How to improve the outcome of individual choices – the lessons of experimental economics

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In this piece I intend to address five points which empirical research suggests might fruitfully shed some light on how we can improve the outcome of investment and savings choices. I shall begin by highlighting some basic principles of wealth creation, before going on to look at pension and savings policies, a brief comparison of baselines and outcomes, possible unintended consequences of the new savings policies and finally the question of how we can promote human betterment.

Human betterment depends on creating wealth

The first issue that all policy reform proposals must consider is that human progress depends on wealth creation. So it is important to understand some of the principles behind this process. It is well understood but too easily forgotten that the creation of wealth springs from "can do" knowledge specialization, skills, innovation and its tools; and it is exchange which makes such specialization possible. Without markets, there can be no specialization and hence no wealth creation.

One of the things that we have learned from nearly 50 years of experiments in economics is that consumer/producer supply and demand markets are incredibly efficient. It is astonishing how people can walk into a laboratory, receive dispersed information on the willingness to pay and willingness to accept of different groups and within a few iterations they are able to find equilibriums which maximize the surplus of those groups. What is more, they have no idea that this is what they have done. This is the miracle of markets and especially of the trading mechanisms that have emerged in the discovery processes that have been going on for thousands of years in human communities.

The point worth emphasizing here is that markets are discovery processes. Traditional economic modeling of markets emphasizes the number of competitors and the conditions of competition and cooperation that are achieved through the pricing system. In this system all information is taken as a given and dispersed.

When we do experiments we find indeed that this particular formulation and representation of markets works very well. Much of what real markets are about is discovering new ways of managing technologies, new products which will be profitable. This is their primary purpose. But it is important to recognize that these new forms of innovation are essentially unpredictable. They arise out of numerous experiments by entrepreneurs, a bottom-up process in which most of the new technologies that emerge are destined to fail.

The automobile industry provides a good example of what I mean. At the turn of the previous century, around 1900, there were literately hundreds of people experimenting with ways to make self-propelling carriages and a good third of these experiments involved electric cars. Edison had invented the battery. The advantage of the battery-operated car is that you do not need a transmission system to transfer power from a fixed rotating engine to the wheels. This problem was really not successfully solved until much later. What is interesting is that electric car production did not peak until 1912. The other main area of experimentation were the many attempts to turn the steam engine into a viable form of locomotion. And out of that process, the winner turned out to be a long shot, Henry Ford and the internal combustion engine. His early engine, by the way, burned ethanol, as gasoline was not yet widely produced.

My own hometown, Wichita, Kansas, was the center of the light plane industry. In the late 1920's there were 15 manufacturers of light planes. Ten years later, by 1938-9, only three survived: Steerman, Beach, and Cessna. More recently in the 1990's we saw the dotcom Internet boom, which threw up hundreds and thousands of experiments. Most of them failed, but out of that process came a few winners which created incredible long term value and increases in productivity that were being reported even during and after the crash that ended the stock market boom in 2001.

Another key factor to recognize is that wealthy societies have always followed liberal principles: the rule of law, choice regulated by markets and the action of others constrained by property rights. Of course, property itself cannot have rights. The rights are those of the human beings who own the property. David Hume put it perfectly over 250 years ago, when he said, "there are just three laws of human nature: the right of possession, its transference by consent, and the performance of promises."

So within a few general rules—though shalt not kill, steal or bear false witness—people are largely left to their own devices to work, discover, innovate, and play. The result, as Mandeville put it so eloquently, is that, "the very Poor Liv'd better than the Rich Before".

In this process freedom is crucial to socioeconomic evolution, and I think there are two ways in which this works. In the first place freedom generates variation. New ideas and experiments, both at the individual level and at the group and policy level, are the lifeblood of cultural change.

Secondly, it assists in selecting the most successful ideas. Human beings are good at coming up with proposals and ideas but they are not very good at selection. This explains why centralized economies fail to identify the best potential winners. Decentralized discovery processes and free exploration are much more efficient in finding products and product combinations that people are willing to buy.

I would also want to emphasize that we cannot redistribute wealth if none is created. Nobody gets any if there isn't any. Therefore all redistribution schemes and policies must pay homage to the need to protect wealth creation. They must also try to minimize the unintended negative consequences, a point I will come back to.

Finally, we must remember that saving, i.e. foregoing consumption of earnings, is society's only means of releasing some of its surplus to allow for future growth and investment. It is the primary source of all human betterment.

The status quo and default decision making

This brings me to my second area of discussion, the *status quo* bias, and how it affects our decisions regarding how much we save or invest for the future.

This bias in decision making seems to be a natural property of who we are as human beings. The essential component of the *status quo* bias is inertia. And inertia is an extremely important characteristic of all human decision making, even when the stakes are very large, not only for trivial matters.

People rarely revisit their savings, retirement, health plans and life opportunity decisions. The default is No Change. And this persists even when a change is necessary to achieve the individual's stated goals. When asked how much they would like to save—1%, 3%, 5%, 7%, 12%?—people may say, "well I'd like to achieve 7%." But if they try to commit to saving 7%, we find they are reluctant to do so over a period of time. On the other hand, if we ask people beforehand to commit to a higher savings rate out of income that will become available in the future, such as prospective pay increases, they are more likely to buy into the idea. So there are ways of pre-committing and setting a default target which can sometimes improve decision making.

It is important to recognize that this default, this inertia, is a key feature of how our brains work. When you are driving a car, you are not thinking about driving a car. This is a beautiful example of the kinds of automatic brain processes that we rely on in day-to-day decision making. Contrary to economic theory, most actions do not flow from mindful deliberation. In the supermarket where I shop, as I check out the attendant always asks, “did you find everything you were looking for?” I answer, “oh yes, and all kinds of things I was not looking for”.

The point is that in reality, we do not think ahead and plan, or think about our preferences and how we can optimize those within a given budget. In a given context, we get ideas. We see what it is we need or want to buy. Attention resources, the resources of reasoning, are among the scarcest resources in the brain. So our brains learned a long time ago to decentralize and allow routine decisions to be taken without our conscious, continuous surveillance. And this process serves us very well.

Meanwhile the brain does not report regularly to the mind and say “hey, it’s time to review your pension policies again”. So naturally we put these tasks off. As Hayek pointed out, “if we stopped doing everything for which we do not know the reason, or for which we cannot provide a justification, we would probably soon be dead”.

These considerations argue for simple “default in” policy rules like auto enrolment in new pension plans and savings plans out of future income. But the question we need to ask is whether “default in” rules are enough? Will people’s inertia trick them into achieving the desired savings? No-one knows until we observe the long-term effects of such policies.

Personally, I tend to be an over-saver and I do not reevaluate. Having been conditioned by the kind of environment I grew up in, I have always over-saved and contributed more than I need to for my retirement. A lot of evidence indicates that individuals have these sorts of lifetime styles for decision making which do not necessarily change as they grow older. They are formed early on, and become a mark of that person’s personality in decision making.

Baselines vs. Outcomes. Do only the latter change?

It is common for policy proposals to assume that the main effect will be the outcome of the proposal while the baseline conditions do not change as those outcomes are achieved. In reality, quite often the prevailing baseline conditions that motivate policy reforms change in a way that is not foreseen, resulting in unintended consequences.

An excellent example of this is the way in which the welfare system in the United States has altered the family structure by providing incentives for male heads to separate from the family, leaving existing families with female heads and creating new households.

When the airlines were deregulated in the 1970’s policy makers intended to deregulate the routes and nobody gave any though to the airports. However, the change enormously increased the efficiency with which the existing stock of aircraft was used and one of the early, completely unanticipated effects was the hub structure for the airline industry. People expected there would be more point-to-point service between secondary airports; instead, the traffic was routed through hubs.

What the industry came to discover was the influence of profitability. People want frequency of service, as can be seen in the non-stop-service between secondary cities after deregulation. But if the airlines cannot add enough aircraft to achieve this through local airports, flights are deflected through the hubs. Today, after a period of time, fleets have been redesigned and we are starting to get somewhat more service between the secondary cities.

Another example of the type of unintended consequences that can occur came out of the tightening of the criteria for bankruptcy in 2005. At that time many people were using bankruptcy as an easy option to avoid paying their debts. By making it more difficult to qualify, we greatly reduced the numbers of people filing for bankruptcy from something like 2 million to 600,000. However, an unintended consequence was that the lower cost of the supply of funds resulted in an increase in lending and in particular, more lending to people in the higher risk categories. The result was an increase in financial distress and that in turn has fed into the mortgage crisis we are witnessing today.

Will the new savings policies have unintended consequences?

The question we now have to answer, then, is whether we can be sure these new "default in" pension plans and savings policies will produce the outcomes we hope for. To get the full benefits from increased saving, we also need to create new investment opportunities. Otherwise the result will be rapidly diminishing returns as increased savings simply press upon those existing opportunities, thereby reducing yields and very probably leading to disappointing results. So I think we need to ask where these new investment opportunities are going to come from. Higher saving increases the demand for opportunities, but is it going to impinge on the same supply of opportunities, or are we going to do something to try and multiply those opportunities ?

Another potential unintended consequence of increased savings, if we are successful, is the effect this easy money might have on the due diligence of fund managers.

A third aspect concerns passive investment. If increased saving generates automatic inflows into Index Funds and similar vehicles, who is going to discover the share prices upon which the Index is based? The prices in Index Funds are all discovered by investors making their individual investment decisions. As we move more and more towards passive forms of investment, what impact will this have on the entire discovery process and asset markets as a whole?

Again, we know that bubbles are exacerbated by increased liquidity. How will increased money flows impact stock market bubbles? When Clinton authorized the deductibility of capital gains on homes (up to $500,000) everyone applauded. Today we are looking at a crash in the mother of all housing/mortgage market bubbles. We cannot expect to select one asset, make it tax free and not expect investment to flow into that asset. Is higher consumption—second or third homes—the path to innovation and greater productivity? And can it really lead to human betterment?

Policies for human betterment

If we are successful in increasing savings and investment, and hope to achieve long term economic betterment, we are going to need more new investment opportunities in the future. We need to ask ourselves where they will come from. On this note I will conclude with what I consider something of a challenge for the European economies.

The question is why do the big European economies—Germany, United Kingdom, France, Italy, Spain—not rank among the best ten in the following eight indices of economic performance? I have taken these figures from the Economist's annual statistical supplement. Europe’s five largest economies are not among the top ten performers in the Human Development Index, Innovation Index or Information Technology Index.

Nor are they among the bottom ten on the Low Brain Drain Index. Anecdotally this is consistent with my observations of students coming from Italy, Spain and other European countries, to the United States. When I ask them “why are you here?” they all give the same reply: “more opportunities for young people”. They see the United States as a place which offers greater opportunities for them and their career advancement and their ambitions. Why is Europe losing its best and brightest?

These same five economies are not in the top ten in Global Competitiveness or on the Economic Freedom Index, apart from the United Kingdom which ties for fifth place in the last index. Again, if we look at the data for the Number of Days it takes to Register a New Business, only France among the top five European countries appears among the countries lowest on that index, and it is tied at number 8 with three other countries.

Finally, only the United Kingdom appears on the Favorable Business Environment index, just sneaking into tenth place.

No-one has successfully demonstrated that they know how to turn around a lagging economy from the top down. However, some countries have tried removing barriers to development, and watched their people work economic miracles. Examples include Post WW II Germany under Chancellor Erhard, Chile, Ireland and China.

If Europe is to follow their example and productively employ increased savings, I suspect that it will need to improve its performance on all the above measures.

Index/Country	**Austria**	**France**	**Germany**	**Italy**	**Spain**	**Sweden**	**UK**	**USA**	**Japan**
Human Development	94.4	94.2	93.2	94	93.8	95.1	94	94.8	94.9
Information Technology	5.11	4.43	4.64	n.a	n.a	5.89	5.14	5.59	4.89
Low Brain Drain (the lower, the better)	below 5	below 5	below 5	below 5	below 5	below 5	below 5	6.1	5.7
Global Competitiveness (Ranking)	11	28	16	42	30	9	20	1	24
Economic Freedom	71.3		73.5		70.9	72.6	81.6	82	73.6
Days to Register a New Business	over 8	8	over 8		over 8	over 8	over 8	5	
Favorable Business Environment	8.28	8.13	8.43	6.99	7.83	8.60	8.55	8.67	7.48

Source: Pocket World in Figures, The Economist, 2008 Edition