

Re: Fine work by our new Nobelist

Source: <http://sci.tech-archive.net/Archive/sci.econ/2004-10/0985.html>

From: Igor (jjweatherby_at_houston.rr.com)

Date: 10/16/04

Date: Sat, 16 Oct 2004 01:20:09 GMT

royls@telus.net wrote:

> On Fri, 15 Oct 2004 19:23:21 GMT, Igor <jjweatherby@houston.rr.com>

> wrote:

>

>

>>sinister wrote:

>>

>>

>>>I assume you mean like intellectual "property rights".

>>>

>>>I'm not sure what Prescott and his coauthor were referring to. Maybe they

>>>estimated the value of such assets by some indirect method.

>>

>>Reading the paper before making comments would help here.

>

>

> As long as one can manage the required suspension of disbelief...

>

>

>>The fundamental value is clearly defined as equal to $(1 - \text{tax on}$

>>distributions) (resource cost of tangible capital) + $(1 - \text{tax on}$

>>profits) (resource cost on intangible capital). This is a statement on

>>returns.

>

>

> More accurately, this formula states that the value of a company does

> not depend in any way on how profitable it is or is expected to be,

> but only on how much money it has spent, and the tax rates. So as

> long as there is no tax on profits, \$1G spent acquiring perfectly

> useless intangibles is considered to make the company worth \$1G.

>

Wrong it is the valuation of assets not how much is currently spent.

Acquiring useless intangibles do not add to the intangible stock. They have to be innovations. Why would a company acquire useless intangibles on purpose it would lower profits with no returns. They are talking about stocks not flows. What the firm could sell for based on assets not how much is spent.

- >> *The tax rates effect prices on capital the distribution rate is*
- >> *used because the return to capital is taxed not the buying of capital.*
- >> *Corporate profit taxes are used because they effect the price of*
- >> *intangible assets. Investment in intangibles are an expense and reduce*
- >> *corporate profits meaning less tax.*
- >
- >
- > *So, because a company that always loses money pays no tax, it is*
- > *considered to be more valuable than a company that always makes money*
- > *and thus does pay tax. Check.*
- >

Wrong note it says $1 - \text{tax}$. This is the after tax value. Presscot clearly states that are sell prices. So if the capital is valued at 1k market then the proceeds after selling are $(1 - \text{the tax rate})$ (market value). The problem is you misinterpret this as current expenditures not as a valuation of assets.

- >
- >> *The valuation is the price of its*
- >> *tangible assets and intangible assets.*
- >
- >
- > *IOW, the assumption is that corporate value does not depend on how*
- > *skillfully the company's assets are deployed, or how profitable they*
- > *are made, but only on how much they cost to acquire and how much any*
- > *returns are taxed.*
- >

No how much the corporation could be sold for. The value is what you can sell the company for. The fundamental portion of that is how much are assets worth after taxation.

- >
- >> *Intangibles are R&D and the productivity gained for R&D. In effect a*
- >> *stock of knowledge which can be represented by total factor*
- >> *productivity.*
- >
- >
- > *Productivity measured how?*
- >

In this case it is a residual. The after tax value of tangible assets is what is left over in profits after you take out the after tax returns to tangible capital.

In context of growth models which Presscot loosely bases the analysis on, it is total factor productivity that is used to measure the stock of knowledge.

>>*The valuation of intangibles is estimated from profits. Profits are equal to (the interest rate) (tangible capital) + (the interest rate– growth trend of output) (intangible capital).*

>

>

> *This formula means that if output is declining, profits are higher, and maximum profitability is achieved if all output is eliminated altogether, as quickly as possible.*

Not necessarily. Prescott derives this from a more complex equation. In steady state the growth of output is equal to the growth rate of knowledge. Hence this is showing how the returns to knowledge capital depreciates. As others catch up you lose market share and profits. This is the growth rate for the economy not the firm. Yes in slower growth rate periods R&D gets higher return because you get a jump on competition. I would suggest actually reading the paper before commenting. It did not make sense to you because you didn't look at the model or did not understand it.

>*And in any case, profits are*

> *defined principally by how much money the company has spent, not in*

> *the conventional way by how much it has left over after subtracting*

> *what it has spent from its revenues.*

>

No it is not the conventional expression of profits but it not how much money was spent either. It is the returns on assets.

>

>>*The derivation of this*

>>*given. The point is if you know the interest rate, the growth rate of*

>>*output, and the value of tangible capital, and profits you can solve the*

>>*equation for intangible assets.*

>

>

> *Yes, and profits can only be negative if output is growing faster than*

> *the interest rate!*

>

No R&D returns may be negative but the return on tangible capital is the interest and can not be negative so it does not automatically imply negative profits. Negative profits would occur if your intangibles do not increase and the rest of the economy is outpacing your technology. You would lose market share and your profits would drop. Which is exactly what this equation says. Profits would only be negative if the loss on the return to intangibles was greater than the return to tangible capital. It is $((1 - \text{tax T}) (i) (\text{tangibles})) + (1 - \text{tax I})(i - g) (\text{intangibles})$ so as long as the return on tangibles is greater than the loss on intangibles profits increase. Note again the growth trend is economy wide not firm level.

>
>>*The Fisher statement dealt only with price and earnings ratio. The paper*
>>*supports low price to earning ratios in 1929. The estimates show that*
>>*fundamental values of corporations were much higher than actual after*
>>*tax earnings.*
>
>
> *Yes. In particular, the negative output growth of 1930–32 shows that,*
> *according to the formula, profits must have been soaring....*
>

No there is no indication of that. It depends on what happened to intangible assets. These can decrease or stay constant. The low growth rates meant higher returns on intangibles. However, lower investment would mean higher depreciation and the return on capital dropping. It also depends on the interest rate.

> *Are you sure you have reported the contents of this paper accurately?*
> *It makes the fumbles Vienneau identifies look like Nobel-quality work.*
>
>

I reported it correctly you misinterpreted what it said. Your interpretation does not follow from the profit equation.

Why don't you read the paper and see if it is correct instead of commenting on something you haven't read.

>>>>*Same thing the dot.coms were selling. If*
>>>>
>>>>*Certainly the dot.coms were marketing themselves based on some sort of*
>>>>*intangible assets. But it's not clear that those "assets" were truly*
>>>>*connected to rent collection.*
>>
>>*The intangible assets were not what dot.coms market under.*
>
>
> *That is of course false.*
>
>
>>*They actually*
>>*had few intangible assets.*
>
>
> *ROTFL!!! Compared to what, their tangible assets?*
>

They had little of an assets. There was no new technology involved. In fact tangible assets such as servers most likely far outweighed intangible assets such as ideas that would work.

- >
- >>*The dot.com crash can be actually thought of*
- >>*failed R&D.*
- >
- >
- > *Nonsense. It was a failed (and absurd) business model.*
- >

Which means failed R&D. I use this term loosely. Not as just the type of R&D manufacturing uses but also the creation of ideas. The creation of the business model was a failed innovation. They spent time and effort on making the model and it added to the stock of knowledge. Granted very little in that this idea does not work but there were lessons future innovators can learn from this. Loosely defined this is failed innovation and research effort.

- >
- >>*The problem with the dot.com is*
- >>*the people believed the value of intangible assets was much higher than*
- >>*what it really was.*
- >
- >
- > *And what of the assumption described above, that intangibles are worth*
- > *whatever was paid for them?*
- >

No. It is not. It is the return on these assets or what market value of the assets which is not what was paid for them. It was what the market values the return on the assets as. This was unmeasurable so it had to be treated as residual. AGAIN RTFM.

- > -- Roy L