International Review of Economics and Finance 31 (2014) 218–231

Contents lists available at ScienceDirect

International Review of Economics and Finance

journal homepage: www.elsevier.com/locate/iref

Taxation of domestic dividend income and foreign investment holdings

Anil V. Mishra *, Ronald A. Ratti [1]

University of Western Sydney, School of Business, Australia

ARTICLE INFO

Article history:
Received 7 October 2013
Received in revised form 30 January 2014
Accepted 30 January 2014
Available online 15 February 2014

Keywords:
Foreign equity investment
Domestic dividend taxes
Dividend imputation schemes
Franking ratio

ABSTRACT

This paper highlights the role of dividend imputation in influencing cross-border equity flows. We account for the dividend imputation scheme employed by various countries at different periods of time. In this paper it is argued that the heavier is domestic taxation of domestic dividend income, the more attractive is foreign investment to domestic agents. Dividend imputation eliminates the double taxation of domestic income, reduces the effective tax rate on domestic investment and makes investment in foreign securities less attractive. A fall of 10% in effective tax rate on domestic dividend income reduces foreign equity investment by about 5%. Domestic investors who are paid dividends under a dividend imputation system receive a credit for the tax paid at the company level and this reduces the effective tax rate. Cross-border equity investment is increased if tax credit rises for taxes paid overseas. Empirical analysis is based on bilateral investments among 23 mature economies over 2001–2011.

1. Introduction

The effect of taxation on cross-border capital holdings has been considered by a number of authors. Much of the focus of this literature has been on the effect of taxes on foreign investment or on income from foreign investment. In Black (1974) taxes are proportional to the net holdings of foreign assets and all risky assets are traded, whereas in Stulz (1981) investors pay a tax proportional to the absolute holdings of risky foreign assets and not all risky assets are traded.[2] Cooper and Kaplanis (1986) derive efficient portfolios in a world where there are barriers to cross border investment. Errunza and Losq (1989) find the effect of partial integration of markets on the multilateral structure of security returns and holdings within a multi-country model.

Demirguc-Kunt and Huizinga (1995) examine pre-tax return on stocks and conclude that capital gains taxes on foreign owners act as a barrier to portfolio investment. Desai and Dharmapala (2009) find that the residual tax on US multinational firms' foreign earnings skews the composition of outbound capital flows.[3] Huizinga and Nielsen (1997) show that with an increase in foreign ownership of firms a higher tax rate on source based investment income may be called for. However, the globally optimal

* Corresponding author. Tel.: +61 9685 9230.
E-mail addresses: a.mishra@uws.edu.au (A.V. Mishra), r.ratti@uws.edu.au (R.A. Ratti).
[1] Tel.: +43 9685 9346.

[2] Analysis of the effect of taxes on international portfolio flows is related to work on optimal taxation. Devereux (2008) states that the same rate of tax on investment income without regard to the source of that income ensures equality of pre-tax returns to capital across countries (maintaining production efficiency across countries). In empirical work Errunza and Losq (1985) find that over the period 1976–1980 markets are mildly segmented in that large risk premiums are found to exist for subsets of securities.

[3] Chan, Covrig, and Ng (2005) employ a country specific time invariant tax variable capturing withholding tax from dividends effect on mutual fund equity allocations and find a statistically significant effect on home bias. Aviat and Coeurdacier (2007) examine the effect of dividend tax and interest rates on bilateral banking claims. They state that the tax rates are far from negligible, ranging from 0% to 40%. Sanjo (2012) shows that with regard to location of foreign direct investment, relative cost and risk can be traded off against the presence of lump sum taxes. Deng, Li, Liao, and Wu (2013) investigate the relationship between dividends and investment for Chinese listed firms and find that neither is cut in the presence of cash flow uncertainty. Sanjo (2013) states that although the domestic firm in the small country is less efficient, it is possible that the government of the small country imposes a higher tax than that of the large country.

http://dx.doi.org/10.1016/j.iref.2014.01.018
1059-0560/

tax system may require exemption of foreign income tax. Davies, Norback, and Tekin-Koru (2009) use affiliate-level data from Swedish multinationals to examine the impact of tax treaties on both overall affiliate sales and the composition of those sales and find that a tax treaty increases the probability of investment by a firm in a given country.

The primary goal in this paper is to investigate the influence of the taxation of domestic dividend income on the foreign investment holdings of domestic investors. In this paper we recognize that in assessing the level of domestic taxation of domestic dividend income it is crucial to realize that some countries operate a dividend imputation system. Under a complete dividend imputation tax system the double taxation of domestic dividend income is eliminated. Domestic investors who are paid dividends under a dividend imputation system receive a credit for tax paid at the company level and this reduces the overall effective tax rate on domestic investment. If there is 100% dividend imputation, then the overall taxation of capital income is the marginal personal income tax rate of investors. If there is no dividend imputation, then the overall taxation of capital income is the sum of the marginal personal income tax rate and the corporate income tax rate (minus the product of the two). It is conjectured in this paper that the heavier is domestic taxation of domestic dividend income, the more attractive is foreign investment to domestic agents.

This paper makes a contribution to the literature by highlighting the role of dividend imputation in influencing cross-border equity flows and by accounting for the dividend imputation scheme employed by various countries at different periods of time. Much of the work in the literature on the effects of dividend imputation (or of the related issue of the effects of differential taxation of dividends) has been theoretical, focused on empirical effects within particular countries, or not concentrated on the effects on domestic taxation for foreign investment. Graham (2003) provides an extensive review of tax research related to domestic and multinational capital structure, payout policy, compensation policy, risk management and organizational form, and finds that tax research generally supports the hypothesis that high tax rate firms pursue policies that provide tax benefits.

Booth (1987) finds that changes in the dividend tax credit will have a differential impact on Canadian ownership. McDonald (2001) and Bell and Jenkinson (2002) examine the effects of change in differential dividend taxation events in Germany and in the U.K. on domestic ownership of shares. Weichenrieder (1998) find that an increase in the dividend tax rate which is induced by lowering the shareholders' imputation rate potentially depresses domestic investment. Erickson and Maydew (1998) state that implicit taxes reflect the extent (if any) to which tax-favored assets bear lower pretax returns than do tax-disfavored assets of similar risk. Edwards and Shevlin (2011) show that in an integrated corporate tax system, resident shareholders receive a tax credit for corporate tax paid that can be used to offset personal tax on dividend income, but that nonresident investors cannot use the tax credit on corporate dividends and thus prefer to invest in flow-through entities.

Cannavan, Finn, and Gray (2004) examine Australia's dividend imputation system and emphasize that in a small open economy a firm's cost of capital is not affected by such a system since the marginal stockholder is a foreign investor who receives no benefit from the imputation of tax credits.[4] Feuerherdt, Gray, and Hall (2010) find that cum-dividend day prices on hybrid securities do not include any value for franking credits. Miller and Scholes (1982) re-examine some recent tests of whether holders of shares with higher dividend yields receive higher risk-adjusted rates of return to compensate for the heavier taxes on dividend payments than on long-term capital gains.

In this paper it is argued that it is important to factor in the influence of a dividend imputation system on returns to domestic investors, since a higher level of dividend imputation makes investment in domestic securities more attractive and thus makes investment in foreign securities less attractive. In our sample of mature economies that have resident investors with foreign income, 52% of the observations are provided imputation of taxes paid on dividend income by domestic corporations. Imputation eliminates the double taxation of income and dividends. Accordingly shareholders receive a higher income stream under dividend imputation tax system. These factors have the potential to significantly influence the extent of foreign investment in equity flows.

The effective tax rate on domestic investment will be constructed to reflect the influence of dividend imputation and corporate and personal income tax rates. It is found that a fall of 10% in effective tax rate on domestic dividend income reduces foreign equity investment by about 5.22%. Tax levied by foreign governments on foreign dividend income is also considered. Cross border taxation in foreign country induces a bias towards source country holding domestic financial assets because it puts additional cost on holding foreign securities from a source country investors' perspective. In mitigation, with regard to dividend withholding tax on payments to foreign shareholders, French and Poterba (1991) note that typically these payments can be credited against taxes in the investors' home country. Taxation of dividend income accruing to foreign investors varies by country and by foreign investor. Cross-border equity investment is found to be increased if tax credit rises for taxes paid overseas. Empirical analysis is based on bilateral investments among 23 mature economies over 2001–2011. To deal with endogeneity between the equity, tax and other variables the Arellano–Bover/Blundell–Bond linear dynamic panel-data method is used to estimate the model.

The taxation of domestic and foreign dividend income is discussed in Section 2. The data and the variables are discussed in Section 3. The econometric model is presented in Section 4. The empirical results are presented in Section 5. Section 6 concludes.

[4] A considerable volume of work examines the implications of Australia's dividend imputation system. Jugurnath, Stewart, and Brooks (2008) finds that dividend imputation in Australia effectively reduces the distortions caused by the traditional system of taxation. Handley and Maheswaran (2008) find that in Australia, 67 (81) per cent of distributed imputation credits were used to reduce personal taxes during 1990–2000 (2001–2004), resulting in a significant elimination of double taxation. HO (2003) states that the Australia imputation tax system favors dividends over capital gains resulting in a significantly higher dividend payout than in Japan.