
Education and Income: An Analysis by Fable

Author(s): Thomas M. Carroll

Source: *The American Economist*, Vol. 16, No. 2 (Fall, 1972), pp. 83-89

Published by: [American Economist](#)

Stable URL: <http://www.jstor.org/stable/25602864>

Accessed: 16/07/2013 19:08

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



American Economist and *Omicron Delta Epsilon* are collaborating with JSTOR to digitize, preserve and extend access to *The American Economist*.

<http://www.jstor.org>

EDUCATION AND INCOME: AN ANALYSIS BY FABLE

by Thomas M. Carroll*

Roster

OUTPIA—a tiny capitalist democracy

KNAB—OUTPIA's major (and only) product, with three uses:

- 1) KNAB can be eaten
- 2) Hardened KNAB serves as a capital input in KNAB production
- 3) Rolled into little balls, KNAB makes a perfect plaything for children of OUTPIA

CHIRs—OUTPIANs with the foresight to be born with wealth

ROPOs—OUTPIANs with less education and wealth

Fun Facts

$K = \min(aHK; bEL)$ —the KNAB production function, where

$K = \text{KNAB}$

$HK = \text{Hardened KNAB}$

$EL = \text{Labor, scaled by education}$

$a, b = \text{positive constants}$

$\frac{w_i}{\bar{w}} = g \frac{e_i}{\bar{e}}$: The relationship between wages and education, with

$w_i = \text{wages of individual}$

$\bar{w} = \text{average wage rate}$

$e_i = \text{educational level of individual}$

$\bar{e} = \text{average educational level}$

$g = \text{a positive constant}$

The Cast

Professor Martin Freemer—Department CHIRman of the CHIRgo School of Economics at OUTPIA TECH; the Mr. Chips of OUTPIAN Economics

Professor Cary Begger—Professor of Economics at CHIRgo School, friend and colleague of Freemer; Author of the HUMAN KNAB theory

Mark Caraless—Befuddled graduate student of economics, whose misinterpretation of the HUMAN KNAB theory leads to his EDUCATION AND KNAB, which hypothesizes that education is undertaken as a consumption activity

And the OUTPIAN Press Corps

The tiny country of OUTPIA had always managed to survive the upheavals that flitted through her long history. And she would manage to survive this one. She had emerged from feudalism with a good set of social institutions. She had

met rebellion with flexibility, responding with accommodation rather than castigation; ever changing but unchanging; extending freedom only by tempering it with responsibility. Since the founding of the OUTPIAN ECONOMIC ORDER (OEO), capitalism had promised opportunity and comfort to those with sufficient foresight to be born wealthy.

The CHIRs had such foresight—they formed the OUTPIAN upper crust. As befitted a capitalist democracy, each CHIR owned a piece of OUTPIAN action. Typical of a small economy, OUTPIA had but one product, KNAB; and a remarkable product it was. KNAB could be eaten, providing all essential vitamins and proteins, thus keeping the OUTPIAN labor force in healthy, productive condition. Left to harden overnight KNAB served as an input into the production of more KNAB. And rolled into little balls, KNAB served as a perfect plaything for youngsters.

The other OUTPIANs, the ROPOs, while not as lucky as the CHIRs, were kept busy and moderately well-fed by devoting their energies to KNAB production. And since OUTPIA was a democracy, the ROPOs often rubbed shoulders with CHIRs during the course of a working day. Not that the two classes performed the same task—that would have been inefficient, not to mention bad for the morale of the CHIRs, who, being better educated, performed more productive roles. But there was no favoritism. Any ROPO, sufficiently educated, could rise to a better paying position. That few made the transition did not rule out the possibility of upward mobility. Each child made his choice, and society, as a good democracy, abided by his expression of preferences.

But a system that works so well in principle, yet less effective in practice, is bound to whet the intellectual appetites of professional thinkers. And it was under the instigation of students of social change that the most recent crisis sprang: for the first time in its long history of efficient capitalism, OUTPIA faced an unemployment problem. And, as usual, had dissidents left well enough alone, the problem would never have occurred.

The trouble began when OUTPIAN economists, so valuable in instilling the ideals of capitalism into young hearts and minds, ventured beyond their field of competence and began to examine the underpinnings of the OUTPIAN ECONOMIC ORDER. One particularly arrogant theorist, Professor Cary Begger of the CHIRgo School of Economics at OUTPIA TECH, went so far as to com-

*Mr. Carroll is a student at Syracuse University.

pare the labor income of CHIRs and ROPOs. His conclusions nearly shattered his faith in the justice of the OUTPIAN economy. Somberly, Begger announced to his colleagues that almost all CHIRs earned higher incomes than the ROPOs.

Professor Martin Freemer was not surprised at Begger's conclusion. "Remember, we economists have often stated that with homogeneous labor, wages should be equal," pronounced Begger's department CHIRman. "But no one ever said that they would be equal. It is one thing to specify a principle, another to observe reality. And although we economists must take the necessary step of abstracting from reality when we compose our theories, we should not be so arrogant as to expect the world to comply with our hypotheses. It is sufficient to describe labor incomes as behaving *as if* they were equal, without them actually being equal."

"That may very well be true," retorted Begger. "But is it not incumbent upon the theorist to incorporate empirical data into his analysis. What we need is a theory with the neatness of homogeneous labor that still accounts for unequal labor income. But what?"

Begger thought. Freemer thought. Begger and Freemer thought. Finally Begger announced: "Discrimination."

"What was that?" Freemer gave him a nasty glare.

"Discrimination. You know: two groups, CHIRs and ROPOs. CHIRs have most of the property. They have the higher paying jobs. I'll admit that it could be a coincidence. But it's worth considering," proclaimed Begger.

"That's begging the question, isn't it, Cary?" Freemer returned. "Look at the facts. CHIRs are a numerical minority. More frugal, perhaps. More industrious, most definitely. With these advantages, why should they discriminate? How could they? There is only one product, and one firm, democratically managed. No ROPO has ever been deprived of property he has won by hard work. Discrimination does not meet empirical scrutiny. Therefore it is an unacceptable theoretical explanation of wage differentials."

Begger considered, "Yes, I see. If the CHIRs were as productive as the ROPOs, a taste for discrimination would require that CHIRs pay for that privilege. They would thus have lower wages, not higher ones."

"Don't feel overly constrained by the requirement of homogeneous labor, Cary," spake Freemer with an encouraging nod. "Look at it this way. Just why do some jobs pay more than others? Equal pay for equal work. But if work isn't equal, pay isn't. That's efficiency."

"But the only other difference between the two groups is education. Yes, EDUCATION!" If cartoon lightbulbs had been in vogue, one would

have appeared above Begger's head. "Education could serve the same function as hardened KNAB. HUMAN KNAB! Naturally. More knowledge makes better workers. More productive. Better pay."

Freemer's wink was one of approval. With hearty congratulations and garlands of good luck, Freemer dispatched his young associate.

Begger devoted most of the following day to developing his HUMAN KNAB theory. It was clear. By investing in themselves, OUTPIANs effectively raised their lifetime earnings. All that was necessary was to determine why CHIRs had a higher propensity to invest. A much pleasanter task than accusing people of bigotry. And certainly a more scientific approach.

To test his theory, Begger went to the source: OUTPIAN ELEMENTARY SCHOOL. And for Begger, the sight presented a different form of education. The contrast was stunning.

Cleanly scrubbed CHIRIdren pored diligently over their work. Even their mischief was clever, no way matching the aimless, almost defiantly anti-social attitudes of the young ROPOs. The young CHIRs enjoyed themselves, making each new experience into a game. But the ROPOs were educational outcasts. The teacher could barely wrench any kind of response from them. So she took the obvious step of using high praise and rewards where they worked—on the CHIRs. For the ROPOs she adopted a policy of enlightened coercion, since threats and punishment at least pulled a minimum of effort from them.

At OUTPIA JUNIOR HIGH, the pattern was similar. ROPOs were anywhere from three to five years behind their CHIR peers in reading, as well as in math. And the gap continued to widen as grade level increased. While CHIRs were likely to skip one or more years of schooling in accelerated programs, ROPOs, were just as likely to repeat a year or two. Teachers admitted that it was a battle even to teach ROPOs more than they forgot. ROPO children he interviewed said that school was a waste of their time. Teachers all but admitted the same. "If it weren't for the CHIRIdren . . ." he heard repeatedly.

But if the junior high indicated trouble with the education of ROPOs, the senior high clearly spelled chaos. The drop-out rate was astonishing. Seeing little fun and less prospect in their continuing an education, ROPOs left school—if not in droves, at least in a steady trickle that gradually accumulated. All manner of counseling was to no avail. Many said that they could not afford to stay in school when there was money to be made in the KNAB factory. Remedial programs were of marginal help, as older students seemed to resent being placed with younger CHIRIdren—EVEN THOUGH IT WAS FOR THEIR OWN GOOD.

The facts were so startling that Begger was almost forced to scrap his HUMAN KNAB theory. Almost. But he was saved by the flexibility of economic theory. Naturally investment opportunities would not be the same for all students. Some would possess greater "natural resources" than others, for which they would obtain a kind of rent. And since education cost money, it would be inefficient to distribute it equally. But money alone, concluded Begger, could not serve as a sufficient criterion to allocate educational resources. Academic ability—not income—was relevant to society's choice function. So it was fitting that OUTPIA TECH screened applicants by their readiness for college and provided scholarships which were financed by OUTPIA's moderately progressive tax system. And if students did not work hard enough to prepare themselves, they showed a marked preference for leisure, which was quite understandable.

Now the story could have ended there, had HUMAN KNAB circulated only among economists who were capable of understanding the finer points of the analysis. Unfortunately, the theory fell into the hands of a young graduate student whom several restless years of economic study had made particularly susceptible to misinterpretations of important and concise writings. Instead of treating Begger's writing with the deference due a master by an understudy, Mark Caraless set upon a full scale rewriting of the HUMAN KNAB theory. He crassly called HUMAN KNAB an interesting metaphor, and went on to point out "deficiencies (?)" in the analysis. Then over protests of his faculty advisor, Caraless set out to devote his master's thesis to deriving an alternative theory of education, titled, rather pompously, EDUCATION AND KNAB.

Caraless' final product was a typically amateurish attempt at cleverness that was immediately and forthrightly rejected by his thesis committee. But the wayward manuscript gravitated into the hands of an unscrupulous paperback publisher. The book sold. And sold, and even eclipsed the success of HUMAN KNAB. Because on top of all its other shortcomings, the book was readable. And that is how Caraless' halfbaked ideas came to stew in the minds of OUTPIANS, CHIRs and ROPOs alike.

People all over OUTPIA, especially immature CHIRs and desperate ROPOs, seized upon EDUCATION AND KNAB as a method of overturning the OUTPIAN ECONOMIC ORDER. Caraless had proposed that differential educational achievement stemmed from the unequal distribution of KNAB (which, of course, was absurd, given OUTPIA's system of subsidized higher education for all deserving high school graduates). Furthermore, EDUCATION AND KNAB proposed that a more intensive effort to influence the preference

of young ROPOs for education would eventually lead to a better academic performance among ROPO children. Ultimately, the proportion of ROPO college graduates would become commensurate with the percentage of ROPOs in the OUTPIAN population. "Equal education," not "equal educational opportunity" became the byword of the Caraless cult.

At first, little happened. But since the OUTPIAN academic community understandably disregarded the danger from the aimless meanderings of EDUCATION AND KNAB, what did happen went unchecked. No one seemed to notice when ROPO youngsters began to steadily increase their scholastic performance. This was merely attributed to the success of OUTPIAN teaching methods. Similarly, when ROPO parents began to pass up lunch to accumulate more KNABALLs for their children as rewards for academic achievement, society slept on (despite a marginal decline in the productivity of some ROPOs on the assembly line). Realization of the pending disaster did not come until that disaster was consummated in an unprecedented pressure on OUTPIA TECH's admissions officer. And because of their dedication to equal opportunity, OUTPIA TECH's administration was forced to admit too many students.

At first pressure was siphoned off by increasing class sizes. But overworked faculty members soon cried for relief, so that TECH's graduate school began churning out college teachers without thoroughly inculcating them with the finer points of existing social theory. Rabble roosting [sic] lectures openly proclaimed to swelled undergraduate ranks that better paying jobs were the due of the better educated. So that when the bloated numbers of college graduates presented their diplomas to the KNAB INC. management, the results were predictably catastrophic.

Initially, the KNAB management was delighted at the prospect of a healthy supply of college educated OUTPIANS. Many were ecstatic at the impact that ROPO managers were bound to have upon the morale at the assembly line. Until it was discovered that the maxim about the optimum ratio of chiefs to Indians was also applicable to KNAB production. In an attempt to lower the mass of its executive and research personnel, KNAB management began to allocate educated personnel to positions previously won by accumulated years of loyal service on the production line. Middle-aged workers found themselves bumped back onto the production lines, unable to compete with the nimbler minds of the newly educated. But the new workers were more productive, and output of KNAB soared. For a while, all willing OUTPIANS found a job at KNAB INC.—until the supply of capital began to dwindle.

The production of KNAB, like that of so many products (made in other tiny mythical countries)

depended upon a fixed input of capital. In the case of KNAB, that capital was KNAB itself, left to harden in the back yards of OUTPIAN citizens. Upon turning over this converted substance, OUTPIANs were given promissory notes redeemable for five percent more KNAB than invested.

Because OUTPIANs, especially the CHIRs, had steady savings functions, the investment of hardened KNAB increased at a rate just sufficient to adjust for the entry of OUTPIANs into the labor force. If too much or too little capital was invested in any year, fractional fluctuations in the interest rate were sufficient to bring investment back into equilibrium. But this delicate adjustment mechanism was overwhelmed by the massive influx of college educated OUTPIANs. Their increased productivity depleted the stockpiles of hardened KNAB.

With a flurry of urgency, the cosmos of KNAB INC. announced an unprecedented return on hardened KNAB—seven POINT five percent, compounded semi-annually or twice a year, whichever came first. Avidly, the management braced itself for the flood of hardened KNAB. At first, hardened KNAB flowed into the warehouse at an accelerated rate. Then the flow began to ebb, until the influx of capital was just what it had been previous to the rise in the interest rate. Baffled, the management called upon the aging Professor Martin Freemer. Assisted by Cary Begger, Freemer agreed to study the matter and report with optimal haste (which minimized waste). The management thanked them and vowed to wrestle with the problem as best they could until provided with THE ANSWER.

During the intervening months, the situation at KNAB INC. deteriorated from unsteadiness to chaos. The slight reprieve that the economy had received via the lowered participation rate of college-aged males in the OUTPIAN labor force began to erode as even larger waves of college graduates swamped the market. Another factor was the swelling in the ranks of women in the labor force. Young ROPO women went to work to aid their husbands in obtaining that all important college degree. And when the husbands entered the job force, young families decided that two incomes were better than one—and women kept working.

And with the pressure from the educated, more experienced ROPOs (and even a few CHIRs) were bounced from positions where they had once felt secure. Slowly, reticently, but logically, the management reached the only possible conclusion—for the first time in its long history as a job provider, KNAB INC. would be forced to lay off some of its production workers.

The news struck all of OUTPIA like a thunder-clap. KNAB stock dropped 57½ points on the OUTPIAN stock exchange—and KNAB being the only listing on the OUTPIAN market, the shock

sent the OUTPIAN INDUSTRIAL AVERAGE OF SELECTED STOCK down an equal measure.

Faced with the potential of a starving population, the OUTPIAN government was forced to undertake a massive loan program (at interest rates necessarily above market level) to keep unemployed ROPOs on their feet until reemployment ended their indolence. When Freemer and Begger announced that the results of their research were ready, the KNAB management called a special press conference to air the conclusions. It might have been better for all concerned if they had taken time to read the report before releasing it to the revenge crazed public.

An air of expectancy hung over the assembled representatives of the fourth estate (consisting of a seasoned reporter from the OUTPIAN *NEWS-PAPER*, a photographer, and a curious custodian) as Professor Martin Freemer clutched the podium. The sound of his gavel rested the murmur into oblivion.

“Fellow OUTPIANs,” he began, “our report is in two parts; one good, one bad. First the bad news: OUTPIA IS IN THE THROES OF A SEVERE ECONOMIC CRISIS.”

A collective gasp sounded from the reporter and the photographer. The janitor stared into space.

“This difficulty,” continued Freemer, “has resulted from a mindless disregard for the constraints imposed on the OUTPIAN economy by tradition and experience. Let me illustrate. . .”

With the steadied confidence of a man who truly knows his craft, Freemer took a single piece of chalk and began to scrawl a formula on the KNABOARD, which was placed strategically for all to see.

“The essence of the OUTPIAN economy lies in the immutability of the KNAB production function, which we have long suspected (and now can prove) takes the following form: $K = \min (aHK; bEL)$.”

Baffled expressions crossed the faces of both the reporter and the photographer. The custodian stifled a yawn.

“Now I don’t have to point out that K represents KNAB output and HK represents hardened KNAB, the capital input. Both a and b are positive constants. The pivotal concept in this equation is the EL term. Now my colleague, Dr. Cary Begger will explain the significance of EL.”

Begger raised his hand to still the rumble of recognition. “Thank you, Dr. Freemer. Gentlemen, as many of you know, labor, along with capital, is the major input into the production of KNAB, but contrary to popular opinion, labor is not a homogeneous input. Each laborer is ‘scaled’ by his education . . .”

“Just a minute!” It was the janitor. “I can see where you’re trying to lead this lecture. I suppose you intend to introduce your HUMAN

KNAB theory. Well stop and think: Is it because educated workers produce more or just because management thinks that they produce more that causes wages to be higher? And even granting that they do produce more, is it because something, presumably education, makes them more productive, or simply that management, themselves educated CHIRs, are predisposed to place educated personnel in positions of responsibility? Just think about that, will you!"

Begger's knuckles went white as he grasped for self-control. Then, pleasantly: "If I understand your question (and it is a question, isn't it?), you are asking about the direction of causation between education and productivity, is that it?"

Begger did not wait for a response, but plowed ahead. "If you think for a moment, the answer should be obvious. People tend to perform best when they know what they are doing." (Assenting nods from the newsmen.) "Well," Begger emphasized, "some jobs are easy to learn, while others are not so simple. Some jobs, like those on the production line, nearly anyone can learn, and through experience, workers become skilled. Sort of 'learning by doing,' you might say. Since these jobs don't take much skill, or prior learning, anyone who walks in off the street can be hired to perform them. Well, since the supply of such people is high, their wage is low.

"Now consider other jobs, like management positions. These jobs are comparatively more difficult, and require much more training. This training, like personnel management, time-and-motion study, requires both effort and talent to complete. Clearly, if a man has such training, he is valuable to the firm, and is hired. If he does not have such training, the firm can teach him, if management has evidence that he can learn. Education provides such evidence.

"But the more knowledge required, the lower the supply of such people. Thus the higher wages. In fact, the influence of education on wages roughly follows this formula: $\frac{w_i}{\bar{w}} = g \frac{e_i}{\bar{e}}$. Here we have

$\frac{w_i}{\bar{w}} = g \frac{e_i}{\bar{e}}$. Here we have

w_i as the individual's labor income, and \bar{w} is the average wage in the economy; e_i is the individual's own educational attainment, \bar{e} is average education, and g is a positive constant.

"Now since the distribution of income tends to follow the distribution of education, education must be entered into the production function, for how else could it earn a market return? Thus, you can see, an increase in education has the same impact upon the economy as an increase in labor itself. Now, perhaps you can see the origin of the problem we now face. . ."

The custodian moved forward, more docile this time. "Doctor Begger, may I ask for a clarification of one point, please?"

"Go ahead," was Begger's guarded response.

"Just how do you intend to measure education?"

"I'm pleased you asked that question," Begger beamed, "for it shows that you have an intuitive feeling for some of the knottier conceptual problems that plague all theorists. Now obviously, we can't open up people's heads to measure their mental capacities. So we have to use an indirect method.

"Actually," Begger continued, "we measure education in two ways. One, we watch people. Since education can only occur in time and over time, it follows that the more time spent in educational activity, the more education is achieved. Thus, we can be fairly safe in assuming that individuals who finish high school should have more education than those who cease going to school after junior high. Similarly, college graduates should have more education than high school graduates. A second way, since we cannot be certain that equal time in school means an equal amount of effort, is to ask people. So by testing and grading we provide information on how much they know, and thus, on how much they have learned."

Once again, the custodian vented his wrath. "What you're saying—really saying—is that employers measure what they think education is, and reward it by giving the educated better paying and more interesting jobs. But is it not possible that this higher output actually stems from a feeling of personal worth, so that work is completed more cheerfully—or should I say CHIRfully—and efficiently by workers who are less alienated?"

Begger scoffed. "If I remember correctly, I said nothing of the kind. And to answer your second query, and to repeat myself, I might add, educated labor is more productive because of its greater responsibility. In the KNAB plant, management is responsible for seeing that things run smoothly—so that people don't bump into each other, or perform each other's tasks—that sort of thing. With management, specialization is possible. And specialization raises productivity. But management must be educated, and education costs money, so that educated manpower is scarce. But this is taking us too far afield, and others here, representing the people of OUTPIA, have come for an explanation of the present unemployment crisis. Now if I can continue. . ."

"As I said before," continued Begger, the white of calm dispelling his enraged blush, "because of the observations, from payroll records, that educated labor is more productive, an increase in the educational level of the population has the same effect upon the KNAB production function as an increase in the supply of labor. But any in-

crease in labor, whether directly through population growth, or indirectly through an increase in the educational level, must be matched by an increase in the input capital—hardened KNAB—if output is to increase. Now suddenly KNAB INC. is flooded with a greatly increased supply of college educated workers. At first, output increased, and incomes likewise rose, until the stockpile of hardened KNAB began to dwindle. When an increased flow of invested KNAB failed to sustain itself, even at higher interest rates, production had to be cut back. This meant that some workers—less educated ones—become redundant. They had to be let go. And now, to explain why investment did not increase sufficiently, I call once again on Professor Freemer.”

Clamor once again greeted the august presence of the eminent Freemer. The very atmosphere of the hall anticipated the words of OUTPIA's great economist. Both the newsman and the photographer cast iron glances in the direction of the janitor, as if to threaten severe reprisals if the import of Freemer's pronouncements were compromised by further outbursts. But the custodian remained silent, and waited.

“The reason for the breakdown in investment,” intoned Freemer, “can be directly traced to the major cause of this entire crisis. A rather second-rate, dull-witted NORMATIVE piece of writing, absurdly titled EDUCATION AND KNAB, published some time ago, theorized that the natural propensity toward educational activity could be influenced early in life. Turning from the major conclusion of Doctor Begger's HUMAN KNAB—that education is an investment activity—this, this EDUCATION AND KNAB started with the premise that education should be treated as a consumption activity.

“As a result of the ill-formed prescriptions of this book,” proclaimed Freemer, “literally hundreds of ROPOs, long disinterested in education, began to bribe—yes, BRIBE—their children with KNABALLs into devoting more time to education. Falling into the habit of education, these students began to enjoy themselves, although not necessarily by choice, and they continued to work insanely hard, even after their parents found it impossible to offer more KNABALLs.

“When these programmed students reached college age, OUTPIA TECH admitted them to study, not realizing the eventual consequences, which we now suffer. So the college graduates came to flood the market, and eventually affected this unemployment crisis. And it is all because of this perverse view—that education can be bought by bribing the young—that new capital has failed to materialize. Parents, even CHIRs, now, roll their leftover KNAB into little balls to induce their children to work harder in school. Now, with unemployment, the fear of inadequate educa-

tion is even worse. More and more KNAB is being siphoned off before it can be invested—all because of this craze started by one demented individual who couldn't meet with academic scrutiny. And until this craze ceases, unemployment will get much worse before it gets any better.”

A storm of fury seized the custodian, who mounted the platform and thrust an aggressive finger into the roundish face of Professor Freemer.

“Mr. Freemer!” The janitor screamed, which was hardly necessary, the professor being but a few feet away. “Let's just get a few things straight before you reach any more rash conclusions. First, all your economic theory—all your so-called logic—contains no hard evidence that education, of and by itself, adds any measure to the productivity of the individual.

“Consider this: certainly a doctor is more productive as a *physician* than if he were totally ignorant of how to cure people. That does not necessarily mean that he is a better plant manager—or even that he could be trained to be a better plant manager—than another man who does not possess a medical education. Yet this is the belief upon which the HUMAN KNAB theory is based. And it is according to this theory that you intend to deny ROPOs an equal chance at employment. For years ROPOs have been at the bottom of the heap, holding down the dullest jobs for the least pay. ‘Discrimination,’ they cried. ‘Education,’ was your reply. Well, they got an education, and forced you to give them better jobs—not as good as the CHIRs, but better than what they could have expected without an education. So for the first time, ROPOs filled lower level administrative posts, like those of plant foreman. Two effects occurred; one: plant foremen, having an education, were happier than their predecessors who had to grovel their way up from the bottom of the heap, so the newly educated were more productive. Two: being ROPOs, they empathized with their fellow production workers and represented their interests to the management. As a result, morale rose and production on the line increased.

“But education had always served the function of maintaining the OUTPIAN class structure. Suddenly threatened by upshot ROPOs, CHIRs worked even harder to induce their CHIRldren to do well in school—if you can't have an educational monopoly, you can try to shine in educational performance. Already possessing the advantages of a more conducive educational environment, CHIRs had only to induce a little more effort from their CHIRldren to ensure educational superiority. Of course, this diverted resources from investment activity, and combined with the diminution of hardened KNAB, led eventually to the investment panic.

“Because of the practice of paying educated workers (heretofore almost exclusively CHIRs) higher wages, plus the increase in the promised

return on KNAB, the management found that production was not sufficient to meet budgeted outpayments. Thus they decided to lay off some production workers—even though they were actually responsible for the production of KNAB. But of course, they weren't well-educated. Nor were they CHIRs."

"That's all very interesting—very interesting indeed." It was Begger, recovering from a temporary speechlessness, brought on by a combination of surprise at the outburst as well as a confidence that Professor Freemer himself would handle the situation. But the other man sat mute, almost as if he were listening to that drivel! Begger had always admired Freemer's fairness and willingness to listen to all sides of an issue, but surely in this case. . .

"But tell me, Mr. Caraless. . ." (a gasp from the crowd), "Yes," resumed Begger, "I recognized you, although that KNABSACK you use to cover those shaggy locks of yours does wonders for your appearance. But although you may disguise your exterior, I could recognize that line of yours anywhere. When are you going to realize that economics is too sophisticated a science to lend itself to political demagogy? Take this latest ranting of yours. Sure, you want equity, and the fact that you come from a CHIR background even lends a certain credibility to your sincerity. But can't you see, equality just isn't in the cards. No two people are the same; they have different preferences. **AND ONE OF THOSE PREFERENCES IS FOR THE RIGHT TO ACHIEVE SOMETHING UNIQUE! TO FULFILL THEMSELVES! TO BE BETTER THAN SOMEONE! TO BE UNEQUAL!**"

Caraless raised a clenched fist.

"No, Mr. Caraless, hold your peace. You had your say. Now listen for once. You thought that equity could be achieved artificially, through bribing youngsters to exceed their natural capabilities. But in so doing, you upset the laws of supply and demand—and no law is broken without someone having to pay the consequences. Well, it was your ROPO friends who had to pay, and they'll go on paying until the natural equilibrium between educated and general workers is restored."

Caraless was near tears. "Don't you see. Nobody had to pay; everyone could have benefited. Did you ever think of the fact that education, because of the advantages it offers for consumption activity, increases REAL incomes of the educated? It's not necessary to give educated people higher incomes to ensure that they'll pursue an education, as long as their job and their education provide their own rewards. Besides, look at the waste that's occurred in the past. Did you ever think of

how silly it looks for a country—even a tiny country like OUTPIA—to have only one product? But do we have enough doctors? No, at least not enough for the ROPOs, anyway. Nor do we have enough lawyers, or teachers, or writers, or poets. But we've got plenty of KNAB, or at least we did have. Now we don't even have enough of that, at least not the way it's distributed."

Furiously, Caraless hurled his broom to the floor, and the baffled photographer received a smarting blow to his left shin as the KNAB shaft rebounded from the hard-KNAB floor. Caraless turned, cast a quick glance of contempt over his shoulder, and stalked from the room.

"One moment, Mr. Caraless," intoned Freemer. "Don't leave just yet. We announced that only part of the report contained bad news. Don't you want to hear the better side?"

Caraless halted and faced the economist. Moist smudges streaked either side of his face.

Freemer grasped the podium and threw his head back in a display of confidence, as if calm could be relayed to the audience once they knew that the situation was well in hand.

"Gentlemen," began the Mr. Chips of OUTPIAN economics, "As we've said earlier, this crisis had its inception in the artificial overstimulation of the educational preferences of school children, spurring them into college, to their own detriment, as well as that of the economy as a whole. Well, by a unanimous vote by the Regent of OUTPIA TECH, we have found a solution. Effective immediately, there will be a substantial cut-back in the undergraduate ranks of the college. Now since there continues to be a large number of young OUTPIANS who have suffered the false impression that they actually prefer higher education, when we here know that this is not the case, it is imperative that we think first of their interest. So from this point, only those students with one or more parent who is a college graduate will be admitted to OUTPIA TECH. We feel that this step will go a long way toward reestablishing the equilibrium in the OUTPIAN labor force. And this move will ensure that OUTPIA's unblemished record as the LAND OF OPPORTUNITY will be preserved. That's all I have. Now, are there any questions, gentlemen?"

Caraless did not hear the applause, or the questions that followed. The clicking of the latch of the solid KNAB door was the only sound that encroached on his train of thought. Someday, they would hear from him again. And he wouldn't be carrying a broom. Perhaps a sliderule—as if the sliding rule of economic reasoning had not perpetrated damage enough already.