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ALCHIAN AS A TEACHER AND AN ECONOMIST

by

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Having been both an undergraduate student and a long-time colleague of Armen Alchian, I may have something useful to say about the uniqueness of his work, both as a teacher and an economist. In the following attempt to do so, I'm not going to resist the temptation of preaching a little economics in an attempt to shake up the choir.

I. ALCHIAN THE TEACHER

Although the only course I've ever taken from Armen was an introductory statistics course, he made the subject about as intellectually stimulating as it can be. He had this imaginary tout approach the class with a potential tip on a horse race and allowed us to ask questions of the tout. He then, in his uniquely Socratic way, made us realize how difficult it was to invent the subject of statistics. Nobody in the class saw that we wanted the probability distribution of the returns on the tout's past recommendations. Once he told us the answer, and proceeded to teach a rather straightforward course in classical statistics, he had built up both an appreciation of the

* Charlie Hickson and I had several excellent conversations on this topic before I decided to write this little paper. Also, Harold Demsetz supplied some valuable suggestions on a previous draft.

problem of Neyman and Pearson (who tried to intelligently discuss hypothesis testing, and implicitly statistical decision theory, without explicitly introducing a utility function) and a desire to know the subject that lasted well beyond the length of the course. This was 43 years ago. Armen's is the only course I have ever taken whose basic question I still clearly remember.

Armen's style was even more memorable. Socratic does not do it justice. It was relaxed, good-natured, and natural. It constantly maintained a close tie to the real world. It was so refreshingly non-academic that it gave me hope that I too could become qualified to teach in a university. This course, combined with a theory course from his coauthor, Bill Allen, made me turn to economics. Here, in economics, I thought, was finally a subject that was both sufficiently intellectually open and sufficiently logically disciplined to produce a clear basis for analyzing problems of social reform. (Bill's was the only course I have ever taken whose basic logic and conclusions I can still clearly recall.)

The uniquely practical-yet-logical character of the Alchian-Allen text, University Economics, should, I think, serve as a model for all basic economics texts.

II. ALCHIAN THE ECONOMIST

Before commenting on Armen's papers, I should admit that I've had the benefit of reading Rolf Richter's statement. I agree that the most significant is Armen's 1950 discussion of the evolution of competitive firms. I also agree that it's greatest potential lies in the area of extending the analysis to the evolution of institutions generally. I would like to first discuss this evolutionary theory and it's possible further generalization to all social institutions. After that, I'd like to say a few word's about Armen's well-known special theories of the firm. I'll discuss both the famous one he developed with Harold Demsetz and the subsequent generalization he developed with Susan Woodward .

1. Alchian's General Theory of the Competitive Firm. Let's first consider, then, Armen's even more famous general theory of the competitive firm, his discussion of the Darwinian evolution of such firms. Here, entrepreneurs do not have to be rational but will still wind up, at the end of the market's natural selection process, to be profit maximizers. It is remarkable that he does **not**, along the lines suggested by Professor Richter, apply the argument to institutions generally. Why not? He has, at the time he is writing, an entire Austrian tradition that **does** apply such an evolutionary thought system to institutions. But he eschews it. Why?

The answer, as usual for Armen, is that he has a constant empirical feel for what he is doing. The same evolutionary process does **not**, within his logic, extend to institutions generally. The underlying reason, of course, is that a zero-profits condition applies to the firms in his equilibrium and that such a condition does not apply to institutions generally.

The importance of the zero profits characteristic is that it dramatically speeds up the market's ability to naturally select the appropriate firm characteristics.[1] If a firm gets one of its several salient characteristics

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1) Blume and Easley have recently introduced a dynamic complication into the argument. They treat persistent business mistakes as investment costs and allow for the existence of relatively patient or over-optimistic investors. Their long run equilibrium may easily contain such inefficient firms. Thus, for example, Knight's over-optimistic investors and their mistaken views of the market may not be eliminated by the natural selection of the market because over-optimistic investors will generally be willing to save and invest more than others. Such investors and their inefficient firms may even dominate an economy.

This argument has not been countered in the literature. Although objective learning could eliminate the problem, this would generally take a long time. Another possible counter, more suitable to the pure-natural-selection basis of Armen's original argument, is to recognize that the reason that a person has an evolved time preference rate is that there is an survival cost to bear by saving more or less than the rate suggested by the person's time preference rate. So, if the inefficient investor devotes more resources to an investment activity, he or she will devote too little to, say, reproductive activity. So his type will reproduce at a suboptimal rate and will disappear in a long-run equilibrium. But this too takes a long time.

The way I would defend Armen here is to follow Thompson-Hickson by introducing certain activities that are vital for the inefficient firm to survive from one period to the next. Say, to survive the year, the firm has to pay-off a politician by a certain date to maintain its operating license, pay off its back-taxes by a certain date, catch a serious embezzler before he takes off, and suitably prepare for a health inspector that can close the firm down. These are vital activities that have no real chance of being simultaneously adopted by a substantially inefficient firm. In order to survive, the firm has to be able to solve a diverse series of such

systematically wrong, that firm will soon be gone.

Subsequent literature on general evolutionary games, which can be taken to fairly represent a version of the Austrian evolutionary theory that Armen was avoiding, reveals a very slow evolutionary process. The problem with this slowness is that realistic external shocks, shocks that greatly disturb the social institutional equilibrium with an average frequency of only a couple of generations, mean that an ordinary evolutionary process will put us, at any moment in time, much closer to some historically determined initial point than to an equilibrium. The target takes large and frequent leaps in random directions while the gun moves very slowly in response to previous errors. The likelihood of being even close to the target at any given moment is effectively zero. Austrian institutional evolution has this critical empirical defect, and Armen was wise not to take the leap.

All is not lost, however, in the case of general institutional evolution. Societies themselves may possess vital institutions, institutions without which the society cannot long survive even when most individuals in the society live substantially above zero profits, substantially above subsistence, in any equilibrium. For if the society gets one of several salient features wrong, it will not survive its military competition with other societies. So part of social evolution, the part having to do with defense institutions, is just like Armen's rapid evolution of efficient firm characteristics. That's why the defense-related economic institutions that I wrote about in '74 and '79 -- the military draft, peacetime subsidies to war-sacrificing activities, income taxation, international cartels, tariffs, agricultural price supports, etc. -- show such remarkable efficiency characteristics. (My website, http://www.econ.ucla.edu/thompson, will supply you with copies of these JPE papers.) More generally, adding objective learning and possibly durable societies to the discussion, the political process generating these vital economic institutions must be very sensitive to large external

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problems on an annual basis. The rapidly naturally selected entrepreneurs are then about as efficient a group of decisionmakers as we could ever hope to find.

shocks in order for a state to survive a series of such large external shocks. Under this condition, efficient political processes, and thus institutions generally, emerge as part of a rapidly adjusting process of general institutional evolution (Thompson-Hickson, Ch 1).

So perhaps Armen should have allied himself with the Austrians after all. It appears that most "new institutionalist" writers, although reluctant to admit it, have done so. For most writers in both the Austrian and new-institutionalist schools have assumed that existing institutions have evolved to where they are close to efficient.

However, we must be careful here. Suppose there is an intellectual cartel, a group of thinkers that learn, perhaps through their own evolutionary process, to internally cooperate and generate subconsciously demand-creating ideas. If this cartel assumes a substantial teaching role in their society and thereby affects the thinking of the ruling classes, the latter will join the cartel in responding in a biased fashion to empirical evidence and experience. Efficient learning and therefore evolutionary efficiency will not arise. Biased learning, although it would ruin a firm, might enhance the military survivability of the state. Spartan militarism is an example from the ancient world, Middle-Eastern militarism would be one from the modern world. But there are much more sophisticated, political and legal ideologies that can also bring a welfare loss but evolutionary gain. Again in the presence of vital institutions, an equilibrium is rapidly approached. But this one is potentially highly inefficient (Thompson-Hickson, Ch. 2).

Austrian economics and the "new institutionalism" both share the same defect by failing to recognize the presence of these "deeply rooted" political and legal ideologies and the corresponding evolutionary inefficiencies. Moreover, these economic ideologies are likely to have their own perverse effects on their societies.

So, no. Armen was not wrong to eschew the possible Austrian extension of his work. This indeed corresponds to his personal skepticism regarding these, and many other schools of economists, who he

accurately labels "true believers." Even though he may share the same feelings and opinions as those held by several of these economists, his scientific conscience will not allow him to insert these into his lectures or writings.

To be more explicit here, consider the most popular Austrian views of the world, those running from Burke and Menger to Hayek and Schumpeter. These views, which also usually endogenize the legal and political systems, all fail to recognize that highly inefficient ideologies may gradually emerge as part of a long-run social equilibrium. They correspondingly fail to see that intellectual enlightenment – or at least pragmatic learning – concerning the perverse nature of the evolutionary process, and some correspondingly basic policy reforms, are necessary to eliminate these evolved social institutions. Most directly, the way such authors have worked is to: (1) witness a rapid series of institutional changes that they and their associates regard as undesirable, and then (2) appeal to the benefits of gradual learning and natural selection (and usually a good deal of economic ideology) to argue for resisting the changes. So, in sharp contrast to the de-ideologizing policies that we are calling for, these "Austrian" authors systematically promoted ideologies that oppose actually quite efficient social policies.[2]

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2) In the case of Burke, who vigorously opposed the French revolution because of its imposition of a feeble attempt at rationality on a system that he supposed was in an evolutionary equilibrium, the early stages of the French revolution were actually <u>against</u> the rationality-extolling ideologues that had been taking over the French aristocracy and creating excessively laissez faire policies (Thompson-Hickson, pp 153-165, 180-182). So the early French Revolution was actually a quite conservative reaction in that its leaders were attempting to restore the old political and urban-economic order. So, if Burke had an appropriate evolutionary model, he would have favored the revolution. (What probably blinded Burke to this rather obvious fact was his weakness for free market ideology and the fact that Britain had been handsomely benefitting from the French adoption of laissez faire policies.)

Menger's case was essentially identical to Burke's in that he strongly approved of the free market ideologization that had been gradually growing in Europe during the 1850's and '60's. This led him to ignore the military failures that free market policies had recently created for both France and Austria (Thompson-Hickson, pp 166-181). So, when he saw the pragmatic German reaction to the policy failures, he reacted as did Burke, with an appeal to gradualism that ignored the fact that the German reaction was actually a conservative movement back to an earlier, gradually evolved, equilibrium. The sudden learning of the failures of a gradually growing ideology <u>should</u> lead to a sharp policy reaction against that ideology. Menger's position, just like Burke's, was especially non-objective in that his arguments were, in effect, nation-serving attempts

2. Alchian's Special Theories of the Firm. Consider now Armen's specific theories of the firm.

(a) The Alchian-Demsetz Theory. Here, the function of the evolved entreprenuer, or "residual claimant" is to monitor inputs who suffer an "agency problem" in that their remuneration is less than the total profits to the firm (They implicitly rule out, apparently because of legally realistic restrictions on free contracting, hiring an independent third party to pay each non-cooperating input owner the total profit of the firm while charging the various input owners lump sum rents for the opportunity.) The wide-spread, essentially Austrian, "new-institutionalist," application of this theory is to argue that this is a social efficient state of the world, and we should praise the behavior of our firms, especially in contrast to governmental firms, which clearly devote fewer resources to monitoring their consequently less well-motivated employees.

However, this is far from true, and I think that Armen would not go this far, at least not in print. For it does not logically follow. Again we assume, I think quite realistically, that there is a legal cartel and a resulting legal ideology that constrain input contracts to be resolved without payments being made to independent third parties. Any fine imposed on a deviant worker would then represent compensation to the damaged employer. If the employer catches a "shirking" worker, the pay of the latter is docked, or perhaps the worker is outright fired for, say, sleeping on the job. The marginal private benefit to the entrepreneur's resource-costly monitoring activity is then either the value of the docked pay or the value of replacing the

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to move a neighboring country toward free trade.

Hayek and Schumpeter largely argued in response to the egalitarian policy shocks that followed WW's I and II. Such egalitarian policy shocks are actually quite appropriate reflections of the domestic gratitude felt for their sacrificing masses after an expensive war fought largely by citizen soldiers, the apparent "redistributions" effecting a qualitatively efficient – even vital – reward for successful wartime sacrifices (Thompson-Hickson, pp 184-5). Because such gratitude payments, although a historical regularity in Western Europe and a result of our efficiently evolved political institutions, are not part of economic ideology, these 20th century Austrian economists misinterpreted them, considering them to be clear indications of the dissolution of the necessarily highly treasured, long-and-painfully evolved, traditional moral inheritance of European culture, and incorrectly warned of pending political-economic disasters.

fired worker with one that has more domestic sleeping habits. However, the marginal **social** values of the activities are, in equilibrium, zero. In the pay-docking case, monitoring on the margin is pure rent-seeking from the worker because his loss is the employer's gain and there is no significant incentive-effect on the margin. In the case that the exposed worker is fired, there is no social gain because the sleepy worker will just go somewhere else. The social value of the operation is zero or negative. In contrast, the government employer, at least theoretically, is concerned with maximizing something like social welfare instead of profits. Such bureaucrats do not over-monitor their workers because they do not positively value redistributions away from workers or their alternative employers. They monitor only to the extent that such monitoring improves worker incentives and thus social efficiency.

Hence, given our inefficient contract law, wherein worker fines are paid to employers rather than independent third parties, when economists see governmental bureaucracies lose money where private employers do not, or observe that government workers are less disciplined and less productive than private ones, economists have no reason to criticize this efficiency characteristic of the public sector and no reason to push for privatization.

Or, applying Armen's evolutionary theory of the firm, when competing firms evolve a separation of ownership from control, giving professional monitor-managers bureaucratic-type incentives by allowing them only small fractions of the profit, we should look hard for a cost minimizing reason for this. Once we consider the firm's monitoring function, and our over-monitoring point, our search for a cost-minimizing reason is over. For cost minimization is made possible by such a separation, which eliminates a good part of the substantial over-monitoring incentive that exists for owner-managers. The separation increases profits by lowering the initial input prices faced by the firm, the input owners being appropriately appreciative of the fact that they will be less over-monitored. While there is a slight loss in productive efficiency, this loss is more than offset by the firm's reduced input prices. When the point is reached that the loss in efficiency

from further separation of ownership from control exceeds the wage savings, the separation ceases, thereby leaving with the managers with some, efficient, incentive to do their jobs.[3]

(b) The Alchian-Woodward Theory. Finally, let me turn to the subsequently generalized theory of the firm which Armen wrote with Susan Woodward. These papers nicely generalize Coase's pioneering article and Williamson's vague early discussions as well. Here, the nature of the opportunism, the result of person-specific investments and bilateral monopoly bargaining costs, is clarified, as are other firm-generating transaction costs. Moreover, Alchian and Woodward clearly recognize that there is a role for legislative intervention; there is no sense of the laissez faire bias that we find in earlier, "new institutionalist," papers on the subject.

Nevertheless, the underlying reason for the market failures could be a bit clearer. Observed bilateral monopoly and related transaction costs are unnecessarily high because of realistic legal constraints. Anticipated bilateral monopolies, say renegotiations of long-term leases in which both landlords and existing tenants should invest to support the firm's activities, are unnecessarily costly and generally invite bureaucratic regulation, regulation that would again be totally unwelcome if the legal system permitted efficient contracting.

Without discussing here the characteristics of an efficient contract between bilateral monopolists, consider what happens when the anticipation of socially unnecessary bilateral monopoly bargaining costs leads profit-making tenants to evacuate a building at their lease termination dates before the owner has been able to find higher-paying tenants to replace them. Buildings stay vacant for long periods of time because building owners would lose long-term bargaining power -- and would also run into ejection problems

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3) Rejections of inputs (e.g. worker firings) and the corresponding monitoring expenditures, however, are still generally excessive in such a cost-minimizing firm. This is because the reason the rejected inputs will not accept the lower price offer of the eventually informed firm is that the exposed input owners estimate that, even after their search and relocation costs, they will be able to find a less-informed employer, one who will similarly end up disappointed in the input's quality but, again because of our imperfect contract law, cannot recoup the interim overpayment to the disappointing input.

because of various inefficient ejection laws – if they were to make continuing, inexpensive, week-to-week, agreements with their lease-terminating tenants. Here, as in the case of over-monitoring, legislative intervention would be called for. A small subsidy for allowing tenants to temporarily use one's property on a free-rent basis and a bureaucratically imposed ejection process would create a Pareto improvement over the free market's unfortunately constrained attempts to minimize transaction costs.

The Alchian-Woodward definition of the firm, paraphrased as *a coalition of input owners whose imputed values when cooperating with one another exceed the sum of the values in their next-best uses*, however unintentionally admits only multi-person operations and also does not rule out bridge clubs.

All this does suggest an alternative definition and corresponding theory of the firm.

(c) A Suitably General Theory of the Firm. There really should be no struggle to come up with a general definition of the "firm." The reason is that we know what we, as economists, want to do with the term. We want to discuss final output and basic inputs. For these are clearly connected to institution-free welfare economics. So a "firm" is simply an internally cooperating organization (which includes a single person that internally cooperates with his future selves) that is part of the process of converting the society's inputs into final outputs.

It should also be clear (the 1977 paper at http://www.econ.ucla.edu/thompson/ proves it) that if there were an efficient legal system and a price-taking competitive equilibrium, firms would form so as to minimize the transaction costs of converting a given set of basic inputs into any feasible set of outputs. Hence, if we had an efficient legal system, it would not be theoretically interesting to specify what kind of transactions and transaction costs arise under various technologies. The upshot is that if describing firms and various kinds of transaction costs is an interesting subject, it is only because there are going to be

inefficiencies in the legal system, inefficiencies that generally invite various forms of legislative or bureaucratic intervention. It is not appropriate to study real world firms and transaction costs unless one is ready to find legal-constraint-based allocative inefficiencies.

*3. **Conclusion.*** What we see in Armen's work is a constant and highly commendable unwillingness to draw policy implications from high quality, seminal, economic analyses. This includes a reluctance to join our all-too-numerous groups of economic ideologues, economists who join together to flatter themselves into thinking that they are positively contributing to the highly evolved governmental institutions of their broader societies by continuing to recommend previously tried and pragmatically rejected classical or neoclassical economic policies.

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