

Pricing Drinking Water for Conservation and Fiscal Stability

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6 Aug 2014

Overview

1. Why a water economist?
2. The evolution of water prices
3. Problems dealing with water scarcity
4. Reforming the system
5. Question & Answer

Download PDF at <http://tinyurl.com/awra-zetland1>

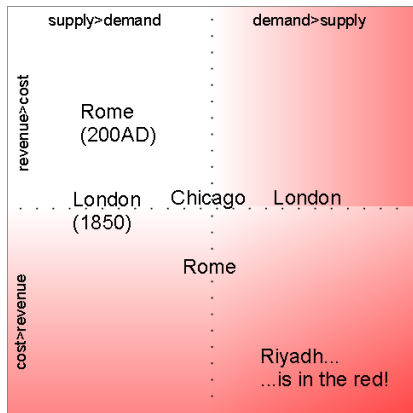
From Roman extravagance to the end of abundance

- ▶ The big challenge was infrastructure
- ▶ Cost recovery via taxes or standing charges
- ▶ Water scarcity meant charges were too low¹
- ▶ “Please use less” didn’t always work
- ▶ Conservation pricing (higher variable charges) as the solution?

Problem: Most conservation pricing creates a conflict between fiscal and environmental stability

¹Cost-recovery works when you include ALL costs

The evolution of water charges

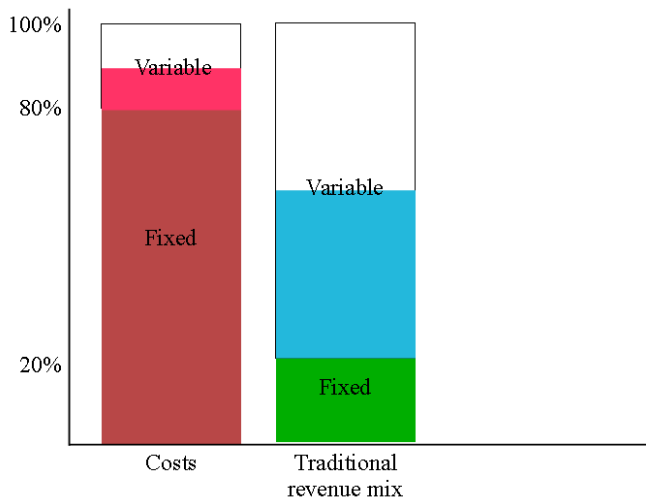


The changing mix of charges

1. Outside funding
2. Property tax funding
3. Capacity charge funding (i.e., pipe size or customer class)
4. Meters matching charges to costs, e.g., decreasing blocks²
5. Meters aiming for conservation (overweight variable charges)

²Decreasing blocks are NOT a problem with abundant water

Unstable variable charges



See <http://www.aguanomics.com/2014/07/pricing-tap-water-for-efficiency-and.html>

A few side comments on increasing block rates

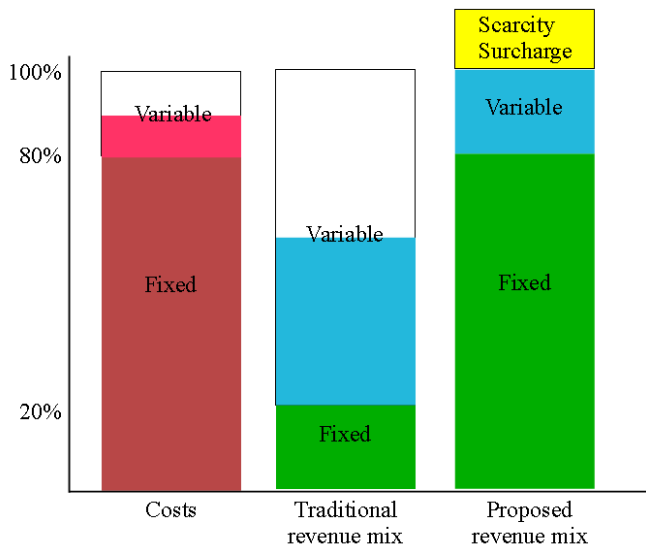
IBRs are popular with economists (marginal cost), consultants (fat fees) and politicians (micro-management), but. . .

- ▶ IBRs are unpredictable for utilities and confusing for customers
- ▶ They are only fair when based on headcount
- ▶ Relative to meters (20% drop) and higher prices (elasticity), they do not reduce use³

NB: The utility deals with aggregates. Customers only see the bill for their use.

³<http://www.aguanomics.com/2014/07/another-blow-against-ibrs.html>

Fiscal stability



Have we seen these ideas in action?

How to deal with fixed charges

Vegas blows it:⁴

<http://www.aguanomics.com/2009/03/vegas-hits-wall.html>

Davis does it right:

<http://www.aguanomics.com/2014/03/davis-tariffs-stabilize-finances-and.html>

⁴Vegas surreal: <http://www.aguanomics.com/2012/02/anyone-listening-in-las-vegas.html>

How to deal with variable charges

Los Angeles blows it:

<http://www.zocalopublicsquare.org/2014/03/14/>

[if-clean-water-is-a-right-why-have-we-been-so-wrong/ideas/up-for-discussion/](http://www.zocalopublicsquare.org/2014/03/14/if-clean-water-is-a-right-why-have-we-been-so-wrong/ideas/up-for-discussion/)

Santa Cruz does it right:

<http://www.aguanomics.com/2014/08/santa-cruz-sets-prices-right-way.html>

In conclusion

- ▶ The community decides what system it wants (regulations matter too)
- ▶ The resulting costs can be shared in many ways
- ▶ “User pays” means fixed charges for burden and variable charges for use
- ▶ Add a scarcity surcharge when water is scarce

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Now let's do the Q&A!