certain conditions imposing heavy costs on the health system.
- Moral hazard risk – risk of members joining the scheme with higher than average claim propensity, as a result of unrestricted access and no or insufficient application of risk control mechanisms such as those used in the private sector (medical examinations, waiting periods, exclusions, etc.); also the risk of excessive demands on the system because of inadequate financial deterrents to seeking treatment, visiting the doctor, etc.

Economic risk covers some of the risks to the income side of the account, which might include the impact of economic cycles on earnings levels and employment, as well as the effects of inflation. Economic conditions can also significantly affect the liabilities; new incapacity and work injury claims are particularly prone to increase when the economy is in a downturn.

Investment risk is the risk that investments will fail to deliver expected levels of return, through systemically poor market conditions, as a result of bad strategic decisions or through poor choice of individual investments. Investment risk includes credit risk, such as the failure of a counterparty or default by a bond issuer. It also includes risks of concentration of investments by particular issuers, geographical area, industry and type of instrument, and, more broadly the risk of insufficient diversification of investment, diversification being a key strategy for managing investment risk. Investment risk can also arise because of a mismatch between the assets and the liabilities they are held to meet, e.g. the assets are of short duration but the liabilities are long-term, necessitating significant levels of reinvestment at unpredictable future rates of interest, or the assets held are too long for the liabilities and have to be realized, potentially at a loss, before their maturity dates. A further area of investment risk can be political interference, resulting in an insistence on investment in assets with uneconomic returns or excessive risk. If investments are accounted for on a market or fair value basis, market risk can be significant, as a result of fluctuations in market values from one balance sheet date to another.

Catastrophe risk may be more of an issue in some countries than others, particularly where there is a significant risk of earthquake, volcanic eruption, windstorm or flooding. There could be a major risk to the buildings of the social security institution, resulting in potential loss of operational capability and necessitating a well thought through business continuity plan. Catastrophic events can also have a major impact on the liabilities, affecting sickness and disability claims, demands on the health care system, and triggering survivorship benefits. The operational problems are probably greatest for a social security health care system, since a

catastrophic event may generate a huge demand for emergency health care at a time when some of the health care facilities are themselves damaged or exposed to risk.

Political risk, as with operational risk, can take numerous forms. Social security systems are prone to incessant change as a result of political initiatives which are often well-meaning but result in operational disruption and sometimes in perverse outcomes or excessively complicated systems. Of course, it is impossible to insulate social security from political changes, since in most countries the social security system will be viewed as an instrument for achieving political objectives.

Conclusions

Governance issues are increasingly becoming a focus of attention for many institutions and particularly for public companies. A number of countries have passed legislation or introduced voluntary codes to strengthen governance structures. Social security institutions are not generally covered by such legislation or codes, but their financial impact can be huge, both in terms of cash flows and, in some cases, the size of their investment portfolio. In some countries social security is administered by a government department and subject to monitoring by a national audit office and to control by Parliament. Other social security institutions are established with a board of governors or some other independent governance structure. Whatever the governance structure, careful attention should be paid to achieving an appropriate division of responsibilities and sufficient accountability and transparency for the operations of the institution to be publicly held to account.

The finances of a social security scheme should always be subject to an effective audit process at least annually and should be subject every two or three years to actuarial evaluation and review to assess the future commitments and the adequacy of expected income, having regard to the assets of the scheme. Reports from the auditors and the actuary should be made publicly available.

A key component of governance should be the process of risk management, which needs to be properly integrated into the business of the governing body, where there is one, or through corresponding mechanisms. Responsibility for the risk management process should be assigned to a senior executive with a direct reporting line to the chief executive and to the governing body. Monitoring and managing risk should be at the heart of the operational and strategic management of the organization. Each organization will develop its own processes for evaluating, monitoring and managing risk, but the process needs to be a formal, regular and ongoing one, supplemented by special studies and investigations into particular risk exposures from time to time. Consideration should be given to making public on a regular basis a summary of the risk evaluation and a report on the steps being taken to manage the risks.

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