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# EXPANDING THE APPRAISAL LEXICON

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Developing a professional lexicon is an important responsibility of any professional organization. A professional lexicon of defined and accepted vocabulary and terminology allows all members of the profession to communicate clearly about important professional issues and methodologies with each other and with those outside the profession. Every profession, from law, medicine, and architecture to appraisal, has its own vocabulary of specialized terminology. Jargon, often used as a derogatory term, is first defined as “special words and phrases that are used by particular groups of people, especially in their work.”<sup>1</sup>

Over the last year it’s been a great honor to work with the co-authors and reviewers of a white paper on the Stabilization of Value, presented here in full as approved by the Machinery & Technical Specialties Committee of ASA. This approval expands the professionally accepted appraisal vocabulary, providing terminology for a marketplace behavior that every

MTS appraiser has witnessed and didn’t have a term for: how to explain value conclusions *for items that have surpassed their economic life (EL) and / or normal useful life (NUL) and are still considered to have value.*

## About the Author

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## Stabilization of Value in Valuing Machinery and Equipment

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**Abstract:** *Machinery & Technical Specialties (MTS) appraisers regularly provide opinions of value for items that have surpassed their economic life (EL) and / or normal useful life (NUL) and that are, nevertheless, still considered to have value. This article discusses terminology that MTS appraisers may find useful in describing a market characteristic for assets that appear to have value although their chronological age is greater than their expected normal useful or economic life.*

### When Might Value be Considered Stable?

The concept of stabilization of value addresses the appraisal of assets that continue to contribute value to an operating business beyond their expected economic or normal useful life.

In the cost approach, this concept of value is typically expressed as a “minimum percent good” for a given asset or group of assets. In the sales comparison approach, it is typically expressed as the minimum value at which an asset in operable condition has stabilized over a period of years, within the value premise or market level of trade under which the appraisal is being performed.

This stabilization of value can be the result of many attributes, such as the durability of the item, its use in a protected or non-corrosive environment, an uncomplicated design, proper maintenance and upkeep, or an item’s utility with limited changing technology.

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Almost any type of asset can be and is subject to some form of value stabilization. Exceptions might be specialized assets that have a constrained life due to characteristics such as a limited production life or other factors. For examples, certain machinery may have been built for a limited production run and may have no alternative use. Other factors such as contamination or regulations can make an asset worthless in the market.

### Example of Stabilization of Value

As an example of an asset experiencing value stabilization, consider older tanks in a vintage food processing facility. The tanks are stored indoors and hold non-corrosive liquids such as olive oil or milk. While the chronological age of the tanks may exceed their normal useful life or economic life, they are still usable and still contributing value to the business.

### An Explanation of Market Behavior

**Stabilization of value is not a definition of value:** it is an explanation of market behavior. In other words, the term codifies the recognition that an asset may have value past its “assigned” or expected normal useful life.

**Definition:** *Stabilization of value occurs when the estimated value of an asset has reached its minimum percent good (via the cost approach) or is observed to be consistent or relatively stable year after year (via the sales comparison approach). The asset is still usable and has a value (typically greater than scrap or salvage) in the marketplace to another user or to the current owner.*

The value will theoretically stabilize at a higher level than scrap or salvage values since the asset is still operable and in continued use by the current owner or in a condition where it may be sold to another user in need of like utility. Such an asset may be installed, although it need not be.

As stated earlier, almost any type of equipment can be subject to some form of value stabilization.

Since stabilization of value is an explanation of market behavior and not a value definition, the stabilization of value conclusion for an asset may vary depending on the level of trade. An asset could have a value stabilization applicable to fair market value and have other, differing value stabilization levels applicable to various liquidation scenarios. Market behaviors may be entirely different in a fair market value situation than in a forced liquidation, so the values over time and the value stabilization at a specific level may or may not be similar.

### Stabilization of Value Versus Terminal Value

Stabilization of value is an MTS term that describes the value of a usable asset reaching a stable or consistent level for a period of time. It is different from terminal value, a term used in business

valuation to describe estimating value from cash flows continuing into perpetuity.

**Note on terminology:** *The value behavior discussed here is described as the stabilization of value, alternately as value stabilization. A similar-sounding phrase, stabilized value, is intentionally not used, as it gives the impression that the term might be an actual definition of value, which it is not. Additionally, stabilized value has an unrelated definition in real property appraisals,<sup>2</sup> so use of that term could cause confusion.*

### USPAP Compliance

In any situation, an appraiser should document their research and analysis in support for the stabilization of value, in compliance with USPAP<sup>2</sup> SR8-2(a)(x)(1-5):

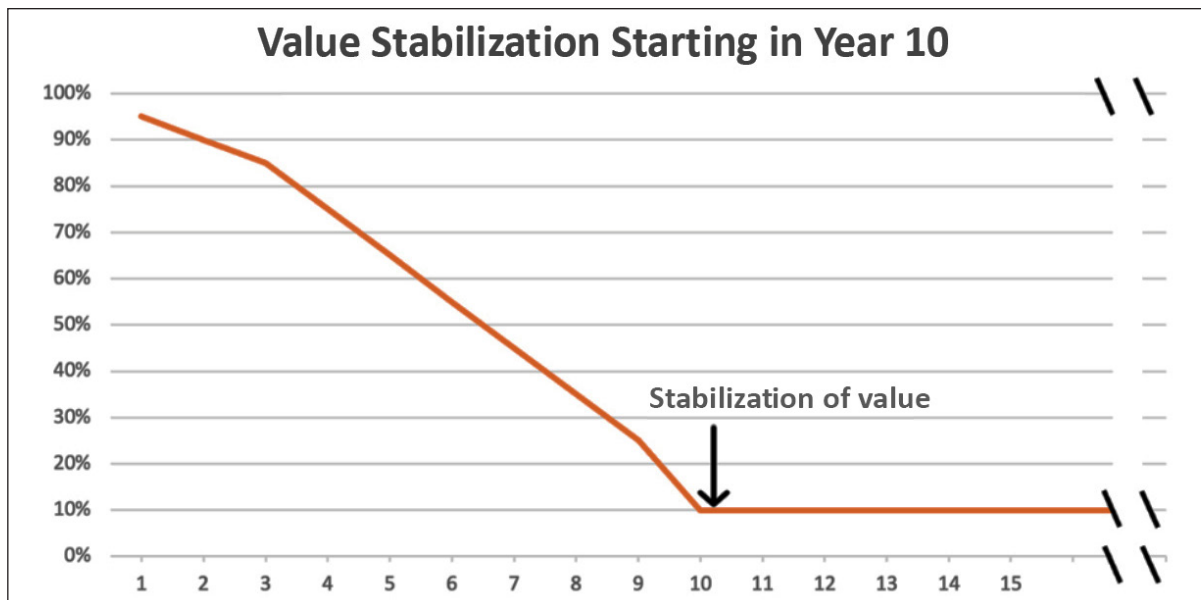
- (a) *The content of an Appraisal Report must be appropriate for the intended use of the appraisal and, at a minimum:*
  - x. *provide sufficient information to indicate that the appraiser complied with the requirements of STANDARD 7 by:*
    - (1) *summarizing the appraisal methods or techniques employed;*
    - (2) *stating the reasons for excluding the sales comparison, cost, or income approach(es) if any have not been developed;*
    - (3) *summarizing the results of analyzing the subject property's sales, agreements of sale, 1511 options, and listings when, in accordance with Standards Rule 7-5, it was necessary for 1512 credible assignment results and if such information was available to the appraiser in the normal course of business;*

**Comment:** *If such information is unobtainable, a statement on the efforts undertaken by the appraiser to obtain the information is required. If such information is irrelevant, a statement acknowledging the existence of the information and citing its lack of relevance is required.*
    - (4) *stating the value opinion(s) and conclusion(s); and*
    - (5) *summarizing the information analyzed and the reasoning that supports the analyses, opinions, and conclusions, including reconciliation of the data and approaches*

Stabilization of values, just like value conclusions, must be justified through reliable, supportable sources such as dealers, manufacturers, market data, internet resources, and so on.

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### Stabilization of Value Curve

The hypothetical graph above illustrates a stabilized value profile<sup>3</sup> of an asset that reached a stabilized value of 10% of RCN at 10 years. This curve is provided for illustration purposes only and should not be used as a reference for valuation purposes. The backslashes “\” in the graph indicate the unspecified time period until an asset is retired.

Market values often stabilize at a level relative to RCN, or perhaps the cost compared to installation or removal costs, as opposed to a fixed dollar amount. For example, assume a Bridgeport mill is worth \$3,000 when RCN is \$20,000. If RCN increases to \$30,000, the used Bridgeport mill will likely increase in value accordingly to \$3,250 or \$3,500, rather than remaining at \$3,000. If RCN subsequently decreases, the value will likely experience a corresponding decline in value.

### Maintenance Versus Betterment

Value stabilization assumes repairs and maintenance, which may include rebuilds, overhauls, replacement of critical parts, and similar upkeep. Stabilization applies to an asset that receives normal maintenance during its normal course of usage and does not apply to assets that have been improved upon (a betterment<sup>4</sup>).

In identifying the value stabilization level for an asset, appraisers must consider any betterment or improvement to the asset which increases its value. For example, if a CNC component has recently been added to a Bridgeport manual mill, the value of the mill may be increased beyond the original point at which the value had stabilized when it was a manual mill. While betterment is not considered a component of value stabilization, betterment can influence the value stabilization level—if the mill has had the improvement for several years and a new value stabilization level

can be supported by way of analysis—not just by including the cost of the improvement—that value stabilization level should be recognized.

### Market Conditions

Stabilization of value assumes normal market conditions. Unusual or abnormal market conditions should be considered in each situation, and external market factors should always be analyzed.

For example, during the post-Covid era of significant inflation and supply chain issues, many items that had been considered to have reached value stabilization experienced an increase in value.<sup>5</sup> This is considered an economic premium (the opposite of economic obsolescence).

In other situations, the value of assets with an active secondary market may be subject to swings related to supply and demand. For example, used construction or mining equipment values may go up or down in value based on market forces unique to that asset type and that have no or minimal impact on other asset types. The affected asset values may or may not then stabilize again depending on subsequent market conditions.

### Stabilization of Value in the Sales Comparison Approach Versus Cost Approach

When determining the value of an asset through the sales comparison approach, research might indicate an observed amount at which the value has reached stabilization. For example, in researching the value of the food processing tank introduced earlier as an example, market-based sources today might show that the tank’s value has remained constant at €1,000 for several years. The sales comparison approach would indicate value stabilization for the tank at €1,000.

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As discussed earlier, it is likely that the value stabilization level is correlated to the current replacement cost new (RCN) of the tank. If, for example, the tank's RCN was €10,000, then the value stabilization level of €1,000 represents ten percent of the RCN. Over time, as the RCN increases (e.g., due to inflation, during supply chain disruptions, or production cost increases), market research would potentially indicate that the value of the tank has increased, which might be seen to negate the stabilization of value theory. It is probable, though, that the new value is still approximately ten percent of the RCN. (Please note that just as with the hypothetical value curve shown above, these particular values and percentages are for illustration only and should not be used for valuation purposes.)

The value stabilization level for an asset can therefore be developed through either a sales comparison approach analysis or a cost approach analysis. The appraiser would determine the appropriate valuation approach and support the value stabilization level through research and analysis.

### Stabilization of Value and End of Life

While the value of an asset might stabilize for a period of time, that does not negate an eventual decrease or increase in value. A food processing facility's tank, for example, may continue to be usable for years past their economic life or normal useful life, and their value might stabilize at a consistent value or percent of RCN. At some point, though, they may no longer be considered to have the same utility. That might be because of wear and tear of components, because of accidental damage, or because more desirable or more efficient alternatives become available.

In every situation, the appraiser should understand the assets and the market drivers of value for the assets they appraise.

Economic factors such as changes in supply and demand (either temporary or permanent) may increase or decrease the stabilization of value conclusions and other factors—inherent in an asset or

external to the asset—may influence the length of time an asset's value remains stable.

For example, when an asset is no longer desirable by market participants, the value may decline to a scrap or salvage value. If an asset has alternative uses, however, the value may resume the same type of downward curve described above, potentially reaching stabilization of value at a lower level for a period of time.

### Usefulness of Establishing a Reference for Stabilization of Value

Why, or when, might an appraiser consider or use the term “stabilization of value”? This term may be useful in any situation where an MTS appraiser is called upon to explain why an asset is still considered to have value even though it is older than its expected life, its NUL, or its EL. Because appraisal assignments often include assets which are in use beyond their expected NUL or EL, appraisers frequently encounter situations where an asset is still considered to have value even though its chronological age is greater than its NUL or EL.

For a financial reporting appraisal such as an allocation of purchase price or appraisals for property tax appeals which may include hundreds or thousands of assets, an appraiser could use this concept to explain to auditors how assets older than their NULs or ELs were valued.

In situations such as these, and in dispute situations, such as litigation, family law cases, or property tax appeals the ability to reference “stabilization of value” as an accepted appraisal concept can serve as a valuable tool in explaining market behavior to a client or decider of facts.

<sup>1</sup> Cambridge Dictionary, “meaning of jargon in English,” accessed February 26, 2023. <https://dictionary.cambridge.org/us/dictionary/english/jargon>

<sup>2</sup> USPAP: 2020-2021 *Uniform Standards of Professional Appraisal Practice*, The Appraisal Foundation p. 4. The 2020-2021 edition of USPAP is effective through December 31, 2022.

<sup>2</sup> “Stabilized Value definition,” *Law Insider*, <https://www.lawinsider.com/dictionary/stabilized-value>

<sup>3</sup> Appraisers must do their own research to arrive at a supportable stabilized value.

<sup>4</sup> Betterment: An addition or significant improvement made to an asset to extend its useful life or enhance its efficiency, resulting in returns over and above the incurred cost. Machinery & Technical Specialties Committee of the American Society of Appraisers, *Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets*, 4th ed., American Society of Appraisers (Herndon, Virginia: 2020), p. 526.

<sup>4</sup> For a specific example, see Greenburg, Ran, “Economic Obsolescence Lessons from the Pandemic Period,” *The MTS Journal*, Vol 37, Issue 2, p. 56.

<sup>5</sup> For a specific example, see Greenburg, Ran, “Economic Obsolescence Lessons from the Pandemic Period,” *The MTS Journal*, Vol 37, Issue 2, p. 56.