This paper is based on a background paper presented to the meeting of the Australian Statistics Advisory Council on 25 May 2004. The wellbeing framework has been developed in Treasury over a number of years as a corporate tool to improve the quality of our policy analysis and advice to Treasury Ministers and, through them, to the Government.

# Introduction

Treasury's mission is 'to improve the wellbeing of the Australian people by providing sound and timely advice to the Government, based on objective and thorough analysis of options, and by assisting Treasury Ministers in the administration of their responsibilities and the implementation of Government decisions'. Developing a consistent and robust understanding of wellbeing is thus critical to Treasury's work.

In this regard, Treasury has developed a wellbeing framework to underpin analysis and advice across the full range of our public policy responsibilities. The framework is drawn from broadly applicable economic principles, which are Treasury's comparative advantage in the provision of policy analysis and advice to Government.

The dimensions chosen for the wellbeing framework are: (i) the level of opportunity and freedom that people enjoy; (ii) the level of consumption possibilities; (iii) the distribution of those consumption possibilities; (iv) the level of risk that people are required to bear; and (v) the level of complexity that people are required to deal with. These dimensions are not necessarily comprehensive, unique or independent. They have been chosen simply because they describe the aspects of wellbeing that are considered to be most relevant to Treasury's responsibilities.

This paper considers the conceptual basis for the wellbeing framework, discusses some issues concerning the framework as a whole, examines each of the dimensions in further detail and then considers some interactions between them. The paper concludes by discussing some public policy implications in applying the framework, and its value for policy analysis and advice.

# Conceptual basis

Wellbeing has different meanings for different people. The Australian Bureau of Statistics (ABS) suggests that wellbeing relates to 'the desire for optimal health, for better living conditions and improved quality of life'. However, each person will have their own interpretation of what is specifically important with respect to their own wellbeing, the wellbeing of others, and the weight that they place on each dimension of wellbeing. The diversity of these interpretations, and the fundamental nature of the questions posed, means that it is a significant challenge to create a useful and comprehensive framework for the consideration of wellbeing.

A range of disciplines (amongst others, economics, sociology, politics, theology and philosophy) bring some notion of wellbeing into their intellectual foundation.

<sup>1</sup> Australian Bureau of Statistics (2001), p. 3.

Consistent with Treasury's grounding in the intellectual history of economics, the Treasury wellbeing framework draws primarily on the methods of *welfare economics* and the related philosophical tradition of *utilitarianism*.

The challenge to conceptualise wellbeing has a long tradition in this intellectual history. Indeed, economists have sought to understand, measure, and model wellbeing since 1776 when Adam Smith discussed the 'invisible hand', which transformed self-interest into outcomes for the public good.<sup>2</sup>

The modern approach to considering such wellbeing questions in welfare economics is in terms of the *social welfare function*. Within this approach, the unit of analysis is the *utility* of individuals, defined to be some measure of their pleasure or happiness.<sup>3</sup>

Conventional economic analysis is strongly founded in this *utilitarian* social welfare approach. Each individual's choices are characterised by the respective utilities of the options available to them.<sup>4</sup> Social welfare is judged as an aggregate function of the levels of utility across society.<sup>5</sup> Maximising aggregate utility, or happiness, then corresponds to maximising overall wellbeing.

In theory, the determinants of utility may be quite general, reflecting a range of material and non-material influences. In practice, however, the conventional analysis usually assumes that the level of income or consumption is the most important determinant. At an aggregate level, measures of overall income such as Gross Domestic Product (GDP) are often used as a proxy for social welfare.

In recent years, however, it has become increasingly accepted that analyses of economic development or progress that only take income into account neglect other important determinants of wellbeing. As the Australian Statistician notes, 'a

Note, however, that although Smith's work is characterised as the foundation of wellbeing analysis in economics, it was itself strongly grounded in the intellectual history of moral philosophy. This underscores that there is considerable cross-fertilisation between different fields in considering issues of wellbeing.

<sup>3</sup> The identification of utility as a hedonic outcome has a long history. Edgeworth (1881) once imagined a hedonimeter that could measure individual utilities. However, the foundation of utilitarianism can be found in the work of Bentham (1789), Sidgwick (1874) and Mill (1848). Kahneman et al. (1999) also provide some of the more recent literature on wellbeing as a hedonic outcome.

<sup>4</sup> Economic treatments of utility and choice can be found in Marshall (1920), Hicks (1956) or Samuelson (1974). Varian (1992) also provides a good overview of these concepts.

The formalisation of the social welfare function has its origin in the work of Bergson (1938) and Samuelson (1956) and can be defined as some function of all of the utility functions of the constituent members of the society. The form of the social welfare function is not necessarily additive and depends, to some extent, on the ethical basis being used (cf. Bentham, 1789 or Rawls, 1971).

consensus is growing that countries and governments need to develop a more comprehensive view of progress, rather than focussing mainly on economic indicators such as Gross Domestic Product' (ABS, 2002).<sup>6</sup> Thus, it is important that utility functions that purport to capture wellbeing incorporate determinants that are broader than simply increasing income or consumption.<sup>7</sup>

In fact, these wider determinants have always been at the core of practical economic thought. Sen (1999) notes that 'while the national accounts devised by these leaders of economic analysis [including, amongst others, Adam Smith, William Petty, Antoine-Laurent Lavoisier and Joseph-Louis Lagrange] established the foundations of the modern concept of income, their attention was never confined to this one concept'.<sup>8</sup> The move towards generalised determinants for utility, beyond income as an inadequate (though practical) proxy for welfare, can thus be seen as reclaiming the original heritage of welfare economics.

Even with generalised determinants for utility, however, the utilitarian approach has been criticised on conceptual grounds. Sen (1999) has argued that 'it is sensible enough to take note of happiness, but we do not necessarily want to be happy slaves or delirious vassals'. He therefore proposes a broader *capabilities* framework that takes into account 'not only the primary goods the persons respectively hold, but also the relevant personal characteristics that govern the *conversion* of primary goods into the person's ability to promote her ends'. <sup>10</sup>

That is, Sen argues that capabilities are important in their own right, and not just because they have an indirect impact on happiness. His framework is thus *beyond-utilitarian*, in the sense that there are factors other than utility that also impact directly on wellbeing.<sup>11</sup>

An alternative approach is to generalise the constituents of utility, as well as the determinants. In this more abstract approach, utility is a measure of not just

<sup>6</sup> ABS (2002), pv.

<sup>7</sup> The generalisation of the set of variables that constitute utility functions has been central to the development of theory around decision making in economics. Lancaster (1966) and Becker (1975) expanded the utility function to include the attributes of the choices available to a consumer. McFadden (1974) and Manski (1977) also pioneered methods for incorporating unobservable differences across consumers in the utility analysis.

<sup>8</sup> Sen (1999), pp. 24-25.

<sup>9</sup> Sen (1999), p. 62.

<sup>10</sup> Sen (1999), p. 74, italics in original text. Primary goods are those goods that allow a person to meet their objectives and include rights, liberties and opportunities, income and wealth, and the social bases of self-respect (Rawls, 1971). See also the discussion of these concepts in Nagel (1986).

<sup>11</sup> For example, most prominently, libertarian theories privilege liberty as important in and of itself, and not just because it is a component of happiness (see, for example, Nozick, 1974).

happiness, but all of the elements of life that are valued by an individual. This type of utility function can encapsulate capabilities, as discussed by Sen, to the extent that they are valued by the individual.<sup>12</sup>

Such a *generalised-utilitarian* paradigm requires considerable supplemental information on determinants and constituents of wellbeing, beyond traditional measurements of income and GDP alone. In this context, the Australian Bureau of Statistics publication, *Measures of Australia's Progress*, has brought together statistics across a wide range of economic, social and environmental considerations to provide a better information base for considering wellbeing in Australia (ABS, 2004). For example, apart from conventional economic statistics of income, consumption and productivity, it also provides information on other key indicators such as life expectancy, education levels, rate of unemployment, biodiversity levels, air pollution and levels of crime.<sup>13</sup>

To summarise, the intention of Treasury's wellbeing framework is to ensure a broad assessment of the costs and benefits of all policies in our analysis and advice. It recognises a range of determinants for utility (beyond just income and GDP), and also a range of constituents of utility (beyond just individual happiness). It thus takes a generalised-utilitarian form, but with elements of the more contemporary capabilities framework. By taking into account a wider informational basis for what is valued in wellbeing, it facilitates the objective and thorough analysis of options that is central to Treasury's mission.

It is important to note that Treasury's framework is intended *only as a descriptive tool* to provide background context for public policy advice, and *not as an analytic framework*. It is therefore beyond the scope of this paper to enter the debate on the exact conditions under which a more generalised utilitarian framework may break down, or when an alternative framework may be necessary for formal analysis.

<sup>12</sup> Indeed, in concept, there is no limit to the constituents of utility that might be considered to be important. However, to remain a utilitarian framework in principle, the generalised utility functions need to be still sufficiently (mathematically) 'well-behaved' as to preserve higher-order utilitarian analysis.

ABS (2004), pp. 22-23. The primary interest in this paper is the conceptual understanding of wellbeing, not issues regarding measuring wellbeing or producing wellbeing indicators. However, we note that the portfolio approach used by the ABS is similar to that used by the United Nations Development Programme for its Human Development Indicators (UNDP, 2001). In contrast, other approaches have sought to combine disparate elements into a single 'headline' figure. For example, the Australia Institute has used this approach to propose a Genuine Progress Indicator for Australia (Hamilton and Denniss, 2000). The results from these combined indicators are, by definition, strongly dependent on the weightings used for the individual elements. Donovan and Halpern (2002) have produced an excellent critical analysis of broader wellbeing indicators and their usefulness for policy.

# The framework as a whole

As noted above, the dimensions chosen for Treasury's wellbeing framework are: (i) the level of opportunity and freedom that people enjoy; (ii) the level of consumption possibilities; (iii) the distribution of those consumption possibilities; (iv) the level of risk that people are required to bear; and (v) the level of complexity that people are required to deal with.

Consistent with being primarily a descriptive tool, rather than a framework for more formal analysis, the set of dimensions are not designed to meet more formal analytic criteria, such as being comprehensive, unique or independent.<sup>14</sup>

Depending on the approach, the framework could be argued to be comprehensive by definition. In the utilitarian approach, the level of consumption possibilities could be considered the primary dimension of the framework, and could technically reflect all of the preferences implicit in a generalised utility function. Alternatively, in Sen's approach, opportunity and freedom could be considered to be the primary dimension, and could encompass all of the capabilities required for people to lead lives that they value. In either case, the other dimensions would then be considered to be a useful set of determinants for the primary dimension.

However, this interpretation simply shifts the question of comprehensiveness down a level. That is, it is still an open question whether the dimensions are a comprehensive set for describing everything that is important to people.<sup>16</sup> This is an issue that is open to substantial debate, and is beyond the scope of this paper.

In any case, the dimensions are certainly not unique. As noted above, Treasury recognises that there are a range of alternative frameworks for mapping the impact of public policies onto wellbeing.<sup>17</sup> The selection of this framework simply reflects the issues that have been found to be most pertinent to Treasury's particular role, as a central policy department within the Australian Public Service, and to Treasury's particular intellectual history, derived primarily from the traditions of welfare economics and utilitarianism.

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<sup>14</sup> Using terminology analogous to analysing a mathematically based set of dimensions.

<sup>15</sup> That is, ultimately all preferences for what is important to people could perhaps be expressed as 'consumption' of some form of a generalised good, even if this good is intangible.

<sup>16</sup> Possible extra dimensions that may be required under such an interpretation may include issues of identity, culture or spirituality.

<sup>17</sup> For example, on the basis of alternate cultural value systems.

In addition, the dimensions are also not independent. On the contrary, there are strong interactions between the dimensions for almost all public policy issues. These are discussed further in a later section.

# The individual dimensions

In this section, each of the dimensions is considered in further detail. For each of the dimensions, in addition to a static analysis, it is important to consider the dynamics of wellbeing over time.

## (i) Level of opportunity and freedom that people enjoy

Opportunity and freedom refers to the capacity for people to choose the lives they want to live. 18

The concept of freedom has been integral to the development of modern market economics.<sup>19</sup> The efficiency benefits of markets are predicated on people being free to choose what is most important to them, and being free to satisfy these choices through mutually beneficial exchanges.<sup>20</sup>

As well as these efficiency benefits, the utilitarian framework acknowledges that freedom may be valued in itself. However, unless a generalised-utilitarian framework is used, freedom is assumed to have only an indirect impact on wellbeing through pleasure or happiness, rather than having an independent status.<sup>21</sup>

In contrast, the classical liberal framework suggests that freedom is the central right of individuals, and thus should be accorded special status.<sup>22</sup> This ethical position has underpinned a long history of classical liberal economics, which 'favours policies that promote and enlarge economic freedom, both for their own sake, and because they make for greater prosperity' (Henderson, 2000).<sup>23</sup>

The recent work of Sen has sought to incorporate aspects of freedom from both the utilitarian and classical liberal approaches. He argues that freedom does have a special

<sup>18</sup> This incorporates aspects of both negative freedom, which is freedom from oppression or constraint, and positive freedom, which is freedom to act (as per Berlin, 1969).

<sup>19</sup> As set out in some detail by the Secretary to the Treasury, Dr Ken Henry, in his speech to the Australian Business Economists in May 2001 (Henry, 2001).

<sup>20</sup> See, for example, the discussion of the fundamental theorems of welfare economics in Varian (1992).

<sup>21</sup> See discussion in Sen (1999).

<sup>22</sup> As set out, for example, by Nozick (1974).

<sup>23</sup> That is, this view holds that economic and political freedoms are inextricably intertwined. This citation is drawn from Henry (2001). Hicks (1981) also discusses similar themes.

status for wellbeing, beyond its impact on happiness or pleasure. However, he expands the focus beyond simply the rights available to individuals, to include their effective opportunities to exercise those rights, given their personal and social circumstances.<sup>24</sup>

In this conception, there remains a critical role for government, not least in providing basic infrastructure for economic and social interaction of individuals, including, amongst others, property rights, contract law, criminal law, other economic regulation and enforcement. These all limit liberties for some individuals, but provide the essential underpinning for the exercise of every individual's substantive freedoms.<sup>25</sup>

Applying these insights regarding opportunity and freedom can have important implications for policy design across almost the full range of government social and economic policy areas. In particular, freedom can be considered to be both a goal and an instrument for public policy.<sup>26</sup>

## (ii) Level of consumption possibilities

The level of consumption possibilities refers to people's command over resources to obtain goods and services to satisfy their needs and wants.

This definition should be considered in its broadest conceptual sense. That is, people's command over resources encompasses traditional economic concepts of income, as well as non-economic concepts such as application of political authority. As well as traditional market goods and services, the definition considers non-market goods and services such as, amongst others, voluntary and community work, personal and professional relationships, social capital, the quality of the physical environment, health and leisure.

<sup>24</sup> In his synthesis approach, Sen follows (and extends) the social contract theory of Rawls (1971)

<sup>25</sup> That is, in technical terms, there is a distinction between 'liberty', which usually denotes a consequence-independent basic right, and 'freedom', which denotes a consequence-dependent right (since its exercise depends on the impact on others).

<sup>26</sup> That is, Sen (1999, p. 4) argues that freedom is important to development both for evaluative reasons (that is, development should aim to enhance people's essential freedoms) and effectiveness reasons (that is, development is best achieved through free agency of people).

In addition, the needs and wants to be satisfied range from meeting basic material necessities such as food and shelter, through to non-material desires for emotional satisfaction or political participation.<sup>27</sup>

The traditional focus on improving living standards through economic growth still constitutes a substantial portion of the expanded consumption possibilities dimension.<sup>28</sup> This means that effective policy advice and design still requires the application of the tools of economic analysis, but with a wider appreciation of the world in which we live. This incorporates, but is not restricted to, considerations of economic efficiency, through the rank-ordering of consumption possibility outcomes according to the Pareto condition.<sup>29</sup>

It is also important to consider explicitly the path of consumption possibilities over time. Solow (1992) defines the duty of sustainability to be 'to endow [the next generation] with whatever it takes to achieve a standard of living at least as good as our own and to look after their next generation similarly'.<sup>30</sup> Sen (2004) extends this to include 'sustaining people's freedom to have — or safeguard — what they value and to which they have reason to attach importance'.<sup>31</sup> Advice on policies to achieve sustainable development therefore needs to consider carefully incentives for consumption over time, and in particular, the impact of social, technological or environmental externalities that may not be adequately priced by the market.

# (iii) Distribution of consumption possibilities

The distribution dimension refers to the spread of all aspects of consumption possibilities across the population, including across different groups in society, across different geographic regions and across generations. In addition, it considers the distribution of the other aspects of the wellbeing framework (risk, complexity and

<sup>27</sup> As noted in the previous section, this broader definition represents a desire to incorporate broader determinants and constituents of utility. Sources for supplemental information for these broader considerations include, amongst others, ABS (2004) and UNDP (2001). The conceptual underpinning for incorporating broader considerations is discussed in Lancaster (1966) and Sen (1999).

<sup>28</sup> As set out, for example, in Sen (1999).

<sup>29</sup> As set out, for example, in the discussion of the fundamental theorems of welfare economics in Varian (1992). A Pareto-optimal outcome is one in which it is impossible to make some individuals better off without making others worse off. Note that different initial allocations are likely to lead to different Pareto-optimal outcomes. The relative social value of these outcomes can only be judged by applying the weightings of a specific social welfare function.

<sup>30</sup> Solow (1992), p. 15.

<sup>31</sup> That is, Sen (2004, pp. 10-11) argues that 'there can be a loss of freedoms (and of corresponding human rights) even when there is no diminution in the overall standard of living', for example, extinction of species denies future generations the opportunity to appreciate their existence.

opportunity and freedom), which may or may not be considered to be explicitly part of consumption possibilities in themselves.<sup>32</sup>

Welfare economics has historically been characterised as only being prepared to provide definitive advice regarding efficiency, and not being prepared to address equity. This is because distribution has been seen as a matter of direct political choice, and hence not a matter for conventional economic analysis.<sup>33</sup>

In fact, distribution issues are fundamentally interrelated with other economic considerations, and hence economic tools can provide important insights in this dimension as well.<sup>34</sup> For example, this analysis underpins the crucial distributional criteria of horizontal and vertical equity. Horizontal equity calls for individuals in similar positions (often defined through income or consumption) to be treated in a consistently similar manner, while vertical equity calls for individuals in different positions to be treated in a consistently different manner.<sup>35</sup>

Economic policy analysis is also critical in assessing the intergenerational equity issues embodied in the impact of an ageing population on fiscal and economic sustainability. As noted in *Australia's Demographic Challenges*, 'many of the benefits enjoyed by Australians today are the outcomes of sacrifices and investments of earlier generations. So too the prosperity of future generations depends on the decisions we make today'.<sup>36</sup>

Behavioural economics has also furnished some important insights for the distribution dimension. These include an increased awareness of the higher value of an extra dollar to a poor person versus a rich person, the greater value attached to losses versus

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<sup>32</sup> Konow (2003) provides an excellent summary of the literature on theories of distribution, as they relate to economics. Frankfurt (1987) has also set out some interesting conceptual ground for thinking about economics and equality. He critiques the views, amongst others, of Dworkin (1985) and Nagel (1979).

<sup>33</sup> This view is set out, for example, by Varian (1992, p. 335), who states that 'a competitive market system will give efficient allocations but this says nothing about distribution. The choice of distribution of income is the same as the choice of a reallocation of endowments ...'

<sup>34</sup> In addition, as discussed in a later section, the distribution dimension has particularly strong interactions with the other dimensions of the framework, reinforcing its central role in economic policy analysis and advice. Hence, for example, the social exclusion of the poor may be amongst the most important factors in their disconnection from the workforce, which has important GDP implications. On the other hand, redistribution has important incentive effects on the production of goods and services, and may create perverse incentives under some circumstances.

<sup>35</sup> For example, horizontal equity suggests that people on a similar income should pay a similar amount of tax, while vertical equity suggests that the tax burden should be borne more heavily by those with a stronger capacity to pay. See Zajac (1995) for a broader discussion of these issues.

<sup>36</sup> Australian Government (2004), p. 2.

gains, and the higher importance attached to relative position in income distributions as against absolute income.<sup>37</sup> These insights have important implications for policy design and implementation.<sup>38</sup>

## (iv) Level of risk that people are required to bear

Risk refers to the intrinsic uncertainty in possible outcomes that is present in almost all decisions. In this broadest conceptual sense, risk impacts on all individuals, and is everywhere in the economy and in society.<sup>39</sup>

People have different preferences regarding risk, depending on factors such as their relative financial security, their aspirations for the future, or their desire for risk as a good in its own right. All else being equal, it would be expected that wellbeing would be improved if there is a better match between people's risk preferences and the risk borne.<sup>40</sup>

The conventional analysis, which assumes that individuals have well-ordered risk preferences, suggests that an optimal allocation in aggregate can be achieved by facilitating full risk-trading amongst complete markets. <sup>41</sup> This suggests that addressing risk market failures of information, contracts and externalities provides a potential agenda for future economic policy reform to improve wellbeing. <sup>42</sup> However, since risks and resources are inextricably linked, each potential intervention needs to be assessed in terms of its resource impacts as well as its risk impacts. <sup>43</sup>

Prospect theory suggests that actual behaviour often contradicts the crucial classical assumption of well-ordered risk preferences. Under these circumstances, facilitating risk trading may not be sufficient to improve the match between their preferences and

39 Bernstein (1996) is an excellent general reference on risk as an economic policy issue, including the central role of risk in the development of modern economic thought. The conceptual basis for this broad definition of risk is set out in Arrow (1951).

<sup>37</sup> See, for example, Kahneman et al. (1986) and Kahneman et al. (1999).

<sup>38</sup> Some policy implications are summarised in Konow (2003).

<sup>40</sup> Note that in conventional usage, discussion of risk often focuses on 'risk management', that is, decision-making processes and frameworks that enable an individual or organisation to better manage risks. As a dimension of the wellbeing framework, however, the focus is on the risks themselves, and their implications for public policy, rather than the management of these risks.

<sup>41</sup> The culmination of the classical analysis is the work of Arrow and Debreu (1954), who integrated the impact of risk on decision-making across the whole of the economy.

<sup>42</sup> Moss (2002) provides an excellent analysis of the role of government as the 'ultimate risk manager' through addressing risk market failures. Stiglitz (2002) has made some important contributions on the role of information risk market failures in particular. Shiller (2003) suggests some potential new useful markets for risk, although it is beyond the scope of this paper to provide an analysis of the practicalities of their application.

<sup>43</sup> As per the general equilibrium framework set out by Arrow and Debreu (1954).

the risk borne. Instead, policies may need to be designed specifically to address issues of context, paths and perceptions.<sup>44</sup>

## (v) Level of complexity that people are required to deal with

Complexity refers to the proliferation of the number of considerations, and the interconnections between those considerations, for many economic and broader social decisions.

Conventional analysis of complexity has focused on the economic impact of sets of rules, especially in the areas of government regulation and the tax system.<sup>45</sup> Increasing complexity usually brings benefits both through a better targeting of rules and through the provision of greater certainty. However, it may also impose significant costs through increasing resources devoted to verification and compliance.

A critical difference with some of the other dimensions is that opportunities to trade directly in exposure to complexity may be limited, especially with regard to complexity associated with dealing with the government.<sup>46</sup> This puts a stronger onus on designing policies which meet community preferences directly.<sup>47</sup>

More recent work on complexity has examined emergent properties of systems, which are properties of the system as a whole beyond the sum of the individual interactions.<sup>48</sup> These may arise, in particular, in complex adaptive systems, where the constituent parts are able to adapt their behaviour to changing circumstances. Analysis of such systems suggests that issues such as the dynamics of equilibrium formation and the potential for positive and negative system feedbacks can be crucial for policy design and implementation.

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<sup>44</sup> Tversky and Kahneman (1974) have famously set out a range of behavioural puzzles that contradict the assumptions of well-order risk preferences. Some policy implications are set out in Kahneman (2003).

<sup>45</sup> Krugman (1996) provides an interesting overall introduction to complexity as an economic policy issue. Prominent examples of the classical analysis are Kaplow (1992) and (1994), and Krueger and Duncan (1993).

<sup>46</sup> Instead, individuals may increasingly turn to brokers to manage complexity on their behalf.

<sup>47</sup> In particular, care must be taken when implementing policy reforms to take account of the potential for increased complexity over time (Krueger and Duncan, 1993).

Axelrod and Cohen (1999) provide an interesting overview of modern complexity analysis, including the application of the concept of complex adaptive systems. Some policy implications are suggested by Durlauf (1997) and Chapman (2002).

# Interaction between the dimensions

As noted previously, there are strong interactions between the dimensions for almost all public policy issues. These strong interactions between the dimensions represent trade-offs between aspects of individual or societal wellbeing.

A critical consideration remains that increasing economic growth over the long term, and hence increasing the level of consumption possibilities in a sustainable manner, is likely to increase the capacity of governments to improve other dimensions of wellbeing. However, pursuing improvements in one dimension to the exclusion of the others is likely to undermine public support for reform and may ultimately be counter-productive.

Table 1 provides some simplified examples of how such interactions can potentially occur across the whole matrix of dimensions.<sup>49</sup>

<sup>49</sup> Note that, in some cases, the nature of an interaction may change over time, so that an initial 'win/lose' trade-off may become a 'win/win' situation in the longer term. See, for example, the discussion of species extinction in Sen (2004).

Table 1: Interactions between the dimensions of Treasury's wellbeing framework

	affects this element of wellhoing							
		affects this element of wellbeing						
		Opportunity and freedom	Level of consumption possibilities	Distribution	Risk	Complexity		
Improving this element of wellbeing	Opportunity and freedom		Increasing the freedom of operation of markets may provide increased consumption possibilities. However, it may reduce the consumption possibilities of future generations, unless achieved in a sustainable manner.	Addressing deprivation of opportunities and freedom is both a goal and an instrument of alleviating poverty.	Increased capabilities allow better matching of risks to preferences. However, they may increase risks borne, due to the greater variability in individual outcomes compared with universal provision.	Increased capabilities may imply increased complexity, but are also likely to increase the capacity to deal with complexity.		
	Level of consumption possibilities	Addressing market failures may restrict individual freedoms in the short-term, but may increase substantive freedoms in the long-term.		Efficient markets may increase disparities in income. However, they may also increase absolute incomes for the least-well-off.	Efficient markets may expose individuals to increased risks. However, increased incomes may also increase capacity to bear risks.	More consumption possibilities may increase complexity. However, increased incomes may increase capacity to use brokers to manage complexity.		
	Distribution	Redistribution of resources can provide low income groups with substantive freedom to participate in the economy and society more generally.	Redistribution of resources may create disincentives for production. However, it may enable greater participation in the workforce among low-income groups.		Redistribution of resources will also redistribute risk. It may reduce the vulnerability to risk amongst lowincome groups, but may also weaken incentives for good risk management.	Mechanisms for redistribution, especially highly targeted programmes, can result in increased complexity.		

Table 1: Interactions between the dimensions of Treasury's wellbeing framework (continued)

maniework (continued)										
		affects this	element of wellb	eing						
		Opportunity and freedom	Level of consumption possibilities	Distribution	Risk	Complexity				
Improving this element of wellbeing	Risk	Risk trading enables greater choice with regard to risk borne, and provides opportunities for entrepreneurial activity.	Better matching of risk with preferences can lead to better resource allocation in the short-term, and can facilitate entrepreneurial activity in the longer-term.	Better matching of risk with preferences can reduce vulnerability of disadvantaged people in both risk and resource terms.		Risk trading requires more sophisticated instruments, and may increase complexity.				
	Complexity	Simplification may reduce the choice of instruments to match individual wellbeing preferences. However, assisting participation in society by disadvantaged groups increases their substantive freedoms.	Simplification can reduce economic costs with regard to compliance and verification. However, it may be at the expense of better targeting to individual circumstances.	Simplification, especially of government programmes, can be particularly beneficial for the participation of disadvantaged groups in the economy and society more broadly.	Simplification may require fewer instruments for risk-trading, and hence reduce matching of risk preferences. However, simplification of regulation may also reduce the costs of beneficial risk trading.					

# Public policy implications

Treasury's role as a central policy agency means that it has an interest in all key policy areas and frameworks integral to the functioning of the economy and wellbeing of Australians. This covers the full range of the Government's responsibilities, ranging from traditional economic issues such as macroeconomic management, fiscal and tax policy, and advice on sound markets, through to broader issues such as social and environmental policy, international engagement and capacity-building, and direct delivery of certain programmes. The wellbeing framework is designed to ensure that Treasury brings a consistent and robust understanding of wellbeing across the full range of this remit, based on (but not restricted to) the application of economic principles and tools.

The purpose of the framework is to provide guidance on the key issues Treasury officers should be thinking about in framing their policy advice to Government. It is not a 'checklist' to be applied in every circumstance, and its application differs across different areas reflecting their different responsibilities and tasks. Nevertheless, it serves an important unifying function for the Department's policy analysis and advice, through providing a broader intellectual context for our work.

The framework reinforces Treasury's strongly-held conviction, inherited from the intellectual tradition of economics, that *trade-offs matter deeply*. Most policy reforms will involve trade-offs within or between dimensions of wellbeing. As noted in the previous section, such trade-offs can be complex and multidimensional. Decisions regarding policies involving such trade-offs ultimately require judgments to be made about valuing different aspects of social welfare, which can only be done through the political process.

The ultimate value of the wellbeing framework is that it improves the quality of Treasury's policy advice to Government, through helping to identify the important trade-offs for wellbeing, and providing a consistent basis for understanding their impact. Treasury considers that helping to understand wellbeing is an important part of our contribution to improving wellbeing, and that this contribution can potentially impact on each of the dimensions of our own wellbeing framework.

The initial process of developing the framework has been important in itself, since it has required Treasury to think carefully about what people value in wellbeing, and how this relates to policy analysis and advice. However, the framework will also be an important iterative learning process for the Department, as application of the framework will require ongoing examination of each of these dimensions in detail, and provide opportunities to consider potential future improvements to the dimensions and the framework as a whole.

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