ELSEVIER

Journal of International Economics 65 (2005) 507–521

Journal of INTERNATIONAL ECONOMICS

www.elsevier.com/locate/econbase

Corporate tax systems, multinational enterprises, and economic integration

Hans Jarle Kind[1], Karen Helene Midelfart[2], Guttorm Schjelderup*

Department of Economics, Norwegian School of Economics and Business Administration, Helleveien 30, 5045 Bergen, Norway

Received 25 July 2003; received in revised form 26 May 2004; accepted 6 June 2004

Abstract

Multinational firms are known to shift profits and countries are known to compete over shifty profits. Two major principles for corporate taxation are Separate Accounting (SA) and Formula Apportionment (FA). These two principles have very different qualities when it comes to preventing profit shifting and preserving national tax autonomy. Most OECD countries use SA. In this paper we show that a reduction in trade barriers lowers equilibrium corporate taxes under SA, but leads to higher taxes under FA. From a welfare point of view, the choice of tax principle is shown to depend on the degree of economic integration.

Keywords: Multinational enterprises; Economic integration; Trade costs; International tax competition; Tax regimes

JEL classification: F15; F23; H25; H87

* Corresponding author. Tel.: +47 55 95 92 38; fax: +47 55 95 93 50.

E-mail addresses: guttorm.schjelderup@nhh.no (G. Schjelderup), hans.kind@nhh.no (H.J. Kind), karen.midelfart@nhh.no (K.H. Midelfart).

[1] Tel.: +47 55 95 95 90; fax: +47 55 95 93 50.

[2] Tel.: +47 55 95 95 10; fax: +47 55 95 93 50.

0022-1996/$ - see front matter © 2004 Published by Elsevier B.V.
doi:10.1016/j.jinteco.2004.06.002

1. Introduction

The rise in FDI and multinational firm activity is one of the most pronounced trends in the world economy over the last two decades.[3] This trend has worried policymakers and academics, since multinationals are known to shift profits to low tax countries and governments are prone to compete for shifty profits.[4] In response to these problems, the European Commission has focused on "harmful" tax competition (as in the "Monti Package"), and has more recently published a study on corporate taxation. The latter study aims at finding a system for corporate taxation that prevents profit shifting, reduces compliance costs for firms, and preserves national tax autonomy (Commission of the European Communities, 2001).

One of the main proposals emerging from the Commission's corporate tax study is a switch from the corporate tax system employed by most European countries—called Separate Accounting (SA)—to a system of Formula Apportionment (FA). Apportionment systems are already in use internally among states, provinces, and cantons in federal countries such as the United States, Canada, and Switzerland, where its introduction has been motivated by the need to disentangle the activities of state subsidiaries from the activities of multistate enterprises as a whole in order to secure a tax base in all states where the enterprise has ongoing activities.

Under Separate Accounting (SA) taxable income of a corporation's activity in each jurisdiction is based on computing the value of transactions between related affiliates as if they had occurred by independent parties in the market place (so-called arm's length pricing). The obvious weakness of this system is that it can be difficult to obtain market parallels on which such prices can be established. In particular, there is substantial evidence that Multinational Corporations (MNCs) arise because they possess firm-specific assets that are intangible in nature and difficult to trade at arm's length (Markusen (1995)). In practice, multinationals therefore have significant discretion when setting their transfer prices. The competing alternative to SA, Formula Apportionment (FA), implies that the corporate group combines the income of each of its operatives into a single measure of taxable income. The group then uses a formula to apportion taxable income to each of the jurisdictions in which the group has activities.[5] The advantage of this approach is that manipulation of income between affiliates by use of transfer prices does not have an impact on the single measure of income for the corporate group.

Given the growing importance of multinationals worldwide and the attention by policymakers to the issue of company taxation, it is perhaps surprising that very little work

---

[3] See Markusen (ch. 1, 2002).

[4] The profit shifting activities of MNCs are well documented. Grubert and Mutti (1991), Hines and Rice (1994), Harris et al. (1993), and Collins et al. (1998) study U.S. data and find strong evidence in support of profit shifting to low tax countries. Broader data are analyzed by Bartelsman and Beetsma (2001) who find evidence for tax avoiding transfer pricing in most OECD countries. For Europe Weichenrieder (1996) shows that German firms have shifted profits to the manufacturing sector in Ireland, thereby taking advantage of the low Irish tax rate. For a survey of this literature, see Hines (1999).

[5] In the United States, for example, some of the states that levy a corporate income tax determine taxable income within their state on the basis of the state's shares of the corporation's total property, payroll and sales.