For property tax purposes, Illinois assesses farmland on the basis of its “agricultural use” value rather than its “auction block” or market value. The agricultural use value is affected by the expected income from farming. The income potential in turn varies by soil productivity, productivity, and also changes as costs and prices evolve through time. To help dampen the impact of changes in farm incomes, the law “caps” the annual rate at which farmland assessments can change from year to year at 10% of its previous value. However, there is an emerging technical problem in the way the 10% cap functions, given the special historical context of farmland assessments in Illinois. A reasonable legislative solution would be to retain the “10% cap” but to provide a different answer to the question … “10% of what?”. The following paragraphs elaborate the purposes of the farmland assessment act, the calculation of agricultural use value, how the 10% cap currently works, the historical context that has created an unintended consequence of the 10% cap, and how the problem could be fixed by amending the farmland assessment law.

The Farmland Assessment Act and Agricultural Use Value

Under the Illinois Farmland Assessment Act, the value of cropland for property tax purposes is determined by its agricultural use value. Most major agricultural states use some variation of use-value in establishing assessment values for farmland, though the particular approach differs from state to state, as well as the associated process for establishing tax rates and eventual tax levels. The basic principle in ag-use valuation is to identify income potential for a given parcel from its highest and best agricultural use, then capitalize the income stream into a current value associated with the income producing potential. In other words, identify the value of an analogous investment that would generate similar income through time. This approach generally results in a value that is lower than direct market values, but that is proportional to the income producing potential across differing parcels. Some states calculate soil-based suitability ratings for a crop, others use direct rent measurements, and others use historic averages of income, but virtually all intend to reflect differences in productive capacity in assessed values. Importantly, assessed values do not translate directly to tax bills as some taxing bodies are limited in the total rate or “extension” allowed, and others simply divide the total public expense by the total assessed value of property in its taxing district and identify the “rate” that covers the total expense regardless of assessed value. In Illinois, the Act’s term for the estimated agricultural use value is “Agricultural Economic Value” (hereafter, AEV).

The Act establishes the process used in calculating AEV with the following general steps. First, the five year rolling averages of prices and expected yields based on soil productivity measures and actual crop rotations are used to calculate a measure of income potential for a particular case. The income potential is important rather than actual income as it mitigates the impact of good or bad management, or good or bad weather that would not be expected to be reflected in values of income available under typical use. From the income potential, non-land production costs are subtracted to leave what is termed the Land Return or LR. The LR is then divided by what is known as the 2023A rate -- the same discount rate that
is used in the federal tax code for valuation of many businesses transferred without sale. The 2032A rate is based on a five year average of the interest rates on agricultural mortgage loans in the district including Illinois. For concreteness, if the income potential were $120/acre and the 2032A rate were 5%, the AUV would be $2,400 or $120/.05. The idea is that a $2,400 investment at 5% would likewise generate annual income potential of $120/year. By convention in Illinois, the assessed values are divided by 3 to arrive at the farmland’s equalized assessed value or EAV. The calculations are conducted for every soil productivity index (soil PI) that is farmed in the state, and then simple limitations applied in certain cases for limited productivity circumstances, flood, and other drainage issues, and so forth. The final step is to provide Certified Values by PI to assessors for use in property tax bill calculations by local taxing bodies.

Again, it is important to recall that the goal of the Act is for farmland assessments (EAVs) to be reasonably related to the net income expected from the farmland (not the “auction block” value), and for the relationship between EAV and expected net farm income to equitable across the whole spectrum of soil productivity indexes (PIs).

Soil PIs in Illinois for productive farmland range from roughly PI 80 to PI 130 using the indexing system referred to as Bulletin 810 (available here). By most measures, the ratio of production potential for major crops is roughly 2:1 from high to low PI. Likewise, the rental values are roughly 2:1. The market values vary somewhat by location and soils are distributed non-uniformly throughout the state, but likewise are in the range of 2:1. The basic calculations of income values likewise are roughly 2:1 from highest PI soils down to soils with PIs of approximately 80. Importantly, this relationship has been incredibly stable through the history of data available since the early 1980s through major changes in actual farmland values and through the recent period of higher commodity prices.

The 10% Cap: Intended and Unintended Consequences

In what might seem to be an innocuous description of a simple annual change “cap” to provide stability in planning for both tax payers and tax levying bodies, the Act was amended so that the annual change in EAV could not vary more than 10% of its previous certified value. The caps were established during a time when there was concern about rapidly falling property values and the potential for undue burden due to the through time averaging, and also to help smooth increases during periods of potentially rapidly rising income that were contemplated as possible. The intent of the 10% cap was to cushion cropland owners who pay the property taxes, and local governments which rely on property tax revenues to fund public services, from significant annual fluctuations in the EAV of cropland. The language used was direct and easily interpreted and yet contained an unintended consequence due to the difference in magnitudes of 10% of small versus large numbers. Consider an application to a scale of values that includes 0, 10, and 100 – the ten percent cap allows the first item to never change, the second item to change by 1 unit per year and the top item to change by 10 units per year – that differential width of the change resulted in certain major differences in CVs through time due primarily to the definition of a proportional cap without consideration of the magnitude. The pedagogical question “What is twice as cold as a day when the temperature is 0o” reminds us of the importance of the scale. What seems to be a sensible interpretation of other parts of the Act would be that, for example, a $10 change in income potential should have the same impact on EAVs regardless of the previous period’s certified value, and that the change cap should be of a sensible magnitude as well across all points on the PI scale.

The repeated application of the 10% cap resulted in a complicated dynamic of certified values through time that has left a substantially dampened response at low PI soils and a “crossing effect” over the 10% channel at higher PI soils early in the Act’s application and the lower PI soils now are roughly 1/40 the assessed value of the highest PI soils, and moreover, the 10% limitation has a far less consequential effect on high PI soils whose income fluctuations would virtually never be controlled by the 10% cap. Again it is important to note that there is also a very complicated relationship between these assessed values and actual tax bills from the different uses of assessed values in rate calculations.
However, as agricultural incomes have risen and capitalization rates (interest rates) have generally fallen, the ratio of the less restricted high PI soils to low PI soils has continued to exacerbate the ratio due to the form of the 10% limit. Clearly the current situation is a gross departure from the guiding principle of the Act, i.e., that the relationship between EAV and expected net farm income should be fairly consistent across the whole spectrum of soil productivity indexes (PIs) where most measures would point to equitable ratios of roughly 2:1.

Over the past several years, farm income potential has risen with crop prices and with reductions in capitalization rates, and the associated averages used in the AUV calculations have increased smoothly and predictably. However the repeated application of the cap has continued to exacerbate the relative EAVs of farmland across the entire PI spectrum. With a “10% Cap” that allowed sensible changes to occur, we would expect the relative ratios to be re-established.

A Legislative “Fix” to the Problem

Ideally the actual EAVs for cropland across the entire PI spectrum should catch up to their target EAVs, but do so over a reasonable time line. However, the current wording of the 10% cap does not allow meaningful recalibration for the least productive cropland, and it does not create a meaningful cap on change for higher productivity soils with fairly stable income potential. Fortunately, a legislative “fix” has been proposed that started with the simple question: “10% of what?”. The answer intends to preserve the ag-use treatment common to most ag land but would allow identical income changes to translate to identical differences in assessed values through time with a reasonable cap on potential annual changes.

The introduction of HB2651 adds 5 words in the description of the 10% limit. The practical effect is to apply the same dollar change limit (10% of the EAV for the “median cropped soil”) to the EAVs for all PIs. This clarification allows the actual EAVs for less productive soils to “catch up” to their target EAVs more quickly. This change also will modestly slow the rate at which the most productive soils “catch up” to their target EAVs. Importantly, prior to application of taxing rate changes, the impact would be conceptually revenue neutral across the total soil PI spectrum. From our perspective, the proposed legislative “fix” also is consistent with the underlying goals of the Act: Farmland assessments (EAVs) should be reasonably related to the net income expected from the farmland (not the “auction block” value), and the relationship between EAV and expected net farm income should be fairly consistent across the whole spectrum of soil productivity indexes (PIs).

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