

“Why Do Inefficient Black Churches Survive?”

By

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Abstract

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Why do Black American consumers continue to reflect higher rates of church attendance than the remainder of the U.S. population, and continue to obtain a significant amount of services from Black churches? When we hypothesize that the implicit prices of services that are produced by Black churches are higher than the price of low-cost substitute services, the preceding question raises curiosity all the more. The logical follow-on question is, “Why do Black churches, which appear to be inefficient in the production of services, continue to survive?” The analysis that is presented in this paper employs Consumer Expenditure Survey and American Time Use Survey data to reveal answers to these questions in the context of consumer optimization theory. We determine that, to answer these questions satisfactorily, one cannot overlook the role of culture.

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Introduction

Why do Black American consumers continue to reflect higher rates of church attendance than the remainder of the U.S. population, and continue to obtain a significant amount of services from Black churches? When we hypothesize that the implicit prices of services that are produced by Black churches are higher than the price of low-cost substitute services, the preceding question raises curiosity all the more. The logical follow-on question is, “Why do Black churches, which appear to be inefficient in the production of church services, continue to survive?” The analysis presented in this paper employs Consumer Expenditure Survey (CEX, Bureau of Labor Statistics, 2009B) and American Time Use Survey (ATUS, Bureau of Labor Statistics, 2009A) data to reveal answers to these questions in the context of consumer optimization theory.¹ We determine that, to answer these questions satisfactorily, one cannot overlook the role of culture.

Background

Unarguably, second to the Black family, the Black Church is the most important institution in Black America. It has provided the spiritual and moral underpinnings for Black America since its inception in late 18th century when the Rev. Richard C. Allen founded the first African Methodist Episcopal Church in Philadelphia. It has been a very effective information dissemination instrument, providing information from the outer (White) to the inner (Black) community and vice-versa. It has served as an educational institution, facilitating the development of basic reading skills and providing funds for some of the earliest Black educational institutions—including selected Historically Black Colleges and Universities. It has served as a social club, providing opportunities for young and old to meet and greet and share their musical and literary talents. It has served as the training ground for the development of dramatic, oratorical, and musical skills. It has been a laboratory for teaching organizational and business skills, from building small businesses, such as cleaners, mortuaries, restaurants, publishing concerns, and barber shops, to teaching how to develop franchises. Finally, it has served as the primary organizational facility for many a movement in the Black Community—especially during the Civil Rights Movement of the 1960s. Moreover, we find that most major and minor organizations in the Black Community (e.g., the National Association for the Advancement of Colored People and the Urban League) have used the Black church to operationalize their own agendas.

Given these very important roles, it is critical that the Black church remain strong going forward—not ignoring the fact that it may require some transformation to fulfill important prospective future roles. While it is clear that Black Americans are the most religious sub-group in America (Sahgal and Smith, 2009), it is also true that the youth of America are turning away from religion for selected groups, and increasingly so (see Sanders, 2010). Because educated Blacks with relatively high incomes are the most capable of supporting the Black Church in the future, we should ask, “Will the trend away from religion serve as a major challenge to the continued strength and importance of the Black church?”

¹The CEX is from the Bureau of Labor Statistics (2009B), which provides detailed data on consumer expenditures for 2008, while the ATUS is from the Bureau of Labor Statistics (2009A), which provides detailed data on the amount of time Americans spend performing or consuming activities during a particular day of 2008.

From an economic perspective, we know that the world is changing rapidly, with businesses concentrating on delivering more and improved goods and services at relatively cheaper prices. Firms use this approach to increase market share in a drive toward expansion and monopolization. In this context, and with services that are provided by the Black church being parallel or substitutes for services that are provided by non-church firms, we should ask whether Black churches are competitive in the provision of services. In other words, “Can Black churchgoers identify substitutes for the services that they receive in the church outside of the church, and will they, as optimizing consumers, seek increasingly to acquire these services outside of church?” Finally, we should ask, “Will a cultural innovation make acceptable increasing consumption of substitute church services, which are provided by non-church producers?” If the answers to these two questions are “yes,” then the Black church is in for a decline.

Purpose

To assess whether the implicit prices of services consumed by Black Americans in church exceeds the prices of substitute church-related services that are produced by non-church producers, and to determine whether this price difference may cause a reduction in church attendance and, ultimately, a Black church decline.

Roadmap

This paper is organized as follows. First, we provide definitions for six broad church services that we will feature in this analysis. Second, we develop a theoretical framework concerning the optimization of utility in the consumption of church services by Black Americans with an income constraint and cultural rigidities. Third, we explore the data and methods that are used to prepare prices for services; both for services that are produced by Black churches and for services that are low-cost substitutes and that are produced by non-church producers. Fourth, we present our results. Fifth, we conclude.

BLUF (Bottom Line up Front)

This analysis leads to the finding that cultural rigidities and other factors cause Black Americans to continue to obtain a significant amount of services that they consume from Black churches. This consumer behavior appears to partly ignore the reality that there are lower-cost substitute services. We use 2008 CEX and ATUS data to prepare and compare prices for church and non-church produced services. Because the prices of non-church produced services are generally lower than the prices of church-produced services, we attribute the current consumption pattern to cultural rigidities and to the demand for “position.” The latter factor permits Black Americans to play leadership roles in their community—something for which they continue to have few opportunities, at least on an elected basis, nearly 50 years since the Voting Rights Act of 1965.

Definitions: Services Produced in Churches and their Substitutes

This section identifies and summarizes the services that Black churches provide. We must define these services properly in order to be able to conduct a useful analysis. In particular, we must ensure that the services that churches produce are comparable with the substitute services

that are produced by non-church producers. We conclude that Black churches provide at least six key services: Entertainment; counseling; social club/network; childcare; educational; and basic healthcare. The analysis assumes, of course, that readers agree that it is appropriate to view churches as firms (Iannaccone, 1998; Finke and Stark, 1992; and Ekelund *et al* 1996). While churches organize themselves legally as nonprofit, charitable entities, they too dissolve if they fail to collect sufficient contributions to meet their expenses.

Entertainment: No question about it, certain worshippers seek solace and “nearness to God” by attending church services. However, most religions espouse the belief that nearness to God and the peace that it brings may best be attained through quiet or even silent prayer and meditation. Many Black Churches reflect a countervailing view. They reference *Psalms* 100:

“Make a joyful noise to the Lord, all the lands! Serve the Lord with Gladness. Come before his presence with singing....Enter his gates with thanksgiving, and his courts with praise! Give thanks to him, bless his name. For the Lord is good; his steadfast love endures forever, and his faithfulness to all generations.” (May and Metzger, 1973)

In other words, worship in the Black Church is very much a show. From the formal and articulate spoken word announcements and order of service, to the highly musical hymns and Gospel songs (even Rap Music these days), to the syncopated delivery of the spoken word of God that is delivered by ministers of the Gospel, the Black church service is a well choreographed multi-act play. It is generally an interactive process where the worship leaders and congregations have nearly equal roles. Even the collection of offerings can be entertaining in its involvement of worshippers who are often asked to march to the front of the sanctuary to deposit their monetary contributions.

The worship process has analogs such as cinemas or athletic events. Church services are similar to cinemas, if the Black church service is less interactive and entails more passive entertainment. The services are athletic event-like when the worship process is very interactive (shouting and praising). There are probably no other entertainment forms that cause participants to become more excited about an experience than fans at football or wrestling matches or worshippers at Black churches. For this study, we consider television entertainment (mainly religious programming) as the low-cost substitute service that is produced by a non-church producer.

Counseling Services: Like most pastors/ministers, Black pastors/ministers provide what is essentially psychological counseling to their parishioners. This pseudo mental health service is called upon to help parishioners who are experiencing anxiety about life’s stresses; e.g., difficulties in marital relationships or problems with children who may act out from time-to-time. On the other hand, counseling can serve as a preventative tool as in pre-marital counseling of soon-to-be-married couples. Pastoral/ministerial counseling is not equivalent to sessions offered by trained psychiatrists, but it may be comparable to the type of counseling often offered by psychologists or social workers who may offer this service through a private practice or it may be a publically-provided service. These types of psychological counseling services serve as the lowest-cost substitute counseling service that is produced by a non-church producer.

Social Club/Network: Clearly, Black churches, like most other regular meeting places, offer an opportunity to gather to meet, greet, and share experiences. This sharing of experiences entails transmittal of vital information about endless areas of life: From best clothing buys, to best real estate buys, to best automotive buys, to best vacation buys, to best schools, to best restaurants, to best colleges, to best jobs, etc. It is, in many ways, the same type of information that is shared at country clubs or on social networks, such as Facebook. We adopt Internet social networks as a low-cost substitute for this service that is produced by a non-church producer.

Child care services: When parents with children are worshippers, they receive a service as an ancillary product of their worship. For example, most Black churches embody in their liturgies Sunday School classes that are structured by age. If the child is too young to be placed in an aged-based class, then they are sent to the church nursery. In either case, parents are offered a reprieve from childcare while they worship. Given the level of trust that is usually associated with church communities, most parents do not give a second thought to childcare services that are offered by the church. By default, they permit their children to be swept away so that they can devote their attention to worship. This is a very valuable service, especially for Black mothers or fathers who are the lone head of their household. We adopt standard babysitting services as the low-cost substitute for this church service, which is performed by non-church producers.

Tutorial/Educational services: Many readers will recall that their earliest experiences of reading on their own may have taken place in church. After being taught A-B-C phonics, one of the most peaceful places for testing one's reading skills is to pick up a Bible or Hymnal during a relatively quiet church service and seeing if one can "make-out" the words printed in those heavy bound volumes. Therefore, churches offer an excellent opportunity for youth and adults alike to practice reading; in certain cases with adults who do not read elsewhere, it is an important place for keeping reading skills sharp.

In addition, the Black church provides an excellent opportunity for youth and adults to hone their dramatic, singing, and oratorical skills. Couple that with the need for memorization, and one can see the significant educational benefits that churches provide. These skills, particularly memory and oratorical or speaking skills, can be invaluable in the world of work.

All of these educational skills, of course, can be obtained in elementary, secondary, and vocational schools. In fact, educational skills that can be obtained in church primarily reach the level of slightly higher than secondary educational training. Of note, most of these skills that can be obtained in a public school framework (elementary, secondary, and vocational schools) are usually free; i.e., at no out-of-pocket cost. Consequently, we establish a zero price for substitute educational services that are produced by a non-church producer.

Basic clinical healthcare services: Historically, the Black church has combined worship with eating. As a result, the church has contributed in a significant way to the often unhealthy condition of parishioners.² Of late, Black churches have begun to perform penitence by allowing

²See the February 4, 2010 *Oprah Winfrey Show*, which highlights "America's Silent Killer—Diabetes." The program features a church community that is obese and plagued with diabetes due, in large measure, to the mentality formerly socialized by the church regarding the consumption of food.

public and private healthcare officials to visit their premises and offer basic healthcare services such as blood pressure screening, vision checking, diabetes counseling, and weight control counseling.³ These basic healthcare services are comparable to those traditionally provided by neighborhood public or private healthcare clinics. Therefore, we adopt basic healthcare services that are provided by non-church producers as the low-cost substitute for this church service.

Theoretical framework

Our model deviates from the basic Azzi and Ehrenberg (1975) line of models that feature households as producers of religion by attending religious services and performing other functions. Our focus is on the economics of the consumption of religious services and we, therefore, do not attempt to address the intricacies of relationships between economics, ethics, and religion. We agree with Leightner (2005), who concludes that these are three distinct phenomena: (1) Economics concerns maximizing utility using objective and positive, not normative principles; (2) ethics concerns philosophical principles that are strongly normative; and (3) religion mainly concerns decisions about sacrifice based on normative principles, and is different from both economics and philosophy altogether.

Given our focus on the consumption of religious services from an economic perspective, it seems prudent to contend that religious worshipers should pay the lowest possible price for services consumed at church. The purpose of this section is to consider selected stylized facts about first order conditions for traditional consumer behavior and about competitive firms that infer economic efficiency. When we apply these stylized facts to consumer action and to implicit and actual price data for services produced by church and non-church producing units, respectively, we should identify whether the facts hold and whether Black church goers are acting as optimizing consumers. Going further, and on a cost-benefit analysis basis, we must also consider other costs that consumers incur to consume services that are produced by the Black church. In combination, the actual and implicit prices and other costs reveal whether it is in the best economic interest of Black consumers to consume services produced by Black churches as opposed to obtaining these services from non-church producers.

To the extent that Black church goers violate stylized facts concerning consumer behavior, then we may be able to explain current and future behavior by referring to Thorstein Veblen's (1899) seminal work, *The Theory of the Leisure Class*. Veblen views cultures as evolving through transformations over time. If cultures do not evolve in order to improve economic outcomes, then Veblen attributes this to "imbecile" institutions that cause resources to be used in nonproductive displays, conspicuous consumption, or wasteful ceremonial activities. Tool (1998) calls this failure to evolve "cultural rigidities." These conditions may accurately characterize Black Americans' consumption of services that are produced by the Black church.

Black Consumers and Church Services

Following Henderson and Quandt (1980), we begin by proving why it is optimizing for Black consumers to consume low-cost substitute church services that are produced by non-church

³ Actually, it is as common to see healthcare advertisements on fans used in Black churches today as it is to see advertisements for mortuary services—the longstanding featured advertisement on such fans.

producers. A stylized fact is that consumers have a utility function that is optimized subject to a budget constraint as depicted in Equations 1 and 2.

Equation 1

$$U = F(\delta(cs_1 \dots cs_6), aog\&s_j)$$

Where U represents utility that is characterized by the elements of the separable utility function F , cs represents the six services that are defined above (entertainment, counseling, social network, daycare, educational, and healthcare services), which are consumed in the Black church, δ is a factor that represents cultural rigidity with respect to the consumption of cs , and $aog\&s_j$ represents the consumption of “all other goods and services.”⁴

Consumers are expected to act to optimize their utility subject to their income constraint as reflected in Equation 2.

Equation 2

$$V = F(\delta(cs_1, \dots, cs_6), aog\&s_j) + \lambda(y^o - \sum_{i=1}^6 p_{cs_i} cs_i, \dots, p_{cs_6} cs_6, - \sum_{j=1}^n p_{aog\&s_j} aog\&s_j)$$

Where V is to be optimized, λ is a Lagrange multiplier, y^o represents a consumer’s total income, and p represents the price of goods.

Taking partial derivatives with respect to the goods to be consumed, we arrive at the Equation 3 first order conditions:⁵

Equation 3

$$(3a) \quad \frac{\partial V}{\partial cs_1} = f_1 \delta - \lambda p_{cs_1} = 0$$

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$$\frac{\partial V}{\partial cs_6} = f_1 \delta - \lambda p_{cs_6} = 0$$

$$(3b) \quad \frac{\partial V}{\partial aog\&s_j} = f_2 - \lambda p_{aog\&s_j} = 0$$

$$(3c) \quad \frac{\partial V}{\partial \lambda} = y^o - \sum_{i=1}^6 p_{cs_i} cs_i, \dots, p_{cs_6} cs_6 - \sum_{j=1}^n p_{aog\&s_j} aog\&s_j = 0$$

Manipulating Equations 3a-3c, we derive the following Equation 4 relationship:

Equation 4

$$\frac{f_1 \delta}{p_{cs_j}} = \frac{f_2}{p_{aog\&s_j}} = \lambda$$

⁴The factor δ , which represents cultural rigidity, is assumed to take on values between 0 and 1; 0 represents complete cultural flexibility (ability to transform/evolve) and 1 represents the converse.

⁵ We assume that all of the appropriate second-order conditions hold.

Equation 4 states that, given cultural rigidity, the ratio of the marginal utility of each good to its price must be equal for all goods consumed, and it is equal to the marginal utility of income, which is symbolized by λ . That, is λ indicates the increase in marginal utility caused by a marginal increase, say one dollar, in expenditures. Notably, if more utility could be gained from spending an additional dollar on *cs* than on *aog&s*, then the consumer has not maximized utility. Rather the consumer should optimize by shifting a portion of the current expenditure to *cs* and away from *aog&s* to increase utility without spending additional income.

Theoretically, under Equation 1-4 conditions, the consumer optimizes the consumption of *cs* and of *aog&s* taking into account cultural rigidities. The consumption set is assumed to reflect “revealed preferences.” But, given cultural rigidity, these preferences infer that it is acceptable to consume *cs* from mainly one supplier; i.e., traditional churches alone should supply *cs*. This is tantamount to saying that, in the beginning, transportation was limited to walking. The reality is that, over time, other forms of transportation came into existence: riding animals; riding in animal drawn carriages, mechanical carriages or automobiles, and, ultimately, flying. One day we may transport *Star Trek* style. The same goes for *cs*. Now, due to cultural rigidities, *cs* are mainly delivered by churches. However, when there is a softening of cultural rigidities, *cs* can be obtained from a variety of non-church producing units.

We believe that a softening of cultural rigidities concerning the consumption of church-produced *cs_i* will occur for at least two reasons. First, as Hagerstrand (1988) explains, diffusion or innovation occurs due to the realization of changing possibilities; i.e., as limited possibilities expand. In this case, the very fact that we can identify low-cost substitutes for *cs_i*, some of which are recent phenomena, reflects the expanding opportunity set that Black Americans face. As more and more low-cost *cs_i* substitutes become available, there is likely to be a shift toward the consumption of these substitutes instead of church-produced *cs_i*.

The second reason for a softening of cultural rigidities has to do with what Wagner (1988) calls *Geltung*; i.e., the prestige, standing, or validity that empowers effective communication. If Black church leadership continues to suffer indignities from accusations of unsavory behavior (viz., recent allegations lodged against Bishop Eddie Long), the *Geltung* of the leadership falls. At the same time, as Black Americans become more and more preoccupied with wealth creation and gain greater respect for rich and famous Black Americans (their *Geltung* rises) who place less emphasis on religious worship, it stands to reason that church attendance may become less the order of the day.

When cultural rigidities soften, one may find that consumers reveal another set of preferences. Viewing Equation 4 intertemporally, when δ declines, variables in the equality must change in response. A reduction in δ opens the door to a different consumption set and the revelation of another set of preferences. This is particularly true when alternative or substitute *cs* are available at a lower price than church-produced *cs*. Under the just-described conditions, it is possible to increase utility even when the income constraint is unaltered.

Henderson and Quandt (1980), use the Equation 1-4 optimizing framework to estimate elasticities; i.e., the percentage change in the quantity of a good that is demanded in response to a

percentage change in the price of the good. Taking cs as an example, we find that the price elasticity of demand for cs can be depicted in the following way:

Equation 5

$$\varepsilon = -\frac{p_{cs_i}}{cs_i} \frac{\partial cs_i}{\partial p_{cs_i}}$$

In this analysis, ε is partly determined by cultural rigidity. If the idea is pervasive that one must go to church to obtain cs and that there are no substitutes, then ε will be smaller ($\varepsilon > -1.0$) than it would be in the absence of cultural rigidity because ∂cs_i will change little in response to price changes (∂p_{cs_i}). This is the status quo for Black Americans given the large numbers that continue to attend church as the price of church attendance rises.⁶

Assume that cultural rigidities soften and that Black Americans recognize that there are good cs substitutes that are produced by non-church producing units, and assume that the price of non-church cs are significantly cheaper than church produced cs , then we should see a shift from the consumption of church-produced cs to non-church produced cs .

In other words, Black Americans now face the following consumption set: (*church* $cs_1, \dots, \text{church } cs_6$; *non-church* $cs_1, \dots, \text{non-church } cs_6$; and *aog&s_j*). Many Black Americans currently reveal a preference for the following consumption sets: (*church* cs_1, \dots, cs_6 ; and *aog&s_j*) > (*non-church* $cs_1, \dots, \text{non-church } cs_6$; and *aog&s_j*). Given more cultural flexibility with respect to cs and lower prices for non-church cs versus church cs , we may see a change in, if not a reversal of, this revealed preference.

Efficiency conditions

In order to determine the efficiency of the Black church, Henderson and Quandt (1980) establish basic efficiency conditions for competitive multiproduct firms, which use multiple inputs. In order to use this efficiency condition, we must show that Black churches operate within a competitive-like market framework. This is achieved by noting two facts. First, within the United States according to the 2007 Census (Census Bureau, 2007), we find that there are about 300,000 catholic and protestant Christian Churches, Jewish Synagogues, Mosques or Masjids, Hindu Temples, etc. Such a large number of establishments is consistent with the number of establishments in industries that are considered to be competitive; i.e., retail stores, medical practitioners' offices, law offices, etc.

Second, Henderson and Quandt (1980, p. 139) show that competitive firms are price takers. While certain religious establishments (especially sect-like organizations) set standards for contributions (i.e., the price that worshipers must pay to receive cs), it is safe to say that most religious establishments do not obtain 100 percent compliance with their contribution requirements.⁷ Moreover, many religious denominations have no contributions standards, per se,

⁶ The price of obtaining church-produced services is rising because, even when the value of contributions does not rise, prices for church-related ancillary goods and services (e.g., clothes, transportation costs, etc.) continue to rise.

⁷ Iannaccone (1998) categorizes churches into two major groups: "High-cost 'sects'" and "easygoing" churches that have no firm contribution standard (see p. 1483).

and simply accept what parishioners offer. In other words, these religious establishments are essentially price takers.

Therefore, both on number and price taker status grounds, we conclude that Black churches operate within a competitive environment. As such, without cultural rigidities, they would face stiff competition from the many non-church producers of *cs*. Given Black church current implicit price levels for *cs*, which support current operations, Black churches would face closure if Black worshippers opted to consume non-church *cs* because they found prevailing prices to be much lower than church *cs*. They would perform such consumer behavior because, given the price levels that they would face for substitute *cs* from non-church producing units, they would substitute non-church *cs* for church *cs*, and possibly increase their overall consumption of *cs*. Based on income effects, Black consumers would possibly also increase their consumption of *aog&s_j*. On both counts, they would stand to increase their overall utility.⁸

Even as price takers, Black church produced *cs* implicit prices may be higher than the price of non-church produced *cs*. This implies inefficiency in production on the part of Black churches. Either the production of Black church produced *cs* is inefficient (i.e., production costs exceed the production cost of non-church production) or the profit margin on Black church produced *cs* is higher than the profit margin for non-church produced *cs*. If the latter, then the owners of production require higher returns than would normally be accorded *cs* production. These returns are possible mainly due to cultural rigidities. Once these rigidities soften, owners of production would have to seek their required returns through some other form of production.

Data and Methods used to Compute Church and Non-Church Produced Service Prices

This section focuses on the data and methods that are used to identify or compute prices for church and non-church produced services. The two primary data sources that are used are the CEX and the ATUS. It is noteworthy that these sources must be used to identify national average prices for the six *cs* under consideration because the U.S. Bureau of Labor Statistics, the preeminent collector of price data in the U.S., does not now publish national average price data for services—only for food items and gasoline. The primary method for preparing these price data is to match as closely as possible CEX and ATUS categories, and then to divide expenditure data for services by the time spent performing or consuming the service. For Black Americans' expenditures for *cs* produced by non-church producers, we use CEX and ATUS estimates by race for Black Americans. Where available and as appropriate, we also use data on Black American contributions to Black churches in combination with ATUS data for Blacks to determine the price of church-produced *cs*. The objective is to match the prices of the lowest priced *cs* substitutes that are produced by non-church producers with the implicit prices of Black church produced *cs*.

Estimates of the total share of time spent consuming *cs* in a Black church setting is derived as follows:

⁸Henderson and Quandt (1980) show that elasticity (ϵ) has substitution and income effects by describing the Slutsky Equation (see Equation 2-34 on p. 27). We have already discussed the substitution effect. Here we mention the income effect.

Equation 5

$$cs_i \text{ share} = ATUS\ cs_i / \sum_{i=1}^6 \text{Total ATUS } cs_i$$

The cs_i share estimate, which is a ratio, is then used to determine the value of Black American annual average expenditures on church produced cs_i using the following formula.

Equation 6

$$\text{Value of expenditures on } cs_i (VEXCS_i) = \text{Total Contributions} * cs_i \text{ share}$$

The implicit price per unit of cs_i consumed is derived using the following formula:

Equation 7

$$\text{Implicit Price of } cs_i (IPCS_i) = \frac{VEXCS_i}{\text{Number of church visits per year}}$$

The national average price for the lowest priced cs_i substitutes that are produced by non-church producers is determined using Equation 8.

Equation 8

$$\begin{aligned} \text{Unit Price of CEX on lowest cost } cs_i \text{ substitute (UPCEXCS}_i) \\ = \text{CEX annual value of lowest cost } cs_i \text{ substitute} \\ / \text{Consumption periodicity}_i \end{aligned}$$

We use the following assumption concerning *consumption periodicity*_{*i*}:

- Entertainment – Weekly but with a unit price based on daily (365) consumption of cable and Internet service
- Counseling – Weekly (52)⁹
- Social networks – See entertainment above
- Child care – All working days during the year (non-national holidays less a two-week vacation; i.e., 343 days)
- Education – The standard 180-day school year
- Healthcare – 3.8 annual visits¹⁰

The CEX categories for the lowest priced cs_i substitutes that are produced by non-church producers and their annual expenditures, and daily prices are presented in Table 1 below:

⁹ This consumption periodicity is reported by Pingitore *et al* (2001).

¹⁰ This is the weighted-average number of healthcare visits from the National Center for Health Statistics (2010).

Table 1.—Consumer Expenditure Survey CS_i Data

CS_i Category	Lowest Cost CEX Category (ies)	Annual Expenditures	Average Unit Expenditure (Price)
$CEXCS_1$ - Entertainment	Cable and satellite television services ⁺	\$562.23	\$1.54
$CEXCS_2$ - Counseling	Services by professional other than a physician*	\$16.49	\$0.31
$CEXCS_3$ - Social Network	Cable and satellite television services ⁺	\$562.23	\$1.54
$CEXCS_4$ - Childcare	Daycare, nursery, and preschool services	\$217.12	\$0.63
$CEXCS_5$ - Educational	Vocational and technical schools	\$7.71	\$0.04
	School books, vocation and technical schools	\$.80	\$0.0
$CEXCS_6$ - Healthcare (clinical)	Services by professional other than physician*	\$16.49	\$4.33
Total CS_i			\$8.39

⁺--We use the same CEX category for both entertainment and social networks because many members of social networks access the Internet as part of cable television services.

*--We use the same CEX category for both counseling and healthcare cs_i because these CEX categories include both psychological and physical care. We are unable to derive separate (split out) CEX categories for these services.

Table 1 reveals that units of cs_i can be obtained for a total price of \$8.39 on an unweighted basis. To obtain weights for these prices, we need appropriate shares that can be derived from ATUS data. The ATUS categories that comprise cs_i and the daily time spent consuming these services and their shares are presented in table 2:

Table 2.—ATUS Shares for CS_i Services

CS_i Category	ATUS Categories	Daily Hours Expended	Category Shares
$ATUSCS_1$ - Entertainment	Television (religious) (120304)	0.01	0.01
$ATUSCS_2$ - Counseling*	Obtaining medical care for household children (030302)	0.00	
	Waiting associated with household children health (030303)	0.00	
	Obtaining medical care services for household adults (030404)	0.00	
	Travel related to household children health (180303)	0.00	
	Using healthcare services outside of the household (080401)	0.06	
	Waiting associated with medical care (080403)	0.01	
	Travel related to using medical care services (180804)	0.00	
	SUBTOTAL	0.07	0.07

CS _i Category	ATUS Categories	Daily Hours Expended	Category Shares
ATUSCS ₃ – Social Networking	Socializing and communicating (120100)	0.71	0.84
	Waiting associated with socializing and communicating (120501)	0.00	
	Travel related to socializing and communicating (181201)	0.01	
	Attending or hosting social events (120200)	0.06	
	Waiting associated with attending or hosting social events (120502)	0.00	
	Travel related to attending or hosting social events (181202)	0.01	
	SUBTOTAL	0.79	
ATUSCS ₄ – Childcare	Using paid childcare services (080101)	0.00	0.00
	Travel related to using childcare services (180801)	0.00	
	SUBTOTAL	0.00	
ATUSCS ₅ – Education	Extracurricular music and performance activities (060102)	0.00	0.00
	Travel related to extracurricular activities (180602)	0.00	
	SUBTOTAL	0.00	
ATUSCS ₆ – Healthcare (clinical)*	Obtaining medical care for household children (030302)	0.00	0.07
	Waiting associated with household children health (030303)	0.00	
	Obtaining medical care services for household adults (030404)	0.00	
	Travel related to household children health (180303)	0.00	
	Using healthcare services outside of the household (080401)	0.06	
	Waiting associated with medical care (080403)	0.01	
	Travel related to using medical care services (180804)	0.00	
	SUBTOTAL	0.07	
Total		0.94	1.00 ⁺

*--Following our practice with CEX categories in Table 1, we use identical ATUS categories for counseling and healthcare.

⁺--Components do not sum to the total due to rounding.

Given the time expended shares and prices for lowest cost substitute *cs_i* services, we can compare these prices with the implicit prices paid by Black parishioners. Table 3 (see next page) shows total annual average contributions to Black churches (and the average for all Black households from the CEX). These contributions are normalized to a weekly or unit contribution, and then distributed to the six *cs_i* categories using the shares derived in Table 2. The resulting values are implicit prices, which can be compared to the prices of lowest cost substitutes, which were provided in Table 1. Table 3 results are discussed in the next section.

Results

The first noteworthy fact from Table 3 is that only two Black church denominations are represented. We contacted the three largest Black Christian Church denominations (Church of God in Christ, National Baptist Convention, U.S.A., and the African Methodist Episcopal Church) in order to include them in our analysis, but all three refused to release contributions

Table 3.—Comparing CS_i Implicit Prices with Lowest Priced Substitutes

(1) Black Churches/CEX	(2) Annual Average Religious Contributions	(3) Normalized to Weekly/Unit Contributions*	CS _i Implicit Prices and the Prices of Lowest Cost Substitutes					
			(4) Entertainment	(5) Counseling	(6) Social Networking	(7) Childcare	(8) Education	(9) Healthcare (clinical)
Apostolic Faith Mission Church of God [#]	\$227.57	\$5.69	\$0.06	\$0.40	\$5.03	\$0.00	\$0.00	\$0.40
The Church of Christ (Holiness) U.S.A. [#]	\$1,183.40	\$29.59	\$0.30	\$2.07	\$26.15	\$0.00	\$0.00	\$2.07
CEX	\$683.44	\$17.09	\$0.17	\$1.20	\$15.10	\$0.00	\$0.00	\$1.20
CS _i Prices of Low-Cost Substitutes		\$8.39	\$1.54	\$0.31	\$1.54	\$0.63	\$0.04	\$4.33

*--Sahgal and Smith (2009) reports that 57% of Black Americans attend church services weekly (i.e., 52 attendances per year). In an extreme case, if the remaining 43% of Blacks did not attend church at all, then weighted average annual attendance would be 28 attendances per year. We adopt judgmentally 40 attendances per year as the average annual attendance for all Black Americans. We divide annual average religious contributions by 40 to obtain the normalized weekly/unit contributions.

[#]--Annual average contributions data for these denominations are from the American Council of Churches (2010). The Apostolic Faith Mission Church of God has a membership of 5,200; the Church of Christ (Holiness) U.S.A. has a membership of 11,468.

data.¹¹ *A priori*, the absence of these data may appear to diminish the reach of this study. We disagree based on the assumption that contribution rates for nonreporting denominations equal or exceed those of reported in the CEX, which is discussed below. We make this assumption because the three denominations account for a sizable proportion of Black church goers (about 12 million). Consequently, the three groups must account, in a significant way, statistically for the average contribution reported in the CEX.

Table 3 shows average annual religious contributions of two Black denominations and those reported in the CEX. We normalize the annual contributions to a weekly or unit rate, and then distribute the unit contributions across the six cs_i categories that we are concerned with in this analysis using the ATUS-based Time Expended Shares. The key findings are reflected in Column 3 of the table, which shows that one of the two church denominations (The Church of Christ) and the CEX unit contributions are greater than those that would be required to purchase the six cs_i when obtained via lowest priced substitutes.

As an artifact of the weighting scheme derived from ATUS data that are presented in Table 2, the Table 3 implicit prices for two church produced cs_i categories (Counseling and Social Networking) exceed the lowest priced substitute across the board, while the implicit prices for four cs_i categories (Entertainment, Childcare, Education, and Healthcare) are less than the lowest priced substitutes. Importantly, the weighting scheme allocates a heavy weight to social networking services, and implies that Blacks are willing to pay a premium to engage in social networking services in a Black church environment.

Based on this analysis, we conclude that cs_i can generally be obtained from non-church producing units at a price that is less than the implicit price paid for those services when obtained from a Black church. The implicit prices become even higher when we account for the ancillary costs (e.g., clothes, transportation costs, etc.) that are associated with consuming these services. In the context of a competitive market (price taking) environment, Black churches appear to not be efficient producers of cs —at least as reflected in the implicit prices that they receive for the services. Given that Black parishioners have a willingness to pay more for these services than they would have to pay when obtaining the services from a non-church producer, we conclude that Black consumer behavior reflects cultural rigidities. From these results, it is clear that Black consumers are not optimizing their utility when it comes to acquiring cs_i from Black churches— if we were to account for cultural rigidities.

Therefore, we ask, “Why do inefficient Black churches continue to survive?” We believe that the aforementioned cultural rigidities are driving the outcomes that we observe. When these rigidities are softened, we should observe a reduction in the consumption of cs_i from Black churches. But it is not cultural rigidities alone that cause Blacks to attend Black churches to obtain cs_i .

We believe that there is at least one other factor at play here. A key cultural rigidity that has not been discussed is the fact that the Black church serves as a place that provides great utility for

¹¹These three large Black denominations and many smaller denominations choose not to report membership and contributions data to the National Council of Churches, which is the source for the contributions data for the two Black denominations that are reported in Table 3.

Black parishioners. Specifically, given the dearth of opportunities to operate in positions of power and purpose in the outer society, Black parishioners rely on Black churches to provide them with “position.”

In the Black church, there are numerous positions of leadership besides that of being a minister: From the Deacon Board to the Missionary Board, to the Choir Director, to the Youth Program Directors, etc., which enable Black Americans to operate in a position of authority—roles that they continue to have limited opportunities to perform in the broader community. In 2002, Black elected officials in the U.S. comprised less than 1.0% of the Black population (Census Bureau 2010 and 2003). Therefore, the average Black American has few opportunities to play official leadership roles in their communities. Therefore, they use the Black church as the place where they contribute to their communities’ development by serving in leadership roles. They value this opportunity. We can see the extent of this value by the premium that Blacks continue to pay for the opportunity to maintain their churches and retain their positions of leadership and authority.

Conclusion

This paper discusses Black American consumption of six services (cs_i) in churches. It reveals that, to date, cultural rigidities have constrained the extent to which Blacks have been willing to seek these services at a cheaper price from non-church producing units. The reality is that cultural rigidities should soften over time and the demand for church produced cs_i should diminish. Even with limited data on contributions by Black parishioners, the paper makes clear the fact that Blacks pay a premium for cs_i , and that their utility is, therefore, constrained given their income constraint. It stands to reason that there will come a time when softened cultural rigidities and the realization that utility can be increased through the consumption of lower cost non-church produced cs_i , that Black churches will begin to lose their special place in Black American culture. This will be true all the more as Blacks find increasing opportunity for “position” beyond the confines of the Black church.

This paper has significance far beyond these direct and immediate findings. If Black church attendance declines over time, then there will be a reduced need for churches, ministers, and all of the human and non-human inputs to church production. Reduced demand for these goods and services has significant economic implications. Over the past five years (2005-9), religious institutions accounted for an annual average of \$7.3 billion in new construction activity in the United States. Not only that, but the loss of Black ministers’ incomes will reduce further Black earnings in a significant way. But, of course, if we find this phenomenon in the Black community, we must recognize that it has already been presaged in the wider community. Clearly, America is reflecting a weaker and weaker allegiance to the church. A dramatic case in point of a declining church is the bankruptcy of the Crystal Cathedral (see Audi 2010).

Many proponents of the Black church will argue that these predictions are unfounded, particularly because the Black church is growing in certain areas of the Southern United States. However, they should recognize that even in these locations, cultural rigidities will soften over time and changes in economic conditions could cause Blacks to reduce their consumption of cs_i . Consequently, Blacks could be turned away from the Black church as the primary source of cs_i .

Black Americans are increasingly asking: “If the Black church is such a powerful force, then why is it so ineffective in changing conditions (particularly economic conditions) in the Black community?” For example: Black unemployment continues at high levels; Black educational attainment, especially among Black males, is not on the rise; and Black male imprisonment continues to rape our community of its leadership and strength. As Blacks see the ineffectiveness of the Black church at transforming these conditions, we may see a softening of cultural rigidities and the identification of new sources to meet their physical (economic), psychological, and spiritual needs.

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