# Your Local Friendly Bookstore: Evidence of Pillaging Indiana College Students 

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The rate of inflation for textbook prices has far exceeded the overall rate of price-inflation over the last two decades in the US. This paper examines the retail prices of introductory micro and macro economics textbooks sold at the bookstores located on or near the campus where students attend college. Data were collected for several universities in the State of Indiana. The findings support the conclusion that campuses where a student can buy a textbook at or below the Suggested Retail Price are those where at least a modicum of competition exists. That is, the evidence points to the monopolized retail market for textbooks as a major culprit for the price inflation of textbooks.

## INTRODUCTION

The Congress extended the Higher Education Opportunity Act (HEOA) and the President signed it into law on August 14, 2008 (Public Law 110-315). Provisions of this statute are aimed at making a college education more affordable. Section 112 of the law focuses on actions the Congress anticipates will help to mitigate the runaway inflation in textbook prices. Among these provisions are requirements that colleges and universities provide textbook information months in advance so that students can avail themselves of alternative sources of required class materials, i.e., internet purveyors, etc.

The United States Government Accountability Office (2005) reports that:
In the last two decades, college textbook prices have increased at twice the rate of inflation but have followed close behind tuition increases. Increasing at an average of six percent per year, textbook prices nearly tripled from December 1986 to December 2004, while tuition and fees increased by 240 percent and overall inflation was 72 percent. The cost of textbooks as well as supplies as a percentage of tuition and fees varies for firsttime, full-time, degree-seeking students by the type of institution attended - 72 percent at 2 year public institutions, 26 percent at 4 year institutions, and 8 percent for 4 year private institutions.

The reason for increase in tuition and fees costs have been extensively studied and are attributable to higher overhead costs, building and equipment costs, and market phenomenon (Archibald and Feldman, 2008). However, the overall increase in costs is determined to be a differential impact by socioeconomic position of students attending college (St. John, Paulsen, and Carter, 2005). Regardless of cause and differential impact, the fact remains that these accelerating rates of inflation for tuition and fees and for textbook prices are quickly jeopardizing the financial well-being of students and families supporting students.

Hayashi (2009) reports that there are several factors which contribute to the accelerating cost of college textbooks. Among the causes of the textbook price inflation are (1) development and bundling of supplemental materials, (2) three to four year revision cycles, and (3) moral hazard.

Textbook publishers have been competing with one another by offering more colorful, technologically savvy supplemental materials that purport to aid student learning. The costs of development of these materials are expensive and are recovered by bundling these materials with the text. Fairchild (2004) reported that more than $65 \%$ of the professors who were surveyed reported that they did not use or require the bundled supplements.

Textbooks typically are on three year revision cycles. Again, Fairchild reports that professors surveyed report that these textbook revisions are not substantively justified in more than half the cases. The result is that students are often left with little recourse than to purchase new textbooks, because the edition of the book adopted has no used copies available.

Finally, there is an issue of moral hazard with the current structure of textbook adoptions. Much like the prescription drug market, where physicians decide what patients must buy for their health; professors decide what textbooks students must buy for their enlightenment. In both markets, those making the decision about what will be purchased are not paying the bill. Professors are less inclined to worry about the cost of textbook, than are the students who must use their resources to obtain the required text.

While each of these reasons may well contribute to the increasing costs of textbooks, there is also a fourth possibility. If the Congress is correct, an interesting assumption, then there is also the matter of the market structure of the retailers of textbooks. Why would the Congress require that information about required textbooks be made available to students well in advance, unless there was cause to suspect monopoly rents were obtained by the campus bookstore? The result is that there may well be differences in the pricing of textbooks between campuses where there are competing book stores and campuses where there is no competition (Posner, 1986).

The purpose of this paper is to gather some preliminary evidence to determine if the Congressional assumption about a lack of competition being associated with higher textbook prices is supported with data.

## DATA GATHERING

The data for this study are gathered from various internet sites. Book pricing data were collected from the web sites for the book-stores located at several State Supported Universities in Indiana. The Suggested Retail Price of each of the textbooks is from the four major textbook publishing company sites. The cost-of-living data are from the American Chamber of Commerce Research Association and are proprietary data.

Book pricing data are limited to principles of economics courses, introduction to microeconomics and introduction to macroeconomics. ${ }^{1}$ Survey courses (both micro and macro in a one semester introductory course) were not covered in this study. The institutions selected for this preliminary study were selected for specific reasons. There are two campuses which have two independent bookstores on campus. At Ball State there is a bookstore in the Student Union and three yards to the east is a TIS (Texts for Indiana Students) store. At Indiana University there is a bookstore in the Student Union and a TIS store $1 / 2$ miles southeast of the Student Union, directly across the street from the School of Education, and in the same block on which fraternity row begins. University of Southern Indiana was selected because it has an oncampus bookstore, but also a competitive store which is located off-campus and more than a mile away.

Two campuses were selected which have no brick and mortar competition in the same community, these were IPFW in Fort Wayne, and Indiana State University in Terre Haute, Indiana. Ivy Tech was also included in the study because each campus is a standalone campus in that community with no competition for its textbook business.

Many websites contained prices for just the textbook, and for a bundled package of materials, including CD ROM, study guides, web site access, etc. Only prices for the textbook alone are included in this study. Because there are multiple sections of each course taught by different instructors on each campus, there are generally multiple textbooks required on each campus.

## RESULTS

Table 1 below presents the Manufacturers' Suggested Retail Price for each of the principles of economics text used on our sample campuses. Table 1 presents these prices for each text under the heading of the publishing house which publishes the book.

TABLE 1
MANUFACTURER'S SUGGESTED RETAIL PRICE PRINCIPLES OF ECONOMICS TEXT, BY PUBLISHING HOUSE

| McGraw-Hill/Irwin | Suggested Retail Price* |
| :--- | :---: |
| Colander | 138.75 |
| Frank \& Bernanke | 138.75 |
| McConnell, Brue, Flynn | 145.31 |
| Schiller | 138.75 |
| Colander | 138.75 |
| Pearson-Prentice-Hall |  |
| Hubbard \& O'Brien | 147.67 |
| Parkin | 147.67 |
| Thompson - South-Western |  |
| Arnold | 148.99 |
| Gwartney | 148.99 |
| Hall | 148.99 |
| Mankiw | 140.99 |
| Worth Publishers |  |
| Krugman | 121.95 |
| Cowen \& Tabarrok | 152.95 |

* All are micro or macro splits

It is interesting to note that Pearson-Prentice Hall has the same suggested price for both of the texts it offers in Indiana. McGraw-Hill/Irwin suggests the same retail price for four of their five texts, with McConnell et.al. being less than $\$ 7$ more expensive than the others. Thompson-South-Western has the same price for three of their texts where the text by Mankiw being priced $\$ 8$ below the remaining three. No pattern is discernable in the pricing of the Worth Publishing Company texts.

Table 2 presents the data for textbook pricing at the bookstores which were included in this study. The columns in Table 2 are the campuses from which the data are drawn. Both Ball State University and Indiana University have two columns, one for the campus bookstore, and one for the competition - in both cases the competition is from TIS (Texts for Indiana Students). In both cases, Ball State and Indiana University, the campus bookstores are run by independent entities under contract with the University. In the case of University of Southern Indiana only the data from the campus bookstore was available at the time the internet sites were perused.

The data are presented by color codes. Those prices in red are prices which are below the Manufacturers' Suggested Retail Price, those in blue are above the Manufacturers' Suggested Retail Price and those in black are at the Manufacturers' Suggested Retail Price. ${ }^{2}$ From simple inspection of this table it is clear that all of the campuses in which there is no competition in the textbook market the text book price exceeds the Manufacturers' Suggested Retail Price - Indiana State University, Ivy Tech State College and IPFW. In the case of University of Southern Indiana, with the limited and off campus competition, there are two texts sold at the Manufacturers' Suggested Retail Price.

TABLE 2
CAMPUS PRICING OF TEXTBOOKS

| Book | Ball State |  | Indiana University |  | USI* | IPFW | $\begin{aligned} & \hline \text { IVY } \\ & \text { Tech } \\ & \hline \end{aligned}$ | Indiana State |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Campus | TIS | Campus | TIS |  |  |  |  |
| Arnold(macro) |  |  |  |  |  | 168.00 |  |  |
| Colander(micro) |  |  |  |  |  | 151.25 |  | 148.00 |
| Colander(macro) |  |  |  |  |  |  |  | 176.55 |
| Cowen(micro) | 128.90 | 128.75 |  |  |  |  |  |  |
| Cowen(macro) | 128.90 | 126.25 |  |  |  |  |  |  |
| Frank(micro) |  |  |  |  | 139.00 |  |  |  |
| Gwartney(micro) |  |  | 165.00 | 156.75 |  |  | 168.00 |  |
| Gwartney(macro) |  |  |  |  |  |  | 168.00 |  |
| Hall(micro) | 154.05 | 154.00 |  |  |  |  |  |  |
| Hall(macro) | 154.05 | 154.00 |  |  |  |  |  |  |
| Hubbard(micro) |  |  |  |  | 147.65 |  |  |  |
| Krugman(macro) |  |  |  |  |  | 140.50 |  |  |
| Main(micro) | 103.45 | 103.25 |  |  |  |  |  |  |
| Mankiw(micro) | 154.50 | 146.75 | 164.35 | 159.25 | 164.50 | 168.00 |  | 164.35 |
| Mankiw(macro) |  |  | 164.35 | 159.25 | 164.50 | 168.00 | 164.50 |  |
| McConnell(macro) |  |  | 155.00 | 153.50 |  | 160.25 |  |  |
| Parkin(micro) | 138.45 | 138.25 | 147.65 | 143.75 |  |  |  |  |
| Parkin(macro) |  |  | 147.65 | 143.75 |  |  |  |  |
| Schiller(macro) |  |  |  |  | 146.35 |  |  |  |
| *Competition but not on campus |  |  |  |  |  |  |  |  |
| Below MRSP At | MRSP | Above | RSP |  |  |  |  |  |

The two institutions where there are competitive bookstores both located on campus, Ball State and Indiana University, it is interesting to note that textbook prices are toward the lower end. Cowen's text and Parkin's text sell for a price below the Suggested Retail on Ball States campus. The same is true for Parkin's text at TIS on Indiana University campus, while it sells at the Suggested Retail in the campusbookstore. The Main text sells at the Suggested Retail at both bookstores at Ball State. Where there is competition it is clear that textbook prices are lower than the campuses where no competitive bookstores exist. IPFW's bookstore (Follett's) sells both McConnell et al, and Mankiw more dearly than any other store examined. No comparisons can be made regarding textbooks by Arnold and Krugman at IPFW's bookstore, but it is clear that the micro split for Colander is $\$ 3.25$ more expensive than at Indiana State. Only Schiller and Manikiw's texts are sold for higher than the Suggested Retail at USI, while the other texts are sold for Suggested Retail.

Prices at Ball State University's two bookstores were less than a dollar different on Cowen's micro, both of the Hall texts, Main, and Parkin. The two were $\$ 7.25$ different on Mankiw, but both were the least cost provider in the State for this textbook. Indiana University appears to have more of a price spread than is observed at Ball State. McConnell et al sells at $\$ 155$ (campus bookstore) and $\$ 153.50$ (TIS) at Indiana

University Bloomington, but for $\$ 160.25$ at IPFW. TIS in Bloomington sells Mankiw for $\$ 159.25$ which is less that USI, IPFW, Indiana State, and the campus bookstore at IU-B.

To estimate a bookstore's markup price, a linear model for Bookstore Markup Price, which is the Bookstore's Offered Price minus Manufacturers' Suggested Retail Price, is assumed. The model is estimated using Ordinary Least Squares where the right-hand side variables are a dummy variable for each bookstore (with the intercept term suppressed):

$$
\text { Bookstore Markup }=\beta_{1} B S U_{\text {Campus }}+\beta_{2} B S U_{\text {T.IS. }}+\ldots+\beta_{8} I S U+\varepsilon
$$

The results of the estimated regression model of the markup price data are reported in Table 3.
TABLE 3
ESTIMATED REGRESSION RESULTS

|  | Coefficient | t -statistic | $\mathrm{P}>\|\mathrm{t}\|$ |
| :---: | :---: | :---: | :---: |
| Ball State Campus | -3.44 | -1.04 | 0.307 |
| Ball State TIS | -4.80 | -1.45 | 0.156 |
| I.U. Campus | 8.42 | 2.54 | 0.016 |
| I.U. TIS | 5.24 | 1.58 | 0.123 |
| USI | 9.71 | 2.39 | 0.023 |
| IPFW | 14.07 | 3.88 | 0.000 |
| Ivy Tech | 14.35 | 3.54 | 0.001 |
| ISU | 16.83 | 3.59 | 0.001 |
| Adj. R Sq. | 0.557 |  |  |
| F(8, 32) | 7.29 |  |  |

The utilization of this rather simple, straightforward technique provides a direct comparison of markups (coefficients) for each of the bookstores in the study. Ball State's two bookstores have negative coefficients, indicating that they are charging prices below the Suggested Retail. Every other bookstore has a positive coefficient indicating a premium over Suggested Retail is being charged by those bookstores. Indiana University and the University of Southern Indiana have bookstores charging single digit premiums, while IPFW, Ivy Tech and ISU bookstores are all charging double-digit premiums.

It appears that the across campus competition at Ball State keeps their textbooks cheaper than anywhere else in the State, even though the price differences between the two bookstores is generally minimal. In general, Indiana University Bloomington appears to be the next cheapest place to buy textbooks, but less costly than any other comparable campus. USI seems to be a mixed bag with it being comparable with Indiana State for Mankiw's text, but selling Frank and Hubbard at Suggested Retail. The remaining institutions appear to be collecting monopoly rents from students with the texts selling dearly, and all are above Suggested Retail. Indiana State bookstore appears, from this data, to be the worst offender.

## CONCLUSION

This is a very limited study, both in scope and in depth. Even so, it is remarkable that the predictions of the monopoly pricing model seem to find support in the data for these bookstores. Clearly, there is a problem in that most texts are sold for more than Manufacturers' Suggested Retail Price. The only campuses where a student can buy a textbook at or below the Suggested Retail Price are those where at least a modicum of competition exists. At Ball State and Indiana University Bloomington it is clear that observing textbook prices at or below Suggested Retail is not uncommon for principles of economics. At the University of Southern Indiana only Frank and Hubbard can be purchased at the Suggested Retail Price, everything else is above. Majority of books sold at IPFW, IVY Tech or Indiana State are sold at
prices significantly above the Suggested Retail. These regression results are precisely supportive of those observed in Table 2.

Perhaps there are other explanations for these observations. However, if so, it is a remarkable coincidence that these data reflect the price differentials that they do. Clearly, conclusions of this research suggest that a more exhaustive gathering of data and rigorous statistical analysis is warranted to determine if there is evidence of textbook-price inflation resulting from monopolized retail textbook markets. It does little good to complain about revision cycles, supplements, and moral hazard, if bookstores collude (as perhaps is the case at Ball State) and almost everything sold is above Suggested Retail - and that is particularly true where little or no competition in the retail market exists.

More research is warranted, and perhaps Congress' assumptions are correct, they certainly cannot be rejected on the basis of this study.

## FOOTNOTES

1. E201 Principles of Microeconomics at IPFW, Ball State, and I.U. Bloomington and E202 being Principles of Macroeconomics at the same three institutions and the equivalent courses at the remaining campuses studied - Indiana State and University of Southern Indiana.
2. As a control consumer prices for the communities in which the respective campuses were examined. In the case of both Evansville and Terre Haute there were no ACCRA index so Paducah, Kentucky and Danville, Illinois were used as approximations. The ACCRA index for each community shows little variation. The highest cost-of-living was in Bloomington at 95.5 and the lowest was in Fort Wayne at 88.8 . Indianapolis was 91.2 , Paducah was 90.1 , and Danville was 92.3 . Clearly, prices for college textbooks appear to have little correlation with the local overall cost of living.

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