

The Risk of Government Policies and the Rationing of Retirement

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In late April, a group of leading economists and investment practitioners assembled in La Jolla, California, for Research Affiliates' 2013 Advisory Panel. Our theme this year touched on two topics that have been front-and-center in recent public debates: the risk of government intervention and the potential rationing of retirement. In this synthesis of the presentations, I highlight key messages which struck a chord with me. I do not summarize all the salient points of the astonishingly rich and varied presentations; any such attempt would entail an unacceptable sacrifice of nuance. At times, my interpretations and comments, unintentionally, may corrupt the original genius, and for that I apologize.

Vernon Smith, who shared the 2002 Nobel Prize in Economics with Daniel Kahneman, and co-author, Professor Steven Gjerstad, set the scene by depicting the Global Financial Crisis and the subsequent Great Recession as a household and banking balance sheet crisis.¹ As they examined housing investment and mortgage debt in the context of past recessions, it became apparent that the Great Depression and the Great Recession in the United States coincided with a significant destruction of the household balance sheet due to the housing price collapse. This balance sheet impairment has also been observed in other countries during periods of significant economic decline.



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Nobel laureate Vernon Smith sees the recession as a household–bank balance sheet crisis.

What makes the recent crisis particularly interesting is the role of the government. The U.S. government has been unequivocal in its intention to promote universal home ownership and thereby lessen inequality in the attainment of the American dream. The policy has achieved outstanding success. Low interest rates, the tax deductibility of mortgage interest expense, and the securitization machinery set in motion by government-sponsored entities led to greatly expanded home ownership. And, briefly, these policies also created the conditions for a stunning increase in household wealth. Between 2004 and 2007, the median change in U.S. consumers' net worth was almost 18%, with the lower income households seeing the largest percentage wealth increase. Then, however, things went badly. Low income, low net worth households, which could ill-afford to bear investment risk, were encouraged to enter highly leveraged real estate transactions. A negative shock to housing prices destroyed household balance sheets, with inevitable spillover effects on the balance sheets of the lending institutions. Between 2007 and 2010, median consumer net worth declined by 39%, with, unfortunately, low income households facing the greatest percentage decline.² This fragment of economic history is a powerful reminder that government intervention can have unintended consequences, often of unforeseen magnitude.



Chapman University economist Steven Gjerstad analyzed depreciation's impact on exports.

The aftermath shows us what happens when the balance sheets of households and banks are impaired. The “negative equity” for homeowners and financial institutions creates incentives for perverse behavior, including asset substitution³ and underinvestment (debt overhang). The literature on corporate finance tells the story of desperate equity holders engaging in highly risky transactions with negative present value (NPV) as a way to gamble in an attempt to get out of the hole (asset substitution). At the same time, low risk positive NPV projects are forgone because equity holders do not benefit from modest increases in asset/enterprise value; instead equity holders may prefer to erode asset value through self-enriching schemes.⁴ These sub-optimal patterns of behavior are precisely why “zombie” banks and households are undesirable and growth inhibiting in an economy.

As the undead wander the social and economic landscape, investors are loathe to put in fresh capital, not only because lending to perversely motivated zombies is generally a bad idea, but also because their investments can be diluted if government policies designed to protect moribund banks channel new money to past capital claimants whose investments failed. The uncertainty about

future government policy further discourages the capital market from injecting fuel and much needed new stewardship to rekindle and shepherd growth.

Note that when the recession is driven by a balance sheet crisis, instead of a liquidity crisis, providing more liquidity will not drive real investments and growth. Healthy financial intermediaries are simply not interested in extending credit to zombie entities. Having the government direct liquidity toward these zombie entities by fiat would only be throwing good money after bad. Stimulus spending, on the other hand, has a limited effect in resolving the primary problems: it quickly restores the equity value of zombie banks and households. Of course, it can accidentally stimulate economic activity in areas where no inducements are needed.

Restoring Economic Activity Means Making Hard Choices

There exist various solutions for eliminating zombie households and banks and restoring economic activity. But all the options are painful. The Japanese model is one where zombies and their creditors and investors are protected (and often receiving welfare in the form of social and corporate subsidies) until their balance sheets are restored. Under this approach, it can take decades to nurse zombies back to life, and anemic economic growth is experienced throughout the period of convalescence. In this model, the significant transfer cost is dwarfed by the cost of the growth drag imposed on all citizens due to the zombie entities.

The Swedish model, in which balance sheets are rebooted through bankruptcy and orderly default, can take effect more immediately, writing down debts for households and salvageable financial institutions while eliminating poorly functioning banks by wiping out their investors and creditors. In the U.S. tax code, these actions are known as Chapter 11 and Chapter 7 bankruptcies, respectively. The Swedish model is the textbook prescription for eliminating zombies, and it illustrates the benefits and usefulness of orderly bankruptcy. The cost is an immediate recognition of substantial losses concentrated entirely on equity and bond investors. While personal bankruptcy generally leads to a fresh start and greater future growth in the standard of living, it can be psychologically traumatizing, and this solution is shunned by some households.

The Finnish model involves rapid (but often temporary) currency devaluation. This approach has proven to be effective for other countries like Mexico, Argentina, Thailand, and other Southeastern Asian countries. The massive devaluation can be interpreted as a marking down of all domestic assets and debt in global currencies—a decline of 30% in currency value, in one fell swoop, reducing the debt burden by 30% in international terms and at the same time increasing the international rent on exportable factors of production. This method reduces domestic consumption in favor of exporting, pushes internationally uncompetitive wages down, subsidizes the export oriented industries, and marks down savings and the inflated nominal wealth that has been stored in real estate. This sequence of “price” re-alignment through the currency channel eliminates the “economic drag” associated with downward rigidity in wages and real estate prices (both of which result from the domestic real estate bubble underlying the balance sheet crisis). At the same time, the Finnish model significantly resets the debt burden of the zombies. The depressed currency and therefore the subsidy from holders of domestic cash and assets to debtors and exporters (firms and workers) will continue until the impaired balance sheets are repaired.

Each of the possible solutions is harrowing: the housing price decline destroyed wealth, and there is simply no magical government program for restoring wealth painlessly. Moving money from asset rich households and firms to subsidize the indebted does not increase overall wealth and can often exacerbate the problem, especially if it means prolonging the zombie apocalypse. While the government does not get to create wealth out of thin air through transfers (much as it might like to claim such a magical ability), it does get to choose when and to whom the pain will be allocated.

The Risk Isn't Default, It's Inflation

Christopher Sims, who shared the 2011 Nobel Prize in Economics with Thomas Sargent, reminds us that inflation isn't determined by monetary policy alone; how, and how well, monetary policy is coordinated with fiscal policy is critical.⁵ Massive government borrowing, accomplished by Fed balance sheet expansion through quantitative easing, will not create inflation as long as the money goes into very positive NPV projects to drive strong real growth and, with it, future taxes and primary surplus.



Nobel laureate Christopher Sims presented the fiscal theory of the price level.

When the government can print money, there will be no risk of default—if there is insufficient tax revenue to service the debt, the government can simply issue more debt (with the central bank as the buyer of last resort); the risk lies solely in the “real consumption” afforded by the coupons and principal received. Government bonds can then be conveniently modeled in real terms as the discounted present value of future “real cash flows.” If there are ample future tax revenues to retire debt, it means the government spending and investments have paid off; the economy is expanding and productivity growth is robust. In this environment, the production of goods and provision of services are ample, and nominal wealth translates into meaningful real consumption. If the market forecasts this state of the future world, then bond prices are high today, even in the face of high government debt and aggressive quantitative easing (QE).

However, if the future primary surplus (tax revenue minus non-interest related expenses) is insufficient to service outstanding debt, then new debt must be issued to roll over old debt. This environment will be one in which the economy continues to slow. A prolonged slowdown is marked by declining productivity growth despite ongoing government stimulus and uninterrupted QE—this is a path that could be likely for the economy of a rapidly aging country, where the ratio of productive workers to retirees will fall

precipitously. No amount of government stimulus spending is likely to change the growth drag created by aging demographics. The nominal wealth guaranteed in bonds will have little claim on the real economy. If the market forecasts this state of the future world, then bond prices are low today.

The ability to print money gives the government an *ex post* option to renegotiate (write down) its debt in real terms. If the government spending and/or investments prove wasteful or unwise, it can allocate the pain to bondholders by printing more money instead of facing the wrath of the electorate by raising taxes in a slumping economy. This option to renegotiate debt without legislative procedure enables irresponsible spending by the government, perpetually, or at least until rampant inflation ensues.⁶

The government's willingness to borrow rather than tax is a statement about its ability to allocate pain. Higher taxation today allocates pain to wage earners now. Borrowing is a tax on future wage earners. Persistent deficit and therefore persistent borrowing will ultimately result in inflation, which is, of course, an implicit wealth tax on all savers. In Japan, we have seen three decades of wasteful government spending with no growth to show for it. Japanese households have responded rationally by saving more aggressively to offset the impact of the impending tax hike or price hike driven by decades of QE and fiscal mistakes. What remains to be seen at this point is how the Japanese government will allocate the pain of its wasteful stimulus programs. This question must, at some future point, be addressed by the American government as well, with its mounting debt, and the Chinese are certainly very interested in knowing whether penalizing the bondholders to protect the taxpayers would be the solution the United States finds most convenient.



Cal Tech's Bradford Cornell proposed macroeconomic principles modeled on scientific laws.

Economics Has Its Own Laws of Conservation

Professor Bradford Cornell demonstrated that, like physics, economics also has a few foundational laws of conservation, which cannot be violated, no matter how popular or powerful the great wizard in the White House might be. Specifically, we can only consume what we produce in aggregate. Consequently, if fewer of us produce, then per capita consumption must decline. This law has tremendous implications for the impending pension crisis in the context of boomer retirement.

This law suggests that “nominal” pension savings cannot help retirees all consume more, when the aging demographics necessarily means that a significant fraction of the workforce goes into non-productive retirement. From a per capita basis, unless we are blessed with major technological advances to boost productivity, we must necessarily consume less no matter how much nominal wealth we have accumulated in aggregate. Our relative wealth in retirement merely serves to influence how we split a smaller pie. This reasoning

supports a prediction offered by another speaker at the 2013 Research Affiliates Advisory Panel: Tim Hodgson of Towers Watson anticipates that there will be rationing in the upcoming global retirement boom.

However, government intervention creates yet another uncertainty (and perhaps another unintended incentive) in the retirement planning calculation. If one believes that the government's objective function is to redistribute consumption in order to ensure reasonable equality in the quality of living for the elderly, then it is arguable that a large retirement savings account could translate into significantly more consumption per retirement year, especially in the coveted area of high-end healthcare. The government must simply means-test public benefits, increase taxes to fund more retirement welfare, ration healthcare resources, and pursue a regime of low interest rates and higher inflation to erode the assets of retirees with large savings balances.

At the heart of the retirement challenge is the simple fact that we cannot store human capital. And slavery is not an option. Asian families have traditionally tried to work around that by keeping a stranglehold on their children (children are expected to care for their aging parents), but, given the widespread adoption of Western pop culture in Asia, that approach is not working as well now as it did in the past. Western societies have solved the problem of providing for old age by means of property rights; old folks who own the machines and the underlying intellectual property can force the young to share the fruits of their labor. While the boomers cannot own generations X and Y, they can own the tools they need to make a living!

The transition from the boomers to gen Xs and Ys in the workforce brings into focus the second fundamental conservation law in economics: how much we produce in the long run depends on how many people are working *and how productive they are*. If gen X and Y workers are more productive than the boomers they replace, then the pie will be bigger, and dividing it will be less contentious. Thus, the retirement problem can actually be recast as an innovation problem, to which investment—understood this time as an allocation of capital that enables innovators to succeed—is a solution. If boomers allocate capital wisely to productive enterprises, they can solve the retirement problem by fostering innovation which ultimately increases productivity for the gen X and Y workers. For their contribution to technological advances, boomers are hoping that gen Xs and Ys would share generously rather than drive up wages so severely as to wipe out much of the real value of boomers' nominal retirement portfolios.

What Does Rationing Retirement Mean for the Quality of Life?

To be perfectly fair, we do have evidence that boomers' prudent and ample aggregate investment have led to a significant productivity increase in the United States. One could interpret the steady rise in labor non-participation (that is, the percentage of working age adults who do not work) as reflective of the significant increase in human productivity. The kind of innovation where machines replace people raises the natural rate of unemployment: the more innovation, the more people can "not work." If *anybody* should be not working, it's probably our aged parents and small children. Retirement has always been more about optimal labor nonparticipation than buffets on a cruise ship.

Given the impending pension crisis and the inevitable rationing in boomers' retirement, one might ask: Is retirement a historical anomaly? Keith Ambachtsheer traced its origin to the latter half of the 19th century, when it became apparent that railroad employees could not continue working until the day they died; the number of train accidents due to mistakes made by track operators, in their advanced years, were unacceptably high. On the other hand, cushy retirements, where boomers' parents received a big slice of a big pie, developed more recently. Perhaps it is time the pendulum swings the other way and retirement returns to its original intent—as optimal workforce nonparticipation rather than self-enriching entitlements voted in by popular demand and aided by governments which are uninterested in acknowledging a crisis that was entirely predictable under the twin laws of conservation in economics.

Finally, on the lighter side, Tim Hodgson pointed out the extreme risks that investors (in fact all human beings) face, risks which would, if they came to pass, make government policies, pension underfunding, and retirement rationing irrelevant. One such example is an invasion by aliens who consume more than they produce and seek to resolve their own retirement problem by taking humanity's goods. As far-fetched as this may be, it can serve as an allegory for the risk of advanced aging economies attempting to exploit the labor of the less advanced economies through less honorable means. Many people are betting on advanced robots to perform assisted

living services with tender care (rumor has it, the Japanese already have robots who can wash your hair and give you a scalp massage), and we may be that much closer to Skynet solving our longevity risk. If having Terminators end life as we know it seems unlikely, perhaps we also shouldn't bet on having a doting C-3PO at our beck and call.



Keith Ambachtsheer (left) and Tim Hodgson (right) spoke of the potential need to ration retirement. Chris Brightman moderated.

In sum, these and other presentations and related conversations were sobering. We spend our lives working and hoping for a few good, healthy years in retirement. The experts seem to want to tell us that demographics and other economic forces are likely to surprise even those of us who save religiously with a rather austere retirement if not one that is characterized outright by lacks and insufficiencies. I can't help but think that all this talk about optimizing output and consumption disregards the most important question: What about happiness? There is wisdom in the ancient prescription that happiness is not having what you want but wanting what you have. So love your parents, and love your friends' parents, too. Love them for their wisdom; love them for their driving-you-mad-by-treating-you-like-a-five-year-old; love them for the free babysitting and house sitting; love them for their frailty, which teaches all of us some humility and humanity. They will live a good long time and lean heavily on us for support and, most of all, for love. And, in turn, we and our children will also be surrounded by love. In that world, there is no rationing but only abundance.

Endnotes

1. Their presentation was based upon *Prosperity and Recession*, forthcoming from Cambridge University Press.
2. The corresponding averages were lower. In the 2004–2007 timeframe, mean household income and net worth rose approximately 13%, and in 2007–2010 it declined about 15%.
3. See the classic corporate finance paper Myers and Majluf (1984) for an in-depth theoretical discussion on asset substitution for highly indebted entities.
4. See Myers (1977) for a theoretical discussion. We see this behavior in spades in neighborhoods with significant under-the-water properties, where the home occupant no longer makes payments on the mortgage or maintains the property. Many home occupants have also actively prevented lenders from foreclosing on their properties in an attempt to consume housing rent-free or force favorable concessions from lenders. The resulting, steady decline in the home's value spills over to the value of other properties in the neighborhood.
5. This is the fiscal theory of the price level (FTPL). Sims and John H. Cochrane have contributed significantly to its development.
6. If the government can't print money, as is the case of Eurozone member nations, then bad fiscal policy cannot be bailed out by inflating the debt away. Debt resolution can only occur in the format of painful sovereign default, which would then place a country under IMF's austerity prescription. There has also been wasteful spending in Greece and Italy, but those countries have shown little ability to collect taxes. For the time, while they are unable to print their own currency, defaulting on their bondholders becomes necessary. If they were to exit the Euro currency zone, they will then soft default on their debtholders through high inflation and currency devaluation.

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