

Abstract

The path to becoming a lawyer, pilot, or a doctor is a very tough route no matter which profession one should choose. The purpose of this research paper is to determine if all the careers offer the same reward upon completion of education. Does one career earn significantly more money per dollar invested in education? The hope is that this paper will show these inconsistencies and increase awareness of the amount of debt students are piling on. The starting salary of a profession needs to be able to support the debt that must be accrued. Throughout this research paper, there will be a thorough analysis of three professions that will look at the time invested to obtain an education, the money invested, and the difficulty of obtaining the certification for that specific career path. This will show that each career is extremely difficult and thus should be rewarded as such. After this has been accomplished, I will discuss the starting salaries and compare this to the average debt obtained during education. It is my hope to show that some careers are financially much more viable than others, and this needs to be considered before entering the career field.

Dream Job or Money Pit?

With the cost of education soaring, now more than ever, it is important for a university student to be assured that they are making a lucrative investment and that someday their education will pay itself back. This however, is not the case for many career paths. College is no longer affordable; even with a full time job. This was not the same situation 30 years ago. Back in the days of affordable college, there were stories of students working all summer to pay for their tuition in the fall and spring semesters. On average today, higher education has a yearly tuition of \$19,339 (Bernasek, 2014). This brings the average for a four year degree to around \$80,000. This means that a student would have to be making \$20,000 a summer all while having next to no work experience or formal education. This number obviously excludes simple things like the cost of living and other expenses so really a student would have to make substantially more than \$20,000 a summer. The cost may be justifiable though, with the hope of a good return on investment somewhere in the future.

All of the tuition costs in the previous section were for a four year Bachelor's degree. \$80,000 for the bare minimum of four year higher education. Obviously, some careers require more than just a four year degree and this is where the costs really start to soar. Some examples of career paths that require higher education are doctors, lawyers, physicists, and pilots. These careers not only require more of the tough collegiate course work, but a lot more money. This time and effort is what guarantees that our highly educated individuals are really some of the best. The incredible investment that must be made begs the question of whether that investment is ever returned to the individual in their career field. If the investment is returned, how long will this take? For almost every profession the answer is yes. The career starts at a fairly high salary and continues to climb. To demonstrate this example a typical path to being a doctor can be analyzed. A physician obviously requires extensive school and a huge investment. According to Best Medical Degrees (BMD), the cost is astronomical, ringing in at \$207,866 for a public university and \$278,455 for a private university on average ("Is Medical School

Worth It Financially," 2014). Future physicians are bright students though and many receive scholarships so the national average of debt for physicians is around \$170,000 ("Is Medical School Worth It Financially," 2014). This would be a very huge amount of debt to have looming over a newly graduated individual, however, according to Best Medical Degrees, on average that physician is going to make \$210,000 annually. Ignoring debt that accumulates on the physician's school loans, the physician can expect to pay off their debt in around seven years. It can easily be seen how this is a worthwhile investment because eventually it does pay itself off, and rather quickly at that.

The almost immediate payback however, is not the case for some career fields that require a substantial investment. There is one career path that requires a Bachelor's degree and an additional \$60,000 in training but does not have the return on investment that a physician has. That cost of training is substantial and the coursework is rigorously difficult. The path to becoming a professional pilot however, does not have the same level of reward on investment. The cost of flight instruction varies pretty greatly depending on the aircraft and location but generally the average is around \$40,000 for a non-university flight school. This means that when you're done with all your flight training you will have a commercial multi-engine pilot's certificate but no four year degree. This could work out okay for you because a degree is not required for many smaller jobs, but the major airlines such as Delta, United, and Southwest all require four year Bachelor's degrees. For the rest of this paper, a four year degree with flight training will be assumed because that is the best way to recoup your money from the large investment.

Flight training associated with a university will end up costing a whole lot more. Information received from the bursar's office at Purdue University in West Lafayette, IN has their commercial pilot program set at \$50,813 (purdue.edu, 2014). It is important to note that this is entirely on top of the annual tuition for the school so the total education cost would be somewhere around \$130,000 assuming \$20,000 a year in tuition. This education would give the student a four year degree as well as

around 250 hours in the airplane. This would essentially allow the pilot to do absolutely nothing with their license. A commercial pilot's license sadly does not enable an individual to get many jobs at all. Because of recent rule changes, any pilot hoping to fly airlines is forced to accrue 1,500 hours before even being looked at by an airline. This means that when a pilot has \$130,000 in debt and 250 hours the only real jobs they can obtain are flight instructing (requiring more education) and maybe the possibility of flying skydivers or doing aerial photography for next to no pay. The most likely route (and best paying) is to get your certified flight instructor license and begin teaching people how to fly. The pay can range a whole lot for flight instructing but it is generally somewhere in between \$20-\$40 an hour and according to glassdoor.com, the national average is \$34,000 a year ("Salary: Flight Instructor," 2015). This means that an individual with \$130,000 in debt will be making \$34,000 a year and still generating interest on that mass amount of debt. Clearly, this does not seem like the ideal situation, but things will get better once the pilot has their 1500 hours. For the sake of this situation, it can be assumed that the flight instructor is in the best possible location to get their flight time. They are in a perfect climate and they get 800 hours a year. This is an extremely unlikely situation but it is possible. This would mean that the instructor would have 1,500 hours in a little over a year and half. Obviously, somewhere like Indiana would not allow for this because of the many days with poor weather.

Once the instructor accrued his/her 1,500 hours the airlines would officially hire him/her. However, not any airline will hire them. No one can jump straight on to a Delta or United airline. Those airlines require thousands of hours total time and around 1,000 hours of turbine time (time in a jet, which no flight instructor receives). This means that the pilot must first apply to a regional airline such as Republic, out of Indianapolis, Skywest, based in Utah, or many others. This is where the real problem arises. The pilot now has four years of education and two years of instructing, along with 1,500 hours. According to Skywest.com, the 1st year or regional airline pilot pay is a grand total of \$24 an hour. This is exactly, or even less, than what the flight instructor was making. Skywest guarantees 76 hours per

month which makes the annual salary, before taxes, a total of \$21,888. This does get a little better the second year where they guarantee \$39.53 per hour bringing the annual salary up to \$36,051, before taxes (skywest.com, 2015). This is a little better but it still seems incredibly low for the amount of money invested in training.

The price of pilot training and education is clearly very well published and documented as well as other routes of higher cost education, but the return and reward comparisons over time have yet to be thoroughly looked into. It would be very interesting to give a detailed analysis of the comparison between three high costs of entry career fields and dissect the true reward numbers. The general assumption I would make is that pilots have a lower end result but twenty years with an airline can prove to be quite financially pleasing. Being a pilot may be substantially cheaper than being a physician, but the actual time invested to getting to an airline may be on par with medical school. It is a comparison that I do not believe to have been made before and thus it would be interesting to do so. To do this I am going to compare the time invested, money invested, and the overall toughness of the education of becoming a pilot, physician and lawyer (professional). This information will allow me to compare the routes that each career path must take and then to continue the comparison I will compare the overall the salaries over time, and the overall job availability.

The toughest part of this undertaking will be comparing the time invested in each of these career fields. To gain an understanding of the time invested I will be analysis each career field and try to obtain a sense of the course load and the years of schooling associated with each profession. Time invested can count as both time on the job training for the profession, or simply schooling required. Obviously a physician is going to have to go through on the job training and a pilot is going to have to grind through flight instructing for a couple years to reach the end goal of being an airline captain. The second element that will be looked at is the money invested in the schooling. This will be a fairly simple task because all of this data is published online. I will be comparing both public and private institutions.

The third and final item I will look at is the overall academic challenge of the degree completion. Obviously this is going to be a little difficult to get a true understand of seeing as how I have only completed one of the three paths, but I think a general idea can be gathered about each situation. I will be looking at the coursework difficult, the difficulty in getting accepted into programs and also the pass/fail rate of these programs.

After I have thoroughly analyzed the path to gaining the dream career in each of these career fields, I will switch gears and talk about the career payoffs. This will include the career salary and job demand. Both the starting salary up to the career max salary will be discussed and how that compares to the amount invested. Each time a yearly salary is given it will also be given in a unit called salary to debt ratio which will show the amount invested to the amount earned. This will be helpful in giving a comparable number between jobs that have very incomparable amounts invested. All of this information will be absolutely nothing if the job is not in high demand though, to be without work when an individual has that much money invested could be devastating so the last element that will be analyzed is the job demand.

All of this information is easily obtained and will provide an accurate comparison between careers and their immediate, as well as, future payoffs. The information used in the comparisons will be taken from scholarly articles as well as the tuition websites from many universities. The average salaries can be found pretty easily with a simple Google search and the job availability is also readily available. This study will provide a relatively easy way to compare the graduate debt with the career salary and compare if some careers really are getting a worse return on investment.

The three careers that will be analyzed are a pilot, a physician, and a lawyer. The costs will vary heavily for the schooling and that is why it is important that the salary to debt ratio is used to give every career and to give a very obvious and accurate comparison. The jobs will be ranked by total time, money

and work invested into the program. After completion of this step, the careers will again be analyzed to see the future benefits of the career in terms of salary, and job availability. With this information it will be simple to conclude which jobs were a lucrative investment and to see if some careers truly aren't worth the investment. This will give a fairly reasonable answer as to whether pilots in the United States are underpaid for the investment that they have made.

The first career to be analyzed is the physician. A physician requires an immense amount of schooling. According to the Association of American Medical Colleges, the process of becoming a doctor of medicine starts with a four year undergraduate degree just like any other job. Once the four year degree is completed the doctoral candidate must apply to medical schools across the country, more on this process later, and hope to be accepted. Should a candidate be academically competitive enough to be accepted, the individual will then start the four year medical schooling process. The medical schooling process is a rigorous four years and many potential doctors don't make it past this step. After the four year medical school is completed, the training is still not over for the newly graduated doctor. The doctor must then start their residency which is basically on the job training and this can last anywhere from three to eight years depending on the specialty the doctor would like to pursue (Association of American Medical Colleges, 2014). To complete this process can take as long as 16 years for the most specialized types of doctors and at a minimum would take around 11 years.

If the time consumption isn't enough to prove medical school is a huge investment, then the cost definitely is. As previously stated by bestmedicaldegrees.com, the average cost of medical school is \$278,000 for private schools and \$200,000 for public schools. Keep in mind that this cost is just for medical school not the required four year degree to get accepted into a medical school ("Is Medical School Worth It Financially," 2014). The running total for medical school so far is around \$280,000-\$358,000. This number is a heavily offset by scholarships and other sources of income so it's very important to look at the average debt of medical students. As stated previously, the average debt of a

new graduated physician is around \$170,000 ("Is Medical School Worth It Financially," 2014). The costs associated with medical school are astronomical, but the academic effort needed to survive in medical school is the truly impressive portion of this career.

According to Linda Stewart on startmedicine.com, the average medical student can expect to spend around eight hours a day in class listening to lectures and learning all about their future career. What is astounding to most, is that medical students study, on average, independently around five hours a day (Stewart, 2009). The coursework in medical school is extremely difficult and cannot be completed by just your average college students. Medical students are incredibly devoted and hard working. The ability to manage time has to be perfect and the individual's self-determination must be strong. The first thing that must be looked at to truly get an understanding of the difficulty of medical school is to see how many people get accepted into the medical programs. According to one source, in 2013 over 48,000 people applied to medical school all across the United States and just over 20,000 of those applicants were accepted into a medical school. This puts medical school at just under a 42% acceptance rate. All of these applicants are still extremely smart individuals, just not quite elite enough for medical school. According to Mark J. Perry at the American Enterprise Institute, the average GPA for medical school acceptance is a 3.40-3.59 (Perry, 2014). An undergraduate GPA of 3.4-3.6 is a very high level of achievement and even then, you still may be denied entry if your Medical College Admission Test (MCAT) scores are too low. The MCAT exam is what really determines if you are made for a career in the medical field. This exam is a rigorous test that covers verbal sciences, physical sciences, and biology all in one test. A prospective physician must do well in all three categories to have a fighting chance to be accepted into a medical school.

It is very easy to see that the career path to becoming a doctor is very consuming in every way. The rigorous coursework combined with a massive financial burden can look daunting to even the most driven young professionals. Even after such hard work in undergraduate, the aspiring physician

must continue their hard work for many years to come. However, this is all justifiable because the physicians that the United States' population depends on needs to be the best. When individuals go to the doctor they expect the best and because of the rigorousness of the medical school process, we can depend on the best care to be delivered. With no doubt that a physician's path of education is a very difficult journey, the next career path to be analyzed is one of a lawyer.

A lawyer (also called an attorney, counsel, or counselor) is a legal professional who advises and represents others in legal issues. An attorney must have a very precise knowledge of the law in the field in which the attorney specializes. Much like physicians, lawyers can choose to specialize in a wide variety of areas including, but not limited to, civil rights, corporate and securities law, criminal law, education law, labor law, and environmental law among many others (Weaver, 2014). However, unlike physicians, lawyers need only to complete undergraduate and law school without a residency period. A typical law school is around a three year endeavor (Harper, 2014). Under the assumption that the law student completes all required academic courses in the normal time frame, a law student can be a practicing lawyer is just seven years. This time frame even includes the four year undergraduate degree. If this were to be accomplished, the lawyer could be in his/her career 4-9 years before the physician would start practicing medicine. The lost time in the career field should not be overlooked because if an average salary of \$100,000 is assumed, the lawyer could make anywhere from \$400,000-\$900,000 before the physician even begins to get paid for all their expensive schooling. The time commitment is a fair amount less for a lawyer and also the money invested in education is a fair amount less.

The lawyer would have the exact same amount of money invested in undergraduate education. For the purposes of consistency, the average undergraduate tuition is around \$80,000 dollars. According to a 2014 report by the American Bar Association, the average yearly cost of a private law school is around \$65,000 a year. A public law education is not a whole lot cheaper, weighing in at around \$50,000 per year. The sheer amount of money required to put a student through law school can very rare be

paid for by a family and almost never simply paid for by an individual. Many times the law student is so preoccupied with his/her studies that a full time job is completely out of the question. Again, it is very important to look at the average debt of the law student to have a good comparison between the three careers that are being analyzed. Obviously any law school student is a very bright person and will receive scholarships, however the costs are simply too high to make it out ahead. According to the same American Bar Association report, the average debt of law school graduates is somewhere in range of \$150,000 to \$200,000 of debt and "many carry much more" (American Bar Association, 2014).

Even assuming a student can somehow receive the required funding for law school, the road to being a lawyer is still very tough. First a student must receive a competitive GPA in their undergraduate studies. The average GPA for law school acceptance varies from law school to law school but the national average is around a 3.50 (Jones, 2014). Much like taking the MCAT to be accepted into a medical school, the potential lawyers must complete a Law School Admission Test (LSAT). Once accepted into a law program potential lawyers must be compared to a rigorous three years of schooling. Many people agree that law school is unlike many other higher education endeavors because of the vast amount of reading required. Most courses have little to no homework but require class participation to ensure that a student really understands the material. With no homework or quizzes, all, or a great majority, or the final grade is based solely on final exam scores (Henry, 2015). Having a very difficult test determine your standing in the class puts an immense pressure on the students and really shows whether a law student can be self-disciplined to study and read on their own time. The final step to becoming a lawyer is to pass the Bar Exam. The Bar examination is different in every state and is a test that determines whether a law candidate is qualified to be a practicing lawyer. The test is a two day, 12 hour examination that covers a wide variety of legal topics. To pass this test, a student must have spent a great deal of time studying and preparing for this test. With no doubts about the difficulty or time commitment it takes to become a lawyer or a doctor, the last career to be analyzed is that of a pilot.

For the purpose of this study, a pilot is always going to refer to an airline pilot. There are many routes that pilots can choose to take whether it being agricultural flying, aerial photography, cargo, or air ambulance. The reason in choosing to analyze an airline pilot is because the airline pilot requires the highest qualifications and because that is the end goal for a majority of new pilots. The certification process of an airline pilot is a little different than that of a doctor or a lawyer because there is no formal schooling such as medical college or law school. The pilot just needs to get an undergraduate degree and then begin working on all the pilot's licenses. The first step to becoming an airline captain is to gain a private pilot's license. This license basically is just a reflection that you know how to fly but are not allowed to get paid to do so. This would allow you to fly friends and family so long as the pilot is the one paying for the aircraft. This very first step in the license costs on average around \$8,000 and consists of a minimum of 40 hours of flight time. The private pilot license usually takes around six months to a year to complete (AOPA, 2013). After completion of the private pilot's license, an instrument rating must be added to the license so that the pilot is verified as safe in all weather conditions. Without an instrument rating, the pilot must stay in visual weather conditions at all times. This is where things start getting more difficult. According to pilotcareer.com, the average instrument rating will take about a year to complete and is one of the most difficult parts of flight training. The instrument rating is one of the most important parts of flight training and in this portion of training, the pilot will learn skills that will literally be used every flight in his/her career. The average cost of adding on an instrument rating is around \$14,000 (pilotcareer.com, 2013).

The third license that a pilot must get to finally be able to make money flying is to obtain a commercial pilot's license. A commercial pilot's license can vary a whole lot in terms of time to obtain and cost. According to 49 CFR 61.129 the only real requirement for a commercial pilot's license is that the applicant must have 250 hours of total time in aircraft (49 CFR 61.129, 2015). If the pilot accumulated a larger number of hours during their private pilot and instrument rating, the commercial

license is going to be cheaper but the total cost for all three licenses will still be the same. On average it takes the student over 100 hours to complete the commercial license and around \$16,000 (AOPA, 2013). Now a pilot is officially a commercial pilot, however this only allows the pilot to fly single engine aircraft. Therefore, a multi-engine add on must be acquired to the commercial pilots license. According to AOPA, this typically costs around \$6,000. With a multi-engine add on the total cost of a commercial multi-engine pilot's training is up to around \$44,000. This of course, is on top of the \$80,000 to get an undergraduate degree. The total amount invested in education and training is somewhat lower than a physician or a lawyer at just around \$124,000. With these licenses you can now begin making money, however no airline will ever hire you. To become an airline pilot, a pilot must obtain an Airline Transport Pilot (ATP) license which can be obtained at 1,500 hours of flight time. Remember that a commercial license is issued at 250 hours, so a pilot must find something to build that time before an airline will even look at them.

A vast majority of pilots choose to flight instruct to gain the required time to apply to an airline. This means that the pilot must first obtain a certified flight instructors (CFI) license. This usually only costs around \$2,000 according to AOPA (AOPA, 2013). The new CFI may now start grinding away at instructing for 1,250 hours. This can take anywhere from 2-4 years. This brings the total time invested into becoming an airline pilot up to around 6-8; four years for undergrad and two to four years of instructing time building. Compared to the lawyer and the physician, the pilot could potentially enter the career field at the same time as the lawyer and still 4-9 years before the doctor ever makes it in the field.

The difficulty of the program is really where the pilot route is a lot different than the physician or lawyer. As mentioned before, the pilot has no dedicated schooling after the undergraduate degree. All required coursework is to be completed on their own for each of the licenses. For every license listed above (private, instrument, commercial, CFI, ATP) the pilot must pass a practical and a written

examination to be awarded the license. So although there is no formal college dedicated simply to becoming a pilot, the student is still subject to a whole lot of studying. The hardest license to obtain is the certified flight instructor license. This certificate can take upwards up a year to complete and the certification exam consists of around a six hour oral exam and a two hour flight portion. According to a publication taken from the Aircraft Owners and Pilots Association (AOPA), the initial CFI practical test had a failure rate of over 75% (2014). After a failure an applicant must receive more training and then try again at the areas in which he/she was deficient. It is a very rigorous process and although there may not be formal schooling dedicated to the training, the difficulty is still there.

After a thorough analysis of the paths that a student must take to become either a lawyer, pilot, or physician, it is very obvious that all paths require a great amount of work and money. According to a study conducted in 2012 by The Institute for College Access and Success, the average debt among Indiana public university graduates is \$28,466 and nearly 62% of all college graduates have some form of debt (Institute for College Access and Success, 2014). It is very obvious to see that the career paths previously examined have much more money and, probably time, invested than a typical college graduate. This huge investment is made under the assumption that there will be a return some day. The question is whether that return happens quicker for some careers as opposed to others and what will the debt to income ratio look like for each of these careers? Each process to becoming a lawyer, physician, or pilot has been analyzed and now all that's left is to delve into the benefits of the huge investment that each individual has made. This will be accomplished in the order of most invested (financially and time) to the least invested. Earlier it was stated that a physician had the most money and time invested at \$280k-\$360k and around 11-16 years. The next in line for most invested was a lawyer at \$230,000 and a seven year minimum academic investment. The last career is the pilot with only (relatively speaking) \$144,000 and 6-8 years invested. The most logical outcome of this investigation would be that doctors make more money than lawyers and lawyers make more than pilots,

but they are all very comparable in their amount invested compared to their average income. To see if this is the case, each career must be again analyzed to see the career benefits. The salary will be judged both on the initial first year salary and on the career ending salary.

The first job to analyze is that of a physician. The physician is such a broad category because there are so many specializations that can require extra schooling and eventually pay extremely well. For the purpose of this comparison, focus will be placed on a family medicine practitioner. This is just a general family practice doctor. According to bestmedicaldegrees.com, the family medicine practitioner would require seven years of education in total including their residency, medical college, and undergraduate. Seven years and an average debt of \$170,000 is a lot to invest in a career without the career eventually generating a profit. According to payscale.com, the median salary for a family practice physician is among the lower end for all physicians and is around \$170,000 for the first year. This means that with an average debt of \$170,000 and a first year salary of \$170,000, the debt to salary ratio for the first year pay is 1:1. This really is a good payoff for every dollar invested in education. After this doctor has been practicing for a number of years, there is a possibility to move up in pay but not significantly. A doctor basically starts at a great pay rate and continues at that pay rate (Payscale.com, 2015).

Education is a rarely a wasted investment and clearly true in the case of a physician. A 1:1 debt ratio will make it fairly easy for the physician to pay off that debt so long as they financially plan for it. This could prove to be incorrect in only one circumstance, and that is if the job market suddenly decides there is no longer a need for the physician. This seems like a very unlikely situation and according to Bureau of Labor Statistics (BLS), the job outlook is looking very favorable with a growth rate of 18% from now until 2022. This will mean that there will be a demand for an additional 123,000 physicians (BLS, 2012). This is an extremely favorable outlook and this job demand ensures that no physicians will be out of work and overcome with debt. All in all, the choice to become a physician is an expensive and

academically challenging investment, but the reward is definitely there with a great salary and a job that will likely be in demand for the foreseeable future.

With the physician thoroughly analyzed, it is time to move on to the lawyer and determine if becoming a lawyer is a lucrative investment. As stated previously, a lawyer is expected to have, on average, \$175,000 in debt. This is basically the exact same amount as a physician and thus, you would expect to see similar salaries. Using the same source of pay information as a physician, the lawyer is only going to make an average of \$76,000 during their first year of employment (payscale.com, 2014). This would give the young attorney a debt to income ratio of around 2.3:1. That means that a lawyer with \$170,000 in debt will only make about .43 cents for every dollar invested in that education. Already one can see how much different this is from the physician. This still however can be a worthwhile investment because that is still a very strong salary and can help pay off the debt, it will just take much more time. Unlike a doctor, the lawyer has a big fluctuation in salary based on years of experience. Also according to payscale.com, the lawyer with 20 years of experience will make around \$133,000 as opposed to the starting salary of \$76,000 (payscale.com, 2014). This will give the lawyer with 20 years of experience a 1.2:1 debt to income ration. This is a whole lot closer to the 1:1 that the physician had and seems to make a little more sense considering the amount invested.

The lawyer also must have a positive job outlook or else there is no point in getting the education. The worst situation would be to have a couple hundred thousand dollars invested in an education and not be able to find a job. According to the Bureau of Labor Statistics, the occupation outlook for a lawyer has around a 10% growth rate which is basically average for all careers. This ensures that the lawyer will not be left high and dry without a job because of a simple lack of demand (BLS, 2012).

The third and final career to analyze the post education benefits is a pilot. As previously stated, the pilot will be an entry level commercial airline pilot. To be an airline pilot, the pilot must accrue 1,500 hours of total flight time. This would obviously not be acquired during education and it is similar to being a resident doctor. There is very poor pay during the residency and the acquiring of flight time, but after grinding it out, both the resident and the pilot can move on to their career that they've been studying for. Once a pilot finally has enough time to move up to the airlines, he/she will not be looking at Delta or United, but rather a small regional airline such as Skywest, Republic, Mesa, or Allegiant. With over \$140,000 the assumption is that a pilot would start with a fairly comparable salary to that of a lawyer or physician, but according to some regional airline websites this is very much not the case. Skywest airlines has their first year airline pilot pay at just \$21,888 annually (skywest.com, 2015). This is extremely low and gives the new airline pilot a debt to income ratio of 6.5:1. This means that for every dollar invested in an extremely expensive education, the pilot receives around 15 cents a year. All hope is not lost for the pilot though. The pay does continually increase and get to a reasonable level eventually. A pilot with five years' experience, according to payscale.com, will make around \$35,000. This gives the five year pilot a debt to income ratio of 4.1:1. With this low of income it is beginning to seem unlikely that the pilot could ever pay off the debt, but eventually it becomes worthwhile. When taking a look at the end career salary of a pilot, it becomes possible to pay off that debt. A pilot with 20 years' experience is slated to make around \$122,000; bringing the debt to income ratio to around 1.2:1. This is finally around where the lawyer and physician are. This is clearly a whole lot different pay scale than that of a lawyer or physician and yet all three jobs have comparable costs of entry (payscale.com, 2014).

The pilot may have measly pay starting out, but the job demand is one positive factor for this career. According to the Occupational Outlook of Pilots by the Bureau of Labor Statistics, the job growth actually looks fairly stagnant. The reports show around a zero percent increase in pilot jobs, however

because of the poor pay scale for pilots, there are a lot of available jobs (BLS, 2012). There may not be a whole lot of new pilot jobs being created, but if you are a pilot and looking for a job, there are many jobs available. This means that pilots who have already gotten all their training will have no problem finding work. This is always a huge positive when considering the amount of money invested into the high level of training and education required.

Making a decision is a huge decision in the life of every student pursuing collegiate education. Many times this decision is made based off of passion for a field of study and this sometimes can overlook the debt that can come along with pursuing that career field. As everyone knows, college is expensive, but the reward for having a college education is nearly always worth the investment. According to LA Times, a college graduate can expect to earn over a million dollars more than a high school graduate in their lifetime. The purpose of this research project was to decide whether pursuing a very prestigious career was cost effective, as well as possible with the mountains of debt that one must accrue to be a college student for six to ten years. To try and gain an understanding of time, effort, and money invested, each profession was thoroughly explained and the debt was calculated. Once the career paths were fully understood, the career benefits needed to be discussed. Specifically, the debt to salary ratio was used to gain a better understanding of the long-term financial practicality of the career. The debt to salary ratio is a simple ratio of the amount of average debt for the career compared to the average starting salary. The main purpose of this research project was to see if, among the high level careers, the debt ratio stayed fairly consistent. This however was not the case.

After a thorough analysis of three professions, conclusions can be drawn as to the return on investment that each career path can expect. The first career that was analyzed was the physician and it was immediately easy to see that the physician required the most schooling, money invested, and time spent studying for classes. This hopefully will mean that the physician will likely start with the highest salary and have the best debt to salary ratio. Luckily, this is the case and the debt to initial salary ratio is

right around 1:1. For every dollar invested in education, the doctor makes one dollar in their first year on the job. This is the ideal situation for anyone with heaps of education debt and this proves that a doctor is a very prudent career with a great return on investment. The next career was that of a lawyer. As previously stated, the lawyer has around seven years and around \$230,000 invested in education. However, unlike the physician, the debt ratio for the lawyer is only 2.3:1 and it will take the lawyer around 20 years in the field to climb in salary up to a 1:1 ratio like the physician started out with. This still could be manageable for the lawyer and the career field is still likely a prudent decision for anyone aspiring to become a lawyer. The third and final career was that of a pilot. The pilot had less money but the same amount of time invested as a lawyer. The pilot had around 6-8 years and \$144,000 invested before being able to call themselves an airline pilot. This is fairly comparable to the lawyer, however the pilot has one of the worst debt ratios, scoring in at 6.5:1. This means that a doctor will make one dollar for every one dollar invested, while a pilot will only make fifteen cents for every dollar. It is very easy to see how this would be a very unrewarding career path for the aspiring pilot.

Obviously, not all careers are going to pay the same; nor should they. However, it should not be unreal that has a very significant time and money investment in a particular field should be compensated as such. The airline pilot is one of few jobs that truly is not compensated fairly based on the amount of money invested. The started airline pilot will have significant debt and yet will still make \$14,000 less than your average grade school teacher. This is truly illogical and it makes the profession seem very grim to young students who could be great pilots. There are too many other jobs that pay better and yet have lower costs of entries. This is a very significant finding because there are so many students that go to college and have no idea what they want to do with their career. The truth of the matter is that some jobs are much more financially logical and this needs to be considered. Obviously if a student is extremely passionate about one subject area then by all means study that subject, but there has to be some thought about just gaining a degree that will help you financially and then you can

pursue your passions with your newfound financial stability. The absolute dream job is one that you love and can provide a good return on money invested. However, in the case of the pilot we see that really the starting salary is just too low for many people to be able to afford it without outside help or just a lot of scholarships. This does not seem very fair but that's the way the job market is for pilots right now. This study took an in-depth look at three careers and really has found that some jobs are just more lucrative than others. This same strategy of comparing the debt to the starting salary is something that every college student should keep in mind, however this is rarely even discussed. Hopefully, as a population, the debt that is to be accrued for a career can be one of the first things that is thought of when discussing possible career paths. The salary of the career must be able to support the debt accrued.

Airline Pilot Occupational Outlook. (2012). Retrieved June 11, 2015, from

<http://www.bls.gov/ooh/transportation-and-material-moving/airline-and-commercial-pilots.htm>

Am. Bar Ass'n, Law School Tuition, 1985-2012,

http://www.americanbar.org/content/dam/aba/administrative/legal_education_and_admissions_to_the_bar/statistics/lis_tuition.authcheckdam.pdf (last visited June 7, 2015).

Attorney / Lawyer Salary United States (2014). Retrieved June 11, 2015, from

<http://www.payscale.com/research/US/Job=Attorney / Lawyer/Salary>

Bernasek, A. (2014). IT'S A PLANE. IT'S A YACHT. NO, IT'S YOUR TUITION BILL. *Newsweek Global*, 162(14), 1-3.

Bursar's Office. (n.d.). Retrieved May 27, 2015, from

<http://www.purdue.edu/bursar/tuition/feerates/2013-2014/aviation.html>

Commercial Pilot Certification, 49 CFR 61.129 (2015).

Deciding on a Career in Medicine - The Basics - Aspiring Docs - Students. (2014, May 20). Retrieved May 29, 2015, from <https://www.aamc.org/students/aspiring/basics/280558/right-career.html>

Family Physician / Doctor Salary United States (2015). Retrieved June 11, 2015, from

http://www.payscale.com/research/US/Job=Family_Physician / Doctor/Salary

Harper, M. (2014, January 13). So, You Want to Become a Lawyer. Retrieved June 8, 2015, from

http://study.com/education_requirements_for_becoming_a_lawyer.html

Henry, H. (n.d.). Preparation For Law School. Retrieved June 9, 2015, from

<https://secure.lawpreview.com/index.php/resources/experience/>

Hsa, Tiffany. "College Graduates Earn 84% More than High School Grads, Study Says." *College Graduates Pay*. LA Times, 5 Aug. 2011. Web. 5 Aug. 2015.

The Institute For College Access and Success. (2014, December 20). Retrieved June 11, 2015, from

<http://ticas.org/posd/map-state-data>

Is Medical School Worth it Financially? (2014, November 19). Retrieved May 27, 2015, from

<http://www.bestmedicaldegrees.com/is-medical-school-worth-it-financially/>

Jones, E. (2014, June 24). GPA Medians For Law Schools 2015 - LawSchooli. Retrieved June 8, 2015, from

<http://lawschooli.com/gpa-medians-law-schools-2015/>

Lawyer Occupational Outlook. (2012). Retrieved June 11, 2015, from

<http://www.bls.gov/ooh/legal/lawyers.htm>

Perry, M. (2014, July 1). Acceptance rates at US medical schools in 2013 reveal racial profiling and affirmative discrimination for blacks, Hispanics - AEI. Retrieved June 4, 2015, from <https://www.aei.org/publication/acceptance-rates-at-us-medical-schools-in-2013-reveal-racial-profiling-and-affirmative-discrimination-for-blacks-hispanics/>

Physicians and Surgeons Occupational Outlook. (2012). Retrieved June 11, 2015, from <http://www.bls.gov/ooh/healthcare/physicians-and-surgeons.htm>

Pilot certificate options and timeline. (2013, May 6). Retrieved June 9, 2015, from <http://www.aopa.org/letsgeflying/ready/time/options.html>

Pilot Pay. (n.d.). Retrieved May 27, 2015, from <http://www.skywest.com/skywest-airline-jobs/career-guides/flight-jobs/#/payscale>

Private Pilot Costs. (2013, March 14). Retrieved June 9, 2015, from http://www.pilotcareer.info/Private_Pilot_Costs.html

Salary: Flight Instructor. (2014, April 16). Retrieved May 27, 2015, from http://www.glassdoor.com/Salaries/flight-instructor-salary-SRCH_KO0,17.htm

Stewart, L. (2009, March 1). Taste of Medical School - A Typical Day and Week in Med School. Retrieved May 29, 2015, from <http://www.startmedicine.com/app/typicalday.asp>

Weaver, A. (2013, June 15). Thinking About Law School. Retrieved June 4, 2015, from <http://www.lsac.org/jd/thinking-about-law-school/fields-of-law>