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GILTI INCOME AND FINANCIAL REPORTING: AN ANALYSIS OF THE 10-K DISCLOSURES BY S&P 500 FIRMS FOLLOWING THE 2017 TAX REFORM

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ABSTRACT

The 2017 tax reform introduced a minimum tax on "global intangible low-taxed income" (GILTI). Current research has shed limited light on how firms report GILTI-related items on their financial statements. This study examines the 10-K disclosures of S&P 500 firms after the 2017 tax reform (Tax Cut and Jobs Act, or TCJA) and focuses on the differences in their financial reporting choices (period cost vs. deferred method) for GILTI. Most of the firms that chose the deferred tax method are concentrated in the subsectors of pharmaceutical, biotechnology, and software technology. Ten firms reported a total of $24.77 billion of GILTI-related deferred tax liability (and potential "cookie jar" for future earnings) after the passage of TCJA in December 2017. For these firms, GILTI-related items constitute a substantial portion of the total deferred tax liabilities and pre-tax income. The results also show that firms in the industrial sector are in general less likely to be affected by the GILTI regime than firms in the sectors with high-return intangible assets. This is consistent with the legislative intent for the GILTI tax.

JEL: M41, M48

KEYWORDS: Accounting Policy, Deferred Tax Liability, Global Intangible Low-Taxed Income, Tax Cut and Jobs Act

INTRODUCTION

The 2017 tax reform, also known as the Tax Cuts and Jobs Act (TCJA) of 2017, is considered a major overhaul following the Internal Revenue Code of 1986 on the taxation of corporations' international transactions and foreign earnings. TCJA created section 951A and introduced a minimum tax on a category of income known as the "Global Intangible Low-Taxed Income" (GILTI) from Controlled Foreign Corporations (CFC). Before the GILTI provision, US corporations may reduce their overall tax burden by shifting intangible assets, such as patents or copyrights, to subsidiaries in a low tax foreign jurisdiction. The introduction of the GILTI regime is aimed to reduce the incentives for firms to move income-generating properties around the globe to structure the best tax outcome. The on-going discussion of a global minimum tax scheme for the OECD countries resembles that of the GILTI tax with the same objective to prevent large multinational corporations from moving their incomes across countries and shopping for the best tax deal. Following the passage of TCJA on December 22, 2017, the Financial Accounting Standards Board staff issued guidance on how to report the impact of the GILTI inclusion on financial statements (FASB Staff Q&A Topic 740 No.5). However, we have limited empirical evidence on the landscape of GILTI-related accounting disclosures for a large cross-section of U.S firms. This study contributes to the literature by systemically examining how the GILTI items are reported by the S&P 500 companies. Sector-based analyses show that firms in the sector of healthcare and information technology are most likely to disclose the effect of GILTI on their financial statements, followed by firms in the industrials and consumer discretionary sector. The interaction between the GILTI provision and a "territorial-based" international tax system for U.S. corporations after the 2017 tax reform created complications for the financial reporting

of income taxes on consolidated financial statements. A divergence of views emerges among accounting firms and tax practitioners on how to apply the Accounting Standards Codification on income taxes (ASC 740) on GILTI. As such, the FASB staff concluded that firms may elect to treat the tax liability from GILTI either as a current-period expense (the period cost method), or to account for the basis differences affected by the GILTI regime as a deferred tax item on the balance sheet (the deferred tax method). The results from the samples of this study show that 209 firms elected the period cost method and they are distributed across different sectors. A total of 15 firms are found to have elected the deferred tax method and they are concentrated in the pharmaceutical, biotechnology and software/technology sub-sector. Following the passage of TCJA in December 2017, ten firms in the S&P 500 reported GILTI-related deferred tax liability with an average of $2.4 billion and median of 1.6 billion. The average is $149 million for the five firms that reported GILTI-related deferred tax assets.

Prior accounting literature has suggested that companies would use income tax items as a "cookie jar" to manage earnings. In Blouin et al (2010), it is estimated that firms have pre-emptively released income tax reserves up to $4.4 billion for the 100 largest nonfinancial, nonutility firms before the effective date of a regulatory regime change on the financial reporting of uncertain tax positions. In comparison, it is shown here that the ten large firms in the pharmaceutical and tech/biotech industries recognized a total $24.77 billion in deferred tax liabilities (DTL) following TCJA under the deferred methods for GILTI items. These recognized DTL can be used as accounting reserves because the DTL may be released into earnings for future years. The background of GILTI is explained next in the literature review section, as well as the related research on firms' financial reporting of foreign earnings before and after the 2017 tax reform.

LITERATURE REVIEW

Before the 2017 tax reform known as the Tax Cuts and Jobs Act (TCJA), the U.S. generally does not tax foreign business profits through a foreign subsidiary until the event of a dividend payment by the subsidiary back home, otherwise known as a "repatriation". This created an opportunity for firms to accumulate earnings and profits in a low-tax foreign jurisdiction and delay repatriation payments. For this reason, Congress created an anti-deferral rule in the Revenue Act of 1972 known as the subpart F income (codified in the Internal Revenue Code, Subtitle A, Chapter 1, Subchapter N, Part III, Subpart F) to prevent an indefinite delay in collecting revenues. Subpart F income is taxed on a current basis (in the period when the profit occurs), without regard to whether the income is distributed to shareholders. It generally includes passive income from investments that can be moved easily from one country to another.

The 2017 tax reform created code section 951A on Global Intangible Low-Taxed income (GILTI). The tax on GILTI is a minimum tax on Controlled Foreign Corporations' (CFC) foreign earnings over and above a "net deemed tangible return" from tangible properties. The GILTI tax is conceived in a way that is similar to subpart F to tax foreign profits on a current basis but with a broader tax base than the existing subpart F. But different from subpart F, the GILTI is not taxed at the CFC level but at the shareholder level. The GILTI inclusion is equal to the U.S. shareholder's share of the CFC's net income, reduced by the excess of (i) 10 percent of the CFC's aggregate adjusted basis in depreciable tangible property used in its trade or business, over (ii) the CFC's net interest expense. Currently companies can take a deduction of 50% of GILTI tax paid and apply their foreign tax credits as an offset. After applying the deduction and foreign tax credits, the effective tax rates on the GILTI inclusion may range from 10.5% to 13.125%.

Another main feature of the 2017 tax reform is to allow a one-time "toll tax" or deemed repatriation tax of 15.5% on foreign cash holdings or 8% on non-cash holdings. This toll tax is part of the overall design by TCJA to shift from a worldwide taxation model to a more "territorial" system by providing a dividend-received deduction to U.S. shareholders who receive distributions out of foreign-source earnings from CFCs. But the GILTI inclusion and the territorial-based dividend received deduction for shareholders created complications for financial reporting. Usually, the outside basis of a parent entity in a CFC is considered as

the unit of account under Accounting Standards Codification (ASC) 740. However, because foreign-source dividends paid out of foreign earnings are no longer subject to US tax due to the dividend-received deduction under TCJA, the timing difference between the book and tax basis of a foreign subsidiary cannot necessarily be used to predict future U.S. income tax. As such, there is a divergence in views on how to account for GILTI associated with foreign subsidiaries and its impact on financial statements (Deloitte, KPMG 2018). Tax practitioners have argued that a flexible financial reporting approach is warranted. For instance, the Tax Executives Institute asserts that the Financial Accounting Standards Board (FASB) should "adopt a method for disclosing the financial impacts of the GILTI regime that…does not provide a single prescribed accounting standard. The method should provide preparers sufficient ability to make judgements on their GILTI tax accounting based on individual facts and circumstances" (TEI, 2018)

The Financial Reporting on Foreign Earnings pre-TCJA and FASB Staff Guidance on GILTI

In the pre-TCJA period when firms can avoid U.S. taxation if their foreign earnings are not repatriated, the Accounting Principal Board Opinion 23 (APB 23) has been relied upon for the financial reporting of foreign and domestic tax liabilities. Under APB 23, companies also do not have to report or disclose potential U.S. tax liabilities as long as the foreign earnings are deemed to be indefinitely reinvested overseas (also known as Permanently Reinvested Earnings, or PRE). This is considered one of the "loop-holes" (Furner and Dickins 2019) for multinational corporations to manipulate both their tax liabilities from foreign operations and their compliance with the disclosure requirements of PRE on the financial statements (Ayers et al. 2015). Some accounting research has studied the disclosures on the impact of the one-time transition tax, also known as the "toll tax" by TCJA. Given the limited time between the passage of TCJA and the 10-K due dates for fiscal 2017, the Securities and Exchange Commission (SEC) in its Staff Accounting Bulletin (SAB-118) allowed firms to make an initial rough estimate on the impact of the transition tax. Honeker and Thomas (2019) examined the impact of this transition tax (not the GILTI tax) on firms' deferred tax asset and liabilities and Chen et al. (2021) discussed the following adjustments after the initial estimates under SAB-118. Due to the complexities regarding the impact of GILTI tax on financial statements, the FASB staff believes that the current ASC 740 is not clear-cut on the treatment of GILTI on financial statements and "plans to monitor how entities that pay tax on GILTI are accounting for and disclosing its effects" (FASB Staff Q&A 2018). In the same Q&A, the staff report takes the position that firms can either report the GILTI tax as: 1) a period cost: treat the tax liability on future GILTI inclusions as a current-period expense, or 2) deferred tax items: account for the temporary differences that would result in GILTI tax as deferred tax on the balance sheet (which are expected to reverse into earnings in future periods).

It is yet to be seen whether the FASB would propose a formal draft on the important changes brought by TCJA on foreign earnings and GILTI. Some companies may see opportunities in earnings management by using the divergence in the methods to account for the GILTI items, and investors would likely demand more detailed information and disclosures. This view on firms' opportunistic reporting behavior is supported by empirical evidence on a prior "tax holiday" enacted by the American Jobs Creation Act during 2004-2005 to encourage the repatriation of foreign-source earnings. Although firms can repatriate earnings and receive an 85 percent dividend-received deduction during that tax holiday, Morrow and Ricketts (2014) show that firms participated in such a holiday reduced their reported financial reporting income for the holiday period. They attributed this to an "expectation management" behavior by reducing earnings during the repatriation period to enable potential earnings growth in subsequent fiscal years. Firms that chose the deferred method to account for GILTI items may adopt a similar approach to recognize a deferred tax liability and reduce current earnings with the understanding that future earnings may be influenced by a reversal of the deferred tax liability.

Unintended Consequence of GILTI

Because there is no uniform requirement currently by the FASB on the accounting choice of GILTI items, the aim of this study is to first conduct a systematic review of the disclosure and reporting regarding GILTI in a representative sample of large U.S. companies. The design of the GILTI tax also suggests that Congress intended to capture high-return income that is also highly mobile across borders (Callas and Prater 2020), income that is often generated by intangibles such as patents, software, and technical know-hows that can be easily migrated to low-tax jurisdictions. In this way, GILTI tax are usually associated with pharmaceutical, biotech and technology firms. However, recent anecdotal evidence also suggests that GILTI is hitting traditional, railroad companies such as Kansas City Southern (Rubin 2018) due to the interactions between GILTI and other parts of the Internal Revenue Code. The income and expense allocation rules under the foreign tax credit limitation calculation can allocate some interest expense to foreign income and reduce the credible ratio assigned to the foreign tax credit. Some industrial companies with large plant and equipment, and likely large interest expenses to finance their capital expenditures may somehow become an unintended target of the GILTI tax. Therefore, in the next section a logistical regression model is constructed to test whether firms in different sectors have the same odds of being affected by GILTI and thus disclosing their accounting choice for GILTI items.

DATA AND METHODOLOGY

This study analyses a representative sample of large US corporations. Form 10-Ks form firms listed on the S&P 500 index are collect from the Securities and Exchange Commission's website at www.sec.gov/edgar/searchedgar/companysearch.html. As Table 1 shows, the sample selection starts with firms on the index in 2017. To have a comparison on the initial and subsequent disclosures by the companies on the effects of TCJA, the sample is further restricted to firms that were listed in the S&P 500 in both 2017 and 2018 (n=461). This is consistent with the pattern that there are on average 22 firms added to, and an equal number of firms taken off from the index on a yearly basis. The sample is further screened for subsequent acquisition by other companies and sufficient Compustat data coverage on the financial statement items. This results in a final sample of 459 companies.

Table 1: Sample Selection

Selection Criteria	Number of Firms
Step1: Firms listed on the S&P 500 Index as of 12/31/2018	500
Step 2: Firms not listed on the S&P 500 in both fiscal 2017 and fiscal 2018	(39)
Step 3: Firms that underwent Merger/Acquisition or do not have consistent Compustat data coverage	(2)
Final Sample size	459

As Table 1 shows, 10-K data are collected for the 459 firms on the S&P 500 index after the sample selection procedure. Symantec and VF Corp were removed from the sample in Step 3.

As discussed in the literature review section, one of main intention of the GILTI legislation is to tax foreign incomes from firms that can easily move their intangible assets around jurisdictions to seek the best tax outcome. In this regard, large pharmaceutical and biotech companies in the Healthcare sector, as well as firms in the technology sector are the main focus of this new tax law. A question arises on whether firms in other sectors, such as industrial companies that has large capital expenditures on plants and equipment, are equally affected by GILTI. To this end, a logistical regression is used to see if firms in the industrial sector are equally affected by the GILTI tax, and therefore equally likely to disclose an accounting policy election associated with GILTI.

For i = 1,…,n firms, the model is $\log\left[\frac{p_i}{1-p_i}\right] = \alpha + \beta_1 x_{i1} + \beta_2 x_{i2} + \cdots \beta_k x_{ik}$

where p_i is the probability that $y_i = 1$, that is if a firm discloses its accounting policy for GILTI (either deferred or period) and $y_i = 0$ if a firm didn't disclose any GILTI items or the GILTI items are immaterial. $x_1 \dots . x_k$ are indicator/dummy variables when a firm belongs to one of the sectors in the S&P 500 index. Because there are 11 main sectors on the S&P 500, the logistic regression will create 10 dummy variables (using the Utilities sector as the reference sector). The null hypothesis is that the coefficient on the Healthcare or IT sector equals the coefficient on the Industrial sector. For example, the following SAS code is used to test whether firms in the Healthcare sector is more likely to disclose GILTI than the Industrial Sector:

```
proc logistic data=gilti_sp500;
class GICSectors (ref="55") /param=ref;
model gilti (event='1')= GICSectors;
Healthcare_vs_Industrials: test GICSectors35=GICSectors20;
run;
```

RESULTS

The overall pattern of how the firms disclosed GILTI items on their Forms 10-K is shown on Panel A of Table 2. In total, 224 firms disclosed accounting policy elections on GILTI (48% in the sample period), out of which 209 firms opted for the period cost method and 15 firms disclosed that they elected the deferred method. Panel B of Table 2 shows top sectors with GILTI-related disclosures. The specific GIS sub-sectors for the firms under the deferred method are shown in Table 3. Overall, firms that have adopted the period cost method are distributed across different sectors while those that elected the deferred method are concentrated in the subsectors of pharmaceuticals, biotechnology and information technology.

Table 2: Sector Analysis of on The Financial Reporting of GILTI For S&P 500 Firms

Panel A: Accounting Disclosures on GILTI and Deferred Taxes for Fiscal Year 2018 By GIS Sector			
	Firms That Do Not Mention the Effect of GILTI Tax Provision on Deferred Taxes or the Impact of GILTI Is Immaterial	**Firms That Elected Treat GILTI Provision as a Period Cost**	**Firms That Elected to Treat GILTI as Deferred Tax**
Energy Sector	21	5	0
Materials Sector	5	18	0
Industrials	29	34	0
Consumer Discretionary	31	30	0
Consumer Staples	11	21	0
Healthcare	14	37	6
Financials	43	20	0
Information Technology	17	32	8
Communication Services	11	7	1
Utilities	25	1	0
Real Estate	28	4	0
Subtotal	235	209	15
Panel B: Top Sectors That Discloses the Impact of GILTI and Related Financial Reporting Policy Election			
	GILTI as Period Cost	**GILTI as Deferred Tax**	**Number of Firms with GILTI Disclosure**
Healthcare	37	6	43
Information Technology	32	8	40
Industrials	34	0	34
Consumer Discretionary	30	0	30
Consumer Staples	21	0	21

Panel A shows the sector information for the 459 firms listed on the S&P 500 index in both fiscal 2017 and 2018. Panel B shows the top five sectors affected by the GILTI tax.

Table 3: Firms That Elected the Deferred Method, By GIS Subsectors

Company Name	SIC Sector Code	SIC Sector Name
Apple Inc	452020	Technology Hardware, Storage & Peripherals
Analog Devices	453010	Semiconductors & Semiconductor Equipment
Alexion Pharmaceuticals Inc	352010	Biotechnology
Activision Blizzard Inc	502020	Entertainment
Biogen Inc	352010	Biotechnology
Intl Business Machines Corp	451020	IT Services
Johnson & Johnson	352020	Pharmaceuticals
Lilly (Eli) & Co	352020	Pharmaceuticals
Lam Research Corp	453010	Semiconductors & Semiconductor Equipment
Microsoft Corp	451030	Software
Nvidia Corp	453010	Semiconductors & Semiconductor Equipment
Oracle Corp	451030	Software
Pfizer Inc	352020	Pharmaceuticals
Regeneron Pharmaceuticals	352010	Biotechnology
Xilinx Inc	453010	Semiconductors & Semiconductor Equipment

Table 3 shows the detailed sub-sector information for the firms that elected the deferred method for GILTI items.

As a comparison, Nichols et al. (2018, 2019) selected 139 Fortune-250 companies for their 2017 and 2018 Forms 10-K and reported that 23 companies disclosed GILTI items, of which just four companies (Biogen, Eli Lily, IBM, and Johnson & Johnson) in 2018 and one company in 2017 (Pfizer) recorded a deferred tax liability for GILTI-related basis differences. Because firms may not have made the election on time for their fiscal 2018 10-K, our sample also includes firms without initial information on GILTI for fiscal 2018 but subsequently disclosed their election on Forms 10-K filed in 2019. A closer examination of the specific disclosures indicates that a smaller number of firms reported a large amount of GILTI-related deferred tax liability without much details on the underlying basis differences that established deferred taxes for GILTI. For example: in Eli Lilly's 2018 10K (Note 13):

"*Related to GILTI, we elected to establish deferred taxes in the amount of 1.68 billion for the reversal of temporary items in future years*"

Pfizer (2018) did not provide a tabulated result on deferred taxes, but states that

"*In 2017, we provided a provisional deferred tax liability of approximately $1.0 billion based on the evaluation of certain temporary differences inside each of our foreign subsidiaries that are expected to reverse as global intangible low-taxed income. In 2018, this estimate was finalized and we have provided for an additional deferred tax liability of approximately $200 million, resulting in a deferred tax liability of approximately $1.2 billion*"

It is also worth noting that Apple does not use "GILTI" anywhere in its financial statements but disclosed "minimum tax on foreign earnings" in the deferred tax liability section instead of mentioning the GILTI word. Appendix A contains sample 10-K disclosures on GILTI items. Panel A of Table 4 shows that the firms that elected deferred tax method for the financial reporting of GILTI after TCJA recognized a total $24.7 billion in deferred tax liabilities (DTL) in their 10-K disclosures. The respective amount (excluding Apple) is shown in Figure 1. The breakdown of each firm's GILTI-specific DTL, total DTL and pre-tax income is listed in Panel B of Table 4. The results also suggest that GILTI-related DTL constitutes a substantial portion of total DTL reported by each company. It is shown in Figure 2 that the impact by

GILTI-items on the current-period income statement is mostly below 45% of pre-tax income while most GILTI-related DTL is under 60% of total DTL. Firms under the deferred method could be using the opportunity to recognize the income tax effect of GILTI (to reduce net income) in the current period while put the same amount on the balance sheet as DTL. Any reversal of these GILTI-related DTL can potentially reduce the effective tax rate and increase earnings in the future.

Table 4: GILTI and Deferred Tax Liabilities of S&P 500 Firms

Panel A: Reported Deferred Tax Liability (DTL) on Form 10-K (in Millions)

	Firm	Tic	Fiscal Year End	GILTI-related DTL	Total DTL	Pre-tax Income
1	Apple*	AAPL	9/28/2019	10,809	11,595	65,737
2	Analog Devices*	ADI	11/2/2019	1,254	2,304.5	1,485.7
3	Alexion	ALXN	12/31/2018	268.8	930.7	242.2
4	Biogen	BIIB	12/31/2018	544.6	2,305.4	5,899.6
5	IBM	IBM	12/31/2018	1,927	7,398	1,1325
6	Johnson & Johnson	JNJ	12/30/2018	2,971	11,271	17,999
7	Lilly	LLY	12/31/2018	1,680	3,175.7	3,795.7
8	Microsoft	MSFT	6/30/2019	2,607	5,716	43,688
9	Oracle	ORCL	5/31/2019	1,515	2,766	12,420
10	Pfizer	PFE	12/31/2018	1,200	9,456	11,885
	Subtotal			2,477		

Panel B: Percentage of Fiscal 2018/2019 GILTI-Specific Deferred Tax Liability (GILTI-DTL) To Total DTL and Pre-Tax Income (Pi)

Firm	GILTI-DTL/Total DTL	GILTI-DTL/Pi
Apple	93.22%	16.44%
Analog Devices	54.42%	84.41%
Alexion	28.88%	110.98%
Biogen	23.62%	9.23%
IBM	26.05%	17.02%
Johnson & Johnson	26.36%	16.51%
Lilly	52.90%	44.26%
Microsoft	45.61%	5.97%
Oracle	54.77%	12.20%
Pfizer	12.69%	10.10%
Mean	41.85%	32.71%

Based on data collected from 2018 and 2019 Form 10-K, Table 4 shows the ten firms with the largest amount of GILTI-related Deferred Tax Liability (DTL) and its proportion to total DTL and pre-tax income.

**Firms that finalized the reporting decision on GILTI-related deferred tax items in fiscal 2019*

Figure 1: GILTI-Related Deferred Tax Liabilities (DTL, in Millions), Excluding Apple

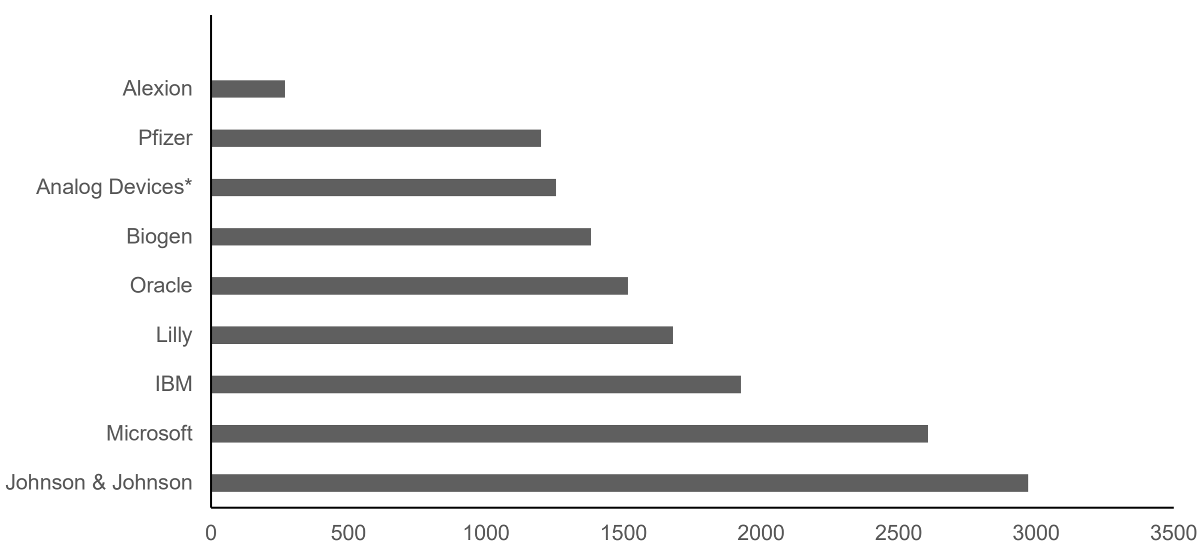
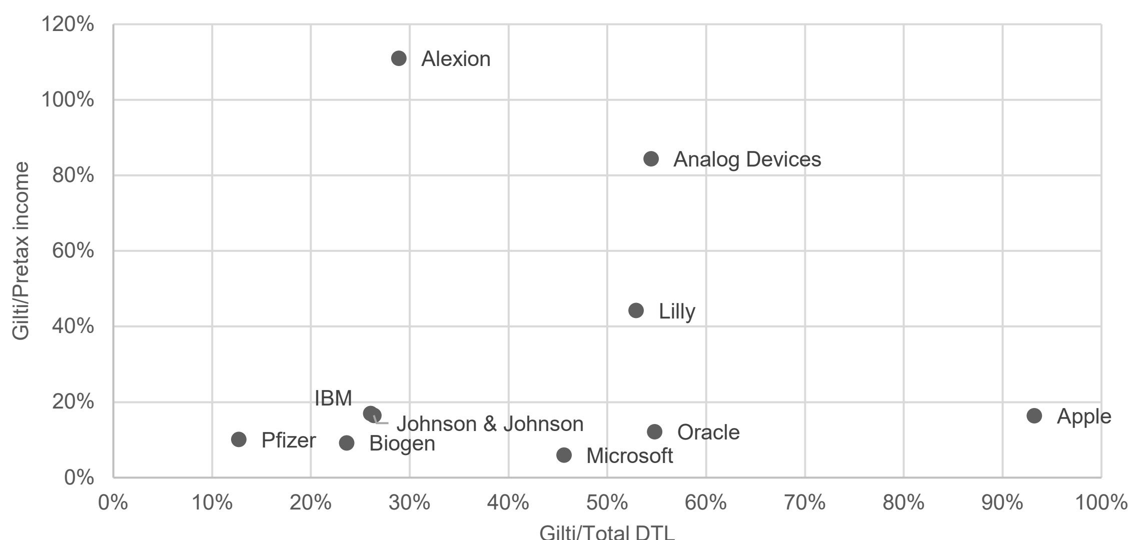


Figure 1 shows the amount of GILTI-related deferred tax liabilities disclosed on Form 10-K for fiscal 2018. Apple does not use "GILTI" anywhere in its financial statements but disclosed $10.8 billion of deferred tax liability associated with "minimum tax on foreign earnings" on its fiscal 2019 Form 10-K

Figure 2: GILTI-Specific Deferred Tax Liabilities (DTL) to Total DTL and Pre-Tax Income



*As Figure 2 shows, the impact by GILTI-items on the current-period income statement is mostly below 45% of pre-tax income while most GILTI-specific DTL is under 60% of total DT*The results also show that most firms electing to record a DTL are in the pharmaceutical, biotech and software-technology where intangibles such as copyrights, trade-secrets and technical know-hows can generate a higher rate return. It can be reasonably expected that they are subject to the GILTI tax on a regular basis after the 2017 tax reform. As firms are allowed the option of either treating GILTI as a period cost or setting up a reserve for expected future GILTI inclusion, the deferred method offers the opportunity to reduce the variability in the effective tax rates for future periods. The disclosures on the specific basis differences on GILTI items are however scarce in the Form 10-Ks. The data also suggest that fewer firms report deferred tax assets (DTA) associated with GILTI. Table 5 shows that five companies reported a total of 149 million of DTA and only one of them (Regeneron) is in the pharmaceutical/biotech sector. This is consistent with the historical pattern that most firms record a DTL

for subpart F incomes (TEI 2018). The mean ratio of GILTI-related DTA/Total DTA is 22% and the scale of GILTI-related DTA is on average less than 6% of pre-tax income.

Table 5: GILTI and Deferred Tax Assets of S&P 500 Firms

	Firm	**Tic**	**Fiscal Year End**	**Disclosed as:**	**GILTI-related DTA**	**Gross DTA**	**Pre-tax Income**
1	Activision Blizzard	ATVI	12/31/2018	In the footnote	-219	-671	1,877
2	Lam Research	LRCX	6/30/2019	In the footnote as DTA	-47.6	-470.6	2,446.5
3	Nvidia	NVDA	1/27/2019	GILTI deferred tax asset	-376	-1,140	3,896
4	XILINX Inc	XLNX	3/30/2019	GILTI deferred tax asset	-38.41	-157.48	968.33
5	Regeneron	REGN	12/31/2018	In the footnote as DTA	-68	-672.8	2,553.5
	Subtotal				-149.8		

Panel B: Percentage of Fiscal 2018/2019 GILTI-Specific Deferred Tax Asset (GILTI-DTA) to Total DTA and Pre-Tax Income (Pi)

	Firm	**GILTI-DTA/Total DTA**	**GILTI-DTA/Pi**
1	Activision Blizzard	32.64%	-11.67%
2	Lam Research	10.11%	-1.95%
3	Nvidia	32.98%	-9.65%
4	XILINX Inc	24.39%	-3.97%
5	Regeneron	10.11%	-2.66%
	Mean	22.05%	-5.98%

Panel A shows that there are five companies in the sample that reported deferred tax assets on their 10-K. The ratio of GILTI-related deferred tax assets (DTA) over Total DTA and pretax income is reported in Panel B DTA amount are presented as negative numbers in contrast to DTL numbers

Logistical Regression Results

The number of firms in the sample (n=459) confers statistical power for the use a logistical regression model in Table 6. In the model, different industry sectors are indicator variables to predict the log-odds of the probability that a firm makes a GILTI-related accounting choice. Panel B of Table 6 shows that we can safely reject the null hypothesis that Healthcare and Industrial firms are equally likely to be affected by the GILTI tax. The difference between IT and Industrial firms are however only marginally significant.

Table 6: Logistic Regression Results

Panel A: Dependent Variable = Log-Odds of the Event When a Firm Discloses an Accounting Policy for GILTI Items				
GIC Sector Code	**Parameter**	**Estimate**	**Standard Error**	**Pr > ChiSq**
	Intercept	-3.2189	1.0198	0.0016
10	Energy	1.7838	1.1347	0.1160
15	Materials	4.4998	1.1382	<.0001
20	Industrials	3.3779	1.0507	0.0013
25	Consumer Discretionary	3.2189	1.0520	0.0022
30	Consumer Staples	3.8655	1.0856	0.0004
35	Healthcare	4.2720	1.0630	<.0001
40	Financials	2.4534	1.0551	0.0201
45	Information Technology	4.0745	1.0601	0.0001
50	Communication Service	2.9004	1.1207	0.0097
60	Real Estate	1.2730	1.1514	0.2689
Panel B: Testing of the Null Hypothesis $\beta_{Healthcare=}\beta_{Industrials}$				
		Wald Chi-Square		**Pr > ChiSq**
Healthcare_vs_Industrials		5.1970		0.0226
Panel C: Testing of the null hypothesis $\beta_{IT=}\beta_{Industrials}$				
		Wald Chi-Square		Pr > ChiSq
IT_vs_Industrials		3.2850		0.0699

Table 6 shows the relationship between GIC Sectors (as indicator/dummy variables) and the log- likelihood that firms are affected by GILTI. The Utilities sector is the reference sector. Panel B shows that we may reject the null hypothesis that Industrial firms are equally likely to be affected by GILTI as Healthcare firms. Panel C shows that the difference between IT firms and Industrials is not as statistically significant.

CONCLUDING COMMENTS

The objective of this study is to analyze firms' financial reporting choices on Global Intangible Low-Taxed Income (GILTI). Currently there is a paucity of published empirical evidence regarding such accounting choices following the Tax Cut and Jobs Act of 2017 (TCJA) for a representative sample of large firms across different industries and sectors. This study contributes to the literature by collecting Form 10-K data of S&P 500 firms regarding GILTI, and presenting statistics on the adoption of different GILTI accounting methods. Furthermore, a logistic regression model is deployed to test whether firms in different sectors are equally affected by the GILTI regime.

The results indicate that a substantial amount of GILTI-related deferred tax liability (DTL) has accumulated on firms' balance sheet, mostly for those in the pharmaceutical, biotechnology, and the software-technology sector. The underlying details of the temporary differences that gave rise to the DTL are however scarce from the disclosures. The lack of a clear guidance by the Financial Accounting Standards Board for GILTI items may give rise to reporting behaviors that seek to smooth out the variability of tax expenses and future effective tax rates when the deferred method is elected for GILTI. This is supported by the fact that pharmaceutical and biotech companies are particularly sensitive to any future change in the GILTI tax rates (Davison 2021, Strasburg and Cooper 2021). There is also anecdotal evidence reported by the Wall Street Journal that the GILTI tax may have an unintended consequence on industrial companies such as the Kansas City Southern Railroad. A logistic regression model is deployed for the samples in this study to test whether the GILTI regime affect different sectors in the same way. The results show that in general Industrial

companies are less likely to be affect by the GILTI tax than firms in the healthcare sector where high-return intangible assets such as patents can be easily moved around jurisdictions to shop for the best tax deal.

A limitation of this study is that the sample is limited to S&P 500 companies and there is no longitudinal comparison. Future research may use more 10-K disclosures from 2020 and beyond. Several avenues are also open for future research in this area. First, the sample size may be increased to firms listed on the Russell 1000/3000 to further explore the impact of GILTI and the disclosure pattern by both large and small/midcap firms that represent the lion's share of active companies on the U.S. equities market. Second, as manually collecting disclosure data is time-consuming, the insights gathered in this research can be further expanded to explore a statistical formula that may be applied to predict future U.S. tax liability with the current information given on GILTI-related deferred taxes. Third, with time-series data in the future, a comparability of the usefulness of financial statements between firms that adopted the period cost vs. the deferred method may be carried out with statistical power.

The current GILI regime is also undergoing expansion as the Biden administration has proposed to increase the tax rate on GILTI from 10.5% to 21%. The tax base will also be broadened. In a draft legislation released on August 25, 2021, Senate Finance Committee Chairman Ron Wyden outlined his plan on how multinational corporations would be taxed (EY 2021). Specifically, he proposed changes that eliminated the Qualified Business Asset Investment (QBAI) exemption (or tangible asset exemption) and thus GILTI becomes "global *inclusion* of low-tax income". If the proposals become law, researchers may use this setting to collect data and analyze how firms re-adjust their reporting for GILTI on the financial statement and whether their previous disclosures add relevant information. This also adds urgency to the FASB's income tax disclosure project post TCJA as investors may need a comprehensive framework and standardized disclosure requirement to evaluate corporate tax exposure and ESG-related investing for GILTI items.

APPENDIX

Appendix A: Samples of 10-K disclosures on future foreign GILTI income and deferred tax balances

<u>1-Apple 2019 10-K</u>

On December 22, 2017, the U.S. enacted the Tax Cuts and Jobs Act (the "Act"), which significantly changed U.S. tax law. The Act lowered the Company's U.S. statutory federal income tax rate from 35% to 21% effective January 1, 2018, while also imposing a deemed repatriation tax on previously deferred foreign income. The Act also created a new minimum tax on certain foreign earnings, for which the Company has elected to record certain deferred tax assets and liabilities. The Company completed its accounting for the income tax effects of the Act during 2019, in accordance with the U.S. Securities and Exchange Commission Staff Accounting Bulletin No. 118

Deferred tax liabilities	2019	2018
Minimum tax on foreign earnings	10,809	----

<u>2-Microsoft 2018 10-K</u>

On December 22, 2017, the TCJA was enacted into law, which significantly changed existing U.S. tax law and included numerous provisions that affect our business, such as imposing a one-time transition tax on deemed repatriation of deferred foreign income, reducing the U.S. federal statutory tax rate, and adopting a territorial tax system. In fiscal year 2018, the TCJA required us to incur a transition tax on deferred foreign income not previously subject to U.S. income tax at a rate of 15.5% for foreign cash and certain other net

current assets, and 8% on the remaining income. The TCJA reduced the U.S. federal statutory tax rate from 35% to 21% effective January 1, 2018. In addition, the TCJA subjected us to a tax on our global intangible low-taxed income ("GILTI") effective July 1, 2018. Under GAAP, we can make an accounting policy election to either treat taxes due on the GILTI inclusion as a current period expense or factor such amounts into our measurement of deferred taxes. *We elected the deferred method, under which we recorded the corresponding deferred tax assets and liabilities on our consolidated balance sheets*.

3-Pfizer 2018 10-K

The TCJA subjects a U.S. shareholder to current tax on global intangible low-taxed income earned by certain foreign subsidiaries. The FASB Staff Q&A, Topic 740, No. 5, Accounting for Global Intangible Low-Taxed Income, states that we are permitted to make an accounting policy election to either recognize deferred taxes for temporary basis differences expected to reverse as global intangible low-taxed income in future years or provide for the tax expense related to such income in the year the tax is incurred. *We have elected to recognize deferred taxes for temporary differences expected to reverse as global intangible low-taxed income in future years*. In 2017, we provided a provisional deferred tax liability of approximately $1.0 billion based on the evaluation of certain temporary differences inside each of our foreign subsidiaries that are expected to reverse as global intangible low-taxed income. In 2018, this estimate was finalized and we have provided for an additional deferred tax liability of approximately $200 million , resulting in a deferred tax liability of approximately $1.2 billion 4-Regeneron During 2018, we recorded an income tax benefit of $68.0 million as an adjustment to the provisional amount recorded as of December 31, 2017, which was partly attributable to our election to record deferred tax assets and liabilities for expected amounts of GILTI inclusions. Our assessment of the re-measurement of U.S. net deferred tax assets at the lower enacted corporate tax rate is now complete.

5-Xlinix

All income tax amounts reflect the use of the liability method under the accounting for income taxes, as interpreted by Financial Accounting Standards Board (FASB) authoritative guidance for measuring uncertain tax positions. Under this method, deferred tax assets and liabilities are determined based on the expected future tax consequences of temporary differences between the carrying amounts of assets and liabilities for financial and income tax reporting purposes. The TCJA introduced GILTI, which subjects a U.S. shareholder to current tax on income earned by certain foreign subsidiaries. The FASB allows companies to either (1) recognize deferred taxes for temporary differences that are expected to reverse as GILTI in future years (deferred method) or (2) account for taxes on GILTI as period costs in the year the tax is incurred (period method). The Company elected the deferred method.

REFERENCES

Ayers, B. C. Schwab, and S. Utke. 2015 "Noncompliance with Mandatory Disclosure Requirements: The Magnitude and Determinants of Undisclosed Permanently Reinvested Earnings" The Accounting Review January 2015.

Blouin, J, C. Gleason, L. Mills and S. Sikes. 2010. "Pre-Empting Disclosure? Firms' Decisions Prior to FIN No. 48. The Accounting Review 85 (3) 791-815

Callas, G. and M. Prater. 2020 "Is GILTI Operating as Congress Intended?" Tax Notes January 6, 2020.

Chen, S. M. Erickson, M. Harding and B. Stomberg. 2021 "Companies Initial Estimates and Disclosures of the One-Time Transition Tax Imposed by the Tax Cuts and Jobs Act." Working Paper.

Davison, L. 2021 “Senate Company Tax Plan Boosts Penalty on Sending Profit Abroad”. Bloomberg News August 25, 2021.

Deloitte 2018. Financial Reporting Alert 18-1, Frequently Asked Questions About Tax Reform

Eli Lilly. 2018 10-K at https://www.sec.gov/Archives/edgar/data/59478/000005947819000082/lly-20181231x10xk.htm

EY. 2021 “Discussion draft released by Senators Wyden, Brown, Warner proposes significant changes to current international tax rules” EY Tax News August 29, 2021.

Financial Accounting Standards Board. 2018. Staff Q&A, Topic 740. No. 5: Accounting for global intangible low-taxed income.

Furner, Z. and D. Dickins 2019 “How Closing a Tax Loophole Helps Resolve an Accounting Loophole” The CPA Journal October 2019.

Honaker, K, and P. Thomas. 2019. “An Analysis of the Initial Financial Statement Impact of the Tax Cuts and Jobs Act”. CPA Journal February 2019.

KPMG 2018 Tax Reform, Supplement to KPMG’s Handbook, Accounting for Income Taxes (Jan 5, 2018)

Morrow, M. and R. Ricketts. 2014 “Financial Reporting versus Tax Incentives and Repatriation under the 2004 Tax Holiday” Journal of the American Taxation Association. 36 (1).

Nichols, N, A. Duxbury, and I.J. Scott. 2018 “Analysis of the TCJA’s Impact on Year-End Financial Statements” Tax Notes, June 25, 2018

Nichols, N, A. Duxbury, and I.J. Scott. 2019 “Finalizing the TCJA’s Impact: 2018 Form 10-K Adjustment Analysis” Tax Notes, July 22, 2019

Pfizer 2018 10-K at https://www.sec.gov/Archives/edgar/data/78003/000007800319000015/pfe-12312018x10kshell.htm

Rubin, R. 2018 “New Tax on Overseas Earnings Hits Unintended Targets” The Wall Street Journal. March 28, 2018

Strasburg. J and Laura Cooper. 2021 “Big Pharma Quietly Pushes Back on Global Tax Deal, Citing Covid-19 Role” The Wall Street Journal. July 27, 2021

TEI 2018 “Request for Interpretation of Accounting Standards Codification 740 – Income Taxes Relating to U.S Tax Reform” Tax Executives Institute. https://www.tei.org/advocacy/submissions/tei-files-comments-proposed-gilti-high-tax-exception

TCJA. 2017. Tax Cut and Jobs Act (Public Law 115-97) “An act to provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018”

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