362 AMQ International's

STRATEGIC ASSET MANAGEMENT

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Intergenerational Equity & the role of the asset manager

The role of the asset manager is changing.

Once we may have seen the role of the asset manager as 'maintaining functionality at acceptable levels of risk' - a purely technical role.

Today, however, with the realisation that the purpose of assets - and by extension asset management - is to 'provide a service', the role of the asset manager is different. That purely technical role has been expanded. It is now a social + technical role.

This is true for all asset managers but it is particularly important for those responsible for what may be called 'soft services' or 'quality of life infrastructure', such as community housing, culture and heritage, community and recreation facilities, and health facilities,

In this issue we look at the question of fairness (intra- and inter-generational equity). What level of service provision is 'fair', and what distribution of costs, is 'fair'? The answer, as you may have guessed, is that there is no answer. These are not questions that can be answered by plugging data into a formula. Fortunately, as asset managers we don't have to *solve* the problem. However, it is essential that we are aware of it - and that we actively '*manage it*'. Hamilton City Council in Canada provides an excellent example of what is involved in managing fairness.

Enjoy!
Penny

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Editorial: Are you propping up an unsustainable system?

Before he retired, my husband was the Paymaster of Bridgestone International, the tyre company. The pay office staff worked many hours of unpaid overtime every day - and they all complained about it! 'If only the company would hire another person for the pay office, we could get back to normal hours working'. I told them that while they made the current situation work, the company had no incentive to change - if they wanted change to happen, they had to stop propping up the unworkable system. However, nobody did anything. Despite their complaints, I saw that they took a certain amount of pride in making the unworkable work.

Are you doing the same? Are you disguising the unworkable?

Consider the following comment by Alan M. Webber, co-founding editor of Fast Company Magazine and author of "Rules of Thumb, 52 Truths for Winning at Business without losing yourself."

> "Everyone is pursuing sustainability. But if change happens when the cost of the status quo is greater than the risk of change, we really need to focus on raising the costs of the unsustainable systems that represent the unsustainable status quo.
>
> Unsustainable failed educational systems, obesity-producing systems, energy systems, transportation systems, health care systems. Each and every one is unsustainable. It's more 'innovative' to talk about bright, shiny, new sustainable systems, but before we can even work on the right side of the change equation, we need to drive up the costs of the unsustainable systems that represent the dead weight of the past.
>
> The road to sustainability goes through a clear eyed look at unsustainability."

I am not convinced that driving up the costs of unsustainability must happen ***before*** we can start to work on the right side of the equation. We all have an inbuilt inertia which leads us to stick with something until we have something better to put in its place. So it is important that we have something to move onto. Moreover the costs of unsustainability are rising all the time, all by themselves: we don't have to drive them up, it is happening anyway. (Maybe Webber would like it to happen a little faster?)

What we do need to do is to stop propping up unsustainable systems.

What props up unsustainable systems?

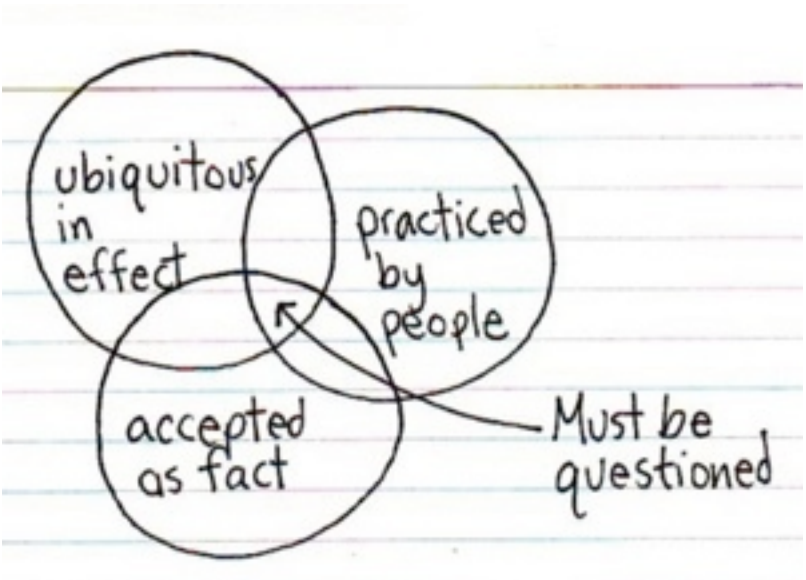
Here are some props, what are others?

- When the Board/Elected Members/Minister doesn't want to accept that asset lives and depreciation are what they are - do you agree to change the figures? (Do you even take pride in your 'creative accounting?)
- When you are putting in a bid for a new capital asset, do you make the proposed ongoing operations and maintenance costs less than you know they will be - to make sure that your bid makes the budget cut? Or, when pressure is put on you to submit more 'realistic' (ie. lower figures), do you agree?
- Do your benefit cost figures exaggerate the benefits and diminish the costs? Optimism bias results in serious cost over-runs - and, worse, in projects going ahead that should not go ahead. See SAM 360 on Optimism Bias, What are you doing to counteract Optimism Bias? Is it enough?
- When including external benefits - do you give as much attention to the external *costs*?

In what other ways, are we propping up unworkable systems?

GREAT GRAPHICS 3.

Most graphics are, what I call, 'presentational' graphics - they are designed to present information, but Jessica Hagy's graphics are 'thinking' graphics. You can find a large collection of her insightful graphics at her blog "Indexed".



Leo Gohier on Fairness and the Asset Manager

Leo Gohier developed this work with his team while with the Hamilton City Council and he presented it to the IPWEA national conference in Melbourne in 2011. These are the big 'take away' points from that presentation. But I would urge all readers who have responsibility for community assets to read the updated version of Leo's presentation that forms Chapter 14 in the ***International Case Studies in Asset Management*** edited by Chris Lloyd and published by Thomas Telford, London, in 2012.

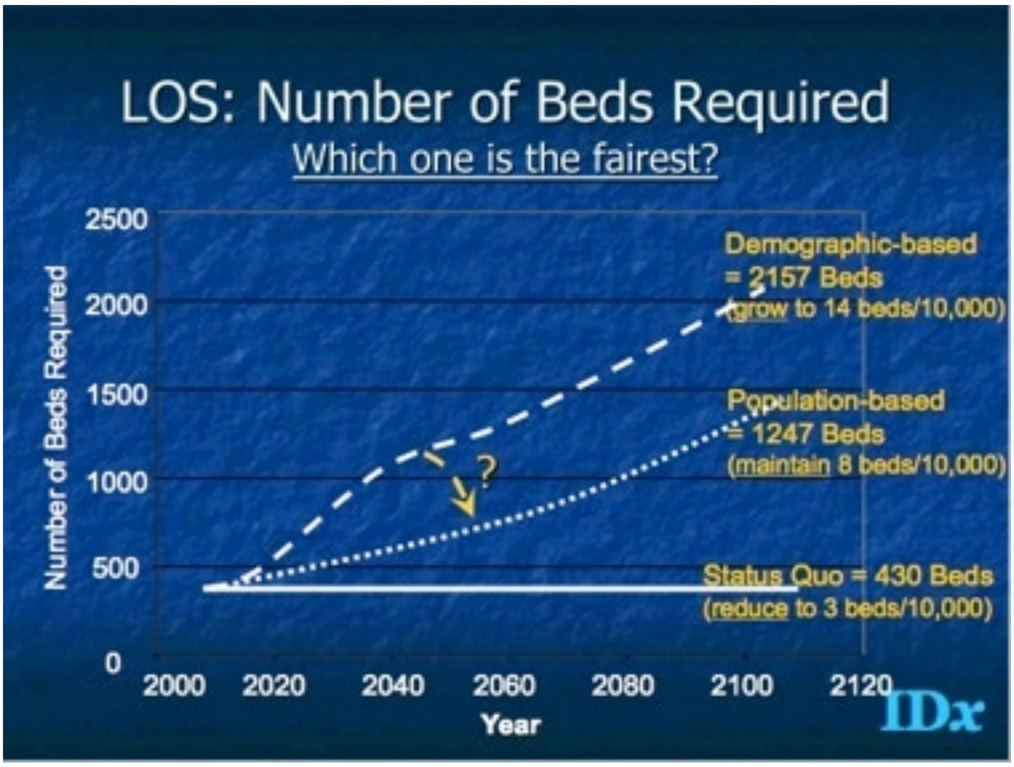
Long-term care facility beds

Point 1: Maintaining the 'status quo' as far as *assets* are concerned will NOT maintain the 'status quo' in *service delivery.*

Hamilton City Council maintains two long-term care facilities with 430 beds. At present that equates to a service level of 8 beds per 10,000 of the population. Population in the council area is rising at about 1.07% per annum. Thus maintaining the same number beds would result in reducing the level of service. (the bottom line in the graph below)

To maintain the *same level of beds per 10,000 population* would require the number of beds also to rise at about 1.07% per annum. (the middle line in the graph)

However, those over 75 and the ones most in need of long term care, are growing far more quickly than the general population increase. Thus, to maintain the same level of service to the group that needs it, would require a similarly faster rate of growth of beds. (the top line in the graph)



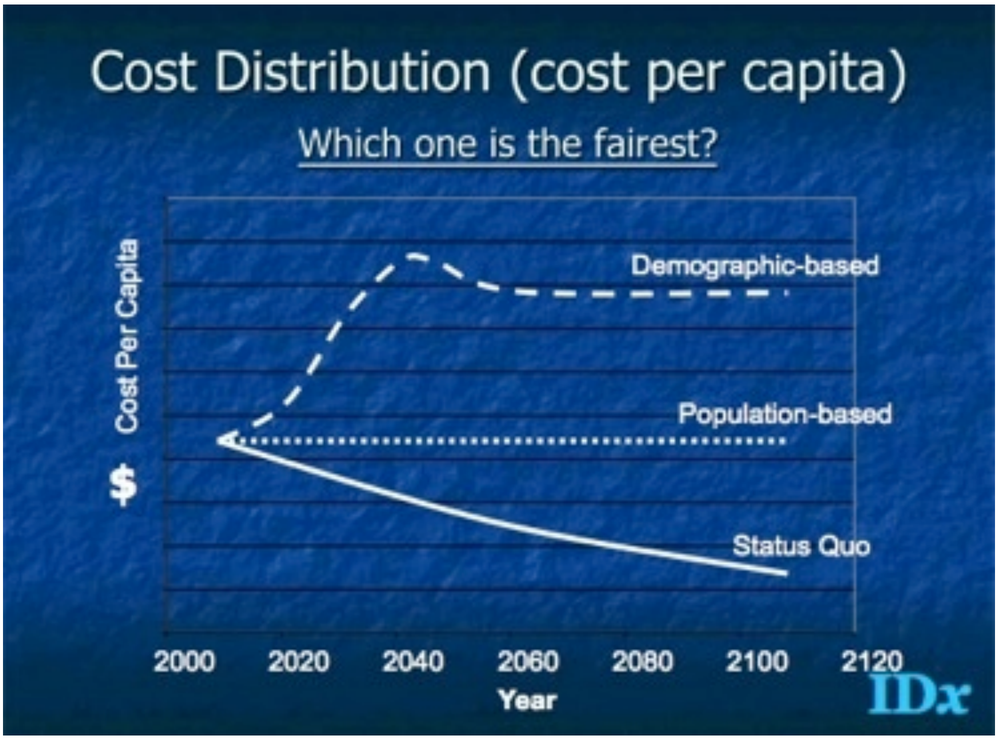
Point 2: 'Fairness' is a 2-way street: we must consider fairness to receivers - and to those who pay the costs!

In the graph below, we can see that maintaining the existing level of beds (the status quo option) results in reduced costs per capita as the population grows (the bottom line).   Keeping the number of beds per 10,000 in line with general population growth maintains the cost per capita. (the middle line), however keeping the same level of accessibility for those in need requires a rapid rise in expenditure in the short term, flattening out in about 30 years.

Thus maintaining the level of service for those in need requires a sizeable commitment from the rest of the community, raising serious questions of sustainability.

(and perhaps suggesting the need for further research - for example, with the increasing health and longevity of the population, will the needs of 75 year olds for long term care be the same as it is now? What alternatives can we suggest?)

The Asset Management Role   Fortunately, it is not the responsibility of the asset manager to make the difficult decision of what service level to choose. It is, however, the responsibility of the asset manager to research and make clear the options. Failure to do so, (such as simply accepting the status quo) is dereliction of duty.



Point 3: Fairness is a complex issue. So is the issue of who decides.

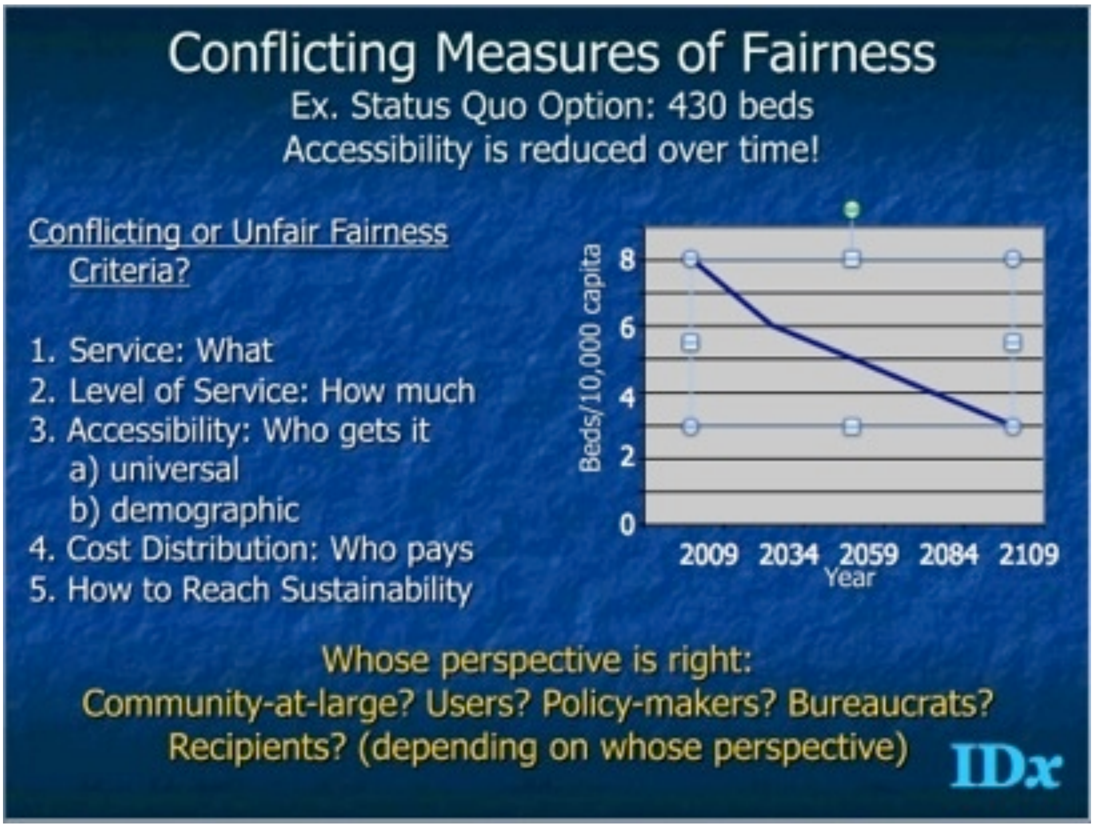
Who should make the decision on which service level to adopt? If we ask the community we omit many of those who will be the potential beneficiaries but who are now either too young to register a voice, or not yet born. Those who are potential beneficiaries within the next 20, 30 or 40 years, may also fail to take full account of their future needs. In any case, for most people, present needs outweigh future ones.

How much sacrifice should be made now for the sake of future benefits?

Point 4: Given the tendency of all decision makers to err on the side of the present over the future, it is essential that the options be presented with maximum credibility and clarity

- Maximum use of externally determined data, e.g. demographics, research studies
- Simple language,
- Avoid making value judgements in the presentation

Don't forget - more information is available in the **International Case Studies in Asset Management,** Telford, London, 2012, edited by Chris Lloyd. Make sure you get your copy!



The Future of Asset Management - Feedback on the first 4 scenarios

I uploaded the first four scenarios (AM in a world dominate by regulation; AM as toolbox or a technology) on my History Project Forum on LinkedIn. Here are some of the interesting comments that have been posted. LinkedIn forum members have not yet had the opportunity to see the last two scenarios that we published in SAM in the last issue, but already they are anticipating what may come next.

How can we use scenarios such as these?

1. **To decide what we would prefer or dislike.** We can look at them to see what we like and what we don't like and then work to get more of the one and less of the other. *See comments 1 and 2.*

2. **To see where we are likely headed.** We can use them to evaluate where our current trends are leading - they are likely to be different in different places, in different industries, (and at different times). *See Comment 3*

3. **To develop other scenarios.** We can treat them as the bare bones of a scenario and add elements that we think are missing but would be appropriate, given the drivers considered. Where we consider that other drivers need to be considered, we can develop new and different scenarios. For example, one commentator noted that the scenarios were developed from the perspective of developed nations. *See Comment 4*. This is true and deliberate. New scenarios could be developed that would apply to developing nations. These, however, are likely to be more varied in their institutions so that it may be helpful to develop a set of scenarios for a specific country.

On Regulation (Scenarios 1 & 2):

Pro:

1. "I am of the belief that appropriate, informed regulation assists the progression / improvement of AM better than any other approach. ...It is not that good AM is not being done elsewhere it is just that only a small percentage of like organisations do it (15%) as opposed to the large majority (95%) where regulation is practiced."

Con:

2. "Take into account that regulators are 'one-eyed': they are required to focus on only one aspect of the ISO50001 cost, risk, performance balance ... also consider the scenario where regulators are required to adopt laws that of themselves, do not link to any accepted artefact of documented human knowledge! That is they exist outside the human experience!" (*Ed: On this latter point, my mind turns to the work of Auditors and their requirement to obey the rules of "GAAP - Generally accepted accounting principles" even where those principles demonstrably do not suit the asset management task at hand*.)

General:

3. One commentator made the excellent point that both of these scenarios requires professional operations (Scenario 1 more so) and asks "What is the role of ordinary workers, without a university education, in these scenarios? How do they apply to small councils or countries whose few staff do the specialist roles of dozens in larger entities?" (*Ed: This is a good point, for it illustrates that not all of the scenarios are equally applicable. The future of asset management will be different across industries and across countries.*)

4. Who monitors the regulators? *(Ed: Indeed! Whereas some regulators are very well versed in asset management, a surprising number of them are not!)*

On AM as a technology or tool box (Scenarios 3 and 4)

Not surprisingly, since many forum members are technical people, these scenarios found considerable favour. *See comment 5.* There was support for a common language (this is also being found in the development of data itself - cf the BIM, Building Information Modelling, work that we addressed in the last issue.) *See comment 6.*

5. "As a "technocratic" individual, I must say that the notion of toolbox rather appeals, but I can't discount influences of scenario 2. Governance and some kind of universally valid framework is important. ISO 550xxx alone? I think by nature the diversity we require in Asset Management may (for now) preclude it to be a subject all its own that can be taught say in University. Some of the elements of AM certainly require deep (specialised) knowledge and expertise. What I have gleaned from a few people is that AM in their considered view and observation is not a technology driven subject or field, it is people driven! An interesting observation from diverse cultures. While that may be so, can we neglect some of the processes, methodologies or technologies that will be required in the future of sustainably managing assets? How are people conditioned for and in AM?

6. "I believe that how language influences our thinking, AM technology will continue to either grow or restrict the application of infrastructure asset management practices. There is a demand for technology to help address the management of thousands of assets and their data, as well as the interconnectivity of the analysis for improved decision making. In the US and Canadian municipal and wet infrastructure markets it has been very interesting to see the continued advancement of applied business workflows, analytics and processing in a competitive AM software environment."

New Information

Several commentators suggested useful reports such as the recent McKinsey Report on urbanisation, infrastructure and productivity. http://www.mckinsey.com/insights/mgi/research/urbanization/infrastructure_productivity

and work towards standardised terminology http://www.mckinsey.com/insights/mgi/research/urbanization/infrastructure_productivity

Some Interesting Asset Classes.

If you are only interested in Operational AM, you can ignore this. However, if you are intrigued by the puzzles that impact Strategic AM, I think you will find the following idiosyncratic asset classes interesting.

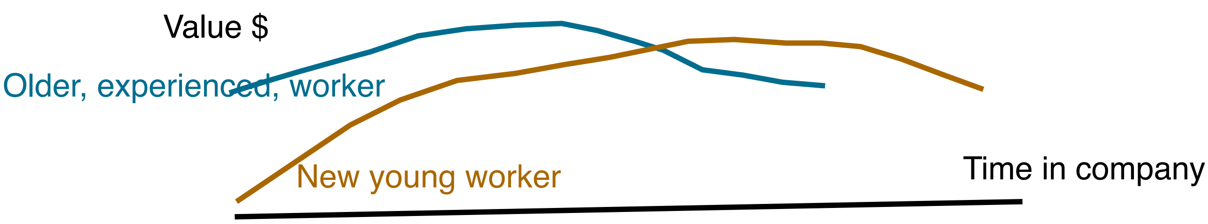
1. Appreciating or Depreciating Assets

We normally think of assets as depreciating (the majority of them) or appreciating (a few such as Persian carpets, forests or fine wine), but what about a major asset class that does both?

It has often been suggested that we should view people as assets. I have voiced objections to this in past issues. However, I am warming to the view that it is not unreasonable to regard 'employees' as a particular asset class.

If we do this, we need to consider the peculiarities of the way that the value of this asset changes over time. There is an early period of appreciation, followed by either a period of slower appreciation, stability or decline. A young person with much to learn would have an initial low valuation but would (if the organisation has chosen wisely, and treats him well) rapidly appreciate. A more experienced person in a new organisation would have a higher initial valuation representing his greater skills and experience. There would also be a period of appreciation as he gains knowledge of the new organisation. Proportionally one would not expect the rate of appreciation to be as great as for the youngster.

How long will the period of appreciation last? This would be variable, and a factor of (1) the quality of the individual employee (2) the investment that the company makes in the employee (training, etc) and (3) the scope that the company gives the employee to make a difference. It is this latter that probably is the greatest determinant of how long the period of appreciation lasts. After a while, when the new employee has gained as much as is possible from the organisation and the training provided, the value of his contribution is likely to level out. If the company ceases to maintain training, if it ceases to give the employee scope to excel, the greater likelihood is that his value to the company will start to decline. Even the most experienced workman will lose value if his experience is of the old ways of doing things and not the new. So what we have is the following inverse U curve.



While a new physical asset may experience settling in problems at the start, they generally do not affect the value of the asset. So this is a peculiarity particular to employees.

2. The second interesting asset class is the whole class of environmental assets - public parks, public access to rivers, scenic views, etc.

What sets this asset class apart is, again, the value to be placed on them. Economists distinguish two types of value, namely 'value-in-exchange' and 'value-in-use'. Value in exchange is the typical value used for goods which exchange ownership. If I buy, say, a generator from you then ownership passes to me. You have the money I paid for it, and I have the generator. We have exchanged at an agreed value. I am now the beneficiary of the services of the generator and you are not.

This is not the case for environmental assets. Consider a public park. Who benefits from the services of the park? All the users of that park! My use does not remove your use. Unless we get to a situation where there are so many users of the park that congestion reduces the value we gain as individuals, then the value of the services of the park are additive. The more people who use the park, the greater the value the community obtains.

This, however, is not the end of the story.

Consider the value that each individual places on the park. If there are a great number of parks and indeed a great deal of open land in general, then the value of the park to any individual may be quite low.

As urban density increases, however, and there is relatively less open land available. As more of the public land that the community used for recreation is sold off for development, then the growing scarcity of parkland results in each individual prizing the remaining parkland more highly.

OK. It should be clear that as populations grow, not only are there more individual valuations to add to get to the total community value, but that the resulting urban density will also mean that the individual valuations are higher.

In general, we can see that the total community valuation will be a factor of individual valuations (IV) and the number of individuals (N). Both are affected by population growth. Let us assume that the population growth is x% p.a. Let us further assume that the scarcity factor is pushing up individual valuations at the rate of y% p.a.

In other words, valuation = IV x N
The rate of growth of valuation = IV x N x (xy%)

What makes this such an interesting asset class is the following observation.

If the rate at which the population is growing multiplied by the rate at which scarcity is pushing up individual valuations (i.e xy%) is greater than the discount rate, **then the value of such assets is infinite!**

This is not impossible. Scarcity is likely to have an exponential effect on individual valuations and the population rate in certain areas could be considerably higher than the national average. As Governments act to diminish the discount rate to increase investment and job opportunities, the possibility of an infinite value for environmental assets (and indeed, by extension, any public good) increases. Interesting?