Full text available at: http://dx.doi.org/10.1561/1400000037

International Transfer Pricing

Richard Sansing
Tuck School of Business at Dartmouth
Hanover, USA
and
CentER, Tilburg University
The Netherlands
richard.c.sansing@tuck.dartmouth.edu

now
the essence of knowledge
Boston — Delft

Full text available at: http://dx.doi.org/10.1561/1400000037

Foundations and Trends® in Accounting

Published, sold and distributed by:
now Publishers Inc.
PO Box 1024
Hanover, MA 02339
United States
Tel. +1-781-985-4510
www.nowpublishers.com
sales@nowpublishers.com

Outside North America:
now Publishers Inc.
PO Box 179
2600 AD Delft
The Netherlands
Tel. +31-6-51115274

The preferred citation for this publication is

R. Sansing. *International Transfer Pricing*. Foundations and Trends® in Accounting, vol. 9, no. 1, pp. 1–57, 2014.

This Foundations and Trends® issue was typeset in LaTeX using a class file designed by Neal Parikh. Printed on acid-free paper.

ISBN: 978-1-60198-895-9
© 2014 R. Sansing

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, mechanical, photocopying, recording or otherwise, without prior written permission of the publishers.

Photocopying. In the USA: This journal is registered at the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923. Authorization to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by now Publishers Inc for users registered with the Copyright Clearance Center (CCC). The 'services' for users can be found on the internet at: www.copyright.com

For those organizations that have been granted a photocopy license, a separate system of payment has been arranged. Authorization does not extend to other kinds of copying, such as that for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. In the rest of the world: Permission to photocopy must be obtained from the copyright owner. Please apply to now Publishers Inc., PO Box 1024, Hanover, MA 02339, USA; Tel. +1 781 871 0245; www.nowpublishers.com; sales@nowpublishers.com

now Publishers Inc. has an exclusive license to publish this material worldwide. Permission to use this content must be obtained from the copyright license holder. Please apply to now Publishers, PO Box 179, 2600 AD Delft, The Netherlands, www.nowpublishers.com; e-mail: sales@nowpublishers.com

Full text available at: http://dx.doi.org/10.1561/1400000037

Foundations and Trends® in Accounting
Volume 9, Issue 1, 2014

Editorial Board

Editor-in-Chief

Stefan J. Reichelstein
Stanford University
United States

Editors

Ronald Dye
Northwestern University

David Larcker
Stanford University

Stephen Penman
Columbia University

Full text available at: http://dx.doi.org/10.1561/1400000037

Editorial Scope

Topics

Foundations and Trends® in Accounting publishes survey and tutorial articles in the following topics:

- Auditing
- Corporate governance
- Cost management
- Disclosure
- Event studies/Market efficiency studies
- Executive compensation
- Financial reporting
- Financial statement analysis and equity valuation
- Management control
- Performance measurement
- Taxation

Information for Librarians

Foundations and Trends® in Accounting, 2014, Volume 9, 4 issues. ISSN paper version 1554-0642. ISSN online version 1554-0650. Also available as a combined paper and online subscription.

Full text available at: http://dx.doi.org/10.1561/1400000037

Foundations and Trends® in Accounting
Vol. 9, No. 1 (2014) 1–57
© 2014 R. Sansing
DOI: 10.1561/1400000037

International Transfer Pricing

Richard Sansing
Tuck School of Business at Dartmouth
Hanover, USA
and
CentER, Tilburg University
The Netherlands
richard.c.sansing@tuck.dartmouth.edu

Full text available at: http://dx.doi.org/10.1561/1400000037

Contents

1 Introduction **2**

2 Historical Perspective **7**

3 Evidence of Income Shifting **12**
3.1 Aggregate data 12
3.2 Intangible assets 13
3.3 Product level data 14

4 Transfer Pricing Fundamentals **16**
4.1 Price or profit? 16
4.2 Economic profits or accounting profits? 17
4.3 Economic costs or accounting costs? 19

5 Optimization Models **21**
5.1 Transfer price discretion 21
5.2 Two sets of books 24
5.3 Endogeneity of comparable uncontrolled prices 29
5.4 Transfer pricing and investment incentives 31

6 Transaction Cost Economics **34**
6.1 Endogeneity of organizational structure 34

Full text available at: http://dx.doi.org/10.1561/1400000037

6.2 Intangible assets 35
6.3 Returns to internalization 37

7 Tax Compliance Models 42
7.1 Transfer price inconsistency 42
7.2 Advance pricing agreements 43

8 Formulary Apportionment 45

9 Future Research 48
9.1 Methods of shifting income from intangible assets 48
9.2 Allocating the returns to organizational capital 49

10 Conclusions 50

Acknowlegements 52

References 53

Full text available at: http://dx.doi.org/10.1561/1400000037

Abstract

International transfer pricing determines how the worldwide income of a multinational enterprise is divided among countries for income tax purposes when transactions occur within the firm. This review examines economics, accounting, legal research, and tax practitioner literatures on international transfer pricing.

The empirical literature documents the ability of multinational enterprises to shift income attributable to intangible assets and organizational capital from high-tax to low-tax countries. The theoretical literature reflects many different perspectives, but a recurring theme is that the current system that evolved in a world in which value was created by tangible assets with clear physical locations is not well suited for a world in which value is created by firms that develop intangible assets and choose organizational structures that economize on transaction costs.

R. Sansing. *International Transfer Pricing*. Foundations and Trends® in Accounting, vol. 9, no. 1, pp. 1–57, 2014.

DOI: 10.1561/1400000037.

Full text available at: http://dx.doi.org/10.1561/1400000037

1

Introduction

This monograph reviews international transfer pricing. Taxable income for a multinational enterprise (MNE) is determined on the basis of separate accounting, in which the incomes of a United States (U.S.) parent and its foreign subsidiaries are determined separately. When goods or services are transferred between related entities the transfer price, i.e., the price at which the good or service is transferred, determines how the income of the two entities is divided between the U.S. and the foreign country for income tax purposes. If a U.S. manufacturing firm produce a widget at a cost of $20 and transfers it to its Dutch subsidiary, and the Dutch retailer in turn sells it to an unrelated party for $30, how the $10 profit is divided between the U.S. parent and the Dutch subsidiary depends on the transfer price. If the transfer price is $27, the U.S. parent has taxable income of $7 and the Dutch subsidiary has taxable income of $3. A particularly important type of service is the use of intellectual property that is developed in one country and used in another.

The rapid increase in globalization has increased both trade and foreign direct investment. Much of the increase has been in the form of intrafirm trade. Eden [1998, p. 70] argues that intrafirm trade is

Full text available at: http://dx.doi.org/10.1561/1400000037

the *sine qua non* of the MNE. About 40% of U.S. international trade occurs between a U.S. firm and a related party in a foreign country [Clausing, 2003]. The Organization for Economic Co-operation and Development (OECD) estimates that more than 60% of world trade takes place between related parties in MNEs [Wittendorf, 2010, p. 5]. For some pairs of countries, 75% of cross-boarder trade occurs within MNEs [Brem, 2004]. The increase in intrafirm trade means that transfer pricing has become much more important over time.

If the MNE could pick any price in an unconstrained fashion, it could shift all of its taxable income to the country with the lower income tax rate.[1] Therefore, tax authorities have coordinated on the arm's length standard for determining whether the resulting allocation of taxable income is valid for tax purposes. The arm's length standard involves a thought experiment, in which one asks what allocation would have arisen had the parties been unrelated, each striving to maximize its own income. This approach raises serious conceptual difficulties, as the economic theory of the firm indicates that two related entities within a vertically integrated firm will interact quite differently than will independent firms.

The research on international transfer pricing is found in journals that reflect very different research traditions. Leading papers can be found in economics journals, accounting journals, law reviews, and tax practitioner journals. This monograph puts more weight on the accounting and tax practitioner literatures, while striving to incorporate the most important contributions from the economics and legal research literatures. Eden [1998] and Wittendorf [2010] provide more comprehensive surveys of the economics and legal research literatures, respectively. Transfer pricing is just one part of how MNEs are taxed; Blouin [2011] provides a review of the larger literature on the taxation of MNEs.

It is important to understand and appreciate the history of a field of study in order to put current disputes into perspective. Section 2

[1] Transfer prices are not the only way to shift income from a high-tax rate country to a low-tax rate country. For example, an MNE can reduce taxable income in a high-tax country by having high-tax rate affiliates do all of the borrowing or making all of the tax-favored R&D investments.

Full text available at: http://dx.doi.org/10.1561/1400000037

briefly summarizes the development of the international tax regime from the post-World War I era through the most recent revision in the U.S. transfer pricing regulations, with particular emphasis on the areas of disagreement between the U.S. Treasury Regulations and the OECD Transfer Pricing Guidelines (hereafter, OECD Guidelines).

Section 3 summarizes the empirical evidence that shows that firms successfully shift income from high-tax to low-tax countries. Most of this evidence is based on firm-level data. Firms owning valuable intangible assets are particularly adept at shifting income attributable to intangible assets to low-tax jurisdictions. Other studies use product-level data rather than firm-level data. Both types of studies paint a compelling picture that shows that shifting income via transfer pricing is pervasive.

Section 4 examines some fundamental transfer pricing issues. I emphasize that the tax authorities define the arm's length standard in terms of the *profit* one would expect unrelated parties to earn, not the *price* at which unrelated parties would transact. I also analyze the difference between economic profits and accounting profits. Models in the economics literature often treat the cost of equity capital as if it were deductible for tax purposes. This approach is analytically convenient but substantively mistaken.

Section 5 reviews the literature in which the transfer price is viewed as an optimal choice of the MNE. One set of papers focuses on the extent to which firms have discretion over the transfer price itself. In these studies, the firm can choose any price from a specified range. Not surprisingly, the firm chooses an endpoint of the range, as it strives to allocate as much income as possible to the country with the lower tax rate.

Another set of papers examines the dual roles played by transfer prices. One role is determining the allocation of taxable income within an MNE. The other role is a mechanism by which division within a vertically integrated firm with decentralized decision rights coordinate their actions. These papers model the tradeoff between using a transfer price for tax purposes and internal decision-making purposes. I argue, however, that the evidence supporting the existence of this alleged tradeoff in practice is quite weak.

Full text available at: http://dx.doi.org/10.1561/1400000037

A third set of papers examines the endogeneity of a comparable transaction with an unrelated party, in which the price from a transaction with an unrelated party is used to allocate income between related parties. The final set of papers examines the effect of the transfer price on investment incentives. In each case, the tax incentives distort investment choices, with ambiguous effects on economic efficiency.

Section 6 examines the issue of transfer pricing through the lens of transaction cost economics, in which firms vertically integrate in order to economize on transaction costs. The transactions costs associated with valuable intangible assets are particularly severe, so firms holding valuable intangibles tend to vertically integrate. This makes it difficult to identify comparable transactions between unrelated parties that can be used in order to implement the arm's length standard. One particularly difficult issue arises when the organizational structure itself creates value. As the transfer pricing rules tend to focus on the location of tangible capital, the question of which political jurisdiction should tax the returns to organizational capital is difficult to resolve. The papers that take a transaction cost economics perspective find that using an arm's length price often does not yield an arm's length allocation of taxable income, reflecting the fact that related parties interact in fundamentally different ways than do unrelated parties.

Section 7 addresses the issue of tax compliance. In practice, many firms are taxed by multiple political jurisdictions on the same income due to inconsistent transfer pricing rules. The prospect of double taxation has led to the use of institutional arrangements in which the MNE and one or more tax authorities agree upon transfer prices before the tax return is filed. These arrangements are known as advance pricing agreements, or bilateral advance pricing agreements in the case of agreements with two tax authorities. These agreements can make all three parties to be better off; even though taxes are zero-sum wealth transfers, the deadweight loss associated with audit costs can be reduced.

The difficulty that the U.S. government has taxing the income earned by U.S. MNEs, particularly those using valuable intangible assets, has led some to advocate changing to a system of formulary apportionment to replace the current system of separate accounting.

Full text available at: http://dx.doi.org/10.1561/1400000037

Section 8 describes formulary apportionment, with particular emphasis on the destination sales formulary apportionment system, and describes the advantages and disadvantages of formulary apportionment compared to separate accounting. In Section 9, I offer my thoughts regarding promising unexplored research questions. Section 10 concludes.

Full text available at: http://dx.doi.org/10.1561/1400000037

References

B. Anand and R. Sansing. The weighting game: Formula apportionment as an instrument of public policy. *National Tax Journal*, 53:183–199, 2000.

R. Antle and G. Eppen. Capital rationing and organizational slack in capital budgeting. *Management Science*, 31:163–174, 1985.

R. Avi-Yonah and K. Clausing. Reforming corporate taxation in a global economy: A proposal to adopt formulary apportionment. In Jason Furman and Jason Bordo, editors, *Path to Prosperity: Hamilton Project Ideas on Income Security, Education and Taxes*, pages 319–344. Brookings Institute Press, Washington, DC, 2008.

R. Avi-Yonah, K. Clausing, and M. Durst. Allocating business profits for tax purposes: A proposal to adopt a formulary profit split. *Florida Tax Review*, 9:497–553, 2009.

T. Baldenius, N. Melumad, and S. Reichelstein. Integrating managerial and tax objectives in transfer pricing. *The Accounting Review*, 79:591–615, 2004.

E. Bartelsman and R. Beetsma. Why pay more? Corporate tax avoidance through transfer pricing in OECD countries. *Journal of Public Economics*, 87:2225–2252, 2003.

A. Bernard, B. Jensen, and P. Schott. Transfer pricing by U.S.-based multinational firms. NBER Working Paper 12493, 2006.

C. Berry. Economics and the section 482 regulations. *Tax Notes*, 43:741–749, 1989.

J. Blouin. Taxation of multinational corporations. *Foundations and Trends in Accounting*, 6:1–67, 2011.

Full text available at: http://dx.doi.org/10.1561/1400000037

M. Brem. A new approach to transfer pricing for multinational corporations. *Tax Notes International*, 33:1005–1016, 2004.

P. Buckley and M. Casson. *The Future of the Multinational Enterprise*. Macmillan, London, 1976.

M. Carroll. Taxation of foreign and national enterprises (volume iv) — methods of allocating taxable income. League of Nations Document No. C.425(b).M.217(b).1933.11.A., 1933.

R. Caves. *Multinational Enterprise and Economic Analysis*. Cambridge University Press, New York, 1982.

D. Cheng. General comments and comparison chart on the 1994 final section 482 regulations and the 1995 OECD guidelines. *Tax Notes International*, 11:1184–1189, 1995.

K. Clausing. Tax-motivated transfer pricing and U.S. intrafirm trade prices. *Journal of Public Economics*, 87:2207–2223, 2003.

K. Clausing. Multinational firm tax avoidance and tax policy. *National Tax Journal*, 62:703–725, 2009.

R. Coase. The nature of the firm. *Economica*, 4:386–405, 1937.

Container Corp. of America v. Franchise Tax Board. 463 U.S. 159 (103 S.Ct. 2933, 77 L.Ed.2d 545).

A. De Waegenaere and R. Sansing. Inconsistent transfer prices and the location of mobile capital. *National Tax Journal*, 63:1085–1110, 2010.

A. De Waegenaere, R. Sansing, and J. Wielhouwer. Who benefits from inconsistent multinational tax transfer pricing rules? *Contemporary Accounting Research*, 23:103–131, 2006.

A. De Waegenaere, R. Sansing, and J. Wielhouwer. Using bilateral advance pricing agreements to resolve tax transfer pricing disputes. *National Tax Journal*, 60:173–191, 2007.

A. De Waegenaere, R. Sansing, and J. Wielhouwer. Multinational taxation and R&D investments. *The Accounting Review*, 87:1197–1217, 2012.

E. Diewert. Transfer pricing and economic efficiency. In A. Rugman and L. Eden, editors, *Multinationals and Transfer Pricing*, pages 47–81. St. Martin's Press, New York, 1985.

J. Dunning. *Multinational Enterprise and the Global Economy*. Reading, Addison-Wesley, 1993.

L. Eden. *Taxing Multinationals: Transfer Pricing and Corporate Income Taxation in North America*. University of Toronto Press, Toronto, 1998.

Full text available at: http://dx.doi.org/10.1561/1400000037

Ernst and Young. 2007–2008 global transfer pricing survey, 2007.

Ernst and Young. Navigating the choppy waters of international tax: 2013 global transfer pricing survey, 2013.

H. Grubert. Intangible income, intercompany transactions, income shifting, and the choice of location. *National Tax Journal*, 56:221–242, 2003.

H. Grubert and J. Mutti. Taxes, tariffs and transfer pricing in multinational corporate decision making. *The Review of Economics and Statistics*, 73: 285–93, 1991.

H. Grubert and J. Slemrod. The effect of taxes on investment and income shifting to Puerto Rico. *Review of Economics and Statistics*, 80:365–373, 1998.

H. Grubert, T. Goodspeed, and D. Swenson. Explaining the low taxable income of foreign-controlled companies in the United States. In A. Giovannini, G. Hubbard, and J. Slemrod, NBER, editors, *In Studies in International Taxation*, pages 237–275. University of Chicago Press, Chicago, 1993.

R. Halperin and B. Srinidhi. The effects of the U.S. income tax regulations' transfer pricing rules on allocative efficiency. *The Accounting Review*, 62: 686–706, 1987.

R. Halperin and B. Srinidhi. U.S. income tax transfer pricing rules for intangibles as approximations of arm's length pricing. *The Accounting Review*, 71:61–80, 1996.

D. Harris. The impact of U.S. tax law revision on multinational corporations' capital location and income-shifting decisions. *Journal of Accounting Research*, 31(Supplement):111–140, 1993.

D. Harris and R. Sansing. Distortions caused by the use of arm's length transfer prices. *Journal of the American Taxation Association*, 20:40–50, Supplement 1998.

D. Harris, R. Morck, J. Slemrod, and R. Yeung. Income shifting in U.S. multinational corporations. In A. Giovannini, G. Hubbard, and J. Slemrod, NBER, editors, *Studies in International Taxation*, pages 277–302. University of Chicago Press, Chicago, 1993.

J. Hirshleifer. On the economics of transfer pricing. *Journal of Business*, 29: 172–183, 1956.

T. Horst. Theory of the multinational firm: Optimal behavior under differing tariff and tax rates. *Journal of Political Economy*, 79:1059–1072, 1971.

Full text available at: http://dx.doi.org/10.1561/1400000037

H. Huizinga and L. Laeven. International profit shifting within multinationals: A multi-country perspective. *Journal of Public Economics*, 92:1164–1182, 2008.

C. Hyde and C. Choe. Keeping two sets of books: the relationship between tax and incentive transfer prices. *Journal of Economics & Management Strategy*, 14:165–186, 2005.

K. Klassen and D. Shackelford. State and provincial corporate tax planning: income shifting and sales apportionment factor management. *Journal of Accounting and Economics*, 25:385–406, 1998.

K. Klassen, M. Lang, and M. Wolfson. Geographic income shifting by multinational corporations in response to tax rate changes. *Journal of Accounting Research*, 31(Supplement):141–173, 1993.

S. Langbein. The unitary method and the myth of arm's length. *Tax Notes*, 30:625–681, 1986.

S. Langbein. Transaction cost, production cost, and tax transfer pricing. *Tax Notes*, 44:1391–1413, 1989.

B. Lev. *Intangibles: Management, Measurement, and Reporting*. Brookings Institution Press, Washington, 2001.

D. Levy and D. Wright. In the OECD and the United States it's the arm's length principle that matters: Comparison of new transfer pricing regulations. *International Transfer Pricing*, 2:28–44, 1995.

Merck & Co. v. United States. 24 Cl.Ct. 73, 1991.

L. Mills. Book-tax differences and Internal Revenue Service adjustments. *Journal of Accounting Research*, 36:343–357, 1998.

L. Mills and R. Sansing. Strategic tax and financial reporting decisions: theory and evidence. *Contemporary Accounting Research*, 17:85–106, 2000.

F. Modigliani and M. Miller. The cost of capital, corporate finance and the theory of investment. *American Economic Review*, 48:261–297, 1958.

S. Morse. Revisiting global formulary apportionment. *Virginia Tax Review*, 29:593–644, 2010.

V. Narayanan and M. Smith. Impact of competition and taxes on responsibility center organization and transfer prices. *Contemporary Accounting Research*, 17:497–529, 2000.

OECD. OECD task force recommendations on U.S. transfer-pricing regulations. *Tax Notes International*, 6:93–99, 1993.

OECD. *OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations*. OECD, Paris, 2010.

Full text available at: http://dx.doi.org/10.1561/1400000037

L. Samuelson. The multinational firm with arm's length transfer price limits. *Journal of International Economics*, 13:365–374, 1982.

A. Sandmo. Investment incentives and the corporate income tax. *Journal of Political Economy*, 82:287–302, 1974.

R. Sansing. Relationship-specific investments and the transfer pricing paradox. *Review of Accounting Studies*, 4:119–134, 1999.

G. Schjelderup and A. Weichenrieder. Trade, multinationals, and transfer pricing regulations. *Canadian Journal of Economics*, 32:817–834, 1999.

M. Smith. Ex ante and ex post discretion over arm's length transfer prices. *The Accounting Review*, 77:161–184, 2002a.

M. Smith. Tax and incentive trade-offs in multinational transfer pricing. *Journal of Accounting, Auditing and Finance*, 17:209–236, 2002b.

J. Sokatch. Transfer-pricing with software allows for effective circumvention of subpart F income: Google's "sandwich" costs taxpayers millions. *International Lawyer*, 45:725–747, 2011.

I. Springsteel. Separate but unequal. *CFO Magazine*, 15:89–91, August 1999.

D. Swenson. Tax reforms and evidence of transfer pricing. *National Tax Journal*, 64:7–25, 2001.

J. Tirole. *The Theory of Industrial Organization*. MIT Press, Cambridge, 1990.

A. Tomohara. Inefficiencies of bilateral advanced pricing agreements (BAPA) in taxing multinational companies. *National Tax Journal*, 57:863–873, 2004.

U.S. Department of the Treasury. *A Study of Intercorporate Pricing (the White Paper)*. Government Printing Office, Washington, 1988.

O. Williamson. *Markets and Hierarchies: Analysis and Antitrust Implications*. Free Press, New York, 1975.

O. Williamson. *The Economic Institutions of Capitalism*. Free Press, New York, 1985.

P. Wilson. The role of taxes in location and sourcing decisions. In A. Giovannini, G. Hubbard, and J. Slemrod, NBER, editors, *Studies in International Taxation*, pages 195–234. University of Chicago Press, Chicago, 1993.

J. Wittendorf. *Transfer Pricing and the Arm's Length Principle in International Tax Law*. Kluwer Law International, Netherlands, 2010.

J. Zimmerman. *Accounting for Decision Making and Control*. McGraw-Hill Irwin, New York, 8th edition, 2014.