www.pwc.com/jp/tax

Transfer Pricing News

The Berry Ratio and Japan Transfer Pricing Practice

April 2014

One year on from its introduction into the Japanese legislation, there still appears to be some uncertainty around the purpose and usefulness of the Berry ratio in Japanese transfer pricing practice.

Accordingly, for the benefit of taxpayers in Japan for whom the Berry ratio may be unfamiliar, this article discusses its history and its potential uses, as well as comparing the results derived from an application of the Berry ratio with other transfer pricing methodologies.

Berry Ratio

In 2010, the Organisation for Economic Cooperation and Development (OECD) updated its Transfer Pricing Guidelines for Multinational Enterprises (the OECD Guidelines). As part of the revisions, a section examining the Berry ratio as a financial indicator, for use in the examination of arm's length prices, was added to Chapter 2 Transfer Pricing Methods (Chapter 2).

From 1 April 2013, the Berry ratio is also now included in the Japanese transfer pricing legislation, by incorporation into the Order for Enforcement of the Act on Special Measures Concerning Taxation Articles 39-12 and 39-112. The change is intended to align Japanese transfer pricing practice with the OECD Guidelines. Consequently, while the Berry ratio has been previously accepted by the Japanese tax authorities in bilateral advance pricing arrangements, it will now also be recognised as a valid profit level indicator in audit examinations.

History

The Berry ratio is the ratio of gross profit to operating expenses and is named after American economist Professor Charles Berry, who first applied it in the transfer pricing court case E.I. du Pont de Nemours & Co. v. U.S., 608 F.2d 445 (Ct. Cl. 1979). The du Pont case involved a distributor which also performed related marketing services. When evaluating the performance of the distribution business, Professor Berry compared the ratio of gross profit to operating expenses to third party comparable companies' ratios of gross profits (less unrelated other income) to operating costs (excluding interest and depreciation). In this way, Professor Berry was able to evaluate the return the du Point distributor earned on its purely value-adding distribution activities, though with an important underlying assumption that the costs of these activities were fully captured in the distributor's operating expenses. The Berry ratio has been recognised in the United States transfer pricing regulations since the early 1990s.

Uses in Transfer Pricing

Generally, the Berry ratio should only be used to test the profits of limited risk distributors or service providers that do not own or use any intangible assets. This is because the reliability of the Berry ratio depends upon the existence of a relationship between gross profit and operating expenses.

Chapter 2 of the OECD Guidelines gives the example of intermediary activities where a taxpayer purchases goods from an associated enterprise and on-sells those goods to other associated enterprises as an example of where the Berry ratio may be usefully applied. In such cases, both sales and costs of goods may be controlled transactions leaving operating expenses as the only reasonably independent accounting line item from which to base a transfer pricing method (subject of course to the presence of other controlled transactions within operating expenses, such as management service charges or royalties).

The Berry ratio can also be useful when applied to limited risk distribution of high volume / low margin products. The following (simplified) example illustrates the problem that may arise in such a scenario should a sales based transactional net margin method be applied, and how using the Berry ratio may be a more appropriate measure of an arm's length return for the functions performed.

	Scenario A			*Scenario B*		
	Case 1A	*Case 2A*	*Case 3A*	*Case 1B*	*Case 2B*	*Case 3B*
Revenue	10,000	100,000	1,000,000	10,000	100,000	1,000,000
COGS	(9,500)	(97,400)	(978,800)	(9,500)	(99,000)	(990,000)
Gross profit	500	2,600	21,200	500	1,000	2,000
OPEX	(300)	(600)	(1,200)	(300)	(600)	(1,200)
Operating profit	200	2,000	20,000	200	400	800
Berry ratio	1.67	4.33	17.67	1.67	1.67	1.67
OM	2.00%	2.00%	2.00%	2.00%	0.40%	0.08%

In the example above, three cases with increasing sales volume are presented for each of two scenarios. In Scenario A, the cost of goods sold is adjusted in each case to achieve a 2% operating margin. In Scenario B, the cost of goods sold is adjusted in each case to achieve a Berry ratio of 1.67. Under both scenarios, sales volumes are increased tenfold, while operating expenses are assumed to double, reflecting the fact that operating expenses for limited risk distributors do not increase simply due to sales volumes.

In Scenario A, the sharp increase in the Berry ratio illustrates one potential problem that may arise with using operating margins as a measure of profitability. Despite the 2% target margin being reasonable at the lower sales volume, the distributor's return can be seen to be increasingly divorced from its value adding activities (operating expenses) as sales volumes increase. By applying the Berry ratio in Scenario B, the link between the distributor's efforts and its return can be maintained.

The previous example is obviously extreme but is helpful to illustrate the application in practice of the Berry ratio compared to other measures of profitability.

However, the Berry ratio does have some limitations even where it may appear to be an appropriate method to apply. For example, it is crucial that the set of comparables from which a Berry ratio is calculated are functionally similar to the tested party. Moreover, it is also necessary to identify comparables that do not own significant intangible assets. Another common difficulty, noted in the OECD Guidelines, is that the determination of Berry ratios is obviously sensitive to the classification of costs, and therefore may lead to further comparability issues. Given the difficulty in finding the right comparables or making adjustments to eliminate the effect of intangibles on profits, these limitations can make the Berry ratio harder to apply in practice.

In addition, taxpayers should be aware that the inclusion of the Berry Ratio as an allowable method does not mean it will go unchallenged by tax examiners where it has been selected as the most appropriate method. In fact, experience from Europe[1] shows that taxpayers should anticipate that its use may be challenged and be prepared to support it based on commercial or practical reasons to the extent possible, rather than relying solely on general economic theory.

What Should Japanese Taxpayers Do?

Notwithstanding the limitations described above, the Berry ratio can be extremely useful in the right circumstances. Accordingly, this change in law should prompt Japanese taxpayers to review their cross border transactions and to assess whether the Berry ratio might be appropriate to adopt as a transfer pricing policy. This would be particularly the case where operating margins are used as a measure of profitability in distribution businesses with exponential growth patterns.

Finally, all taxpayers should see the further alignment of the Japanese legislation with the OECD Guidelines as a positive step forward for Japanese transfer pricing practice.

[1] Bloomberg BNA, *Transfer Pricing International Journal*, Vol.14, No.11, November 2013, page 9.

For more detailed information, please consult your international tax representative or contact any of the following members listed below:

Zeirishi-Hojin PricewaterhouseCoopers
Transfer Pricing Consulting Group
http://www.pwc.com/jp/tax

Tokyo
Kasumigaseki Bldg. 15F
2-5, Kasumigaseki 3-chome
Chiyoda-ku, Tokyo 100-6015
Telephone: 81-3-5251-2400

Osaka
Breeze Tower 24F
4-9, Umeda 2-chome, Kita-ku
Osaka-shi, Osaka 530-0001
Telephone: 81-6-7670-0988

Nagoya
Nagoya Crosscourt Tower 12F
4-10 Meieki 4-chome, Nakamura-ku
Nagoya-shi, Aichi 450-0002
Telephone: 81-52-587-7520

Partner	Akio Miyamoto	81-3-5251-2337	akio.miyamoto@jp.pwc.com
	Daisuke Miyajima	81-3-5251-2552	daisuke.miyajima@jp.pwc.com
	Toyoharu Nakamura	81-3-5251-2355	toyoharu.nakamura@jp.pwc.com
	Teruyuki Takahashi	81-3-5251-2873	teruyuki.takahashi@jp.pwc.com
	Michael Polashek	81-3-5251-2517	michael.polashek@jp.pwc.com
	Ryann Thomas	81-3-5251-2356	ryann.thomas@jp.pwc.com
	Kouji Noda (Osaka)	81-6-7670-0956	kouji.noda@jp.pwc.com
	Ai Yoshida (Osaka)	81-6-7670-0958	ai.yoshida@jp.pwc.com
Managing Director	Howard Osawa	81-3-5251-6737	howard.h.osawa@jp.pwc.com
Director	Toshiyuki Kurauchi	81-3-5251-2697	toshiyuki.kurauchi@jp.pwc.com
	Takeki Nagafuji	81-3-5251-2438	takeki.t.nagafuji@jp.pwc.com
	Masatoshi Ohashi	81-3-5251-6750	masatoshi.m.ohashi@jp.pwc.com
	Naoki Hayakawa	81-3-5251-6714	naoki.hayakawa@jp.pwc.com
	Toru Fujisawa (Nagoya)	81-52-587-7528	toru.fujisawa@jp.pwc.com
Senior Manager	Kenji Nakamuta (Osaka)	81-6-7670-0955	kenji.nakamuta@jp.pwc.com
	Koichi Funatani (Nagoya)	81-52-587-7522	koichi.f.funatani@jp.pwc.com

PwC Japan Tax (Zeirishi-Hojin PricewaterhouseCoopers), a PwC member firm, is one of the largest professional tax corporations in Japan with about 500 people. Within this practice, our Transfer Pricing Consulting Group is comprised of approximately 70 professionals, dedicated specifically to advising on transfer pricing matters. In addition to tax compliance services including the preparation of corporation income tax, individual income tax, and consumption tax returns, our tax professionals are experienced in providing tax consulting advice in all aspects of domestic/international taxation including transfer pricing, financial and real estate, M&A, group reorganisation, global tax planning, and the consolidated tax system to clients in various industries.

PwC firms help organisations and individuals create the value they're looking for. We're a network of firms in 157 countries with more than 184,000 people who are committed to delivering quality in assurance, tax and advisory services. Tell us what matters to you and find out more by visiting us at www.pwc.com

This content is for general information purposes only, and should not be used as a substitute for consultation with professional advisors.

© 2014 Zeirishi-Hojin PricewaterhouseCoopers. All rights reserved.
PwC refers to Zeirishi-Hojin PricewaterhouseCoopers, a member firm in Japan, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.