COMMENT

TEXAS INVENTORY TAX: APPRAISAL DISTRICTS' MISUNDERSTANDING OF THE LAW CAUSING TEXAS RETAILERS TO PAY THE PRICE

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I. INTRODUCTION

Everything is bigger in Texas. Unfortunately for Texas retailers, this idiom rings true for property tax liabilities as well.[1] Texas is one of only seven states to fully impose property tax on retail inventory.[2] Over the last several decades, most states have done away with inventory tax—either in an effort to simplify their already-complex property tax codes[3] or

1. Texas is one of a minority of states that levies personal property and one of even fewer that extends that tax to inventories. *See* Joyce Errecart et al., *States Moving Away from Taxes on Tangible Personal Property*, BACKGROUND PAPER (Tax Found., Wash., D.C.), Oct. 2012, at 1, 3 (noting Texas is one of only seven states that does not exempt inventory from personal property taxation).

2. Texas, Alaska, Arkansas, Kentucky, Louisiana, Maryland, Massachusetts, Mississippi, Oklahoma, Vermont, Virginia, and West Virginia are the only states that have not exempted business inventories from their tangible personal property tax calculations. *See id.* at 3, 6 tbl.1 (indicating only seven of the twelve states that impose an inventory tax do so statewide; the other five—Alaska, Maryland, Vermont, Virginia, and Massachusetts—either only tax inventory in some local jurisdictions or only tax certain types of businesses).

3. The majority of states have removed inventory from their personal property tax base as a way to eliminate unnecessary distortion. *See id.* at 9–10 (expressing there has been a migration from

as a part of the growing trend to reduce their tax revenues from tangible personal property.[4] Texas, however, is reluctant to join this trend,[5] and by refraining to do so, it puts a heavy tax burden on businesses that hold inventory for resale.[6]

Nevertheless, Texas's reluctance to move away from personal property taxation is not the focus of this Comment. For the time being, Texans are subject to this tax, and unless legislation to the contrary is enacted, it is a legitimate business expense shared by all Texas retailers.[7] This Comment aims to determine whether the agencies charged with administrating the tax on retail inventory have applied the law correctly, or whether they have misinterpreted and misapplied the law, leaving business owners to pay the price.

According to the Texas Constitution, property shall be taxed ad valorem,[8] meaning it is taxed according to its cash value.[9] This

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the use of inventory to calculate tangible personal property tax over the last fifty years).

4. From 2000 to 2009 alone, there was a palpable decrease of tax revenues received from tangible personal property by the majority of states. *See id.* at 8 tbl.2 (representing most states have shown less tangible personal property tax collections per capita). Several states have even eliminated tangible personal property taxes from their property tax codes altogether. *See id.* at 11 (noting Ohio is the most recent of seven states to have completely eliminated tangible personal property tax (citing OHIO REV. CODE ANN. § 5711.22(G) (West 2013))); *accord* Letter from Scott W. Drenkard, Economist, Tax Found., to Chairman and Members of the Fin. and Tax Comm., Fla. House of Representatives 3 (Feb. 1, 2012), http://taxfoundation.org/sites/taxfoundation.org/files/docs/testimony_drenkard_florida_20120201.pdf (urging the Florida Finance and Tax Committee to adopt proposed bills H.B. 1003 and 1005 to "put the state on the path to eliminating this outmoded [tangible personal property] tax").

5. *See* Errecart et al., *supra* note 1, at 8 tbl.2 (revealing Texas has not shown any noticeable decrease in tangible personal property tax revenue).

6. Virtually every state has completely exempted non-income-producing personal property from their tax calculations; thus, an individual taxpayer is not likely to incur much, if any, tangible personal property taxes. *See* TEX. TAX CODE ANN. § 11.14(a) (West 2015) (providing a tax exemption for tangible personal property that is not held for the production of income); *see also* Errecart et al., *supra* note 1, at 2 (contending, because most non-income-producing property is exempt, the tax on tangible personal property is invisible to most individuals). However, tangible personal property taxation "is a significant expense for businesses." *Id.* Moreover, tax liability from inventories is one of the major contributors to the carrying cost associated with an inventory, which represents a substantial portion of the business's operating expenses. *See* Dan Bolger, *Inventory Control: Increasing Profits Without Investment or Additional Risk*, FURNITURE WORLD (Feb. 1, 1995) (on file with the *St. Mary's Law Journal*) (emphasizing it is common knowledge in the retail world that carrying excess inventory often represents up to 40% of its cost).

7. The Texas Tax Code provides: "All real and tangible personal property . . . is taxable unless exempted by law." TAX § 11.01(a). Inventories in general are not excluded anywhere in the Code, and the rules of appraisal for determining their value are enumerated in Section 23.12. *See id.* § 23.12 (specifying the general provisions behind Texas's inventory taxation).

8. Ad valorem is defined as: "(Of a tax) proportional to the value of the thing taxed." *Ad valorem*, BLACK'S LAW DICTIONARY (10th ed. 2014).

9. *See* TEX. CONST. art. VIII, § 1(b) ("All real property and tangible personal property in this

constitutional requirement means property must be assessed and taxed based on its reasonable fair market value (FMV).[10] Tangible personal property tax, more specifically, taxes the type of property that can be moved and touched, such as furniture, equipment, or inventory.[11] In general, most ad valorem tax revenues are derived from "real" property, with tangible personal property representing only a fraction, and inventories representing only a portion of tangible personal property;[12] however, for the businesses that maintain an inventory, these taxes can represent a significant portion of their total property tax liability.[13] Thus, any misapplication of the law in determining the true fair market value of a unit of inventory has significant implications for Texas retailers.[14]

II. PURPOSE

The Internal Revenue Code (IRC), through income taxation, taxes what is earned by a business.[15] State sales taxes levy the activity of a business.[16] Ad valorem property tax is a tax on what a business has left over (its assets

State, unless exempt . . . shall be taxed in proportion to its value."); *see also* Errecart et al., *supra* note 1, at 1 (explaining ad valorem taxation results in "higher-valued property pay[ing] a higher property tax than a lower-valued property").

10. Black's Law Dictionary defines cash value as a synonymous term for fair market value. *See* *Cash Value*, BLACK'S LAW DICTIONARY (10th ed. 2014) (directing the reader to the definition of "value" under the subsection "fair market value," equating cash value with fair market value); *Value*, BLACK'S LAW DICTIONARY (10th ed. 2014) (defining fair market value as "[t]he price that a seller is willing to accept and a buyer is willing to pay on the open market and in an arm's-length transaction; the point at which supply and demand intersect"); *see also* Michael R. Garatoni et al., *Retail Inventory Valuation for Texas Ad Valorem Taxation*, J. PROP. TAX MGMT., Fall 1998, at 1, 2 (asserting the Texas Constitution demands property be valued "based upon reasonable cash market value" (citing Parker Cty. v. Spindletop Oil & Gas Co., 628 S.W.2d 765, 767 (Tex. 1982))). Although the general definition mentions the interests of the willing seller, the specific definition for inventory tax focuses primarily on the interests of the willing purchaser. *See* TAX § 23.12(a) (defining inventory market value as what a willing purchaser would pay).

11. *See* TAX § 1.04(4), (5) (defining tangible personal property as property that is not "real" property and that can be measured, weighed, felt, or perceived by the senses, excluding documents that represent some other interest); Errecart et al., *supra* note 1, at 2 (calling tangible personal property anything that can be moved or touched, such as furniture and equipment).

12. Compared to real property, only a relatively small share of a state's property tax revenue is taken from tangible personal property. *See* Errecart et al., *supra* note 1, at 2 (identifying only 11% of assessed property from cities in Texas were accounted for through tangible personal property).

13. *See id.* at 2 (suggesting tangible personal property is a significant business expense).

14. This Comment develops the notion that virtually every county in Texas incorrectly values inventory significantly higher than its true fair market value, leading to more carrying costs for the holders of inventory. *See* Bolger, *supra* note 6 (noting carrying costs represent a high percentage of a retailer's operating costs).

15. *See generally* I.R.C. sub. tit. A (2012) (making up the federal income tax code).

16. *See generally* TAX tit. 2 (forwarding the Texas sales tax).

and unsold inventory) at the end of the year,[17] and with respect to inventory—an asset intended for disposition—it is a regressive tax on the failures of a business.[18] The crux of this Comment lies in this distinction—apparently overlooked by Texas county appraisal districts—that the tax rules and regulations that guide federal income taxation are not the same as the rules that govern Texas's ad valorem property taxation.[19]

The IRC values inventory to determine periodic income based on generally accepted accounting principles[20] (GAAP).[21] In contrast, Texas law demands inventory—for ad valorem property taxation—be valued

17. *See* TEX. CONST. art. VIII, § 1 (giving Texas authority to tax all tangible or personal property in proportion to its value); TAX § 11.01 (noting all property, real or tangible personal, is taxable unless specifically exempted by law); *see also id.* § 23.01 (stating all taxable property is appraised as of January 1 of each year).

18. A regressive tax is one where the percentage of one's income used to pay the tax decreases when the taxpayer's income increases. *See Regressive Tax*, BLACK'S LAW DICTIONARY (10th ed. 2014) (noting regressive taxation is "more burdensome for low-income taxpayers than high-income taxpayers"). Levies on inventory are regressive because they tax what failed to sell. *See* TAX § 23.01 (expressing the tax is based on the market value of what is left over at the end of the tax year). If a seller is unable to get rid of his older merchandise, it stays in his inventory; thus, not only is he taxed on a higher-value unit of inventory—based on the volume on hand—but also, by not selling the older inventory, he has made fewer profits with which to pay the tax. *See* John Egger, *Casting Off the Inventory Blues: The Age of Your Inventory Has Far Reaching Consequences for Operations Expenses and Store Profitability*, FURNITURE WORLD (June 10, 2004), http://www.furninfo.com/Furniture%20World%20Archives/2204 (stating the stagnating inventory of a business retailer was "dragging down profitability"). Moreover, the inventory that lies dead in the warehouse accumulates additional carrying costs, which further reduce profitability of the business. *See id.* (estimating inventory carrying costs—not including property taxes—are approximately 25% of original costs).

19. It is imperative to realize the different standards required to reach a determination of inventory value under IRC rules and Texas Property Code rules. *Compare* I.R.C. § 446(a) (2012) (mandating taxable income must be calculated using the taxpayer's method of accounting to compute his income to keep his books), RESTATEMENT AND REVISION OF ACCOUNTING RESEARCH BULLETINS No. 43, ch. 4 statement 2, 6 (Am. Inst. of Certified Pub. Accountants 1953) [hereinafter RESTATEMENT AND REVISION OF ACCOUNTING RESEARCH BULLETINS] (recognizing the primary objective of accounting for inventory is to match costs with revenues to properly determine income), *and* Thor Power Tool Co. v. Comm'r, 439 U.S. 522, 532 (1979) (explaining I.R.C. § 471(a) (2012) commands an inventory must be valued to reflect income and "'conform[] 'as nearly may be' to the 'best accounting practice[s]'"), *with* TAX § 23.01(b) (stating market value of property must be found by applying generally accepted appraisal methods and techniques), *and* INT'L ASS'N OF ASSESSING OFFICERS, PROPERTY ASSESSMENT VALUATION 487 (Garth Thimgan et al. eds., 3d ed. 2010) [hereinafter PROPERTY ASSESSMENT VALUATION] (promulgating accounting formulas cannot be used to calculate the appraisal value of inventory because accounting methods are driven by IRC rules, while appraisals are driven by the economic principles or supply and demand).

20. GAAP is the widely accepted set of rules and procedures in the United States that govern the way American businesses keep their financial statements. Howard E. Lubow & Gregory S. Oetting, *Appraisers Find Help in Recent Accounting Rules*, FAIR & EQUITABLE, Aug. 2003, at 8, 8.

21. *See* I.R.C. §§ 446(a), 471(a) (2012) (valuating inventory based on the taxpayer's accounting methods or as best to reflect income by a method as close to an accepted accounting method as possible).

based on generally accepted appraisal methods and techniques (GAAM&T) and the rules laid out in the Texas Property Tax Code.[22] Further, the Property Tax Code specifically identifies the Uniform Standards of Professional Appraisal Practice (USPAP) as a codified source of GAAM&T for the appraisal entities to follow.[23] But, despite the clear language of the Property Tax Code and the USPAP, Texas appraisal districts have commonly failed to differentiate GAAP from GAAM&T for inventory valuation, most notably, by using GAAP's "market" value to determine GAAM&T's valuation concept of "market" value.[24] GAAP's

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22. The Texas Constitution provides tangible personal property shall be taxed according to its value, which is determined by methods provided by law. TEX. CONST. art. VIII, § 1. The Texas Tax Code notes Title 1 may be referred to as the Property Tax Code. TAX § 1.01. Within the Property Tax Code, Section 11.01 provides real and tangible personal property are taxable unless exempted by this statute. *Id.* § 11.01. Section 23.01 commands the market value of all taxable property shall be determined by the generally accepted appraisal methods and techniques (GAAM&T), and Section 23.12 specifically mandates the same for determining the market value of inventory. *Id.* §§ 23.01(b), 23.12(c).

23. Not just inventory, but all property, for the purpose of ad valorem property taxation is constitutionally required to follow appraisal methods, not accounting practices. *See* TEX. CONST. art. VIII, § 1(b) (stating all property "shall be taxed . . . as may be provided by law."); TAX § 23.01(b) ("The market value of property shall be determined by the application of generally accepted appraisal methods and techniques."); Travis Cent. Appraisal Dist. v. FM Props. Operating Co., 947 S.W.2d 724, 727 (Tex. App.—Austin 1997, writ denied) (recognizing the statutory definition calls for appraisal methods to be used).

24. The U.S. Supreme Court made the distinction between cost and market value in the mid-1800s. *See In re* Cliquot's Champagne, 70 U.S. (3 Wall.) 114, 125 (1865) ("You will perceive, therefore, that the actual cost of the goods is not the standard [for determining market value]."). GAAP rules and GAAM&T rules have different objectives when determining market value, and therefore, each has a different definition of what constitutes market value to reach those goals. *Compare* RESTATEMENT AND REVISION OF ACCOUNTING RESEARCH BULLETINS, *supra* note 19, ch. 4, statement 2, 6 (recognizing the primary objective when valuing inventory under accounting is to match costs with revenues to properly determine income and noting market means cost in this context), *and* FIN. ACCOUNTING STANDARDS BD., ORIGINAL PRONOUNCEMENTS AS AMENDED: STATEMENT OF FINANCIAL ACCOUNTING STANDARDS NO. 151, at FAS151-1 (2004) ("*Inventories*, are based on the principle that the primary basis of accounting for inventory is cost."), *with* TAX § 23.12(a), (c) (mandating generally accepted appraisal methods, not accounting principles, shall be used in determining market value, and market value means the price the inventory would sell as a unit to a purchaser continuing the business), *and* INT'L ASS'N OF ASSESSING OFFICERS, PROPERTY APPRAISAL AND ASSESSMENT ADMINISTRATION 35 (Joseph K. Eckert et al. eds., 1990) [hereinafter PROPERTY APPRAISAL AND ASSESSMENT ADMINISTRATION] (defining market value as "the cash price a property would bring in a competitive and open market" and drawing a distinction between market value and price—referring to historical cost). Nevertheless, the difference between these two definitions seems to have been overlooked by appraisal districts in their arguments before the courts. *See In re* Quality Beverage Co., 170 B.R. 310, 316 (Bankr. S.D. Tex. 1994) (showing the expert for Harris County equated book value for market value, claiming "every item on hand and its booked-in price, was some indication of market value of the inventory"); Sears Roebuck & Co. v. Dall. Cent. Appraisal Dist., 53 S.W.3d 382, 383–84 (Tex. App.—Dallas 2000, pet. denied) (acknowledging the Dallas County Appraisal District based its appraisal on book value, as determined by GAAP); *FM*

"market" is a homonym with GAAM&T's "market," but the two have completely different meanings within their respective contexts.[25] Consequently, its misapplication is rampant; county appraisal districts have consistently misused GAAP's "market" in GAAM&T contexts, which—along with some other crucial errors, such as valuing inventory at historical-cost-new without developing an appraisal model to support their conclusion[26]—has led to gross overvaluation of inventories, costing Texas retailers millions in excessive tax liabilities.[27]

Part III of this Comment briefly explores the development of Section 23.12 of the Property Tax Code and demonstrates its drafters

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Props., 947 S.W.2d at 732 (describing the district's attempt to reach market value by multiplying the number of items by their retail price as unreasonable and outside of common sense). Not only have county appraisal districts misapplied GAAP definitions in court but also some have explicitly implemented the incorrect GAAP definitions into their official policies. *See* BEXAR APPRAISAL DIST., 2014 PERSONAL PROPERTY VALUE DOCUMENTATION & INSPECTION SCHEDULES 2–3 (2013) (equating market value to book value, erroneously using GAAP's "lower of cost or market" as somehow adjusting for market place depreciation). Bexar's policy states, "Accrued depreciation is derived from property owner's financial documents and is identified as the 'lower of cost or market' adjustment. Such adjustment generally accounts for damaged, lost, slow-moving, and obsolete inventory." *Id.* Another example of baseless and conclusory policy can be seen by Harris County. *See* HARRIS CTY. APPRAISAL DIST., BUSINESS & INDUSTRIAL PROPERTY DIVISION VALUE CALCULATION GUIDELINES TAX YEAR 2014, at 1, 1 (2014), http://www.hcad.org/pdf/forms/2014/ppcalcguide_2014.pdf (stating outright that market value equals 100% original cost).

25. GAAP directs inventory must be valued at the "lower of cost or market;" the definition of market for accounting purposes means replacement cost—the cost of replacing an individual item. *See* RESTATEMENT AND REVISION OF ACCOUNTING RESEARCH BULLETINS, *supra* note 19, ch. 4, statement 6 ("As used in the phrase *lower of cost or market*, the term *market* means current replacement cost (by purchase or reproduction, as the case may be) . . . ." (footnote omitted)). In contrast, the definition of market value for appraisal of inventory is "the price for which it would sell *as a unit* to a *purchaser* who would *continue the business*." TAX § 23.12 (emphasis added); *see also* Stuckey Diamonds Inc. v. Harris Cty. Appraisal Dist., 93 S.W.3d 212, 214 n.2 (Tex. App.—Houston [14th Dist.] 2002, no pet.) (clarifying the definition of market value from Section 23.12 of the Property Tax Code is unique and applicable only to inventory); *accord FM Props.*, 947 S.W.2d at 731 (acknowledging the legislature may have concluded valuation of an inventory on a unit basis is "inherently fairer and more likely to produce true market value" than using retail selling price multiplied by the number of items in the unit).

26. The Property Tax Code gives IAAO, the Appraisal Foundation, and other professional organizations the ability to create the standards and rules by which the state shall administer ad valorem taxes. *See* TAX § 5.05 (allowing the comptroller to approve publications by professionally recognized sources). The Appraisal Foundation established the Uniform Standards for Professional Appraisal Practice (USPAP), which is the official, authorized book of administrative standards by which all appraisals shall follow. *See* APPRAISAL FOUND., UNIFORM STANDARDS OF PROFESSIONAL APPRAISAL PRACTICE, at U-46 (Appraisal Standards Bd. ed., 2012–13 ed. 2011) (indicating a requirement of using a mass appraisal model is developing a model that shows the relationship of attributes that affect the market value).

27. If the county values property at or near cost rather than at a much lower fair market value, the taxpayer is clearly going to be subject to greater tax liability. *See FM Props.*, 947 S.W.2d at 731–32 (surmising the fair market value of property is likely to be reduced to less than half its original cost).

clearly meant to distinguish GAAM&T from GAAP. Part IV describes the goals that drive GAAP and GAAM&T and explains each serves a significantly different purpose, which aids in understanding why the Property Tax Code demands GAAM&T rather than GAAP. Part V exposes the gross misapplication and direct violations of the law by county appraisal districts in this area of property valuation and reveals there is a general ignorance surrounding this issue, often causing taxpayers to pay excessive taxes without ever knowing it. Finally, Part VI proposes a model based on the 80/20 economic principle, which demonstrates the true market value of a unit of inventory is substantially less than what is currently being asserted by Texas county appraisal districts.

III. HISTORICAL MOTIVATIONS BEHIND THE TEXAS PROPERTY TAX CODE

Within the first sentence of the current version of Section 23.12(a) of the Property Tax Code is the command that "the market value of an inventory is the price for which it would sell as a unit to a purchaser who would continue the business."[28] This language establishes the definition of market value for inventory and remains unchanged since the Property Tax Code's adoption by the 66th Legislature in 1979.[29] While numerous expansions and amendments have been injected into Section 23.12, this language in particular persists—reflecting the original intent and the continued belief that an inventory's market value should be defined separately and uniquely from other definitions of market value.[30]

Further, a public debate on the house floor over a proposed amendment to Section 23.12 reveals the unique market value definition attached to inventory was not merely the result of later interpretation but was part of the original intentions of the drafters.[31] On May 24, 1979, a

28. TAX § 23.12(a).

29. Although numerous additions and amendments to the Tax Code have prevailed, the definition of market value for an inventory has gone unchanged since the Property Tax Code was first proposed. *Compare* Tex. H.B. 1270, 66th Leg., R.S. 37 (1979) (revealing the original definition of inventory market value as "the price for which it would sell as a unit to a purchaser who would continue the business"), *and* Tex. S.B. 621, 66th Leg., R.S. 37 (1979) (containing an identical definition to the House Bill's definition), *with* TEX. TAX CODE ANN. § 23.12(a) (West 2015) (containing the phrase "the price for which it would sell as a unit to a purchaser who would continue the business" within the first sentence of subsection (a)).

30. *See* Garatoni et al., *supra* note 10, at 9 (noting, based on the legislative history, Section 23.12 was meant to provide a different concept of market value as an alternative from what is applied to other property).

31. Garatoni's discussion in the Journal of Property Tax Management also notes Senate Bill 621, which contained the current definition of inventory market value in Section 23.12, was debated

representative proposed to strike the separate inventory market value definition.[32] Fear that the separate definition could result in under-valuation of inventory at much less than its actual cost motivated the proposal.[33] In response, Representative Wayne Peveto, the sponsor of the bill, explained the intent behind the separate inventory market value definition was to allow merchants to value their inventories based on marketplace value, meaning, if the unit of inventory is worth nothing, it has no value.[34] This exchange demonstrates the sponsor of the bill understood the book value or cost of an inventory does not necessarily represent its appraised marketplace value.[35]

Going back even further, in 1966, John H. Keith, the former president of the International Association of Assessing Officers (IAAO), wrote about proper methods of appraisal of inventories.[36] Keith's methods were highly influential in the creation of Section 23.12.[37] He explained the original cost of an inventory could only represent its market value where all "obsolete stock has been eliminated . . . [and] is all current."[38] Further, he noted deductions from original cost should be allowed for inventory that is shop-worn or out of date, and a purchaser would not pay the original cost of the inventory, but rather "only the amount that he could expect to recover on its sale, less cost[s] of selling and profit."[39]

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and defended by the bill's sponsor. *Id.* at 10.

32. *See id.* (discussing the debate over the market value definition of inventory).

33. *See id.* (revealing the representative who opposed the separate market value definition feared it would create valuations at "many times less than actual cost" (citing the debate of Tex. S.B. 621 on the floor of the House) (tape available from the Texas House of Representatives Video/Audio Services Office))).

34. *See id.* (noting Peveto defended the separate definition allowing a merchant to value its inventory at its real value).

35. *See id.* (extrapolating through this debate that the legislature intended for the market value of an inventory to reflect its value in exchange, rather than its cost).

36. Chapter 54 of Keith's book discusses the appraisal of inventories at a time before the Property Tax Code was passed. *See* JOHN H. KEITH, PROPERTY TAX ASSESSMENT PRACTICES: A REFERENCE BOOK FOR THE ASSESSOR, APPRAISER, ACCOUNTANT, ATTORNEY AND THE STUDENT 536 (1966) (forwarding the methods believed to be proper in valuing inventory).

37. Keith's influence on the drafters of Section 23.12 is evident in that it directly quotes Keith when creating the definition of market value for inventories. *Compare id.* (making the statement, in 1966, "[The market value] of an inventory is the amount for which it would sell as a unit to a person who would continue the business."), *with* TEX. TAX CODE ANN. § 23.12(a) (West 2015) (mirroring Keith's definition and only changing "amount" to "price" and "person" to "purchaser").

38. KEITH, *supra* note 36, at 536.

39. *Id.* Keith's method requires the allowance of depreciation to reach FMV for inventories, and since the drafters modeled Section 23.12 after Keith's methods, it would seem obvious that, under the Property Tax Code, inventory must be allowed to depreciate. *See* Jim Robinson, *Analyzing Retail Markdowns*, *in* PROCEEDINGS OF THE 60TH ANNUAL CONFERENCE ON ASSESSMENT ADMINISTRATION 478, 480–81 (1994) (observing markdowns for depreciation are an integral part of

Another important point is that the principles of accounting and appraisal must be segregated in this context. Keith specifically addressed this concern as well.[40] He warned "[i]t is important that an auditing function not be confused with the appraisal process" and noted accounting books conform to income tax standards, which ordinarily do not reflect property tax regulations.[41] The drafters of the Property Tax Code heeded this warning by requiring appraisers and taxpayers to follow GAAM&T for the ad valorem taxation of property.[42] Ultimately, the legislature used Keith's analysis as the cornerstone for erecting Section 23.12 and, accordingly, devised a unique definition of market value for inventory apart from the general definition for market value under Section 1.04(7).[43]

IV. THE TEXAS CONSTITUTION AND THE PROPERTY TAX CODE CLEARLY MANDATE THE USE OF GAAM&T NOT GAAP IN AD VALOREM PROPERTY TAXATION

Appraisals for ad valorem tax purposes are separate and unique from accounting for income taxation purposes.[44] However, despite the

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the valuation process). This further aids in separating the ideas of GAAP from the methods of appraisal because, under GAAP, inventory cannot be depreciated, meaning GAAP book value cannot possibly reflect GAAM&T since the former does not allow the depreciation that the latter does. *See* INTERNAL REVENUE SERV., PUBL'N NO. 946, HOW TO DEPRECIATE PROPERTY 5 (2015), https://www.irs.gov/pub/irs-prior/p946--2014.pdf [hereinafter I.R.S. PUBL'N NO. 946] (instructing, for income tax purposes, "[y]ou cannot depreciate inventory because it is not held for use in your business"); INTERNAL REVENUE SERV., PUBL'N NO. 538, ACCOUNTING PERIODS AND METHODS 18 (2012), https://www.irs.gov/pub/irs-prior/p538--2012.pdf [hereinafter I.R.S. PUBL'N NO. 538] (noting the markdowns allowed under certain methods of accounting do not include markdowns based on depreciation and obsolescence); *cf.* PROPERTY ASSESSMENT VALUATION, *supra* note 19, at 487 (noting accounting is driven by IRS rules of income matching, while appraisals are driven by economic principles).

40. *See* KEITH, *supra* note 36, at 536–37 (stressing the importance of separating accounting and auditing practices).

41. *Id.*

42. *See* TEX. TAX CODE ANN. § 23.12(c) (West 2015) (requiring appraisals to be conducted by using GAAM&T).

43. Following Keith's methods, the drafters of 23.12 imputed a separate definition for inventory market value, distinguishable from the general definition of market value for non-inventory property under Section 1.04(7). *Compare id.* (defining inventory market value), *with id.* § 1.04(7) (defining market value in general).

44. *Compare* I.R.C. §§ 446, 471 (2012) (establishing the taxpayer's method of accounting shall be used to compute income, and inventories specifically are to be accounted for by accounting practices that clearly reflect income), *and* RESTATEMENT AND REVISION OF ACCOUNTING RESEARCH BULLETINS, *supra* note 19, ch. 4, statement 2 (stating the major objective in accounting for inventory is the matching of costs against revenues to properly determine realized income), *with* TEX. CONST. art. VIII, § 20 (mandating no property "shall ever be assessed for ad valorem taxes at a greater value

marriage of appraisal methods and techniques to ad valorem taxation—which is explicitly enumerated several times throughout the Property Tax Code[45]—appraisal districts have erroneously relied on accounting principles to appraise inventory at the "lower of cost or market" by relying on GAAP's book[46] value.[47] The misuse of these two distinct standards creates a problem because the underlying goals for determining a value through GAAP (book value) and GAAM&T (market value) are incongruent.[48]

than its fair cash market value"), TAX § 23.01 (dictating GAAM&T shall be used to determine market value), *and* TAX § 23.12 (defining market value in GAAM&T terms for use when appraising inventory).

45. *See* TAX § 23.01(b) ("The market value of property shall be determined by the application of generally accepted appraisal methods and techniques."); *id.* § 23.12 ("In appraising an inventory, the chief appraiser . . . shall apply generally accepted appraisal techniques in computing the market value . . . ."); *see also id.* § 5.05 (authorizing the use of appraisal manuals and publications—rather than any accounting manuals and publications—for the administration of property taxes).

46. Book value is a GAAP term used to describe the fictional value assigned to an asset for purposes of matching costs associated with that asset; it represents the value of property on the balance sheet. *See Book Value*, BLACK'S LAW DICTIONARY (10th ed. 2014) (defining book value); *see also* Hurst v. Hurst 401 P.2d 232, 237 (Ariz. Ct. App. 1965) (calling book value in accounting records an arbitrary valuation, inapplicable to finding market value), *modified*, 405 P.2d 913 (Ariz. Ct. App. 1965).

47. County appraisal districts frequently interchange replacement cost (or book value) as their estimation of fair market value. *See* HARRIS CTY. APPRAISAL DIST., BUSINESS & INDUSTRIAL PROPERTY DIVISION VALUE CALCULATION GUIDELINES TAX YEAR 2014, at 1, 1 (2014), http://www.hcad.org/pdf/forms/2014/ppcalcguide_2014.pdf (stating outright that market value equals 100% original cost); *accord In re* Quality Beverage Co., 170 B.R. 310, 316 (Bankr. S.D. Tex. 1994) (evincing the expert for Harris County Appraisal District concluded the booked-in price was roughly equivalent to market value); Sears Roebuck & Co. v. Dall. Cent. Appraisal Dist., 53 S.W.3d 382, 384, 386, 387 (Tex. App.—Dallas 2000, pet. denied) (indicating the appraisal district relied on GAAP's book value to reach ad valorem market value); Fullers Jewelry, Inc. v. Dall. Cent. Appraisal Dist., No. 05-96-01776-CV, 1999 WL 199341, at *2 (Tex. App.—Dallas Apr. 12, 1999, no pet.) (not designated for publication) (revealing the Dallas Central Appraisal District approximated FMV by using the book value provided by a company's financial statements). Fortunately, not every court falls for this trick. *See* Polk Cty. v. Tenneco Inc., 554 S.W.2d 918, 923 (Tex. 1997) (holding the Court of Civil Appeals erred by equating book value to fair market value). As *Polk County v. Tenneco Inc.* notes, market value and book value are not related and lead to an erroneous conclusion of market value. *Id.*; *accord* Travis Cent. Appraisal Dist. v. FM Props. Operating Co., 947 S.W.2d 724, 731–32 (Tex. App.—Austin 1997, writ denied) (demonstrating no reasonable, willing, and knowledgeable buyer would pay original cost for an entire unit of inventory); Cauble v. Handler 503 S.W.2d 362, 364 (Tex. Civ. App.—Fort Worth 1973, writ ref'd n.r.e.) ("The court erred when [it] used the cost price or book value of the partnership assets in determining the value of the inventory. . . . It should have been based on market value.").

48. This misapplication is evident considering IAAO has explicitly noted the danger in using GAAP where GAAM&T are proper. *See* INT'L ASS'N OF ASSESSING OFFICERS, STANDARD ON VALUATION OF PERSONAL PROPERTY 9 (Int'l Ass'n of Assessing Officers 2005) [hereinafter STANDARD ON VALUATION OF PERSONAL PROPERTY] (warning appraisers of the different goals of GAAP and GAAM&T).

On one hand, the principles of accounting match expenses to revenues to accurately reflect the income of a business.[49] On the other, the methods of valuation for appraisal purposes focus on finding the marketplace value of inventory, determined by its future potential profitability[50] (also known as the principle of anticipation[51]), and what it would trade for to a purchaser "who would continue the business."[52] Accordingly, using GAAP to value inventory for ad valorem appraisal

> The assessor should recognize that appraisal and accounting practices for depreciating personal property may differ. Accounting practices provide for recovery of the cost of an asset[,] . . . whereas appraisal practices strive to estimate a value related to the current market . . . . Appraisal practice must consider depreciation in the forms of physical deterioration, functional obsolescence, and external (economic) obsolescence.

Id. The IAAO further stresses "[c]aution should be exercised when inventory values are estimated from the owner's accounting records," noting cost does not necessarily reflect market value. *Id.* at 11; *accord* Jack P. Friedman, *Market Value of Inventory: Different Definitions Equal Different Values*, J. PROP. TAX MGMT., Summer 1998, at 1, 10 (concluding it is inappropriate to use a business's inventory amount on its financial statements when appraisal standards clearly call for market value and noting application of GAAPs "lower of cost or market" can result in a valuation much higher than what was intended by the property tax code).

49. *See* I.R.S. PUBL'N NO. 538, *supra* note 39, at 14 (recognizing the value of an inventory "must clearly reflect income"). Since the goal of valuing inventory through the IRC is to match income, the IRC disallows taking depreciation on inventory. *See* I.R.S. PUBL'N NO. 946, *supra* note 39, at 5 (asserting inventory cannot be depreciated for federal income tax purposes "because it is not held for use in [the] business").

50. The idea that market value is determined by the profitability and use of the property dates back over 100 years. *See* Cleveland, Cincinnati, Chi. & St. Louis Ry. v. Backus, 154 U.S. 439, 445 (1894) ("[T]he value of property results from the use to which it is put, and varies with the profitableness of that use, present and prospective, actual and anticipated. There is no pecuniary value outside of that which results from such use.").

51. The principle of anticipation is another term to express the idea that market value is based on the use and potential profitability of the inventory. *See* PROPERTY ASSESSMENT VALUATION, *supra* note 19, at 20.

> Value is the present worth of all the anticipated future benefits to be derived from a property. The benefits, in the form of an income stream or amenities, are those benefits anticipated by the market. . . . The principle of anticipation is related to the principle of change, which can sometimes make the prediction of future benefits difficult.

Id.

52. *See* TEX. TAX CODE ANN. § 23.12 (West 2015) (defining market value as that which a willing buyer would pay for a unit of inventory to continue the business). A willing and knowledgeable buyer with the goal of continuing the business is fully aware of the factors that devalue the inventory. *See* Robinson, *supra* note 39, at 479 ("A knowledgeable purchaser *who would continue the business* is aware of the impact of retail markdowns on the value of inventory."). As such, to reach a FMV, the depreciation of the inventory must be taken into account. *See* STANDARD ON VALUATION OF PERSONAL PROPERTY, *supra* note 48, at 9 ("Appraisal practice must consider accrued depreciation in the forms of physical deterioration, functional obsolescence, and external (economic) obsolescence.").

misrepresents the desired outcome for valuation through GAAM&T.[53]

A. *GAAP and Accounting for the Value of Inventory at Lower of Cost or Market*

GAAP is the amalgamation of the accepted rules of accounting that dictates what accounting practices a business must use in recording its activities.[54] One of the primary purposes of GAAP is to promote consistency in business records to ensure the records are transparent to investors.[55] Additionally, this uniformity aids the government in determining the actual income of a business, so it may impose income taxes in a fair and equitable manner.[56] With these goals in mind, it is important for the reader to understand that the primary focus of GAAP and the IRC rules is to determine a business's income based on what it has spent and what it has taken in, not to determine the marketplace value of any individual asset and what it is worth independent of the business.[57]

Accordingly, under GAAP and IRC rules, the recorded value (book value) of inventory must be determined by matching what it cost the business to procure to the revenues it produces.[58] To match revenues and

53. As noted above, the IRC and GAAP forbid accounting for depreciation in reaching a value for inventory to match income. *See* I.R.S. PUBL'N NO. 946, *supra* note 39, at 5 (commanding taxpayers cannot depreciate inventory). Conversely, under GAAM&T, the Tax Code and the IAAO specifically demand the consideration of various forms of depreciation. *See* Robinson, *supra* note 39, at 480–81 (explaining the need for using economic depreciation when determining the market value of a retail inventory). Thus, using the methods imposed by the IRC and GAAP cannot possibly reach the same conclusion of value that is called for by the Texas Constitution and the statutes that govern ad valorem taxation. *See* Travis Cent. Appraisal Dist. v. FM Props. Operating Co., 947 S.W.2d 724, 732 (Tex. App.—Austin 1997, writ denied) (concluding no willing buyer would purchase a unit of inventory for its book value); *see also* KEITH, *supra* note 36, at 536 (noting the importance of separating auditing (accounting) principles from appraisal processes because completely different values could be reached); PROPERTY ASSESSMENT VALUATION, *supra* note 19, at 487 (confirming accounting formulas cannot be used to calculate the appraisal value of inventory).

54. Through the Securities and Exchange Commission, the Financial Accounting Standards Board, and other authoritative sources, the Generally Accepted Accounting Principles have been developed over the years to become the authoritative source of accounting guidelines in the United States. *Financial Accounting Standards*, QUICKMBA.COM, http://www.quickmba.com/accounting/fin/standards (last visited Dec. 15, 2015).

55. *See id.* (noting accounting standards are required so financial statements will consistently and fairly reflect financial performance).

56. Many of the various factors used to calculate income for income tax purposes are derived through GAAP principles; inventory is an example of this. *See* RESTATEMENT AND REVISION OF ACCOUNTING RESEARCH BULLETINS, *supra* note 19, ch. 4 statement 2 (stating accounting for inventories serves to match revenues and costs to determine income).

57. *Compare* I.R.C. §§ 1–9834 (enumerating a vast expanse of rules and procedures to determine one's taxable income), *with* TEX. CONST. art. VIII, § 20 (demanding taxes on property are levied based on the value of the property with no mention of income as a determinative factor).

58. *See* RESTATEMENT AND REVISION OF ACCOUNTING RESEARCH BULLETINS, *supra* note

costs, GAAP provides the value of inventory can be determined under several methods: (1) the cost method,[59] (2) the lower of cost or market method,[60] or (3) the retail method.[61] Each of these reaches a GAAP-approved book value of inventory, but the reader must keep in mind that GAAP and GAAM&T are not interrelated.

Ultimately, each of these GAAP methods is viable in reaching a conclusion of inventory book value.[62] However, most retail businesses use the more-flexible retail method because it takes into account actual markups and markdowns on the individual items, providing some leeway for poor selling items that must be sold at a discounted price.[63] The

19, ch. 4 statement 2 ("A major objective of accounting for inventories is the proper determination of income through the process of matching appropriate costs against revenues.").

59. The GAAP cost method is fairly simple. It requires a business to determine its inventory value by calculating the actual dollars spent on procuring the inventory. I.R.S. PUBL'N NO. 538, *supra* note 39, at 17. These costs include the purchase price from distributers, the costs associated with shipping and transportation, and other costs, which often (depending on the size of the business/inventory) must be capitalized under uniform capitalization rules per Section 263A of the Internal Revenue Code. *See id.* (mentioning capitalized costs); *see also* I.R.C. § 263A (2012) (outlining the rules for capitalization of costs). Additionally, the cost method allows for discounts such as a quantity purchase discounts or discounts based on timely payments to the seller. *Id.*

60. Under this GAAP method, the business looks at each individual item in its inventory and values it at its market price (i.e., replacement cost new (RCN)) or at its original/historical cost new (HCN)—whichever is lower—then sums that item with all the other items in the inventory to reach a total inventory value. I.R.S. PUBL'N NO. 538, *supra* note 39, at 17. The term "market," here, actually refers to replacement cost—what the business would have to pay to replace an item in its inventory. *See id.* at 18 (noting market value, in this context means "the usual bid price on the date of inventory," which is the price of replacing the inventory item new).

61. The GAAP retail method is a bit more mathematically complicated. Under the retail method, the business totals the costs associated with its opening inventory and the inventory purchased during the year and subtracts them from the retail value of that inventory (subject to net markups) to reach a markup percentage, which is then multiplied by the net of total retail value minus sales. *Id.* Further, this method makes slight alterations based on the accounting methods used by the business. *Id.* While this method is a bit more complicated, it tends to match expenses to revenues more accurately and is the method most widely used by merchandise retailers. *See* Robinson, *supra* note 39, at 479 (noting retailers typically use the retail method of accounting).

62. The IRC lists GAAP's cost method, the lower of cost or market method, and the retail method, as the three methods that are generally available to value inventory as part of one's taxable income. I.R.S. PUBL'N NO. 538, *supra* note 39, at 17–18. The reader must be careful not to confuse these GAAP methods with the similarly named GAAM&T methods of appraisal. *See* TEX. TAX CODE ANN. § 23.0101 (West 2015) (requiring appraisers to "consider the cost, income, and market data comparison methods of appraisal and use the most appropriate method").

63. The retail method does allow for limited markdowns and markups to account for certain expenses associated with the inventory, which allows the retailers to match their expenses and revenues associated with the inventory more accurately. *See* Robinson, *supra* note 39, at 479 (claiming most retailers with diverse inventories will use the retail method of accounting); *see also* I.R.S. PUBL'N NO. 538, *supra* note 39, at 18 (allowing retailers to take certain markdowns on inventory, but specifically excluding depreciation and obsolescence from allowable markdowns).

markdowns allowed under the retail method, however, are not markdowns for depreciation.[64] This means even under the most preferential method of accounting—the retail method—neither GAAP's cost recovery depreciation nor GAAM&T's appraisal forms of depreciation, such as economic obsolescence depreciation, can be used to decrease the book value of the inventory.[65]

Neither the IRC nor GAAP account for inventory depreciation because the inventory is not being held for use, rather, it is held as an income-producing asset.[66] GAAM&T, on the other hand, determines value for ad valorem taxation by using cost as a baseline to which it applies marketplace depreciation.[67] Further, it focuses on the amount a purchaser would be willing to pay for the entire unit of inventory to continue the business of retailing that inventory.[68]

B. *GAAM&T and the Appraisal of Property to Determine the True Fair Market Value of Inventory*

Neither the Property Tax Code nor any materials that comprise GAAM&T contain language suggesting an inventory's market value is equal to its book value, original cost, or replacement cost, as it does under the IRC or GAAP.[69] Instead, the general definition of market value for

64. *See* I.R.S. PUBL'N NO. 538, *supra* note 39, at 18 (clarifying depreciation is not an allowable markdown).

65. Since, under GAAP and IRC rules, inventory cannot be depreciated to reach book value, and under GAAM&T, inventory must be depreciated to reach market value, one cannot logically use book value as the determinant of market value for appraisal. *See id.* (noting depreciation and obsolescence are not allowable markdowns). *But see* TAX § 23.011 (listing depreciation as a factor to reduce the calculation of market value); PROPERTY ASSESSMENT VALUATION, *supra* note 19, at 479 (noting the new cost is reduced by the losses incurred through all forms of depreciation); STANDARD ON VALUATION OF PERSONAL PROPERTY, *supra* note 48, at 9 (demanding appraisers "must consider accrued depreciation in the forms of physical deterioration, functional obsolescence, and external (economic) obsolescence").

66. *See* I.R.S. PUBL'N NO. 946, *supra* note 39, at 5 ("You cannot depreciate inventory because it is not held for use in your business.").

67. The GAAM&T cost method of appraisal uses the book value of the inventory as a starting point from which it subtracts physical, functional, or economic obsolescence. *See* TAX § 23.011 (requiring a chief appraiser to "make any appropriate adjustment for physical, functional, or economic obsolesce" if the chief appraiser determines the market value of real property based on the cost method of appraisal).

68. *See id.* § 23.12 (providing market value as "the price for which it would sell as a unit").

69. "FMV" is mentioned in GAAP and IRC rules, but like the term "market," it has a different meaning than under GAAM&T. *See id.* (defining inventory market value specifically with respect to appraisal methods); *accord* Gary A. Goff, *Fair Market Value: A Primer for Texas Legal Practice*, 15 TEX. TECH L. REV. 637, 637–38, 671 (1984) (mentioning a multitude of areas of the law where "FMV" is used but noting each "FMV" may vary based on the context). The reader must be careful when reviewing sources that are not specifically dedicated appraisal sources as it is easy to read into the

appraisal is found in Section 1.04(7) of the Property Tax Code, and more specifically, the unique definition of inventory FMV is found in Section 23.12(a). The general definition is:

> [T]he price at which a property would transfer for cash or its equivalent under prevailing market conditions if: (A) exposed for sale in the open market with a reasonable time for the seller to find a purchaser; (B) both the seller and the purchaser know of all the uses and purposes to which the property is adapted and for which it is capable of being used and of the enforceable restrictions on its use; and (C) both the seller and purchaser seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other.[70]

The specific definition under Section 23.12(a) is "the price for which [an inventory] would sell *as a unit* to a *purchaser* who would *continue the business*."[71] It is important to distinguish these two definitions and note the specific definition is wholly separate and unique to personal property classified as an inventory.[72] To fully understand the inventory-specific

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language of an IRS source, for example, and confuse it for authority governing GAAM&T. *See* Treas. Reg. § 1.471-4 (as amended in 1993) (explaining the need for inventories to reflect taxable income); *Valuation of an Acquired Retailer's Inventory* 1, 2 (Internal Revenue Serv., Coordinated Issue Paper UIL No. 471.08-06, 1991), http://www.irs.gov/pub/irs-isp/ret-val.pdf (discussing Revenue Procedure 77-12 and Treasury Regulation 1.471-4 and construing "[t]he cost of reproduction method is the preferred method to use when valuing retailers' inventories"). This "cost-of-reproduction method," described by IRC standards, seeks to find the value of new inventory that would replace the old inventory on hand (i.e., replacement cost), rather than the value of the *unit* of inventory as required by the Property Tax Code which must be found with consideration of all the "individual characteristics that affect the property's market value" per Section 23.01. TAX §§ 23.01, 23.12. Thus, IRC and other GAAP sources may put forward means to reach the "FMV," but it is not the same "FMV" required by the Texas Property Tax Code and GAAM&T. *See* Sears Roebuck & Co. v. Dall. Cent. Appraisal Dist., 53 S.W.3d 382, 391 (Tex. App.—Dallas 2000, pet. denied) (claiming book value could only be an indication of ad valorem market value if there was evidence to demonstrate the two were equivalent). In *Sears*, the court merely contends GAAP's book value (which is proffered as FMV under IRC rules) can be equal to ad valorem FMV but only by coincidence of calculation not that they can be equal by definition. *See, e.g.*, Travis Cent. Appraisal Dist. v. FM Props. Operating Co., 947 S.W.2d 724, 732 (Tex. App.—Austin 1997, writ denied) (illustrating no willing purchaser would pay book value for a housing inventory to continue the business).

70. TAX § 1.04(7).

71. *Id.* § 23.12(a) (emphasis added).

72. Section 1.03 of the Property Tax Code affirms Chapter 311 of the Government Code (The Code Construction Act) applies to the construction of every provision in the Property Tax Code unless otherwise stated. *Id.* § 1.03. The Code Construction Act confirms the specific definition for inventory market value prevails as an exception to the general definition. *See* TEX. GOV'T CODE ANN. § 311.026 (West 2013) (stating the rule of construction). Section 311.026 states:

> (a) If a general provision conflicts with a special or local provision, the provisions shall be construed, if possible, so that effect is given to both.
>
> (b) If the conflict between the general provision and the special or local provision is

definition, one must make an effort to understand each of its parts.

1. Purchaser–Seller Distinction

Notably, the price at which the seller would sell is absent from the specific definition, evincing the market value of an inventory is determined primarily from the perspective of the purchaser.[73] This distinction is paramount to an understanding of inventory valuation; it shows the taxable value of an inventory is subject to the desires of a knowledgeable, willing buyer.[74] Consequently, since the goal of every investor (one who purchases an inventory to use in his business) is to turn a profit, the fair market value of inventory must be determined based on the inventory's future profitability to a purchaser.[75]

Obviously, if the selling entity were to choose a price at which to sell, it would also aim to sell at a profit. To sell at a profit, the seller could not sell its inventory at less than its cost. If, however, the going price for a unit of inventory was its cost to the seller, a willing buyer would have no incentive to buy from the seller because it could just purchase the items in that inventory at cost elsewhere, which would include other intangibles like warranties and packaging.[76] Hence, when the legislature drafted the

> irreconcilable, the special or local provision prevails as an exception to the general provision, unless the general provision is the later enactment and the manifest intent is that the general provision prevail.

Id. Thus, by following the guiding rules of construction, appraisers must follow the independent definition for inventory when estimating market value.

73. The definition in Section 23.12(a) was taken directly from the language in John H. Keith's book; however, a few key words were changed. One of the alterations to Keith's definition was to change "person" to "purchaser," which serves to further demonstrate the legislature intended the market value of inventory to be determined with respect to the perspective of a purchaser; not a seller. *Compare* KEITH, *supra* note 36, at 536 ("[T]he amount for which it would sell as a unit to a person who would continue the business."), *with* TAX § 23.12(a) ("[T]he price for which it would sell as a unit to a purchaser *who would continue the business*." (emphasis added)).

74. *See* Robinson, *supra* note 39, at 479–80 (discussing the market value definition for inventory from the perspective of a "knowledgeable purchaser *who would continue the business*").

75. *See* Polk Cty. v. Tenneco, Inc., 554 S.W.2d 918, 921 (Tex. 1997) (concluding the buyer of inventory is "primarily interested in the income which his property will generate"); Travis Cent. Appraisal Dist. v. FM Props. Operating Co., 947 S.W.2d 724, 730 (Tex. App.—Austin 1997, writ denied) (noting the income approach to valuing inventory is concerned with the future profits that a buyer would generate in a later retail sale).

76. When inventory is purchased new, it usually comes with intangibles, such as warranties, credit terms, discounts, or disposable, but valuable, tangible packaging. However, when a purchaser buys second-hand held inventory from a seller of a unit of inventory, he does not receive all of the benefits associated with getting the inventory new. Thus, the price at which a willing buyer would buy must be low enough to justify buying from a unit-seller rather than purchasing new. *See* Robinson, *supra* note 39, at 479 (noting where all the merchandise is new, the value is the FIFO cost, but in the real world, where inventory is comprised of new, used, damaged, and obsolete inventory,

definition of inventory market value, it purposefully removed any mention of the seller's motives.[77]

2. Knowledgeable and Willing Purchaser

While requirements that the purchaser be knowledgeable or willing are not explicitly stated in Section 23.12, both are implied and supported by GAAM&T.[78] Willingness to buy is clearly important when determining value. A buyer under duress or financial hardship might pay much more or less, respectively, for the goods than what a willing buyer under no pressure would.[79] Moreover, without willingness to buy in the first place, there would be no incentive to make the purchase at all; thus, willingness is requisite in determining FMV under Section 23.12.[80]

Evidence that the fictional purchaser must be knowledgeable is implicit in the language, "who would continue the business."[81] This language is

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FIFO values are likely an overstatement of true market value).

77. *See* TAX § 1.04(7) (containing both a willing seller and willing buyer element in the calculation of market value generally). *But see id.* § 23.12(a) (defining inventory market value specifically as what a willing buyer would pay and not as what a willing seller would sell). This specific definition for inventory focuses primarily on the buyer. *See* KEITH, *supra* note 36, at 536 (noting the value is based on what the buyer is willing to pay).

78. The Property Tax Code does not specifically demand the hypothetical buyer must be knowledgeable, but it is implied through the continue-the-business language. *See* TAX § 23.12(a) (noting the fair market value is the price "a purchaser who would continue the business would pay").

79. The International Association of Assessing Officers expressed that, in general, market value must be determined by the most probable price a property would bring "in an arm's-length transaction between a willing seller and a willing buyer" who are both knowledgeable in all the characteristics and uses of the property. PROPERTY APPRAISAL AND ASSESSMENT ADMINISTRATION, *supra* note 24, at 80. A similar definition was accepted by the Supreme Court of Kansas as far back as 1892. *See* Kansas City, Wyandotte & Nw. R.R. Co. v. Fisher, 30 P. 111, 111 (Kan. 1892) (holding the following "proper definition of 'market value'" should have been given). The court held:

> The "market value" means the fair value of the property as between one who wants to purchase and one who wants to sell, not what could be obtained for it under peculiar circumstances, when a greater than its fair price could be obtained, nor its speculative value; not a value obtained from the necessities of another; nor, on the other hand, is it to be limited to that price which the property would bring when forced off at auction under the hammer. It is what it would bring at a fair public sale, when one party wanted to sell and the other to buy.

Id.

80. *See* TAX § 23.12(a) (implying a willing buyer is one "who would continue the business").

81. *Id.* One rule of statutory interpretation is that courts should construe statutes based on the intent of the legislature. *See* Union Bakers Ins. Co. v. Shelton, 889 S.W.2d 278, 280 (Tex. 1994) (claiming the primary rule of interpretation "look[s] to the intent of the legislature"); Monsanto Co. v. Cornerstones Mun. Util. Dist., 865 S.W.2d 937, 939 (Tex. 1993) ("The goal of statutory construction is to give effect to the intent of the legislature."); *see also* May v. State, 903 S.W.2d 792, 793 (Tex. App.—Dallas 1995), *rev'd on other grounds*, 919 S.W.2d 422 (Tex. Crim. App. 1996) (commenting interpretation should focus on the literal text and discern a fair meaning from it).

more thoroughly explored later, but for now, it is enough to know one who would continue the business of selling inventory is assumed to be one who knows how to sell that inventory and is apprised of all the particular characteristics and risks inherent in that business.[82] Clearly one who knows nothing about the industry might pay an exorbitant amount or ask for too little in exchange for the inventory; thus, what an ignorant purchaser would pay cannot reflect FMV.[83]

3. Inventory as a Unit

Additionally, Section 23.12 specifically notes the price under consideration is the price of the entire unit of inventory: not the price of the business; not the price of the sum of individual items in the inventory; and not the retail price or sum of retail.[84] This distinction is critical to differentiate GAAP value from GAAM&T value. As explained above, the methods of accounting look at each individual item in a given inventory and devise various calculations to reach a net inventory book value.[85] The Property Tax Code, however, explicitly denies this approach for inventory with the as-a-unit language.[86]

82. Following the rule of statutory construction, one should logically conclude a purchaser who would continue the business would be knowledgeable enough to actually continue that business. *See* Robinson, *supra* note 39, at 479 (claiming a knowledgeable purchaser seeking to continue the business knows about the characteristics of the inventory and is aware of the effect physical and economic factors may have on such an inventory, causing him to seek a purchase price much lower than FIFO cost); 21 JAY D. HOWELL, JR., TEXAS PRACTICE SERIES: PROPERTY TAXES § 412, at 1–2 (4th ed. 2001) (noting it is an important principle in determining market value "to consider everything that would be considered by well-informed buyers and sellers").

83. In *FM Properties*, the court made a determination of value based on what a purchaser would know and understand about the market conditions affecting the inventory. Travis Cent. Appraisal Dist. v. FM Props. Operating Co., 947 S.W.2d 724, 732 (Tex. App.—Austin 1997, writ denied) ("An amount that no willing buyer would pay for property is simply not market value . . . .").

84. TAX § 23.12(a). Once again, the rule of statutory construction requires Section 23.12 to be read based on its plain reading and the intent of the legislature. *See* Union Bakers Ins. Co. v. Shelton, 889 S.W.2d 278, 280 (Tex. 1994) (asserting the primary rule of interpretation "look[s] to the intent of the legislature"). Courts have evaluated this language and concluded the legislature intended to look at the unit as a whole rather than as the sum of its parts. *See FM Props.*, 947 S.W.2d at 731 (surmising the legislature concluded valuing inventory as a single unit was "inherently fairer and more likely to produce true market value" than other methods); *accord* Cherokee Water Co. v. Gregg Cty. Appraisal Dist., 773 S.W.2d 949, 956 (Tex. App.—Tyler 1989, writ granted), *aff'd* 801 S.W.2d 872 (Tex. 1990) (recognizing the value of the whole is not necessarily equal to the value of the sum of the parts that make up the whole).

85. Cost, lower-of-cost-or-market, and retail method are the generally accepted and used methods for matching inventory costs to revenues. I.R.S. PUBL'N NO. 538, *supra* note 39, at 17.

86. The calculations under federal income tax methods require an inquiry into the values of all the individual pieces of inventory to be added together to reach GAAP book value. *Id.* But, while these income tax calculations can be useful to appraisers as a starting point in their GAAM&T

The importance of this distinction is two-fold. First, a valuation of an entire unit of inventory means the good inventory, that holds a higher market value, is weighed down by the bad inventory—reflecting the appraisal principles of contribution and regression.[87] Second, by strictly defining what is being sold as the unit of inventory, Section 23.12 explicates that only the inventory is for sale in this calculation, not the seller's business with the inventory as a piece of the bargain.[88] If a purchaser was valuing an inventory with the business in mind, it might pay well over or under the marketplace price due to any number of other advantages or disadvantages that come with purchasing one's entire business as a going concern.[89]

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calculations, they are not alone determinative. *See* PROPERTY ASSESSMENT VALUATION, *supra* note 19, at 479 (explaining there are several appraisal methods used to calculate the amount to be subtracted from replacement cost new).

87. The principle of contribution essentially states the added value to the whole that is created by the contribution of a component to the whole is not necessarily equal to the value of the component by itself. *See* PROPERTY ASSESSMENT VALUATION, *supra* note 19, at 18–19 (explaining the cost of the component does not always equate to the value the component contributes to the whole). For example, construction of a new driveway for a home may cost the homeowner $5,000, yet the improvement may only increase the value of the property by $1,000. *See id.* (providing similar examples). This concept of contribution aids in understanding how the addition of a new piece of inventory does not necessarily add to the value of the unit of inventory equal to the piece's cost. The principle of regression also comes into play with inventory valuation; it states the value of property may decrease by association with property of lower value. *Id.* at 20. This concept aids in understanding the bad purchases that lie stagnant in an inventory will bring down the value of the good/fast-moving inventory by association, making the unit of inventory less valuable. *Id.*

88. By following the rules of statutory construction, Section 23.12 must be read for its plain meaning and, because there is no mention of the seller's business, it cannot be made part of the calculation. *See* Garatoni et al., *supra* note 10, at 6 (noting it would be impossible for a purchaser who only bought the inventory to continue the seller's business, thus reading the statute that way would be absurd). This mandates when calculating the inventory's value, any other going concerns of the seller's business must be ignored. *See In re* Quality Beverage Co., 170 B.R. 310, 316 (Bankr. S.D. Tex. 1994) (concluding the inventory and the going concern of the business had a separate ascertainable value, and thus one does not affect the other for determining the market value of the inventory); *see also FM Props.*, 947 S.W.2d at 728 (calling to attention that the continue-the-business language means to continue "the business of selling whatever goods make up the inventory," not to continue the seller's business).

89. The going concern of a business includes the intangibles associated with it, such as good will, customer loyalty, and brand recognition. *See* Garatoni et al., *supra* note 10, at 7 (distinguishing the value of the intangible going concern of a business from the value of the business's inventory). In addition to the intangibles associated with the business being excluded through Section 23.12, they must be excluded more broadly based on the fact that those intangibles are not taxable at all under Texas law. *See* Dall. Cent. Appraisal Dist. v. Tech. Data Corp., 930 S.W.2d 119, 121–22 (Tex. App.—Dallas 1996, writ denied) (pointing to Section 11.02(a), which disallows taxation of intangible property); *see also* Gregg Cty. Appraisal Dist. v. Laidlaw Waste Sys., Inc., 907 S.W.2d 12, 19–20 (Tex. App.—Tyler 1995, writ denied) (stating where a going concern exists "it should be recognized as a value separate and distinct" from the value of the tangible property). Additionally, the court in

4. To Continue the Business

The phrase, "to continue the business" is of particular importance; it implicitly suggests the buyer must be knowledgeable and in the same business.[90] As noted above, this statement implies the buyer is knowledgeable because an ill-informed buyer could not reasonably calculate the marketplace risks and characteristics of the inventory that lead to a FMV purchase.[91] The requirement that the purchase be for the sole purpose of continuing the business of selling inventory means the only concern of the buyer is the future profitability of the unit of inventory.[92] What the inventory might have cost (its book value) means little—other than to serve as a starting point for calculations—to the willing buyer because book value does not reflect the inventory's potential economic benefits.[93]

Finally, the reader must not confuse what it means to continue the business. The call of Section 23.12 is to continue the business of selling the items that make up the inventory; it is not to continue the individual seller's business.[94] An inventory, as it relates to the seller's business, may

Laidlaw Waste Systems accuses the appraisal district of "creat[ing] confusion" by commingling the going concerns of the business with the value of the property and trying to impose a tax on the intangibles associated with it. *Id.*

90. *See* Robinson, *supra* note 39, at 479 (contending only a knowledgeable purchaser continuing the business would know of all appropriate markdowns to consider in reaching a market value purchase).

91. *See FM Props.*, 947 S.W.2d at 732 (equating market value to what a willing and knowledgeable buyer would pay).

92. The value of an inventory depends entirely on its future profit potential to the buyer. *See* Garatoni et al., *supra* note 10, at 7 (claiming inventory valuation under Section 23.12 "is an attempt to estimate the present value of the forecasted future benefits to the buyer"); *see also FM Props.*, 947 S.W.2d at 734 (recognizing the buyer's primary interest is in future financial benefit, which creates a value based on "future benefits expected to be derived from ownership").

93. Under GAAM&T's cost method of appraisal, the historical cost is relevant. TEX. TAX CODE ANN. § 23.011(1) (West 2015). However, the historical cost of inventory represents only the starting point of the calculation, which must be then be reduced by "physical, functional or economic obsolescence." *Id.* § 23.011(2). The reader must remember that under IRC rules, inventory cannot be depreciated, so the book values, by law, cannot reflect the deprecation of inventory. *See* I.R.S. PUBL'N NO. 946, *supra* note 39, at 5 (providing inventory cannot be depreciated for IRC purposes). Thus, to reach market value for ad valorem taxing, an appraiser may use book value (i.e., replacement cost) as a starting point but must then subtract the depreciation that was not allowed under GAAP and IRC rules. *See* PROPERTY ASSESSMENT VALUATION, *supra* note 19, at 487 (calculating the market value by subtracting depreciation from replacement cost new); *see also* INTERNAL REVENUE SERV., PUBL'N NO. 561, DETERMINING THE VALUE OF DONATED PROPERTY 3 (2007), https://www.irs.gov/pub/irs-prior/p561--2007.pdf ("Often there is no relationship between the replacement cost and the FMV.").

94. *See In re* Quality Beverage Co., 170 B.R. 310, 316 (Bankr. S.D. Tex. 1994) (noting the going concern of the business had a separate ascertainable value and does not affect the determination of

have incalculable variance from business to business. If the seller's business is incredibly efficient and has extensive customer loyalty, the inventory is worth much more in those hands because it will turnover more frequently. However, if that same unit of inventory was in the hands of a seller with a bad reputation, poor customer service, or simply is in a bad location, the inventory would be worth substantially less.[95] Accordingly, the continue-the-business language in Section 23.12 means the purchaser will continue the business of selling inventory on his own; the value of the seller's business is completely irrelevant.[96]

market value for the inventory); *FM Props.*, 947 S.W.2d at 728 (calling to attention that the continue-the-business language means to continue "the business of selling whatever goods make up the inventory"); *see also* Garatoni et al., *supra* note 10, at 6 ("[I]t is clear that the contemplated purchaser does not buy the entire operation of the seller and does not acquire the seller's stores, name, or *anything* other than the inventory.").

95. By applying the principles of regression and contribution, the value of the unit of inventory is worth less than the original cost to the seller. *See* Garatoni et al., *supra* note 10, at 6–7 (claiming the unit of inventory has an independent and much lower value than the sum of the individual parts that make up the inventory); *see also* City of Saginaw v. Garvey Elevators, Inc., 431 S.W.2d 575, 579 (Tex. Civ. App.—Fort Worth 1968, writ ref'd n.r.e.) (asserting the willing-buyer test cannot be ignored and any method that results in a substantially different value than what would have been produced through the willing buyer test is "fundamentally wrong"). Those who make a living (with 20 to 40 years of personal experience) purchasing new inventory for their respective companies (furniture retailers) affirmed they would only be willing to pay 0% to 50% of original cost for any second-hand held unit of inventory. *See* Robert X. Johnson, Sen. Prop. Tax Consultant, General Expert's Report Concerning the Personal Property – Unit of Merchandise Inventory of Various Retailers 8 (Jan. 1, 2014) (on file with author) [hereinafter Johnson's Expert Report Concerning Personal Property] (compiling data of professionals' opinions); *see also* Aff. of Jeri Metting Alvarez Concerning Opinion of Value 4 (July 20, 2010) (answering 10% for showroom and 50% for warehouse); Aff. of Oscar G. Araiza Concerning Opinion of Value 4 (Aug. 11, 2010) (answering 15% for showroom and 85% for warehouse); Aff. of Bart Blake Concerning Opinion of Value 4 (Aug. 26, 2010) (answering 50% for showroom inventory and 70% for warehouse inventory); Aff. of Clara Isabel Bulla Concerning Opinion of Value 4 (2010) (answering 20% for showroom and 80% for warehouse); Aff. of Marty Duplissey Concerning Opinion of Value 4 (Aug. 29, 2010) (answering 30% for showroom and 50% for warehouse); Aff. of Thomas R. Edelman Concerning Opinion of Value 4 (Aug. 24, 2010) (answering 45–50% for showroom and up to 50% for warehouse); Aff. of Virginia Henry Concerning Opinion of Value 4 (July 20, 2010) (answering 10% for showroom and 20% for warehouse); Aff. of B. T. Mahtani Concerning Opinion of Value 4 (Aug 11, 2010) (answering 0% for showroom and 10% for warehouse); Aff. of Jarome J. Oliphant Concerning Opinion of Value 4 (July 20, 2010) (answering 10% for showroom and 20% for warehouse); Aff. of Jamie Parra Concerning Opinion of Value 4 (July 20, 2010) (answering 25% for showroom and 30% for warehouse); Aff. of Van Smith Concerning Opinion of Value 4 (July 20, 2010) (answering 15% for showroom and 20% for warehouse); Aff. of John Snell Concerning Opinion of Value 4 (July 6, 2010) (answering 40% for showroom and 25% for warehouse). In gathering these affidavits and compiling his own data, Robert X. Johnson concluded the mean amount a willing buyer would pay for a second-hand unit of inventory was only 23% of original cost. Johnson's Expert Report Concerning Personal Property, *supra*, at 8.

96. *See In re* Quality Beverage Co., 170 B.R. at 316 (concluding the going concern of a business does not affect the calculation of an inventory's market value); *FM Props.*, 947 S.W.2d at 728 (noting

C. *Why GAAP and GAAM&T Cannot Logically Coexist When Determining the Market Value of an Inventory*

The goals of the IRC and GAAP are incongruent with the goals of ad valorem inventory taxation.[97] The IRC taxes a business on its income; and to a retail business, its inventory is the main driver of its income. When inventory is sold, there is a cost associated with revenue, and the book value of the individual piece of inventory is used to demonstrate the gross profits from each sale.[98] For this reason, the IRC does not allow cost-recovery depreciation of inventory for determining income taxes.[99]

In contrast, appraisal for ad valorem taxation is not concerned with costs and revenues; rather, it seeks to accurately measure the leftover unsold inventory's profit potential.[100] As such, devaluation of that unit of inventory is a very real concern. One of the biggest devaluating factors of an inventory is the effect of economic obsolescence—an inescapable

"continue the business" means to continue "the business of selling whatever goods make up the inventory" not continuing the seller's business).

97. Unlike valuation under GAAP and the IRC, which looks at the past expenses to match income, GAAM&T looks at future profit potential based on the characteristics of the asset's pattern of demand. *See* RESTATEMENT AND REVISION OF ACCOUNTING RESEARCH BULLETINS, *supra* note 19, ch. 4 statement 4 (revealing the objective of accounting for inventories is to reflect periodic income); *see also* I.R.S. PUBL'N NO. 538, *supra* note 39, at 17 (valuing inventory through GAAP methods to be added to calculations arriving at taxable income). The Property Tax Code, however, does not follow GAAP; it follows GAAM&T. *See* TAX § 23.01(b) ("The market value of property shall be determined by the application of generally accepted appraisal methods and techniques."); PROPERTY APPRAISAL AND ASSESSMENT ADMINISTRATION, *supra* note 24, at 35 (defining market value as "the cash price a property would bring in a competitive and open market" and drawing a distinction between market value and price—referring to historical cost); PROPERTY ASSESSMENT VALUATION, *supra* note 19, at 487 (stressing accounting formulas cannot be used to calculate the appraisal value); *see also* KEITH, *supra* note 36, at 536 (warning appraisers of the importance of separating accounting functions from appraisal techniques).

98. A business may elect several methods of inventory accounting, but each method's only purpose is to match costs to revenues. I.R.S. PUBL'N NO. 538, *supra* note 39, at 14, 17–19 (directing GAAP must be used to determine inventory values and laying out each method of inventory accounting with the goal of accurately matching costs to revenues).

99. *See id.* at 5 ("You cannot depreciate inventory because it is not held for use in your business."); *id.* at 18 (noting the markdowns included in accounting calculations do not include real world adjustments like depreciation and obsolescence). Under the Property Tax Code, depreciation must be taken into consideration. *See* TAX § 23.01(b) (demanding value be determined under GAAM&T); PROPERTY ASSESSMENT VALUATION, *supra* note 19, at 487 (explaining accounting depreciation is driven by the IRC rules—which do not allow depreciation for inventories—but "appraisal depreciation is driven by supply and demand").

100. The appraised value of property should reflect the property's future potential. *See* PROPERTY ASSESSMENT VALUATION, *supra* note 19, at 73 (noting "values represent anticipated benefits to be received from property ownership" and "economic trends play an important role in the future value of property").

market phenomenon that can be measured by economic depreciation.[101] Section 23.01 demands "each property shall be appraised based upon the individual characteristics that affect the property's market value."[102] Economic obsolescence depreciation (a measure of the unit's potential profitability) is one of those characteristics.[103] As such, the demand of the IRC and GAAP—that inventory not be depreciated—cannot be in line with GAAM&T.[104]

V. VIRTUALLY EVERY COUNTY APPRAISAL DISTRICT IN THE STATE HAS FAILED TO ABIDE BY THE TEXAS CONSTITUTION, THE TEXAS PROPERTY TAX CODE, AND THE UNIFORM STANDARDS FOR PROFESSIONAL APPRAISAL PRACTICE IN THEIR VALUATIONS OF INVENTORY FOR PROPERTY TAXATION

The adoption of the Property Tax Code in 1979 did more than just set up the standards and guidelines for properly appraising and taxing property; it also created the agencies charged with the stewardship of the code, and designated certain manuals and standards as the procedural guides for the taxpayer and those agencies to follow.[105] The government

101. The GAAM&T cost approach appraisal method is generally the most useful for discovering the value of a retained inventory. *See* Garatoni et al., *supra* note 10, at 19 (pointing out valuation techniques other than the cost method rely heavily on market data which is rarely available, thus making the cost method most useful); *see also* Polk Cty. v. Tenneco, Inc., 554 S.W.2d 918, 921 (Tex. 1997) (identifying the comparable sales method is not often useful and the income method can be inaccurate where market data is not readily available, leaving the cost approach as the most viable option); TAX § 23.0101 (reminding appraisers to consider all methods but "to use the most appropriate one"). The GAAM&T cost method of appraisal begins with the replacement cost of the inventory—the replacement cost can often be determined by looking at the accounting records of the company—and subtracting applicable depreciation from it. *See* TAX § 23.011 (laying out the formula which subtracts economic obsolescence from replacement cost).

102. TAX § 23.01.

103. *See* Garatoni et al., *supra* note 10, at 19 (walking through the cost method and noting the importance of finding the amount of marketplace obsolescence and depreciation to reduce the replacement cost value).

104. Even though the clear language of the tax code requires depreciation deductions, appraisal districts often continue to value inventories at book value. *Id.* at 20–21; *cf.* Cheek v. Humphreys, 800 S.W.2d 596, 598 (Tex. App.—Houston [14th Dist.] 1990, writ denied) (agreeing the trial court erred by relying on book value rather than market value); Cauble v. Handler 503 S.W.2d 362, 364 (Tex. Civ. App.—Fort Worth 1973, writ ref'd n.r.e.) (holding book value is not a proper measure of determining market value); *accord* PROPERTY ASSESSMENT VALUATION, *supra* note 19, at 487 (reminding appraisers accounting formulas cannot be used to calculate the appraisal value of inventory because accounting methods are driven by IRC rules, while appraisals are driven by the economic principles or supply and demand).

105. The IAAO is named specifically as a source of the appraisal techniques to be followed. *See* TAX § 5.05 (giving credit to the manuals put out by IAAO as a reliable source of GAAM&T). Additionally, Section 23.01 mandates the appraisal districts comply with USPAP when conducting

agencies set up are the county appraisal districts, and the primary source of procedural guidance comes from the Uniform Standards of Professional Appraisal Practices (USPAP).[106] Unfortunately, the appraisal districts have consistently failed to follow the Property Tax Code and the USPAP in the area of inventory taxation.[107]

A. *The County Appraisal Districts Demonstrate a Blatant Disregard for the USPAP in Failing to Develop Appraisal Models for Their Conclusions of Value*

Section 23.01 of the Property Tax Code requires the use of USPAP in all counties that use mass appraisal.[108] Virtually every county uses mass appraisal because the alternative would be to conduct individual appraisals (i.e., fee appraisals) on every individual property, which would be incredibly inefficient and time consuming. Since the appraisal districts conduct mass appraisals, they must comply with USPAP guidelines in order to harmonize with the Property Tax Code.[109]

One of the requirements of USPAP is that evidence must be compiled to create a mass appraisal model to support the determination of value.[110] Most county appraisal districts either lack a model altogether, or simply conclude the FMV is the "first in, first out" (FIFO) cost of the inventory, without putting together any evidence to back up this conclusion.[111] In

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mass appraisals. *Id.* § 23.01.

106. *See id.* §§ 5.05, 23.01 (listing acceptable publications and sources of appraisal techniques as well as mandating the appraisal districts follow USPAP).

107. Standards Rule 6-4 of USPAP requires the appraisal districts to develop models to accurately reflect market value. *See* APPRAISAL FOUND., *supra* note 26, at U-41 ("Mass appraisers must develop mathematical models that, with reasonable accuracy, represent the relationship between property value and supply and demand factors, as represented by quantitative and qualitative property characteristics.").

108. TAX § 23.01.

109. *See id.* (requiring mass appraisals to be conducted according to USPAP).

110. Standards Rule 6-4 lays out the rules by which appraisers must conduct themselves in developing models to support their contentions of value. *See* APPRAISAL FOUND., *supra* note 26, at U-41 (calling for appraisers to identify market information including economic factors, such as supply and demand). What is more puzzling is how appraisers could ignore depreciation on inventory, equating book value to market value when Standards Rule 6-5 specifically reminds appraisers to take into account depreciation when developing mass appraisals. *See id.* at U-41 to U-42 (calling for analysis of data to develop a model that includes depreciation).

111. Although the USPAP clearly mandates a mathematical model, most appraisal districts simply rely on book value as the determination of inventory market value, thus blatantly ignoring Standards Rule 6-4. *See* Garatoni et al., *supra* note 10, at 20–21 (accusing appraisal districts of relying on book value for inventory valuations despite having been warned book value does not represent market value). According to Robert X. Johnson, a former retailer owner with twenty-one years of personal experience and Texas Registered Senior Property Tax Consultant (SPTC # 10365), none of the counties—approximately forty—in which he has argued this very subject matter have ever actually produced such a model, nor provided any evidence to suggest a conclusion that FMV is the

1994, the chief appraiser of Harris County recognized "appraisers historically have assumed that the market value of an inventory is its FIFO cost."[112] He goes on to note this common assumption among appraisers is actually wrong: "[I]n the case of retail inventories, a value estimated under the FIFO method is likely to overstate the true market value of the goods in question."[113] By making the assumption of FMV based on FIFO cost, appraisal districts violate the Property Tax Code by failing to abide by USPAP procedures and consistently overvalued Texas retailers' inventory, leading to excessive tax liability.

B. *The Misunderstanding Between GAAP and GAAM&T Extends Beyond the Appraisal Districts' Errors and Has Led Some Courts to Misapply the Rules*

The confusion surrounding this issue has extended to the courts as well. The argument that FMV, for ad valorem valuation, does not equal GAAP's book value, (i.e., original cost) has been before the courts on several occasions, but the rulings have been inconsistent.[114] In *Sears Roebuck v. Dallas Central Appraisal District*,[115] the court held, absent evidence to the contrary, GAAP book value can equal the FMV sought by Property Tax Code Section 23.12.[116] The court made this determination based solely on the fact that the appraisal district concluded Sears's books complied with GAAP.[117] This is a prime example of a misapplication of

FIFO cost of the inventory. Interview with Robert X. Johnson, Senior Prop. Tax Consultant and Certified Pers. Prop. Specialist, in San Antonio, Tex. (Dec. 20, 2014). For example, the Bexar and Harris County policies are conclusory and baseless, relying on GAAP figures to reach what they call market value. *See* BEXAR APPRAISAL DIST., 2014 PERSONAL PROPERTY VALUE DOCUMENTATION & INSPECTION SCHEDULES 2–3 (2013) (revealing a method of reaching market value through use of accounting practices); HARRIS CTY. APPRAISAL DIST., BUSINESS & INDUSTRIAL PROPERTY DIVISION VALUE CALCULATION GUIDELINES TAX YEAR 2014, at 1 (2014), http://www.hcad.org/pdf/forms/2014/ppcalcguide_2014.pdf (listing outright that market value equals 100% original cost).

112. Robinson, *supra* note 39, at 479.

113. *Id.*

114. *See* Sears Roebuck & Co. v. Dall. Cent. Appraisal Dist., 53 S.W.3d 382, 391 (Tex. App.—Dallas 2000, pet. denied) (holding the appraisal district's rendition based on book value as a measure of FMV was valid). *But see* Travis Cent. Appraisal Dist. v. FM Props. Operating Co., 947 S.W.2d 724, 732 (Tex. App.—Austin 1997, writ denied) (holding any model that comes to a result different than would result from the willing buyer test could not be reflective of market value).

115. Sears Roebuck & Co. v. Dall. Cent. Appraisal Dist., 53 S.W.3d 382 (Tex. App.—Dallas 2000, pet. denied).

116. *Id.* at 389.

117. The court concludes book value may indicate market value, and absent evidence showing otherwise, it is a valid measure. However, it fails to recognize that when the district guesses market value based on accounting practices, it has relied on invalid evidence, as it did not use appraisal methods to reach its conclusions (a requirement of the Property Tax Code) and did not gather

GAAP into a GAAM&T context. In *Sears*, the court failed to understand the factors that diminish an inventory's profit potential are not reflected in a business's book value; thus, it erroneously concluded the county's "evidence" showing Sears complied with GAAP was enough evidence to support the county's sought value.[118]

In *Travis Central Appraisal District v. FM Properties Operating Co.*,[119] the court did it right. In this case, the court looked at the value of the property in question by ascertaining what a reasonable, willing buyer would pay for the unit of inventory—following the Section 23.12 definition.[120] By doing this, the court avoided the trap of assuming GAAP alone had the final answer and concluded the property's future potential profitability—not its book value—was the measurement of its FMV.[121]

These two cases reveal a conflict in the law. In both, the county asserted the FMV could be reached through methods other than the "willing buyer test," but the court reached opposite results.[122] In *Sears*, the court concluded the book value already reflected any increases or

evidence as required by USPAP. *See id.* (concluding the "evidence" showed market value was equal to book value); *see also* TAX § 23.01 (requiring appraisal methods, not accounting practices to be used to determine market value and demanding USPAP be used to develop such evidence); APPRAISAL FOUND., *supra* note 26, at U-41 (requiring evidence to be developed based on market conditions and economic factors such as supply and demand, and economic depreciation).

118. *See Sears*, 53 S.W.3d at 387 (revealing the Dallas County Appraisal District's conclusion of value was based on the fact that "Sears's book values for the inventories already reflected reductions for obsolescence and were, therefore, equivalent to . . . market value"); *see also* Fullers Jewelry, Inc. v. Dall. Cent. Appraisal Dist., No. 05-96-01776-CV, 1999 WL 199341, at *4 (Tex. App.—Dallas Apr. 12, 1999, no pet.) (not designated for publication) (concluding in error that book value could equal market value based on the appraisal district's "evidence" that the books were run correctly). However, this conclusion is based on fiction because, as this Comment has pained to show, the IRC does not allow depreciation on inventory; thus, the books could not possibly reflect market value. *See* I.R.S. PUBL'N NO. 946, *supra* note 39, at 5 ("You cannot depreciate inventory because it is not held for use in your business.").

119. Travis Cent. Appraisal Dist. v. FM Props. Operating Co., 947 S.W.2d 724 (Tex. App.—Austin 1997, writ denied).

120. *See id.* at 732 (analyzing whether a reasonable buyer would ever pay full cost for a seller's inventory).

121. *See id.* (holding a method that multiplies the replacement cost of each item by the number of units would result in a FMV "grossly in excess of what a" reasonable, willing buyer would pay); *see also* Polk Cty. v. Tenneco, Inc., 554 S.W.2d 918, 918 (Tex. 1997) (finding it an error to equate market value with book value); Cauble v. Handler 503 S.W.2d 362, 364 (Tex. Civ. App.—Fort Worth 1973, writ ref'd n.r.e.) (agreeing the value was based on proper accounting techniques by holding the court erred in using the cost value as a measurement of market value).

122. In *Sears*, the court erroneously allowed the county appraisal district to base its conclusion on book value, but in *FM Properties*, the court held only the willing buyer test satisfies Section 23.12 of the Property Tax Code. *Sears*, 53 S.W.3d at 387, 390; *FM Props.*, 947 S.W.2d at 732.

decreases in the FMV and was thus enough evidence to support that it reflected the Section 23.12 definition.[123] However, as noted above, the IRC and GAAP do not allow depreciation on inventory, so the court's conclusion that GAAP reflects all markdowns is wrong.[124] In *FM Properties*, the court did not have a problem with the business's accounting but understood its accounting practices did not reflect the marketplace values—realizing there are factors, such as economic depreciation that affect FMV that are not incorporated in GAAP accounting.[125]

This conflict between GAAP and GAAM&T must be recognized. The Property Tax Code explicitly gives a unique definition of inventory market value and clearly mandates the use of USPAP and GAAM&T.[126] It is a mystery then how some courts and most appraisal districts continue to rely on book values—which by law cannot incorporate depreciation—to determine FMV for ad valorem taxation. Instead, appraisal districts and courts must follow a model that incorporates the appraisal principles of supply and demand, anticipation, substitution, contribution, and regression to depreciate property to its true FMV.[127]

123. *Sears*, 53 S.W.3d at 386.

124. *See* I.R.S. PUBL'N NO. 946, *supra* note 39, at 5 (forbidding depreciation on inventory); *see also* I.R.S. PUBL'N NO. 538, *supra* note 39, at 17 (excluding markdowns for depreciation in accounting methods of valuation). Using arbitrary accounting records as the determinate of market value violates the Property Tax Code and will almost always result in excessive valuations. *See* TAX § 23.01 (requiring appraisers to use appraisal methods rather than accounting practices to find market value); *accord* Cheek v. Humphreys, 800 S.W.2d 596, 598 (Tex. App.—Houston [14th Dist.] 1990, writ denied) (calling accounting book values arbitrary and holding they are unfit as a measure of market value); Coastal States Petroleum Co. v. Corpus Christi Indep. Sch. Dist., 707 S.W.2d 206, 213 (Tex. App.—Corpus Christi 1986, writ ref. n.r.e.) (holding market value is "not its book value as a matter of law").

125. *See FM Props.*, 947 S.W.2d at 732 (looking at the characteristics of the inventory under dispute and evaluating market value from those characteristic—found devalue the inventory—rather than by looking at replacement costs).

126. "[T]he market value of an inventory is the price for which it would sell as a unit to a purchaser who would continue the business." TAX § 23.12(a). Moreover, an appraiser "shall apply generally accepted appraisal techniques in computing the market value as defined in Subsection (a)." *Id.* § 23.12(c). Finally, appraisers "must comply with the Uniform Standards of Professional Appraisal Practice" as the guiding procedures in gathering evidence and data to form an opinion on market value through GAAM&T. *Id.* § 23.01(b).

127. The Property Tax Code credits the IAAO as one of the sources of GAAM&T. *Id.* § 5.05. One of the manuals put out by the IAAO summarizes an appraiser's responsibilities:

> The task of appraisal, estimating the market value of property, in the simplest terms requires the following: identification of *what* is being appraised (the nature of the property and the rights being valued), identification of the *market* in which value is determined (highest and best use), an understanding of the *economic forces and principles* within the market, and the ability to represent the market in a *model* (model specification and calibration).

PROPERTY APPRAISAL AND ASSESSMENT ADMINISTRATION, *supra* note 24, at 36. From this

VI. A MODEL THAT TAKES INTO ACCOUNT THE 80/20 RULE AND OTHER ECONOMIC FACTORS MOST ACCURATELY REFLECTS THE TRUE FAIR MARKET VALUE AS REQUIRED BY THE CONSTITUTION AND PROPERTY TAX CODE

In a perfect world, every business would purchase the precise amount of exactly what customers want, and they would always sell the items in their inventory above cost. But in reality, the world of retail is an educated guessing game where retailers try to interpret a market in constant flux to purchase what they believe their customers will want.[128]

Every business will lose this game at some point. A retailer will buy inventory for a price it believes will sell for a profit, but then, based on the ephemeral desires of the market, that product will turn out to be a poor seller—perhaps based on the retailer's poor judgment, or perhaps because the product simply fell out of style.[129] Either way, losing this guessing game is the inevitable and recurring nature of a free market. Consequently, what retailers are left with after making these purchasing mistakes are stockrooms and showrooms, slowly filing up with inventory that is difficult to sell; or sells at a net loss.[130] The question is then: What

summarization, it is clear that relying on accounting book values to estimate market value does not meet any of the "tasks" of a faithfully executed appraisal. One example of a model that does incorporate these economic factors is the model developed by Robert X. Johnson. Mr. Johnson's model takes into account the pattern of demand, which matches the 80/20 phenomena, and applies the determined economic obsolescence calculation, concluding the true market of the retail inventories he represents is approximately 50% of the inventories' book value/original cost. When the Texas appellate court in Austin inquired into economic factors it reached a similar conclusion. *See* Travis Cent. Appraisal Dist. v. FM Props. Operating Co., 947 S.W.2d 724, 731–32 (Tex. App.—Austin 1997, writ denied) (surmising the fair market value of property is likely to be reduced to less than half its original cost). Mr. Johnson has used his USPAP-compliant model on behalf of his clients over 800 times since 2006, achieving substantially reduced appraised values approximately 97% of the time. Interview with Robert X. Johnson, *supra* note 111.

128. *See* Robinson, *supra* note 39, at 479 (noting FIFO cost could only represent market value where all merchandise is brand new and stating "[i]n the real world, inventories are a mix of current as well as worn, damaged, obsolete or out-of-fashion goods"); *see also* RICHARD KOCH, 80/20 PRINCIPLE: THE SECRET TO SUCCESS BY ACHIEVING MORE WITH LESS 118 (1998) (claiming nearly all businesses have trouble with their inventories because the 80/20 rule takes its toll, meaning the majority of its merchandise is made up of slow moving, "cash guzzling" product); David McMahon, *Let's Simplify Your Inventory: Part 1*, FURNITURE WORLD (July 09, 2010), http://www.furninfo.com/Furniture%20World%20Archives/11662 (illustrating the 80/20 principle and showing the majority of one's inventory is often made up of "dogs" or "item[s] that produce[] 0 or negative gross margin dollars").

129. *See* Joe Milevsky, *Beat the 80/20 Merchandising Rule*, FURNITURE WORLD (June 10, 2004), http://www.furninfo.com/Furniture%20World%20Archives/2019 (stressing "[b]uying decisions are often unplanned reactions to special deals, the newest hottest item" or some other desire of the consumer, which results in accumulation of slow moving inventory).

130. *See* McMahon, *supra* note 128 (showing the majority of one's inventory is often made up

is the fair market value of a unit of inventory (the price a willing and knowledgeable purchaser would pay) filled with slow-moving and unwanted goods?

A. *GAAM&T Dictates Appraisers Must Establish Evidence of the Pattern of Demand to Demonstrate FMV*

The market value of property is a direct result of its use, and inventory is used for the sole purpose of supplying consumers with a resource they demand.[131] Accordingly, GAAM&T determines market value by establishing a pattern of demand and applying it to the subject property.[132] In other words, whether an inventory has any taxable market value at all is determined by whether that inventory is profitable in the market, as seen by the pattern of demand for the goods that make up the inventory.[133]

Thus, for an appraiser to calculate an inventory's FMV accurately, he must establish evidence that proves a certain pattern of demand exists.[134]

of items that produce negative gross margin dollars); *see also* KOCH, *supra* note 128, at 119 (contending the 80/20 rules is universal and causes managers of inventory to suffer due to an accrual of bad or slow moving inventory).

131. *See* PROPERTY APPRAISAL AND ASSESSMENT ADMINISTRATION, *supra* note 24, at 80 (noting how property is used is essential when discovering its value). Inventory is almost universally used to turn a profit, so it is essential to inquire into an inventory's future profit potential to determine its market value. *See* Cleveland, Cincinnati, Chi. & St. Louis Ry. v. Backus, 154 U.S. 439, 445 (1894) ("The value of property results from the use to which it is put, and varies with the profitableness of that use, present and perspective, actual and anticipated.").

132. The profitability of the use of property is highly determined by the demand for it in the market. *See* PROPERTY ASSESSMENT VALUATION, *supra* note 19, at 29 (noting the highest and best use principle is "determined by the derived demand for resources"); *see also* PROPERTY APPRAISAL AND ASSESSMENT ADMINISTRATION, *supra* note 24, at 80 (explaining demand for resources is contingent on the pattern of demand within the market of consumers). To understand the pattern of demand, an appraiser must look at all of the factors that affect it, including economic obsolescence and depreciation. PROPERTY ASSESSMENT VALUATION, *supra* note 19, at 29.

133. *See id.* (noting appraisers need to be aware of economic trends to make accurate estimations of value). Robert Johnson's model demonstrates, using over 40 data sets, that the 80/20 rule and the principles of regression, contribution, and supply and demand have a real effect on the value of inventory within the furniture retail market. Johnson's Expert Report Concerning Personal Property, *supra* note 95, at 53 tbl.22.

134. The USPAP requires appraisers to develop models that represent the relationships between value and supply and demand. APPRAISAL FOUND., *supra* note 26, at U-41. GAAM&T literature clearly indicates, when creating models based on supply and demand, the appraiser should take into consideration all types of depreciation—remembering book value does not reflect *any* kind of depreciation on inventories. *See* PROPERTY APPRAISAL AND ASSESSMENT ADMINISTRATION, *supra* note 24, at 33 (recognizing there are several forms of depreciation which must be determined to reflect how the market operates accurately, including physical, functional, and economic depreciation).

In broad terms, the pattern of demand for any unit of inventory can be explained through the long observed economic phenomenon known as the 80/20 principle.[135] The 80/20 rule predicts, in any system made up of parts, roughly 80% of those parts will produce about 20% of the desired outcomes (profits) while the other 20% produces around 80% of the profits.[136] The 20% that is producing most of the profits has a high turnover, meaning it leaves the shelves quickly, and should (if possible) be replenished quickly.[137] Ad valorem taxation taxes what is leftover at the end of the year, not everything that has gone through the hands of the business throughout the year.[138] Therefore, because the high turnover inventory leaves the shelves quickly, the inventory on hand at years end is largely made up of the goods with low turnover—the goods in the 80%. Thus, the majority of the inventory on hand has a low profit potential and, as the appraisal principle of regression states, brings down the value of the entire unit of inventory.[139] This devaluation is called external (economic) depreciation.[140]

135. *See* PROPERTY APPRAISAL AND ASSESSMENT ADMINISTRATION, *supra* note 24, at 36 (requiring, in making an estimation of market value, an appraiser must understand "the *economic forces and principles* within that market"). Robert Johnson's model, which follows the evidence gathering requirements of USPAP, harmonizes with these economic factors and demonstrably concludes the 80/20 has a tangible effect on the value of a retailer's inventory. *See* Johnson's Expert Report Concerning Personal Property, *supra* note 95, at 56–57 tbl.23 & 24 (showing the profitable goods on hand makes up only 10%–50% of the inventory, while the unprofitable goods make up between 50% and 90%).

136. F. John Reh, *Pereto's Principle—The 80-20 Rule: How the 80/20 Rule Can Help You Be More Effective*, ABOUT.COM, http://management.about.com/cs/generalmanagement/a/Pareto081202.htm (last visited Dec. 15, 2015) (describing the 80/20 rule and noting various business applications where 80% produces 20% of results and vice versa).

137. The 80/20 principle is one of those economic principles so fundamental and well known it permeates virtually every facet of the economy; hence, it would seem obvious that any appraisal of inventory must take into consideration its effect on the value of an inventory. *See* KOCH, *supra* note 128, at 4 (noting the 80/20 principle is a truth in many areas of economics as well as in other facets of society); *see also* Bolger, *supra* note 6 (calling it an established fact that the value of an inventory is decreased because only around 20% of the inventory is producing profits while the rest is dragging profits down); Milevsky, *supra* note 129 (noting "the old 80/20 rule. . . is based on the observation that 20% of inventory yields 80% of sales").

138. The timing at which retailers are taxed on their inventories is yet another factor to consider when conducting an estimation on the value of the unit of inventory on hand on January first. Garatoni et al., *supra* note 10, at 19 (pointing to the problem of valuing an inventory on January first, and contending the beginning of the year is the "worst time for retail sales," meaning there is even more "markdown adjustments" that need to be considered).

139. "The principle of regression states that the value of a better quality property is decreased by association with lower quality properties in the same area." PROPERTY ASSESSMENT VALUATION, *supra* note 19, at 20.

140. *See* STANDARD ON VALUATION OF PERSONAL PROPERTY, *supra* note 48, at 9 ("Appraisal practice must consider accrued depreciation in the forms of physical deterioration, functional

According to Section 23.12, the FMV of an inventory is "the price for which it would sell as a unit to a purchaser who would continue the business."[141] Once economic depreciation is taken into account, it is not a stretch to conclude a purchaser of a unit of inventory who is concerned with turning a profit will not willingly pay the full original cost of that inventory because it is full of low-turnover goods that drag down the profitability of the entire unit. In fact, such a purchaser would pay significantly less than the seller's book value cost.[142] Accordingly, the Texas county appraisal districts that baselessly value inventory at book value are in violation of the Property Tax Code and should not be allowed to continue this practice.[143]

VII. CONCLUSION

Most retailers will find the appraisal agencies charged with determining the market value of their property have failed to do so according to the law. In most situations, the county appraisal districts do not perform even their most fundamental procedural duties under USPAP, but instead rely on conclusions that baselessly assert original cost or book value equals market value. We know inventory was given a separate and unique market value definition by the legislature that requires real-world analysis. Despite this, appraisal districts continue to erroneously rely on GAAP as a substitute for proper valuations even though GAAP book values cannot, outside mere coincidence, reflect an inventory's FMV. Thus, if the county appraisal districts wish to follow the law they are charged to uphold, they must develop appraisal models that reflect the economic depreciation inherent in most inventories.

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obsolescence, and external (economic) obsolescence.").

141. TEX. TAX CODE ANN. § 23.12(a) (West 2015).

142. As indicated in Robert Johnson's model detailing indicators of value, the conclusion that a true market value of approximately 50% of original cost/book value (or historical cost new or replacement cost new) is most probable. *See generally* Johnson's Expert Report Concerning Personal Property, *supra* note 95 (modeling data to determine the true market value of inventories).

143. Travis Cent. Appraisal Dist. v. FM Props. Operating Co., 947 S.W.2d 724, 732 (Tex. App.—Austin 1997, writ denied) (proclaiming any method used that does not harmonize with the willing buyer test is "fundamentally wrong" and "erroneous under the Constitution and Statutes of Texas").