Internet Appendix A239: Dividend Imputation
Illustrative Reverse Engineered Pitch Template Example

Pitcher's Name	Marie To (UQ Summer Scholar)	**FoR category**	Dividend Imputation	**Date Completed**	06/02/2018
(A) Full Reference	Cannavan, D. and Gray, S. (2017) Dividend drop-off estimates of the value of dividend imputation tax credits. *Pacific-Basin Finance Journal*, 46: 213-226.				
(B) Basic Research Question	What is the market value of distributed imputation credits (θ) in the Australian dividend imputation tax system?				
(C) Key paper(s)	Officer, R. (1994) The cost of capital of a company under an imputation tax system. *Accounting and Finance,* 34(1): 1-17 Cannavan, D., Finn, F. and Gray, S. (2004) The value of dividend imputation tax credits in Australia. *Journal of Financial Economics*, 73(1): 167-197 Beggs, D. J. and Skeels, C. L. (2006) Market arbitrage of cash dividends and franking credits. *The Economic Record,* 82(258): 239-252				
(D) Motivation/Puzzle	Under Australia's dividend imputation tax system, different groups of investors (e.g. resident vs. non-resident) will assign different values to imputation tax credits (or franking credits), making it difficult to conceptually determine the expected market value of these credits. This paper seeks to generate an empirical estimate of the market value of imputation credits to the representative investor, which has not yet been achieved in the current academic literature.				
THREE					
(E) Idea?	Using dividend drop-off analysis, this paper infers the value of cash dividends and any attached imputation credits from a comparison of the cum-dividend share price (which includes the value of dividends and imputation credits) and the ex-dividend share price (which doesn't). The dividend drop-off ratio (the difference between cum- and ex-dividend share prices, relative to the amount of the dividend) is regressed on the amount of the franking credit, relative to the amount of the dividend.				
(F) Data?	(1) Ex-dividend events for listed Australian companies, from July 2000 to June 2016 (2) Total 4690 ex-dividend events over the sample period (3) Not a panel dataset (4) Data collected from and matched across Morningstar DatAnalysis and Thomson Reuters Tick History (5) Observations where the dividend amount or ex-date was missing were eliminated (6) Yes (7) No				
(G) Tools?	Econometric model: $\frac{P_{i,t-1} - P^*_{i,t}}{D_i} = \delta + \theta \frac{FC_i}{D_i} + \varepsilon_i$ The parameters to be estimated are δ and θ, which represent the market value of cash dividends and distributed franking credits (respectively) as a proportion of their face amount. The model is estimated using ordinary least squares, generalised least squares, and robust regression methods.				

TWO	
(H) What's New?	This paper is the first to estimate the value of dividends and tax credits in the Australian system which employs a large sample, and which relies exclusively on data from after the introduction of both the 45-day holding period rule (1997) and the cash rebate for excess credits (2000). Mickey Mouse: Australian dividend imputation tax system, large sample and improved econometric techniques, dividend drop-off analysis
(I) So What?	A statistically reliable estimate of the market value of imputation credits is important for firm valuation (imputation credits reduce a firm's cost of equity capital), as well as for the regulation of monopoly infrastructure assets in Australia.
ONE	
(J) Contribution?	This study contributes to the literature by providing statistically robust estimates of the market value of both cash dividends and distributed imputation credits, which are not limited by insufficient sample sizes.
(K) 3 Key Findings	1. The market value of distributed imputation credits (θ) is around 35% of their face amount. 2. Assuming a distribution rate to shareholders of 70%, the value of imputation credits (γ) under the Officer (1994) cost of capital framework is approximately 0.25. 3. The estimate of 0.35 for θ corresponds with an estimate of 0.85-0.90 for the market value of cash dividends.