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# On Human Capital and Productivity



I sometimes get verbally attacked by some of my colleagues who try to score public points on social media. Two types of economists do this:

- Those who do have not a degree in economics but later started to write on economics.
- The “has-beens” who try to become popular again.

Those who do have not a degree in economics but tend mostly to have a degree in mathematics, which make it difficult for them to understand that economics is a discipline that studies human preferences and human nature, and therefore they fail to see that mathematics alone is not enough to address economic problems.

Science is an activity that is based on observation and experiment, and the results are expressed with mathematical notations. But when you are dealing with economics and when you try to get results through formulas and equations alone, the error rate tends to increase inevitably.

An addition sign between the variables on both sides of the equation means “it doesn’t matter if the value of one of them is zero”, but a multiplication sign between them means that the values on both sides of the equation are “indispensable”.

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So, the most basic mistake of some colleagues who are very good at mathematics but do not have sufficient knowledge on the philosophy of economics is that they tend to bend reality in order to justify their solution to a problem.

I think they should remember Paul Dirac, one of the founders of quantum mechanics, and his theory that they use mathematics to ignore the obvious so they can prove themselves

right.

“Meaningful mathematics is not ignoring large variables you don’t like, but removing small values from the equation that won’t affect the result.”

Many economists, who built their development theories upon institutionalism, have all come to the following two conclusions after thousands of years of observation and experience:

- The State should invest in infrastructure to reduce production costs.
- As the quality of human capital increases, the productivity of physical capital increases as well.

Efforts to increase the quality of human capital will have to continue until the day when all economic activities are carried out entirely by robots.

Of course, this does not mean that everyone has to understand quantum mathematics. It just means that as the technology changes, human capital will need to be provided with the training they need to use it in the most efficient way.

Not only that, but they will also require an environment that can enable them to create other solutions that the manufacturers of this technology would not think of.

For example, those two types of economists I mentioned above will not be able to make the impact they desire on the public when they appear live on television if the technical staff there have not received proper training.

That’s why the universities have radio, television and film departments. We are working to produce strongly trained graduates for the industry.

No matter how new your technology is or how big your equipment, you will not be able to get the desired results without providing a substantial training to human resources.

## Perfect Blend of Technology and Human Capital

Let's suppose that you have high-quality human capital, but could your physical capital with insufficient technology still help you achieve efficiency?

Sure it could. but that would be like driving an older model against brand new cars in an F1 race.

Likewise, forcing trained and skilled human resources to work with old technology would result in low productivity.

I feel as if my readers would have no objections to what I have been meaning to demonstrate so far.

Obviously, the conclusion I am trying to reach is neither visible nor tangible. Therefore, I will try to focus more on the productivity of human capital for the rest of this article, as it would be a waste of time to try to convince otherwise those who use mathematics to deny the apparent facts.

**Training alone is not enough to increase the productivity of human capital**

According to United Nations reports, the world population is ageing at a rapid pace. The number of people who are unhappy - because they are getting old and do not earn enough money to meet all their wants and needs - is increasing every day.

Since not everyone is lucky or skilled enough to rise to a top position at some corporation, most people work a low-level operational job for many years until they retire, which tells us that training alone is not enough to increase the productivity of human capital.

Other factors such as cultivating a sense of belonging, creating a peaceful work environment, a competitive environment that creates value, and treating all employees

equally also have a serious impact on productivity.

Studies conducted after the 2007-2008 financial crisis show that, accounting only for 1% of the total number of employees, top executives have been getting ever-higher pay: at least ten times more than what others earn. With the pandemic, it became 15 times more.

Studies on human productivity show us that the efficiency of employees who rise to top positions in a company decline as they age, despite the higher wages they are paid.

We should accept that spending company's money on non-essential needs such as getting senior executives new cars do not help the company at all.

Instead, providing low-paid field staff with better pay, rewards or benefits for their hard work can be a less costly and more rational approach.

**Individuals who barely meet their essential needs due to low wages risk falling into excessive debt, which may cause decline in employee focus and ethical problems at work**

Individuals who barely meet their essential needs due to low wages and the ever-increasing cost of living risk falling into excessive debt, which may cause decline in employee focus and ethical problems at work.

Employees who do not want to lose their jobs might choose to ignore the mistakes they witness or even participate in dishonest acts.

The lack of focus of over-indebted employees might sadly lead to workplace accidents or result in their failure to finish the work properly and on time.

Therefore, in the 21st century, it is imperative to take a holistic approach when tackling these matters.

Bain & Company's 2017 research on employee productivity has revealed the following data:

- The productivity of unhappy employees tends to fail to exceed 70%.
- Happy employees tend to deliver the expected performance.
- Engaged employees care about their work and they can exceed performance expectations by 40%.
- Inspiring and supportive leadership tends to double employee performance.

Based on these facts, we could say that treating employee-related matters from a mathematical and scientific perspective alone might lead to fundamentally wrong results. Perhaps this is the reason behind the lack of empathy in organisations.

However, it is possible to express mathematically the facts that we can grasp through observation and experience, such as education, work environment, leadership quality, and loving the job.

If we try to do this measurement in reverse, in other words, to make estimates by means of mathematics and then expect it to happen would not be an empirical approach, only a useful experiment.

## Working with Generational, and Talent-Based Differences

It is not easy to achieve harmony in business environments where different generations work together. Being able to have people who differ greatly in terms of experience, ability and understanding work together harmoniously is an example of excellent leadership.

Before Leicester City made it to the Premier League in England, the club management took a different approach for a change.

What they did was to create a team comprising players of different ages and abilities, and to hire a success-hungry coach who was sacked from the Greek National Team. The result was phenomenal.

Leicester City's two strikers, worth around £2m, had scored more goals midway through the 2015-2016 season than £400m worth Manchester United and £265m worth Liverpool. They finished the season as champions, ten points ahead of Arsenal.

As a contrary example, Orduspor and Samsunspor, two football clubs in Turkey that made it to the Super League, went down in history as "teams who made the highest number of transfers in Europe" in the 2011/2012 season, leaving even the Italians behind.

But both clubs were relegated to a lower division by the end of the season, which goes to show that changing the entire staff is not the correct behaviour either.

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Here's another example: many films produced with a small-budget often get numerous awards as well as the love and appreciation of the audiences. The same thing can be observed in other industries as well.

So the thought of "more pay will bring more productivity" is not always accurate. Again, something that cannot be based on mathematics.

Research conducted in the US says that by 2027 the number of freelancers worldwide will exceed that of traditional employees.

In the not very remote future, more and more companies will outsource work to freelancers instead of in-house hiring.

Before that time comes, companies should start making the necessary efforts to ensure receiving a high quality and efficient service from freelancers.

And most of these freelancers will probably be former employees at some company, so bettering human capital for better productivity in the present and in the future must be organisations' top priority.