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Critical Analysis of Taxpayer's October 2014 Expert Reports: Medtronic, Inc. and Consolidated Subsidiaries v. Commissioner of Internal Revenue

by

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Medtronic Transfer Pricing Critical Analysis

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Medtronic Transfer Pricing Critical Analysis

I. Executive Summary

A. Introduction and Assignment

In October 2014, the IRS provided me with eight expert reports from Medtronic, Inc. ("MUS" or "MEDTRONIC")[1] analyzing certain of its transfer prices. Among other conclusions, the taxpayer expert reports opine that the MEDTRONIC transfer prices were consistent with arm's length expectations. The IRS hired Precision Economics, LLC to critically analyze the pricing/profit-related conclusions in these taxpayer expert reports.[2]

MEDTRONIC is a multinational medical device company headquartered in the United States, with operations around the world. It has enjoyed significant success as a market leader:

- For the products/supply chain at issue, MEDTRONIC earned operating profits of $2.8 billion on $6.0 billion of revenue. See **Table C5**.
- MEDTRONIC was more profitable than all other large medical device companies. Its profitability over the supply chain at issue was well above MEDTRONIC's overall profitability. See **Table 13A**.
- MEDTRONIC maintained market share leadership in the markets at issue. Along with its two primary competitors, it consistently prevented all other companies from successfully entering these markets with significant market shares. See **Tables 14A-14B**.

During the fiscal years 2005-2006 (ended in April), MUS entered into three types of intercompany agreements—intangible licenses, component sales (supply agreement), and finished product purchases (distribution agreement)—with a related party in Puerto Rico, Medtronic Puerto Rico Operations Co. ("MPROC"). See **Table 1A**. The transfer prices from these transactions determine how the $2.8 billion of operating profits for this supply chain are divided between MUS and MPROC.

In competitive markets, profits and profit margins are driven largely by two factors: (a) competitive advantages/barriers to entry; and (b) the results of risky investments.[3] An example

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[1] In this report, MUS refers to the United States parent and/or other Medtronic, Inc. related entities in the United States (besides Puerto Rico), unless otherwise specified. MEDTRONIC refers to the company when no particular country/entity designation (*e.g.*, United States parent, manufacturing subsidiary, selling subsidiary, etc.) or when multiple country/entity designations are intended—including the consolidated company.

[2] The reports cover a variety of topics, but my analysis is restricted to specific pricing/profitability opinions or other opinions that potentially impact such prices/profits.

of a competitive advantage is the barrier to entry created by the protection of intellectual property—created from R&D—through patents. If a product is protected by a patent, the owner of that patent may be able to prevent competitors from manufacturing and selling that same product, which may allow for a monopoly/oligopoly,[4] or similar market power leading to higher profit margins.[5]

Throughout this report, I will use the terms "value," "valuable," or "relative value" to describe MUS and MPROC with regard to *both* their competitive advantages and any successful incurring of risk. I consider these relative values in conjunction with the resulting profit splits.

In addition to considering the relative values of different activities by entity, it is also helpful to quantify the *relative sizes* of the respective entities. For example (all else equal), an entity incurring 89 percent of the combined costs would expect to report noticeably higher profits than an entity incurring 11 percent of the costs. With this context in mind, the functions/risks of MUS and MPROC are described and quantified in **Table 1A**, below.

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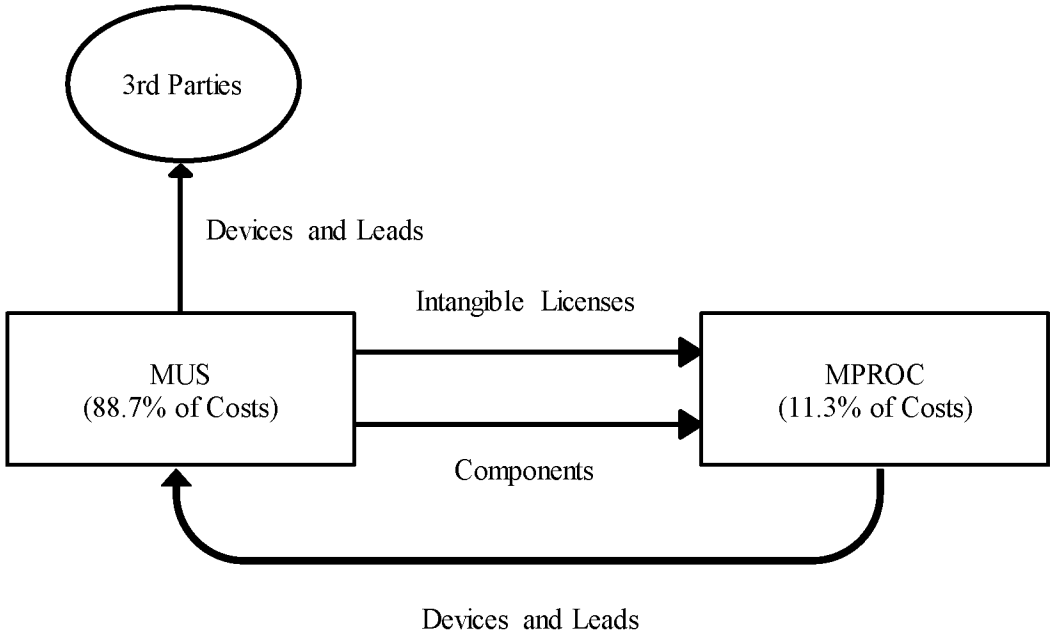
[3] Carlton, Dennis W. and Jeffrey M. Perloff. (1994). Modern Industrial Organization. 2nd Edition. HarperCollins: New York, pp. 109-110, 338-339.

[4] Oligopolies are like monopolies except when a small number (greater than one) of firms control a market in a way to earn above normal profit. See, Varian, Hal R. (1987). Intermediate Microeconomics: A Modern Approach. 1st Edition. W. W. Norton & Company: New York, p. 446; and Mankiw, N. Gregory. (2007). Principles of Economics. 4th Edition. South-Western Cengage: Mason, Ohio, pp. 346-347.

[5] See, Carlton, Dennis W. and Jeffrey M. Perloff. (1994). Modern Industrial Organization. 2nd Edition. HarperCollins: New York, pp. 110-111, 704, 707-708.

Table 1A: Intercompany Transactions at Issue



MUS performs most of the tasks and incurs most of the costs associated with the supply chain/system at issue. In total, MUS represents *88.7 percent* of the combined costs for this supply chain, with MPROC incurring the other *11.3 percent*. See **Table 2B**, below.

Table 2B: Split of Total "System" Costs Between MUS and MPROC: 2005-2006

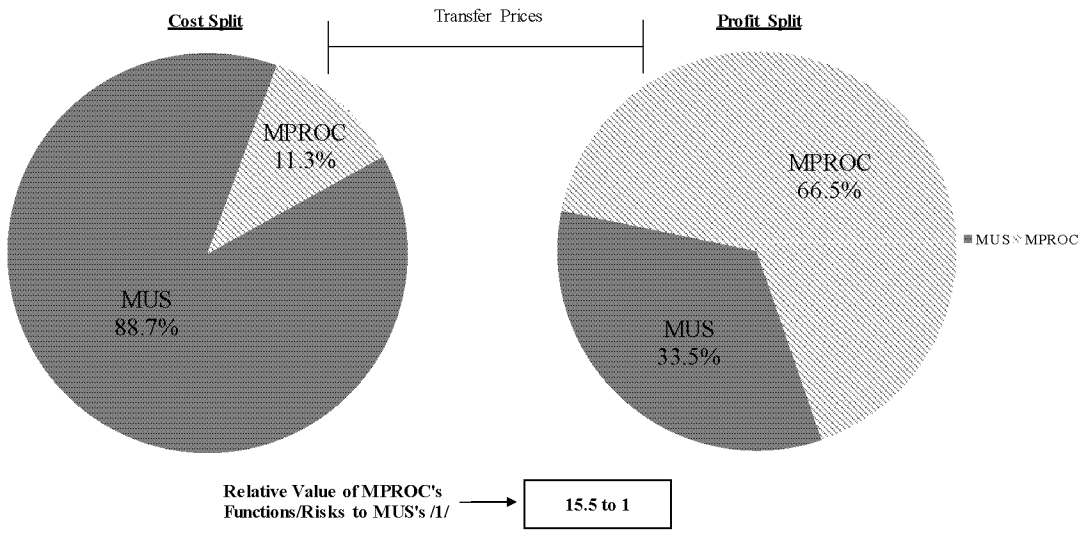
Fiscal Year Ended April (In USD Millions Except Percentages)	2005-2006 Total Costs	Cost Split
Distribution and Overhead Costs /1/	[redacted]	50.7%
R&D/Business Costs	822.9	25.7%
Component Manufacturing Costs	[redacted]	12.3%
MUS Costs /1/	**2,836.1**	**88.7%**
MPROC Finished Manufacturing Costs /2/	**362.3**	**11.3%**
Total System Costs	3,198.4	100.0%

Notes:
/1/: Includes other product, overhead, and intercompany expense costs.
/2/: Data are proportionate to MPROC percent of sales to MUS.

While the *bulk of expenses* for the supply chain was incurred by MUS, MEDTRONIC's transfer prices place *most of the profit* with MPROC. Approximately two-thirds (66.5 percent) of the profit has been booked by MPROC with the remaining one-third (33.5 percent) booked by MUS. See **Table 2A**. Thus, these transfer prices would provide MPROC with profit equivalent to 15.5 times its cost share, relative to MUS.[6] See **Table 2C**, below.

[6] That is, MPROC's ratio of profit split to cost split (66.5/11.3 = 5.9) is equal to 15.5 times the analogous ratio for MUS (33.5/88.7 = 0.4). That is, 5.9/0.4 = 15.5.

Table 2C: Impact of Transfer Prices on MUS and MPROC



Note:
/1/: That is, MPROC's ratio of profit split to cost split (66.5/11.3 = 5.9) is equal to 15.5 times the analogous ratio for MUS (33.5/88.7 = 0.4). That is, 5.9/0.4 = 15.5.

The taxpayer expert reports opine that these transfer prices are within the arm's length range of their benchmarks. The ranges from the taxpayer expert reports include results that would locate even more profit in MPROC. For example, the median of the taxpayer expert reports' ranges would price the intercompany transactions such that: (a) MUS would incur a *loss* of more $470 million; and (b) MPROC would enjoy *more than 100 percent* ($3.2 billion) of the total system profit. See **Tables 2D & C7**.

My analysis and conclusion are presented in more detail in Section I.D below as well as in Chapter III. My opinions are based upon the information I have reviewed through the date on the cover of this report. Subsequent information could potentially change my opinion.

B. Materials Reviewed

To perform these analyses, I reviewed a number of documents supplied by MEDTRONIC to the IRS as well as a number of publicly available documents. Some of the documents reviewed are listed below:[7]

- The intercompany supply, distribution, and license agreements covering the 2005-2006 fiscal years between MUS and MPROC;[8]

[7] Appendix B contains a complete listing of the documents I relied upon in these analyses.

- Kennelly, Mike. (October 22, 2014). "Medtronic, Inc. v. Commissioner-TC Dkt. No. 6944-11: Expert Report of Mike Kennelly" ("KENNELLY REPORT");
- White, Alan G. (October 22, 2014). "Expert Report of Alan G. White, Ph.D." ("WHITE REPORT");
- Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP" ("BERNEMAN REPORT");
- Dowden, Paul D. (October 15, 2014). "Medtronic, Inc. v. Commissioner-Tax Court Dkt. No. 6944-11: Expert Report of Paul D. Dowden" ("DOWDEN REPORT");
- Hughes, Edward F.X. (October 21, 2014). "Expert Report of Edward F.X. Hughes, MD, M.P.H. Re: Medtronic, Inc. v. Commissioner" ("HUGHES REPORT");
- Schultz, Daniel. (October 22, 2014). "Expert Report of Daniel Schultz, MD" ("SCHULTZ REPORT");
- Chappell, Michael A. (October 22, 2014). "Expert Report of Michael Chappell" ("CHAPPELL REPORT");
- Lee, Timothy J. (October 21, 2014). "Medtronic, Inc. v. Commissioner-Tax Court Dkt. No. 6944-11: Statement of Timothy J. Lee" ("LEE REPORT");
- Medtronic, Inc. Form 10-Ks; and
- Analyst Reports of Medtronic, Inc. from 2004-2006.

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[8] Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2004). Amendment No. 3 to Trademark and Trade Name License Agreement. (MDT_TC00015728); Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2004). Amendment No. 3 to (Leads) License Agreement. (MDT_TC00004362); Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2004). Amendment No. 3 to (Device) License Agreement. (MDT_TC00004184); Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2005). Amended and Restated Trademark and Trade Name License Agreement. (MDT_TC00015730); Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2005). Amended and Restated License Agreement. (MDT_TC00004186); Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2005). Amended and Restated License Agreement. (MDT_TC00004364); Agreement Between Medtronic Puerto Rico Operations Co. and Medtronic USA, Inc. (September 30, 2001). Distribution Agreement. (MDT_TC00013799); and Agreement Between Medtronic Inc. and Medtronic Puerto Rico Operations Co. (September 30, 2001). Supply Agreement. (MDT_TC00014192).

C. Qualifications

My name is Brian C. Becker. I am the founder and President of Precision Economics. A copy of my current curriculum vitae, which includes a complete listing of my publications, teaching experience, and expert testimony, is attached to this report as Appendix A.

I have been employed as a consulting economist for more than 22 years. Prior to founding Precision Economics in 2001, I gained experience with several consulting firms. My primary areas of focus in these positions were in transfer pricing, business valuation, international trade, intellectual property, and financial damages. With a focus on litigation/dispute in transfer pricing, the bulk of my experience has been in industries with large amounts of intangible property, including software, pharmaceuticals, biotechnology, and medical devices. This represents my third assignment involving pacemakers, for example.

In the transfer pricing/valuation area, I have testified as an expert witness in three countries, published more than a dozen articles, and spoken to a number of industry/government groups. In total, this experience includes more than 500 transfer pricing reports for taxpayers, law firms, and tax authorities. Among assignments that are a matter of public record, I submitted a transfer pricing expert report in the U.S. Internal Revenue Service's (settled) litigation with GlaxoSmithKline. In 2010, I testified as an expert witness in a U.S. Tax Court transfer pricing matter involving intercompany services with Weekend Warrior Trailers, Inc. In 2009-2014, I testified as a transfer pricing economic expert in Australia's first three major transfer pricing trials (Roche, SNF, and Chevron). In 2009-2011, I testified as a transfer pricing economic expert for the Department of Justice Canada and the Canada Revenue Agency in their disputes with General Electric and McKesson involving financial guarantees and factoring receivables, respectively.

My academic background includes teaching positions at four universities and a variety of published research. In particular, I taught Corporate Finance, Derivative Securities, Statistics, and Operations Management. I have published more than two dozen articles and book chapters, including in the *Tax Management Transfer Pricing Report, Corporate Business Taxation Monthly, Business Valuation Review*, *and Business Valuation Digest*.

I received my B.A. in Applied Mathematics and Economics from the Johns Hopkins University. I received my M.A. and Ph.D. in Applied Economics from the Wharton School of the University of Pennsylvania.

D. Summary of Findings

The taxpayer expert reports—and the justifications of MEDTRONIC's transfer prices therein—opine for a range of prices that are *not* consistent with arm's length expectations:

- MEDTRONIC's split of profit between MPROC and MUS implies that MPROC's licensee/final manufacturing functions are 15.5 times (or more) the value of MUS's functions/risks per dollar of cost. See **Table 2C**.

- Applying the middle (medians)[9] of the WHITE and BERNEMAN REPORTS' ranges would lead to MUS incurring a *loss* of $473.4 million, with MPROC booking a *profit* of $3.2 billion under arm's length circumstances. See **Tables 2D & C7**.

I disagree with the WHITE REPORT and the BERNEMAN REPORT,[10] whose results lead to the above conclusions. First, MPROC's functions/risks are *not* 15.5 times (or more) as valuable as those of MUS. Rather, if anything, MUS's functions/risks are relatively *more* valuable than those of MPROC. Prices based on this understanding would place at least $1.5 billion more profit in the United States than proposed by the taxpayer.[11] That is, R&D/technology/patents[12] is the primary driver of value in the medical device industry. This is seen in MEDTRONIC analyst reports, acquisition valuations, product manuals, customer purchase agreements, etc. that all consistently focus on R&D/technology/patents/specs with only rare mentions of manufacturing in any capacity.

Second, the only support for MEDTRONIC's intercompany royalty rates is from the BERNEMAN REPORT, which uses industry averages from graphs/surveys supplemented by several non-comparable agreements as its benchmarks. With the licenses at issue for MEDTRONIC covering a noticeably higher profit margin than typical in this industry, such an

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[9] Transfer pricing economists typically apply medians as opposed to averages. This tends to reduce the influence of outliers. See, Hamburg, Morris and Peg Young. (1994). Statistical Analysis for Decision Making. 6th Edition. Dryden Press: Fort Worth, TX, p. 28.

[10] As described in Chapter II, the KENNELLY REPORT does not offer a pricing/profit opinion. The other five reports describe certain functions or risks that would potentially impact pricing at arm's length. The WHITE REPORT and BERNEMAN REPORT do not cross reference these other reports, however.

[11] If MUS received *proportionate* (to costs) profits, it would have booked approximately $1.5 billion more profit than it did ($2.8 billion * (88.7% - 33.5%) = $1.5 billion), based on profit figures provided in the KENNELLY REPORT.

[12] Such assets were derived (at least in part) from *historic* MUS expenses that are *not* captured in its 88.7 percent split of total costs (*e.g.*, MUS's historical R&D expenses). If the historical expenses were to be captured, this percentage would *increase* above 88.7 percent.

industry graph approach leads to below arm's length royalties. For example, the BERNEMAN REPORT incorrectly opines that a 5 percent (median) royalty rate would be accepted as compensation for the exclusive rights to a market leading, [redacted] operating profit margin business like the MEDTRONIC products at issue. See **Table 13B**.

This report does not quantify and opine for an arm's length set of transfer prices. Rather, it finds that the benchmarks and analyses provided in the taxpayer expert reports do not support the actual pricing seen in **Table 2C** or the more extreme prices seen in **Table 2D** (based on the taxpayer expert reports' medians).

E. Organization of Report

I organize this report into three chapters, supporting tables, and various appendices. This first chapter outlines the scope of the project and summarizes the conclusions. Chapter II summarizes the KENNELLY REPORT's financial statements for MUS and MPROC, and the conclusions drawn in the taxpayer's seven other expert reports. The final chapter critically analyzes the taxpayer expert reports. Tables and appendices follow the text.

II. Summary of Taxpayer Expert Reports

The IRS provided me with eight expert reports of the taxpayer that can be grouped into three categories. First, the KENNELLY REPORT presents financial schedules for MPROC and MUS for the supply chain at issue. Second, the WHITE and BERNEMAN REPORTS opine on the pricing in each of the three intercompany transactions. Finally, the remaining five reports opine on various aspects of the potential importance of MPROC's role in the supply chain.

A. KENNELLY REPORT[13]

The KENNELLY REPORT presents financial schedules for MUS and MPROC over the supply chain at issue. The schedules that are of particular interest show:

- MEDTRONIC in total booked $6.0 billion of revenue and $2.8 billion of operating profit. See **Table C5**.
- The businesses generated operating profit margins of approximately [redacted] in line with projections. See **Tables C5 & E1**.[14]
- MUS incurred 88.7 percent of the system costs, and MPROC incurred 11.3 percent. See **Table 2B**.
- The transfer prices provided MPROC with 66.5 percent of the profits[15] with the remaining 33.5 percent to MUS. That is, MPROC was assigned profits that imply MPROC's functions/risks were 15.5 times as valuable per dollar of cost. See **Table 2C**.

B. Pricing Opinion Reports

The WHITE and BERNEMAN REPORTS opine that the three sets of transfer prices incorporated in the KENNELLY REPORT described above are priced consistently with arm's length expectations. In fact, they both opined that MUS earned *more* than would be expected based on (the median of) their analyses. If MUS and MPROC were to have priced at the median of the ranges established by the comparables in the WHITE and BERNEMAN REPORTS: (a)

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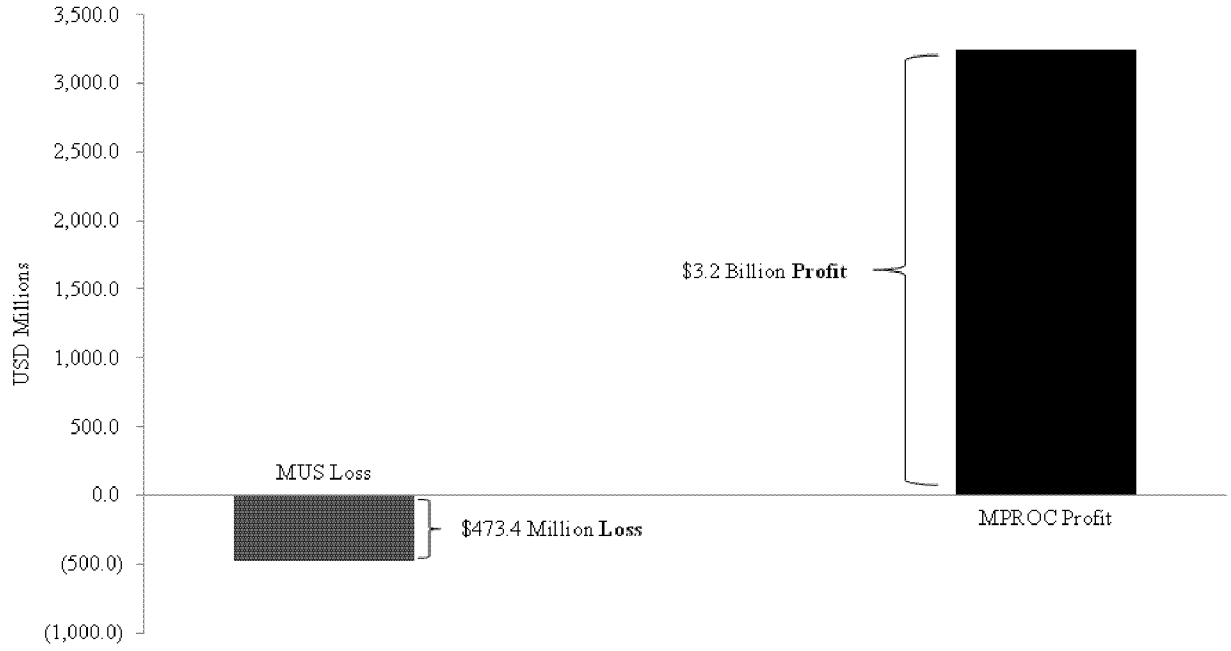
[13] I apply figures from the KENNELLY REPORT throughout this report. I am not offering an opinion as to the correctness of the figures in the KENNELLY REPORT.

[14] These figures are before the imposition of R&D/business costs, as MPROC would not be incurring such costs.

[15] That is, operating profit after the payment of all operating costs (including R&D).

MUS would have suffered nearly half a billion dollar loss; and (b) MPROC would have enjoyed more than 100 percent of the profits at issue. See **Table 2D,** below:

Table 2D: Implied Profit Split Using Median Benchmarks from WHITE and BERNEMAN REPORTS



1. WHITE REPORT

The WHITE REPORT opines that MUS has earned (at least) arm's length profits when: (a) selling manufactured components to MPROC; and (b) reselling MPROC finished products to third parties. See **Table D1**. The WHITE REPORT draws its opinions by reference to independent companies' profits:

- Component manufacturers earn markups of *6 to 10* percent on their costs.
- Distributors earn approximately *3* percent operating margins.[16]

2. BERNEMAN REPORT

The BERNEMAN REPORT is the only taxpayer expert report to opine on royalties. First, it opines that MUS received (at least) arm's length royalties from MPROC for technology/patents/specs. The BERNEMAN REPORT determines the range of arm's length

[16] White, Alan G. (October 22, 2014). "Expert Report of Alan G. White, Ph.D.," Exhibits 5-6, 9.

technology royalty levels as 0.5 to 20 percent—with a median of 5 percent—based on a graph of industry royalty rates described as covering artificial blood, birth control devices, wound treatments, and other products.[17, 18] See **Table 5A**.

The BERNEMAN REPORT supplements the graph with a total of five agreements that have a royalty rate.[19] The first two of these five agreements are *non-exclusive, cross-license, (litigation) settlements*. See **Table 5C**.

The third agreement cited by the BERNEMAN REPORT is not an arm's length agreement, but rather between related parties. It was signed in 1985, involving Genetic Laboratories, Inc.

The fourth agreement—CardioVascular Dynamics—focused on minimum annual sales of $25 *million*. These agreements are described in **Table 5D**.

The last of the five royalty agreements cited—between Theseus Logic, Inc. and MEDTRONIC—was not for a product existing on the market, but rather for a technology that could (potentially) be used in medical applications.[20]

The other industry surveys/graphs presented by the BERNEMAN REPORT as support consist of:

- A citation to another survey of industry averages from a book on early-stage technologies;[21]

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[17] The BERNEMAN REPORT also looks at actual agreements, but its opined arm's length range is equivalent to the range on the graph. Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," pp. 12, 18, 23, 25, Exhibits 1A-1B. See also **Tables 5C-5D**.

[18] The graph does not mention that it includes any agreements for Devices, Leads, or other implantable cardiovascular devices. Parr, Russell L. and Gordon Smith. (2013). Intellectual Property: Valuation, Exploitation and Infringement Damages: 2013 Cumulative Supplement. Wiley: Hoboken, NJ, p. 111.

[19] The BERNEMAN REPORT also summarizes two agreements that do not list a royalty rate. The BERNEMAN REPORT does not opine on a methodology to convert such agreements into a royalty rate. As such, I do not discuss them further. Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," Exhibit 2-A, Appendix C.

[20] Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," p. C-3. See also, Agreement Between Theseus Logic, Inc. and Medtronic, Inc. (August 24, 2001). Design and Production License Agreement. (MDT_LB00009494).

[21] Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," p. 22.

- An industry average from a database of agreements for the pharmaceuticals and biotechnology industries;[22] and
- A citation to a book that cites another survey of non-pharmaceutical technology transfers in a different publication.[23]

The BERNEMAN REPORT is also the only taxpayer expert report to opine on trademark and trade name royalty rates. The agreements identified by the BERNEMAN REPORT as comparable had a median rate of 0.0 percent.[24] It supported these results with a study that was "relying on benchmarks from health science journals, royalty rate studies, and discussions with licensing professionals."[25]

C. Reports Opining on MPROC's Functions[26]

The remaining taxpayer expert reports do *not* opine on arm's length pricing or profits. Rather, they discuss, at a broad level, the importance of marketing, quality manufacturing, FDA regulatory compliance, and product liability in the medical device industry—and MPROC's role therein for these portions of the supply chain. It is not clear what, if any, role these reports had on the pricing opinions in the WHITE REPORT and the BERNEMAN REPORT. However, as analysis of functions and risks are part of a transfer pricing economic analysis, I review these reports' statements or opinions on functions and risks.

1. Manufacturing Quality

The taxpayer expert reports describe quality as an important issue in this industry, and broadly focus on the quality concept in general. The reports do not opine that MPROC's *manufacturing* quality is above (or below) the level of Guidant, St. Jude or any other medical

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[22] Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," p. 22. In point of fact, this study is also in the same Parr and Smith book referenced earlier. Parr, Russell L. and Gordon Smith. (2013). Intellectual Property: Valuation, Exploitation and Infringement Damages: 2013 Cumulative Supplement. Wiley: Hoboken, NJ, pp. 125-127.

[23] Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," pp. 22-23.

[24] The full range for the trademark agreements was 0.0 to 5.0 percent. See Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," Exhibit 2-B.

[25] Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," p. 23.

[26] My descriptions and critical analysis of the HUGHES REPORT, LEE REPORT, SCHULTZ REPORT, CHAPPELL REPORT, and DOWDEN REPORT are limited to only the areas I comment upon. That is, the areas of their report that could potentially support (or weaken) the opinions in the BERNEMAN REPORT and in the WHITE REPORT.

device manufacturer. Rather, in some cases, they (and their cites) describe the distinction between: (a) *products that are of a high quality* due to better features, functionality, materials, specs, etc.; and (b) a *high quality manufacturing plant*.[27] That is, the developer of the product/technology/specs (MUS) controls how much of an *increase in quality* a *product* can have by creating new features, specifying high quality materials, and generally maximizing the effectiveness and safety of the product through improved product design.[28] The manufacturer of a product (MUS for components and MPROC for finished products), by contrast, focuses on *not* releasing products with *manufacturing defects*. That is, the manufacturer ensures that the finished product meets the quality standards (often known as being within the "tolerance ranges" or "acceptance criteria") in the specs provided by the designer.[29] See **Table 7**, below, for example.[30]

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[27] See, for example, Hughes, Edward F.X. (October 21, 2014). "Expert Report of Edward F.X. Hughes, MD, M.P.H. Re: Medtronic, Inc. v. Commissioner," pp. 26-36.

[28] U.S. Food and Drug Administration. (March 11, 1997). Design Control Guidance for Medical Device Manufacturers, pp. 7-8.

[29] U.S. Food and Drug Administration. (March 11, 1997). Design Control Guidance for Medical Device Manufacturers, p. 37.

[30] Product specs are quite voluminous and consist of many pages. This table only shows a snapshot of some characteristics that would be addressed.

Table 7: Sample Summary of "Specs" and Tolerance Ranges for an MPROC Manufactured Lead

TEST	METHOD	SPECIFICATION
Description / Visual	LL-0292	Cardiac lead with a white to off-white residue on the electrode tip.
Identity / HPLC	LL-0276	The retention time of the beclomethasone (BDP) peak in the assay sample preparation is within ± 10% of the mean retention time of the BDP peak in the system suitability injections.
Assay / HPLC	LL-0276	85.0 to 115.0% Label Claim
Content Uniformity / HPLC	LL-0276	TIER 1: 9 of 10 dosage units must lie within the range of 80 to 120% of label claim No unit shall fall outside the range of 75 to 125% of label claim The RSD of the 10 dosage units shall be less than or equal to 10% TIER 2: If 2 or 3 dosage units are outside the range of 80 to 120% of label claim, but not outside the range of 75 to 125% of label claim, Or If the relative standard deviation (RSD) is greater than 10%, Or If both conditions prevail, then test 20 additional units to the following requirements: Not more than 3 units of the 30 shall fall outside the range of 80 to 120% of label claim. No unit shall fall outside the range of 75 to 125% of label claim. The RSD of the 30 dosage units shall be less than or equal to 13%.

2. Product Liability

Product liability is addressed in some of the taxpayer expert reports. The reports distinguish between the relatively modest direct liability costs in litigation and the potentially larger secondary reputational effects due to problems with products. For example, MEDTRONIC had not recorded an annual product liability charge (2000-2006) of more than $25 *million*,[31] but the LEE REPORT opines that billions of dollars of market share profits can

[31] In point of fact, MEDTRONIC's 10-Ks indicate that the company's largest product liability charge during the fiscal 2000-2006 time period was $23.6 million in 2002. See, Medtronic, Inc. (July 21, 2000). Form 10-K for the Fiscal Year Ended April 30, 2000, pp. 7, 13, 37; Medtronic, Inc. (July 26, 2001). Form 10-K for the Fiscal Year Ended April 27, 2001, pp. 9, 15, 32; Medtronic, Inc. (July 19, 2002). Form 10-K for the Fiscal Year Ended April 26, 2002, p. 49; Medtronic, Inc. (July 14, 2003). Form 10-K for the Fiscal Year Ended April 25, 2003, p. 48; Medtronic, Inc. (June 30, 2004). Form 10-K for the Fiscal Year Ended April 30, 2004, p. 40; Medtronic, Inc. (June 29, 2005). Form 10-K for the Fiscal Year Ended April 29, 2005, p. 40; and Medtronic, Inc. (June 28, 2006). Form 10-K for the Fiscal Year Ended April 28, 2006, pp. 29, 40.

potentially be lost due to reputational effects.[32] The DOWDEN REPORT notes that the most recent insurance quote received by MEDTRONIC for its worldwide operations was for $5 million to cover the year 2003.

3. Marketing and Sales (Distribution)

The taxpayer expert reports opine that marketing and sales is important within this industry/supply chain. While MUS performs the marketing and sales function,[33] the reports note that: (a) physician relationships influence sales; and (b) sales involve new versions of products (*e.g.*, adding features, etc.) fairly often—requiring renewed marketing efforts.[34]

4. FDA Regulatory Compliance

The taxpayer expert reports describe the large role played by the FDA in approving products for sale in the medical device industry, and the costs/efforts required in this regard. The reports provide anecdotes of MPROC's role before and after production begins.[35] These anecdotes—and the reports in general—do not quantify efforts in terms of costs, headcount,[36] senior level staff involved, *relative* roles of MUS and MPROC, or MPROC's roles/effectiveness compared to other manufacturers.

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[32] Lee, Timothy J. (October 21, 2014). "Medtronic, Inc. v. Commissioner-Tax Court Dkt. No. 6944-11: Statement of Timothy J. Lee," pp. 15-16.

[33] MPROC does not have a marketing or sales team for sales into the United States. Agreement Between Medtronic Puerto Rico Operations Co. and Medtronic USA, Inc. (September 30, 2001). Distribution Agreement, p. 1 (MDT_TC00013799).

[34] Hughes, Edward F.X. (October 21, 2014). "Expert Report of Edward F.X. Hughes, MD, M.P.H. Re: Medtronic, Inc. v. Commissioner," pp. 20-22.

[35] These anecdotes include "…updating and maintaining Quality System Manuals," "…registering each establishment and listing all medical devices," etc. Chappell, Michael A. (October 22, 2014). "Expert Report of Michael Chappell," pp. 42-48; and Schultz, Daniel. (October 22, 2014). "Expert Report of Daniel Schultz, MD," pp. 31-37.

[36] MUS noted that all 50 of MEDTRONIC's worldwide regulatory affairs specialists and management staff are employed by MUS (none by MPROC). Interview of Tim Samsel, Vice President of Quality and Regulatory, CRDM, Medtronic, Inc. (June 25, 2010). pp. 6-7 (MDT_TC00003716-MDT_TC00003717).

III. Critical Analysis of Taxpayer Expert Reports

The MEDTRONIC transfer prices—under which MPROC received 15.5 times the relative profits of MUS—would only transpire at arm's length if MPROC's functions/risks were *15.5 times as valuable* as MUS's functions/risks. See **Tables 2C-2D**. This is not the case, and the taxpayer expert reports fail to address the following issues that are critical for determining the relative values—and resulting profit splits—of MUS's and MPROC's functions/risks:

- the opinions of financial analysts, MEDTRONIC's public statements, and MEDTRONIC's allocation of acquisition prices all consistently show R&D/technology/patents/specs as the drivers of value in this industry, and that manufacturing is not. See, for example, **Table 3**;

- MEDTRONIC, Guidant, and St. Jude have consistently kept other companies from successfully entering the industry (see **Tables 14A-14B**). The taxpayer expert reports do not address the extent to which this is due to their patents and product technology;

- MEDTRONIC's promotional product and training materials do not mention MPROC manufacturing at all (see **Tables 1B-1C**);

- the fact that senior personnel of MEDTRONIC are disproportionately employed by *MUS*—with limited senior roles at MPROC (see **Table 6**);

- the fact that MEDTRONIC's industry is characterized by (among) the *highest* level of R&D and (amongst) the *lowest* level of manufacturing costs across all industries suggesting a relatively *high* level of focus on R&D and a relatively *low* level of focus on manufacturing (see **Tables 12A-12B**); and

- MPROC was *not* allowed to manufacture products in a manner that would be different from the specs (*e.g.*, outside the tolerance ranges) provided by MUS.

While the reports have not opined on these issues or the overall profit split, they have offered opinions on the following:

- MPROC performs necessary and important functions that constitute 11.3 percent of MEDTRONIC's total costs in this system/supply chain.

- At arm's length, a licensor (like MUS) would be willing to license away a crown jewel of its business—earning [redacted] percent operating profit margins—at a (median) rate of 5 percent.[37]

- The taxpayer's transfer prices are within the range of arm's length expectations. At the median pricing of the taxpayer expert reports, MUS would *lose* more than $470 million with MPROC enjoying *more than 100 percent* ($3.2 billion) of the total profit.[38] See **Table 2D**.

- At arm's length, a licensee (like MPROC) transacting with a component manufacturer and a finished product marketer/distributor (like MUS) would see prices that resulted in the latter earning profits consistent with independent companies.

A. Topics Not Addressed By The Taxpayer Expert Reports

The taxpayer expert reports have failed to support the transfer pricing that leaves MPROC with most (or *more than* all) of the profits while only incurring a small minority of the costs. The difference between the cost and profit splits is so significant—15.5 times or more profit per dollar of cost to MPROC—that a standard transfer pricing analysis would need to show that MPROC's operations represent the value drivers, *and* that MUS's operations are trivial. The taxpayer expert reports have not shown either.

1. R&D as the Value Driver

The taxpayer expert reports and other documents not only fail to make the point of MPROC's functional/risk superiority, they actually show the *opposite*. That is, by all accounts, the *biggest value driver in this industry is (MUS's) R&D/technology/product specs*:

- Analyst reports and MEDTRONIC reports/filings consistently mention the importance of R&D, technology, and new product development to sales growth and profitability. Fully, *all 42* analyst reports reviewed covering the period at issue *focused* on R&D/technology—typically for the supply chain at issue—with minimal mention of manufacturing. See **Table 3**, below. For example:

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[37] The full range of results extends from 0.5 to 25.0 percent. This also includes a trademark royalty payment.

[38] These figures record operating profits after incurring all costs (including R&D).

"*New products are the engine of growth* in the medical device industry…" (Emphasis added).[39]

"We anticipate the growth to be fueled by new product innovations…"[40]

"In order to continue to compete effectively, we must continue to create or acquire advanced technology [and] incorporate this technology into proprietary products."[41]

"Going forward, growth in [the Core Neurological] segment will largely be driven by expanding the overall market opportunity through new devices and new indications."[42]

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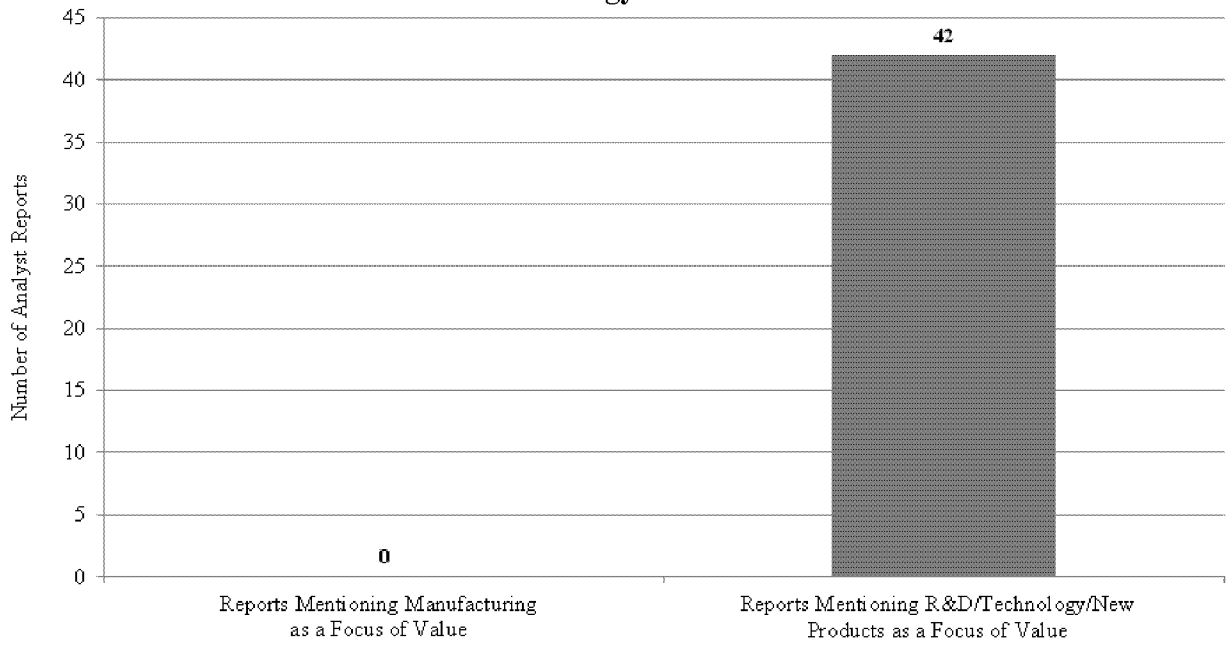
[39] Standard & Poor's. (March 13, 2003). "Industry Surveys: Healthcare: Products & Supplies," p. 17.

[40] Lee, Timothy. (September 29, 2006). "Medtronic, Inc.: Medtronic Showing Some Backbone." Kaufman Bros. Equity Research, p. 1 (MDT_TL00001384).

[41] Medtronic, Inc. (June 29, 2005). Form 10-K for the Fiscal Year Ended April 29, 2005, p. 20.

[42] Reicin, Glenn, Matt Miksic, Anthony Yik, and David Roman. (October 12, 2005). "Medtronic, Inc.: Trying to Make a Case That They are Different!" Morgan Stanley, p. 11 (MDT_TC00294675).

Table 3: Focus of 42 MEDTRONIC Analyst Reports on Manufacturing or R&D/Technology/New Products



Note:
/1/: Includes all reports (written in the 2005-2006 period at issue) provided by the taxpayer, and supplemented by my own search through Thomson Reuters for any additional reports authored by Timothy Lee during period at issue. See Appendix B.

- Industry analysts, by contrast, do *not* mention manufacturing as a primary driver of value. See **Table 3**. Rather, the few mentions of manufacturing relate to: (a) cost savings;[43, 44] (b) lowered margins due to the costs of setting up plants;[45] and (c) tax strategies for manufacturing.[46]

[43] In one year, such cost savings appear to have amounted to approximately $600 thousand. See, Medtronic, Inc. (August 2005). Medtronic Puerto Rico Operations Company, Slide 19 (MDT_TC00083822).

[44] See, for example, Reicin, Glenn and Matt Miksic. (August 20, 2004). "Medtronic, Inc.: F1Q05: Many Gives and Takes in the Quarter." Morgan Stanley, p. 10 (MDT_TC00294323); and Reicin, Glenn, Matt Miksic, Anthony Yik, and David Roman. (October 12, 2005). "Medtronic, Inc.: Trying to Make a Case That They are Different!" Morgan Stanley, p. 4 (MDT_TC00294668).

[45] See, for example, Reicin, Glenn, Matt Miksic, Anthony Yik, and David Roman. (November 17, 2005). "Medtronic, Inc.: F2Q06: Fine, but More Complicated Than it Had to Be." Morgan Stanley, p. 3 (MDT_TC00294698); and Martinelli, Katherine A. and Paul K. Choi. (November 17, 2005). "Medtronic, Inc.: Few Surprises in Q2; No Change to EPS." Merrill Lynch, p. 3 (MDT_TC00292344).

[46] See, for example, Reicin, Glenn, Matt Miksic, Anthony Yik, and David Roman. (October 12, 2005). "Medtronic, Inc.: Trying to Make a Case That They are Different!" Morgan Stanley, p. 4 (MDT_TC00294668); and Martinelli, Katherine A. and Paul K. Choi. (January 24, 2006). "Medtronic, Inc.: Insights Post Day With Management." Merrill Lynch, p. 3 (MDT_TC00140982).

- Echoing the analyst reports above, MEDTRONIC also classified most of the value from its acquisitions as being due to R&D/technology. From its five acquisitions in the years at issue, MEDTRONIC assigned approximately two-thirds of the $1.8 billion purchase price to these assets.[47] See **Table 4**, below.

Table 4: MEDTRONIC Acquisitions and Focus of Value: FY 2005-2006

Company Acquired	Acquisition Price (USD Millions)	Intangible Value Booked to: In Process R&D and Technology
Angiolink Corporation	$45.2	$62.5
Coalescent Surgical, Inc.	$65.1	$42.2
Image-Guided Neurologic, Inc.	$65.1	$22.2
Transneuronix, Inc.	$268.7	$223.1
Gary Michelson, M.D. and Karlin Technology /1/	$1,350.0	$802.6
Total	$1,794.1	**$1,152.6**

Note:
/1/: Acquisition of all of the spine-related intellectual property and related contracts, rights, and tangible materials owned by Gary Michelson, M.D. and Karlin Technology, Inc. Purchase price of $1,350.0 million includes $550.0 million assigned to the settlement of past damages between the two parties.

- MEDTRONIC does not state in its product descriptions where the product was manufactured. In fact, MEDTRONIC does not mention MPROC at all in such documents. See **Table 1B-1C**.

- Compared to other industries, the medical device industry devotes *more* resources towards *R&D* and *fewer* resources towards *manufacturing*. See **Tables 12A-12B**.

As such, *none* of the taxpayer expert reports described MPROC's manufacturing as the value driver or MUS's roles as trivial. Rather, the closest that the reports came to these conclusions were broad descriptions of MPROC's roles with some relation to MUS:

- Some of the reports imply/state that some of MPROC's standard activities, including "medical device listing," "establishment registration," "device labeling," "maintaining a manual," "maintain[ing] a general state of

[47] None of the remaining value was assigned to manufacturing intangibles.

compliance," etc. are important for MEDTRONIC. They do not compare such importance relative to the importance of MUS's functions.[48]

- While noting that MPROC performs a number of listed tasks as part of its 11.3 percent of the total costs, the expert reports clarify that such activities are *required* for *all manufacturers*. In point of fact, most of the emphasis in the CHAPPELL and SCHULTZ REPORTS is not specific to MPROC, but rather a general summary of regulatory requirements[49] by which *all manufacturers* must abide.[50] That is, they do not suggest that MPROC was engaging in any particularly unique functions that would be associated with the pricing as proposed.

These facts and conclusions are incongruous with the pricing where MPROC's functions/risks are implied to be worth 15.5 or more times the relative value of MUS's.

2. MPROC's *Relative* Value

The taxpayer expert reports made it clear that MPROC's roles were necessary.[51] Similarly, plant tours and other presentations made it clear that the MPROC employees were dedicated professionals.[52] This is certainly laudable, but it is *not a differentiating factor* that would allow *MPROC* to be a (profit-wise) outlier. See **Tables 2C, 2D, & 13B**. In my experience, *every* manufacturing facility boasts of its dedicated employees[53] and attention to detail. Similarly, in profit maximizing companies, all employees perform *necessary* functions.

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[48] Schultz, Daniel. (October 22, 2014). "Expert Report of Daniel Schultz, MD," pp. 24-25, 31; and Chappell, Michael A. (October 22, 2014). "Expert Report of Michael Chappell," pp. 26-27, 53-54, 60.

[49] MUS noted that all 50 of MEDTRONIC's worldwide regulatory affairs specialists and management staff are employed by MUS (none by MPROC). Interview of Tim Samsel, Vice President of Quality and Regulatory, CRDM, Medtronic, Inc. (June 25, 2010). pp. 6-7 (MDT_TC00003716-MDT_TC00003717).

[50] Chappell, Michael A. (October 22, 2014). "Expert Report of Michael Chappell," pp. 53-54, 60; and Schultz, Daniel. (October 22, 2014). "Expert Report of Daniel Schultz, MD," pp. 24-25, 34.

[51] How easily other MEDTRONIC entities could perform them was not addressed. However, as described below, MEDTRONIC did have a Devices plant in Switzerland, and it built a Leads plant in Singapore.

[52] For example, the HUGHES REPORT noted that the MPROC employees had a fifteen minute session where they could discuss process improvement after each shift. Hughes, Edward F.X. (October 21, 2014). "Expert Report of Edward F.X. Hughes, MD, M.P.H. Re: Medtronic, Inc. v. Commissioner," p. 33.

[53] For example, MEDTRONIC refers to all 33,000 of its employees as "dedicated." See, Medtronic, Inc. (June 29, 2005). Form 10-K for the Fiscal Year Ended April 29, 2005, p. 1.

Much of transfer pricing analysis requires economists to assess *relative* values of related entities in a supply chain. In this case, that means whether MPROC's necessary manufacturing function manned by dedicated employees is *much more* valuable than MUS's necessary R&D/technology/specs/manufacturing and distribution functions manned by dedicated employees—per dollar of cost?

The documents/data available consistently suggest that the answer to the question above is *No*. If manufacturing were much of a value driver, top manufacturing plants would gain strong reputations and companies would affirmatively advertise that their products were manufactured at these specific plants. However, it is my understanding that MEDTRONIC does not advertise MPROC's role in manufacturing in its product manuals, marketing materials to doctors/hospitals, or in its own training guides for field representatives. For example, on its 16 page INSYNC SENTRY™ marketing document, it does not mention MPROC at all—even in its list of MEDTRONIC entities worldwide.[54] Similarly, its 24 page field representative training manual for MAXIMO™ provides lists of questions and answers that would arise on a sale call, but none include manufacturing or MPROC.[55] That is, MEDTRONIC did not anticipate that a product's manufacturing site would be a likely question/discussion arising from a potential customer. See **Tables 1B-1C**, below.[56]

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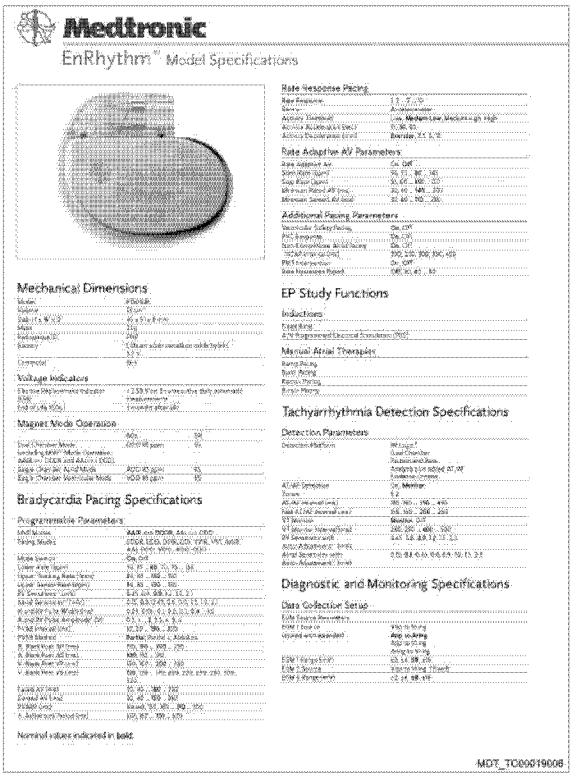
[54] This pattern held for all of the marketing materials for each product I reviewed. Medtronic, Inc. (2005). INSYNC SENTRY™ Heart Failure Management System. MDT_TC00011521-MDT_TC00011536.

[55] This pattern held for each of the product training manuals I reviewed. Medtronic, Inc. (Undated). MAXIMO™ Launch Conversations and ICD Selling Guide. MDT_TC00010961-MDT_TC00010984.

[56] For example, there is no mention of MPROC in purchase agreements for MEDTRONIC products. Similarly, detailed MEDTRONIC product manuals (and product specifications/parameters therein) list many MEDTRONIC entities, but do not include MPROC. See, for example, Purchase Agreement Between SSM Health Care of Oklahoma, Inc. Owning and Operating St. Anthony Hospital and Medtronic, Inc. (May 20, 2004). MDT_TC00170395; Medtronic, Inc. (2004). Information for Prescribers: Medtronic Pain Therapy—Using Neurostimulation for Chronic Pain. MDT_TC00271469; Medtronic, Inc. (2005). EnRhythm Model Specifications. MDT_TC00019006-MDT_TC00019009; and Medtronic, Inc. (2003). MAXIMO™ DR Dual Chamber ICD Product Specifications. MDT_TC00010945-MDT_TC00010952. See also **Tables 1B-1C**.

Table 1B: Example of MEDTRONIC Product Specifications/Parameters



Medtronic

EnRhythm™ Model Specifications

Mechanical Dimensions

Voltage Indicators

Magnet Mode Operation

Bradycardia Pacing Specifications

Programmable Parameters

Rate Response Pacing

Rate Adaptive AV Parameters

Additional Pacing Parameters

EP Study Functions

Manual Atrial Therapies

Tachyarrhythmia Detection Specifications

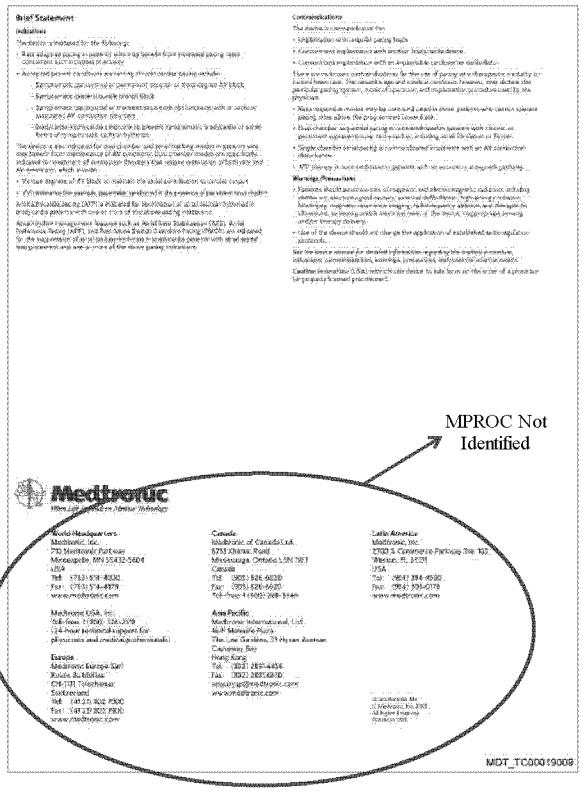
Detection Parameters

Diagnostic and Monitoring Specifications

Data Collection Setup

Nominal values indicated in bold.

MDT_TC00019008



Brief Statement

Indications

Contraindications

Warnings/Precautions

Medtronic

World Headquarters

Canada

Latin America

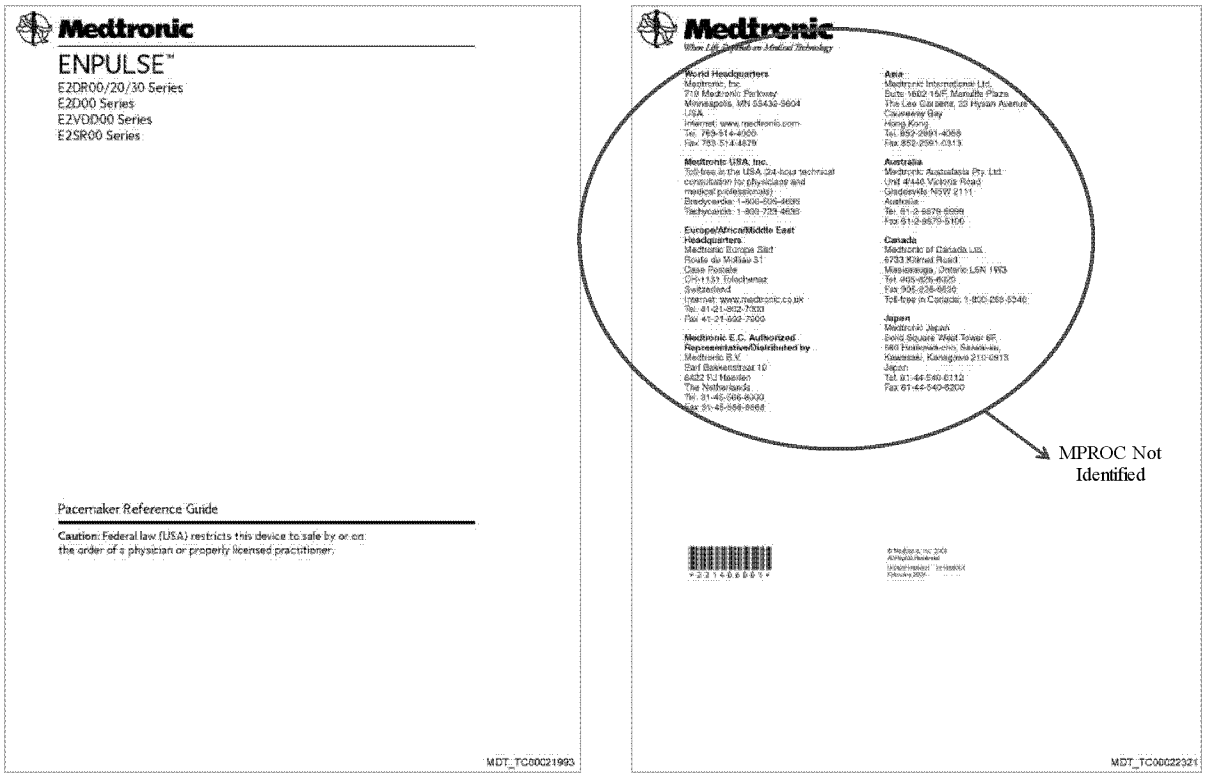
Europe

Asia Pacific

MPROC Not Identified

MDT_TC00019009

Table 1C: Example of MEDTRONIC Product Reference Guide



The many FDA requirements by which *all* manufacturers must abide make it particularly difficult for one manufacturing entity like MPROC to differentiate itself from others in a way to justify large shares of profit. See **Tables 2C-2D**. For example, the FDA requires all medical product companies to register their manufacturing facilities, list their devices with the FDA, and follow general controls requirements. The FDA process does not rate the various facilities in a way that customers could contrast the quality of one facility with another. That is, all operating facilities have been judged to have "passed" the standards.[57]

In a practical sense, *MPROC cannot improve MEDTRONIC's product by manufacturing it well*. It can only produce up to the quality of MUS's design, but it may also fall short of that level. Thus, manufacturing quality really refers to a manufacturer's ability to produce a product to the quality level determined/designed by its owner (*i.e.,* MUS).

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[57] Johnson, Judith A. (June 25, 2012). "FDA Regulation of Medical Devices." Congressional Research Service, Summary; Retrieved December 17, 2012 from http://www.fda.gov/medicaldevices/deviceregulationandguidance/postmarketrequirements/qualitysystemsregulations/default.htm; and Retrieved December 17, 2012 from http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?CFRPart=820&showFR=1.

If manufacturing were the value driver for the product lines at issue, one would expect high quality manufacturing companies (like Johnson & Johnson and Boston Scientific[58]) to have made successful entry into the market without the need for any of the top-end technology/patents/designs owned by MEDTRONIC, Guidant, and St. Jude. However, the entry barriers[59] (patents, etc.) formed by MEDTRONIC, Guidant, and St. Jude consistently kept other potential competitors out of the market.[60] See **Tables 14A-14B**. As a gauge to other companies' levels of interest in entering these markets, both Boston Scientific and Johnson & Johnson offered more than *$25 billion* to acquire Guidant during the years 2005-2006.[61]

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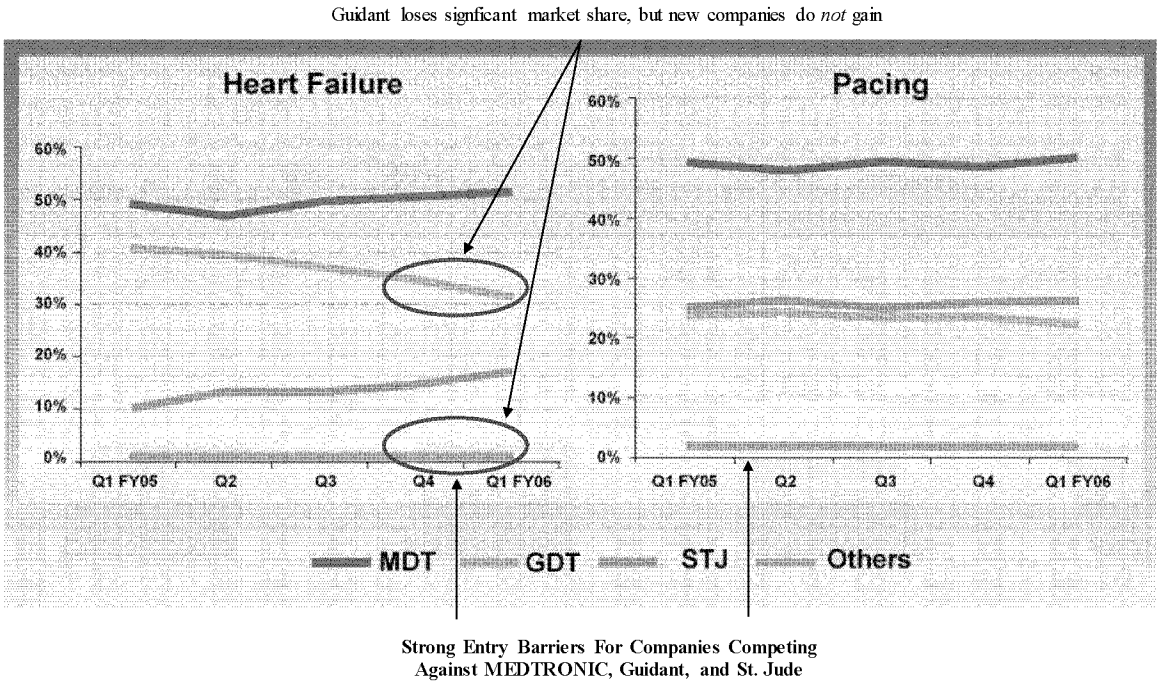
[58] See, Boston Scientific Corp. (March 1, 2006). Form 10-K for the Fiscal Year Ended December 31, 2005, p. 13. See also, retrieved November 11, 2014 from http://www.jnj.com/caring/citizenship/sustainability/strategic-framework/Management-and-quality.

[59] See, Lee, Timothy J. (October 21, 2014). "Medtronic, Inc. v. Commissioner-Tax Court Dkt. No. 6944-11: Statement of Timothy J. Lee," p. 23.

[60] See, Jeffrey, Kirk. (2001). Machines in Our Hearts: The Cardiac Pacemaker, the Implantable Defibrillator, and American Health Care. The Johns Hopkins University Press: Baltimore, Maryland, p. 285; and Retrieved November 10, 2014 from http://www.twst.com/interview/16041.

[61] Retrieved October 30, 2014 from http://news.bostonscientific.com/index.php?s=24913&item=22235; and Retrieved November 5, 2014 from http://dealbook.nytimes.com/2014/07/27/multibillion-dollar-dispute-over-guidant-seems-headed-for-trial/?_r=0.

Table 14B: Medtronic's Presentation of Heart Failure and Pacing Market Shares with Limited New Entrants: 2005-2006



In a more direct/quantitative sense, a true "superman-like" MPROC manufacturer as implied by MEDTRONIC's pricing/profit split (see **Tables 2C-2D**) would be able to easily show hundreds of millions (or billions) of dollars of lowered manufacturing costs compared to what MUS or other independent companies would incur. However, this information is absent from the taxpayer expert reports.[62]

3. Specs Set Product Quality

The taxpayer expert reports imprecisely cite "quality" as an important driver in this market.[63] The product quality, however, is determined by the R&D/technology/specs of the

[62] MPROC does state that its cost initiatives saved $600 *thousand*, but that is only 0.01 percent of the supply chain sales at issue. See, Medtronic, Inc. (August 2005). Medtronic Puerto Rico Operations Company, Slide 19 (MDT_TC00083822).

[63] Lee, Timothy J. (October 21, 2014). "Medtronic, Inc. v. Commissioner-Tax Court Dkt. No. 6944-11: Statement of Timothy J. Lee," pp. 5-6; Hughes, Edward F.X. (October 21, 2014). "Expert Report of Edward F.X. Hughes, MD, M.P.H. Re: Medtronic, Inc. v. Commissioner," p. 25.

developer (MUS) being licensed to the licensee (MPROC).[64] The design and specs define tolerance ranges within which the designer of the product has determined would be judged acceptable.[65] In the event that products are not manufactured according to the design and specs, *MUS* has the right to give MPROC written notice of such failures.[66]

The manufacturer cannot improve upon the specs, but it can make mistakes that either run up production costs or potentially lead to a recall. In that sense, MPROC is *not* unique—*whomever* MUS engaged to manufacture its products according to specs would be required to produce the *same quality* of product.[67]

Product quality in the medical device industry is *expected to be consistent with its specs*—this is not a distinguishing characteristic among manufacturers in the industry.[68] This is evidenced in the fact that medical device companies—all of which have "quality manufacturing" because they create product *according to specifications*—have profit margins that *vary significantly*. Thus, despite the fact that medical device companies do not distinguish themselves in manufacturing,[69] they do distinguish themselves in other ways—including technology/patents/specs and trademarks/marketing. The quantitative mechanism to distinguish themselves is through varied levels of profits (margins). The top firms earn margins of 20 or 30 percentage points above the less profitable firms.[70] MEDTRONIC has done this better than

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[64] The trademark agreements also mention that the trademarks (owned by MUS) are "…a sign of quality in certain segments of the medical device industry." Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (September 30, 2001). Trademark and Trade Name License Agreement, p. 1 (MDT_TC00015719); and Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2005). Amended and Restated Trademark and Trade Name License Agreement, p. 1 (MDT_TC00015730).

[65] See, for example, Lowery, Andrew, Judy Strojny, and Joseph Puleo. (December 1996). "Medical Device Quality Systems Manual: A Small Entity Compliance Guide." U.S. Department of Health and Human Services—Food and Drug Administration, p. 1-8.

[66] Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2005). Amended and Restated License Agreement, p. 3 (MDT_TC00004188); and Agreement Between Medtronic Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2005). Amended and Restated License Agreement, p. 3 (MDT_TC00004366).

[67] See, for example, Lowery, Andrew, Judy Strojny, and Joseph Puleo. (December 1996). "Medical Device Quality Systems Manual: A Small Entity Compliance Guide." U.S. Department of Health and Human Services—Food and Drug Administration, p. 1-1.

[68] See, Lee, Timothy J. (October 21, 2014). "Medtronic, Inc. v. Commissioner-Tax Court Dkt. No. 6944-11: Statement of Timothy J. Lee," p. 5; and Interview of James Patrick Mackin, President of CRDM, Medtronic, Inc. (July 15, 2010). p. 22 (MDT_TC00018310).

[69] I have seen no opinion by an analyst, taxpayer expert report, or a company that MEDTRONIC (or MPROC) manufactures at much lower costs than others in this industry.

[70] By contrast, companies that manufacture without owning valuable R&D make more consistent (and lower) profit margins than fully integrated, research companies. See **Tables 13B-13C**.

other companies, with an additional 20 percentage point premium associated with the products at issue. As seen in **Table 13A** below, MEDTRONIC's profit for the products at issue is fully *two and a half times* the typical (median) profit level seen in this industry amongst leading (large) companies.

Table 13A: Operating Margin for All U.S. Independent Medical Device Companies with Sales Above $500 Million Annually: Fiscal Years 2005-2006

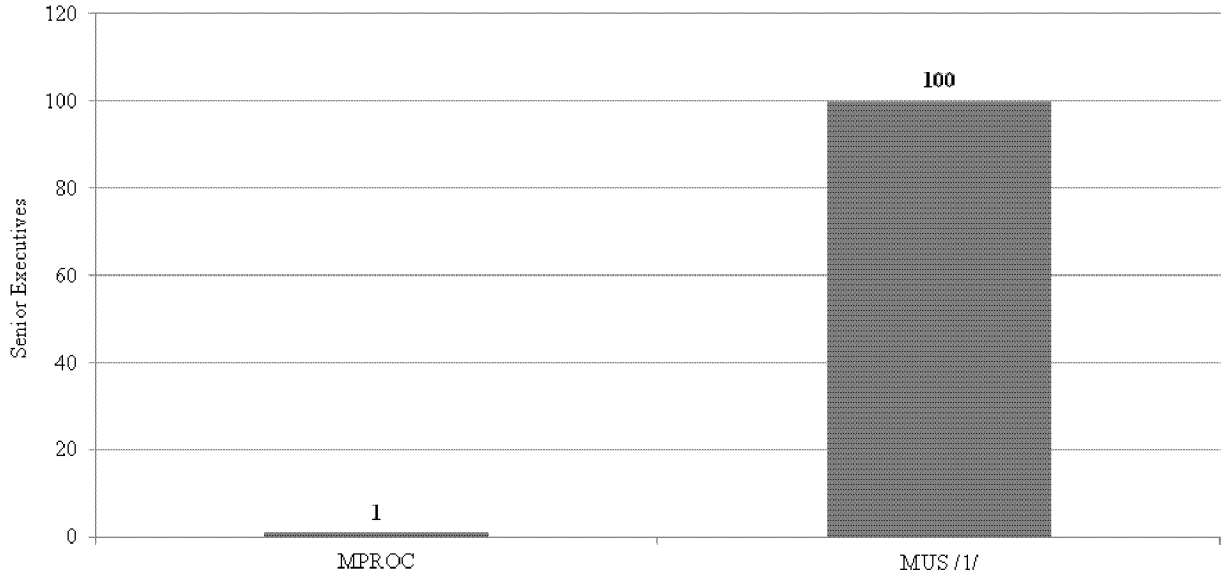
Benchmark Companies	Operating Profit to Sales (Pre-R&D)
Minimum	7.5%
Bottom of Interquartile Range	15.2%
Median	**24.2%**
Top of Interquartile Range	30.8%
Maximum (MEDTRONIC)	40.8%
MEDTRONIC System Profit at Issue	[redacted]

4. MUS Staffs the Senior Personnel

All else being equal, one would expect the senior personnel to have more impact on profits and value than other employees in a company.[71] In this case, almost no senior personnel (Vice President or above) reside at MPROC, with the majority at MUS. For example, MPROC had just one Vice President, while MUS staffed 100 Vice Presidents (and higher level senior executives—including the CEO) in 2005. See **Table 6**, below.

[71] This would be reflected through their higher levels of compensation.

Table 6: Number of Senior Executives (Vice President and Above) at MUS vs. MPROC: 2005



Notes:
/1/: Includes Vice Presidents, Sr. Counsel, Senior Vice Presidents, Presidents, and C-Level Executives in CRM or Neurological Businesses of MEDTRONIC.

B. Benchmarks and Conclusions in Quantitative Reports

The taxpayer expert reports are essentially silent on arm's length profit splits and the relative values of MPROC and MUS in the supply chain, with: (a) no test of reasonableness being performed; and (b) as described below, the reports providing only limited—and inappropriate—benchmarks and analyses to justify their implications that MUS would accept a significant loss while MPROC would enjoy more than 100 percent of the system profit at arm's length. See **Table 2D**.

The WHITE REPORT opines the incoming and outgoing product prices to be consistent with arm's length expectations based on the profits of independent manufacturers and distributors.[72] The WHITE REPORT does not review the BERNEMAN REPORT, so it does not comment on overall profit implications. I first analyze the BERNEMAN REPORT.

The BERNEMAN REPORT values MUS's licenses. MUS's licenses allow exclusive access to a market leading business with significantly above average profit margins (see **Tables**

[72] The WHITE REPORT does not appear to consider other valuation methods or describe why it chose this approach as the best method. See, White, Alan G. (October 22, 2014). "Expert Report of Alan G. White, Ph.D.," pp. 2-8.

13A-13B). The BERNEMAN REPORT's approach of attempting to locate comparable agreements is particularly difficult because of the lack of benchmarks. Market leading companies with [redacted] percent profit margins like MEDTRONIC—of which there are very few to begin with[73]—typically do not license the rights to the "crown jewels" of their business.[74] This difficulty in locating benchmark agreements with similar profit potential is particularly important because profit margins are a primary driver of royalty rates.[75]

The BERNEMAN REPORT *does not* benchmark the licenses at issue to other licenses with demonstrated or projected similar *profit margins*. In fact, the BERNEMAN REPORT does not show the profit margins of its benchmarks at all, as it principally consists of industry surveys of rates. The BERNEMAN REPORT's implication that applying *industry* surveys is an appropriate *substitute* to screening for profit potential is not accurate for several reasons.[76, 77] First, economists typically look for agreements that have similar profit potential because licensees can only pay royalties from the profits they earn—including paying their investors. That is, higher projected profit margins allow for higher royalty rates.[78] Second, this industry in general—and MEDTRONIC's place in it—show a wide variation in profit potential.[79] **Tables 13A-13B** (the latter, below) show that even among the large/successful companies in

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[73] MEDTRONIC on a consolidated basis earned higher operating margins (pre-R&D) than all other large United States medical device companies over the period at issue. Even its consolidated margin (40.8 percent) is far below its margins on the products at issue. There is no documentation that the BERNEMAN REPORT applied agreements for any major product earning profit margins close to those at issue. See **Table 13A**.

[74] See, for example, Parchomovsky, Gideon and Michael Mattioli. (March 2011). "Partial Patents." Columbia Law Review. Vol. 3, No. 2, p. 243.

[75] This concept has been noted by many including the authors of the industry graph used as the arm's length technology royalty rate range in the BERNEMAN REPORT. Smith, Gordon V. and Russell L. Parr. (2005). Intellectual Property: Valuation, Exploitation, and Infringement Damages. Wiley: Hoboken, New Jersey, Chapter 36. See also, Parr, Russell. (2007). Royalty Rates for Licensing Intellectual Property. John Wiley & Sons, Inc: Hoboken, New Jersey, pp. 124-128.

[76] In fact, one of the BERNEMAN REPORT's citations states, "The goal here is simply to caution the reader about the *limitations of using industry standards for setting royalties* and other license considerations." (Emphasis added). See, Razgaitis, Richard. (2007). "Pricing the Intellectual Property of Early-Stage Technologies: A Primer of Basic Valuation Tools and Considerations." Intellectual Property Management in Health and Agricultural Innovation: A Handbook of Best Practices. MIHR: Oxford, U.K., p. 823 (MDT_LB00020338).

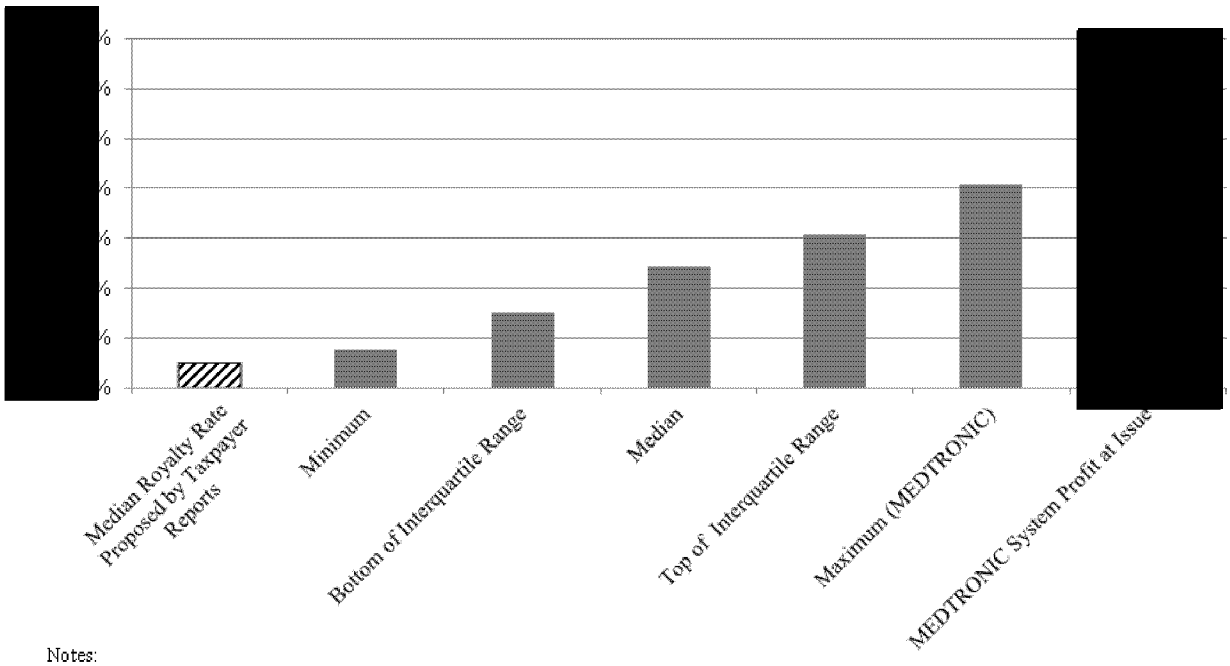
[77] The BERNEMAN REPORT does not appear to consider other valuation methods or describe why it chose this approach as the best method. Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," pp. 9-23.

[78] See, Becker, Brian. (October 9, 2008). "Projected and Actual Profits' Impact on Licensees," Tax Management: Transfer Pricing Report. Vol. 17, No. 11.

[79] In fact, the BERNEMAN REPORT notes the first two criteria of the Treasury Regulations cover these two points. Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," p. 20.

MEDTRONIC's industry: (a) operating profit margins range from *7.5 to 40.8* percent; and (b) MEDTRONIC's [redacted] *percent profit margins* on the supply chain at issue far exceed any of these values. In this sense, royalties based on the much lower "industry profitability" types of surveys used in the BERNEMAN REPORT would not be applicable to the supply chain at issue.

Table 13B: BERNEMAN REPORT Royalty Opinion Compared to Profitability of Medical Device Companies: Fiscal Years 2005-2006



Notes:
/1/: All U.S. companies with $500 million or more in annual sales: FY2005-2006.
/2/: Search was performed using the following SIC codes: 3821, 3841, 3842, 3843, and 3845.

With the above facts in mind, it is important to consider how bargaining power would potentially impact the allocation of profit. (The BERNEMAN REPORT did not perform this type of analysis either). MPROC only owned manufacturing facilities to finish components into final product. By contrast, MUS owned essentially everything it needed in-house to run the entire business by itself.[80] From a practical perspective, only MUS had the legal right to run the business due to its ownership of the technology/patents/specs/trademark and trade name rights

[80] MEDTRONIC owned a Device plant in Switzerland and had the knowledge to open or retrofit a plant to manufacture Leads. It, in fact, built a Singapore plant in 2013 that manufactured Leads (and Devices). Agreement Between Medtronic Puerto Rico Operations Co., Medtronic Europe S.A., and Medtronic Inc. (May 1, 2002). Supply Agreement, pp. 1-2 (MDT_TC00016757-MDT_TC00016758). MEDTRONIC's United States manufacturing plants were also capable of manufacturing prototype devices. See, Interview of Rebecca Bergman, Vice President, New Therapies and Diagnostics, CRDM, Medtronic, Inc. (July 16, 2010). pp. 9-10 (MDT_TC00000341-MDT_TC00000342).

for the products.[81] This bargaining power of MUS would—all else being equal—equate to a larger share of profit than a licensor without such bargaining power. See **Table 8**, below.

Table 8: Bargaining Dynamics for MUS License to MPROC

	Owned By:	
Function, Asset	**MUS**	**MPROC**
Existing Product IP (Patents, Specs, etc.)	●	○
Licensable Business with Projected [redacted]% Profit Margins	●	○
Product Trademarks	●	○
Facility/Intent to Perform Future R&D	●	○
Selling/Marketing Operations	●	○
Component Manufacturing Facilities	●	○
Finished Devices Facilities /1/	●	●
Finished Leads Facilities /1/	○	●

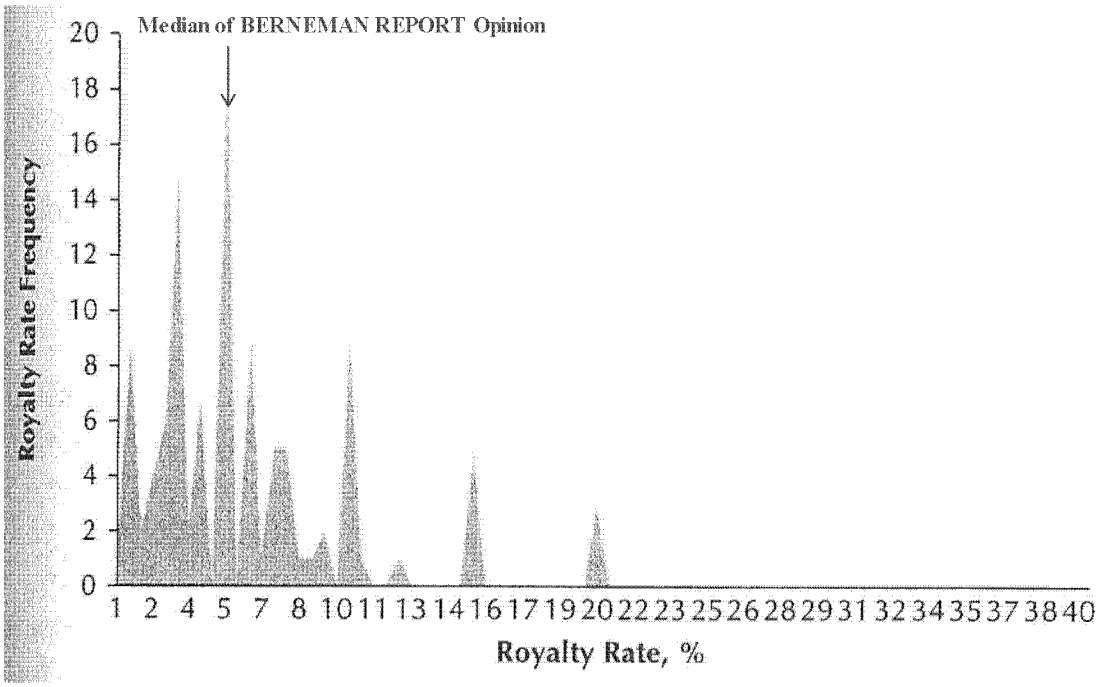
Note:
/1/: It is my understanding that MUS had access to a Devices plant in Switzerland, and had the ability/knowledge to build a plant, retrofit a plant, or license out to a third party in order to perform the final Leads manufacturing.

[81] Agreement Between Medtronic Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2005). Amended and Restated License Agreement, p. 1 (MDT_TC00004186); Agreement Between Medtronic Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2005). Amended and Restated License Agreement, p. 1 (MDT_TC00004364); Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (September 30, 2001). Trademark and Trade Name License Agreement, p. 1 (MDT_TC00015719); and Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2005). Amended and Restated Trademark and Trade Name License Agreement, p.1 (MDT_TC00015730).

To price the royalty rates on the licenses, the BERNEMAN REPORT does not account for the factors above. In fact, it does not consider the overall profit splits[82] or even the specific profit levels of MUS or MPROC (CPM approach[83]). Rather, it cites to the royalty rates seen in an industry survey graph. See **Table 5A**, below. It is my understanding that these royalties do not include any high-end (and high profit margin) implantable cardiovascular medical devices like those being licensed here, but rather cover a range of products described as:

> …artificial blood, magnetic resonance imaging (MRI) equipment, cancer diagnostic devices, birth control devices, wound treatments, and surgical equipment.[84]

Table 5A: The BERNEMAN REPORT's Graph of Medical Device Industry Royalties Used to Define Its Arm's Length Technology Royalty Rate Range



[82] See, 26 C.F.R. § 1.482-6, retrieved November 6, 2014 from http://www.law.cornell.edu/cfr/text/26/1.482-6.

[83] The term CPM refers to the Comparable Profits Method amongst transfer pricing professionals. See, 26 C.F.R. § 1.482-5, retrieved November 6, 2014 from http://www.law.cornell.edu/cfr/text/26/1.482-5.

[84] Parr, Russell L. and Gordon Smith. (2013). Intellectual Property: Valuation, Exploitation and Infringement Damages: 2013 Cumulative Supplement. Wiley: Hoboken, NJ, p. 111.

This inaccurate approach being applied to price very specific (and valuable) rights results in pricing *inconsistent* with arm's length expectations. At a practical level, for example, the BERNEMAN REPORT considers a royalty of 5.0 percent (the median in this industry survey graph) to be a potential result of arm's length royalty negotiations between MUS and MPROC. A 5.0 percent rate, however, is realistically of no value in pricing this royalty rate for the exclusive rights to this large, patent-protected, profitable business. The BERNEMAN REPORT is opining that at arm's length, MUS would agree to provide MPROC exclusive access to this crown jewel in its business *and* MUS would agree to perform R&D/business on a going forward basis for MPROC at a cost to MUS of approximately 14 percent of sales—all for a payment of 5.0 percent of sales. No licensor at arm's length would give its crown jewel business away for free *and* agree to work at a significant loss going forward—especially when they have a successful existing business. See **Table C4**.[85]

The BERNEMAN REPORT's reliance on an industry graph without the benefit of reading the underlying agreements is particularly surprising in light of its own description of intellectual property agreements:

> Generally, a license agreement is a *complex legal document* that includes provisions related to … *royalties*; … *duration* (term); management of intellectual property; risk management (*limitation of liability*, warranties, disclaimer, indemnification); … *dispute resolution*; and notices and requests. License and other alliance agreements may include a *variety of payment terms* and *impose varying obligations* on the parties. (Emphasis added).[86]

With such complexity for licenses, a graph of industry royalty rates without knowledge of their agreement terms would not be sufficient to serve in any benchmark capacity. The BERNEMAN REPORT, however, uses this as its primary benchmark to define its range.

The BERNEMAN REPORT also appears to rely heavily on a MEDTRONIC litigation settlement from 1992 with Pacesetter Systems, Inc., which the BERNEMAN REPORT describes as:

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[85] The BERNEMAN REPORT cites to three other surveys/databases without providing any agreements therefrom. Without the agreements, it is hard to fully comment on the context, but one is from an early stage technologies book, another covers pharmaceuticals and biotechnology, and the third covers non-pharmaceutical medical technologies. By contrast, the MUS/MPROC license involves mature businesses where the most profitable company in the industry is licensing its crown jewels. See **Table 13B**. Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," pp. 21-23.

[86] Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," p. 8.

> …[related] to the *same* products, and even the *same profit potential*, as the products in the License Agreements between Medtronic and MPROC. (Emphasis added).[87]

In fact, the BERNEMAN REPORT states that this 1992 Pacesetter Systems, Inc. settlement gave:

> …comfort that [its] analysis captures the various comparability criteria outlined in the Treasury Regulations.[88]

A review of this agreement would make clear that any comfort provided by a reliance on this agreement would be misplaced. First, the products were *not* demonstrated to have a similar profit potential. Rather, the BERNEMAN REPORT provided no information on this product's profitability in 1992. Second, the 1992 agreement was *non*-exclusive, which is typically less valuable than an exclusive arrangement.[89] Third, the 1992 agreement was a *cross* license whose royalty would be lower than a standard form like that between MUS and MPROC because the former would presumably net out one royalty against another.[90] Fourth, the 1992 agreement was a settlement in litigation, and we are not informed of the underlying facts leading to this settlement as to whether they would resemble arm's length negotiations or would include other factors not present in a licensing negotiation. Finally, there is no indication that the licensor in this agreement was like MUS in that it would continue to perform R&D and provide access to the new products/patents/specs to the licensee. See **Table 5C**, below, which also includes a second BERNEMAN REPORT agreement that was a non-exclusive, cross license, settlement with no profit projections.

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[87] Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," p. 21.

[88] Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," p. 21.

[89] See, for example, World Intellectual Property Organization. (January 2005). "Exchanging Value—Negotiating Technology License Agreements: A Training Manual," pp. 38, 48-49.

[90] For example, a cross license of a 10 percent royalty could result from a license in one direction worth 40 percent against a license in the other direction worth 30 percent. The 10 percent figure (40 – 30) would not be comparable to set a single royalty that was *not being netted out* against another—like the MUS/MPROC license at issue.

Table 5C: Litigation Settlement Agreements Cited by Taxpayer (to Support its Graph) and Their Differences from MUS/MPROC

Characteristic	MUS/MPROC	Pacesetter Systems License Agreement	Edwards Lifesciences Corp. License Agreement
Profit Potential Margin	[redacted]Percent	Not Specified	Not Specified
Exclusivity	Yes	No	No
Context of License	Business Operations	Settlement	Settlement
Type of License	Single Agreement	Cross License	Cross License
Duties Performed by Licensor	Ongoing R&D, Manufacturing, Distribution	--	--
Time Period	1, 3 Years	10 Years	8 Years
Date	2004, 2005	*1992*	*2014*

The BERNEMAN REPORT includes three other agreements as additional supplements to its graph, but they also would not provide reasonable benchmarks in this context. For example, the *1985* Genetic Laboratories agreement was not an arm's length agreement, but rather between related parties. As such, it would provide no information regarding negotiations between unrelated parties. Similarly, the CardioVascular Dynamics agreement specified a minimum royalty associated with annual sales of only *$25 million*. This would likely have quite different economic characteristics than the $[redacted] *billion* of annual sales at issue. This difference in size would exacerbate the likelihood that this product's profit margins were far below the 60 percent levels at issue. See **Table 5D**, below.

Table 5D: Agreements Cited by Taxpayer (to Support its Graph) with Some Sales Data Available

Characteristic	MUS/MPROC	Genetic Laboratories, Inc.	CardioVascular Dynamics
Sales Levels (Per Year)	$[redacted] *billion*	$3 *million* /1/	$25 *million* /2/
Type of Agreement	--	Related Party /3/	--
Date	2004, 2005	1985	1998

Notes:

/1/: Refers to sales of some of the products included in this license agreement (*e.g.,* Peri-Guard and Flo-Rester). Sales data for other products included in the agreement were not publicly available.

/2/: That is, Guidant agreed to pay CardioVascular a minimum annual royalty of $250 thousand, associated with a one percent royalty rate.

/3/: That is, Bio-Vascular, Inc. acquired the cardiovascular business of Genetic Laboratories, Inc. in July 1985.

The BERNEMAN REPORT's final agreement—between Theseus Logic, Inc. and MEDTRONIC—is not for a product, but rather a technology that could be used potentially in conjunction with different products.[91] Profit margin projections would thus likely be harder to locate, and less likely to be as large as the [redacted] percent at issue.

The BERNEMAN REPORT also offered certain benchmarks to MEDTRONIC's trademarks that included trademarks for:

- Dr. Donald E. Doyle's Doyle nasal dressings;
- Dr. Harold Reuter's bivalve nasal septal splints; and
- Dr. Jack Kartush's products for neurology, otology, and head and neck.[92]

While these licenses from individual doctors outside of the profitable cardiovascular space[93] would appear to be of much lower value and at earlier stages than the MEDTRONIC agreements at issue, in fact, these represented the *highest* trademark royalties presented by the BERNEMAN REPORT. The BERNEMAN REPORT illogically opines that the median benchmark trademark royalty would be 0 percent. Thus, its total median royalty including technology and trademarks would only be (5 plus 0) 5 percent. Such rates derived from industry averages have different implications depending on the product's profitability within that industry. This rate is relatively close to the profitability levels of the *lowest* performing medical device companies, but orders of magnitude different from the crown jewels of the industry's most profitable company—the MEDTRONIC supply chain at issue. See **Table 13B**.

C. Other Themes in Qualitative Opinions

The taxpayer expert reports comment on MPROC's responsibilities for some portion of product liability on the supply chain at issue. This section of my report makes two broad comments on this contention. First, while there are direct liability costs from litigation (awards that can potentially be insured against), the potentially larger costs of product reputation

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[91] Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," p. C-3.

[92] Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," Exhibit 2-B.

[93] As seen in **Table 13A**, MEDTRONIC, St. Jude, and Boston Scientific (with the Guidant acquisition) constitute three of the four highest profit margin companies.

problems are seen in a company's inability (or reduced ability) to sell its product.[94] These latter costs cannot typically be insured against.[95, 96]

Market share/market value losses would disproportionately harm MUS as compared to MPROC. Such losses/problems would eliminate (or minimize) the technology/patents/specs/trademark/trade name owner's (MUS's) ability to *sell its product anywhere*. By contrast, such a problem would typically not *directly* hinder the associated manufacturer (MPROC) as much. A manufacturer like MPROC would still be able to contract its services to other customers.[97] MUS, by contrast, would weaken/lose its ability to profit from its (now less/non-valuable) R&D. Those assets—unlike a manufacturing plant[98]—could *not* be redeployed. In this sense, regardless of which party may or may not *pay damage awards in litigation*, the party with the most risk from product liability is MUS.

The second important point of the taxpayer's discussion of liability is valuation.[99] In that sense, the taxpayer notes that *full insurance for all of MEDTRONIC* was quoted at *$5 million* annually for 2003. The DOWDEN REPORT adjusted this result for MPROC's implied share of liability costs for the supply chain at issue by accounting for:

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[94] Lee, Timothy J. (October 21, 2014). "Medtronic, Inc. v. Commissioner-Tax Court Dkt. No. 6944-11: Statement of Timothy J. Lee," p. 12.

[95] I have never seen—including in the voluminous supporting documentation associated with the taxpayer expert reports—an insurance policy that would insure against a loss of market share due to declines in reputation. This would likely be subjective/difficult to measure as opposed to a specific damages award or settlement, for example. See, retrieved November 20, 2014 from http://www.riskandinsurance.com/top-five-uninsurable-risks/; and retrieved November 20, 2014 from http://blogs.wsj.com/riskandcompliance/2013/07/10/biggest-business-risks-uninsurable-lloyds-ceo/.

[96] This is seen in the LEE REPORT, which shows larger market value/market share losses than the relatively modest direct liability awards. Lee, Timothy J. (October 21, 2014). "Medtronic, Inc. v. Commissioner-Tax Court Dkt. No. 6944-11: Statement of Timothy J. Lee," pp. 14-16.

[97] A manufacturer's ability to serve another supplier would depend on whether the product's reputation loss was due to a design defect or a manufacturing error. In the latter case, the manufacturer would face a more difficult market situation.

[98] MUS would be able to re-deploy its component manufacturing assets unless its manufacturing had caused the defect/recall.

[99] It is not clear if the insurance valuation of the DOWDEN REPORT was used at all by the WHITE REPORT or BERNEMAN REPORT that opined on the transfer prices. However, as seen below, the implication that MPROC saved MUS hundreds of millions of dollars annually from not having to pay insurance is not accurate.

- The supply chain at issue is only (less than) 30 percent of MUS's total sales.[100]

- Insurance rates may have increased from 2003 through 2005-2006.[101]

- Although MEDTRONIC considered a total insurance limit of $250 million for its worldwide operations in 2003, and had not recorded an annual liability charge (from 2000-2006) for even *$25 million*,[102] the DOWDEN REPORT priced an insurance limit of *$3 billion* for the supply chain at issue.

- Berkshire Hathaway *offered* an insurance rate on its website in 2005 to *pharmaceutical* and medical device companies.[103]

In total, these adjustments led to the DOWDEN REPORT conclusion that while MEDTRONIC was offered insurance to cover 2003 at a cost of $5 million, two years later the implied "insurance" provided by MPROC on the product lines at issue was worth *$220 million*. See **Table 11**, below.

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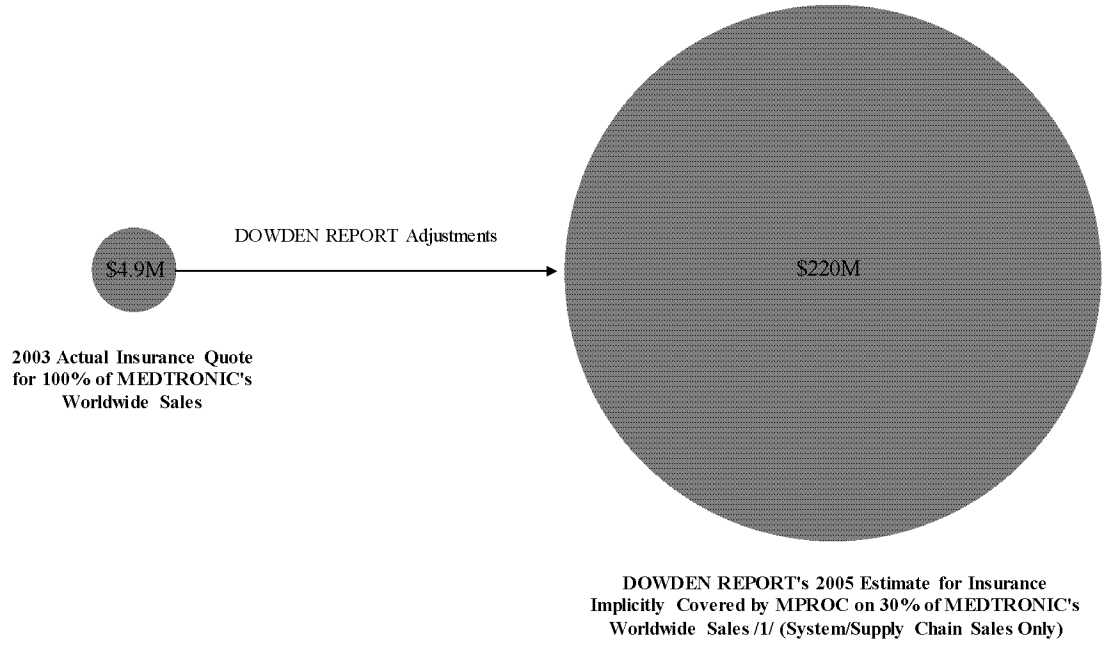
[100] While this is factually correct, the DOWDEN REPORT made no specific downward (or upward) adjustment to account for only focusing on a minority of the company. See, Dowden, Paul D. (October 15, 2014). "Medtronic, Inc. v. Commissioner-Tax Court Dkt. No. 6944-11: Expert Report of Paul D. Dowden," pp. 21-35.

[101] Even by 2011, insurance quotes to MEDTRONIC for its worldwide operations had only increased to $23 to $28 million, for liability coverage up to $600 million. See, Memo from Gary Nelson to Medtronic Audit Committee. (August 24, 2011). Annual Report—Corporate Risk Management: Insurance Operations and Business Continuity Management, p. 1 (MDT_TC00109211).

[102] In point of fact, MEDTRONIC's 10-Ks indicate that the company's largest annual product liability charge during the fiscal 2000-2006 time period was $23.6 million in 2002. See, Medtronic, Inc. (July 21, 2000). Form 10-K for the Fiscal Year Ended April 30, 2000, pp. 7, 13, 37; Medtronic, Inc. (July 26, 2001). Form 10-K for the Fiscal Year Ended April 27, 2001, pp. 9, 15, 32; Medtronic, Inc. (July 19, 2002). Form 10-K for the Fiscal Year Ended April 26, 2002, p. 49; Medtronic, Inc. (July 14, 2003). Form 10-K for the Fiscal Year Ended April 25, 2003, p. 48; Medtronic, Inc. (June 30, 2004). Form 10-K for the Fiscal Year Ended April 30, 2004, p. 40; Medtronic, Inc. (June 29, 2005). Form 10-K for the Fiscal Year Ended April 29, 2005, p. 40; and Medtronic, Inc. (June 28, 2006). Form 10-K for the Fiscal Year Ended April 28, 2006, pp. 29, 40.

[103] It is my understanding that no companies took the offer. See, Email from Bruce Belzak to June Guida. (February 16, 2005). Life Sciences Practice News Blast – Berkshire Hathaway Program. (MDT_PD0001037).

Table 11: DOWDEN REPORT Estimation of Value of Implied Insurance Savings (to MUS) by MPROC on System/Supply Chain at Issue



Note:
/1/: The DOWDEN REPORT's adjustments result in a range of approximately $220M to $235M.

Such an extreme set of adjustments—approximately 45 times an actual insurance quote for a much smaller business—does not accord with the facts. In particular, the taxpayer expert reports did not provide evidence of expected awards approaching $3 billion—as a rationale for $3 billion of insurance limits. Additionally, the taxpayer expert reports did not note that MEDTRONIC has successfully used the "FDA" defense in litigation as a way to limit its liability. This argument provides that an award associated with a design defect should be eliminated or minimized since MEDTRONIC's product and manufacturing process were approved by the FDA.[104]

D. Projections vs. Actual Results

Licensees like MPROC have the potential to benefit when they sign a long-term license for a product/business with modest *projected* profit margins that ends with much higher *actual*

[104] See, for example, Scott, Bryan G. and Elizabeth K. Strickland. (2009). "Recent Development in Federal Preemption of Pharmaceutical Drug and Medical Device Product Liability Claims." North Carolina Association of Defense Attorneys; Whitney, Daniel W. (2010). "Guide to Preemption of State-Law Claims Against Class III PMA Medical Devices," Food and Drug Journal Law Journal. Vol. 65, No. 1; and Brown, Michael K. et al. (May 2012). "Medical Device Preemption—Is There Life for Plaintiffs' Claims After Riegel v. Medtronic, Inc.?" Reed Smith LLP.

profit margins.[105] MEDTRONIC's operating margins, however, did *not* follow the above fact pattern in this supply chain. See **Table E1**. In fact, its [redacted] percent actual profit margins were quite similar to those projected for it.[106, 107] That is, MPROC *did not gain*—nor lose—substantially from being the (licensee) beneficiary of a business earning above projected profit margins.[108] Thus, MPROC's actual (and opined) profit levels far in excess of those for MUS *cannot* be explained by it successfully taking on risk. This further confirms MPROC's excessive actual (and opined) profits cannot be explained by arm's length factors.

E. Conclusion

The taxpayer expert reports—and the justifications of MEDTRONIC's transfer prices therein—opine for a range of prices that are *not* consistent with arm's length expectations:

- MEDTRONIC's split of profit between MPROC and MUS implies that MPROC's licensee/final manufacturing functions are 15.5 times (or more) the value of MUS's functions/risks per dollar of cost. See **Table 2C**.

- Applying the middle (medians) of the WHITE and BERNEMAN REPORTS' ranges would lead to MUS incurring a *loss* of $473.4 million, with MPROC booking a *profit* of $3.2 billion under arm's length circumstances. See **Tables 2D & C7**.

I disagree with the WHITE REPORT and the BERNEMAN REPORT, whose results lead to the above conclusions. First, MPROC's functions/risks are *not* 15.5 times (or more) as valuable as those of MUS. Rather, if anything, MUS's functions/risks are relatively *more* valuable than those of MPROC. Prices based on this understanding would place at least $1.5 billion more profit in the United States than proposed by the taxpayer. That is,

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[105] That is, royalty rates being based on projections/expectations. See, Smith, Gordon V. and Russell L. Parr. (2005). Intellectual Property: Valuation, Exploitation, and Infringement Damages. Wiley: Hoboken, New Jersey, pp. 203, 356-357, 655.

[106] The projections cover a somewhat wider range of products on a worldwide basis. They represent the closest product match amongst contemporaneous projections that I have located.

[107] In a practical sense, MPROC did *not* face *long-term* profit margin risk, as the agreement covering fiscal year 2005 was only one year in length and the agreement with a May 2005 effective date only lasted one year during the period at issue. Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2004). Amendment No. 3 to Trademark and Trade Name License Agreement, p. 1 (MDT_TC00015728); Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2004). Amendment No. 3 to (Leads) License Agreement, p. 1 (MDT_TC00004362); and Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2004). Amendment No. 3 to (Device) License Agreement, p. 1 (MDT_TC00004184).

[108] See, for example, Becker, Brian. (October 9, 2008). "Projected and Actual Profits' Impact on Licensees," Tax Management: Transfer Pricing Report. Vol. 17, No. 11.

R&D/technology/patents is the primary driver of value in the medical device industry. This is seen in MEDTRONIC analyst reports, acquisition valuations, product manuals, customer purchase agreements, etc. that all consistently focus on R&D/technology/patents/specs with only rare mentions of manufacturing in any capacity.

Second, the only support for MEDTRONIC's intercompany royalty rates is from the BERNEMAN REPORT, which uses industry averages from graphs/surveys supplemented by several non-comparable agreements as its benchmarks. With the licenses at issue for MEDTRONIC covering a noticeably higher profit margin than typical in this industry, such an industry graph approach leads to below arm's length royalties. For example, the BERNEMAN REPORT incorrectly opines that a 5 percent (median) royalty rate would be accepted as compensation for the exclusive rights to a market leading, [redacted] percent operating profit margin business like the MEDTRONIC products at issue. See **Table 13B**.

This report does not quantify and opine for an arm's length set of transfer prices. Rather, it finds that the benchmarks and analyses provided in the taxpayer expert reports do not support the actual pricing seen in **Table 2C** or the more extreme prices seen in **Table 2D** (based on the taxpayer expert reports' medians).

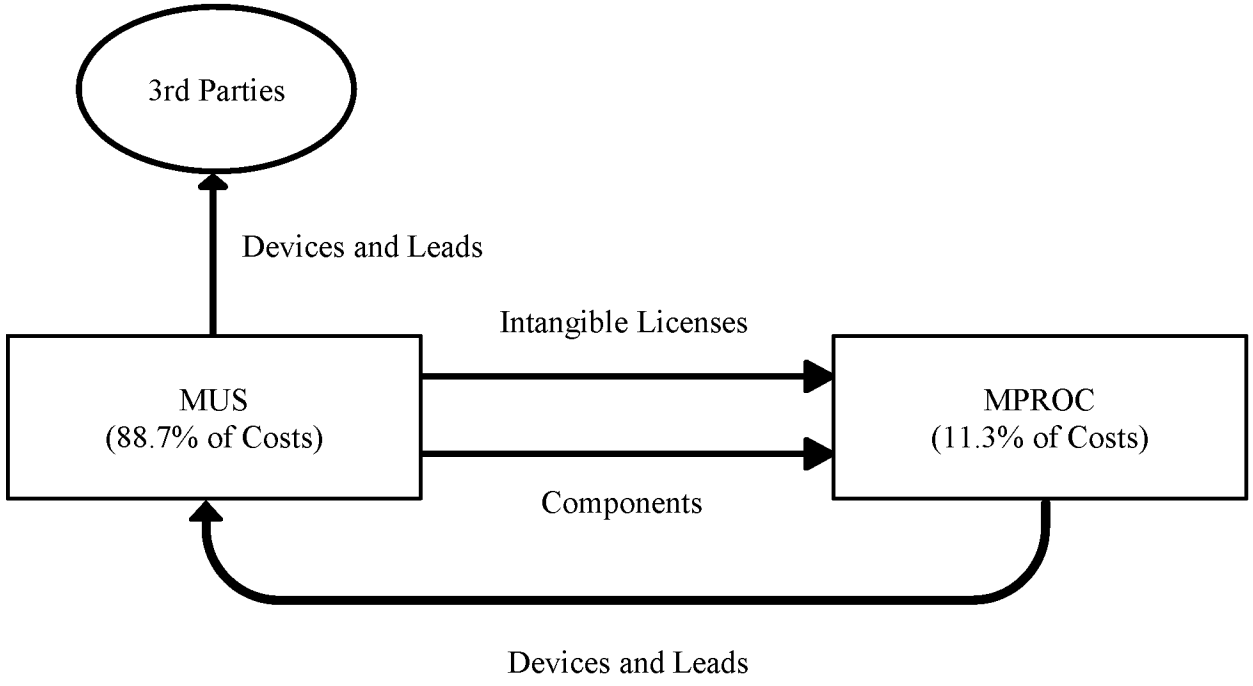
Medtronic Transfer Pricing Critical Analysis

TABLES

Background: Tables 1A-1C

Table 1A:

Intercompany Transactions at Issue



Sources:

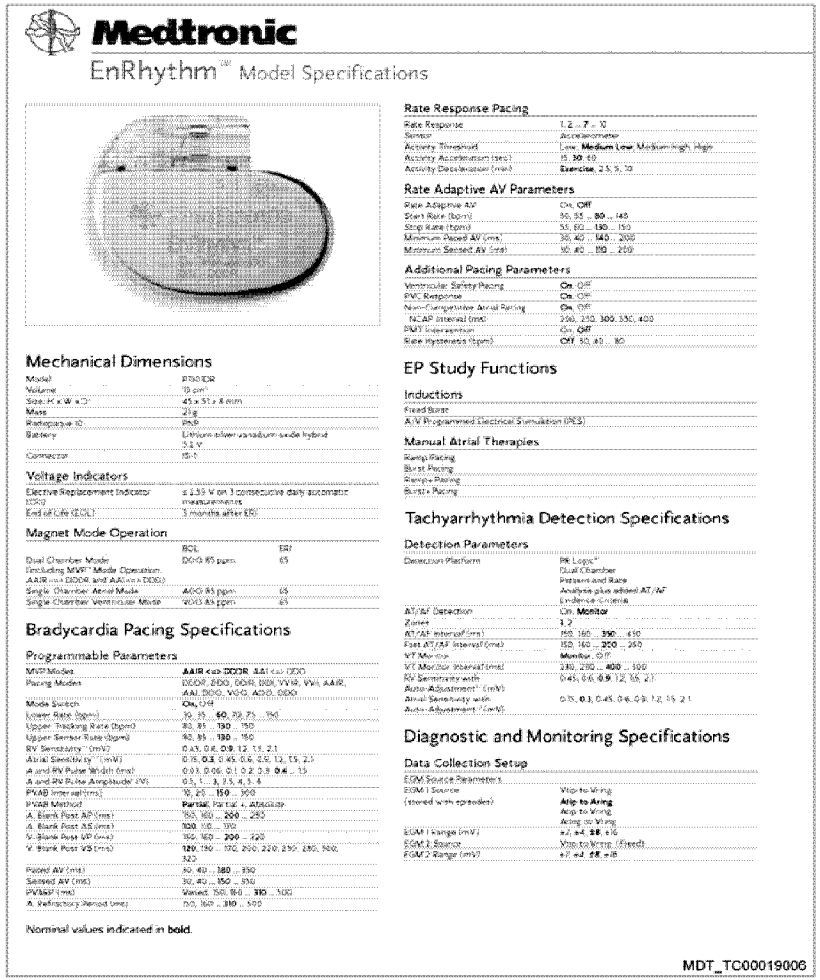
(1) **Table 2B**.

(2) Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," pp. 3-4.

(3) Kennelly, Mike. (October 22, 2014). "Medtronic, Inc. v. Commissioner-TC Dkt. No. 6944-11: Expert Report of Mike Kennelly," pp. 5-9.

Table 1B:

Example of MEDTRONIC Product Specifications/Parameters



Medtronic

EnRhythm™ Model Specifications

Mechanical Dimensions

Model	R160DR
Volume	18 cm³
Size: H x W x D	45 x 51 x 8 mm
Mass	21 g
Radiopaque ID	RMD
Battery	Lithium-silver vanadium oxide hybrid 3.2 V
Connector	IS-1

Voltage Indicators

Elective Replacement Indicator (ERI)	≤ 2.59 V on 3 consecutive daily automatic measurements
End of Life (EOL)	3 months after ERI

Magnet Mode Operation

	BOL	ERI
Dual Chamber Mode (including MVP™ Mode Operation: AAIR ⇔ DDDR and AAI ⇔ DDI)	DOO 85 ppm	65
Single Chamber Atrial Mode	AOO 85 ppm	65
Single Chamber Ventricular Mode	VOO 85 ppm	65

Bradycardia Pacing Specifications

Programmable Parameters

MVP Modes	**AAIR ⇔ DDDR**, AAI ⇔ DDI
Pacing Modes	DDDR, DDD, DDIR, DDI, VVIR, VVI, AAIR, AAI, DOO, VOO, AOO, OOO
Mode Switch	**On**, Off
Lower Rate (bpm)	30, 35 .. **60** .. 90, 95 .. 150
Upper Tracking Rate (bpm)	80, 85 .. **130** .. 150
Upper Sensor Rate (bpm)	80, 85 .. **130** .. 150
RV Sensitivity ¹ (mV)	0.45, 0.6, 0.9, 1.2, 1.5, 2.1
Atrial Sensitivity ¹ (mV)	0.15, **0.3**, 0.45, 0.6, 0.9, 1.2, 1.5, 2.1
A and RV Pulse Width (ms)	0.03, 0.05, 0.1, 0.2, 0.3, **0.4** .. 1.5
A and RV Pulse Amplitude² (V)	0.5, 1 .. 3, 3.5, 4, 5, 6
PVAB Interval (ms)	10, 20 .. **150** .. 300
PVAB Method	**Partial**, Partial +, Absolute
A. Blank Post AP (ms)	150, 160 .. **250** .. 280
A. Blank Post AS (ms)	**100**, 110 .. 130
V. Blank Post VP (ms)	150, 160 .. **200** .. 220
V. Blank Post VS (ms)	**120**, 130 .. 170, 200, 220, 250, 280, 300, 320
Paced AV (ms)	30, 40 .. 280 .. 350
Sensed AV (ms)	30, 40 .. 150 .. 300
PVARP (ms)	Manual, 150, 160 .. **310** .. 500
A. Refractory Period (ms)	150, 160 .. **310** .. 500

Nominal values indicated in **bold**.

Rate Response Pacing

Rate Response	1, 2 .. **7** .. 10
Sensor	Accelerometer
Activity Threshold	Low, **Medium Low**, Medium High, High
Activity Acceleration (sec)	15, **30**, 60
Activity Deceleration (min)	**Exercise**, 2.5, 5, 10

Rate Adaptive AV Parameters

Rate Adaptive AV	On, **Off**
Start Rate (bpm)	50, 55 .. **80** .. 140
Stop Rate (bpm)	55, 60 .. **130** .. 150
Minimum Paced AV (ms)	30, 40 .. **140** .. 200
Minimum Sensed AV (ms)	30, 40 .. **110** .. 200

Additional Pacing Parameters

Ventricular Safety Pacing	**On**, Off
PVC Response	**On**, Off
Non-Competitive Atrial Pacing	**On**, Off
NCAP Interval (ms)	200, 250, **300**, 350, 400
PMT Intervention	**On**, Off
Rate Hysteresis (bpm)	**Off**, 50, 60 .. 80

EP Study Functions

Inductions

Fixed Burst	
A/V Programmed Electrical Stimulation (PES)	

Manual Atrial Therapies

Ramp Pacing	
Burst Pacing	
Ramp+ Pacing	
Burst+ Pacing	

Tachyarrhythmia Detection Specifications

Detection Parameters

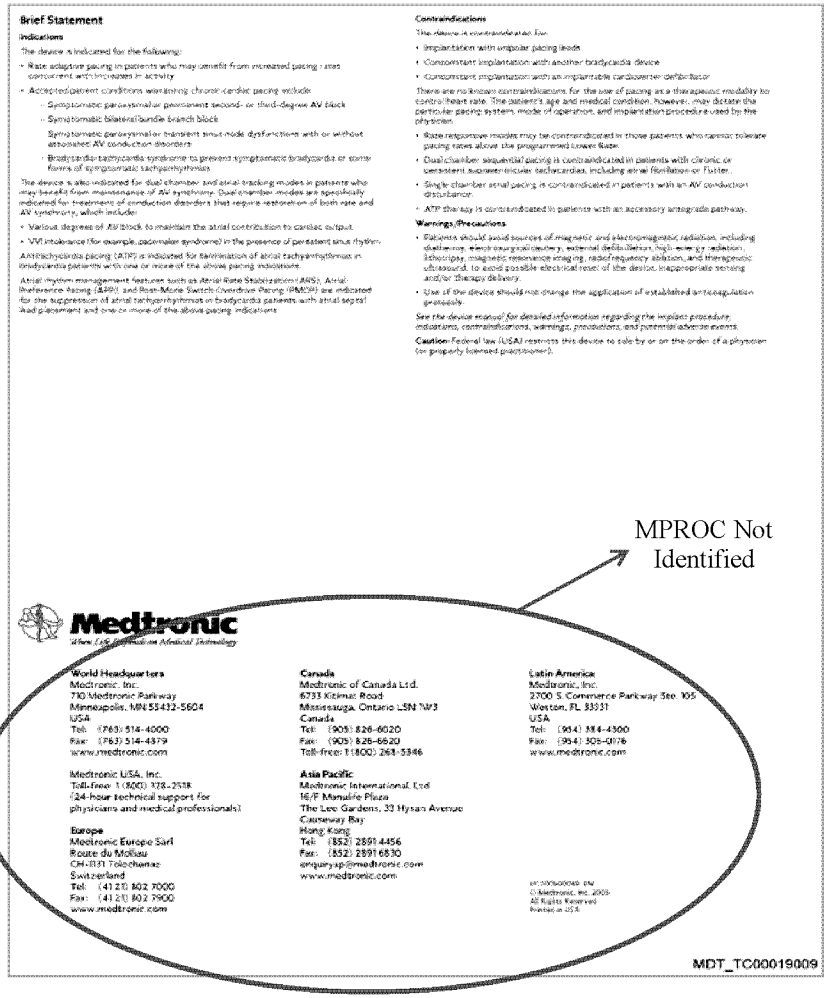
Detection Platform	PR Logic™ Dual Chamber Pressure and Rate Analysis plus added AT/AF Evidence Criteria
AT/AF Detection	**On**, Monitor
Zones	1, 2
RT/AF Interval² (ms)	150, 160 .. **390** .. 610
Fast AT/AF Interval² (ms)	150, 160 .. **250** .. 350
VT Monitor	**Monitor**, Off
VT Monitor Interval² (ms)	280, 290 .. **400** .. 500
RV Sensitivity with Auto-Adjustment¹ (mV)	0.45, 0.6, **0.9**, 1.2, 1.5, 2.1
Atrial Sensitivity with Auto-Adjustment¹ (mV)	0.15, **0.3**, 0.45, 0.6, 0.9, 1.2, 1.5, 2.1

Diagnostic and Monitoring Specifications

Data Collection Setup

EGM Source Parameters	
EGM 1 Source (stored with episodes)	Ring to Ring, **Atip to Ring**, Ring to Ring, Atip to Ring
EGM 1 Range (mV)	±2, ±4, **±8**, ±16
EGM 2 Source	Vtip to Ring (Fixed)
EGM 2 Range (mV)	±2, ±4, **±8**, ±16

MDT_TC00019006



Brief Statement

Indications

The device is indicated for the following:

- Rate adaptive pacing in patients who may benefit from increased pacing rates concurrent with increases in activity
- Acceptable patient conditions warranting chronic cardiac pacing include:
  - Symptomatic paroxysmal or permanent second- or third-degree AV block
  - Symptomatic bilateral bundle branch block
  - Symptomatic paroxysmal or transient sinus node dysfunction with or without associated AV conduction disorders
  - Bradycardia-tachycardia syndrome to prevent symptomatic bradycardia or some forms of symptomatic tachyarrhythmias

The device is also indicated for dual chamber and atrial tracking modes in patients who may benefit from maintenance of AV synchrony. Dual chamber modes are specifically indicated for treatment of conduction disorders that require restoration of both rate and AV synchrony, which include:

- Various degrees of AV block to maintain the atrial contribution to cardiac output
- VVI intolerance (for example, pacemaker syndrome) in the presence of persistent sinus rhythm

Antitachycardia pacing (ATP) is indicated for termination of atrial tachyarrhythmias in bradycardia patients with one or more of the above pacing indications.

Atrial rhythm management features such as Atrial Rate Stabilization (ARS), Atrial Preference Pacing (APP), and Post-Mode Switch Overdrive Pacing (PMOP) are indicated for the suppression of atrial tachyarrhythmias or bradycardia patients with atrial septal lead placement and one or more of the above pacing indications.

Contraindications

The device is contraindicated for:

- Implantation with unipolar pacing leads
- Concomitant implantation with another bradycardia device
- Concomitant implantation with an implantable cardioverter defibrillator

There are no known contraindications for the use of pacing as a therapeutic modality to control heart rate. The patient's age and medical condition, however, may dictate the particular pacing system, mode of operation, and implantation procedure used by the physician.

- Rate-responsive modes may be contraindicated in those patients who cannot tolerate pacing rates above the programmed lower Rate.
- Dual-chamber sequential pacing is contraindicated in patients with chronic or persistent supraventricular tachycardias, including atrial fibrillation or flutter.
- Single-chamber atrial pacing is contraindicated in patients with an AV conduction disturbance.
- ATP therapy is contraindicated in patients with an accessory anterograde pathway.

Warnings/Precautions

- Patients should avoid sources of magnetic and electromagnetic radiation, including diathermy, electrocauterization, external defibrillators, high-energy radiation therapy, magnetic resonance imaging, radiofrequency ablation, and therapeutic ultrasound, to avoid possible electrical reset of the device, inappropriate sensing and/or therapy delivery.
- Use of the device should not change the application of established anticoagulation protocols.

See the device manual for detailed information regarding the implant procedure, indications, contraindications, warnings, precautions, and potential adverse events.

Caution: Federal law (USA) restricts this device to sale by or on the order of a physician (or properly licensed practitioner).

MPROC Not Identified

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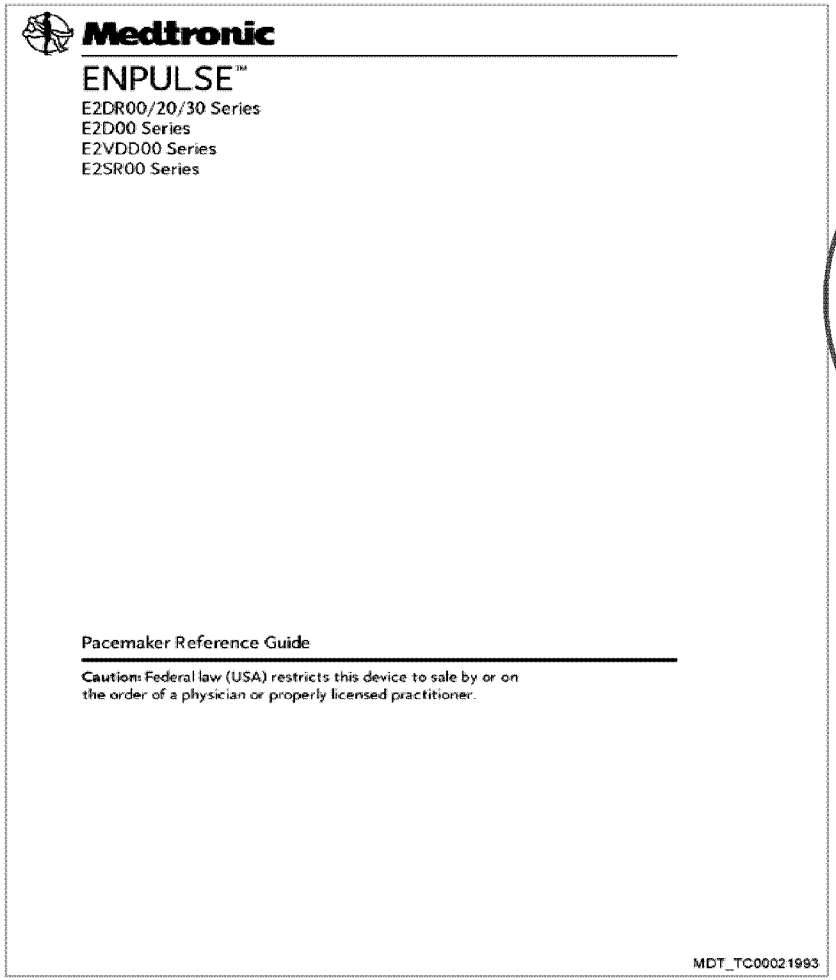
MDT_TC00019009

Source:

(1) Medtronic, Inc. (2005). EnRhythm Model Specifications. MDT_TC00019006-MDT_TC00019009.

Table 1C:

Example of MEDTRONIC Product Reference Guide



Medtronic

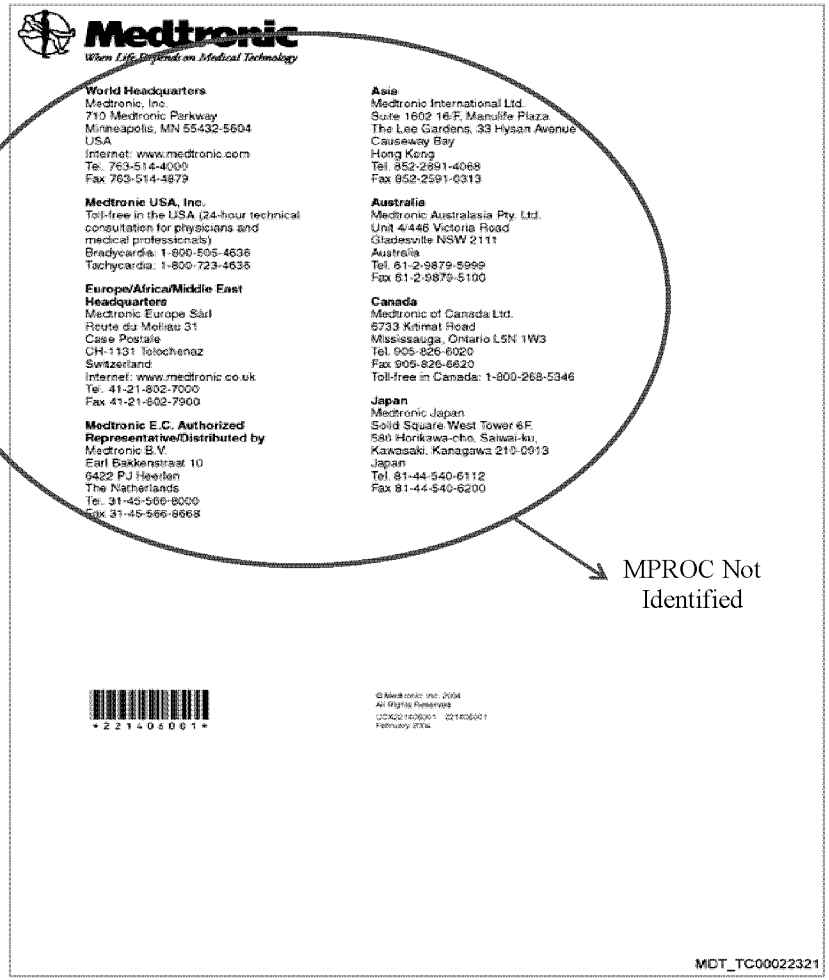
ENPULSE™

E2DR00/20/30 Series
E2D00 Series
E2VDD00 Series
E2SR00 Series

Pacemaker Reference Guide

Caution: Federal law (USA) restricts this device to sale by or on the order of a physician or properly licensed practitioner.

MDT_TC00021993



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Fax 81-44-540-6200

MPROC Not Identified

221405001

MDT_TC00022321

Source:
(1) Medtronic, Inc. (February 2004). EnPulse: Pacemaker Reference Guide. MDT_TC00021993-MDT_TC00022321.

MEDTRONIC Profit Split vs. Cost Split: Tables 2A-2D

Table 2A:

Profit Split Between MUS and MPROC: 2005-2006

Fiscal Year Ended April (In USD Millions Except Percentages)	2005-2006 Total Profit	Profit Split	Cost Split
MUS Operating Profit	929.7	**33.5%**	**88.7%**
MPROC Operating Profit	1,842.9	**66.5%**	**11.3%**
Total System Profit	2,772.7	100.0%	100.0%

Source:
(1) **Tables 2B & C5**.

Table 2B:

Split of Total "System" Costs Between MUS and MPROC: 2005-2006

Fiscal Year Ended April (In USD Millions Except Percentages)	2005-2006 Total Costs	Cost Split
Distribution and Overhead Costs /1/	[redacted]	50.7%
R&D/Business Costs	822.9	25.7%
Component Manufacturing Costs	[redacted]	12.3%
MUS Costs /1/	**2,836.1**	**88.7%**
MPROC Finished Manufacturing Costs /2/	**362.3**	**11.3%**
Total System Costs	3,198.4	100.0%

Notes:

/1/: Includes other product, overhead, and intercompany expense costs.

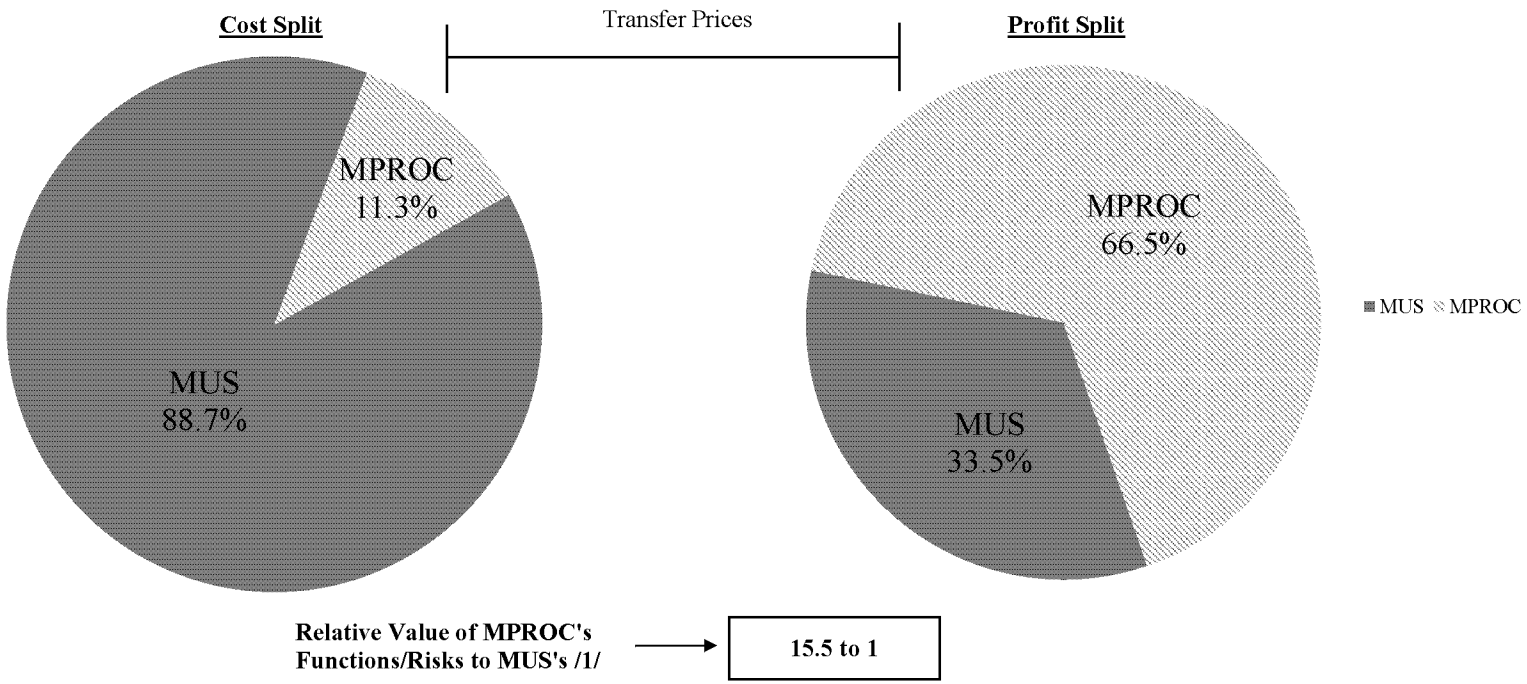
/2/: Data are proportionate to MPROC percent of sales to MUS.

Source:

(1) **Tables C1-C4**.

Table 2C:

Impact of Transfer Prices on MUS and MPROC

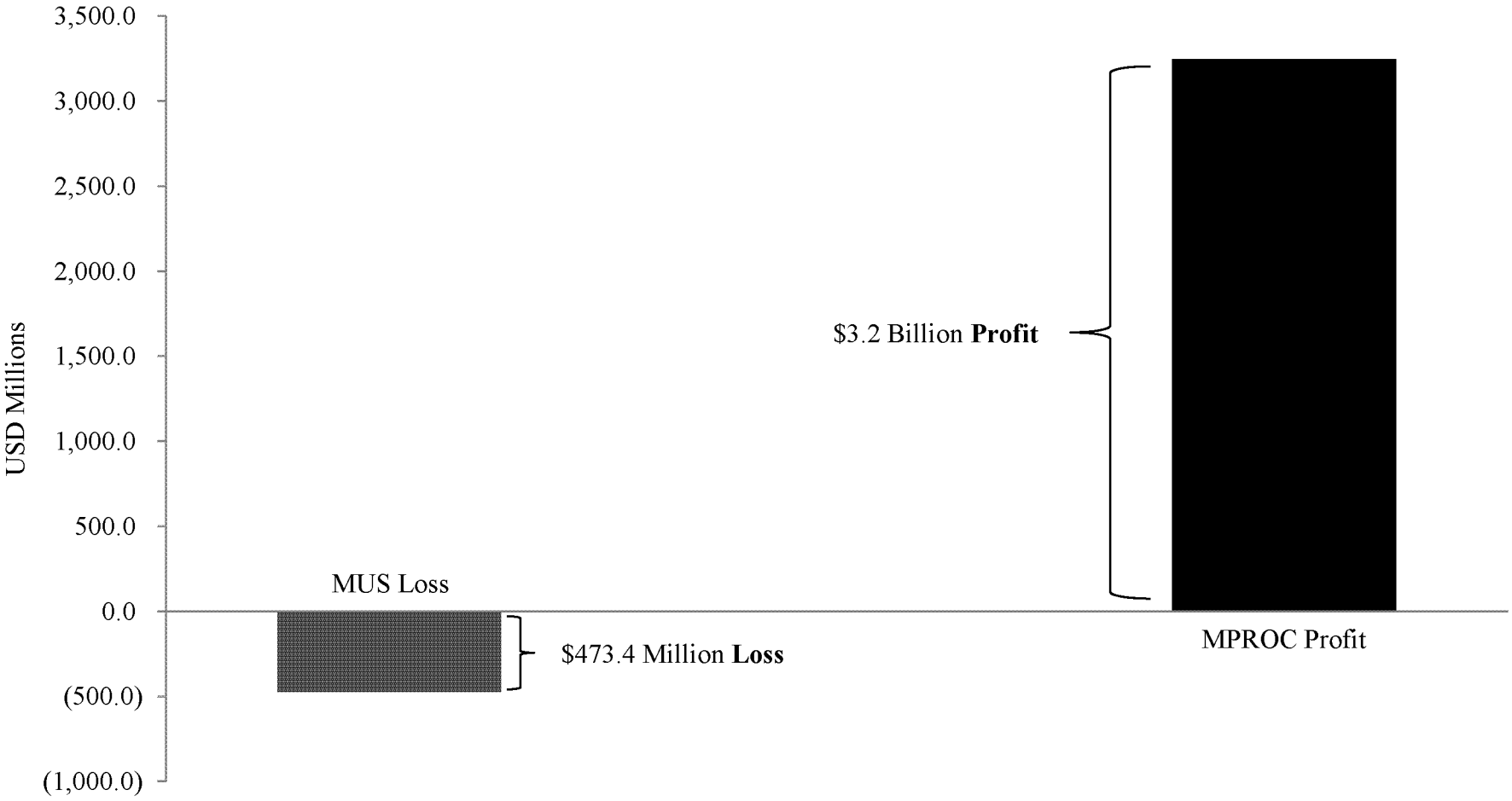


Note:
/1/: That is, MPROC's ratio of profit split to cost split (66.5/11.3 = 5.9) is equal to 15.5 times the analogous ratio for MUS (33.5/88.7 = 0.4). That is, 5.9/0.4 = 15.5.

Source:
(1) **Tables 2A-2B**.

Table 2D:

Implied Profit Split Using Median Benchmarks from WHITE and BERNEMAN REPORTS

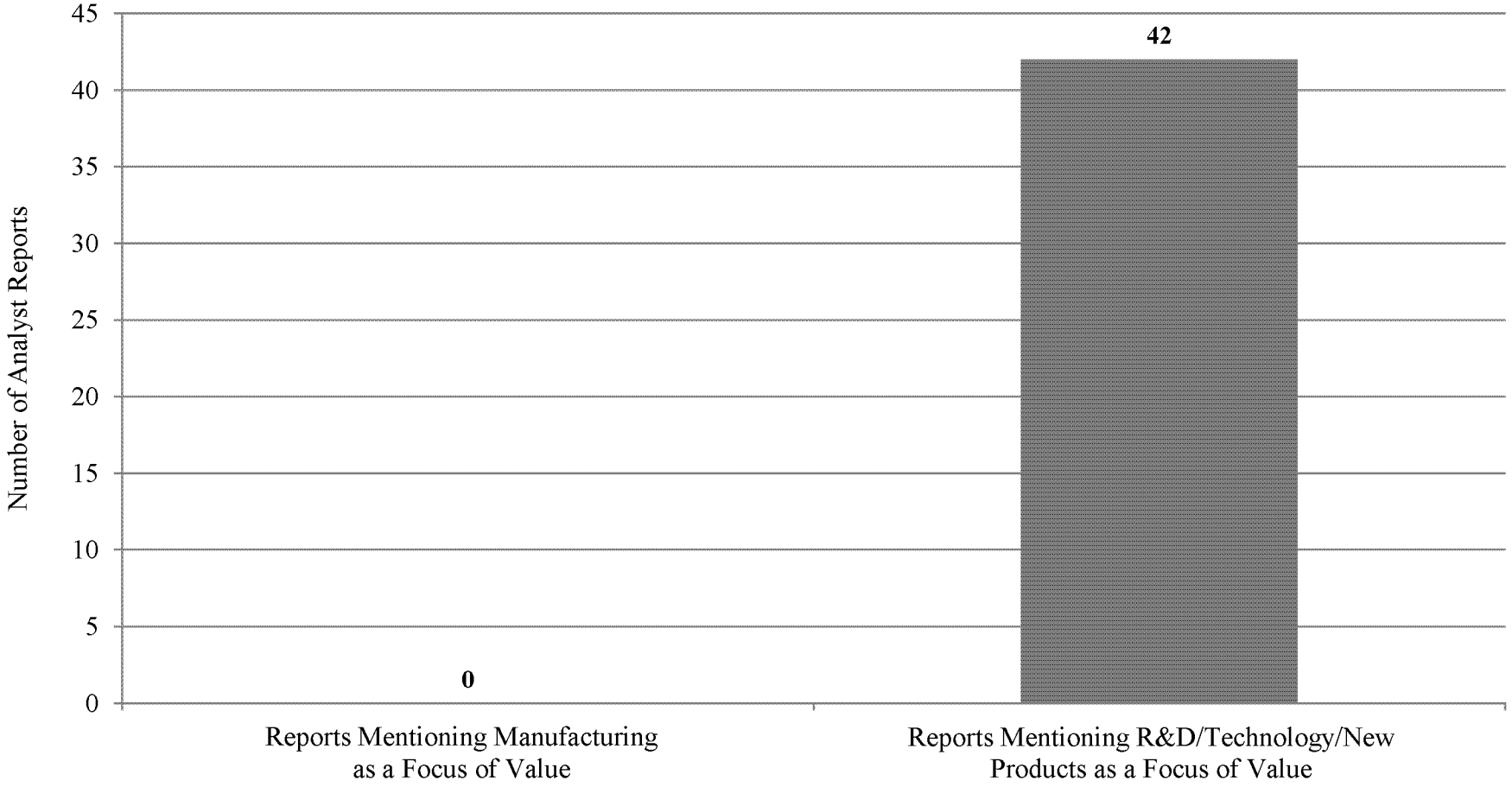


Source:
(1) **Table C7.**

Summary of Taxpayer Submissions: Tables 3-10

Table 3:

Focus of 42 MEDTRONIC Analyst Reports on Manufacturing or R&D/Technology/New Products



Note:
/1/: Includes all reports (written in the 2005-2006 period at issue) provided by the taxpayer, and supplemented by my own search through Thomson Reuters for any additional reports authored by Timothy Lee during period at issue. See Appendix B.

Table 4:

MEDTRONIC Acquisitions and Focus of Value: FY 2005-2006

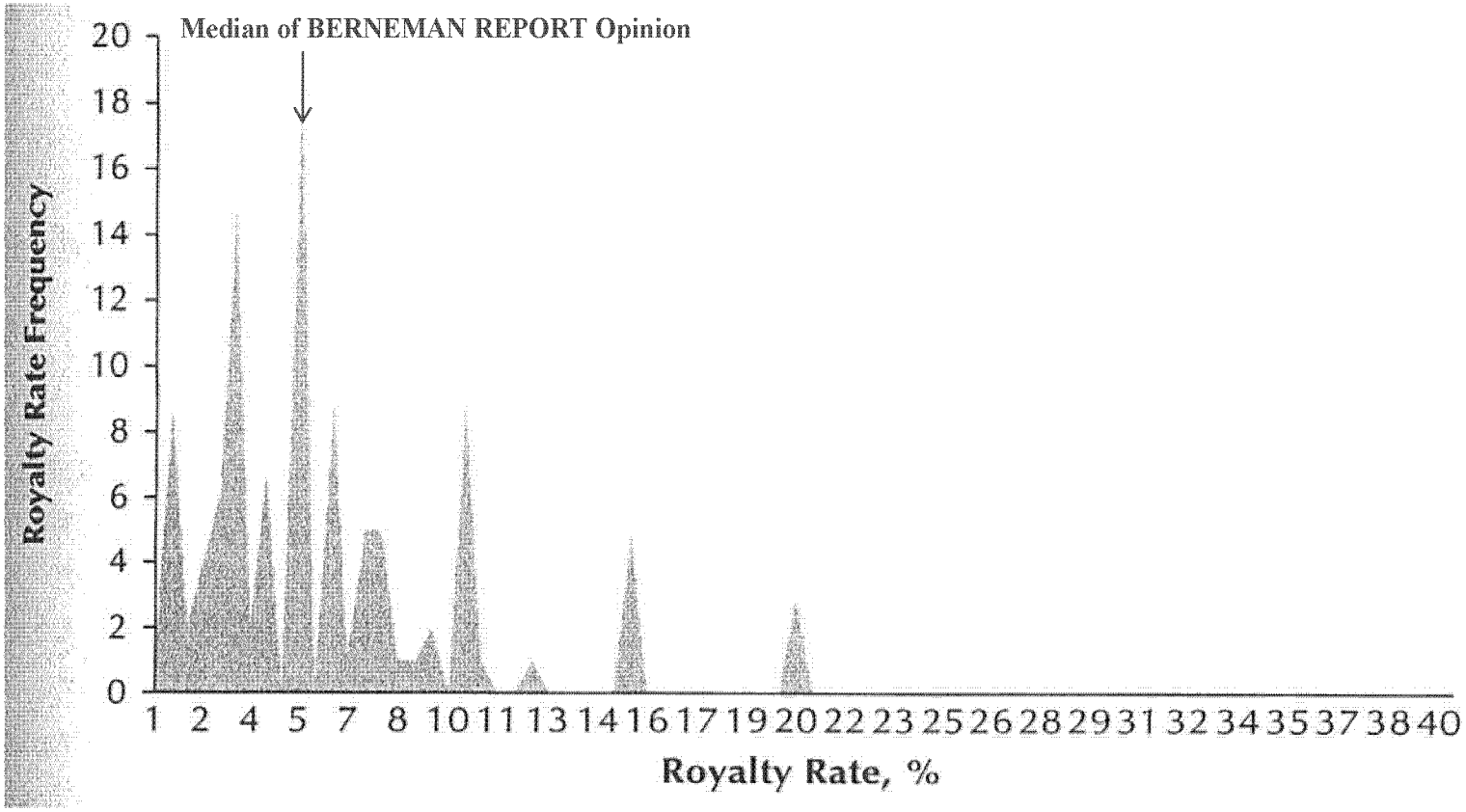
Company Acquired (USD Millions)	Acquisition Price	Intangible Value Booked to In Process R&D and Technology
Angiolink Corporation	$45.2	$62.5
Coalescent Surgical, Inc.	$65.1	$42.2
Image-Guided Neurologic, Inc.	$65.1	$22.2
Transneuronix, Inc.	$268.7	$223.1
Gary Michelson, M.D. and Karlin Technology /1/	$1,350.0	$802.6
Total	$1,794.1	**$1,152.6**

Note:
/1/: Acquisition of all of the spine-related intellectual property and related contracts, rights, and tangible materials owned by Gary Michelson, M.D. and Karlin Technology, Inc. Purchase price of $1,350.0 million includes $550.0 million assigned to the settlement of past damages between the two parties.

Sources:
(1) Medtronic, Inc. (June 25, 2007). Form 10-K for the Fiscal Year Ended April 27, 2007, p. 50.
(2) Medtronic, Inc. (June 28, 2006). Form 10-K for the Fiscal Year Ended April 28, 2006, pp. 46-50.

Table 5A:

The BERNEMAN REPORT's Graph of Medical Device Industry Royalties Used to Define Its Arm's Length Technology Royalty Rate Range



Sources:

(1) Parr, Russell L. and Gordon Smith. (2013). Intellectual Property: Valuation, Exploitation and Infringement Damages: 2013 Cumulative Supplement. Wiley: Hoboken, NJ, p. 111.

(2) Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," pp. 21-23.

Table 5B:

Comparison of MEDTRONIC Licenses at Issue and the Graph Benchmark Used by the BERNEMAN REPORT

Information Provided	Transactions at Issue	Taxpayer Industry Royalty Graph
Agreements Provided	✓	
Description of Product/Technology Licensed	✓	
Projected Profit Margins Listed	✓ (60 Percent)	
Ongoing R&D/Business Functions of the Licensor Listed	✓	
Dated Approximately 2004 or 2005	✓	
License for Rights to Market Leader of Implantable Cardiovascular Medical Devices	✓	
License for Artificial Blood, Birth Control Devices, Wound Treatments, etc.		✓
Non-Approved, Early Stage Technology		?

Sources:

(1) **Tables 1A, 2B & E1**.

(2) Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," pp. 21-23.

(3) Parr, Russell L. and Gordon Smith. (2013). Intellectual Property: Valuation, Exploitation and Infringement Damages: 2013 Cumulative Supplement. Wiley: Hoboken, NJ, pp. 111-113.

Table 5C:

Litigation Settlement Agreements Cited by Taxpayer (to Support its Graph) and Their Differences from MUS/MPROC

Characteristic	MUS/MPROC	Pacesetter Systems License Agreement	Edwards Lifesciences Corp. License Agreement
Profit Potential Margin	[redacted] Percent	Not Specified	Not Specified
Exclusivity	Yes	No	No
Context of License	Business Operations	Settlement	Settlement
Type of License	Single Agreement	Cross License	Cross License
Duties Performed by Licensor	Ongoing R&D, Manufacturing, Distribution	--	--
Time Period	1, 3 Years	10 Years	8 Years
Date	2004, 2005	*1992*	*2014*

Sources:
(1) **Tables C1 & E1**.
(2) Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," Exhibit 2-A, Appendix C.
(3) Agreement Between Siemens Aktiengesellschaft and Medtronic, Inc. (August 26, 1992). Settlement Agreement. MDT_LB00019822.
(4) Agreement Between Edwards Lifesciences Corporation and Medtronic, Inc. (May 19, 2014). Settlement Agreement. MDT_LB00019615.

Table 5D:

Agreements Cited by Taxpayer (to Support its Graph) with Some Sales Data Available

Characteristic	MUS/MPROC	Genetic Laboratories, Inc.	CardioVascular Dynamics
Sales Levels (Per Year)	[redacted] *billion*	$3 *million* /1/	$25 *million* /2/
Type of Agreement	--	Related Party /3/	--
Date	2004, 2005	1985	1998

Notes:

/1/: Refers to sales of some of the products included in this license agreement (*e.g.,* Peri-Guard and Flo-Rester). Sales data for other products included in the agreement were not publicly available. See Source (2) below.

/2/: That is, Guidant agreed to pay CardioVascular a minimum annual royalty of $250 thousand, associated with a one percent royalty rate.

/3/: That is, Bio-Vascular, Inc. acquired the cardiovascular business of Genetic Laboratories, Inc. in July 1985. See Source (6) below.

Sources:

(1) **Table C1**.

(2) Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," Exhibit 2-A, Appendix C.

(3) Synovis Life Technologies Inc. (December 23, 1997). Form 10-K for the Fiscal Year Ended October 31, 1997, p. 7.

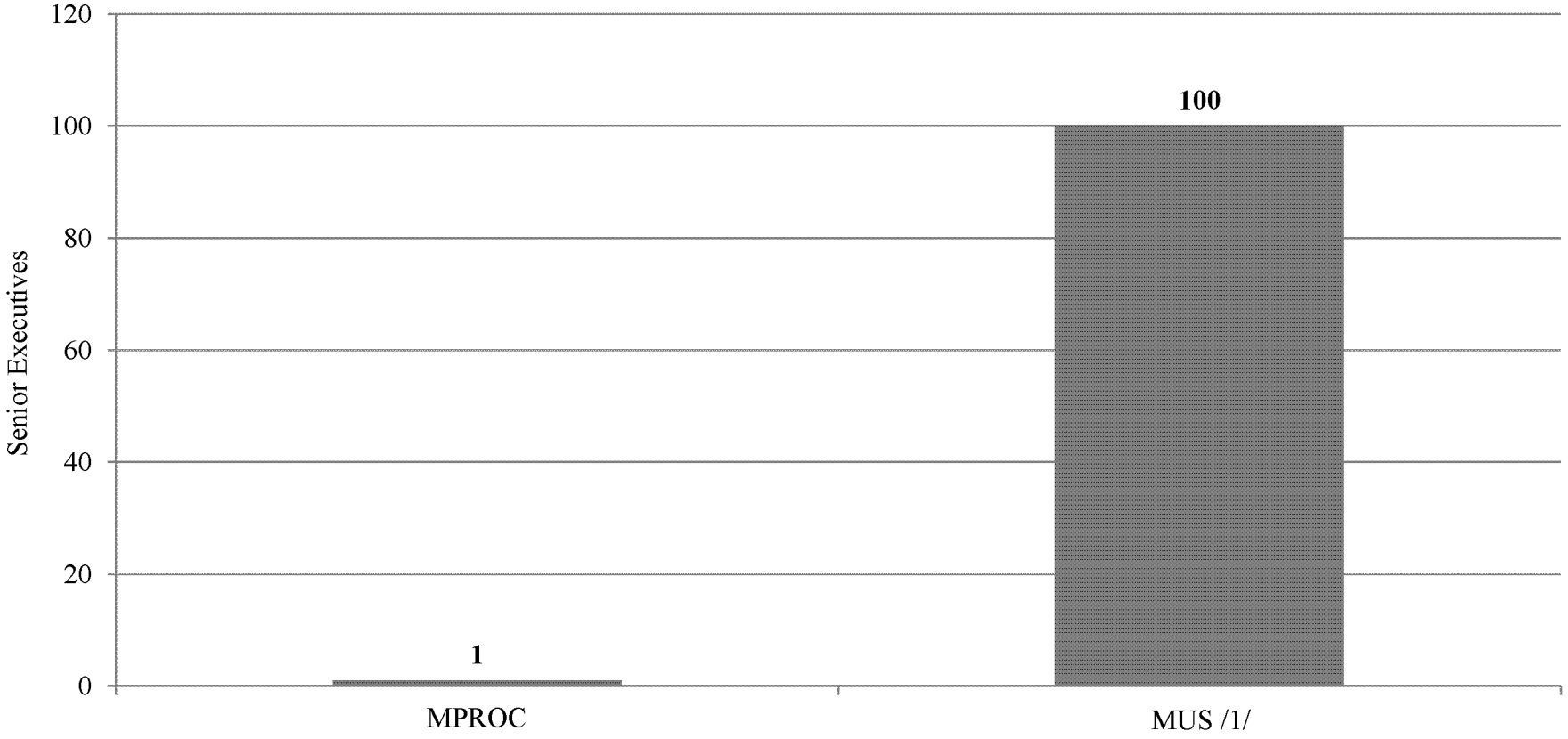
(4) Agreement Between Genetic Laboratories, Inc. and Bio-Vascular, Inc. (September 25, 1985). License Agreement. MDT_LB00011456.

(5) Agreement Between Cardiovascular Dynamics, Inc. and Guidant Corporation. (June 19, 1998). License Agreement. MDT_LB00024141.

(6) Bio-Vascular, Inc. (January 29, 1987). Form 10-K for the Fiscal Year Ended October 31, 1986, p. 22.

Table 6:

Number of Senior Executives (Vice President and Above) at MUS vs. MPROC: 2005



Notes:
/1/: Includes Vice Presidents, Sr. Counsel, Senior Vice Presidents, Presidents, and C-Level Executives in CRM or Neurological Businesses of MEDTRONIC. See Source (1) below.
/2/: Source (1) below was provided to me by the IRS on December 2, 2014.

Source:
(1) "Copy of Senior Personnel in MINC MUSA and MPROC 2005." Excel Spreadsheet.

Table 7:

Sample Summary of "Specs" and Tolerance Ranges for an MPROC Manufactured Lead

TEST	METHOD	SPECIFICATION
Description / Visual	LL-0292	Cardiac lead with a white to off-white residue on the electrode tip.
Identity / HPLC	LL-0276	The retention time of the beclomethasone (BDP) peak in the assay sample preparation is within ± 10% of the mean retention time of the BDP peak in the system suitability injections.
Assay / HPLC	LL-0276	85.0 to 115.0% Label Claim
Content Uniformity / HPLC	LL-0276	TIER 1: 9 of 10 dosage units must lie within the range of 80 to 120% of label claim No unit shall fall outside the range of 75 to 125% of label claim The RSD of the 10 dosage units shall be less than or equal to 10% TIER 2: If 2 or 3 dosage units are outside the range of 80 to 120% of label claim, but not outside the range of 75 to 125% of label claim, Or If the relative standard deviation (RSD) is greater than 10%, Or If both conditions prevail, then test 20 additional units to the following requirements: Not more than 3 units of the 30 shall fall outside the range of 80 to 120% of label claim. No unit shall fall outside the range of 75 to 125% of label claim. The RSD of the 30 dosage units shall be less than or equal to 13%.

Source:

(1) Medtronic, Inc. (December 26, 2006). Original PMA for the Medtronic® Attain StarFix™ Model4195 Lead. MDT_TC00093258.

Table 8:

Bargaining Dynamics for MUS License to MPROC

Function, Asset	Owned By: MUS	Owned By: MPROC
Existing Product IP (Patents, Specs, etc.)	●	○
Licensable Business with Projected [redacted]% Profit Margins	●	○
Product Trademarks	●	○
Facility/Intent to Perform Future R&D	●	○
Selling/Marketing Operations	●	○
Component Manufacturing Facilities	●	○
Finished Devices Facilities /1/	●	●
Finished Leads Facilities /1/	○	●

Note:
/1/: It is my understanding that MUS had access to a Devices plant in Switzerland, and had the ability/knowledge to build a plant, retrofit a plant, or license out to a third party in order to perform the final Leads manufacturing.

Source:
(1) **Tables 1A & 2B**.

Table 9:

Characteristics of the Actual Transaction between MUS and MPROC

Characteristics	MUS	MPROC	Source
Transactions			
Outbound (U.S.) Intercompany Transactions	Licenses Out Technology/Specs/Tradename; Sells Components	Licenses In Technology/Specs/Tradename; Buys Components	(1)-(4)
Inbound (U.S.) Intercompany Transactions	Buys Finished Products	Sells Finished Products	(5)-(7)
Bargaining Power in License	✓		Table 8
Major Characteristics of Parties			
Part of Multinational?	✓	✓	(5)
Ultimate Parent	Medtronic, Inc.	Medtronic, Inc.	(5)
Description	U.S. Subsidiary of Medtronic, Inc.	Puerto Rican Subsidiary of Medtronic, Inc.	(5)
Products at Issue	Devices and Leads	Devices and Leads	(1)-(2)
Projected Operating Profit Margin for Licensee	Approximately 60 Percent		Table E1
Owner of Historic R&D/Patents/Technology	✓		(6)-(7)
Performs Product R&D After License	✓		Table 2B
Creator/Controller of Product Specifications, Tolerances	✓		(6)-(7)
Owns Component Manufacturing Facility	✓		Tables 2B & 8
Owns Devices Manufacturing Facility	✓	✓	Table 8
Owns Leads Manufacturing Facility		✓	Table 8
Financial Results			
Share of Ongoing (System) Costs	88.7%	11.3%	Table 2B
Business Above Profit Expectations During License	N/A	No	Table E1

Sources:

(1) Agreement between Medtronic Inc. and Medtronic Puerto Rico Operations Co. (September 30, 2001). Device License Agreement, pp. 1-2, 6 (MDT_TC00004173-MDT_TC00004174, MDT_TC00004178).

(2) Agreement between Medtronic Inc. and Medtronic Puerto Rico Operations Co. (September 30, 2001). Leads License Agreement, pp. 1-2, 6 (MDT_TC00004350-MDT_TC00004351, MDT_TC00004355).

(3) Agreement between Medtronic Inc. and Medtronic Puerto Rico Operations Co. (September 30, 2001). Trademark and Trade Name License Agreement, pp. 1-2 (MDT_TC00015719-MDT_TC00015720).

(4) Agreement between Medtronic Inc. and Medtronic Puerto Rico Operations Co. (September 30, 2001). Supply Agreement, pp. 1-2 (MDT_TC00016757-MDT_TC00016758).

(5) Kennelly, Mike. (October 22, 2014). "Medtronic, Inc. v. Commissioner-TC Dkt. No. 6944-11: Expert Report of Mike Kennelly," pp. 5, 7.

(6) Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2005). Amended and Restated License Agreement, pp. 1-3 (MDT_TC00004364-MDT_TC00004366).

(7) Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2005). Amended and Restated License Agreement, pp. 1-3 (MDT_TC00004186-MDT_TC00004188).

Table 10:

Characteristics of the Hypothetical Transaction between a Licensor and Licensee

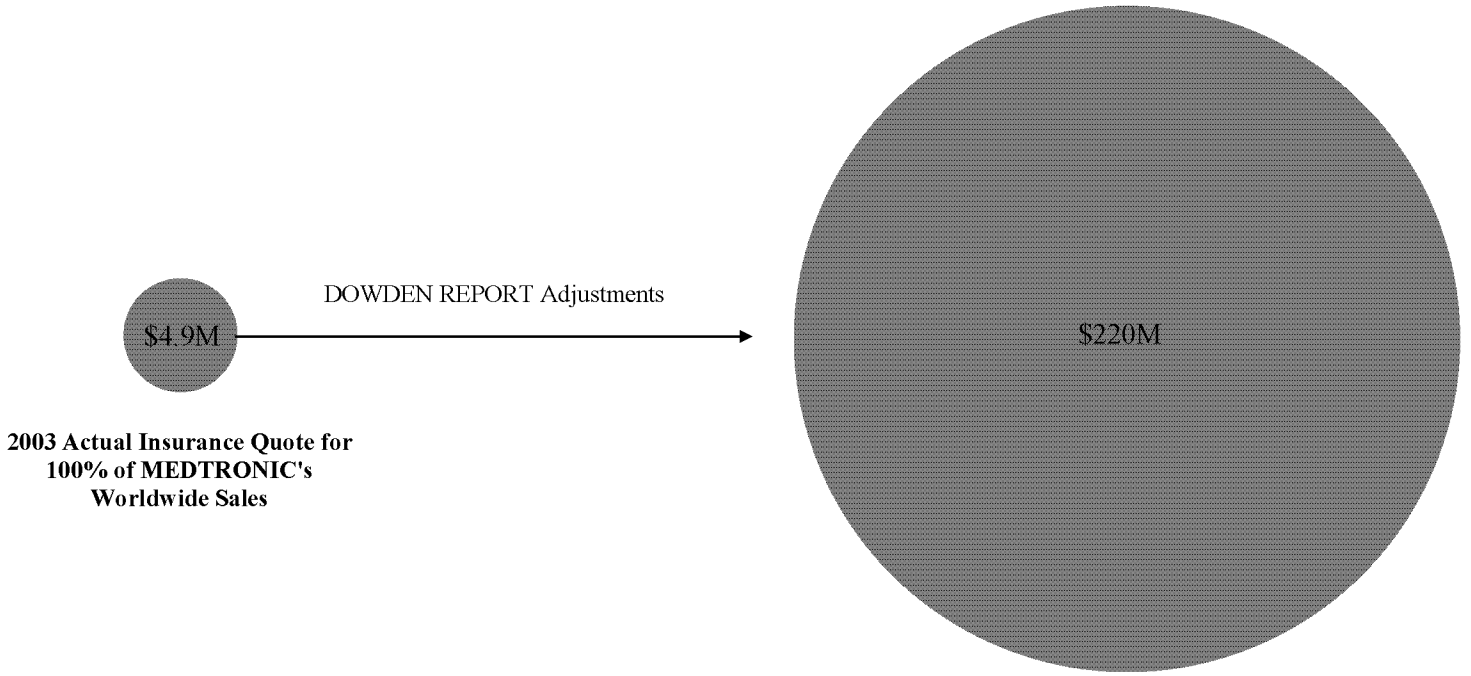
Characteristics	Licensor	Licensee
Transactions		
Outbound (U.S.) Transactions	Licenses Out Technology/Specs/Tradename; Sells Components	Licenses In Technology/Specs/Tradename; Buys Components
Inbound (U.S.) Transactions	Buys Finished Products	Sells Finished Products
Bargaining Power in License	✓	
Major Characteristics of Parties		
Part of Multinational?	✓	✓
Ultimate Parent	Multinational A	Multinational B
Description	U.S. Subsidiary of Multinational A	Puerto Rican Subsidiary of Multinational B
Products at Issue	Devices and Leads	Devices and Leads
Projected Operating Profit Margin for Licensee	Approximately 60 Percent	
Owner of Historic R&D/Patents/Technology	✓	
Performs Product R&D After License	✓	
Creator/Controller of Product Specifications, Tolerances	✓	
Owns Component Manufacturing Facility	✓	
Owns Devices Manufacturing Facility	✓	✓
Owns Leads Manufacturing Facility		✓
Financial Results		
Share of Ongoing (System) Costs	88.7%	11.3%
Business Above Profit Expectations During License	N/A	No

Critical Analysis of Taxpayer Submissions: Tables 11-14B

Precision Economics, LLC

Table 11:

DOWDEN REPORT Estimation of Value of Implied Insurance Savings (to MUS) by MPROC on System/Supply Chain at Issue

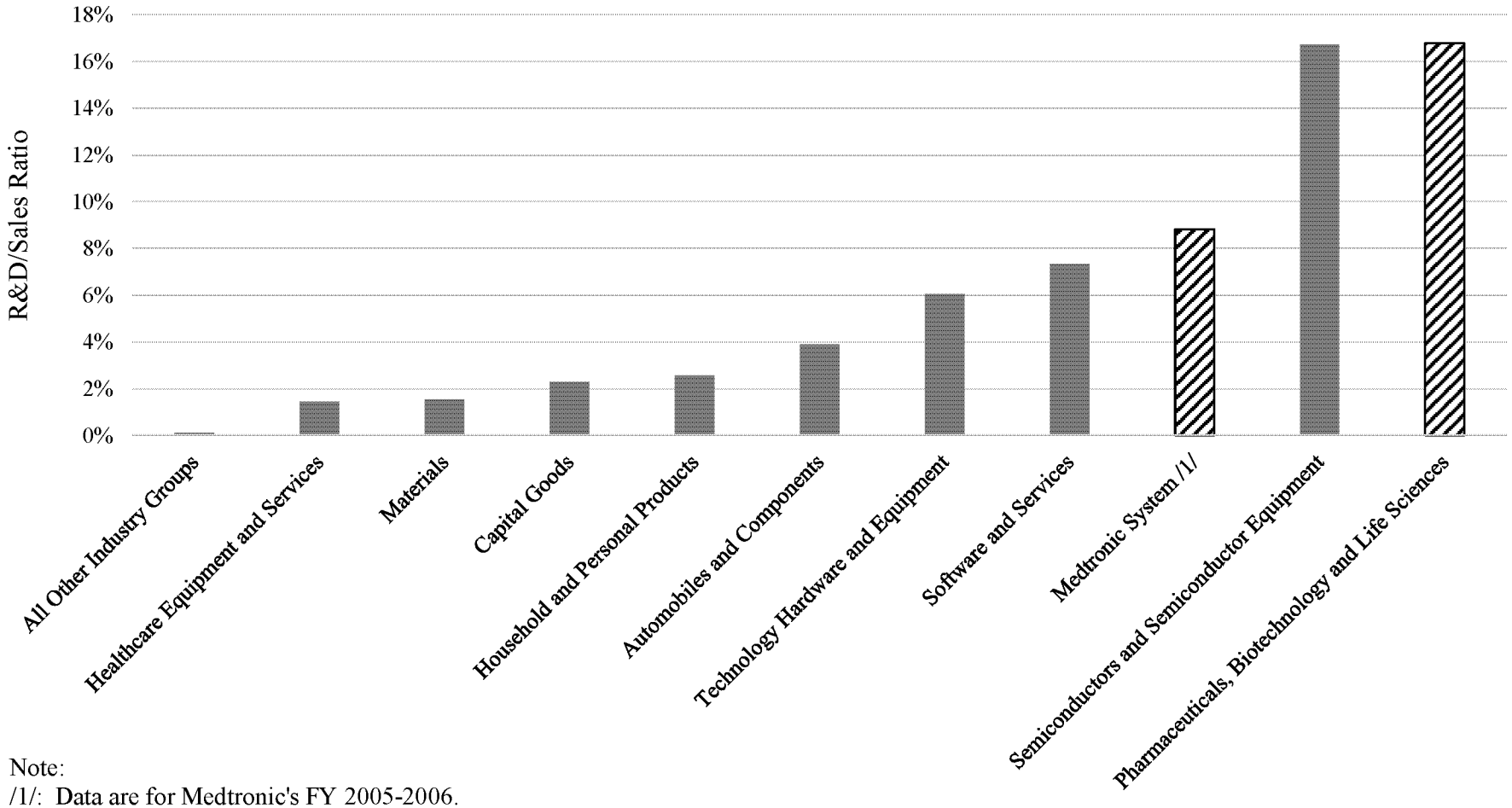


Note:
/1/: The DOWDEN REPORT's adjustments result in a range of approximately $220M to $235M.

Sources:
(1) **Table C1**.
(2) Medtronic, Inc. (June 28, 2006). Form 10-K for the Fiscal Year Ended April 28, 2006, p. 34.
(3) Dowden, Paul D. (October 15, 2014). "Medtronic, Inc. v. Commissioner-Tax Court Dkt. No. 6944-11: Expert Report of Paul D. Dowden," pp. 22, 34.

Table 12A:

U.S. R&D Expenses by Industry Group Compared to MEDTRONIC: 2001-2005

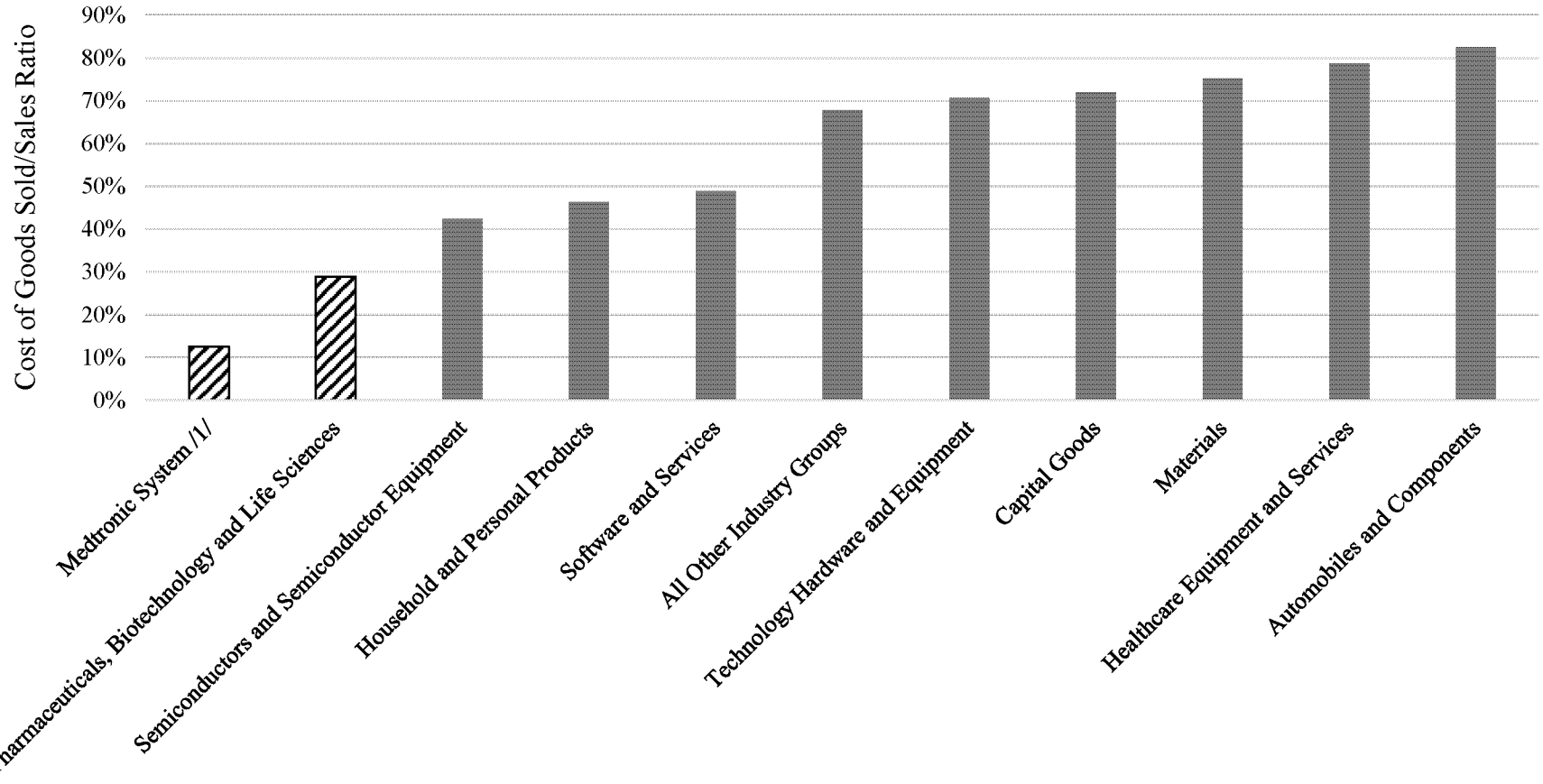


Note:
/1/: Data are for Medtronic's FY 2005-2006.

Sources:
(1) **Tables C1 & C4**.
(2) Standard & Poor's. (September 30, 2014). Compustat (North America) Database.

Table 12B:

U.S. Cost of Goods Sold by Industry Group Compared to MEDTRONIC: 2001-2005



Note:
/1/: Data are for Medtronic's FY 2005-2006.

Sources:
(1) **Tables C1-C3**.
(2) Standard & Poor's. (September 30, 2014). Compustat (North America) Database.

Table 13A:

Operating Margin for All U.S. Independent Medical Device Companies with Sales Above $500 Million Annually: Fiscal Years 2005-2006

Benchmark Companies	Operating Profit to Sales (Pre-R&D) /1/
MEDTRONIC INC	**40.8%**
ZIMMER HOLDINGS INC	39.0%
ST JUDE MEDICAL INC	38.1%
BOSTON SCIENTIFIC CORP	38.1%
BIOMET INC	31.4%
BARD (C.R.) INC	30.8%
RESMED INC	29.9%
EDWARDS LIFESCIENCES CORP	27.6%
STRYKER CORP	26.7%
VARIAN MEDICAL SYSTEMS INC	26.6%
BECTON DICKINSON & CO	24.6%
ADVANCED MEDICAL OPTICS INC	23.9%
RESPIRONICS INC	20.6%
DENTSPLY INTERNATL INC	20.4%
VIASYS HEALTHCARE INC	16.1%
CONMED CORP	15.3%
MSA SAFETY INC	15.2%
STERIS CORP	14.7%
ARMOR HOLDINGS INC	13.2%
TELEFLEX INC	10.5%
APRIA HEALTHCARE GROUP INC	9.9%
INVACARE CORP	7.5%

Statistics	
Minimum	7.5%
Bottom of Interquartile Range	15.2%
Median	**24.2%**
Top of Interquartile Range	30.8%
Maximum (MEDTRONIC)	40.8%
MEDTRONIC System Profit at Issue	[redacted]

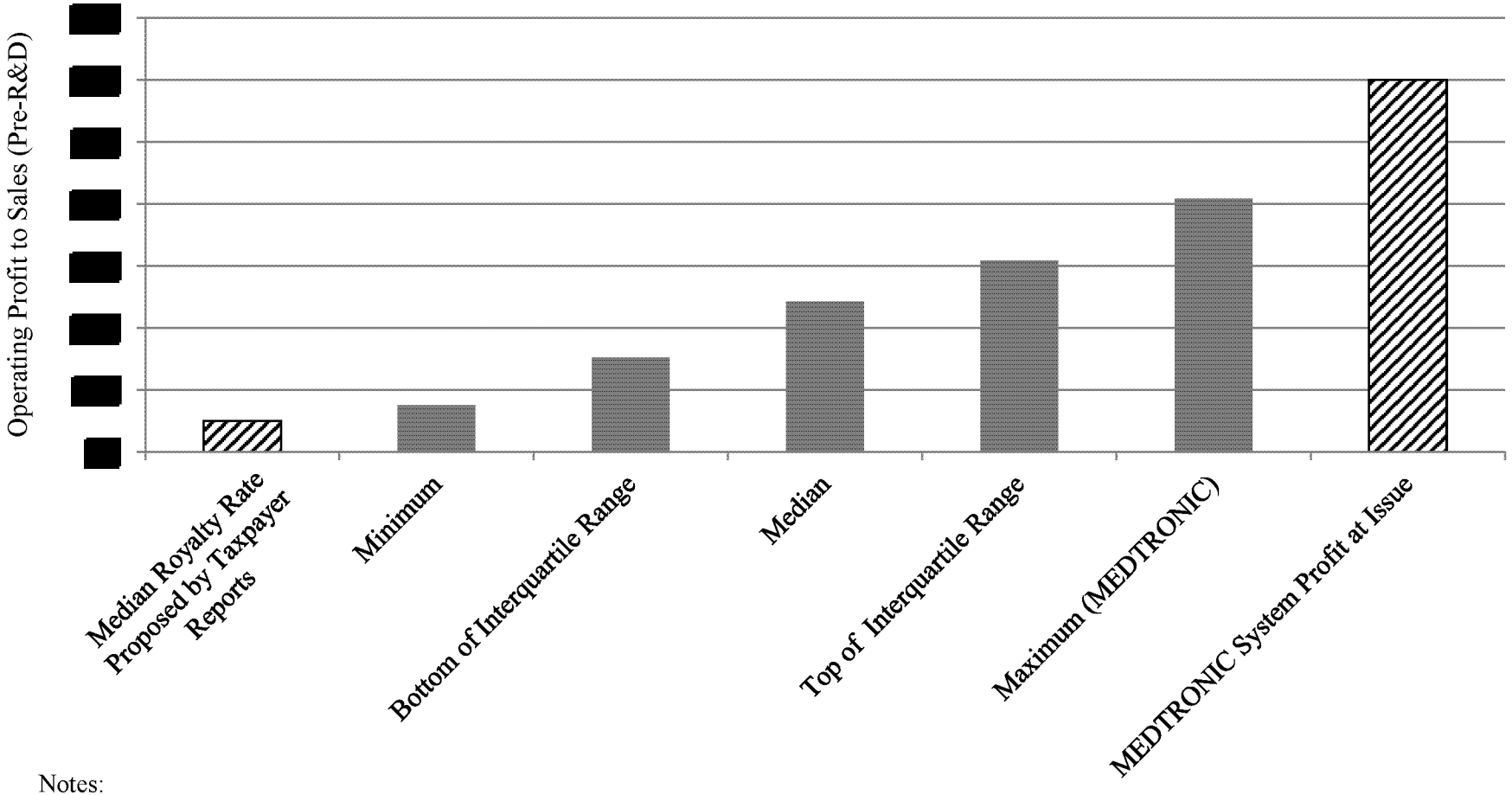
MEDTRONIC products at issue [redacted] times as profitable as industry median.

Notes:
/1/: R&D expense does not include in process R&D expense.
/2/: Search was performed using the following SIC codes: 3821, 3841, 3842, 3843, and 3845.

Sources:
(1) Standard & Poor's. (July 31, 2014). Compustat (Global) Database.
(2) Standard & Poor's. (September 30, 2014). Compustat (North America) Database.
(3) **Table E1**.

Table 13B:

BERNEMAN REPORT Royalty Opinion Compared to Profitability of Medical Device Companies: Fiscal Years 2005-2006



Notes:
/1/: All U.S. companies with $500 million or more in annual sales: FY2005-2006.
/2/: Search was performed using the following SIC codes: 3821, 3841, 3842, 3843, and 3845.

Source:
(1) **Tables 13A & 5A**.

Table 13C:

Operating Margins for U.S. Independent Medical Device Companies With Limited R&D and Sales Above $100 Million Annually: Fiscal Years 2005-2006

Benchmark Companies /1/	Operating Profit to Sales (Pre-R&D)
SYMMETRY MEDICAL INC	16.9%
ARMOR HOLDINGS INC	13.2%
MEDICAL ACTION INDUSTRIES	11.5%
TELEFLEX INC	10.5%
APRIA HEALTHCARE GROUP INC	9.9%
INVACARE CORP	7.5%
POINT BLANK SOLUTIONS INC	3.5%
Statistics	
Minimum	3.5%
Bottom of Interquartile Range	7.5%
Median	**10.5%**
Top of Interquartile Range	13.2%
Maximum	16.9%

Notes:
/1/: Companies with $100 million in annual sales and R&D of less than 2 percent of sales.
/2/: Search was performed using the following SIC codes: 3821, 3841, 3842, 3843, and 3845.

Source:
(1) Standard & Poor's. (July 31, 2014). Compustat (Global) Database.

Table 14A:

Cardiac Rhythm Management Market Shares with Limited New Entrants: 2004-2006

Company	2004	2005	2006 /1/
MEDTRONIC	46%	47%	47%
GUIDANT	27%	23%	23%
ST JUDE	18%	21%	22%
All Other Combined	**9%**	**8%**	**8%**

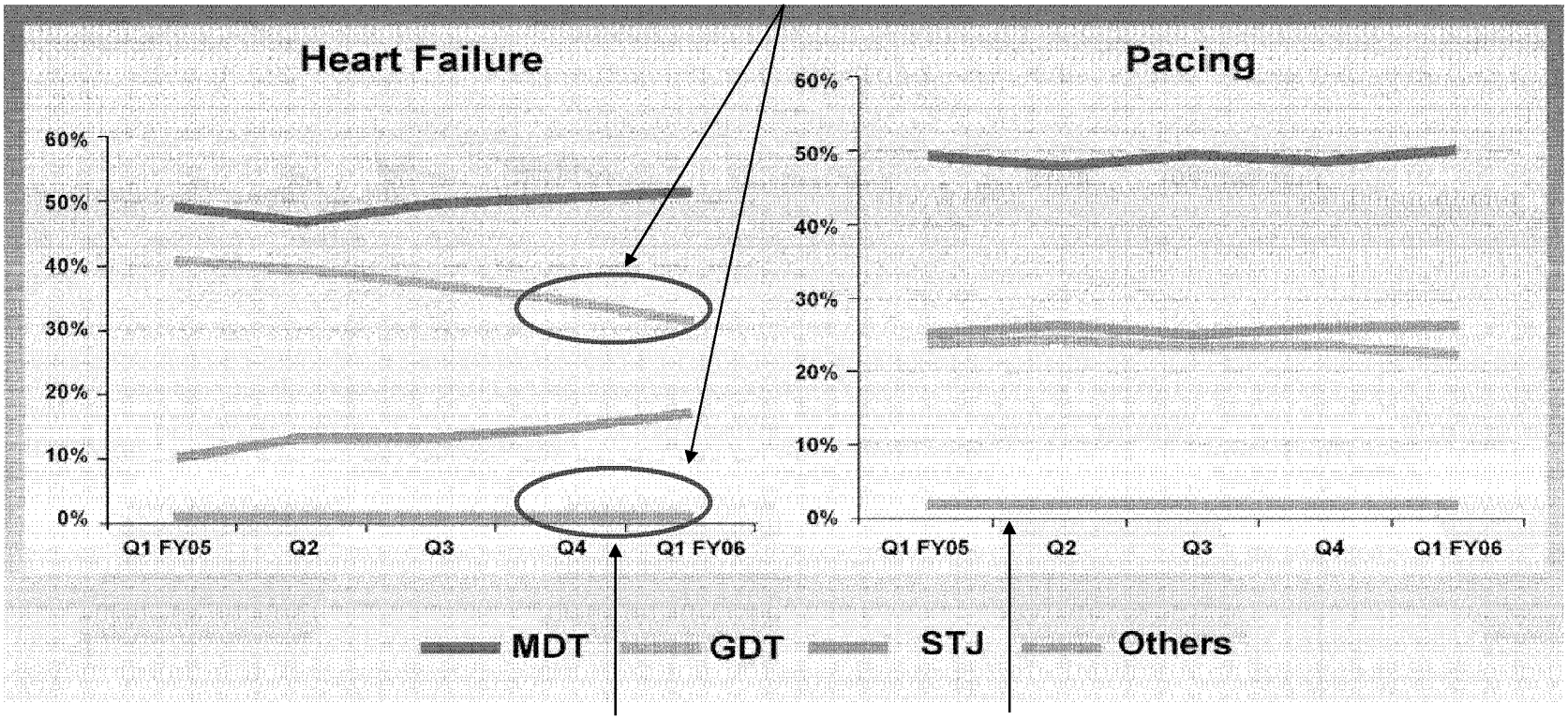
Note:
/1/: Estimated value.

Source:
(1) JP Morgan. (January 3, 2006). "The MedTech Monitor," Table 186.

Table 14B:

MEDTRONIC's Presentation of Heart Failure and Pacing Market Shares with Limited New Entrants: 2005-2006

Guidant loses significant market share, but new companies do *not* gain



Strong Entry Barriers For Companies Competing Against MEDTRONIC, Guidant, and St. Jude

Source:

(1) Mahle, Stephen. (October 2005). "Investments and Innovation at Work." Medtronic, Inc., Slide 10 (MDT_TC00288868).

APPENDICES

APPENDIX A

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EDUCATION

The Wharton School of the University of Pennsylvania, Philadelphia, PA

- Ph.D., Applied Economics (1993)
- M.A., Applied Economics (1991)

The Johns Hopkins University, Baltimore, MD

- B.A., Applied Mathematics, Economics (1988)

PRESENT POSITION

PRECISION ECONOMICS, LLC, Washington, DC, Founded in 2001
President

EXPERT TESTIMONY, SUBMISSIONS AND HEARINGS

1) "Affidavit of Brian Charles Becker in Support of Notice of Appeal Against Appealable Objection Decision Under Section 14ZZ of the Taxation Administration Act 1953 Affirmed on 28 July 2014," Federal Court of Australia, New South Wales District Registry, Between Chevron Australia Holdings Pty Ltd, Applicant, and The Commissioner of Taxation of the Commonwealth of Australia, Respondent, No. NSD 569 of 2012, No. NSD 151 of 2013, July 28, 2014, Direct and Cross Examination Testimony, Sydney, Australia, October 14-16, 2014.
2) "Affidavit of Brian Charles Becker in Support of Notice of Appeal Against Appealable Objection Decision Under Section 14ZZ of the Taxation Administration Act 1953 Affirmed on 10 March 2014," Federal Court of Australia, New South Wales District Registry, Between Chevron Australia Holdings Pty Ltd, Applicant, and The Commissioner of Taxation of the Commonwealth of Australia, Respondent, No. NSD 569 of 2012, No. NSD 151 of 2013, March 10, 2014, Direct and Cross Examination Testimony, Sydney, Australia, October 14-16, 2014.
3) "Affidavit of Brian Charles Becker in Support of Notice of Appeal Against Appealable Objection Decision Under Section 14ZZ of the Taxation Administration Act 1953 Affirmed on 6 March 2014," Federal Court of Australia, New South Wales District Registry, Between Chevron Australia Holdings Pty Ltd, Applicant, and The Commissioner of Taxation of the Commonwealth of Australia, Respondent, No. NSD 569 of 2012, No. NSD 151 of 2013, March 6, 2014, Direct and Cross Examination Testimony, Sydney, Australia, October 14-16, 2014.
4) "Rebuttal Statement of Brian C. Becker," AZSA Holdings Pty Ltd vs. Commissioner of Taxation, Administrative Appeals Tribunal, Taxation Appeals Division, New South Wales District Registry, AAT Proceedings 2010/3229-3232, March 6, 2014.
5) "Declaration of Brian C. Becker in Support of Ricoh Company, Ltd.'s Motion for Relief from Judgment," United States District Court, Southern District of New York, Case No. 12-CV-3109 (DLC), February 26, 2014.

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6) "Rebuttal Analysis of Expert Report and Videotaped Deposition Testimony of Michael G. Kessler," United States District Court, Southern District of California, Case No. 12-CV-2188-GPC (BGS), February 3, 2014.
7) "Economic Analysis of Intercompany Transfers Between Altec Lansing, LLC and Altec Lansing, BV: 2010-2012," United States District Court, Southern District of California, Case No. 12-CV-2188-GPC (BGS), December 9, 2013.
8) "Expert Report in Eastman Kodak Company, Plaintiff v. Ricoh Company, Ltd., Defendant," United States District Court, Southern District of New York, Case No. 12-CV-3109, September 23, 2013 Supplement, October 12, 2013 Second Supplement.
9) "Economic Analysis of Intercompany Transactions Between DeCoro USA and DeCoro Ltd.: 2004-2007." United States Bankruptcy Court, Middle District of North Carolina In Re: DeCoro USA, Ltd., Debtor, Chapter 11 Bankruptcy Case No. 09-10846, September 11, 2012, Direct and Cross Examination Testimony, Greensboro, NC, September 24, 2013.
10) "Affidavit of Brian Charles Becker in Support of Notice of Appeal Against Appealable Objection Decision Under Section 14ZZ of the Taxation Administration Act 1953 Affirmed on 2 August 2013," Federal Court of Australia, New South Wales District Registry, Between Chevron Australia Holdings Pty Ltd, Applicant, and The Commissioner of Taxation of the Commonwealth of Australia, Respondent, No. NSD 569 of 2012, No. NSD 151 of 2013, August 2, 2013, Direct and Cross Examination Testimony, Sydney, Australia, October 14-16, 2014.
11) "Expert Report in Eastman Kodak Company, Plaintiff v. Ricoh Company, Ltd., Defendant," United States District Court, Southern District of New York, Case No. 12-CV-3109, July 8, 2013, Deposition Testimony, Washington, DC, August 8, 2013.
12) "141 Repellent, Inc., Plaintiff v. International Flavors & Fragrances, Inc., Defendant and Counterclaim Plaintiff v. Dennis Tracz, Counterclaim Defendant" United States District Court, District of Western Virginia, Between 141 Repellent, Inc., Plaintiff, and International Flavors & Fragrances, Inc., Defendant, Case No. 6:12-00054 (NKM), June 14, 2013.
13) "Economic Analysis of Intercompany Transactions Between DeCoro USA and DeCoro Ltd.: 2004-2007." United States Bankruptcy Court, Middle District of North Carolina In Re: DeCoro USA, Ltd., Debtor, Chapter 11 Bankruptcy Case No. 09-10846, September 11, 2012, Deposition Testimony, Washington, DC, November 2, 2012.
14) "Altana Pharma AG and Wyeth vs. Teva Pharmaceuticals USA, Inc., et al., Altana Pharma AG and Wyeth vs. Sun Pharmaceuticals Industries, Ltd., et al." United States District Court, District of New Jersey Between Altana Pharma AG, and Wyeth, Plaintiffs, and Teva Pharmaceuticals USA, Inc., et al., Defendants, May 4, 2012 Supplement, Deposition Testimony, Washington, DC, May 10, 2012.
15) "Altana Pharma AG and Wyeth vs. Teva Pharmaceuticals USA, Inc., et al., Altana Pharma AG and Wyeth vs. Sun Pharmaceuticals Industries, Ltd., et al." United States District Court, District of New Jersey Between Altana Pharma AG, and Wyeth, Plaintiffs, and Teva Pharmaceuticals USA, Inc., et al., Defendants, March 15, 2012, Deposition Testimony, Washington, DC, May 10, 2012.

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16) "Economic Analysis of Receivables Transactions Involving McKesson Canada Corporation and McKesson International Holdings III S.ar.l.: Fiscal Year 2003," Tax Court of Canada Between McKesson Canada Corporation, Appellant, and Her Majesty the Queen, Respondent, Court Files No. 2008-2949(IT)G and 2008-3471(IT)G, April 4, 2011, Direct and Cross Examination Testimony, Toronto, Canada, November 1-16, 2011.

17) "Rebuttal Economic Analysis of Receivables Transactions Involving McKesson Canada Corporation and McKesson International Holdings III S.ar.l.: Fiscal Year 2003," Tax Court of Canada Between McKesson Canada Corporation, Appellant, and Her Majesty the Queen, Respondent, Court Files No. 2008-2949(IT)G and 2008-3471(IT)G, May 18, 2011, Direct and Cross Examination Testimony, Toronto, Canada, November 1-16, 2011.

18) "Brief of Dr. Brian C. Becker, Dr. Sara Fisher Ellison, and Dr. Joseph R. Mason as *Amici Curiae* in Support of Petitioners," In the Supreme Court of the United States, No. 10-1173, April 25, 2011.

19) "Valuation of Nortel Networks U.K. Limited and Nortel Networks Corporation as of June 30, 2008," In the Matter of a Plan of Compromise or Arrangement of Nortel Networks Corporation, et. al., Application Under the Companies' Creditors Arrangement Act, R.S.C. 1985, C. C-36, As Amended, Ontario Superior Court of Justice, Court File No. 09-CL-7950, Toronto, Canada, November 30, 2010.

20) "Valuation Expert Report," DDRA CAPITAL, INC. and JOHN BALDWIN, Plaintiffs v. KPMG, LLP, Defendant, Civil Action No. 2004/0158, BEFORE THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF THE VIRGIN ISLANDS, DIVISION OF ST. CROIX, October 8, 2010, Deposition Testimony, Washington, DC, November 10, 2010, Declaration, March 11, 2011.

21) "Valuation Expert Report," United States District Court, Southern District of Florida, Miami Division, Marine Hose Antitrust Litigation, Master Docket No. 08-MDL-1888-GRAHAM/TURNOFF, June 16, 2010, Deposition Testimony, Washington, DC, July 9, 2010.

22) "Second Statement of Brian Charles Becker," Federal Court of Australia, New South Wales District Registry, Between Devereaux Holdings Pty Limited, Applicant, and The Commissioner of Taxation of the Commonwealth of Australia, Respondent, June 30, 2010.

23) "Statement of Brian Charles Becker," Federal Court of Australia, New South Wales District Registry, Between Devereaux Holdings Pty Limited, Applicant, and The Commissioner of Taxation of the Commonwealth of Australia, Respondent, March 31, 2010.

24) "Economic Analysis of the Transfer Prices Between Weekend Warrior Trailers, Inc. and Leading Edge Designs, Inc.: 2002-2004," United States Tax Court, Weekend Warrior Trailer, Inc. et. al., Petitioner, v. Commissioner of Internal Revenue, Respondent, Docket Numbers 6984-08, 6997-08, and 15166-08, January 22, 2010, Direct and Cross Examination Testimony, San Diego, CA, February 23, 2010.

25) "Third Statement of Brian C. Becker," Federal Court of Australia, Victoria District Registry, Between SNF (Australia) PTY Limited, Applicant, and The Commissioner of Taxation of the Commonwealth of Australia, Respondent, May 15, 2009, VID 132 of 2008, 2011 ATC 20-265, Direct and Cross Examination Testimony, Melbourne, Australia, July 29-30, 2009.

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26) "Second Statement of Brian C. Becker," Federal Court of Australia, Victoria District Registry, Between SNF (Australia) PTY Limited, Applicant, and The Commissioner of Taxation of the Commonwealth of Australia, Respondent, March 23, 2009, VID 132 of 2008, 2011 ATC 20-265, Direct and Cross Examination Testimony, Melbourne, Australia, July 29-30, 2009.

27) "Statement of Brian C. Becker," Federal Court of Australia, Victoria District Registry, Between SNF (Australia) PTY Limited, Applicant, and The Commissioner of Taxation of the Commonwealth of Australia, Respondent, March 2, 2009, VID 132 of 2008, 2011 ATC 20-265, Direct and Cross Examination Testimony, Melbourne, Australia, July 29-30, 2009.

28) "Economic Analysis of the Taxpayer's Expert Reports in the Matter of Guarantees Made by General Electric Capital Corporation to General Electric Capital Canada, Inc.: 1996–2000," General Electric Capital Canada Inc. v. Her Majesty the Queen, Tax Court of Canada, 2006-1385(IT)G, May 7, 2009, Direct and Cross Examination Testimony, Toronto, Canada, June 17, 2009.

29) "Economic Analysis of the Guarantees Made by General Electric Capital Corporation to General Electric Capital Canada, Inc.: 1996–2000," General Electric Capital Canada Inc. v. Her Majesty the Queen, Tax Court of Canada, 2006-1385(IT)G, April 14, 2009, Direct and Cross Examination Testimony, Toronto, Canada, June 17, 2009.

30) "Damages Rebuttal Expert Report," United States District Court, Southern District of Florida, Case No. 07-80826, June 16, 2008, Deposition Testimony, Washington, DC, June 27, 2008.

31) "Statement of Brian C. Becker," Roche Products Pty. Ltd. vs. Federal Commissioner of Taxation, Administrative Appeals Tribunal, Taxation Appeals Division, New South Wales District Registry, NO NT7 AND NT56-65 OF 2005, August 30, 2007, Direct and Cross Examination Testimony, Sydney, Australia, February 20-21, 2008.

32) "Leslie J. Leff et. al., v. Morgan Lewis & Bockius, LLP: Valuation Expert Report", JAMS Arbitration Hearing, March 15, 2007, Direct and Cross Examination Testimony, Philadelphia, PA, April 19, 2007.

33) "Assessing the Impact of Revoking Antidumping Orders on Canned Pineapple Fruit from Thailand on the Domestic Industry," in Canned Pineapple Fruit from Thailand, Investigations No. 731-TA-706 (Second Review), United States International Trade Commission, with A. Parsons, January 5, 2007.

34) "Economic Analysis of Transfer Prices and Royalties for Licensed Pharmaceutical Products Between Glaxo, Inc. and Related Entities: July 1, 1988 - December 31, 2000," GlaxoSmithKline Holdings (Americas) Inc., Petitioner v. Commissioner of Internal Revenue, Respondent, United States Tax Court, 117 T.C. No. 1, August 29, 2006.

35) "Affidavit of Brian C. Becker, Ph.D. in Support of Plaintiffs' Initial Discovery Plan," in CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM, On Behalf of Itself and All Others Similarly Situated vs. THE NEW YORK STOCK EXCHANGE, INC., et. al., United States District Court, Southern District of New York, Civil Action No. 03-CV-9968-UA, May 23, 2006.

36) "Affidavit of Brian C. Becker" and "Economic Analysis of Sales Dispersion And "Make-Up" Sales," in Re Appraisal Between, DUANE READE, INC., and ST. PAUL FIRE AND MARINE

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INSURANCE COMPANY, December 16, 2004, Appraisal Panel Hearing, Direct and Cross Examination Testimony, New York, NY, April 27, 2005.

37) "The Steel Industry: An Automotive Supplier Perspective," in Certain Hot-Rolled Flat-Rolled Carbon-Quality Steel Products from Brazil, Japan, and Russia, Investigations Nos. 701-TA-384 and 731-TA-806-808 (Review), United States International Trade Commission, Testimony at Hearing, March 2, 2005.

38) "Affidavit of Brian C. Becker, Ph.D., Submitted in Support of Defendant's Motion to Dismiss the Indictment and Inspect the Grand Jury Minutes," in THE PEOPLE OF THE STATE OF NEW YORK, against THEODORE C. SIHPOL, Indictment No. 1710/2004, Supreme Court of the State of New York, County of New York, February 9, 2005.

39) "Fair Market Value Estimate of the But-For Commissions Earned by Maitake Products, Inc. from August 17, 2001 Through April 10, 2006," in MAITAKE PRODUCTS, INC., AND SUN MEDICA CO., LTD., v. TRANS-HERBE, INC., Superior Court of New Jersey Law Division – Bergen County, Docket No: L-9476-02, December 10, 2004, Deposition Testimony, January 28, 2005.

40) "Economic Analysis of Colortyme's Lost Profits," in DL KING, LLC D/B/A COLORTYME, v. KEVIN COLEMAN AND ABC TELEVISION & APPLIANCE RENTAL, INC., D/B/A PRIME TIME RENTALS, Circuit Court of Halifax County, Virginia, Case No. CH02000102-00, August 18, 2004.

41) "Affidavit of Brian C. Becker," in KEITH PARKS, et. al., Individually, and on Behalf of Others Similarly Situated, v. GOLD KIST, INC., et. al., Superior Court of Dekalb County, Georgia, Civil Action Case No. 04-CV-7263-4, August 10, 2004, Deposition Testimony, August 24, 2004.

42) "Punitive Damages Report," in KATHLEEN McCORMACK et al. v. WYETH et al., Superior Court of the District of Columbia, Civil Case No. 02-CA-6082, Deposition Testimony, May 20, 2004.

43) "Third Affidavit of Brian C. Becker, Ph.D.," in CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM, On Behalf of Itself and All Others Similarly Situated vs. THE NEW YORK STOCK EXCHANGE, INC., et. al., United States District Court, Southern District of New York, Civil Action No. 03-CV-9968-UA, April 6, 2004.

44) "Second Affidavit of Brian C. Becker, Ph.D.," in CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM, On Behalf of Itself and All Others Similarly Situated vs. THE NEW YORK STOCK EXCHANGE, INC., et. al., United States District Court, Southern District of New York, Civil Action No. 03-CV-9968-UA, January 16, 2004.

45) "Affidavit of Brian C. Becker, Ph.D.," in CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM, On Behalf of Itself and All Others Similarly Situated vs. THE NEW YORK STOCK EXCHANGE, INC., et. al., United States District Court, Southern District of New York, Civil Action No. 03-CV-9968-UA, January 6, 2004.

46) "Assessing the Impact of Imported Frozen Basa and Tra Fillets from Vietnam on the U.S. Frozen Catfish Fillet Industry," United States International Trade Commission, Inv. No. 731-TA-1012 (Final, with A. Salzberg), submitted June 11, 2003, Testimony at Hearing, June 17, 2003.

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47) "Valuation of Estate of Josephine Thompson's Shares in Thomas Publishing Company as of May 2, 1998," submitted February 14, 2003 and "Rebuttal Valuation of Estate of Josephine Thompson's Shares in Thomas Publishing Company," submitted May 27, 2003 in Estate of Josephine T. Thompson v. Commissioner of Internal Revenue, U.S. Tax Court, No. 4939-02. Direct and Cross Examination Testimony, New York, NY, June 4-5, 2003.

48) "Analysis of Xentex's Expenses," in Xentex Technologies, Inc., Chapter 11 Reorganization, Motion of TMB, LLC for an Order Appointing a Chapter 11 Trustee, United States Bankruptcy Court for the Northern District of Illinois Eastern Division, Deposition Testimony, April 23, 2003.

49) "Insolvency Analysis Regarding Xentex Technologies, Inc. as of February 7, 2003," in Xen Investors, LLC v. Xentex Technologies, Inc., C.A. NO. 19713 NC In the Court of Chancery for the State of Delaware in and for New Castle County, Report Submitted February 7, 2003; Deposition Testimony February 27, 2003; Direct and Cross Examination Testimony, Georgetown, DE, March 4, 2003.

50) "Economic Testimony," United States International Trade Commission, Inv. Nos. 731-TA-986 and 987 (Final), Testimony at Hearing, November 22, 2002.

51) "The State of Venture Capital Investment in the U.S. Telecommunications Sector," White Paper Submission to the Federal Communications Commission Regarding Spectrum Auction 46, Washington, DC, September 20, 2002.

52) "Economic Damages Report," *In*: Jerry Brown vs. Education Services International, Judicial Arbitration and Mediation Services, Inc. (JAMS) Arbitration, Washington, DC, April 4, 2002 (written testimony).

53) "Economic Testimony," United States International Trade Commission, Inv. Nos. 731-TA-986 and 987 (P), Testimony at Hearing, December 17, 2001.

54) "COMPAS Economic Analysis of Various Quota Remedies for Hot Bar/Light Shaped Steel, Rebar, and Welded Tubular Products (Products 9, 11, and 20)," United States International Trade Commission, Inv. No. TA-201-73, Pre-hearing report filed October 29, 2001, Testimony at Hearing, November 8, 2001, Post-hearing report filed November 14, 2001.

55) "Expert Report of Brian C. Becker, Ph.D.," *In*: Muze, Inc. vs. Alliance Entertainment Corp; Matrix Software, Inc., and Eric Weisman; and Michael Erlewine; and Does 1 through 10, inclusive, March 2, 2001, United States District Court, Central District of California, Western Division, Case No. 00 – 00620 RSWL (CWx), Deposition Testimony, April 3, 2001.

56) "Economic Expert Report *In*: William A. Clutter d/b/a BC Transportation Consultants, Petitioner v. Transportation Services Authority of Nevada, Respondent," December 11, 2000, District Court, Clark County, Nevada, Case No. A387827, Dept. No. VII, Docket No. P. (written report and affidavit).

57) "Economists' Expert Report on Uzbekistan Imports, An Economic Assessment of the Impact of Termination of the Investigation of Uranium Imports from Uzbekistan," United States International Trade Commission, Inv. Nos. 731-TA-539-C, E and F (Review), Report filed June 5, 2000, Testimony at Hearing, June 13, 2000 (with A. Wechsler).

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58) Economic Witness on Uranium from Kazakhstan, United States International Trade Commission, Inv. No. 731-TA-539-A (Final), United States International Trade Commission, Testimony at Hearing, June 9, 1999 (with A. Wechsler).

59) "Expert Report In the Matter of Dumped Certain Prepared Baby Foods Originating in or Exported from The United States of America," The Canadian International Trade Tribunal Public Interest Inquiry No. PB-98-001, August 10, 1998. Direct and Cross Examination Testimony, Ottawa, Canada, September 15, 1998.

60) Economic Witness on Changed Circumstances Review for Titanium Sponge from Japan, Kazakhstan, Russia, and Ukraine, United States International Trade Commission, Testimony at Hearing, June 8, 1998.

61) Witness on Economic Methodologies Panel for Proposed Amendments to Rules of Practice and Procedure; Five-Year Reviews, United States International Trade Commission, Testimony at Hearing, February 26, 1998.

62) "An Economic Analysis of the Compensation paid to Executives of the Dexsil Corporation 1989-1990," executive compensation case # 1349-93, United States Tax Court, June 8, 1994 (written testimony, with G. Godshaw).

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1) "A Way Forward in Cost Sharing: Considering Payments and Benefits from Future Intangibles," *Tax Management Transfer Pricing Report*, Vol. 23, No. 10, September 18, 2014, pp. 684-690.
2) "How Transfer Pricing Disputes are Resolved with Tax Authorities: Lack of Publicly Available Information," *Financier Worldwide: Global Reference Guide Corporate Tax 2011*, July 2011, pp. 4-6.
3) "Projected and Actual Profits' Impact on Licensees," *Tax Management Transfer Pricing Report*, Vol. 17, No. 11, October 9, 2008, pp. 461-466.
4) "The Economics of Cost Sharing Buy-Ins: Questions and Answers," *Tax Management Transfer Pricing Report*, Vol. 16, No. 24, April 24, 2008, pp. 950-953.
5) "Benchmarking Manufacturing or Distribution Entities Against the Profits of Consolidated Companies," *Tax Management Transfer Pricing Report*, Vol. 13, No. 5, July 7, 2004, pp. 236-237.
6) "An Examination of Goodwill Valuation Methodologies," *Corporate Governance Advisor*, Vol. 10, No. 4, July/August 2002, pp. 35-40 (with M. Riedy and K. Sperduto).
7) "Comparable Profits Method: Accounting for Margin and Volume Effects of Intangibles," *Tax Management Transfer Pricing Report*, Vol. 10, No. 19, February 6, 2002, pp. 831-833.
8) "Cost Sharing Buy-Ins," Chapter in *Transfer Pricing Handbook*, 3rd Edition, and *Transfer Pricing International*, edited by Robert Feinschreiber, John Wiley & Sons, 2002, pp. A-3 - A-16.
9) "Cost Sharing Buy-Ins," *Corporate Business Taxation Monthly*, Vol. 3, No. 3, December 2001, pp. 26-35.

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BRIAN C. BECKER, Ph.D.

10) "Further Thoughts on Cost Sharing Buy-Ins: A Review of the Market Capitalization and Declining Royalty Methods," *Tax Management Transfer Pricing Report*, Vol. 10, No. 6, July 11, 2001, pp. 195-197.
11) "Valuing In-Process R&D for Acquisitions: Economic Principles Applied to Accounting Definitions," *Tax Management Transfer Pricing Report*, Vol. 9, No. 10, September 20, 2000, pp. 323-326.
12) "Should a Blockage Discount Apply? Perspectives of Both A Hypothetical Willing Buyer and A Hypothetical Willing Seller," *Business Valuation Review*, Vol. 19, No. 1, March 2000, pp. 3-9 (with G. Gutzler).
13) "Does a Small Firm Effect Exist when Using the CAPM? Not Since 1980 and Not when Using Geometric Means of Historical Returns," *Business Valuation Review*, Vol. 18, No. 3, September 1999, pp. 104-111 (with I. Gray).
14) "Transfer Pricing and Foreign Exchange Risk," *Tax Management Transfer Pricing Report*, Vol. 8, No. 6, July 14, 1999, pp. 251-256 (with M. Bajaj and J. Neuberger).
15) "The Control Premium: An Initial Look Into a Strict Monetary Value Approach," *Business Valuation Digest*, Vol. 5, No. 1, July 1999, pp. 12-15.
16) "Using Average Historical Data for Risk Premium Estimates: Arithmetic Mean, Geometric Mean, or Something Else?," *Business Valuation Review*, December 1998, Vol. 17, No. 4, pp. 136-140 (with I. Gray).
17) "The Cost of Carry: An Inflation Adjustment to Assure Consistent Real Profit Margins," *Tax Management Transfer Pricing Report*, Vol. 7, No. 17, December 23, 1998, pp. 639-643 (with B. Brooks).
18) "The Peculiar Market for Commercial Property: The Economics of 'Improving' a Rental Property," *The Southwestern Journal of Economics*, July 1998, Vol. II, No. 2, pp. 104-121.
19) "The Effects of Inflation on Cross-Country Profit Comparisons," *Tax Management Transfer Pricing Report*, Vol. 7, No. 3, June 3, 1998, pp. 77-82 (with B. Brooks).
20) "Quantifying Comparability for Applications in Economic Analysis: The Weighted Distance Method," *The Southwestern Journal of Economics*, Vol. 2, No. 1, April 1997, pp. 128-141 (with K. Button).
21) "Minority Interests in Market Valuation: An Adjustment Procedure," *Business Valuation Review*, Vol. 16, No. 1, March 1997, pp. 27-31.
22) "Capital Adjustments: A Short Overview," *Tax Management Transfer Pricing Report*, Vol. 5, No. 19, January 29, 1997, pp. 613-619.
23) "Multiple Approaches to Valuation: The Use of Sensitivity Analysis," *Business Valuation Review*, Vol. 15, No. 4, December 1996, pp. 157-160.
24) "The Robin Hood Bias: A Study of Biased Damage Awards," *The Journal of Forensic Economics*, Vol. 9, No. 3, Fall 1996, pp. 249-259.
25) "Three Technical Aspects of Transfer Pricing Practice: Distinguishing Methods, Using Statistical Ranges, and Developing Data Sets," *Tax Management Transfer Pricing Report*, Vol. 5, No. 4, June 19, 1996, pp. 97-103.

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26) "The Final Transfer Pricing Regulations: The More Things Change, the More they Stay the Same," *Tax Notes*, Vol. 64, No. 4, July 25, 1994, pp. 507-523, (with G. Carlson, et. al.).
27) "Philadelphia's Luxury Hotels: Boom or Bust?," *The Cornell Hotel and Restaurant Administration Quarterly,* Vol. 33, No. 2, April 1992, pp. 33-42.

PROFESSIONAL SEMINARS

1) "Effectively Managing Global Transfer Pricing," Panelist at the Life Sciences Tax Congress, November 18, 2014.
2) "Transfer Pricing," Guest Lecturer at the Georgetown University Law Center, October 30, 2014.
3) "Distribution Rights Valuation Issues," Panelist at the CLE International's *Wine, Beer & Spirits Law Conference*, September 19, 2014.
4) "Transfer Pricing," Guest Lecturer at the Georgetown University Law Center, October 31, 2013.
5) "Treatment of Intangibles," Speaker on Transfer Pricing, Networking Seminars Inc., New York, NY, March 18, 2013.
6) "Potential Safe Harbor for Cost Sharing Buy-In Discount Rates," Speaker at the Transfer Pricing Symposium 2012, National Association for Business Economics, Arlington, VA, August 1, 2012.
7) "Current Economic Issues in Transfer Pricing," Speaker on Transfer Pricing at Kim & Chang, Seoul, Korea, May 23, 2012.
8) "Transfer Pricing for Worldwide Income: New Rules and Enforcement," Strafford Publications Teleconference Speaker on Methods and Services Sharing Agreements, April 10, 2012.
9) "Transfer Pricing," Guest Lecturer at The George Washington University Law School, March 28, 2012.
10) "Treatment of Intangibles," Speaker on Transfer Pricing, Networking Seminars Inc., New York, NY, March 26, 2012.
11) "Transfer Pricing," Guest Lecturer at the Georgetown University Law Center, September 22, 2011.
12) "Arranging for Intercompany Transfers of Intangible Property," BNA CITE: U.S. International Transfer Pricing Update, New York, NY, July 18, 2011.
13) "Double Irish, Dutch Sandwich, and Other Current Transfer Pricing Topics," Guest Lecturer at the Georgetown University Law Center, November 4, 2010.
14) "Transfer Pricing," Guest Lecturer at the Georgetown University Law Center, November 5, 2009.
15) "Fundamentals of Transfer Pricing," Conference Chair, IIR Seminar, London, UK, October 29, 2008.
16) "Fundamentals of Transfer Pricing," Speaker on Transfer Pricing Methods, IIR Seminar, London, UK, June 11, 2008.
17) "Transfer Pricing," Guest Lecturer at The George Washington University Law School, March 26, 2008.

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18) "Economics of Private Student Loans," Speaker on the 2008 National Council of Higher Education Loan Programs Leadership Conference: As the Dust Settles, Sarasota, FL, January 9, 2008.
19) "Economists in Transfer Pricing: Intangibles, Audits, and APAs," Council for International Tax Education, Inc.: U.S. Transfer Pricing Planning and Controversies, Houston, TX, October 15, 2007.
20) "New IRS Rules for Transfer Pricing of Services," Strafford Publications Teleconference Speaker on Methods and Services Sharing Agreements, July 10, 2007.
21) "New IRS Rules for Transfer Pricing of Services," Strafford Publications Teleconference Speaker on Methods and Services Sharing Agreements, May 8, 2007.
22) "Economists in Transfer Pricing: Intangibles, Audits, and APAs," Council for International Tax Education, Inc.: U.S. Transfer Pricing Planning and Controversies, Washington, DC, April 23, 2007.
23) "Profitability and R&D for PhRMA," Pharmaceutical Research and Manufacturers of America Conference, Charlottesville, VA, January 26, 2007.
24) "Economics of Mass Tort: Lead Paint," Gerson Lehrman Group Seminar, New York, NY, November 16, 2005.
25) "Understanding the Issues Involved in the Valuation of Intangibles," Transfer Pricing: Best Practices for Managing the Corporate Transfer Pricing Function, Infonex Seminar, San Francisco, CA, October 27, 2005.
26) "Maximizing Revenue, Minimizing Taxpayer Burden," Emcee and Speaker for Discussion of "Revenue Matters," National Press Club, Washington, DC, June 7, 2005.
27) "Intangible Valuation in Transfer Pricing," Transfer Pricing Roundtable: Best in Class Practices for Companies, Infonex Seminar, New York, NY, May 25, 2005.
28) "Transfer Pricing Workshop," Workshop Chair and Speaker, IIR Ltd., London, UK, April 25, 2005.
29) "The Steel Industry: An Automotive Supplier Perspective," National Press Club, Washington, DC, February 16, 2005 (with Kevin Hassett.)
30) "Probability and Statistics," Digital Sandbox Risk Analysis Seminar Series, Reston, Virginia, October 14, 2004.
31) "The Economics of Transfer Pricing: Independent Arm's Length Analysis," Council for International Tax Education: U.S. Transfer Pricing Planning & Controversies, New York, NY, August 16, 2004.
32) "Transfer Pricing Workshop," Workshop Chair and Speaker, IIR Ltd., London, UK, April 21, 2004.
33) "Economists in Transfer Pricing: Independence, Methodologies, and Case Study," Council for International Tax Education: U.S. Transfer Pricing 101, New York, NY, February 23, 2004.
34) "Profitability Analysis of NYSE Trading Specialists," American Enterprise Institute Seminar Series, Washington, DC, October 8, 2003.
35) "Economists in Transfer Pricing: Independence, Cost Sharing, and CPM Volume Effects," Council for International Tax Education: U.S. Transfer Pricing Planning & Compliance, New York, NY, August 18, 2003.

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36) "Economists in Transfer Pricing: Profit Splits, Volume Effects, Cost Sharing, and Real Options," Council for International Tax Education: U.S. Transfer Pricing Planning & Compliance, Washington, DC, May 6, 2003.
37) "Economists in Transfer Pricing: Profit Splits, Volume Effects, Cost Sharing, and Real Options," Council for International Tax Education: U.S. Transfer Pricing Planning & Compliance, Dallas, TX, March 24, 2003.
38) "Topics in Transfer Pricing and Valuation," Conference Chair, Discussion Topics "Cost Sharing Buy-In Valuations" and "Volume Effects of Intangibles," Internal Revenue Service, Washington, DC, December 9-10, 2002.
39) "Economists in Transfer Pricing: Cost Sharing and Real Options," Council for International Tax Education: U.S. Transfer Pricing Planning & Compliance, New York, NY, September 23, 2002.
40) "Valuation of Intangible Property and Cost Sharing Arrangements," Economist Group of the Internal Revenue Service, San Francisco, CA, June 25, 2002.
41) "Valuation of Intangible Property and Cost Sharing Arrangements," Southeast Region of Internal Revenue Service, Atlanta, GA, May 10, 2002.
42) "Economists in Transfer Pricing: CPM and Cost Sharing," Council for International Tax Education: U.S. Transfer Pricing Planning & Compliance, Washington, DC, May 6-7, 2002.
43) "Pricing Cost Sharing Buy-Ins and Other Intercompany Transfers," Council for International Tax Education: U.S. Transfer Pricing Planning & Compliance, New York, NY, November 15-16, 2001.
44) "Pricing Cost Sharing Buy-Ins and Other Intercompany Transfers," ATLAS Intermediate U.S. International Tax Update, Cleveland, Ohio, November 5, 2001.
45) "Cost Sharing Buy-Ins: Market Capitalization, Declining Royalty, and Other Methods," Internal Revenue Service Annual Economist Convention, Washington, DC, July 25, 2001.
46) "The Relative Values of Early and Late Stage Research & Development," presentation to Shaw Pittman, McLean, Virginia, March 28, 2001.
47) "Valuation Concepts in Family Limited Partnerships," presentation to Internal Revenue Service Northeast Engineers, Fort Monmouth, New Jersey, August 30, 2000.
48) "The Discounted Cash Flow Method and Other Valuation Concepts," presentation to IRS Kansas and Missouri District Estate & Gift Tax attorneys and managers, Kansas City, Kansas, October 4, 1999.
49) "The Discounted Cash Flow Method and Other Valuation Concepts," presentation to IRS New York District Estate & Gift Tax attorneys and managers, New York, NY, August 16, 1999.
50) "Business Valuation," national closed circuit televised broadcast for Internal Revenue Service Estate Tax Agents, September 23, 1997 (with J. Murphy).
51) "Valuation and Finance Principles Applied to Transfer Pricing," a presentation to IRS and Treasury Department economists, Washington, DC, September 11, 1997 (with T. Reichert).
52) "The Peculiar Market for Commercial Property: An Economically Irrational Situation," Southwestern Economics Association Annual Meeting, Houston, Texas, March 23, 1996.

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53) "The Robin Hood Bias: A Study of Biased Damage Awards," Southwestern Economics Association Annual Meeting, Houston, Texas, March 22, 1996.
54) "Quantifying Comparability for Applications in International Trade and Intercompany Transfer Pricing: The Weighted Distance Method of Analyzing Comparability," Southwestern Economics Association Annual Meeting, Houston, Texas, March 21, 1996.
55) "Some Economic Issues in Transfer Pricing," World Trade Institute: Tax Aspects of Intercompany Transfer Pricing, New York, NY, November 9-10, 1995.

MEDIA AND AWARDS

Inclusion in *Euromoney's* "Expert Guide to the World's Leading Transfer Pricing Advisors," 2010-2014.

Inclusion in *Global Business Magazine's* listing of leading international tax advisors, 2012.

Bloomberg Television Interview, New York Stock Exchange Trading Specialists, October 8, 2003.

"Valuation Evaluation: How to Determine the Size of Interest in an LLC," CFO.com, Ask the Experts, August 31, 2001.

BOARD MEMBERSHIP

THE GERALD R. FORD PRESIDENTIAL FOUNDATION, Grand Rapids, MI, 2014-Present
Associate Trustee

THE PINECREST SCHOOL, Annandale, VA, 2006-2010
Board Member

CONSULTING EXPERIENCE

CRITERION FINANCE, L.L.C., Washington, DC, 2001 - 2001
Senior Vice President

LECG, LLC, Washington, DC, 1999 - 2001
Senior Managing Economist

ECONOMIC CONSULTING SERVICES INC., Washington, DC, 1995 - 1999
Senior Economist (promoted from Economist)

ARTHUR ANDERSEN, L.L.P., Washington, DC, 1994 - 1995
Manager

DELOITTE & TOUCHE, Washington, DC, 1992 - 1994
Senior Consultant

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PROFESSORIAL EXPERIENCE

THE JOHNS HOPKINS UNIVERSITY, Washington, DC, 1997 - 2002
Visiting Professor of Finance

MARYMOUNT UNIVERSITY, Arlington, VA, 1993 - 1995
Visiting Professor of Statistics

THE GEORGE WASHINGTON UNIVERSITY, Washington, DC, 1992 -1993
Visiting Professor of Management Science

THE WHARTON SCHOOL OF THE UNIVERSITY OF PENNSYLVANIA, Philadelphia, PA, 1989 - 1990
Instructor for Computer Applications

December 2014

APPENDIX B

Appendix B: List of Documents Relied Upon

1. "Copy of Senior Personnel in MINC MUSA and MPROC 2005." Excel Spreadsheet.

2. 26 C.F.R. § 1.482-5, retrieved November 6, 2014 from http://www.law.cornell.edu/cfr/text/26/1.482-5.

3. 26 C.F.R. § 1.482-6, retrieved November 6, 2014 from http://www.law.cornell.edu/cfr/text/26/1.482-6.

4. Agreement Between Cardiovascular Dynamics, Inc. and Guidant Corporation. (June 19, 1998). License Agreement. MDT_LB00024141.

5. Agreement Between Edwards Lifesciences Corporation and Medtronic, Inc. (May 19, 2014). Settlement Agreement. MDT_LB00019615.

6. Agreement Between Genetic Laboratories, Inc. and Bio-Vascular, Inc. (September 25, 1985). License Agreement. MDT_LB00011456.

7. Agreement between Medtronic Inc. and Medtronic Puerto Rico Operations Co. (September 30, 2001). Device License Agreement. MDT_TC00004173.

8. Agreement between Medtronic Inc. and Medtronic Puerto Rico Operations Co. (September 30, 2001). Leads License Agreement. MDT_TC00004350.

9. Agreement Between Medtronic Inc. and Medtronic Puerto Rico Operations Co. (September 30, 2001). Supply Agreement. MDT_TC00014192.

10. Agreement Between Medtronic Puerto Rico Operations Co. and Medtronic USA, Inc. (September 30, 2001). Distribution Agreement. MDT_TC00013799.

11. Agreement Between Medtronic Puerto Rico Operations Co., Medtronic Europe S.A., and Medtronic Inc. (May 1, 2002). Supply Agreement. MDT_TC00016757.

12. Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2004). Amendment No. 3 to (Device) License Agreement. MDT_TC00004184.

13. Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2004). Amendment No. 3 to (Leads) License Agreement. MDT_TC00004362.

14. Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2004). Amendment No. 3 to Trademark and Trade Name License Agreement. MDT_TC00015728.

15. Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2005). Amended and Restated License Agreement. MDT_TC00004186.

16. Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2005). Amended and Restated License Agreement. MDT_TC00004364.

17. Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (May 1, 2005). Amended and Restated Trademark and Trade Name License Agreement. MDT_TC00015730.

18. Agreement Between Medtronic, Inc. and Medtronic Puerto Rico Operations Co. (September 30, 2001). Trademark and Trade Name License Agreement. MDT_TC00015719.

19. Agreement Between Siemens Aktiengesellschaft and Medtronic, Inc. (August 26, 1992). Settlement Agreement. MDT_LB00019822.

20. Agreement Between Theseus Logic, Inc. and Medtronic, Inc. (August 24, 2001). Design and Production License Agreement. MDT_LB00009494.

21. Becker, Brian. (October 9, 2008). "Projected and Actual Profits' Impact on Licensees," Tax Management: Transfer Pricing Report. Vol. 17, No. 11.

22. Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP."

23. Bio-Vascular, Inc. (January 29, 1987). Form 10-K for the Fiscal Year Ended October 31, 1986.

24. Boston Scientific Corp. (March 1, 2006). Form 10-K for the Fiscal Year Ended December 31, 2005.

25. Brown, Michael K. et al. (May 2012). "Medical Device Preemption—Is There Life for Plaintiffs' Claims After Riegel v. Medtronic, Inc.?" Reed Smith LLP.

26. Carlton, Dennis W. and Jeffrey M. Perloff. (1994). Modern Industrial Organization. 2nd Edition. HarperCollins: New York.

27. Chappell, Michael A. (October 22, 2014). "Expert Report of Michael Chappell."

28. Dodds, Matthew. (May 18, 2004). "Medtronic, Inc.: MDT: No Longer A Risky ENDEAVOR." Citigroup Smith Barney. MDT_TC00289573.

29. Dowden, Paul D. (October 15, 2014). "Medtronic, Inc. v. Commissioner-Tax Court Dkt. No. 6944-11: Expert Report of Paul D. Dowden."

30. Email from Bruce Belzak to June Guida. (February 16, 2005). Life Sciences Practice News Blast – Berkshire Hathaway Program. MDT_PD0001037.

31. Hamburg, Morris and Peg Young. (1994). Statistical Analysis for Decision Making. 6th Edition. Dryden Press: Fort Worth, TX.

32. Hughes, Edward F.X. (October 21, 2014). "Expert Report of Edward F.X. Hughes, MD, M.P.H. Re: Medtronic, Inc. v. Commissioner."

33. Interview of James Patrick Mackin, President of CRDM, Medtronic, Inc. (July 15, 2010). MDT_TC00018289.

34. Interview of Rebecca Bergman, Vice President, New Therapies and Diagnostics, CRDM, Medtronic, Inc. (July 16, 2010). MDT_TC00000333.

35. Interview of Tim Samsel, Vice President of Quality and Regulatory, CRDM, Medtronic, Inc. (June 25, 2010). MDT_TC00003711.

36. Jeffrey, Kirk. (2001). Machines in Our Hearts: The Cardiac Pacemaker, the Implantable Defibrillator, and American Health Care. The Johns Hopkins University Press: Baltimore, Maryland.

37. Johnson, Judith A. (June 25, 2012). "FDA Regulation of Medical Devices." Congressional Research Service.

38. JP Morgan. (January 3, 2006). "The MedTech Monitor."

39. Kennelly, Mike. (October 22, 2014). "Medtronic, Inc. v. Commissioner-TC Dkt. No. 6944-11: Expert Report of Mike Kennelly."

40. Lee, Timothy J. (October 21, 2014). "Medtronic, Inc. v. Commissioner-Tax Court Dkt. No. 6944-11: Statement of Timothy J. Lee."

41. Lee, Timothy J. and Katherine A. Martinelli. (April 22, 2005). "Medtronic, Inc.: Acquisition Expensive, But Makes Strategic Sense." Merrill Lynch. MDT_TC00292330.

42. Lee, Timothy J. and Katherine A. Martinelli. (January 5, 2005). "Medtronic, Inc.: Weakening Dollar Boosting Q3 Sales." Merrill Lynch. MDT_TC00292261.

43. Lee, Timothy J., Katherine A. Martinelli, and Daniel T. Lemaitre. (November 18, 2004). "Medtronic, Inc.: Q2 Results Light, But Underlying Fundamentals Unchanged." Merrill Lynch. MDT_TC00140934.

44. Lee, Timothy, Katherine A. Martinelli, and Daniel T. Lemaitre. (September 28, 2004). "Medtronic, Inc.: And The Jury Says…" Merrill Lynch. MDT_TC00292258.

45. Lee, Timothy. (August 23, 2006). "Medtronic, Inc.: No Surprises Post Preannouncement; Tempers View on Long-Term Outlook for ICDs." Kaufman Bros. Equity Research.

46. Lee, Timothy. (August 3, 2006). "Medtronic, Inc.: Medtronic's ICD Revenue Fall Short of Expectations Resulting in 1Q Miss." Kaufman Bros. Equity Research. MDT_TL00001371.

47. Lee, Timothy. (December 5, 2006). "Medtronic, Inc.: Addition by Subtraction." Kaufman Bros. Equity Research.

48. Lee, Timothy. (June 13, 2006). "Medtronic, Inc.: ADA Meeting Highlights Diabetes Opportunity." Kaufman Bros. Equity Research.

49. Lee, Timothy. (March 6, 2006). "Medtronic, Inc.: Premier Growth Franchise in Medical Technology; Initiate Coverage With a Buy." Kaufman Bros. Equity Research. MDT_TC00140942.

50. Lee, Timothy. (May 22, 2006). "Medtronic, Inc.: Medtronic Expected to Finish F2006 on a Solid Note." Kaufman Bros. Equity Research.

51. Lee, Timothy. (May 24, 2006). "Medtronic, Inc.: Solid 4Q Results Despite Softness in U.S. ICD Sales." Kaufman Bros. Equity Research. MDT_TL00001356.

52. Lee, Timothy. (November 20, 2006). "Medtronic, Inc.: Medtronic On Tap To Report Fiscal 2Q07 Results." Kaufman Bros. Equity Research.

53. Lee, Timothy. (November 21, 2006). "Medtronic, Inc.: Robust 2Q07 Results for Investors to Feast On." Kaufman Bros. Equity Research. MDT_TL00001401.

54. Lee, Timothy. (September 15, 2006). "Medtronic, Inc.: Barriers to ICD Market Growth Challenging But Not Insurmountable." Kaufman Bros. Equity Research. MDT_TL00001380.

55. Lee, Timothy. (September 20, 2006). "Medtronic, Inc.: FDA Advisory Panel Recommends For Approval The Prestige Cervical Disk." Kaufman Bros. Equity Research.

56. Lee, Timothy. (September 29, 2006). "Medtronic, Inc.: Medtronic Showing Some Backbone." Kaufman Bros. Equity Research. MDT_TL00001384.

57. Lemaitre, Daniel T., Timothy J. Lee, and Katherine A. Martinelli. (August 25, 2004). "Medtronic, Inc.: Solid Fundamentals Evident In 10-K Review." Merrill Lynch. MDT_TC00292246.

58. Lemaitre, Daniel T., Timothy J. Lee, and Katherine A. Martinelli. (May 20, 2004). "Medtronic, Inc.: Three Roads Diverged In A Yellow Wood." Merrill Lynch. MDT_TC00292236.

59. Lowery, Andrew, Judy Strojny, and Joseph Puleo. (December 1996). "Medical Device Quality Systems Manual: A Small Entity Compliance Guide." U.S. Department of Health and Human Services—Food and Drug Administration.

60. Mahle, Stephen. (October 2005). "Investments and Innovation at Work." Medtronic, Inc. MDT_ TC00288859.

61. Mankiw, N. Gregory. (2007). Principles of Economics. 4th Edition. South-Western Cengage: Mason, Ohio.

62. Martinelli, Katherine A. and Paul K. Choi. (February 17, 2006). "Medtronic, Inc.: Targeting Solid Q3:F06 Results." Merrill Lynch. MDT_TC00292431.

63. Martinelli, Katherine A. and Paul K. Choi. (January 24, 2006). "Medtronic, Inc.: Insights Post Day With Management." Merrill Lynch. MDT_TC00140980.

64. Martinelli, Katherine A. and Paul K. Choi. (November 17, 2005). "Medtronic, Inc.: Few Surprises in Q2; No Change to EPS." Merrill Lynch. MDT_TC00282342.

65. Medtronic, Inc. (2003). MAXIMO™ DR Dual Chamber ICD Product Specifications. MDT_TC00010945.

66. Medtronic, Inc. (2004). Information for Prescribers: Medtronic Pain Therapy—Using Neurostimulation for Chronic Pain. MDT_TC00271445.

67. Medtronic, Inc. (2005). EnRhythm Model Specifications. MDT_TC00019006.

68. Medtronic, Inc. (2005). INSYNC SENTRY™ Heart Failure Management System. MDT_TC00011521.

69. Medtronic, Inc. (August 2005). Medtronic Puerto Rico Operations Company. MDT_TC00083804.

70. Medtronic, Inc. (February 2004). EnPulse: Pacemaker Reference Guide. MDT_TC00021993.

71. Medtronic, Inc. (July 14, 2003). Form 10-K for the Fiscal Year Ended April 25, 2003.

72. Medtronic, Inc. (July 19, 2002). Form 10-K for the Fiscal Year Ended April 26, 2002.

73. Medtronic, Inc. (July 21, 2000). Form 10-K for the Fiscal Year Ended April 30, 2000.

74. Medtronic, Inc. (July 26, 2001). Form 10-K for the Fiscal Year Ended April 27, 2001.

75. Medtronic, Inc. (July 27, 1994). Form 10-K for the Fiscal Year Ended April 30, 1994.

76. Medtronic, Inc. (June 25, 2007). Form 10-K for the Fiscal Year Ended April 27, 2007.

77. Medtronic, Inc. (June 28, 2006). Form 10-K for the Fiscal Year Ended April 28, 2006.

78. Medtronic, Inc. (June 29, 2005). Cardiac Rhythm Management Organizational Chart. MDT_TC00125513.

79. Medtronic, Inc. (June 29, 2005). Form 10-K for the Fiscal Year Ended April 29, 2005.

80. Medtronic, Inc. (June 30, 2004). Form 10-K for the Fiscal Year Ended April 30, 2004.

81. Medtronic, Inc. (Undated). "Strategic Plan: Fiscal Years 2005-2010." MDT_TC00000057.

82. Medtronic, Inc. (Undated). MAXIMO™ Launch Conversations and ICD Selling Guide. MDT_TC00010961.

83. Memo from Gary Nelson to Medtronic Audit Committee. (August 24, 2011). Annual Report—Corporate Risk Management: Insurance Operations and Business Continuity Management. MDT_TC00109211.

84. Parchomovsky, Gideon and Michael Mattioli. (March 2011). "Partial Patents." Columbia Law Review. Vol. 3, No. 2.

85. Parr, Russell L. and Gordon Smith. (2013). Intellectual Property: Valuation, Exploitation and Infringement Damages: 2013 Cumulative Supplement. Wiley: Hoboken, NJ.

86. Parr, Russell. (2007). Royalty Rates for Licensing Intellectual Property. John Wiley & Sons, Inc: Hoboken, New Jersey.

87. Purchase Agreement Between SSM Health Care of Oklahoma, Inc. Owning and Operating St. Anthony Hospital and Medtronic, Inc. (May 20, 2004). MDT_TC00170395.

88. Rauch, Ryan A. (June 1, 2005). "Medtronic, Inc.: Initiating Coverage With a Hold Rating." Jefferies & Company, Inc. MDT_TC00003675.

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APPENDIX C

Table C1:

MUS Distribution Profit: 2005-2006

Fiscal Year Ended April (In USD Millions Except Percentages)	2005	2006	Total	Formula
Sales	[redacted]	[redacted]	[redacted]	**a**
Cost of Sales	[redacted]	[redacted]	[redacted]	b
Other Product Costs and Overhead	[redacted]	[redacted]	[redacted]	c
Intercompany Expenses	[redacted]	[redacted]	[redacted]	d
Total Expenses	[redacted]	[redacted]	[redacted]	e = c+d
Operating Profit	[redacted]	[redacted]	[redacted]	f = a-b-e

Source:

(1) Kennelly, Mike. (October 22, 2014). "Medtronic, Inc. v. Commissioner-TC Dkt. No. 6944-11: Expert Report of Mike Kennelly," Exhibits 7-9.

Table C2:

MUS Manufacturing Profit: 2005-2006

Fiscal Year Ended April (In USD Millions Except Percentages)	2005	2006	Total	Formula
Sales	[redacted]	[redacted]	[redacted]	a
Cost of Sales	[redacted]	[redacted]	[redacted]	b
Other Product Costs	[redacted]	[redacted]	[redacted]	c
Other Expenses	[redacted]	[redacted]	[redacted]	d
Puerto Rico Percent of Sales to US /2/	[redacted]	[redacted]	[redacted]	e
Sales	[redacted]	[redacted]	[redacted]	f = a*e
Cost of Sales	[redacted]	[redacted]	[redacted]	g = b*e
Other Product Costs	[redacted]	[redacted]	[redacted]	h = c*e
Other Expenses		[redacted]	[redacted]	i = d*e
Operating Profit	[redacted]	[redacted]	[redacted]	j = f-g-h-i
Adjustment	[redacted]	([redacted]	([redacted]	k
Operating Profit (Post Adjustment)	[redacted]	[redacted]	[redacted]	l = j+k

Notes:

/1/: Includes MMC, MECC, and Tempe Manufacturing entities.

/2/: Percentages shown in row e are aggregate (combined) figures for Devices and Leads. Figures calculated within the box (*i.e.,* row f and below) are based on percent of sales to U.S. for Devices and Leads, individually.

Source:

(1) Kennelly, Mike. (October 22, 2014). "Medtronic, Inc. v. Commissioner-TC Dkt. No. 6944-11: Expert Report of Mike Kennelly," Exhibits 4-6, 16-18.

Table C3:

MPROC Manufacturing Profit: 2005-2006

Fiscal Year Ended April (In USD Millions Except Percentages)	2005	2006	Total	Formula
Sales	[redacted]	[redacted]	[redacted]	a
Cost of Sales	[redacted]	[redacted]	[redacted]	b
Royalty Expenses	[redacted]	[redacted]	[redacted]	c
Other Expenses	[redacted]	[redacted]	[redacted]	d
Puerto Rico Percent of Sales to US /1/	[redacted]	[redacted]	[redacted]	e
Sales	[redacted]	[redacted]	[redacted]	f = a*e
Purchases from MUS (MUS Sales)	[redacted]	[redacted]	[redacted]	g
Other Costs	[redacted]	[redacted]	[redacted]	h = i-g
Cost of Sales	[redacted]	[redacted]	[redacted]	i = b*e
Royalty Expenses	[redacted]	[redacted]	[redacted]	j = c*e
Other Expenses	[redacted]	[redacted]	[redacted]	k = d*e
Operating Profit	[redacted]	[redacted]	[redacted]	l = f-i-j-k
Adjustment	([redacted]	([redacted]	([redacted]	m
Operating Profit (Post Adjustment)	[redacted]	[redacted]	[redacted]	n = l+m

Note:

/1/: Percentages shown in row e are aggregate (combined) figures for Devices and Leads. Figures calculated within the box (*i.e.,* row f and below) are based on percent of sales to U.S. for Devices and Leads, individually.

Sources:

(1) Kennelly, Mike. (October 22, 2014). "Medtronic, Inc. v. Commissioner-TC Dkt. No. 6944-11: Expert Report of Mike Kennelly," Exhibits 4-6, 19-21.

(2) **Table C2**.

Table C4:

MUS Royalty Profit: 2005-2006

Fiscal Year Ended April (In USD Millions Except Percentages)	2005	2006	Total	Percent of Total Sales	Formula
Royalty Income	[redacted]	[redacted]	[redacted]	24.6%	a
R&D and Business Costs					
Business Costs	[redacted]	[redacted]	[redacted]	4.9%	b
R&D Costs	[redacted]	[redacted]	[redacted]	8.8%	c
Total	[redacted]	[redacted]	[redacted]	13.7%	d = b+c
Operating Profit	[redacted]	[redacted]	[redacted]	10.9%	e = a-d
Adjustment	([redacted]	([redacted]	([redacted]	-2.6%	f
Operating Profit (Post Adjustment)	[redacted]	[redacted]	[redacted]	8.3%	g = e+f

Sources:

(1) Kennelly, Mike. (October 22, 2014). "Medtronic, Inc. v. Commissioner-TC Dkt. No. 6944-11: Expert Report of Mike Kennelly," Exhibits 4-6, 10-12.

(2) **Table C1**.

Table C5:

MEDTRONIC Supply Chain Profits: 2005-2006

Fiscal Year Ended April (In USD Millions Except Percentages)	2005	2006	Total	Formula	Source
U.S. Sales of Products at Issue	[redacted]	[redacted]	[redacted]	a	Table C1
MUS Distribution Profit	[redacted]	[redacted]	[redacted]	b	Table C1
MUS Manufacturing Profit	[redacted]	[redacted]	[redacted]	c	Table C2
MUS Royalty Profit	[redacted]	[redacted]	[redacted]	d	Table C4
MUS Profit	[redacted]	[redacted]	[redacted]	e = sum(b:d)	Calculation
MPROC Profit	[redacted]	[redacted]	[redacted]	f	Table C3
Total MEDTRONIC System Profit	[redacted]	[redacted]	[redacted]	g = e+f	Calculation
Total MEDTRONIC System Profit (Pre-R&D/Business Costs)	[redacted]	[redacted]	[redacted]	h = g+R&D	Table C4
Total MEDTRONIC System Profit Margin (Pre-R&D/Business Costs) /1/	[redacted]	[redacted]	[redacted]	i = h/a	Calculation

Note:

/1/: These profits in the KENNELLY REPORT remove all costs and inventory adjustments. See Source (1) below.

Source:

(1) Kennelly, Mike. (October 22, 2014). "Medtronic, Inc. v. Commissioner-TC Dkt. No. 6944-11: Expert Report of Mike Kennelly," Exhibit 4.

Table C6:

Adjusted Profit for MUS Using Median of WHITE and BERNEMAN REPORTS' Analysis

In USD Millions Except Percentages	Actual	Formula	Source
MUS Sales	[redacted]	a	Table C1
Median Operating Margin of WHITE REPORT Distribution Comparables	[redacted]%	b	Table D2
Adjusted MUS Distribution Profit	[redacted]	**c = a*b**	**Calculation**
MUS Manufacturing and Other Related Costs	[redacted]	d	Table C2
Median Markup on Costs of WHITE REPORT Component Manufacturing Comparables	[redacted]%	e	Table D1
Markup on Costs	[redacted]	f = d*e	Calculation
Adjustment	([redacted])	g	Table C2
Adjusted MUS Manufacturing Profit	[redacted]	**h = f+g**	**Calculation**
MUS Sales	[redacted]	i	Table C1
Median of BERNEMAN REPORT's Proposed Royalty Rate Range /1/	[redacted]%	j	(1)-(2)
Royalty	[redacted]	k = i*j	Calculation
Business Costs	[redacted]	l	Table C4
R&D Costs	[redacted]	m	Table C4
Adjustment	([redacted])	n	Table C4
Adjusted MUS Royalty Profit	([redacted])	**o = k-l-m+n**	**Calculation**

Note:
/1/: Median of BERNEMAN REPORT's royalty range of 0.5 to 25 percent--that is, 0.5 to 20 percent for the technology license (5 percent median), plus 0 to 5 percent range for the trademark license (0 percent median). See Source (1) below.

Sources:
(1) Berneman, Louis P. (October 22, 2014). "Expert Report of Louis P. Berneman, EdD, CLP, RTTP," p. 23, Exhibit 2-B.
(2) Parr, Russell L. and Gordon Smith. (2013). Intellectual Property: Valuation, Exploitation and Infringement Damages: 2013 Cumulative Supplement. Wiley: Hoboken, NJ, p. 111.

Table C7:

Total Implied Profit Split Using Median of WHITE and BERNEMAN REPORTS' Analysis

In USD Millions	Implied Profit /1/	Formula	Source
MUS Distribution Profit	179.8	a	Table C6
MUS Manufacturing Profit	26.1	b	Table C6
MUS Royalty Profit	(679.4)	c	Table C6
MUS Profit	(473.4)	d = a+b+c	Calculation
MPROC Profit	3,246.1	e = f-d	Calculation
Total System	2,772.7	f	Table C5

Note:
/1/: Implied profits based on WHITE and BERNEMAN REPORT figures. See **Table C6**.

APPENDIX D

Table D1:

The WHITE REPORT's Proposed Component Manufacturing Profits for MMC and MECC

	Operating Margin		Return on Total Costs	
Company	**2005**	**2006**	**2005**	**2006**
MMC Median	8%	6%	8%	6%
MECC Median	8%	8%	9%	10%

Source:
(1) White, Alan G. (October 22, 2014). "Expert Report of Alan G. White, Ph.D.," Exhibits 5-6.

Table D2:

The WHITE REPORT's Proposed Distribution Profits for MUS

	Operating Margin		Return on Total Costs	
Company	**2005**	**2006**	**2005**	**2006**
MUS Median	3%	3%	3%	3%

Source:
(1) White, Alan G. (October 22, 2014). "Expert Report of Alan G. White, Ph.D.," Exhibit 9.

APPENDIX E

Table E1:

MEDTRONIC's Supply Chain Performed Similar to Expectations: 2005-2006

Fiscal Year (In USD Millions Except Percentages) /1/	2005	2006	Formula	Source
Cardiac Rhythm Management Operating Margin (Pre-R&D)	[redacted]	[redacted]	a	(1)
Neurological and Gastroenterology and Urology Operating Margin (Pre-R&D)	[redacted]	[redacted]	b	(1)
Cardiac Rhythm Management Share of System Profit	[redacted]	[redacted]	c	(2)
Neurological and Gastroenterology and Urology Share of System Profit	[redacted]	[redacted]	d	(2)
Cardiac Rhythm Management Share of Operating Margin	[redacted]	[redacted]	e = a*c	Calculation
Neurological and Gastroenterology and Urology Share of Operating Margin	[redacted]	[redacted]	f = b*d	Calculation
System Operating Margin (Pre-R&D)	[redacted]	[redacted]	g = e+f	Calculation
Business Costs Margin	[redacted]	[redacted]	h	Tables C1, C4
System Operating Margin (Pre-R&D/Business Costs)	[redacted]	[redacted]	**i = g+h**	**Calculation**
Actual System Operating Profit Margin (Pre-R&D/Business Costs)	[redacted]		j	Table C5

Sources:

(1) Medtronic, Inc. (Undated). "Strategic Plan: Fiscal Years 2005-2010," p. 4.8, 4.34, 4.40 (MDT_TC00000089, MDT_TC00000115, MDT_TC00000121).

(2) Kennelly, Mike. (October 22, 2014). "Medtronic, Inc. v. Commissioner-TC Dkt. No. 6944-11: Expert Report of Mike Kennelly," Exhibit 1.