



‘Another Day, Another Vlog’: The Alchian-Allen Theorem, Social Media, and Long-Distance Relationships¹

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Abstract

Principles of economics students often find discussions of the Alchian-Allen theorem to be highly interesting, yet the traditional examples of this theorem presented by instructors do not always appeal to them. This paper describes an application of the Alchian-Allen theorem’s implications to long-distance romantic relationships and how long-distance couples can mitigate the costs associated with long-distance romance through video logging, or vlogging, on YouTube. Couples involved in a long-distance romance are able to use YouTube to generate income by vlogging about the costs and benefits of being in a long-distance relationship. Some of these vlogs are very popular and maintain thousands of subscribers and millions of views. As social media usage becomes more popular and more of today’s college students are involved in long-distance relationships, principles of economics instructors may find this application of the Alchian-Allen theorem particularly interesting and relevant to their students’ lives.

Key Words: Alchian-Allen theorem; long-distance relationships; social media

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1. Introduction

The Alchian-Allen theorem (Alchian and Allen, 1964; Borcharding and Silberberg, 1978) is, from the point of view of many principles of economics students, often one of the more compelling and enjoyable discussion topics. As Staten and Umbeck (1989: 166) indicate, Alchian and Allen (1964) provide “a classic series of examples . . . involv[ing] consumption changes induced by transportation charges levied upon two different quality grades of the same good.” As they explain (Staten and Umbeck, 1989: 166), “Alchian and Allen suggested that the percentage of premium-quality California oranges (or Washington apples) sold in a distant market such as New York would be higher than the percentage sold in California itself.” Despite widespread interest in the theorem, Caudill, Mixon and Upadhyaya (2015) assert that the “classic . . . examples” provided in Alchian and Allen (1964), and oftentimes repeated by instructors, are not always appealing to economics principles students today. In response, they provide a series of anecdotes from American culture and history that are certain to be more appealing to modern students (Caudill et al., 2015).³

The final anecdote discussed in Caudill et al. (2015) – one concerning the Alchian-Allen theorem’s implications for long-distance romantic relationships – is, among those discussed in that study, the least developed. It is also one that students may find to be particularly relevant to their lives. Due to technological advances, long-distance relationships have become more common than in previous decades (Firmin, Firmin, and Lorenzen, 2014). In fact, as many as 75 percent of American students engage in a long-distance relationship at some time during their college years (Jiang and Hancock, 2013). At the same time, they may not always be aware of the costs associated with a long-distance romance, or how those costs may be mitigated. Thus, the current note develops the Alchian-Allen theorem’s application to long-distance relationships more fully, discussing both what economists have written with regard to the theorem’s implications for long-distance relationships, and how those who are involved in such pairings, which often includes the members of Generation Z (i.e., today’s traditional college students), might work to address these implications.⁴

2. Is the Alchian-Allen Theorem Bad for Long-Distance Romance?

Caudill et al. (2015) point out that the Alchian-Allen theorem has much to say about long-distance relationships, and why they are so difficult. This assertion is based in part on entries (in 2006) by economist Tyler Cowen to his economics weblog, *Marginal Revolution*, hinting at the reduced relative price of an expensive date facing two partners in a long-distance romance. Cowen states that the higher the fixed cost, the “higher quality” a trip that the partners in a long-distance relationship will tend to seek.⁵ Cowen’s assertion is supported by economist Tim Harford, who writes in a 2006 column in *The Financial Times* that, when it comes to long-distance

³ This series includes anecdotes that cover aspects of the Civil War, from antebellum slavery markets to the Union blockade of the Confederate South, issues related to sports fandom and participation, and the economic costs of higher education.

⁴ Generation Z (Gen Z) is the demographic cohort born between 1995 and 2014. It is also called the iGeneration.

⁵ See http://marginalrevolution.com/marginalrevolution/2006/09/trudie_on_longd.html.

dating, “. . . there is no point in travelling to see your [long-distance] boyfriend for a take-away Indian meal and an evening in front of the tel[evision].”⁶

As a backdrop to the writings by Cowen and Harford on the Alchian-Allen theorem’s implications for long-distance relationships, Caudill et al. (2015) discuss a hypothetical long-distance relationship between one partner living in Chicago and another partner living in New York. Suppose the partner living in Chicago travels to visit the partner living in New York. Suppose also that airfare between Chicago and New York is \$264 (Caudill et al., 2015). The airfare represents the type of fixed fee discussed in Alchian and Allen (1964) that changes the relative price of goods, such as a restaurant meal in New York.

For example, at New York City’s Johnny Rockets, a hamburger with fries for two is \$18, while Muscovy Duck (with seared foie gras, roasted apricots, quinoa, almonds, mustard greens and ruby port sauce) for two at the Gotham Bar and Grill in New York City is \$86 (Caudill et al., 2015). Thus, to the partners in a geographically local (New York) romantic relationship, the relative price of a meal for two at Gotham Bar and Grill is, as indicated in Table 1, 4.778. As also indicated in Table 1, for the long distance couple the plane fare increases the money prices of both meals (for two) by \$264, resulting in totals of \$282 and \$350 for Johnny Rockets and Gotham Bar and Grill, respectively (Caudill et al., 2015). As such, the relative price of the Gotham Bar and Grill date falls from 4.778 to only 1.241. As Caudill et al. (2015: 35) conclude, “[t]his decrease [in relative price] will exert pressure on the two ‘love birds’ to choose Gotham Bar and Grill . . . thus raising the expectations of the [long-distance relationship].”⁷

Table 1: The Alchian-Allen Theorem in a Long-Distance Relationship

Relationship	Total Costs		Relative Price of GBG
	JR	GBG	
Local	\$18	\$86	4.778
Long-Distance	\$282	\$350	1.241

Source: Caudill et al. (2015)

Given the anecdote presented above, what are long-distance partners to do in response to the pressure imposed by the Alchian-Allen theorem on their long-distance relationship? As Caudill et al. (2015) indicate, Cowen offers a solution, albeit a “difficult one,” to the problem facing the two partners. Cowen suggests lowering one’s expectations for each trip by combining each trip with other activities and appointments, such as visiting an old friend, engaging in business, and, in the case of academicians, presenting a research paper at “a scintillating academic conference.”⁸ Although Cowen’s proposed solution to the high expectations problem inherent in long-distance relationships that results from elements of the Alchian-Allen theorem are appropriate, moving from the high expectations problem to this solution is likely to cause some

⁶ See http://marginalrevolution.com/marginalrevolution/2006/11/tim_harford_on_.html. Harford also makes similar statements in a 2008 column in *The National Post* (See <http://marginalrevolution.com/marginalrevolution/2008/02/the-costs-and-b.html>). See also Harford (2009).

⁷ Cowen adds that, in the case of long-distance relationships, “. . . moving too fast is dangerous and ill-advised . . . [a]nd in the longer run [the long-distance partners will] each ‘expect too much’ from each visit . . . The quest for continual high-quality excitement is not conducive to casual down time together, which is the glue which binds relationships together in the longer run.” For more see http://marginalrevolution.com/marginalrevolution/2006/09/trudie_on_longd.html.

⁸ See http://marginalrevolution.com/marginalrevolution/2006/09/trudie_on_longd.html.

principles of economics students to lose interest in even this example of the relative price phenomenon. As such, we propose in the next section of this note an alternative approach to dealing with the financial burden associated with the high expectations issue that is likely to be more familiar, and of greater interest, to principles of economics students.

3. Can Social Media Mitigate High Expectations in Long-Distance Relationships?

The importance and impact of social media in the lives of Gen Zs is without question. Born after about 1995, today's teens and young adults, having grown up with computers and a high-degree of exposure to technology, rely heavily on social media for entertainment and social interactions (Bolton et al., 2013). According to the most recent survey of social media usage among U.S. adults by the Pew Research Center (Smith and Anderson, 2018), younger Americans are more frequent users of social media, and they also use a larger variety of platforms.⁹ Furthermore, over half of the social media consumers in the survey aged 18 to 24 indicate that giving up their usage of social media would be difficult (Smith and Anderson, 2018).

Given this importance of social media to today's college-aged individuals, integrating the use of social media into classroom anecdotes and examples is often an effective method of conveying economics principles. Burgess, Mixon and Ressler (2010), for example, provide a vignette for public choice instructors built around the use of Twitter by politicians as a form of communication with their constituents. More recently, Mixon, Asarta and Caudill (2017) describe the public goods nature of YouTube music creations, and how their creators are successfully soliciting voluntary financial support from music patrons via an Internet-based company known as Patreon. The current note extends this new stream of literature by offering a solution to the high expectations issue encountered in long-distance relationships that involves YouTube.

Content creators have for some time used YouTube as a platform for making video logs, also known as vlogs, of their daily activities available to the public. Many of these focus on the creator's affinity for video gaming, exercising (i.e., working out), cooking, fashion (styling), and other activities. Some creators simply upload daily (weekly) vlogs of their everyday lives to the YouTube platform, and in doing so build relatively large fan bases. YouTubers' ability to develop a large fan base and to generate revenue from such activity has increased the popularity of vlogging considerably. The number of YouTube channels has increased by approximately 20 percent per year since 2006 (Bartl, 2018), and in 2017, the world's 10 highest-grossing YouTubers earned a combined \$127 million, an increase of 80 percent from the \$70.5 million earned in 2016 (Berg, 2017). Additionally, between July 2017 and July 2018, the number of YouTube channels earning more than five figures per year increased by 50 percent (Snider, 2018).

A subset of the group of YouTubers discussed above includes partners in a long-distance relationship, who, by providing the public a window into the trials and tribulations of long-distance romance, often encounter a large YouTube fan base of individuals who are themselves navigating the issues associated with long-distance relationships and are seeking a sense of camaraderie from others in the same circumstances. Each day, people all over the world watch the vlogging adventures of long-distance couples on YouTube channels titled "Vloggingblonde"

⁹ Approximately 88 percent of individuals aged 18 to 29 report using some form of social media, relative to 78 percent of those over 30 and 64 percent of people aged 50 to 64. Younger adults also report higher usage of Snapchat, Instagram, and YouTube than older Americans.

and “WhatWeganDidNext.” A large number of these YouTube content creators provide their vlogs through YouTube channels named for the partners in the relationship. Thus, large fan bases develop around YouTube channels titled “Garrett and Tay,” “Jess and Gabriel,” and other representations of the partners in a similar long-distance relationship. Couples who choose to vlog about their experiences are able to use the income generated from YouTube viewership to mitigate some of the issues (e.g., travel expenses and other costs) borne out of the Alchian-Allen theorem’s implications for maintaining a long-distance romantic relationship.

Table 2 presents 10 representative YouTube channels in this particular genre, most of which were formed in recent years.¹⁰ As indicated in Table 2, these 10 long-distance relationship-oriented YouTube channels currently maintain a subscriber base ranging from a low of 20,889 subscribers to a high of 2.6 million subscribers.¹¹ Dropping the largest and smallest subscriber bases yields a mean subscriber base of almost 200,000. The data in Table 2 also suggest that the typical long-distance relationship YouTube channel has provided its fans with about 54 vlogs chronicling the relationship, and the couple’s portfolio of YouTube vlogs has generated an average of about 10.1 million views.¹²

YouTube’s business model relies on advertising, wherein companies pay for access to popular YouTube channels such as those listed in Table 2. Although computing the content creators’ financial return from the provision of YouTube content that attracts advertisers can be complicated, Edwards (2014) explains to the readers of *Business Insider* that YouTube content creators generally earn \$2,000 for every one million views. The long-distance relationship vlogs listed in Table 2 have to date generated income streams for their creators ranging from \$2,400 to as much as \$507,000 (approximately).¹³ The typical YouTube couple listed in Table 2 has generated more than \$20,000 (to date) from monetization of video logs of its long-distance relationship.¹⁴ With income streams climbing this high (or higher), the financing of high expectations-related activities (e.g., dinner for two at Gotham Bar and Grill, attending Broadway shows, etc.) by the hypothetical long-distance couple discussed in the previous section of this note is less worrisome for that couple.

¹⁰ The most popular example provided in Table 2 – “Jess and Gabriel” – chronicles the long-distance relationship maintained by Gabriel Conte, a U.S. citizen, and Jessica Bauer, who is from Australia, leading up to their recent nuptials. This couple opens each vlog with the tagline, “Another day, another vlog.”

¹¹ YouTube channels “Vloggingblonde” and “WhatWeganDidNext” boast subscriber bases of 370,607 and 44,049, respectively.

¹² These figures are also computed by dropping the largest and smallest number of video uploads and views, respectively. Additionally, YouTube channels “Vloggingblonde” and “WhatWeganDidNext” provide vlog totals of 846 and 267, respectively, with total views of 169.7 million and five million, respectively.

¹³ These figures do not account for YouTube’s portion of the advertising revenue. Additionally, YouTube channels “Vloggingblonde” and “WhatWeganDidNext” have generated income streams of \$339,400 and \$10,000 (approximately), respectively, with total views of 169.7 million and five million, respectively.

¹⁴ In 2018, YouTube announced new ways for video loggers to generate revenue through “Channel Memberships.” For instance, a channel with more than 50,000 subscribers gives fans the opportunity to sponsor a channel for a monthly fee of \$4.99 (Gesenhues, 2018).

Table 2: Long-Distance Relationships Meet Social Media

YouTube Channel	Videos Uploaded	Subscribers	Views	YouTube Monetization
<i>Jess and Gabriel</i>	169	2,610,516	253,331,237	\$506,600
<i>Cody and Zoe</i>	36	667,622	31,119,643	\$62,200
<i>Sav and Jay</i>	39	501,964	26,235,797	\$52,400
<i>Gabriel and Kayce</i>	47	203,361	8,085,669	\$16,200
<i>Jake and Áurea</i>	45	44,905	4,705,766	\$9,400
<i>Nikias and Danielle</i>	12	27,295	3,338,487	\$6,600
<i>Garrett and Tay</i>	167	48,818	3,099,317	\$6,200
<i>Carlo and Bailey</i>	46	23,551	2,351,669	\$4,800
<i>Dem and Ika</i>	20	52,054	1,829,121	\$3,600
<i>Sam and Monica</i>	30	20,889	1,211,702	\$2,400

4. Tyler and Alyssa: Alchian-Allen Theorem Class Worksheet

To assist economics principles instructors with integrating the lesson related to the Alchian-Allen theorem discussed in this note, we have created a hypothetical scenario involving Tyler and Alyssa, who began dating during their senior year of college in Dallas, Texas. As we explain for principles students in the attached worksheet (at the end of this note), when they graduated, Tyler took a job in Boston, Massachusetts, while Alyssa remained in Dallas. Despite the distance, they continued their relationship.

As indicated in the worksheet, Tyler and Alyssa enjoy going out to dinner and have two favorite restaurants in Dallas. For a casual meal, they go to Rodeo Goat, a hamburger place, where they order two cheeseburgers for \$9.50 each and two sides of French fries for \$3 each. They also enjoy Dakota's, an upscale steak and seafood restaurant. There they prefer to order the porterhouse steak for two for \$80 with a side of mashed potatoes with roasted garlic for \$9 and a side of green beans with toasted almonds for \$9.

At this point, students are asked to calculate the total price of the two restaurant meals (1) when they are both attending college in Dallas, and (2) when, during the long-distance period of their relationship, Tyler flies to see Alyssa and he pays \$195 for his airfare. Next, students are asked to calculate the relative prices of a meal at Dakota's in terms of the price of the meal at Rodeo Goat, and then to explain which restaurant Tyler and Alyssa would be more likely to choose when he flies from Boston to Dallas to visit her.

Lastly, the worksheet explains that Tyler and Alyssa decide to create a video log (vlog) about their long-distance romance on YouTube. Given this information, economics principles students are asked to discuss how their relationship vlog lessens the impact of the relative price effect that is described by the Alchian-Allen theorem. As such, this exercise provides economics principles instructors with a relatively low-cost tool for assessing how well their students understand the ideas conveyed in the pedagogical vignette presented in this note.

5. Concluding Remarks

Surveys of principles of economics students reveal that many students have negative views toward economics, believing their introductory economics courses to be uninteresting, impractical and irrelevant to their lives (Bansak and Starr, 2010; Calkins and Welki, 2006). It is important, therefore, for economics instructors to provide anecdotes and applications of economic theories that provide relevance to students. Furthermore, as today's teens and young adults increase their consumption of social media, the economic aspects of social media usage, such as the revenue generated by YouTube vlogs, provide opportunities for economics instructors to integrate germane anecdotes of economic theories. This paper provides a social media example of the application of the Alchian-Allen theorem's effect on long-distance relationships and the use of video logging on YouTube as a way to lessen the implications of the Alchian-Allen theorem for long-distance romance. Finally, we present a worksheet that assists economics principles instructors with integrating the lesson related to the Alchian-Allen theorem discussed in this note which involves a hypothetical scenario involving Tyler and Alyssa, who began dating during their senior year of college in Dallas, Texas. This exercise not only provides economics principles instructors with a relatively low-cost tool for assessing how well their students understand the ideas conveyed in the pedagogical vignette presented in this note, it can be expanded to explore how other social media platforms, such as Patreon, can be employed by couples in mitigating some of the issues associated with high expectations problems in long-distance romantic relationships.

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Appendix: Alchian-Allen Theorem Class Worksheet

Scenario: Tyler and Alyssa began dating during their senior year of college in Dallas, Texas. When they graduated, Tyler took a job in Boston, Massachusetts while Alyssa remained in Dallas. Despite the distance, they continued their relationship. Tyler and Alyssa enjoy going out to dinner and have two favorite restaurants in Dallas.

For a casual meal, they go to Rodeo Goat, a hamburger place, where they order two cheeseburgers for \$9.50 each and two sides of French fries for \$3 each.

They also enjoy Dakota’s, an upscale steak and seafood restaurant. They like the porterhouse steak for two for \$80 with a side of mashed potatoes with roasted garlic for \$9 and a side of green beans with toasted almonds for \$9.

Using the information provided above, complete the following questions:

1. In the space below, calculate the total price of the two restaurant meals when they are both attending college in Dallas. Fill in the total prices in the table below.

2. Suppose that when Tyler now flies to see Alyssa, he pays \$195 for his airfare. In the space below, calculate the total price of the two restaurant meals, including the price of the airfare when they are in a long-distance relationship. Fill in the total prices in the table.

3. In the space below, calculate the relative prices of a meal at Dakota’s in terms of the price of the meal at Rodeo Goat. Fill in the relative prices for each meal in the table.

Relationship Type	Total Price at Rodeo Goat	Total Price at Dakota’s	Relative Price of Dakota’s (Price at Dakota’s/ Price at Rodeo Goat)
Local			
Long-Distance			

4. Given the relative prices above, which restaurant would Tyler and Alyssa be more likely to choose when he flies from Boston to Dallas to visit her? Why?

5. Tyler and Alyssa decide to create a video log (vlog) about their long-distance romance on YouTube. How does their relationship vlog lessen the impact of the relative price effect that is described by the Alchian-Allen theorem?