

Do public records of private sales tell the same story as do academic guesses?

CHAPTER 14

MINING NUMBERS AT OFFICIAL STOCKPILES

Officeholder: "What's the correct answer?"

Economist: "What do you want it to be?"

PEERING INTO THE EXPERTS' SOURCES

Backtracking is the name of the game. We began with popular articles by journalists who hyped a total for the worth of Earth in America (in normal English), citing the findings of a researcher (Ch 11). Peeling the onion, next we analyzed the academic articles (in professional jargon), whose authors based their findings on official stats (Ch 13). Now we'll pay a visit to the stocked ponds where specialists go fishing.

Our authors used the academic centers and government agencies that record prices for real estate, sometimes even for land alone, or sometimes even for natural resources. Scouring those official sites and more, we draw closer to figuring out the total value of assets never produced by anyone's labor or capital. Knowing the total's change through time, we would know the business cycle better. And we realize a flow of dough that's a surplus, socially generated.

Another reason we need to plumb the wellsprings is to keep current; the flow is always flowing so the total never stays the same. Whatever amount was reported before won't be accurate now. To know that number requires us to harvest the latest available stats.

Plus, we find out if the statisticians at bureaucracies and enterprises have become more or less accommodating since investigators last visited them.

My list of entities to query about natural assets has about 80 names on it. Given that phone numbers change and the person who answers typically transfers the caller to someone who may know the answer or transfer you yet again, that'd total well over 100 calls. I decided to rely on the new custom of email.

I asked all the departments of real estate in all the universities in the US (that I could find) for a figure on "the total value of land and resources"

as they did not understand “Earth’s worth.” Some institutes are in the Ivy League, some are in business schools. I contacted all five dozen of them – and dredged up some new facts.

Some think tanks that think about ground rent are around Boston (America’s college central): the National Bureau of Economic Research and the Lincoln Institute. Others are in the nation’s capital, Washington DC – the Urban Land Institute, the Brookings Institute, the Tax Foundation, and the Center for Economic and Policy Research.

- NBER, the granddaddy of them all, has been making scholarly attempts at totaling the worth of American land going back over a half century, but nothing current.
- The Lincoln Institute updates their database every quarter with the latest (albeit still lagging) output from three deeper sources, one private, two public, but nothing ancient.
- The Tax Foundation had lots of links to deeper sources, but no summaries.
- Center for Economic and Policy Research (CEPR), the young upstart, greets one with a site that looked the best, but looks are not everything; here, looks are the only thing if you’re looking for rents.

While a goodly number of the 80 replied, none gave a satisfactory answer. Whether public or private, there is no service, institute, office, department, bureau, board, or administration that’s assessing all land and resources or tracking all rents. Out of all of this nation’s enormous bureaucratic and academic infrastructure, nobody is curious enough to record how much society spends for the nature it uses.

It does not come as a surprise, but more like a shock. How can the professionals be so indifferent, suffer such a blind spot? What’s so off-putting about this line of inquiry?

At least a few agencies did focus on what people put on top of the land – buildings. Those stats serve as a proxy that we can extrapolate from.

TOP 10 AGENCIES: LOOKING FOR RENT IN MOSTLY WRONG PLACES

1. Housing and Urban Development: Whereas the other federal agencies focus on houses (where the middle class live), HUD focuses on apartment buildings (where, mostly, the poor live). HUD pays many of those poor a voucher good for housing. In 2012

(HUD was six years behind – imagine a bureaucracy doing that), HUD counted 2 million properties, yet the National Apartment Association says there were 2.3 million back then (if you can't correct them, still cite them). HUD found rental receipts to average over \$100k per building and to total \$200b for all buildings for the year.

JS: HUD numbers come from apartment owners filling in a survey, and the less value they admit to the less tax they're required to pay, so the actual rental value could be higher. HUD gives the building rent, an annual figure, and we're seeking an annual figure, albeit for land not buildings. The average selling price of a complex was a bit over \$1 million. With receipts averaging a tenth of that, we derive a ratio of price to rent ratio of 10 to 1. So the value of the land underneath apartment buildings would be at least \$100b in 2012. The owners' property tax was under 1.5% or \$3b. The land half of that, or \$1.5b, gets added to site rent, too.

2. Federal Housing Administration: Part of HUD.

JS: If the FHA has any unique data, they bury it somewhere.

3. Federal Housing Finance Agency: The FHFA provides no totals but has a House Price Index covering from 1975 to 2017. They say in 2017 housing cost 5.7748 times what it did in the mid 70s.

JS: Use Case's figure for 1975 land value – \$291,740,000,000 (Ch 13) – and multiply it by the FHFA figure. Then land value in 2017 comes to \$1,684,740,152,000. A tad more than a trillion and a half is quite small compared to most estimates that went before (Ch 13). Which figure is likely off? Case's land value or the FHFA's multiplier? In 1975, the stock market was \$137,281,000,000; if Case's number were any bigger, it would be outlandishly bigger. That leaves the FHFA multiplier as the culprit, which makes sense. In some of the towns where I've lived the last few decades, housing does not cost merely five or six times as much but 10 or 20 times as much.

4. Freddie Mac: Like the FHFA, they too have great looking tables but no totals.

JS: At least they have an easy-to-use "ask us" form; however, the answer was not overly enlightening.

5. Fannie Mae: No tables, no current data, no easy contact.

JS: But they were kind enough to ask me to call. They told me that they don't even have the total for the land (and buildings) that they own! (Your tax dollars at nap-time.)

AGENCIES REPORTING HOUSING+

The US Department of Commerce has three relevant bureaus:

6. Bureau of Economic Analysis: The BEA gives four relevant measures: personal spending, rental income, GDP, and fixed assets. At the end of 2017, for personal spending, the BEA listed housing but combined it with utilities, coming to \$0.120,442t. They gave rental income \$0.757.4 trillion. At the end of 2016, in their GDP by industry they gave real estate \$3,454.6t; agriculture, \$0.4281 t; and mining \$0.3856t; totaling \$4.2683 trillion. They gave fixed assets \$20,785.7 trillion.

JS: Of course, these figures combine the values of both buildings and land.

- Plus, in the BEA's personal expenditures, now it's not just land complicated by buildings but also by utilities. These bureaucracies are heading in the wrong direction, away from a stat for land alone. The BEA's figure for housing in personal spending is way below the 30% or 40% or 50% of income that most studies cite and differs wildly from that of Labor (coming up below).
- As for the minuscule figure for rental income, recall that it's not from actual figures but from landlord surveys.
- Their GDP figure, if halved, is well below our previous figure for a flow, Foldvary's \$2.6524t and that was 2006, ten years earlier (Ch 13).
- And the BEA's number for fixed assets, despite adding whatever's on the land, is way below Albouy's \$30 trillion for land alone.

Lots of inexplicable contradictions.

7. Bureau of Labor Statistics: The BLS uses a "consumer unit." In 2016, the US consisted of 129,549,000 of them. Their average income was \$74,664. On average that year they spent: on food, \$7,203; on housing, \$18,866; on utilities, \$3,884, on vehicle fuel, \$1,909.

JS: Those categories, food to fuel, are the ones with the biggest portions of land or natural resources. Of course, the price of everything includes a portion for how much the seller or producer paid for a place to do business and perhaps raw material(s).

To compare to the BEA (#6 above), housing and utilities came to \$22,750. Times the number of units, it comes to \$2,947,239,750,000 – well above the BEA and well in line with most studies on how much income housing consumes.

These four BLS categories in 2016 totaled \$31,862. So, consumer units spent 42% of their income on these categories. If half of the value of those categories is rent, then they indirectly spend 21% on land, locations, and resources. As a whole, the 129,549,000 units spent \$4,127,690,238 on those four rent-stuffed categories. If half that figure is for land and natural resources, it still seems low. Of course, all this leaves out spending by nonprofits, business, and government.

8. Census Bureau: For 2016, they gave an aggregate price for all-housing units: \$21,935,096,166,400. For “real estate and rental and leasing” they tabulated a revenue of \$487,655,249,000. For the total revenue that states raised via taxing property – land and buildings – they tabulated \$19,031,950,000; 14 states were left blank and some of those states were big and rich, like New York.

JS: Their \$22 trillion for housing was close to the BEA’s \$21t for fixed assets, but you’d think that all assets would be greater than just one asset. Whatever, the Bureau’s return – under a half trillion = 2% – is abysmal. Obviously, their return leaves out “imputed rent” or the value of owner occupancy. As for the property tax, the revenue collected by states was even less than 1% assessed value (price)—pretty paltry considering society generates the value.

The above are the eight federal agencies that deal with residential costs. There is a ninth organization that is not exactly a part of the government nor is it apart from the government. It’s in a limbo land – like NBER, which receives federal money and supplies government with many of its bureaucrats, both low- and high- level. I refer to the self-christened ...

9. Federal Reserve: It’s a private corporation but at the same time chartered by Congress to, ostensibly, control inflation and unemployment (Chs 12 & 26). They release their Financial Accounts of the US. It has Flows and a Balance Sheet, most recently for 2017 Q4.

In Flows, they created a category they call “Households and nonprofit organizations; gross fixed investment, residential equipment and structures (includes farm houses)” and another “Non-profit organizations; gross fixed investment, nonresidential structures, equipment, and intellectual property products.” Let’s assume their structures sit on land whose value is folded in. The Fed priced structures at \$632,900,000,000 and land at \$148,700,000,000. Together that’s \$781,600,000,000.

In Balance Sheet, they created “Households and nonprofit organizations; real estate at market value” they priced at

\$27,848,300,000,000.

JS: Their \$28 trillion is more credible, greater than all previous official figures. It'd be higher with the real estate of corporations and governments, yet lower with land alone (excluding improvements). Their Flow from that asset (about \$800 billion) is also only 2%. The mighty Fed leaves a lot unanswered.

In sum, those nine agencies, with different sources and different definitions, create tables nearly impenetrable – the old priesthood syndrome – and largely irrelevant, unless minutiae are your thing. They yield conflicting lump sums and make no effort to explain why they vary from their brethren; did they all use rubber rulers? Other fields have agreed on definitions – like the different kinds of clouds in meteorology, so why can't our public statistician and economist servants be as considerate?

Those official number-crunchers might live off public money but they write and format for each other, like school kids sending notes in code to each other during class. How can they take our money for such a performance? Will anybody raise the bar? The public needs to know.

UNOFFICIAL ANSWERS – MORE ACCURATE?

Officials and academics sometimes buy data. Let's see if the private companies deliver any better results. They might have more incentive to nail down the data exactly. Investors like to know true yields. And, unlike officials, companies have to be user-friendly. Or they go broke.

I could not find the answer at the National Association of Realtors, the long-standing go-to group. Nor at CoStar, which a lot of researchers use, but they charge for services. However, I did get a stat at the site of the new kid on the block. Their website – out of all the university, government, and realtor sites – was by far the prettiest and easiest to use.

10. Zillow: "Total Value of All U.S. Homes: \$31.8 Trillion. How Big Is That?" By Zillow Research on Dec. 28, 2017.

Renters spent a record \$485.6 billion in 2017, an increase of \$4.9 billion from 2016.

JS: How much renters spent is pretty close to the Census Bureau real estate revenue (#8 above). However, this privately calculated figure for home prices beats all the totals that public agencies tabulated. And it's just for homes, not for any other buildings sitting on land.

Zillow used to show the separate values of home and land in

the Tax Assessment area in the record for each property. *They no longer do.* Now the only value they show is the combined value of location and improvement. Land value is no longer available from Zillow because even they cannot get it from any agency, from local assessors to federal Census Bureau.

If land is half of Zillow's near on \$32 t, then residential sites might approach \$16t. If you substitute that \$16t for the figure Larson used for home sites in 2009, then Larson's \$23t (Ch 13) total goes up to nearly \$30t for all land. That's in the ballpark with Albouy's figure of over \$30 trillion of a decade ago for metro land (Ch 13). Thus Zillow does lend credence to Albouy's total and methodology.

Most researchers above leave out lots of land. Humans don't just put houses on land. We erect other buildings, too – offices for commerce and factories for industry. And we don't just build, we also pave, yet most tabulators overlook that land used for streets and parking. And some land we don't build anything on but take something out, as we do from farmland, forests, mines, oil wells, etc. And once again, we won't leave out a patch because it's owned by a nonprofit or business or public agency.

To tally a true total, the category "Land" would have to include both urban and rural, solid and fluid, and private and public. We found some figures for those categories, however accurate or complete they may be. We'll play with the cards we're dealt, work them into our calculations, and get closer to that grand total for the worth of Earth in America.