

About the Measurement Framework

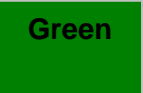




About the plan being evaluated:

The Measurement Framework beginning on page 3 is designed to evaluate either a specific plan (e.g. the Ontario Teachers Pension Plan) or a generic type of plan with a specific design and a specific type of plan sponsor (e.g. a final-pay, corporate-employer-sponsored, defined benefit plan, not all defined benefit plans in general). The Measurement Framework has been developed by a working group sponsored by the Society of Actuaries' Pension Section.

About the ratings:

- The overall ratings are done assuming a “perfect world” where “actors” understand and take advantage of the best features of plans. They do not consider adverse incentives to stakeholders and agents.
- A second set of ratings is developed considering the effects of adverse incentives. Adverse incentives as defined in this application are when stakeholders (particularly individuals) can be led to act not in their own best interests, based on a lack of understanding of features and consequences, or when agents take actions that don't align with interests of stakeholders, particularly individuals or shareholders/owners. While regulatory risk is its own category, we've considered regulatory risk as another adverse incentive (elected officials, including the judiciary, may be guilty of overzealous regulation, affecting the action of individuals, employers and the markets).

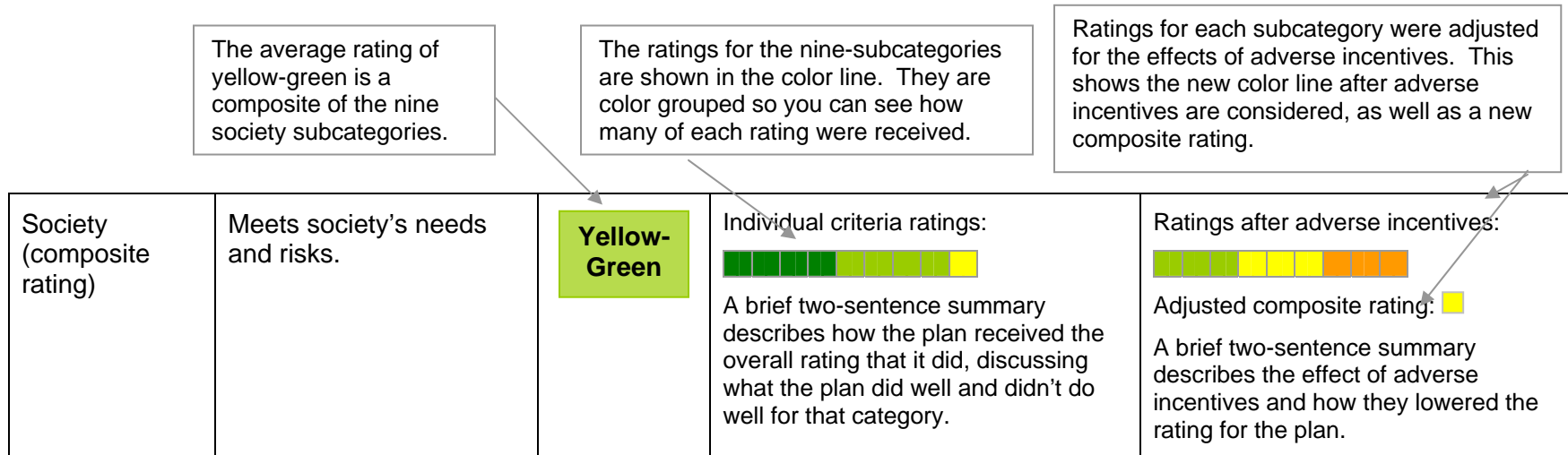
Each rating is given a color of red, red-yellow, yellow, yellow-green or green, using a color block, as illustrated below.

Rating	Threshold	Rating	Threshold
 Green	Plan meets the criteria for the stakeholder nearly perfectly.	 Yellow-Red	Plan generally does not meet the criteria for stakeholders or only in limited circumstances.
 Yellow-Green	Plan mostly meets the criteria for the stakeholder; plan may not meet it due to outside considerations (rates of turnover) or plan design feature.	 Red	Plan does not meet the criteria for the stakeholder in almost any circumstance.
 Yellow	Plan sometimes meets the criteria for individual stakeholders or can meet the criteria, if the stakeholders use the plan features as intended.		



About the Measurement Framework

About the categories







- Four categories have a single rating: self-adjusting, aligns roles with skills, new norms for work and retirement, and alignment with markets. Four other categories, which are based on how well the plan meets the needs of the four key stakeholders, have subcategories with a composite rating. The four stakeholders are society, individuals, employers and markets. The summary page shows both the composite rating and ratings in the subcategories.
- Each of the stakeholder categories has a different number of subcategories, from 6 to 11 subcategories.
- The example below shows how to read the summary of the society category, with both the composite and subcategory ratings. We've shown a sample rating.





MEASUREMENT FRAMEWORK
Plan Name
Summary

Summary				
Criteria	Objective	Rating	Evaluation	Effect of Adverse Incentives
Self-adjusting	Automatically adjusts to changing demographic and economic conditions.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■
Aligns roles with skills	Aligns stakeholders' roles well with skills.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■
New norms for work and retirement	Could support flexible work arrangements, e.g. phased retirement, return to work, etc.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■
Alignment with markets	Could use market mechanisms effectively to hedge risks.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■
Society (composite rating)	Meets society's needs and risks.	Rating	Individual criteria ratings:  Color line above should be completed based on ratings for the nine society criteria. Include a two-sentence discussion of why category received rating that it did.	Ratings after adverse incentives:  Adjusted composite rating: ■ Color line above should be completed based on adjusted ratings after adverse incentives for the nine society criteria. Include a two-sentence discussion of affect of adverse incentives on ratings.

MEASUREMENT FRAMEWORK
Plan Name
Summary

Summary				
Criteria	Objective	Rating	Evaluation	Effect of Adverse Incentives
Individuals (composite rating)	Meets individuals' needs and risks.	Rating	Individual criteria ratings:  Color line above should be completed based on ratings for the 11 individual criteria. Include a two-sentence discussion of why category received rating that it did.	Ratings after adverse incentives:  Adjusted composite rating:  Color line above should be completed based on adjusted ratings after adverse incentives for the 11 individual criteria. Include a two-sentence discussion of affect of adverse incentives on ratings.
Employers (composite rating)	Meets employers' needs and risks.	Rating	Individual criteria ratings:  Color line above should be completed based on ratings for the eight employer criteria. Include a two-sentence discussion of why category received rating that it did.	Ratings after adverse incentives:  Adjusted composite rating:  Color line above should be completed based on adjusted ratings after adverse incentives for the eight employer criteria. Include a two-sentence discussion of affect of adverse incentives on ratings.

MEASUREMENT FRAMEWORK
Plan Name
Summary

Summary				
Criteria	Objective	Rating	Evaluation	Effect of Adverse Incentives
Markets (composite rating)	Meets markets' needs and risks.	<div style="border: 1px solid gray; background-color: #cccccc; padding: 5px; width: 60px; margin: 0 auto;"> Rating </div>	Individual criteria ratings:  Color line above should be completed based on ratings for the six market criteria. Include a two-sentence discussion of why category received rating that it did.	Ratings after adverse incentives:  Adjusted composite rating: Color line above should be completed based on adjusted ratings after adverse incentives for the six market criteria. Include a two-sentence discussion of affect of adverse incentives on ratings.

MEASUREMENT FRAMEWORK
Plan Name
Society

Society's Needs and Risks (Composite Rating <input type="checkbox"/>)				
Criteria	Objective	Rating	Evaluation	Effect of Adverse Incentives
Adequate	Protects vulnerable citizens.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. <input type="checkbox"/>
Affordable	Does not take resources from other social needs. Ensures risk pooling done efficiently.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. <input type="checkbox"/>
Sustainable	Sustainable across and within generations. Equitable across and within generations.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. <input type="checkbox"/>
Robust	Fair, covers great majority, creates shared economic growth, avoids adverse incentives.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. <input type="checkbox"/>
Does not promote economic risk	Efficiently allocates resources and encourages labor force participation.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. <input type="checkbox"/>
Does not promote political risk	Promotes fiscal/political integrity and political stability.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. <input type="checkbox"/>



MEASUREMENT FRAMEWORK
Plan Name
Society

Society's Needs and Risks (Composite Rating <input type="checkbox"/>)				
Criteria	Objective	Rating	Evaluation	Effect of Adverse Incentives
Does not lead to system failure	Withstands shocks, not prone to instability or adverse incentives.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. <input type="checkbox"/>
Addresses imperfections of other stakeholders	Promotes strong individual decision making and covers lack of market instruments.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. <input type="checkbox"/>
Promotes social solidarity and integrity	Ensures basic standards of living; ensures risks are shared.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. <input type="checkbox"/>

MEASUREMENT FRAMEWORK
Plan Name
Individuals

Individual's Needs and Risks (Composite Rating ■)				
Criteria	Objective	Rating	Evaluation	Effect of Adverse Incentives
Guaranteed income	Provides substantial level of income protection.	Rating ■	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■
Predictability of income	Facilitates retirement planning.	Rating ■	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■
Retirement flexibility	Allows choice of retirement age, including possibility to phase into retirement.	Rating ■	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■
Portability	Minimizes loss upon employment termination.	Rating ■	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■
Sensitive to employment conditions	Benefits may vary in line with employment conditions.	Rating ■	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■
Sensitive to family needs	Benefits may vary in line with spousal and children needs.	Rating ■	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■

MEASUREMENT FRAMEWORK
Plan Name
Individuals

Individual's Needs and Risks (Composite Rating ■)				
Criteria	Objective	Rating	Evaluation	Effect of Adverse Incentives
Requirement for individual skills	Level of knowledge required to plan for retirement.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■
Investment risk	Protects against fluctuations in market returns.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■
Longevity risk	Protects against possibility to outlive assets.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■
Inflation risk	Includes both pre- and post-retirement inflation.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■
Premature retirement risk	Protects against forced early retirement due to disability, family circumstances and involuntary termination.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■

MEASUREMENT FRAMEWORK

Plan Name

Employer

Employer Needs and Risks (Composite Rating: <input type="checkbox"/>)				
Criteria	Objective	Rating	Evaluation	Effect of adverse incentives
Supports primary business purpose	Enhances core purpose of the employer's business.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. <input type="checkbox"/>
Workforce management: attraction and retention	Enhances business value by allowing attraction and retention of the "right employees."	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. <input type="checkbox"/>
Workforce management: transition of employees	Enhances business value by facilitating the orderly transition of employees.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. <input type="checkbox"/>
Responsive to owners	Responds to needs of owners, e.g., shareholders for public companies, which may limit amount of risk to be taken.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. <input type="checkbox"/>
Business risk	Ability to react quickly to changes in the competitive landscape.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. <input type="checkbox"/>

MEASUREMENT FRAMEWORK

Plan Name

Employer

Employer Needs and Risks (Composite Rating: ■)				
Criteria	Objective	Rating	Evaluation	Effect of adverse incentives
Regulatory risk	Allows plan to be operated to fit needs and easily change to meet conditions within regulatory framework.	Rating ■	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■
Fiduciary risk	Allows plan to be easily operated to minimize fiduciary liability.	Rating ■	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■
Litigation risk	Allows management of workforce to avoid lawsuits.	Rating ■	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■

MEASUREMENT FRAMEWORK
Plan Name
Markets

Markets Needs and Risks (Composite Rating: ■) (includes both financial markets and intermediaries, e.g. insurers)				
Criteria	Objective	Rating	Evaluation	Effect of adverse incentives
Maximizes use of markets	Effectively uses markets and hedging mechanisms; stakeholders can purchase hedging instruments cost effectively.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■
Transparent (cost)	Costs of plan are transparent (fees, costs to sponsors, other stakeholders, etc).	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■
Strong governance	Fiduciary roles of plan sponsors well defined. Plan structure minimizes agency issues, particularly regarding plan investment and risk taking.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■

MEASUREMENT FRAMEWORK
Plan Name
Markets

Markets Needs and Risks (Composite Rating: ■) (includes both financial markets and intermediaries, e.g. insurers)				
Criteria	Objective	Rating	Evaluation	Effect of adverse incentives
Efficiently priced	Market price is well understood and accepted by stakeholders. Plan does not contain features which cannot be efficiently priced. Plans incorporate discipline in pricing.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■
Efficient risk bearing	Plan efficiently pools idiosyncratic risks and hedges systematic risks (both economic and demographic).	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■
Allocation of risk	Plan efficiently allocates risk across stakeholders, giving each stakeholder the risk he can best bear.	Rating	Discussion of rationale for rating	Discussion of how rating was adjusted (or not adjusted) for adverse incentives with revised rating. ■