## Changes Made in Response to Referee Comments

Below we describe how we incorporated the suggestions of the referees in the final draft.

## • Referee 1.

- Main Comment: The referee felt that we take a "cavalier approach" to the predictions of theory and do not acknowledge that "the results are quite sensitive to the formula input values." The main objection is our calculation of intangible capital, which the referee feels could result in just about anything.
- Response: In the final draft, we try to make the intent of our exercise clearer. Our paper shows what one has to buy into in order to conclude that the market was overvalued by 30 percent. One has to assume that the value of intangibles was negligible in 1929 and the real after-tax return on tangibles was very high. We think that this is interesting because Fisher's main thesis was that intangibles were a big deal! Because we do not have a direct measure of the stock of intangibles for the U.S. corporate sector, we use national accounts data and growth theory to get an estimate and here we try to get the smallest number consistent with national accounts and try to persuade the reader that theory puts a lot of discipline on us. We can't choose any interest rate and growth rate that we want as the referee seems to suggest. In fact, theory ties these two things. We have tried to improve the exposition to make this more clear.
- MINOR COMMENT 1: The referee points out that we used the end of period capital average in equation (4) rather than beginning of period capital average as the expression requires.
- Response: We fixed this error. We also rewrote the expression so that we could relate the estimate for the 1920s to estimates that we have for the postwar. Here, we estimate that resource cost of intangible is at least 60 percent of the tangible cost. This estimate is in the range of estimates for the postwar US and UK.
- MINOR COMMENT 2: The referee recommended that we cut the "jibes" (a paragraph in the introduction and a paragraph in Section 3 of the previous draft) since there is uncertainty whether one works with expected dividends or with

capital stocks.

- Response: We dropped both paragraphs and instead promote our way of estimating the capital stock rather than criticize other approaches.
- MINOR COMMENT 3: The referee wanted clarification on the term "resource cost."
- Response: We carefully define resource cost in the beginning of Section 3.2. This we think is an improvement.
- MINOR COMMENT 4: The referee wanted clarification on the calculation of tax rates.
- Response: In the text, we note in Section 3.1 that we want the tax paid on an additional dollar of income (from profits or from dividends). This is a marginal rate. Of course, as the referee points out, with only one household type, there is no difference between the marginal and average rate. The best empirical counterpart for our many-household economy is an average of the different marginal rates.
- MINOR COMMENT 5: The referee asked whether 1929 was an unusual year (e.g., with investment and capital much above trend).
- Response: It was not according to Kendrick's national account estimates. (Here, we added footnote 13 to note that).

## • Referee 2.

- Comment 1: Referee 2 wants a better connection to the literature that computes the present value of dividends.
- Response: We note that there is an alternative approach in footnote 1. As we noted above, we stick to the positive and say what are the advantages of our approach.
- Comment 2: Referee 2 felt that we were not clear about the message readers should take from the paper.

- RESPONSE: We make two changes in the conclusions to respond to this comment directly. First, we emphasize that we started out to quantify the overvaluation. Theory and data forced us to the conclusion that it was undervalued. Second, we say that we are not after saving Fisher's reputation. Rather, we are interested in developing a theoretical benchmark which can be useful for determining corporate valuations and making informed decisions or policies.
- Commental values as point estimates and then give ranges.
- Response: Our thesis is that the market was not overvalued. To establish this, we think it makes more sense to show that the largest estimate for the market value lies below the smallest estimate for the fundamental value.
- Comment 4: The referee suggested that we include details of the model upon which our main formula is based.
- RESPONSE: We tried doing this in a very concise way but found that we needed lots of additional material. Instead, we included the URL for the paper that contains that summary. (The relevant paper is also at the resubmission stage at RESTUD and will hopefully be accessible both at our website and in a journal.)
- Comment 5: The referee thought that we hinted that expectations do not play a role in our calculations.
- Response: We now state (prior to equation (1)) conditions under which the key relation holds, namely, if investments are positive and funded out of retained earnings. We do not say that expectations do not matter. Of course, the capital stocks are equal to the present value of dividends and therefore summarize the expectations of future cash flows.