HOW DOMESTIC BUSINESSES DEDUCT BUSINESS INTEREST EXPENSES UNDER THE NEW SECTION 163(J)

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ABSTRACT

Although the Tax Cuts and Jobs Act (TCJA) 2017 contains many favorable business tax provisions such as a flat 21 percent tax rate for C corporations as well as the elimination of the corporate alternative minimum tax (AMT); it also creates new unfavorable limitations on business expense deductibility. For example, the TCJA (2017) amends the Internal Revenue Code (IRC) section 163(j) to reduce the deductibility for net business interest expense. Due the complexity of section 163(j), both the Treasury and the Internal Revenue Services (IRS) have issued numerous regulations detailing the application of section 163(j) as amended by the TCJA (2017). C corporations, S Corporations and partnerships implement the provisions of section 163(j) in different ways. This paper summarizes these varying implementations including the use of a real-life case. The application of section 179 (immediate expense), section 274 (food and beverage for employees) as well as section 163(j) (interest expense) are also examined. Finally, this paper updates readers with the newest guidance from the IRS on the Coronavirus Aid, Relief, and Economic Security Act (2020) in relation to section 163(j).

INTRODUCTION

The Tax Cuts and Jobs Act (TCJA), enacted by Congress and the president on December 22, 2017, makes significant changes in how individuals, businesses, multi-national enterprises, and others calculate their Federal tax liability. The report titled “Distribution Effects of Public Law 115-97” prepared by the staff of the Joint Committee on Taxation dated March 25, 2019 suggests that “The reduction in tax liability is more concentrated towards the upper end of the income distribution for the business side relative to the individual side (Joint Committee on Taxation, 2019a, p. 8).”

The most notable modifications to the tax law enacted by the TCJA (2017) is the cap of the corporation tax rate at 21 percent and the repeal of alternative minimum tax on business. Unlike many individual tax provisions under the TCJA (2017) which are scheduled to expire after 2025, most of the business tax provisions under the TCJA (2017) will remain until modified by Congress.

The TCJA (2017) also provides additional tax incentives to businesses. For example, TCJA (2017) allows a 100 percent additional first year depreciation deduction for qualified property acquired and placed in service after September 27, 2017, and before January 1, 2023 (IRS, 2018a). The 100 percent bonus depreciation now applies to both new and used assets (IRS, 2018b).

Based on the Data Book for 2018 published by the Internal Revenue Service (IRS) (IRS, 2019a), corporations only paid 7.60 percent of the total $3.5 trillion of federal taxes collected by the Department of the Treasury in 2018 (IRS, 2019a, Table 1, p. 3). Comparatively, individual income taxes accounted for 56.90 percent and employment taxes accounted for 32.70 percent of the total federal taxes collected in 2018 (IRS, 2019a, Table 1, p. 3).

In 2018, the Department of the Treasury ("Treasury") collected $3.5 trillion of gross federal taxes an increase of $400 million over 2014. According to the data of Collections and Refunds by Type of Tax published by the IRS (IRS, 2020a), the percentage of corporation income tax collected in terms of the total annual amount of gross federal taxes collected decreased from 11.50 percent in 2014 to 7.60 percent in 2018. At the same time, the percentage of income tax in terms of the total annual amount of gross federal taxed collected from individuals increased from 53.60 percent in 2014 to 56.90 percent in 2018.

The TCJA (2017) is not all good news for business owners. For example, the TCJA imposes new restrictions and reduces the deductibility of some formerly deductible business expenses. For example, TCJA (2017) amends section 163(j) to disallow a deduction for net business interest expense in a taxable year in excess of the sum of (a) the taxpayer's business interest income for the year; (b) 30 percent of the taxpayer's adjusted taxable income (ATI) for the year; and (c) the taxpayer's floor plan financing interest expense for the year (IRS, 2019b).

In general, the section 163(j) limitation applies to all taxpayers but with some exceptions for "certain small businesses." The limitation to business interest expenses (BIE) applies at the level of a C corporation or at the level of a consolidated group, but section 163(j) limitation applies at S corporation level and at the partnership level. Partnerships have special pass-through rules, which require allocations of the section 163(j) items, such as allowed and disallowed business interest expense of the partnership, consistent with the partners' distributive shares of items generating limitation (IRS, 2019b).

Since the TCJA (2017) is relatively new and highly complex, the Treasury Department and the Internal Revenue Service (IRS) have been continuously issuing guidelines to clarify details of the TCJA (2017). In fact, as early as April 2018, IRS Notice 2018-29 suggested that the Treasury Department and the IRS intend to issue regulations in an effort to clarify several areas relating to deducting business interest expense under section 163(j), as amended by the TCJA (2017) (IRS, 2018c, p. 494).

In the two years from December 22, 2017 to December 31, 2019 numerous official updates involving IRC section 163(j) have been issued. Unfortunately, only five numerical examples exist from official publications such as the Joint Committee on Taxation (JCT) which demonstrate the calculation of section 163(j) limitation on the deduction for business interest expenses. Further, there is a lack of research publications concerning the section 163(j) limitation on the deduction for business interest expenses. These two factors motivated the authors to write this paper to fill in the gaps in the research literature.

This paper focuses on section 163(j) and the limitation of business interest deductions. We do not discuss the effect of section 163(j) on multi-national businesses, which requires another separate research manuscript due to complexity of the multi-national scenario.

This paper contributes to the literature in several ways. First this paper gives readers a summary of the latest regulations of section 163(j) applicable to domestic U.S. businesses specifically C corporations, S Corporations and partnerships. Second, this paper provides numerical case examples based on real world examples demonstrating the calculation of the section 163(j) limitation on the deduction or business interest expenses for (1) C corporations, (2) S corporations, (3) partnerships, and (4) partners. Third, using a real case example, this paper demonstrates the application of section 179 (immediate expensing), section 274 (food and beverage for employees) along with section 163(j) (interest expense). Readers will benefit from this user-friendly paper to comply with section 163(j).

The authors present the remainder of this paper in the following order. The next section is a literature review. The third section provides the background of section 163(j). The fourth section is a summary of the latest regulations of section 163(j). The fifth section provides a real-life case to illustrate the calculation of the section 163(j) limitation for both a C corporation as well as a partnership. The sixth section discusses implications of tax law changes to business operations. The final section provides a summary and conclusion.

LITERATURE REVIEW

Most of the changes introduced by the TCJA (2017) went into effect on January 1, 2018 and did not affect 2017. Prior literature has ample publications in regards to business expenses deductibility under the old tax law before the enactment of TCJA 2017. For example, Hanson (2011), Hilber & Turner (2014), Binner & Day (2015), provide extensive studies regarding the deductibility of mortgage interest and its effects on the housing market. Pozen & Goodman (2012) and Bank (2014) discuss business interest deduction from a tax lawyer’s viewpoint. Nevius (2016) explains the impact of section 179 and the bonus depreciation.

Shortly after the passage of the Tax Cuts and Jobs Act (TCJA) on December 22, 2017, each of the Big Four CPA firms published reports, summaries, and comments about TCJA (2017). On February 6, 2018, Klynveld Peat Marwick Goerdeler (KPMG) published its Tax Reform-KPMG Report on New Tax Law (KPMG, 2018a) to provide readers with a detailed analysis of how the tax law had changed. Likewise, PricewaterhouseCoppers (PWC, 2018) published advice to their clients on how to change their internal policies so that they conform with IRC section 274 as amended by TCJA (2017).

TCJA (2017) amends section 274 in regards to meal and entertainment expenditures effective for amounts paid or incurred after 2017. Under the TCJA (2017), no deduction is allowed with respect to entertainment, regardless of its connection to the taxpayer’s trade or business (PWC, 2018, p. 1). TCJA (2017) also disallows any deduction for membership dues for any club organized for business, pleasures, recreation, or other social purposes (KPMG, 2018a, p. 54). TCJA (2017) also disallows deductions for a facility or a portion of a facility used in connection with entertainment, amusement, or recreation (KPMG, 2018a, p. 54).

Section 274 as amended by the TCJA (2017) still permits a 50 percent deduction for expenditures incurred in connection with client business meals provided that the taxpayer was present and such meals were not lavish or extravagant (PWC, 2018, p. 1; KPMG, 2018a, p. 54).

TCJA (2017) also reduces the deduction for employer-operated eating facilities to 50 percent, and repeals employee income exclusion for qualified moving expenses reimbursements (KPMG, 2018a, p. 54).

For property places in service in tax years beginning after 2017, TCJA (2017) increases the annual maximum amount that a taxpayer can immediately expense under section 179 from $500,000 to $1,000,000 and also increases the phase out amount of section 179 from $2,000,000 to $2,500,000 (KPMG, 2018a, p. 44). TCJA (2017), as clarified by IRS FS-2018-9, amends the definition of section 179 property (1) to include tangible personal property used in connection with furnishing lodging (for example, beds and furniture for use in hotels and apartment buildings) (KPMG, 2018a, p. 44). The second clarification is (2) to allow taxpayers to elect to include qualified improvements made to nonresidential property (and placed in service after the date the property was first placed in service). For example, taxpayers may elect to include roofs, heating, ventilation and air-conditioning property, fire protection and alarm systems, security systems to nonresidential property placed in service after the date the property was first placed in service (KPMG, 2018a, p. 44).

In another publication, titled Tax Reform Executive Edition: Highlights of the New Tax Law (KPMG, 2018b), KPMG explains that the definition of adjusted taxable income for business interest deduction under section 163(j) (as amended in 2017); will change from EBITDA to EBIT in the beginning of 2022 (KPMG, 2018b, p. 7). In its report (KPMG, 2018a), KPMG suggested that clarification is still needed in regards to the business interest deduction. For example, in addressing business interest income of a partnership or S corporation at the partner or shareholder level for the purpose of applying section 163(j) (KPMG, 2018a, p. 51).

Since the enactment of the TCJA (2017) on December 22, 2017, both the Treasury Department, the IRS and the JCT have been continually issuing guidelines regarding the application of the IRC as mended by TCJA (2017). Thus far, a dearth of research exists regarding IRC section 163(j) in light of the latest official publications. The next section of this paper provides a background regarding official publications from the Treasury Department, the IRS, and the JCT in regards to IRC section 163(j).

BACKGROUND OF SECTION 163(J)

This section of the paper briefly highlights the official updates of the IRC section 163(j) from the date of the TCJA (2017) on December 22, 2017 through December 31, 2019. The motivation of this paper is driven by the following three factors: (1) the complexity of section 163(j) created by the continuous official updates, (2) the dearth of numerical examples regarding the actual application of section 163(j), and (3) the lack of empirical research (with numerical examples) on section 163(j).

On December 22, 2017, Congress and the president enacted the Tax Cuts and Jobs Act (TCJA). The Joint Explanatory Statement of the Committee of Conference on the amendment of the Senate to the Tax Cuts and Jobs Act (2017) is a good source for understanding the TCJA (2017). The TCJA (2017) amends section 163(j) to limit the deduction of business interest expense for taxable years beginning after December 31, 2017.

As of December 31, 2019, detailed rules and procedures relating to the section 163(j) limitation on the deduction for business interest expense are being amended by subsequent proposed regulations by the Treasury Department and IRS publications. Unfortunately, only five numerical examples exist from official publications such as the Joint Explanatory Statement of the Committee of Conference or the Joint Committee on Taxation which demonstrate the calculation of the section 163(j) limitation on the deduction for business interest expenses.

Wein & Kaufman (2018, p. 1) criticize the "new section 163(j)" stating that it was rushed into law without a full and careful review. Wein & Kaufman (2018, p. 3) suggest that "the application of interest limitation at the partnership level has added significant complexity and ambiguity to the section 163(j) in terms of allocations of taxable income and loss of the partnership to the partners." As a result, Wein & Kaufman (2018, p. 6) report that the Internal Revenue Services needed to issue Notice 2018-28 to clarify section 163(j).

On April 16, 2018, the IRS issued Notice 2018-28 titled "Initial Guidance Under Section 163(j) as Applicable to Taxable Years Beginning After December 31, 2017" (IRS, 2018c) to help taxpayers understand and apply section 163(j). IRS Notice 2018-28 also specified that the Treasury Department and the IRS will issue new regulations in an effort to clarify the business interest expense under section 163(j) (IRS, 2018c, p. 494).

On November 26, 2018, the Internal Revenue Services issued, IR-2018-233, proposed regulations [REG–106089–18] regarding the limitation on the deduction for business interest expense for certain taxpayers (IRS, 2018d). The proposed regulations [REG–106089–18] clarify the definitions of terms such as "Business Interest Income" and "Floor Plan Financing Interest Expense." Table 1 provides definitions of the terms used in official publications of both the IRS and the JCT.

Table 1
DEFINITION OF TERMS FROM OFFICIAL PUBLICATIONS

Term	Definition
Business Interest Income	"Amount of interest includible in the gross income properly allocable to a trade or business. Business interest income does not include investment income (JCT, 2018, p. 173)."
Business Interest Expenses	"Any interest paid or accrued on indebtedness properly allocable to a trade or business, including guaranteed payments paid to a partner in a partnership, gain or loss in debt hedging, and certain amounts predominantly associated with the time value of money. Business interest does not include investment interest (JCT, 2018, p. 173; IRS, 2018a, p. 30)."
Floor Plan Financing	"Interest paid or accrued on floor plan financing indebtedness (JCT, 2018, p. 174)."
Floor Plan Indebtedness	"Floor plan financing indebtedness means indebtedness used to finance the acquisition of motor vehicles held for sale or lease to retail customers and secured by the inventory so acquired (JCT, 2018, p. 174)."
Disallowed (or excess) Business Interest Expense (Partnership)	"Any business interest that is not allowed as a deduction to the partnership for the taxable year (referred to as ''disallowed business interest'') is allocated to the partners (JCT, 2018, p. 177)."
Excess Business Interest Income (Partnership)	"Excess business interest income with respect to any partnership is the excess of the business interest income of the partnership over the business interest reduced by floor plan financing interest of the partnership (JCT, 2018, p. 176)."
Excess Taxable Income (Partnership)	"Adjusted taxable income of the partnership that was not used to generate a business interest deduction at the partnership level (JCT, 2018, p. 176)."

The proposed regulations, [REG–106089–18], were published in the Federal Register Volume 83, Number 248 on December 28, 2018 (Fed. Reg. 67490). These proposed regulations provide guidance regarding many of the provisions in section 163(j) as well as the application of section 163(j) to entities such as partnerships, controlled foreign corporations, and corporate members of a tax-consolidated group.

On November 26, 2018, the IRS issued the Revenue Procedure 2018-59 (IRS, 2018e) to provide "a safe harbor that allows taxpayers to treat certain infrastructure trades or businesses as real property trades or businesses solely for purposes of qualifying as an electing real property trade or business under section 163(j)(7)(B) of the IRC (IRS, 2018e)." In other words, any electing real property trade or business as defined in section 469(c)(7)(C) is not treated as a trade or business for purposes of section 163(j) and is therefore not subject to the business interest expense limitation.

Table 2 chronologically summarizes key points of the official publications of the Treasury, the IRS, and the JCT in regards to section 163(j).

Table 2
KEY POINTS OF GOVERNMENT PUBLICAITONS: IRC SECTION 163(J)

Date and Publications	Key Points of the Discussed Government Publications
December 22, 2017 U.S. House. The Tax Cuts and Jobs Act. 2017. Joint Explanatory Statement of the Committee of Conference (to Accompany H.R. 1).	1) Section 163(j), as amended by the TCJA 2017, enacted the "double counting rule" to prevent a partner (or shareholder of an S corporation) from double counting a partnership's (or S corporation's) adjusted taxable income when determining the partner's (or shareholder's) business interest limitation (p. 229). 2) When determining the partner's (or shareholder's) business interest limitation, a partner's (or shareholder's) adjusted taxable income is determined without regard to the partner's (or shareholder's) distributive share of the partnership's (or S corporation's) items of income, gain, deduction, or loss (p. 230).
April 16, 2018 Notice 2018-28, Initial Guidance Under Section 163(j) as Applicable to Taxable Years Beginning After December 31, 2017, published in the IRB 2018-16 (IRS, 2018c).	1) Section 163(j) limitation to business interest expense (BIE) applies to all taxpayers but small businesses are exempted. Section 163(j) disallows a deduction for net business interest expense in a taxable year in excess of the sum of (a) the taxpayer's business interest income for the year; (b) 30% of the taxpayer's adjusted taxable income (ATI) for the year; and (c) the taxpayer's floor plan financing interest expense for the year (IRS, 2018c, p. 493). 2) Section 163(j) limitation to business interest expenses applies at the level of a C corporation or at the level of a consolidated group but applies at the partnership level and S corporation level (IRS, 2018c, p. 493).
November 26, 2018 IR-2018-233 Proposed regulations [REG–106089–18] Limitation on Deduction for Business Interest Expense (IRS, 2018d), published in the Federal Register Volume 83, Number 248 (Fed. Reg. 67490).	1) Provides guidance on the application of section 163(j) to entities such as partnerships, controlled foreign corporations and corporate member of a tax-consolidated group. 2) Clarifies definitions of terms such as "Adjusted Taxable Income," "Interest," "Trades or Businesses," "Excepted Trades or Businesses," "Regulated Utility Trade or Businesses," "Floor Plan Financing Interest Expense." 3) Defines "Interest" to include (a) amounts of compensation for the use or forbearance of money, (b) interest associated with conventional debt instruments, (c) gain or loss from hedges of debt instruments, (d) substitute interest payments under a securities loans, (e) debt issuance costs (IRS, 2018d, p. 16-22), and f) any guaranteed payments by partnerships for the use of capital under section 707(c) (IRS, 2018d, p. 207). 4) Mandates Section 163(j) limitation to be applied at the entity-level but business interest expense carryforward to be allocated to partners (IRS, 2018d, p. 56).
November 26, 2018 Revenue Procedure 2018-59 (IRS, 2018e).	Section 163(j)(7)(B) treats certain infrastructure trades or businesses as real property trades or businesses solely for purposes of qualifying as an electing real property trade or business, as defined in section 469(c)(7)(C), which is not subject to the business interest expense limitation for the purpose of section 163(j).

December 20, 2018 The Joint Committee on Taxation. General Explanation of Public Law 115–97 (JCT, 2018).	1) Reprints the three previously published numerical examples of the section 163(j) limitation of "double counting rule" and "additional deduction limit," originally published in the Joint Explanatory Statement of the Committee of Conference. 2) Demonstrates the calculation of the excess taxable income with respect to any partnership and the additional business interest expense a partner can deduct at the partner level (JCT, 2018, p. 176).
March 28, 2019 The Joint Committee on Taxation. Overview of Limitation on Deduction of Business Interest: Section 163(j) (JCT, 2019).	It provides the latest guidelines on business interest expense deduction, and its appendix has two new numerical partnership carryforward examples demonstrating the allocation of (a) excess business interest income and (b) excess taxable income (ETI) under Anti-Double-Counting Rules (JCT, 2019, p. 38-46).
November 6, 2019 IRS' website (IRS, 2019b).	IRS' website "Basic questions and answers about the limitation on the deduction for business interest expense (IRS, 2019b)."

The Treasury Department and the IRS requested comments regarding the proposed regulations [REG–106089–18]. On February 21, 2019, The American Institute of CPAs (AICPA, 2019) submitted comments and recommendations to the Treasury Department and the IRS in response to the proposed regulations [REG–106089–18].

In response to the proposed regulations [REG–106089–18], Yu & Paulus (2019, p. 994) comment that "a highly controversial aspect of the proposed section 163(j) regulations is one of the four categories of the definition of interest (both expense and income) adopted for purposes of applying the business interest expense limitation." Yu & Paulus (2019, p. 995) believe that "the third category of the proposed definition of interest includes several 'other amounts treated as interest' (each an interest-like amount), each of which presumably falls outside the scope of the general principle-based rule."

On December 20, 2018, the JCT published a document titled "General Explanation of Public Law 115-97" (JCT, 2018), which explains in detail the three previously published numerical examples of the section 163(j) limitation of "double counting rule" and "additional deduction limit," originally published in the Joint Explanatory Statement of the Committee of Conference on the amendment of the Senate to the Tax Cuts and Jobs Act (2017).

On March 28, 2019, the JCT published a document titled "Overview of Limitation on Deduction of Business Interest: Section 163(j)" (JCT, 2019) providing the latest guidelines on business interest expense deduction. The appendix of the above-mentioned document includes two new numerical partnership carryforward examples demonstrating the allocation of (a) excess business interest income and (b) excess taxable income (ETI) under Anti-Double-Counting Rules (JCT, 2019, p. 38-46). On November 6, 2019, the IRS updated its webpage titled "Basic questions and answers about the limitation on the deduction for business interest expense" to reflect the latest clarification of section 163(j). Unfortunately, the IRS webpage does not provide the public with any numerical examples of how to apply section 163(j).

In summary, section 163(j) has been evolving since December 2017, and only five official numerical examples exist which demonstrate the calculation of the section 163(j) limitation on the deduction for business interest expenses. The next section of this paper is a summary of the latest regulations of section 163(j) applicable to C Corporations, S Corporations, Partnerships and individual partners.

SUMMARY OF LATEST REGULATIONS OF SECTION 163(J)

In General

This paper does not discuss the application of section 163(j) in multi-national businesses, which the authors will discuss in a future manuscript. In general, for tax years beginning after 2017, the section 163(j) limitation applies to all taxpayers who have business interest expense other than some excepted trades or businesses. Excepted trades or businesses (IRS, 2019b; JCT, 2019, p. 23-26) include (1) any taxpayer other than a tax shelter for which the annual average gross receipts for the three-taxable-year period ending with the prior taxable year does not exceed $25 million, (2) the trade or business of performing services as an employee, and (3) certain regulated utilities. Excepted trades or businesses also include any electing (4) real property trade or business as defined in section 469(c)(7)(C) and (5) any electing farming business as defined in section 263A(e)(4).

Section 163(j) (IRS, 2019b; JCT, 2018, p. 173; JCT, 2019, p. 2) now disallows a taxpayer to deduct net business interest expense in a taxable year, for more than the sum of the taxpayer's business interest income for the year, 30 percent of the taxpayer's adjusted taxable income (ATI) for the year, and the taxpayer's floor plan financing interest expense for the year. This paper suggests a formula to represent the amount of section 163(j) business interest expenses deduction in a year:

$$= < \Sigma \text{ [business interest income + 30\% of ATI + floor plan financing interest expense].}$$

ATI (JCT, 2018, p. 174; JCT, 2019, p. 12) means the taxable income of the taxpayer computed without regard to (1) any item of income, gain, deduction, or loss that is not properly allocable to a trade or business, (2) any business interest or business interest income, (3) the amount of any net operating loss deduction, and (4) the amount of any deduction allowed under section 199A. Table 3 provides an example of the ATI computation.

For taxable years beginning before January 1, 2022, taxpayers compute ATI without regard to any deduction allowable for depreciation, amortization, or depletion. For taxable years beginning on or after January 1, 2022, taxpayers compute ATI with regard to deductions for depreciation, amortization, and depletion. As a result, taxpayers will have a smaller amount of ATI for the 30 percent calculation of ATI as part of the formula of section 163(j) limitation on the deduction for business interest expense. In terms of accounting, it is Earnings Before Interest, Tax, Depreciation, Amortization (EBITDA). Similarly, without regard to deductions for depreciation, amortization, and depletion it is Earnings Before Interest and Tax (EBIT) (JCT, 2018, p. 174; JCT, 2019, p. 12).

Table 3 gives a numerical example to illustrate the difference in ATI with (without) regard to any deduction allowable for depreciation, amortization, or depletion respectively. Table

3 illustrates the differences between using EBITDA and EBIT to compute adjusted taxable income. Table 3 shows that a taxpayer will have $36 deduction of business interest expense when using EBITDA, but only $27 when using EBIT, to calculate the 30 percent restriction on business interest expense respectively.

In general, taxpayers will deduct a larger amount of net business interest expense by using EBITDA relative to using EBIT for the computation of adjusted taxable income to apply 30 percent restriction on business interest expense. This paper will further discuss the implication of changes in the IRC, such as section 163(j), to business operations in the seventh section.

Table 3
CALCULATION OF 30 PERCENT OF THE TAXPAYER'S ADJUSTED TAXABLE INCOME (ATI)

C Corporation in a taxable year	Amount	EBITDA	EBIT
Business Income	$200		
Business interest income	$20		
Cost of goods sold	($80)		
Business interest expense	($50)		
Depreciation	($30)		
Taxable income before section 163(j) limitation	$60	$60	$60
Minus: interest income $20		($20)	($20)
Add back: net interest expense ($50)		$50	$50
Add back: depreciation ($30)		$30	-
Adjusted taxable income		$120	$90
30% of Adjusted taxable income (ATI)		$36	$27

C Corporations

The section 163(j) limitation on the deduction for business interest expense applies at the level of a C corporation or at the level of a consolidated group. A C corporation will carryforward indefinitely any amount of business interest not allowed as a deduction in a taxable year into the succeeding taxable years for future deduction (JCT, 2018, p. 175).

S Corporations

S corporations apply the section 163(j) limitation on the deduction for business interest at the S corporation level. An S corporation carries over any disallowed interest expense, upon application of the section 163(j) in a taxable year, at the S corporation level to its succeeding taxable years. Therefore, an S corporation does not allocate disallowed business interest expense to its shareholders. However, an S corporation allocates any excess taxable income and excess interest income to its shareholders on a pro-rata basis (IRS, 2019b). The double counting rule of section 163(j) applies to shareholders of S corporations. The business interest income and adjusted taxable income of an S corporation's shareholder is determined without regard to the shareholder's distributive share of any items of income, gain, deduction, or loss of the S corporation (JCT, 2018, p. 175).

Partnerships: Excess Business Interest Expense

Partnerships apply the section 163(j) limitation on the deduction for business interest at the partnership level. Table 4 summarizes key points of IRC section 163(j) in regards to the deduction of excess business interest at partner's level.

Table 4
IRC SECTION 163(J)
DEDUCTION OF EXCESS BUSINESS INTEREST EXPENSE AT PARTNERS' LEVEL

Key Points	Partner's Deduction of Excess Business Interest Expense
Same Partnership's Sources	"A partner carries forward its share of excess business interest expense. In a succeeding taxable year, a partner may treat its excess business interest expense as business interest expense paid or accrued by the partner to the extent the partner is allocated excess taxable income or excess business interest income from the same partnership (IRS, 2019b)."
Distributive Share of the Partnership's Excess Business Interest Income or Excess Taxable Income (ETI)	"Each partner may deduct its share of the partnership's disallowed business interest in any future year, but only to the extent of the partner's distributive share of excess business interest income and 30 percent of the partner's distributive share of excess taxable income of the partnership the activities of which gave rise to the disallowed business interest carryforward. Any amount that is not allowed as a deduction is carried forward (JCT, 2018, p. 177)."
Current Year Deduction of Prior Year Excess Business Interest	"A partner carried forward $100 of excess business interest from a prior year of Partnership X. In the current year, Partnership X allocates $100 of excess taxable income and $10 of excess business interest from X to the partner. The partner has $200 of adjusted taxable income from other sources in the current year. However, the partner can only deduct $40 = [$10 excess business interest income + (30% of the $100 excess taxable income)] of the carryforward excess business interest in the current year without regard to the partner's current year $200 of adjusted taxable income from other sources (JCT, 2018, p. 177)."

The amount of deductible business interest expense that a partnership can deduct in a taxable year cannot exceed the sum of the partnership's business interest income, 30 percent of the partnership's ATI, and the partnership's floor plan financing interest expense. The business interest expense that a partnership can deduct in a taxable year is taken into account in determining the non-separately stated taxable income or loss of the partnership (IRS, 2019b).

Unlike C corporations and S corporations, any business interest expense of the partnership that is disallowed (also known as disallowed or excess business interest expense) upon the application of the section 163(j) limitation is allocated to each partner in the same manner as the non-separately stated taxable income or loss of the partnership (IRS, 2019b). Readers should note that excess business interest expense is only applicable to the situation of a partner. Two special rules (double counting rule and the additional deduction limit rule) of section 163(j) limitation applies at the partner level.

Partnerships: Double Counting Rule

The business interest income as well as the adjusted taxable income of each partner is determined without regard to each partner's distributive share of income, gain, deduction or loss of the partnership (JCT, 2018, p. 175). Table 5 describes the Double Counting Rule of section 163(j).

Table 5
IRC SECTION 163(J)
APPLICATION OF DOUBLE COUNTING RULE AT PARTNERS' LEVEL

Key Points	Illustration of Double Counting Rule at Partner's Level
Distributive Share of the Partnership's Ordinary Business Income	"XYZ Corporation owns 50 percent of Partnership ABC. In current year, the only expense Partnership ABC has is $60 business interest expense versus $200 noninterest income. Partnership ABC can deduct $60 = < Σ [business interest income $0 + 30% of ATI $200 + floor plan financing interest expense $0] of business interest expense. Partnership ABC reports ordinary business income of $140 = [$200 noninterest income - $60 business interest expense]. XYZ Corporation's distributive share of the ordinary business income of Partnership ABC is $70 = [50% of $140] (JCT, 2018, p. 175)."
Double Counting Rule at Partner's Level	"XYZ Corporation's distributive share of the ordinary business income of Partnership ABC is $70 = [50% of $140]. The double counting rule of section 163(j) stipulates that XYZ Corporation has adjusted taxable income computed without regard to the $70 distributive share of the ordinary business income from Partnership ABC. In current taxable year, XYZ Corporation has net taxable income of $0 from its other operations with $0 business interest income but $25 business interest. As a result, the business interest expense that XYZ Corporation can deduct is $0 = < Σ [business interest income $0 + 30% of ATI $0 + floor plan financing interest expense $0]. But, XYZ Corporation can carryforward the disallowed $25 business interest expense indefinitely (JCT, 2018, p. 176)."

Partnerships: Additional Deduction Limit

According to the additional deduction limit rule of section 163(j), the partner's business interest deduction limitation calculated under section 163(j) is increased to reflect the partner's distributive share of any excess business interest income or excess taxable income (ETI) of the partnership (JCT, 2018, p. 176). Table 6 describes the Additional Deduction Limit of section 163(j).

Table 6
IRC SECTION 163(J)
APPLICATION OF ADDITIONAL DEDUCTION LIMIT AT PARTNER'S LEVEL

Key Points	Illustration of Additional Deduction Limit at Partner's Level
Distributive Share of the Partnership's Excess Business Interest Income or Excess Taxable Income (ETI)	"XYZ Corporation owns 50 percent of Partnership ABC. In current year, the only expense Partnership ABC has is $40 business interest expense versus $200 noninterest income. Partnership adjusted taxable income (ATI) is therefore $200. Partnership ABC can deduct $60 of business interest expense = < Σ [business interest income $0 + 30% of ATI $200 + floor plan financing interest expense $0]. Partnership ABC's ETI is the amount which bears the same ratio to ABC's ATI $200 as (1) the excess of [(a) 30% of ABC's ATI over (b) the amount by which ABC's business interest exceeds its business interest income] bears to (2) 30% of ABC's ATI (JCT, 2018, p. 176). (1) = $20 = the excess of [(a) 30% of $200 = $60 over (b) ($40 - $0) = $40] bear to (2) 30% of $200 = $60 (1) bears to (2) = $20 / $60 Partnership ABC's ETI is $20/$60 x $200 = $66.67 XYZ Corporation's distributive share of the ETI from ABC is $33.33 = 50% * $66.67 (JCT, 2018, p. 176)."
Additional Deduction Limit at Partner's Level	"In current taxable year, XYZ Corporation has net taxable income of $0 from its other operations with $0 business interest income but $25 business interest. XYZ Corporation adjusted taxable income (ATI) is therefore $0. XYZ Corporation's distributive share of the ETI from ABC is $33.33 The additional deduction limit rule of section 163(j) stipulates that XYZ Corporation's deduction for business interest is limited to 30 percent of its adjusted taxable income plus its distributive share of the ETI from Partnership ABC (JCT, 2018, p. 177). XYZ Corporation's deduction for business interest is $10 = < Σ [business interest income $0 + 30% of (ATI $0 + distributive share of ETI from partnership ABC $33.33 + floor plan financing interest expense $0)] As a result of the excess taxable income, XYZ Corporation may deduct $10 of business interest and has a business interest deduction disallowance of $15 = ($25-$10) (JCT, 2018, p. 176)."

The next section presents a case analysis based on a real-world example of a hotel. The authors work in the College of Business and Economics situated in a metropolitan tourist city on the west coast of the United States. As a result, the authors are well acquainted with hotel operators. In any given taxable year, hotel operators typically incur business interest expense, renovation expenses, entertainment expenses and employees' meal expenses. Consequently, hotels provide a great case study for examining the effect of changes in IRC sections 163(j), 168(k), 179 and 274 on business operations.

CASE-EXAMPLE FOR ILLUSTRATION OF SECTION 163(J)

To demonstrate how a C corporation, S corporation or a partnership complies with the section 163(j) limitation, this paper creates a case-example based on actual business entities (albeit with fictitious numbers). The entities examined are not tax shelters nor excepted businesses and have average annual gross receipts exceeding $25 million in the previous three years.

Case-example Description

Hotel A is a business entity [C Corporation or Partnership] with average annual gross receipts for the prior three tax years of more than $25 million but less than $50 million. Hotel A is therefore subject to the section 163(j) limitation of deduction of business interest expense. Hotel A opened in 2008 and has 1,000 rooms in a 38-story building which includes a swimming pool and a restaurant which is open 24 hours. The average room rate in 2018 was $100 per night per single room. Historically, Hotel A net profit has been around 10 percent of the gross revenue. In the past, instead of declaring a dividend, the board of directors of Hotel A decided to use most of its net profit and free cash flow to repay the hotel's mortgage loan.

Hotel A took out a mortgage in 2008 and is still repaying its mortgage loan. Currently, Hotel A is in need of renovation and qualified property improvements to its interior. Because Hotel A is a designated crew hotel for multiple airlines, (1) it is common for Hotel A to incur entertainment expenses in an effort to solicit airline business and (2) it operates a 24-hour restaurant to serve the needs of crews arriving and departing at different time during a day. Hotel A also operates a staff canteen. It is a customary practice of Hotel A to provide one free meal per day to each hotel's employee through the hotel's staff canteen. At the end of 2018, the controller of Hotel A calculated that the gross revenue for the year would be approximately $35 million (without interest income) and the cost of goods sold (before interest expense, depreciation, entertainment expense, and employees' meal expense) about $28 million.

During 2018, Hotel A has incurred the following expenses which met the definitions of various types of expenses under relevant sections of the IRC**.** Hotel A's expenses of 2018 included the following: (1) $4,000,000 business interest expense; (2) $8,000 business interest income from a money market checking account; (3) $250,000 annual MACRS depreciation; (4) $1,000,000 qualified property improvement to the interior common corridor areas of the hotel (new carpet, new wallpaper, new lights and fixtures, new swimming pool tiles) and renovation of the hotel (roof, heating and air conditioning systems, fire protection systems, and security systems); (5) $300,000 computer software to upgrade the hotel's computer reservation and security systems; (6) $200,000 cost of providing free meals to employees; (7) $6,000 golf club membership fees and entertainment activities; and (8) $70,000 cost of providing meals and beverage necessary in business of hotel's existing and potential customers.

During the year 2018, Hotel A did not have any of the following: (1) dividends received from taxable domestic corporations; (2) floor plan financing interest; (3) investment interest expense or income; (4) net operating losses; (5) like kind exchanges; (5) lobbying expenses; (6) domestic production deductions; (7) research and experiments deductions; (8) self-created property; or (9) deductions for qualified business income under section 199A. Further, during the year, Hotel A did not have any gain or loss on the sale of property; any depreciation recapture; any carryforward unused depreciation. Hotel A did not make any guaranteed payment to its partners in the partnership scenario.

Due to paper length restrictions, this paper cannot discuss nor illustrate all the major changes to the IRC which affect businesses. This paper's illustrative case demonstrates to readers numerically how a business entity complies with section 163(j), 168(k), 179, and 274 simultaneously. The next few paragraphs briefly explain section 168(k), 179, and 274 as amended by TCJA (2017).

Section 168(k), 179, 274

IRC section 168(k), as amended by TCJA (2017), now allows a 100 percent additional first year depreciation deduction for qualified property acquired and placed in service after September 27, 2017, and before January 1, 2023 (IRS, 2018a). The 100 percent bonus depreciation now applies to both new and used assets, including depreciable personal assets used predominantly to furnish lodging such as beds, refrigerators, and stoves in hotels, apartments and dormitories (IRS, 2018b).

IRC section 179, as amended by TCJA (2017), now increases both the annual maximum deduction under section 179 from $500,000 to $1 million, and the phase-out threshold from $2 million to $2.5 million, for property placed in service in taxable year beginning after December 31, 2017 (IRS, 2018b). Section 179 now allows improvements made to commercial buildings to include roofs; heating, ventilation, and air conditioning equipment; fire protection and alarms; and security systems. However, improvements made to any elevator or escalator or the internal structural framework of the commercial building do not qualify for immediate expense under section 179 (IRS, 2018b).

IRC Section 274, as amended by TCJA (2017), repeals the deduction for entertainment activities and membership dues. Taxpayers can now only deduct 50 percent of their non-entertainment business meals and beverage expenses, assuming the meal expense is not lavish or extravagant and the taxpayer or an employee of the taxpayer is present at the furnishing of the food or beverages to a current or potential business customer (IRS, 2018d). Taxpayers now can only deduct 50 percent of the cost of employer-operated eating facilities.

C Corporation Scenario

Readers can calculate the section 163(j) limitation on the deduction for business interest expenses of a business entity by applying the formula suggested by this paper:

$$= < \Sigma \text{ [business interest income + 30\% of ATI + floor plan financing interest expense].}$$

Table 7 shows the calculation of 30 percent of the adjustable taxable income (ATI) used in this paper's case example. ATI signifies the taxable income of the taxpayer computed without regard to any business interest or business interest income. For taxable years beginning before January 1, 2022, taxpayers compute ATI without regard to any deduction allowable for depreciation, amortization, or depletion (JCT, 2018, p. 174; JCT, 2019, p. 12).

Table 7 explains how Hotel A complies with section 274. Section 274 disallows a deduction for the $56,000 golf club membership fees and entertainment activities and allows Hotel A to only deduct 50 percent of the business meals beverage expenses which is $35,000. Further, section 274 only allows Hotel A to deduct 50 percent of the free meals to employees which is $100,000. Hotel A elects to immediate expense $1,000,000 of qualified property improvement under section 179 and deducts $300,000 depreciation of computer software under section 168(k) bonus depreciation.

Table 7 calculates the adjusted taxable income (ATI) of this paper's case-example as $6,865,000. Hotel A can only deduct $2,067,500 of its business interest expense:

= < Σ [business interest income $8,000 + 30% of ATI $6,865,000 + floor plan financing interest expense $0].

Assuming Hotel A is a C corporation, then it can carryforward the amount of any business interest not allowed as a deduction for any taxable year as business interest paid or accrued in the succeeding taxable year (JCT, 2018, p. 175). Therefore, Hotel A as a C corporation can carry forward the $1,932,500 ($4,000,000 - $2,067,500) of business interest which was not allowed as a deduction in current tax year and treat the carryforward amount as business interest paid in the succeeding taxable year or indefinitely.

Table 7
THIRTY PERCENT OF THE ADJUSTED TAXABLE INCOME OF THIS PAPER'S CASE

Section 163(j) Calculation	Business Entity	EBITDA
Business income	$35,000,000	
Business interest income	$8,000	
Cost of goods sold	($28,000,000)	
Business interest expense	($4,000,000)	
Depreciation MACROS	($250,000)	
Section 179 immediate expense of qualified property improvement	($1,000,000)	
Section 168(k) bonus depreciation for computer software	($300,000)	
50% of the free meals to employees of $200,000	($100,000)	
50% of the business meals beverage of $70,000	($35,000)	
Taxable income before section 163(j) limitation	$1,323,000	$1,323,000
Deduct: Interest Income		($8,000)
Add Back: Interest expense		$4,000,000
Add Back: MARCROS depreciation		$250,000
Add Back: Section 179 qualified property improvement		$1,000,000
Add Back: Section 168(k) bonus depreciation for computer software		$300,000
Adjusted taxable income		$6,865,000
30% of Adjusted taxable income		$2,059,500
Note 1: EBITDA means earnings before interest, tax, depreciation and amortization.		
Note 2: IRC Section 274 allows 50 percent deduction of business meals expense.		
Note 3: IRC Section 274 allows 50 percent deduction of the cost of employer-operated eating facilities.		
Note 4: IRC Section 274 disallows $56,000 golf club membership fees and entertainment activities.		

S Corporation Scenario

S corporations apply the section 163(j) limitation on the deduction for business interest at the S corporation level. An S corporation carries over any disallowed interest expense, upon application of the section 163(j) in a taxable year, at the S corporation level to its succeeding taxable years. Therefore, an S corporation does not allocate disallowed business interest expense to its shareholders.

Assuming Hotel A is an S Corporation, then it can only deduct $2,067,500 of business interest expense and carries forward the $1,932,500 business interest not allowed as a deduction in current tax year to its succeeding taxable years.

Partnership Scenario: Year One

Partnerships apply the section 163(j) limitation on the deduction for business interest at the partnership level. The amount of deductible business interest expense that a partnership can deduct in a taxable year cannot exceed the sum of the partnership's business interest income, 30 percent of the partnership's ATI, and the partnership's floor plan financing interest expense. Assuming Hotel A is a partnership, it is only allowed a $2,067,500 deduction for business interest expense at the partnership level. As a partnership, Hotel A's allowable business interest expense $2,067,500 that can deducted in the current tax year is taken into account in determining the non-separately stated taxable income or loss of the partnership (IRS, 2019b).

Unlike C corporations and S corporations, any business interest expense of the partnership that is disallowed (which is called disallowed or excess business interest expense) upon the application of the section 163(j) limitation is allocated to each partner in the same manner as the non-separately stated taxable income or loss of the partnership (IRS, 2019b).

Let's assume that (1) Hotel A is a partnership with two equal partners each owning 50 percent share of the partnership and (2) that each partner does not have any income from any other source. In this case, each partner of Hotel A will carryforward $966,250 [($4,000,000 - $2,067,500) / 2] of business interest not allowed as a deduction in current tax year to succeeding tax years. In the immediate succeeding tax year, if Hotel A allocates any excess taxable income or excess business interest to a partner; then the partner can deduct carried forwarded excess business interest of Hotel A against newly allocated excess taxable income or excess business interest.

Partnership Scenario: Year Two

Assume that in year two, Partnership Hotel A has $400,000 of business interest expense. Table 8 calculates Partnership Hotel A year two ATI.

Table 8 YEAR TWO PARTNERSHIP: THIRTY PERCENT OF THE ADJUSTED TAXABLE INCOME		
Section 163(j) Calculation	Business Entity	EBITDA
Business income	$35,000,000	
Business interest income	$8,000	
Cost of goods sold	($28,000,000)	
Business interest expense	($400,000)	
Depreciation MACROS	($250,000)	
Section 179 immediate expense of qualified property improvement	($1,000,000)	
Section 168(k) bonus depreciation for computer software	($300,000)	
50% of the free meals to employees of $200,000	($100,000)	
50% of the business meals beverage of $70,000	($35,000)	
Taxable income before section 163(j) limitation	$4,923,000	$4,923,000
Deduct: Interest Income		($8,000)
Add Back: Interest expense		$400,000
Add Back: MARCROS depreciation		$250,000
Add Back: Section 179 qualified property improvement		$1,000,000
Add Back: Section 168(k) bonus depreciation for computer software		$300,000
Adjusted taxable income		$6,865,000
30% of Adjusted taxable income		$2,059,500
Note 1: EBITDA means earnings before interest, tax, depreciation and amortization.		
Note 2: IRC Section 274 allows 50 percent deduction of business meals expense.		
Note 3: IRC Section 274 allows 50 percent deduction of the cost of employer-operated eating facilities.		
Note 4: IRC Section 274 disallows $56,000 golf club membership fees and entertainment activities.		

Table 4 shows that in year two, Partnership Hotel A has a taxable income before section 163(j) limitation of $4,923,000; but still has an adjusted taxable income (ATI) of $6,865,000 and 30 percent of ATI is also $2,059,500. In year two, Partnership Hotel A can deduct up to $2,067,500 in business interest expense:

= < Σ [business interest income $8,000 + 30% of ATI $6,865,000 + floor plan financing interest expense $0].

Even though Partnership Hotel A can deduct up to $2,067,500 business interest expense, it only has $400,000 business interest in year two. Therefore, in year two Partnership Hotel A has excess taxable income (ETI). In year two, Partnership Hotel A does not have excess business interest income because the business interest expense of Hotel A exceeds its business interest income by $392,000 ($400,000 - $8,000).

Following the guidelines of official publications (JCT, 2018, p. 176), Hotel A's ETI is the amount which bears the same ratio to the Hotel A's ATI as (1) the excess of (a) 30 percent of the Hotel A's ATI over (b) the amount by which the Hotel A's business interest, reduced by floor plan financing interest, exceeds its business interest income, bears to (2) 30 percent of the Hotel A's ATI. Calculation of Hotel A's ETI is as follows.

(a) 30% of $6,865,000 = $2,059,500
(b) ($400,000 - $0 - $8,000) = $392,000
The excess of (a) over (b) = $2,059,500 - $392,000 = $1,667,500 (1)

30% of $6,865,000 = $2,059,500 (2)

(1) bears to (2) = $1,667,500 / $2,059,500 = 80.97%

Hotel A's ETI = $6,865,000 * 80.97% = $5,558,333

Each partner's distributive share of the ETI from Hotel A in year two is $2,779,166, and therefore they can deduct a portion of the $966,250 carried forward excess business interest from prior year. In year two, each partner can only deduct $833,750 of the carryforward excess business interest in the current year:

= [excess business interest income $0 + 30% of distributive share of ETI from Partnership Hotel A $2,779,166].

Because of the excess taxable income, in year two each partner may deduct $833,750 of the carryforward excess business interest and continue to carryforward the remaining excess business interest $132,500 ($966,250 - $833,750).

IMPLICATION

In general, changes in the IRC have major implications for business tax liabilities. The next few paragraphs discuss how business managers could modify their operations in responses to the changes in the IRC such as section 163(j), section 168(k), section 179, and section 274.

Implication of Section 163(j) Changes

Table 3 demonstrates that once the definition of adjusted taxable income for business interest deduction changes from EBITDA to EBIT in the beginning of 2022, taxpayers in general will deduct a smaller amount of net business interest expense under the 30 percent limitation of section 163(j) as amended by TCJA (2017). For example, in Table 3, given the same amount of taxable income before section 163(j) limitation, a business operation can deduct $36 of business interest expense before January 1, 2022 but only $27 after January 1, 2022.

Considering only the effect of section 163(j) which allows business operators to deduct a smaller amount of business interest expense after January 1, 2022, business operators will have a higher tax liability. Thus, ceteris paribus, business operators could plan to use less debt financing after 2022. From the present to January 2022, business operators can either pay off some outstanding loans or refinance the loans by taking advantage of the existing low interest rate environment.

Implication of Section 168(k) Changes

The most important change to section 168(k) is the expansion of the 100 percent bonus depreciation for qualified property to include both new and used assets (acquired and placed in service after September 27, 2017 but before January 1, 2023). These assets include depreciable personal assets used to furnish lodging such as beds, refrigerators, and stoves in hotels, apartments and dormitories (IRS, 2018b). Hotel operators should consider buying used depreciable personal assets but deducting 100 percent bonus depreciation of the purchase cost at the same time.

Implication of Section 179 Changes

IRC section 179, as amended by TCJA (2017), now increases the annual maximum deduction under section 179 from $500,000 to $1 million for property placed in service in taxable year beginning after December 31, 2017 (IRS, 2018b). However, a business operator cannot use the section 179 deductions in a tax year to create or increase tax losses. Thus, business operators need to consider future business earning potential, in light of the macroeconomic environment in coming years. Economies continually go through expansion and contraction cycles which affect both interest rates and profits. During recessions, taxable profit might not be large enough for a business to elect section 179 and immediately expense newly acquired property. Taking in to account the time value of money, ceteris paribus firms are better off electing section 179 to generate immediate expenses, and hence pay less taxes now and thus generating more cash in the present period. This cash can then be used to reduce debt, which is another factor for business operators subject to section 163(j) to consider.

Implication of Section 274 Changes

Under the new section 274 as amended by TCJA (2017), no deduction is allowed with respect to entertainment even if it is related to a taxpayer's business. Thus, for tax years after 2017, hotel operators can no longer deduct any expense for entertaining airlines' administrators for referring airlines' crews to stay in designated hotels. But, the new section 274 still permits a fifty percent deduction for non-extravagant business meals with business clients. Hotel operators should consider significantly curtailing entertainment expenditures such as golfing outings and instead shift entertainment dollars to business meals with referring airlines' administrators and onsite catered events at hotel's facilities.

The new section 274 now allows taxpayers to deduct only 50 percent of the cost of employer-operated eating facilities. In tight labor markets, a hotel operator should consider increasing the hourly rate paid to employees while charging these employees 50 percent of the cost of a meal in an employer-operated eating facility.

CONCLUSION

The Tax Cuts and Jobs Act (TCJA) 2017 significantly amended the IRC of 1986. From the time TCJA (2017) became law on December 22, 2017, the Treasury Department and the IRS have been proposing new regulations regarding its application. This paper focuses on the new limitations regarding the of the deduction for business interest expense under IRC section 163(j). To date, official tax authorities have only published five limited examples demonstrating the calculation of the section 163(j) limitation on the deduction for business interest expenses. Due to fluidity of the rules and procedures regarding section 163(j), a lack of research papers on section 163(j) exists. This paper attempts to fill in the void in the research literature.

This paper contributes to the literature in several ways. First, it provides readers with a summary of the latest regulations regarding section 163(j) in tabular format. Second, this paper provides robust numerical case examples illustrating how section 163(j) applies at the entity level (a C corporation, a S corporation, and a partnership) as well as the partner-level. Third, using this paper's case, the authors highlight the application of section 168(k), section 179, section 274 together with section 163(j) in this paper's case examples. Furthermore, this paper discusses how businesses could change business operations to account for the changes in the tax code such as section 163(j), section 168(k), section 179, and section 274.

Tax law is constantly changing in response to changes in the political and economic environment. For example, on March 27, 2020, the President signed the Coronavirus Aid, Relief, and Economic Security (CARES) Act into law. On April 10, 2020, the IRS issued Rev. Proc. 2020-22 (IRS, 2020b) providing guidance on changes made by the CARES Act to the section 163(j) business interest deduction limitation. The CARES Act (2020) changes the limitations on deductibility by allowing taxpayers to apply a 50 percent ATI limitation in the 2019 and 2020 tax years only and allowing companies to compute the 2020 limitation based on 2019 ATI. The authors will discuss about CARES Act (2020) in future research papers.

The authors acknowledge several limitations of this paper. For example, this paper's case-example is a best effort attempt to demonstrate to readers how section 163(j) limitation applies under specific circumstances. Many opportunities exist for research in TCJA (2017), the authors will publish more manuscripts in the future about the effects of TCJA (2017) and the CARES Act (2020) on businesses.

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