

Sharing the Competition

Professor Joshua Gans, University of Toronto and Brattle Group
“The Pros and Cons of the Sharing Economy”
Swedish Competition Authority, November 2016

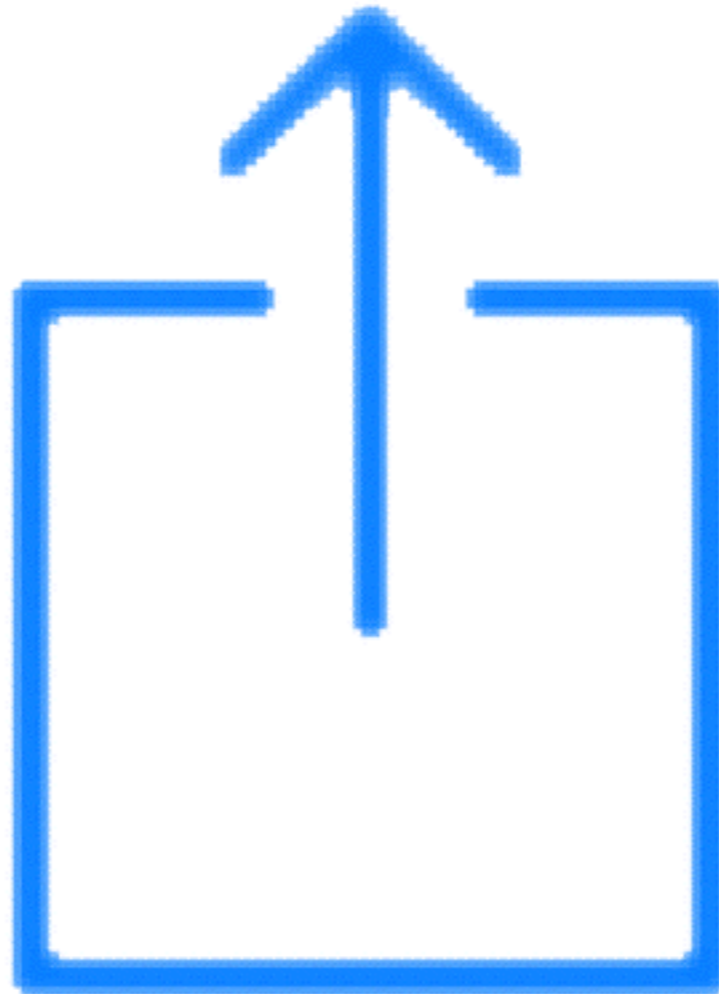
Outline

1. Simple Economics of Sharing
2. Asset Acquisition
3. Compare with 3rd Party Ownership
4. Four canaries
5. Regulation + Disruption

Definition: *The sharing economy is a market where a **physical asset** is both consumed by its owner and others.*



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What sort of owner shares?

Someone who owns

Someone who does not fully use

High value: N consumers with value, V , per use

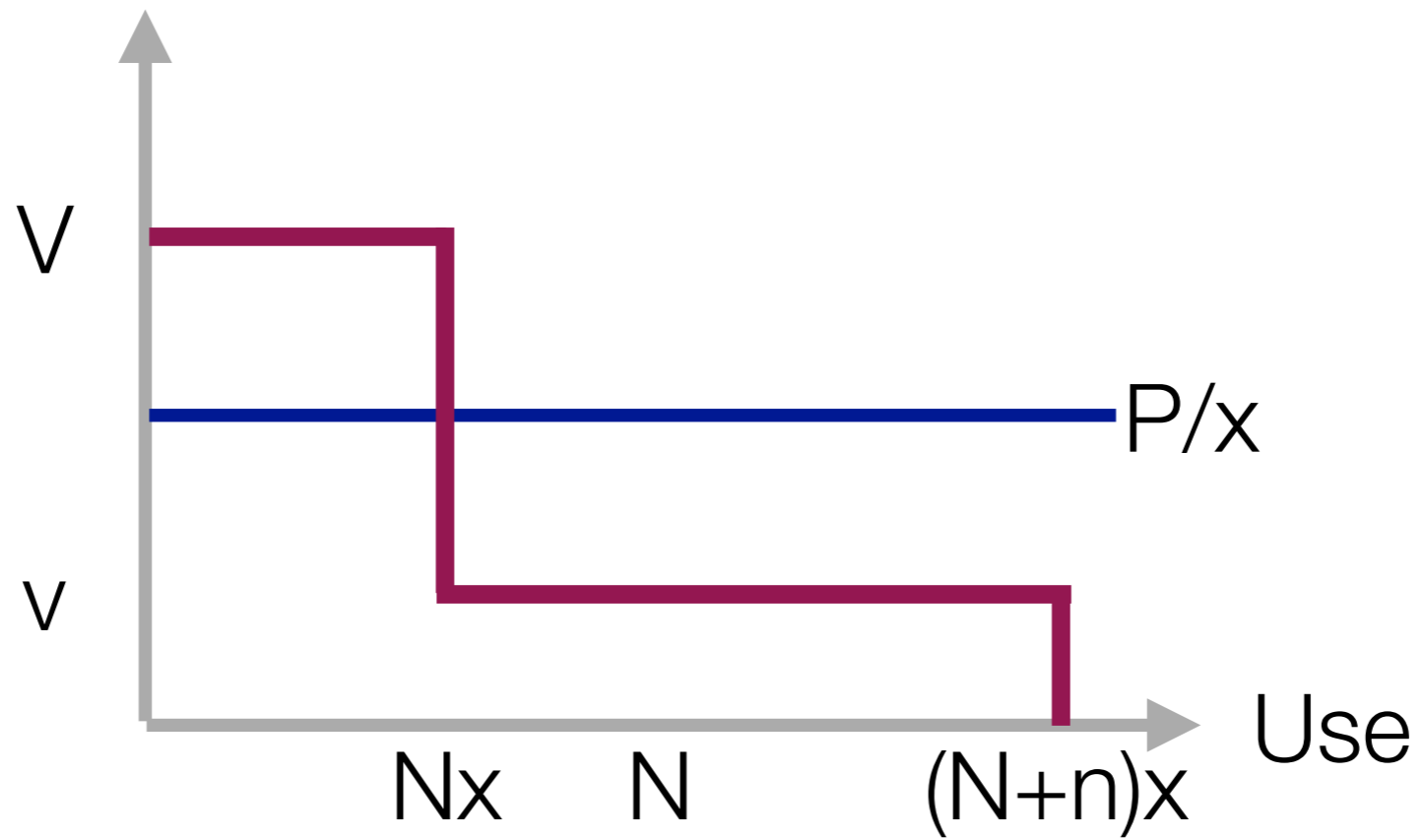
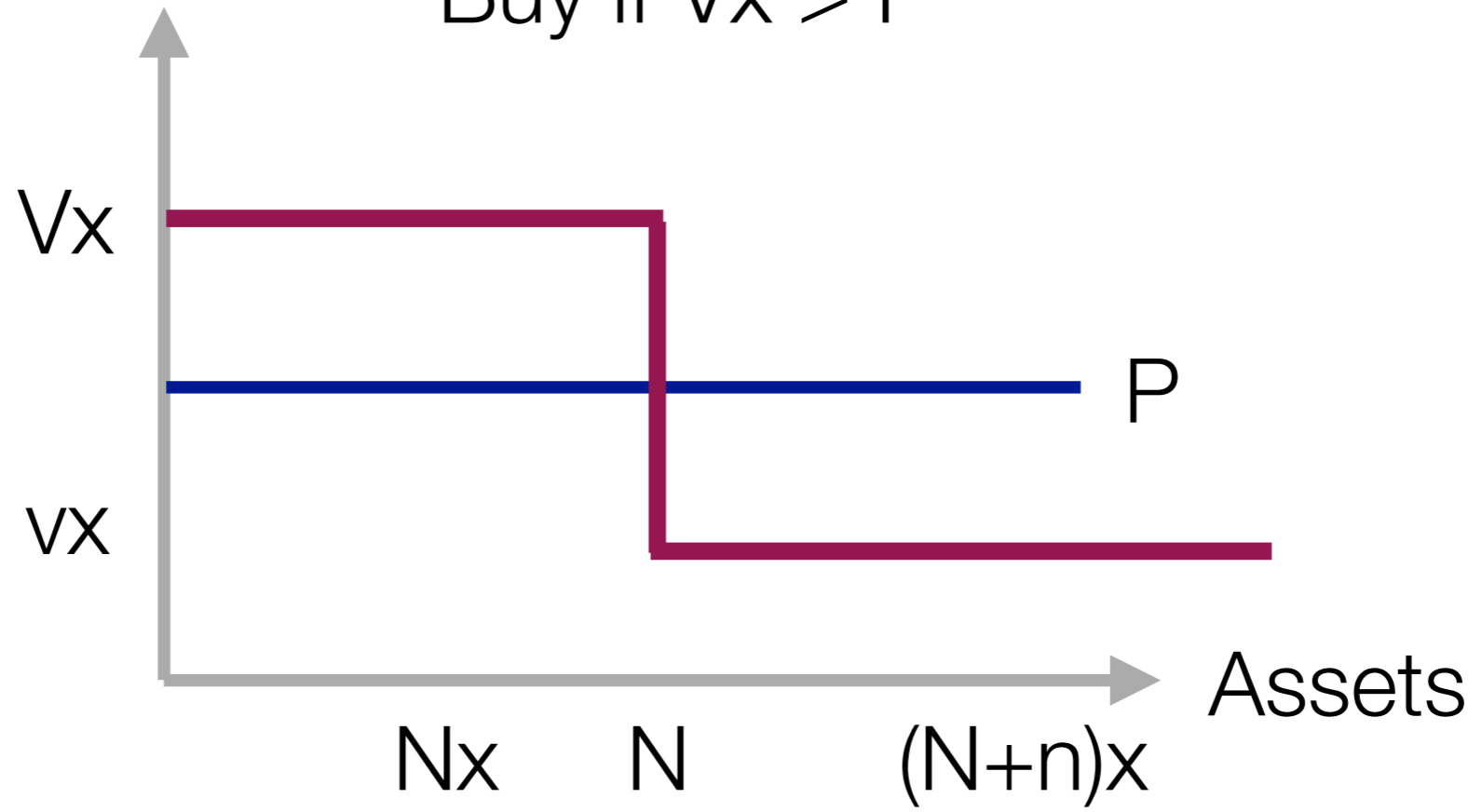
Low value: n consumers with value, v , per use

Buy if $Vx > P$

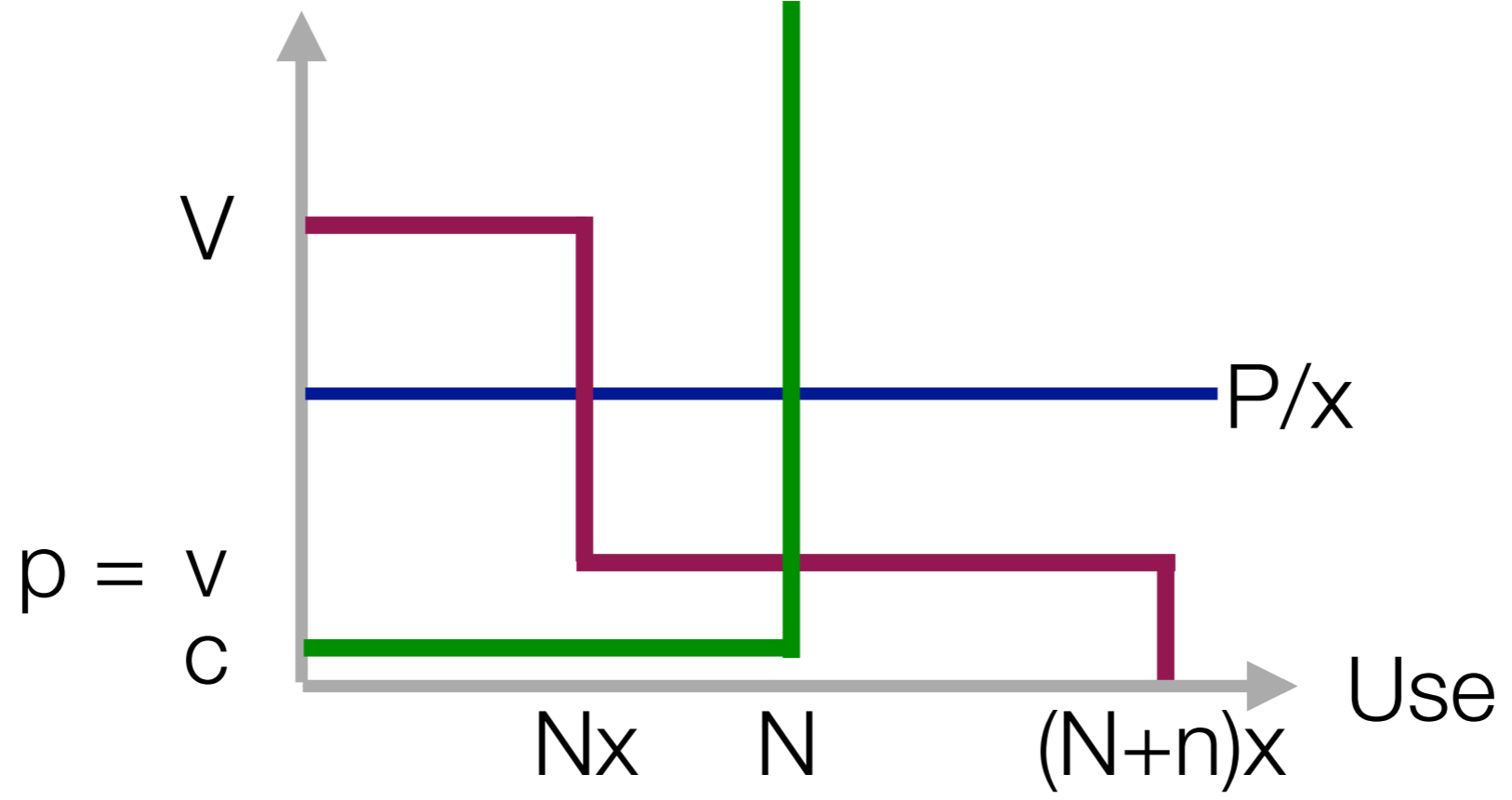
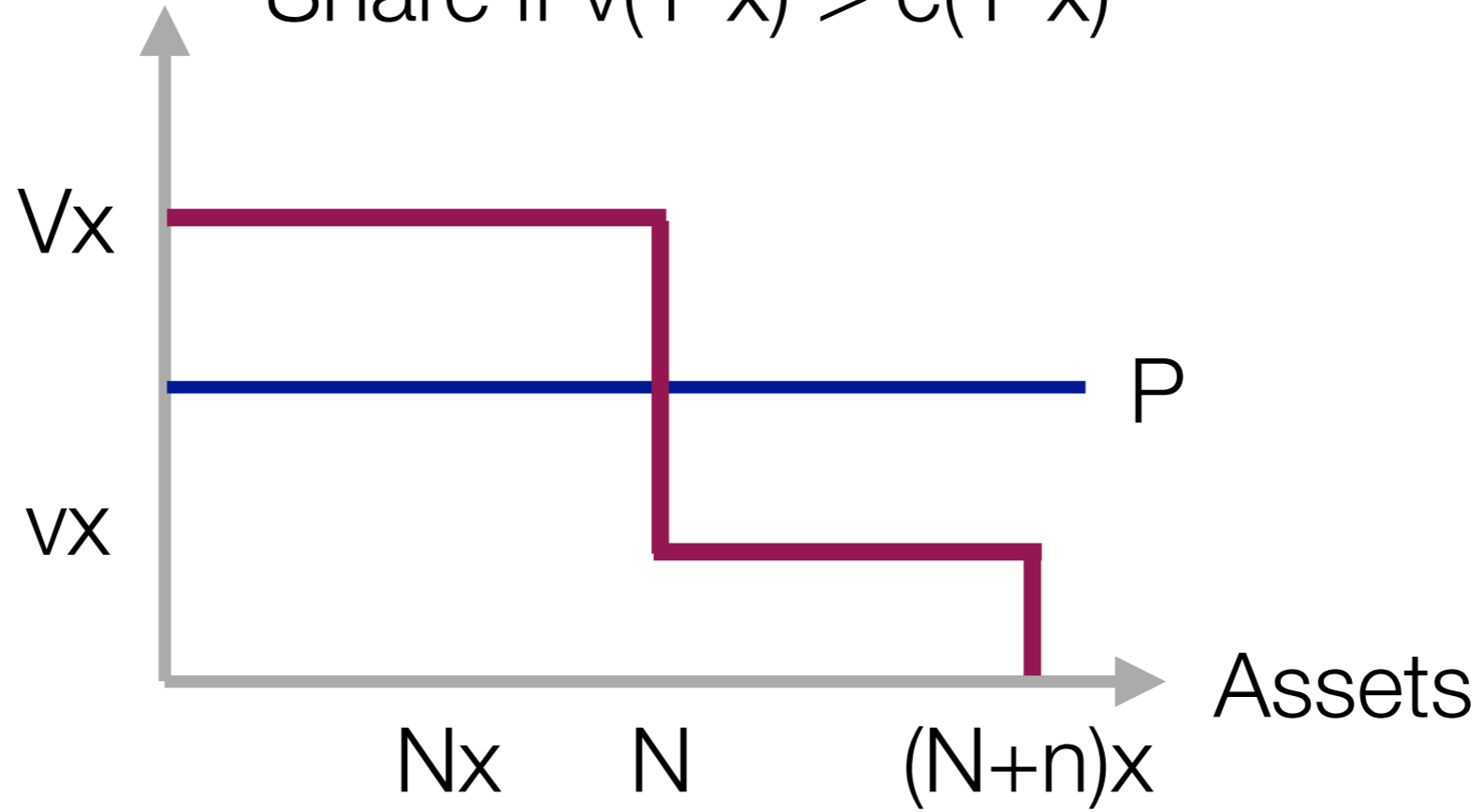
Share if $v(1-x) > c(1-x)$

Sharing price, p , between c (n low) and v (n high).

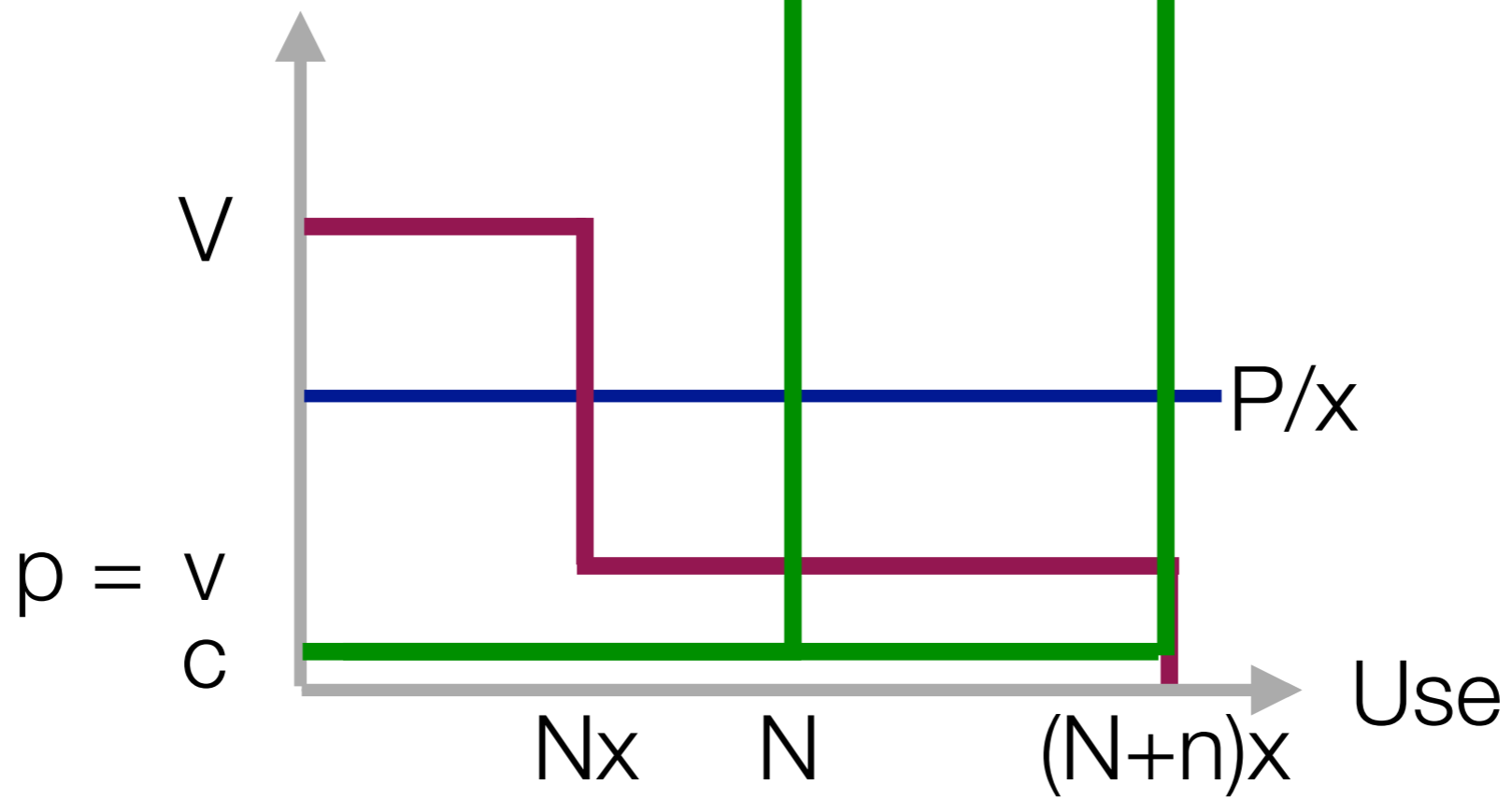
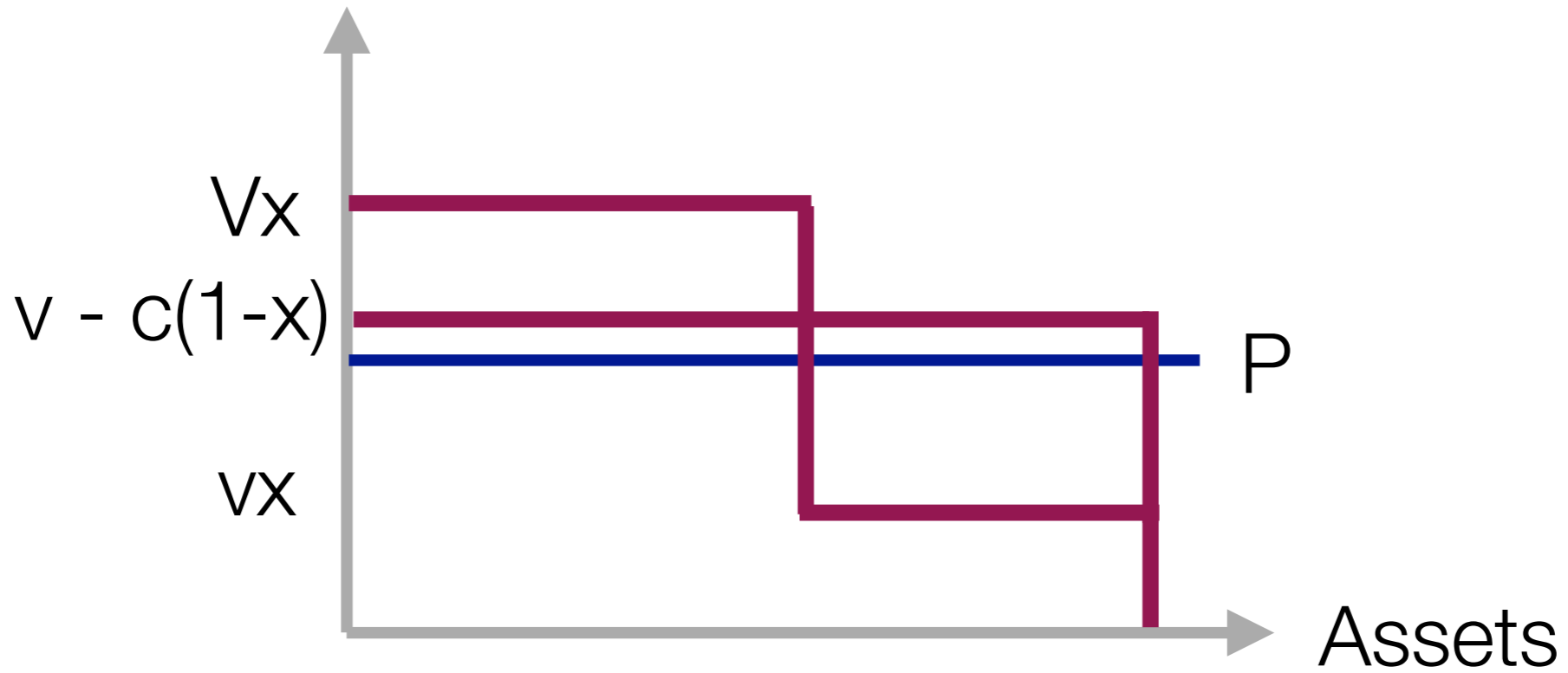
Buy if $Vx > P$



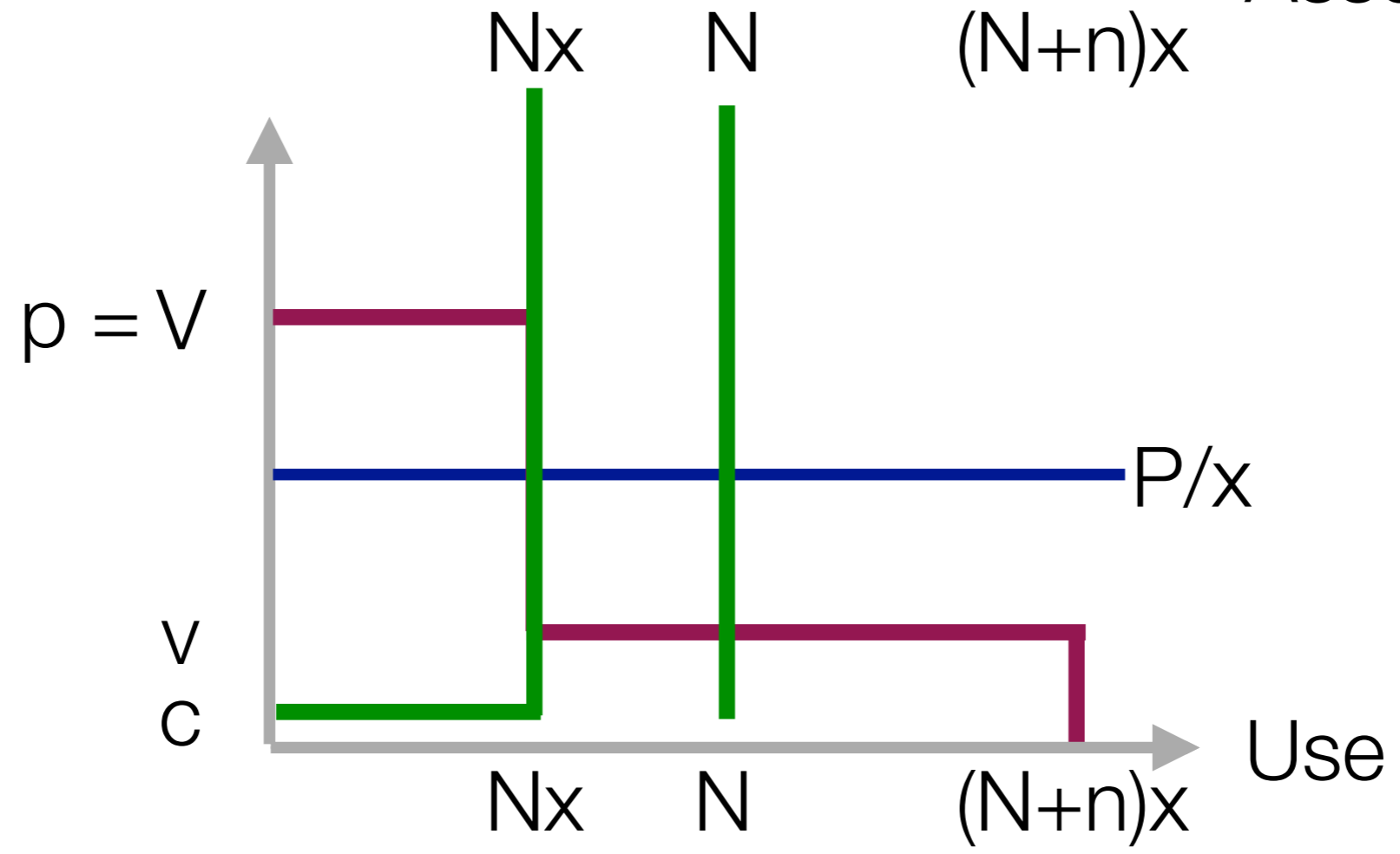
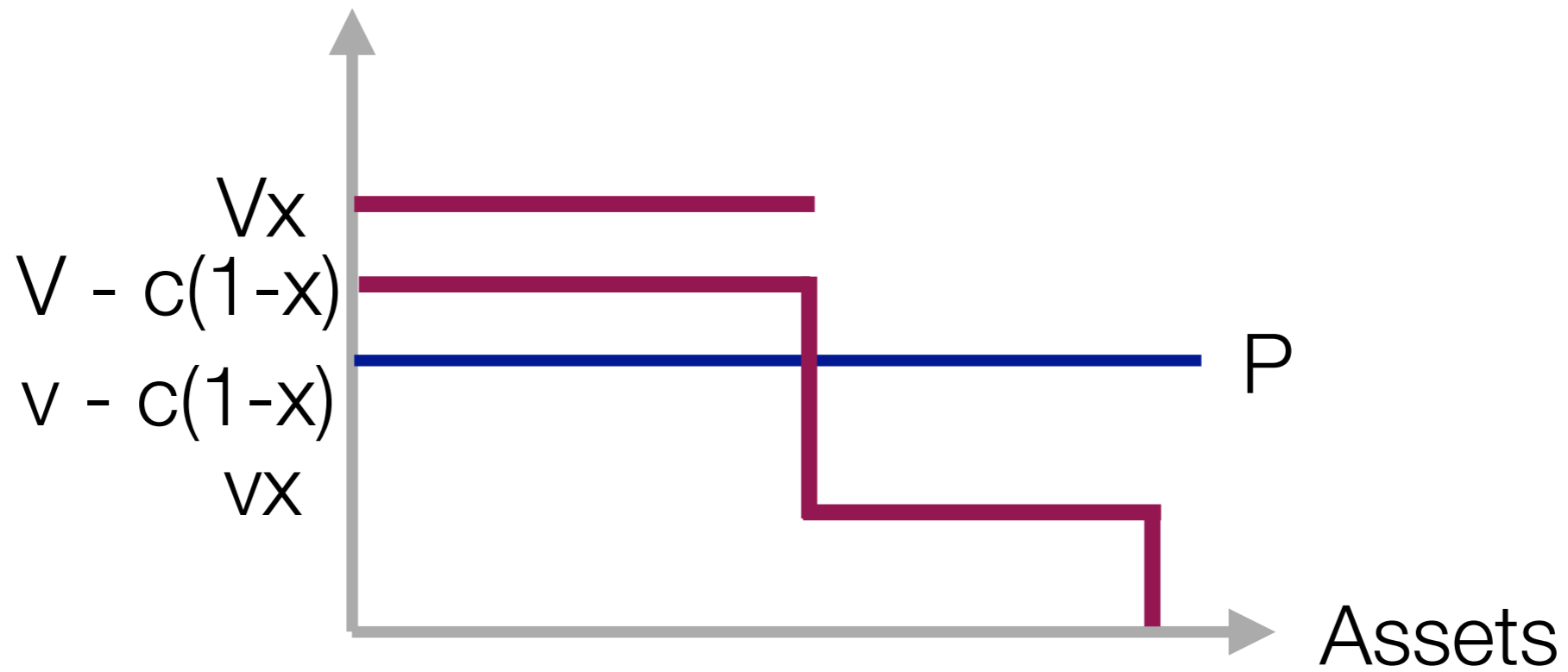
Share if $v(1-x) > c(1-x)$



$$\text{Buy if } Vx + (v-c)(1-x) - P > (V-v)x$$



Buy if $Vx + (V-c)(1-x) - P > 0$



Asset Acquisition

Will buy assets so that fully utilized ($p = v$)

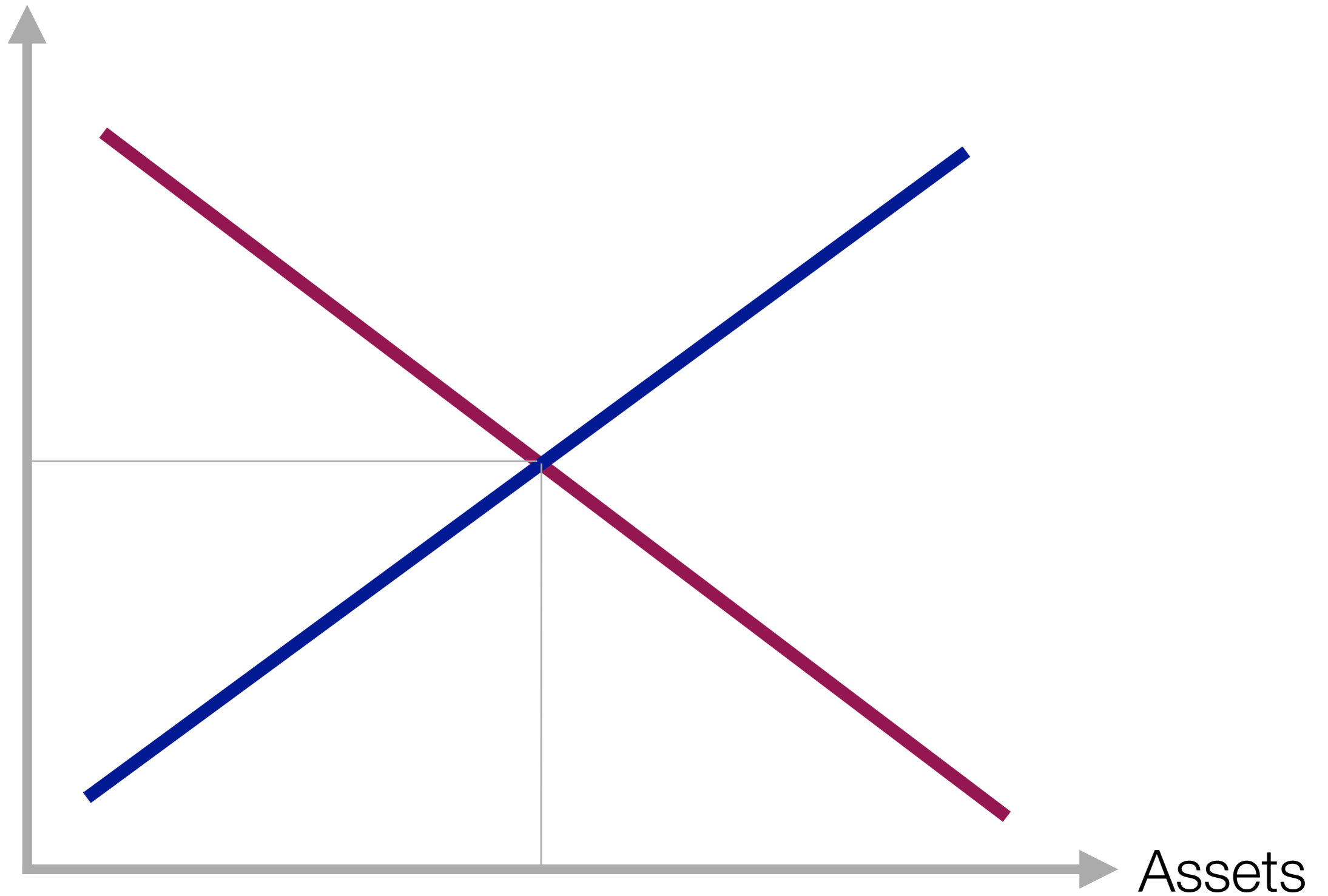
Return to ownership: $v - (1-x)c - P$

(Independent of type of consumer-owner!)

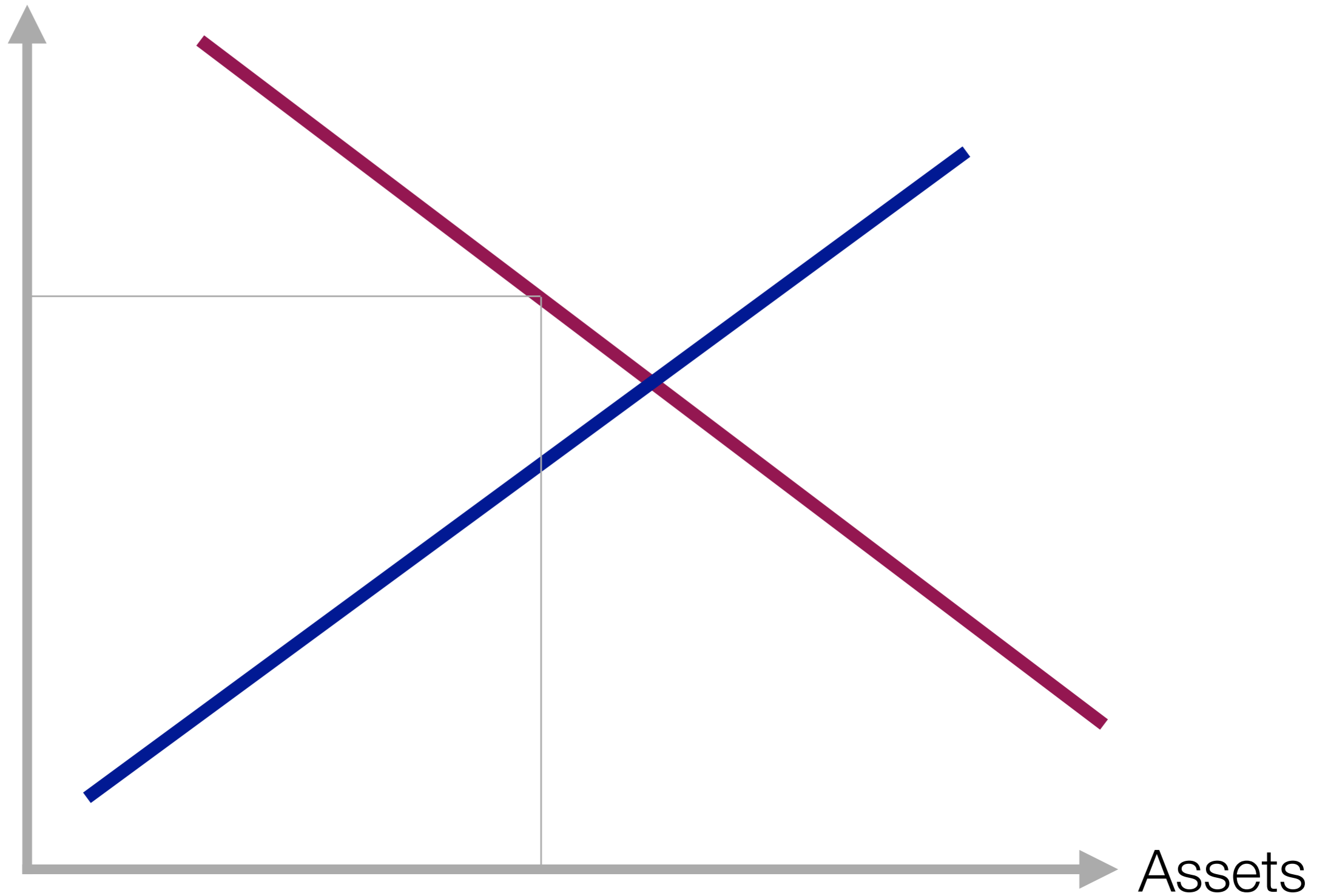
If asset costs are low and under-utilization high, ownership will be dispersed and asset ownership will increase.

If supply is costly so that low values not served, only high types will own and consume so asset ownership will fall.

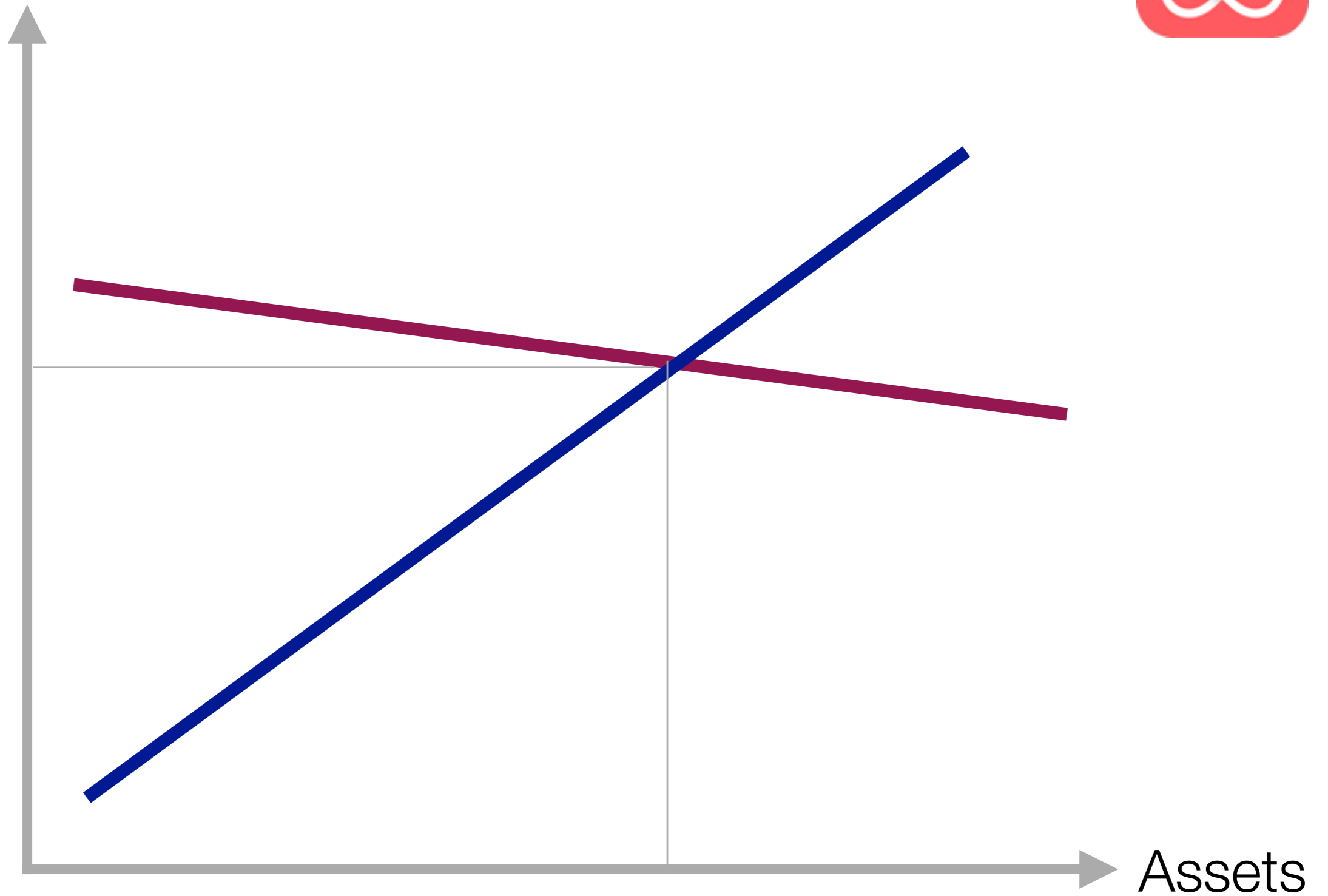
Short-Term Equilibrium



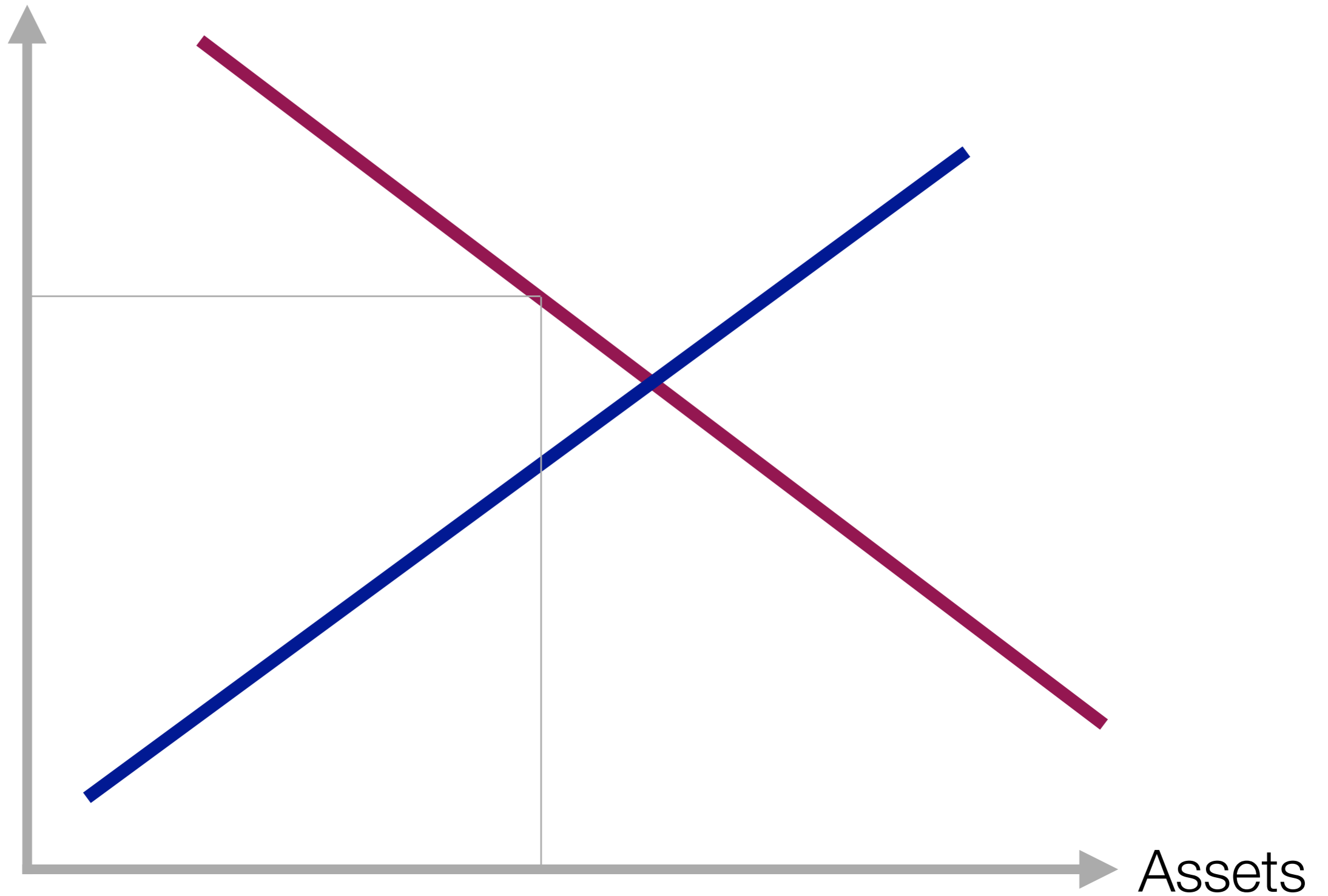
Short-Term Equilibrium



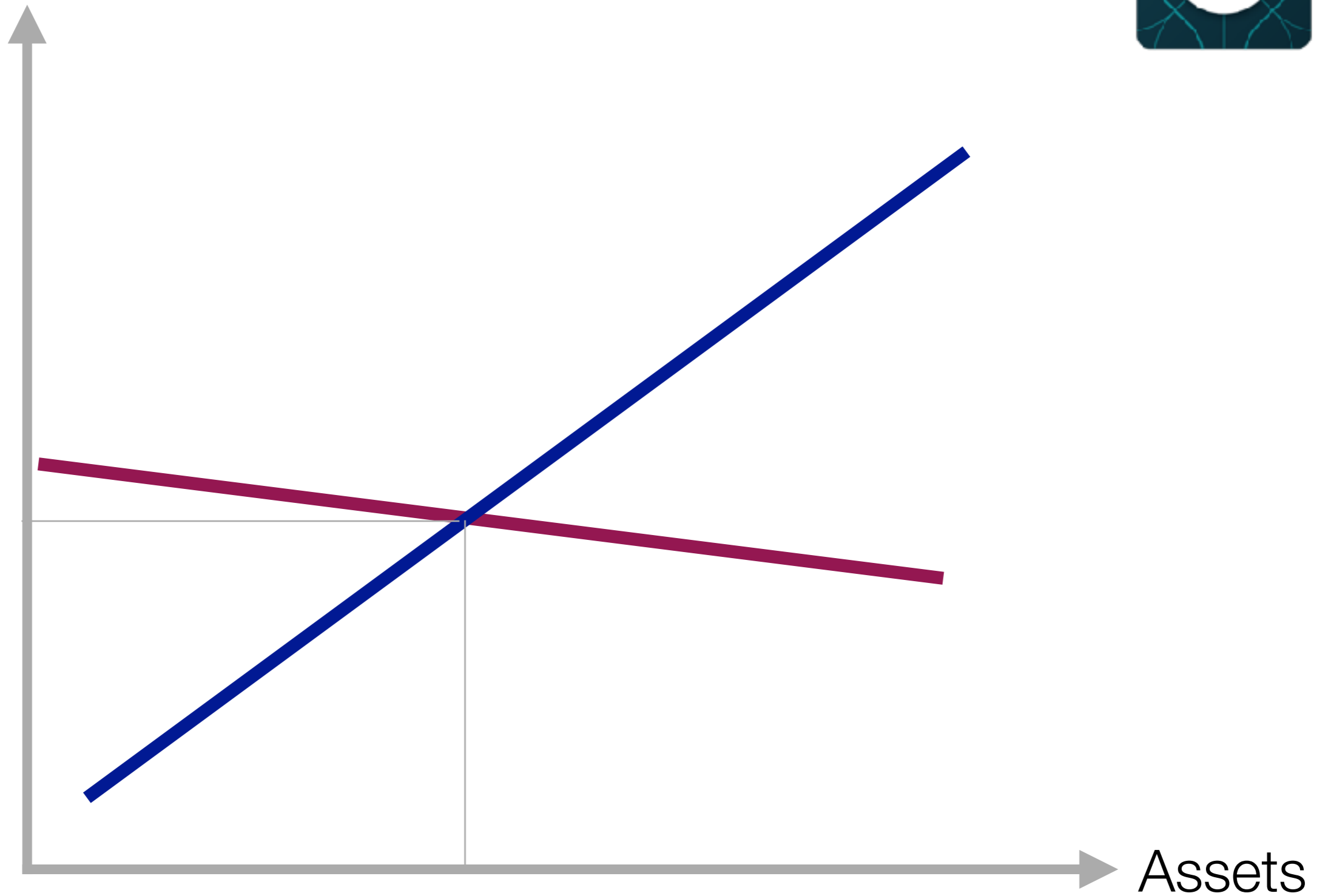
Long-Term Equilibrium



Short-Term Equilibrium



Long-Term Equilibrium



Master Plan, Part Deux

Elon Musk • July 20, 2016

The first **master plan** that I wrote 10 years ago is now in the final stages of completion. It wasn't all that complicated and basically consisted of:

1. Create a low volume car, which would necessarily be expensive
2. Use that money to develop a medium volume car at a lower price
3. Use *that* money to create an affordable, high volume car

And...

4. Provide solar power. No kidding, this has literally been on our website for 10 years.

Messages

Increase diversity of asset ownership

Keep transaction costs low

Asset owner appropriability

Long-run equilibrium involves different pricing

Is sharing sustainable?

What should regulators look for?



Doubts being raised over Quebec's legislation regulating Airbnb-type rentals



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After council voted to change the rules for taxis and companies like Uber, brokerages say they reject new pricing models they've been given



Uber

Transportation

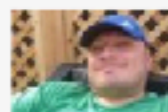
San Francisco taxi company sues Uber for "predatory pricing tactics"

Posted Nov 2, 2016 by [Megan Rose Dickey](#) (@meganrosedickey)



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By Erica Byfield



THE
**Disruption
Dilemma**



JOSHUA GANS

A Note on Disruption

Don't fight wars
before they have
started

Too much uncertainty