

The Opportunity Cost of Study Abroad Programs: An Economics-Based Analysis

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I. Introduction

Most colleges and universities offer study abroad programs, and an increasing number of students participate in such programs. The cost of offering and promoting study abroad programs is often misunderstood and incorrectly assessed. This paper provides an analysis of study abroad costs that will be of general interest, but will be especially useful to college and program administrators who have responsibility for budget, program size, and program management decisions. A budgetary analysis of study abroad programs that are established and staffed by the home institution requires a different approach from that developed here, and thus these types of programs are not considered in this paper.

There are a wide range of study abroad policies, practices, and budgeting procedures for study abroad programs that are offered, but not operated by, a home institution. At many colleges, students participating in any study abroad program retain their status as full-time students and pay regular tuition fees. At other institutions, students study abroad while on official leave of absence. Typically, students pay host institution fees, but the home institution or provider may also impose a processing fee. At other institutions, students retain their home institution enrollment status, but are charged host institution fees, often with a processing fee added. These various program arrangements should not be viewed as exclusive, and at some colleges, program fees and the enrollment status of the student depend upon the specific program chosen. For example, affiliated programs, however defined, may have different fees from nonaffiliated programs. Another fundamental difference in policies and procedures is that some colleges directly place their students in study abroad programs at host institutions, while others use the services of various intermediaries or providers to make placement arrangements.

This paper is based on a fact, an assumption, and a dual purpose. It is a fact that most colleges and universities are not-for-profit institutions. Consistent with this not-for-profit status, it is generally recognized that student tuition fees do not cover the entire cost of providing an education. Almost all students,

whether they are full fee payers or on financial aid, are subsidized. The implications of this established fact are, in general, not fully appreciated.

The assumption underlying the analysis is that study abroad is an academic program, and, in that sense, no different from, for example, programs offered in literature or physics. Many college administrators act as if this were not the case, and treat study abroad as something different from other academic programs. This different treatment is responsible for many of the misunderstandings about the cost of study abroad, and often influences inappropriately the way study abroad budgets are developed and costs assessed.

The purpose of this analysis is, first, to summarize briefly some standard study abroad practices, and indicate their revenue and cost implications. This is done in Part II. The second purpose, presented in Part III, is to discuss the opportunity cost of study abroad. The analysis presented therein will be familiar to economists, but will likely be novel to many college and study abroad administrators. It will demonstrate with a numerical example why the standard interpretation of study abroad costs is wrong, and provide an economic approach whereby costs can be correctly assessed.

II. Program Issues

Several issues are selectively and briefly addressed in this section. After a consideration of the purpose of study abroad and its direct costs, we examine fee structure possibilities and the appropriate handling of financial aid. Program selection possibilities and placement alternatives, and their cost implications, are then discussed.

If study abroad students remain fully enrolled at, and pay participation fees to, their home institution, then the direct institutional cost of study abroad is the payments that are made by the home institution to the host institutions or provider. Thus, for example, if host institution payments average \$6,800 per student abroad semester, and if 200 students enroll in one-semester study abroad programs, then the direct cost of study abroad for the home institution is \$1,360,000 ($\$6,800 \times 200$). This represents a transfer of monies that would not have occurred if the study abroad programs did not exist. Although obvious enough, this transfer of monies occurs regardless of the study abroad fee structure; i.e., it is unrelated to whether or not students pay regular tuition fees. This transfer of monies represents the direct cost, and for many, the only visible cost of study abroad. If, by contrast, students are on leave of absence while participating, then the home institution neither receives tuition fees nor makes host institution payments. This situation poses no direct revenue or cost

consequences that are not obvious, but it does have the indirect consequences that are addressed in the following section discussing opportunity costs.

Should regular tuition fees be assessed, or should fees be based upon host institution charges? The answer to this question depends, in part, on the type of programs offered, the status of the participating student, and how study abroad is viewed by the home institution. A history of study abroad, perhaps biased and certainly incomplete, can be briefly summarized. Study abroad was initially seen as an appropriate finishing school experience for proper young ladies. Young women, traditionally from one of the Seven Sisters' institutions, would spend their junior year in Europe and return home with the patina of Old World sophistication. Advance rapidly to the post World War II era. Study abroad, although still attracting far more women than men, was now viewed as a culturally enriching experience, directly supportive of a liberal arts education. It was broader in its appeal, and more concerned with a depth of appreciation than simply finishing touches. And, study abroad was of particular importance to language students, who were especially encouraged to advance their language proficiency through a semester or year abroad. There are many who continue to believe that the primary purpose of study abroad should be to develop language proficiency, this being the only presumed way to gain a full appreciation of a foreign culture.

A new view of study abroad has since taken hold. The culturally broadening aspect of study abroad is, of course, still recognized, but study abroad is now seen as an academic program that is directly supportive of the student's major. This viewpoint has profound consequences for those who share it. It assumes that faculty and students from other countries have something different and important to say about history and psychology, about business and engineering, about chemistry and biology. Study abroad is for all students, and it provides students with the opportunity to gain a richer understanding of their major. Study abroad is fundamentally an academic program.

Not all college administrations and faculty share this newer view of the role of study abroad. This, not surprisingly, influences some of the important decisions affecting education abroad policies and procedures. And, that, in turn, influences the way study abroad budgets are developed and costs assessed. This paper takes the position that study abroad is an academic program that supports the student's major, and, in that sense, is an integral part of the majors offered, e.g., in business, literature, or physics. Many college administrators act as if this were not the case, and treat study abroad as something different. This different, and, it may be argued, inappropriate treatment is responsible for some of the misunderstandings about the cost of study abroad.

If study abroad is viewed as part of an academic program, then a strong consistency argument can be made for charging regular tuition fees. For example, literature programs, requiring only faculty and classrooms, are far less costly than are modern physics programs that additionally require expensive laboratories and equipment. Yet, few institutions charge students differential tuition fees based on their choice of major. There is no generally compelling reason to treat study abroad differently. That is, should the subsidy structure be different for some programs than for others? Certainly, one can argue that society or specific institutions may, indeed, want to encourage some activities and, thereby, discourage others. But, if this argument is to be made, it must be done knowingly, and not be based on some vague notion that study abroad is different. This analysis will continue on the assumption that participating students are assessed home institution tuition fees.

The revenue implications of this policy are clear. If host institution or provider fees are below those at the home institution, then charging home institution tuition leaves no money on the table. Furthermore, this policy is easy to justify. It is, as already observed, consistent with the uniform tuition level policy that characterizes student participation in other academic programs. If, by contrast, host institution fees are above the home institution's tuition, a study abroad fee structure based on a cost plus policy will generate more revenues. But, that monetary gain is made at the cost of consistency. We have justified charging regular tuition fees on the basis of study abroad being no different from other academic programs. It is not a principle that should be abandoned as soon as it is convenient (profitable) to do so.

Some study abroad programs are, of course, more costly than others, as physics is more costly than literature. But students, regardless of program cost, should, consistent with standard academic program practice, be charged the same tuition fees. Obviously, if a particular study abroad program is deemed to be too costly, it can be eliminated from the student choice set, as, for example, we might eliminate, or not introduce, an overly costly science or classics program. Although a consistent tuition payment policy is here advocated, the discussion underscores a general need for a careful monitoring of study abroad program revenues and costs.

College policies often differ when it comes to the handling of financial aid. First, it should be understood that the tuition revenues of a college are determined at the point of entry. That is, the college admissions office, by its financial aid decisions, determines the net tuition revenues that are available to the college. The direct cost of study abroad, as indicated above, is the transfer of

monies to the host institutions or provider . Whether the student chosen to study abroad is a full payer or is on full scholarship aid does not affect either the tuition revenues that the college receives or the host institution payments that are made. There are no revenue or cost consequences associated with the particular selection of study abroad students. Study abroad students on financial aid should receive the same aid package for which they would otherwise be entitled. It is perhaps gratifying that the cost analysis supports the social conviction that many would share.

With regard to the placement of students, some colleges allow a student to select an education abroad program from an extensive list of possibilities. Other colleges take a more restrictive approach. For example, some colleges have a list of affiliated programs that have been pre-approved for student participation. Students can be approved for nonaffiliated programs only if an academic need can be shown. As noted earlier, some colleges place their students directly at host institutions while other schools primarily depend on the use of providers.

Program selection and student placement policies provide significant opportunities to reduce study abroad costs. For example, some colleges allow students to select from a wide range of study abroad choices, and attempt to accommodate the student's choice of program. Such a policy, if students are charged home institution tuition, allows for minimal control of costs. Restricting student selection to a limited number of affiliated programs provides more effective cost control, and equally importantly, makes quality monitoring both easier and more effective. And, by sending more students to a fewer number of host institutions, personal relationships with the staff at the host institutions can be developed. Such personal relationships are extremely valuable, especially when problems arise.

Often, and particularly where wide program choice is allowed, colleges rely upon program providers to place their students. These intermediaries provide some valuable services, but those services come at a significant cost. Obviously, the benefits of using a broker must be compared with the costs of providing those services. Most host institutions that regularly receive study abroad students have international programs offices that manage the incoming flow of students, assuring that they are registered for classes, and that they are housed and fed. Indeed, many providers make extensive use of the international programs office at the host institutions where they place students. If a home institution were to focus its efforts on a limited number of affiliated programs, the home institution has the opportunity to establish and maintain the personal host institution contacts necessary for the confident direct placement

of most of its study abroad students. The elimination of program providers can lead to significant cost savings; however, this savings may be partially offset by the cost of increasing home institution staff to manage these affiliations.

III. The Opportunity Costs of Study Abroad

Most people if asked what the cost of an undergraduate education is will give the wrong answer. By contrast, a young man or woman who has just received an acceptance letter from the Harvard Business School (HBS) will correctly answer that question. It is not, however, because that prospective student is smarter, but rather because of the considerations that must be made by anyone considering enrolling in a full time MBA program. Annual tuition at the HBS is \$39,600; but it would be wrong to multiply that amount by two (most full time MBA programs, including that offered at the HBS, require two years of study) and give that as answer to the posed question. Top business schools do not generally accept students who have not had several years of successful work experience. A student who accepts admission at the HBS must give up his or her job, and the salary that went with it. The opportunity cost of going to the HBS is not only the \$79,200 ($\$39,600 \times 2$) in tuition, but also, more significantly, the two years of salary that must be foregone. This could easily mean a salary sacrifice of \$150,000 to \$200,000. The correct answer, then, is more than a quarter million dollars. We might incidentally note that the HBS provides illustrative student budgets that include typical room and board costs. Such costs would be incurred by a prospective student regardless of whether he or she decides to go to the HBS (one must eat and sleep whether or not in Boston), and should not, therefore, be considered a cost of attending.

What is the cost of study abroad? The answer must be given with the same understanding displayed above. The opportunity cost of any action is the value of the foregone alternative action. Thus, to assess the opportunity cost of study abroad, we must consider the “value” of the alternative action, i.e., not sending students abroad. Immediately, we save the transfer of monies that has been identified as the direct cost of study abroad. Those monies are now available for other purposes. There are, however, other implications of keeping students on campus that need to be explored. We have previously emphasized that study abroad should be viewed as an academic program. In one important respect, however, study abroad is different. It is a program that is offered abroad. The home institution, in sending students abroad, outsources some of its resource needs; it uses the faculty, services, plant, and equipment of the host institution. In direct consequence, the home institution needs fewer faculty

and classrooms, needs to offer fewer student services, and needs to provide fewer residence hall rooms and recreational facilities, than it otherwise would.

The (negative) value of the alternative action must then include the additional costs that will be incurred if students remain on campus. These additional costs are nicely revealed by use of a numerical example. The cost numbers used are representative of the 2005/2006 situation at Muhlenberg College. Some of the numbers are relevant to most colleges that have study abroad programs. Other calculations depend on the particular situation of the home institution, which may be different from that at Muhlenberg. We will develop the example with respect to (1) faculty needs, (2) residence hall needs, and, (3) other service and facility costs.

Muhlenberg is a small residential college with approximately 2100 students. For the coming academic year, approximately 200 students are scheduled to study abroad in semester length programs. Resident Muhlenberg students, on average, take 4.25 academic courses per semester (i.e., a student who expects to graduate in 8 semesters must complete 34 course units). If we multiply 200 by 4.25, we get 850, of what we will call, *educational units*. The standard teaching load for a full time Muhlenberg faculty member is 3 courses per semester, or 6 courses per year. Assume that an average class size is 20 students. Multiplying, we find that a full time faculty member produces $6 \times 20 = 120$ educational units per year. If the students remain on campus, 850 additional educational units must be produced, and each faculty member produces 120 educational units. Thus, 7 additional faculty will be required if the 200 students remain on campus (i.e., $850/120 = 7.1$). The average faculty salary at Muhlenberg, including benefits estimated at 30 percent of salary, is about \$80 thousand. Thus, the cost of 7 additional faculty is $\$80,000 \times 7 = \$560,000$. This represents an institutional cost saving that is the direct consequence of having 200 students studying abroad.

Some might object that the 100 students per semester who are abroad would, had they remained on campus, been diffused over many course sections, and that there would not, therefore, be the reduced need for faculty that has been suggested above. This has been investigated empirically using simple regression analysis. Two regressions were run, the first based on nine years of historical data for Muhlenberg, and the second based on a cross sectional study of some thirty-three liberal arts colleges. The two regressions yielded remarkably similar results, both indicating that about 6 full time faculty would be required to accommodate an enrollment increase of 100 students. This slightly lower result than that predicted above might tentatively be attributed to the use of adjunct faculty, at least in the short run.

Muhlenberg, as previously noted, is a residential campus, and it is important to the mission of the College that students be housed on campus. New residence halls for 140 students were recently constructed at a cost of about \$14.5 million. This comes to a cost per bed of over \$100,000. Each semester, some 100 students are studying abroad, and that number of additional beds would be needed if those students were to remain on campus. That is, additional residence hall accommodations costing $\$100,000 \times 100 = \$10,000,000$ would be required. If those monies were not used for construction, they could, e.g., be invested in Treasury bonds earning, say, 5 percent per year. Also, a residence hall requires regular maintenance. A 2.5 percent real depreciation rate is routinely used in making such cost calculations. Thus, the additional residence hall facilities needed to accommodate 100 students would have an annual cost of about $\$10,000,000 \times (0.05 + 0.025) = \$750,000$. A residence hall, of course, generates income through room charges, which, for the new residence halls indicated above, is \$5,400 per year per student. These additional annual revenues, $\$5,400 \times 100 = \$540,000$, must be subtracted from the annual building cost. That is, the net additional cost of the residence hall is $\$750,000 - \$540,000 = \$210,000$. This \$210 thousand represents another saving that can be attributed to study abroad.

Let us pause before considering other service and facility costs. In the exampled Muhlenberg context, if 200 students participate in study abroad programs, there is a saving of \$560 thousand in faculty costs and \$210 thousand in residence hall costs, or a total savings of \$770 thousand. This amounts to a study abroad saving of \$3,850 per student semester, i.e., $\$770,000/200$. This is the cost saving that is realized for each student who spends the semester abroad.

In 2002–2003, average host institution tuition fees at Muhlenberg were approximately \$5,400¹. If we subtract from this the realized savings per student calculated above, the true cost of sending a Muhlenberg student abroad was about \$1,550, i.e., $\$5,400 - \$3,850$. It may be that study abroad was the least expensive academic program offered at the College. The US dollar has subsequently depreciated, and average host institution tuition fees have consequently risen. In 2005–2006, Muhlenberg was paying host institution tuition fees that ranged between \$5,600 and \$10,500 (the two largest programs, however, both had tuition fees of less than \$6,000). Even with a less favorable exchange rate, study abroad remains a bargain.

The picture becomes still brighter when other service and facility costs are taken into account. There are many college services that are directly related to the number of students on campus. Counseling, healthcare, and career

development services must increase to meet the needs of more students. In addition, classroom, dining hall, student union, and recreational facilities must be expanded to accommodate additional students. With about 100 students abroad each semester, these additional services and facilities are not necessary. With information and data that are not available to the author, a cost saving analysis similar to that performed above could be conducted with respect to these other factors. It is, however, not unreasonable to believe that the additional services and facilities savings might be sufficient to bring study abroad costs to a zero level or less. This should not be a completely surprising conclusion. Recall that colleges are not-for-profit institutions. Tuition does not cover all educational costs. Shifting some of the educational subsidy burden abroad may, indeed, lower total costs. It should, however, be noted that college administrations typically take less notice of cost savings than of activities that generate additional revenues, even though a dollar saved has the same bottom line consequences as an additional dollar earned.

One implication of the above analysis should be immediately noted. Study abroad budgets are often developed on the supposition that the tuition payments made by the participating students should generate the revenues needed to make host institution payments. This may be an appropriate enough budgeting convention given the somewhat arbitrary nature of college budgeting. But, it is a convention that is not generally used in determining other college program budgets. Few academic programs have budgets based on the tuition payments made by students in the major. We do not, for example, require that the tuition realized from students majoring or taking courses in physics match the funds needed to support the physics program. Indeed, such a requirement would likely lead to the elimination of most physics programs. Also, if tuition payments, which are realized whether or not the students study on campus or abroad, match the transfer of monies to the host institutions, which only occurs if the students study abroad, it would be wrong to conclude that study abroad is thereby operating at a balanced budget level. In most circumstances, the balanced budget so achieved is an accounting illusion having little to do with the real cost of study abroad. The true cost of study abroad requires that we consider the cost implications of having students remaining on campus. That, as we have shown, results in significant additional costs which can be eliminated by having some students study abroad.

The opportunity cost analysis presented above is relevant to all colleges and universities. The illustrative numbers reflect only the situation at Muhlenberg College and would need to be adjusted for the study abroad programs at

other colleges. The cost savings would be greater for colleges that have higher faculty salaries, lower teaching loads, or smaller class sizes. The annual rate of return assumed above for capital cost savings was a conservative 5 percent. Savings will be significantly increased if a higher foregone rate of return is posited (e.g., many colleges and universities have been realizing rates of return on endowment of 10 percent or more). Nonresidential colleges and those offering fewer student services and facilities would realize lower savings. Exchange rate variations will also influence the cost of study abroad. For example, the recent depreciation in the value of the US dollar has appreciably increased study abroad costs. Note, too, that the presented analysis is largely independent of how the program issues discussed in Part II are resolved; thus, opportunity cost analysis has universal applicability.

IV. Conclusion

Several program issues have been addressed. A case has been made for charging home institution tuition fees for participating students. It has been shown that continuing financial aid for study abroad students has no budgetary consequences for the home institution. Limiting program choice to students leads to better cost control and quality monitoring.

The more important purpose of the analysis is to show that a proper consideration of opportunity costs is essential to an assessment of study abroad costs. When viewed from this appropriate economic perspective, study abroad, through an out-sourcing of college resources, is a low cost academic program. The benefits accruing to the participating student have not been considered. For an answer to that question, one need only ask a returning student.

Notes

¹Muhlenberg charges study abroad students standard College room or board fees if the host institution provides housing or meals. Such charges are essentially a payments “wash”, and in the interests of simplifying the analysis, without any substantive loss, are not considered above