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The value of dividend imputation tax credits in Australia ☆

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Abstract

A dividend imputation tax system provides shareholders with a credit (for corporate tax paid) that can be used to offset personal tax on dividend income. This paper shows how to infer the value of imputation tax credits from the prices of derivative securities that are unique to Australian retail markets. We also test whether a tax law amendment that was designed to prevent the trading of imputation credits affected their economic value. Before the amendment, tax credits were worth up to 50% of face value in large, high-yielding companies, but subsequently it is difficult to detect any value at all.

JEL classification: G31; G38

Keywords: Dividend imputation; Cost of capital

1. Introduction

Under a dividend imputation tax system, corporate tax can be imputed against personal tax obligations on dividend income. This effectively removes the double taxation of dividends that exists under a classical tax system. When a dividend is paid out of corporate profits that have been taxed at the statutory corporate tax rate,

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the shareholder receives the cash dividend plus an imputation tax credit. This tax credit can be used to offset personal income tax obligations.

Many developed countries operate some form of dividend imputation. Australia, New Zealand, Mexico, Finland, and Norway operate full imputation systems in which all of the corporate tax paid can be offset against personal tax obligations. Germany operated a full imputation system until October 2000. Many other countries (e.g., U.K., France, Italy, Canada, Ireland) operate partial imputation systems in which part of the corporate tax paid can be offset against personal tax obligations.

Even under a full imputation system, however, not all of the imputation credits can be utilized by stockholders because imputation credits can generally be used only to offset domestic personal tax obligations. Tax-exempt and nonresident stockholders do not pay domestic personal tax and therefore have no personal tax obligations to offset. That is, different stockholders will place different values on these imputation tax credits. Tax-paying resident stockholders will value them highly. Conversely, tax-exempt and nonresident stockholders can only extract value from these imputation tax credits if they can somehow transfer them to resident stockholders. In this case, the value that can be extracted is the transfer price net of transactions costs. A number of schemes have been employed to do this, but in Australia, for example, a 1997 tightening of tax laws is likely to have increased the costs of performing such transfers.

In this paper, we seek to estimate the value of imputation tax credits in Australia, and to test whether the 1997 tightening of tax laws have affected their value. We do this by inferring the value of cash dividends and tax credits from the relative prices of share futures and the individual stocks on which those futures are written. This methodology has a number of methodological and econometric advantages over the standard drop-off technique, in which the value of the dividend is inferred from the ex-date stock price decline. Our results are consistent with the notion that nonresidents are the marginal price-setting investors in large Australian firms. The strong relationship between dividend yield and the value of tax credits is consistent with the idea that the costly transfer of the credits provides a source of value to nonresidents. Since the 1997 tax law amendments, which effectively prevent the transfer of imputation tax credits, were introduced, the implied value of tax credits has been insignificantly different from zero.

These issues are of considerable practical importance because, as Officer (1994) demonstrates, the value of imputation credits to the marginal stockholder is an important element of firm valuation. Having obtained an estimate of the market value of imputation credits for the marginal investor, this value can be added back into the firm's cash flows, or can form the basis of an adjustment to the weighted-average cost of capital. Officer (1994) illustrates both of these approaches and provides the framework for much of the existing research in the area.

The remainder of the paper is structured as follows. Section 2 provides an overview of the Australian dividend imputation tax system and stresses the significance of recent changes to the taxation laws. Section 3 reviews the relevant literature on the market valuation of dividends with specific emphasis on the value of