

Potternomics part two: What is magic?

by John Norell, april 2017

Abstract / spoiler

In this blog post I present an economic perspective on what magic is in the Harry Potter saga and how the principles of economics can be used to analyse this society. The wizarding community, though in a high degree isolated from the non-magical community, still has a very high standard of living. The big difference between these two societies is that the institutions and advancements in the wizarding world are built upon a completely different set of technologies; what we know as magic. As a technology, magic is vastly different from muggle technologies, and hence production functions are different as well. Without trade between the two economies, they cannot benefit from the technological advancements made by the other community, and the law of one price doesn't hold for goods that exist in both economies. If trade were to be established between these two economies, prices would converge, having disruptive effects in the short run. In the long run, greater specialization and division of labour would lead to enormous wealth increases in both societies.

From different perspectives, we will view magic differently. If you were to ask a physicist, chemist or some researcher from any other natural science discipline to describe what magic in the wizarding world of Harry Potter is, they would perhaps tell you something along the lines of magic being “a means of willingly invoking the improbable behaviour of living or dead matter,” as Dr. Immo Garrn writes in a blog post where he makes an attempt to create a model for the physics of magic in the potterverse¹. He further discusses the process of performing magic as being a way to manipulate/transfer electromagnetic energy in different ways. In this post I want to instead present a view of magic from a social science point-of-view.

¹ Garrn, D. (2017). *How do they do it? An Attempt at a Model for the Physics of Magic*

The study of economics is the study of human behaviour and society. The economist would therefore, if given the same question, describe magic from its role in society. In most respects, the magical population does not differ from the non-magical population. Both wizards and muggles (people without magical abilities) constantly find themselves in situations where they need to make choices taking into account the trade-offs they're forgoing. The students at Hogwarts, to give just a few examples of the similarities of life choices in both societies, dwell over what subjects to study², what career to pursue³ and what quidditch team to support⁴. The big difference between the muggle society and the wizarding one is the existence and use of magic in the wizarding society; it's likely that this difference of technology can explain in some parts why the two societies have evolved so differently from each other in terms of economic, social and political institutions. For example, people hold different occupations, their cultural norms are foreign and the functions of their governments vary.

Magic's role in society is what the economist would call a technology. In economics, technology has quite a specific yet broad definition, namely "The sum total of knowledge and information that society has acquired concerning the use of resources to produce goods and services."⁵ Technology doesn't refer to the actual computers, radar systems and wheelchairs we use, but rather the knowledge and know-how of the way we do things. The technology of a society therefore accumulates over time, as we learn better ways to do things. It's a very broad way to look at technology I shall say. If, by trial and error, you conclude that folding the toilet paper is more effective than crumbling it when wiping your butt, then that discovery is to be considered a piece of technology since you have found a way to produce clean bums using less resources.

² In their third year, students at hogwarts get some new subjects, which they get to choose from a list. Since their schedule is limited, they can't choose all of them. J.K. Rowling, 1998. page 266

³ In their fifth year, the students have career counseling. Harry's desire is to become an auror, but he regrets not thinking about alternatives when he realises it being a difficult career path. J.K. Rowling, 2003. pages 610-614

⁴ At the Quidditch world cup, Harry and his friends are divided about whether to support Bulgaria or Ireland in the quidditch world cup. J.K. Rowling, 2000. page 70

⁵ The definition of technology I borrowed from <http://glossary.econguru.com/economic-term/technology>

What differs the technology of the wizard society (i.e. magic) and the technology of the muggle society is not that either is superior to the other, they are basically different in kind. In some respects, wizards have more effective and cheaper ways to cater their needs and preferences. For example in transportation: wizards can travel long distances in only seconds via apparition, port-keys (similar to what we would call teleportation) and the floo network system (traveling via chimneys)⁶. Muggle technologies for travel, which include cars, escalators and planes, are extremely more expensive in terms of time spent when trying to get from point A to point B. Muggle technology however is vastly superior when it comes to communications. While wizards uses owls to send letters as their primary way to communicate with people in other locations, muggles have developed radio, telephones and the bloody internet.

When the technology in a society evolves, for example when there is a scientific breakthrough, we see increases of productivity. In a market economy where there is competition, productivity increases will transfer into lower prices on goods and services. Improvements in technology do not affect prices uniformly in the economy however. When machinery makes farming cheaper, this affects the prices of wheat but not equally the prices of newspapers. Relative prices (the price of a commodity measured in terms of other commodities) are not stable, but change in response to technological development. People might talk about prices being high or low, but what we actually mean is that they are high or low relative to what else we could spend that same money on.

I've read some attempts to calculate the exchange rate between muggle money and wizarding money (the currency used is called Galleons) by finding examples of commodities that are priced in the Harry Potter books which also exist in the muggle world and then compare prices⁷. That approach, I argue, isn't very useful exactly because the relative prices in each economy are different. If however trade would become established between the two economies, it would make a lot of sense to use this approach.

⁶ J.K. Rowling, 2000. pages 56, 60 and 39

⁷ The Tab US. (2017). *Someone just worked out the entire Harry Potter economy.*

Since muggles and wizards rely on completely different technologies in their production of goods and services, the relative prices in each economy will differ a lot. This is assuming there is no trade between the two economies, otherwise some people would buy goods cheaply in one world and go sell them in the other world making a nice profit; at the same time pushing up the price of this good in the first economy, and pushing down the price in the other⁸. The flow of goods and services between the muggle world and the wizarding world would continue until prices eventually converge so that it no longer would be possible to earn easy money this way.

There is very little interaction between muggles and wizards and therefore it's not far fetched to assume that there's little or practically no trade between them. When Harry joins the Weasley family to attend the quidditch world cup, even the muggle-enthusiast Arthur Weasley struggles with the muggle currency when he is going to pay for their accommodations, having to ask Harry for help⁹. Reversely, muggles do not seem to have any knowledge of the workings in the wizarding world. They continue to utilize their inadequate muggle medicine, such as stitching wounds, and wizards seem to wish to keep it this way.

When the prices in these two economies converge, a lot of changes will occur in society. It will have more dramatic effects than just changing what goods people buy in the supermarket. Since the muggle economy is so vastly bigger than the wizard economy¹⁰, the convergence of prices would probably mostly mean that the prices in the wizarding economy would adjust to the prices in the muggle economy. Let's imagine life in the wizarding world since the changes will be more dramatic there. In areas where magic is superior to muggle technology, prices of goods and services will rise because producers will suddenly have a much bigger market to sell to, and hence they will raise their prices in order to make bigger profits. In areas where muggle technology is superior to magic, prices will fall because a lot

⁸ The act buying goods cheaply and then selling them more expensively where the price is higher is called *arbitrage trading*. The resulting mechanism of trade flows over different markets ensuring prices converging across economic systems where trade exist is called *the law of one price*.

⁹ J.K. Rowling, 2000. page 65

¹⁰ How much bigger is a difficult question, people have been trying to calculate the size of the wizarding world and it's economy, most calculations conclude that the wizarding population in Britain at least isn't bigger than 100 000 people. This compared to a muggle population in Britain of 63 million makes me believe that the wizarding economy is dwarfed by it's muggle counterpart.

of cheaper muggle-made goods will be imported to the wizarding world. This will inevitably put some producers out of business, raising the unemployment of the wizards and witches employed in those fields of work. In the short term, there will be both winners and losers on the production side when trade is established.

In the long run though, there will be a shuffle in the labour force. Fewer wizards will work in the areas where muggle techniques are better, and more of them will work in the areas where magic is finer. These dynamic effects on the production sectors can be seen when trade is established between countries in the real world who didn't trade before. This is why most well developed countries outsources a lot of manufacturing and farming to less developed countries. When more and more wizards change occupations and start working in sectors where wizards have a comparative advantage, the price on these stuff will go down a bit again.

So, is this on the whole good or bad? The way the price system works is that it will incentivise people to focus on the things they do best relative to other people; I wrote a post about this earlier for the one who is interested in learning more¹¹. This is where the biggest gains of trade are to be found: with increased specialization and division of trade across economies, the overall welfare will be raised. But, if there really is that much to gain from trade, why do the wizards choose to abstain from trading with the muggles? Well, that is not a question of what makes economics sense, but what makes good politics. All over the world we see countries enacting protectionist policies, closing their borders and creating barriers to trade with foreigners. Sometimes they claim it is to save jobs from being outsourced abroad or to help the domestic economy and sometimes they claim these trade embargos are set up to punish foreign countries or their leaders. The question of why this makes good politics is a subject I plan on writing a post about later.

¹¹ <http://www.johnnorell.com/2016/12/31/potternomics-part-one-how-do-wizards-get-rich/>

Conclusions

In this post, I've presented an economic view of magic in the world of Harry Potter. The wizarding community differs from the muggle's by the type of technology they use. Since the two economies are isolated, their relative prices differ, which is why we cannot calculate the exchange rate between muggle and wizarding currencies based on examining prices in each economy. If trade were to be established between the two worlds, a higher degree of specialization and division of labour would allow for increases in wealth in both societies. Why the wizarding community chooses not to, however, is a question about politics, not economics. I hope you found this post interesting, if you have any questions or objections, please don't hesitate sending me a message or comment on my website!¹²

¹² <http://www.johnnorell.com/>

References

Garrn, D. (2017). *How do they do it? An Attempt at a Model for the Physics of Magic – The Harry Potter Lexicon*. [online] The Harry Potter Lexicon. Available at:

<https://www.hp-lexicon.org/2007/01/01/how-do-they-do-it-an-attempt-at-a-model-for-the-physics-of-magic/> [Accessed 18 Apr. 2017].

Rowling, J. K. (1997). *Harry Potter and the Philosopher's Stone*. *New York: Scholastic*.

Rowling, J. K. (1998). *Harry Potter and the Chamber of Secrets*. *New York: Scholastic*.

Rowling, J. K. (1999). *Harry Potter and the Prisoner of Azkaban*. *New York: Scholastic*

Rowling, J. K. (2000). *Harry Potter and the Goblet of Fire*. *New York: Scholastic*

Rowling, J. K. (2003). *Harry Potter and the Order of the Phoenix*. *New York: Scholastic*

The Tab US. (2017). *Someone just worked out the entire Harry Potter economy*. [online] Available at: <http://thetab.com/us/2016/03/17/someone-just-worked-entire-harry-potter-economy-2722> [Accessed 18 Apr. 2017].