America’s Fiscal Insolvency and Its Generational Consequences

Testimony to the Senate Budget Committee

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Chairman Enzi and Other Distinguished Members of the Senate Budget Committee,

I am honored to discuss with you our country's fiscal condition. Let me get right to the point. Our country is broke. It's not broke in 75 years or 50 years or 25 years or 10 years. It's broke today. Indeed, it may well be in worse fiscal shape than any developed country, including Greece.

This declaration of national insolvency will, no doubt, shock those of you who use the officially reported federal debt as the measuring stick for what our country owes. After all, federal debt in the hands of the public is only 74 percent of the GDP. Yes, this is double the debt-to-GDP ratio recorded a decade ago. But it's still a far cry from Italy's 135 debt-to-GDP ratio or Greece's 175 percent ratio.

Unfortunately, the federal debt is not an economic measure of anything, including our nation's fiscal position. Instead, the federal debt and its annual change, the deficit, are purely linguistic constructs that reflect how you members of Congress choose to label government receipts and payments.

To see this point, consider the almost $750 billion the government is collecting this year from workers under the heading Social Security payroll taxes and the future Social Security transfer payments these FICA contributions secure. The $750 billion could just as well be called government borrowing and the future transfer payments could just as well be called principal plus interest on this borrowing plus a future tax (positive or negative) if the future payments don't correspond precisely to principal plus interest.

This simple change in language would more than double this year's reported federal deficit. Indeed, were we to go back in time and re-label all past Social Security taxes as borrowing, official federal debt held by the public would not be $13 trillion, but $38 trillion, which is 211 percent of U.S. GDP.

Driving in NY With a Map of LA

Economic theory doesn't tell us what language to use to discuss its equations. Whether we use English, French, or Chinese, the real economic outcomes predicted by the math are the same. Fiscal labeling conventions are simply a choice of language. And federal debt is a word game, not a well-defined measure of fiscal policy. Its use in understanding fiscal sustainability and generational policy is no different from driving in Los Angeles with a map of New York.

Economics is not the only field where language can mask reality. In physics, time and distance were once viewed as fundamental concepts. Today they are understood for what they are – reflections of our physical frame of reference, which is itself a language. And just as there are an infinite number of alternative measures of time and distance, there are an infinite number of alternative measures of the federal debt. Choose the right words and you can make the federal debt any number, positive or negative, you want.

Moreover, the fact that Congress has chosen particular fiscal labels over time does not make those labels economically more valid than any other set of internally consistent labels. Each of us is free to come up with his own labeling convention and produce his own utterly useless measure of government debt.

My Mother's Treasury Checks

One way to clearly see the vacuity of standard fiscal accounting is to consider the two sets of checks my 95-year old mother receives from the U.S. Treasury. The checks look physically identically. They are both the same size, color, and have the same words in the same font. The only way they differ is in their amount. This is how I know that one set of checks is for Social Security benefit payments and the other is for coupon payments on Treasury bonds.

Despite the identical nature of their appearance, only the present value of the Treasury bond payments is included as part of government debt. The present value of the Social Security payments my mom receives each month is not.

Why is that?

Yes, the Treasury bonds bear "the full faith and credit of the U.S. government." But those fancy, legal words don't make those bonds safe in any real economic sense. Our government has periodically defaulted on the real value of official debt by running inflation. In 1946, for example, it wiped out a quarter of the real value of War Bonds by lifting price controls. In the 1970s, our government used inflation to wipe out hundreds of billions of dollars in the real value of federal debt.

So my mom's payments that Congress is currently calling debt payments are hardly safe. In contrast, her Social Security benefits, which are inflation-indexed and backed by the lobbying power of 50 million members of the AARP, are secure against both inflation and changes in legislation. Yet, Congress includes not a penny of these liabilities in its tally of what the federal government owes.

What economics tells us is that we can't choose what to put on the books. All government obligations and all government receipts, no matter what they are called, need to be properly valued in the present taking into account their likelihood of payment by and to the government.

Cooking the Books

Congress's economically arbitrary decisions as to what to put on and what to keep off the books have not been innocent. Successive Congresses, whether dominated by Republicans or

Democrats, have spent the postwar accumulating massive net fiscal obligations virtually all of which have been kept off the books.

Net fiscal obligations refers not just to formal and informal commitments to high future transfer payments, but also formal and informal commitments to low future levels of taxation.

Spending six decades raising or extending transfer payments and cutting or limiting taxes helped members of Congress get reelected. But it has placed our children and grandchildren under a fiscal Sword of Damocles that gravely endangers their economic futures.

The Fiscal Gap

Economic theory is unequivocal in telling us what not to measure when it comes to fiscal sustainability and generational policy. It's also crystal clear in telling us what to measure, namely *the infinite-horizon fiscal gap*. The infinite-horizon fiscal gap tells us whether the government has, over time, enough receipts to cover its projected spending. It equals the present value of all projected future expenditures less the present value of all projected future receipts.

The infinite-horizon fiscal gap has five important properties.

First, it puts everything on the books. All expenditures, regardless of whether they are called debt service, transfer payments, or discretionary spending are included in forming the present value of future outlays. It also puts all receipts on the books, including income the government receives on its real and financial assets.

Second, the infinite-horizon fiscal gap takes on the same value regardless of what internally consistent labeling convention is used to characterize fiscal outlays and receipts. In contrast, any finite-horizon fiscal gap, such as the 75-year fiscal gaps calculated for the Social Security and Medicare programs, are, like the federal debt, creatures of nomenclature. I.e., they can be set to any value one wants simply by choosing the right fiscal labels.

Third, a positive fiscal gap means the government is attempting to spend, over time, more than it can afford. Doing so violates what economists call the government's *intertemporal budget constraint*. Hence, a positive fiscal gap is a direct measure of the unsustainability of current fiscal policy.

Fourth, eliminating the infinite-horizon fiscal gap is a zero-sum game across generations. Hence, the fiscal gap tells us the fiscal burden that will be imposed on today's and tomorrow's children if current adults don't pay more to or receive less from the government. Understanding the fiscal burdens our kids could face from the fiscal gap is called *generational accounting*.

Fifth, the machinery of fiscal gap accounting tells us the size of the adjustment needed to balance the government's intertemporal budget constraint and how the magnitude of the requisite adjustments depend on when the adjustment begins.

The U.S. Fiscal Gap

The U.S. fiscal gap currently stands at $210 trillion. This figure is my own calculation based on the Congressional Budget Office's July 2014 75-year Alternative Fiscal Scenario (AFS) projection.

Constructing the infinite-horizon fiscal gap from the CBO's AFS projection takes less than five minutes. One simply needs to extend CBO's projection into the future and engage, via Excel, in some high-school algebra to form the appropriate present values of expenditures and revenues. Yet the CBO refuses to make the infinite horizon fiscal gap calculation and continues to focus attention almost exclusively on official debt. In so doing, the CBO is, in my opinion, deliberately misleading the public and Congress about our nation's true fiscal condition.

The size of the U.S. fiscal gap -- $210 trillion -- is massive. It's 16 times larger than official U.S. debt, which indicates precisely how useless official debt is for understanding our nation's true fiscal position.

U.S. GDP currently stands at $18 trillion. Hence, the fiscal gap represents almost 12 years of GDP. The fiscal gap can also be compared with the present value of the CBO's projection of GDP extended through the infinite horizon. Doing so indicates that the fiscal gap is 10.5 percent of GDP. This means we need to either reduce the time path of government expenditures by 10.5 percent of GDP or raise the time path of government revenues by 10.5 percent of GDP. Alternatively, we can enact a combination of spending cuts and tax increases that amount to 10.5 percent of annual GDP. This adjustment needs to begin immediately and continue forever. Waiting to adjust will leave current adult generations either fully or partially off the hook and make the fiscal burden on young and future generations that much larger.

What's Needed to Close the Fiscal Gap?

Our $210 trillion fiscal gap represents 58 percent of the present value of projected future taxes. Hence, eliminating the fiscal gap via tax hikes requires an immediate and permanent 58 percent hike in federal taxes. Stated differently, the overall federal government is 58 percent underfinanced.

By way of comparison, the Social Security system, taken by itself, is 33 percent underfinanced. (I.e., its infinite-horizon fiscal gap, reported in table VIF1 of the 2014 Trustees Report, is 33 percent of the present value of projected Social Security taxes.) Another comparison is Detroit prior to declaring bankruptcy. The city appears to have been roughly 25 percent underfunded. Hence, the U.S. is in far worse fiscal shape than was Detroit before it went broke.

Another option is to cut spending on all expenditures, apart from servicing official debt, to close the fiscal gap. Doing so requires an immediate and permanent 38 percent spending cut.

The Price of Delay

Table 1 below shows the requisite tax hike or spending cuts needed to eliminate the fiscal gap if such adjustments are postponed into the future. Waiting, for example, for a decade to permanently raise revenues requires a 64.4 percent tax hike starting at that date. Alternatively, spending would need to be cut not by 37.7 percent, but by 40.4 percent starting in 2025. Obviously, the longer we wait to adjust, the worse the impact on our children and grandchildren. If, for example, we wait until 2035 before adjusting via tax hikes, we'll sentence today's newborns to lifetime tax payments that are 70.4 percent larger than would arise under current law.

Table 1
Percentage Revenue Increase or Cut in Spending (apart from debt service)
Needed to Eliminate U.S. Fiscal Gap for Different Adjustment Starting Year

Start year	Revenue Increase	Cut in Spending
2015	58.5	37.7
2025	64.4	40.4
2035	70.4	43.2
2045	77.0	46.5

Source: calculations by Laurence Kotlikoff based on CBO's 2014 Alternative Fiscal Scenario

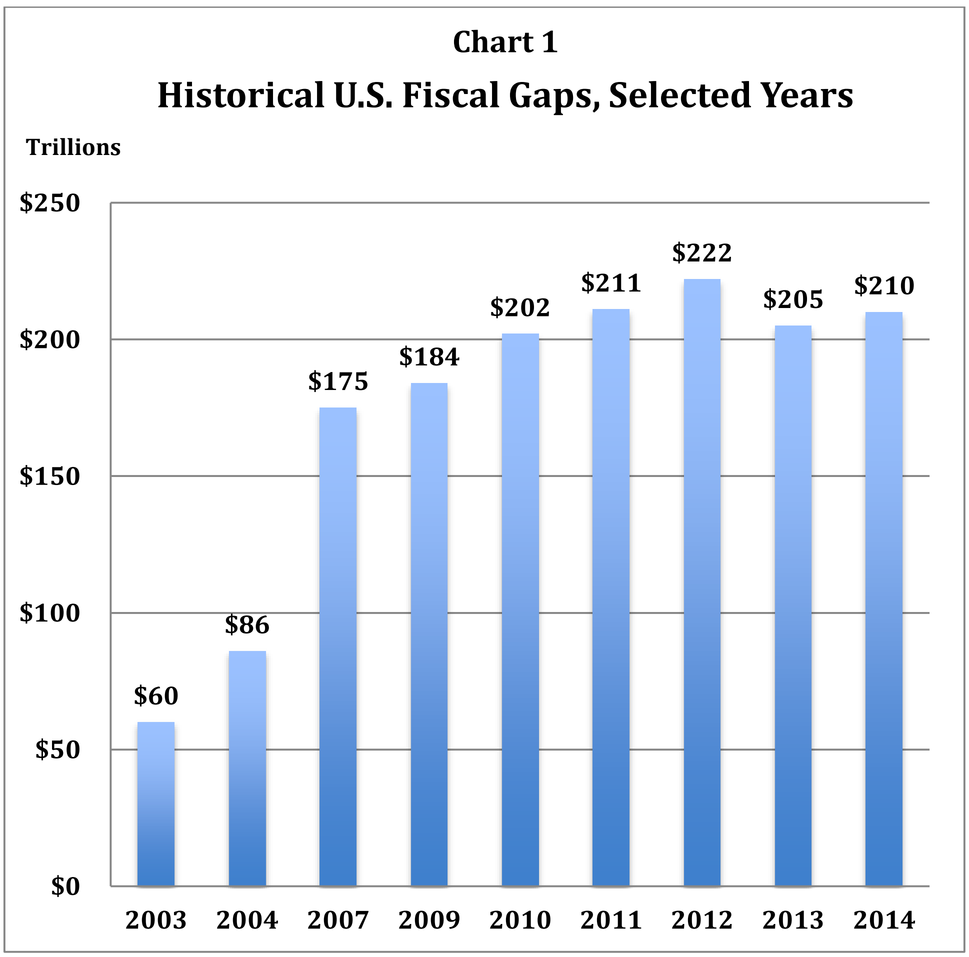
Our Nation's True Deficit

In 2013 the fiscal gap stood at $205 trillion. In 2014 it was $210 trillion. Hence the country's true 2014 deficit – the increase in its fiscal gap – was $5 trillion, not the $483 billion increase in official debt reported by the CBO.

Why did the fiscal gap rise so dramatically? A major reason is that the baby boom generation got one year closer to collecting what will ultimately be about $40,000 in Social Security, Medicare, and Medicaid benefits per person per year. Hence, the present value of these obligations rose due simply to interest. Stated differently, the fiscal gap is, in effect, our nation's credit card bill and like our own credit card balances, the fiscal gap accrues interest. If we fail to pay interest on the fiscal gap it will get larger.

The Growth in the U.S. Fiscal Gap

As indicated in the chart below, the fiscal gap has risen dramatically over the past dozen years. This reflects interest accrual. But the major reasons for the growth in the fiscal gap from $60 trillion in 2003 to $210 trillion today are tax cuts, increases in Medicaid and Medicare benefit levels, additional defense spending, and the introduction of Medicare Part D. The U.S. fiscal gap was reduced, from $222 trillion to $205 trillion, in 2013 due to tax and spending legislation.



Source: Calculations by Laurence Kotlikoff based on CBO Alternative Fiscal Scenario Projections.

Fiscal Gaps in Other Developed Countries

Table 2 compares the 2012 fiscal gaps in the U.S. with those in major European countries. The fiscal gaps for the EU countries were calculated by the European Commission. As is immediately clear, among the countries listed the U.S. is in the worst fiscal shape by a considerable margin. It's also clear that there is little correspondence between official debt to GDP ratios and fiscal gaps measured as a ratio of the present value of future GDP. In 2012 both the U.S. and the Netherlands had debt-to-GDP ratios of roughly 70 percent. Yet the U.S. fiscal gap, scaled by the present value of GDP, was over twice that of the Netherlands. Or consider Italy with its 127 percent 2012 debt to GDP ratio. Its 2012 fiscal gap is negative 2.3 percent of the present value of future GDP.

What explains Italy's negative fiscal gap? The answer is tight projected control of government-paid health expenditures plus two major pension reforms that have reduced future pension benefits by close to 40 percent.

Table 2

2012 Fiscal Gaps In Major Developed Countries

Country	Fiscal Gap as a Share of the Present Value of GDP
U.S.	13.7
Germany	1.4
UK	5.4
Netherlands	5.9
France	1.6
Spain	4.8
Italy	-2.3
Sweden	1.7

Source: Laurence Kotlikoff calculation for the U.S. and European Commission (http://ec.europa.eu/economy_finance/publications/european_economy/2012/pdf/ee-2012-8_en.pdf)

Infinite-Horizon Fiscal Gap Accounting Has Almost Universal Support Among Economists

Claiming, as I am, that the United State is broke, that official government debt is economically meaningless, that the use of federal debt by Congress and the Congressional Budget Office and other parts of the government to guide fiscal policy is deeply misguided, and that fiscal gap accounting over the infinite horizon is the only meaningfully way to assess a country's fiscal condition could readily be dismissed as the strong views of an extreme economist.

Unfortunately, that's not the case. At www.theinformact.org, over 1200 of our nation's economists have endorsed The Inform Act – a bipartisan bill that requires the Congressional Budget Office, the Office of Management and Budget, and the General Accountability Office to do both fiscal gap and generational accounting on an ongoing basis. The list of economists includes a Who's Who of the profession. Each of the top 25 economics departments is well represented on the list. What's more, 17 Nobel Laureates in Economics have endorsed The Inform Act. In addition to economist, the site records endorsements from former top government officials like former Secretary of Treasury, former Secretary of State, former Director of the Office of Management and Budget, and former Secretary of Commerce, George Shultz. The other remarkable aspect of this list is its inclusion of economists from both ends of the political spectrum.

The fact that essentially the entire economics profession is publicly and very strongly endorsing fiscal gap accounting should not be taken lightly as, unfortunately, has been the case to date by the CBO, OMB, and GAO. These agencies shouldn't need an act of Congress to start forming meaningful measures of our country's fiscal position and the dangers it holds for our children.

Economic Fall Out From Postwar Generational Policy

U.S. postwar generational policy is accurately characterized as "Take As You Go." Over the decades Republican and Democratic Congresses and Administrations have taken ever-larger amounts of resources from young workers and transferred them to old retirees. The resources taken from the young to give to the old were called, in the main, "taxes." And the young were effectively told, "Don't worry. We are calling these resources taxes, but when you are old, you will receive massive transfer payments that more than make up for what you are paying now."

The impact of this policy was predictable. Older generations consumed more, younger generations had no or little reason to consume less, and the national saving rate fell. Chart 2 below documents the post 1950 decline in our national saving rate, virtually all of which can be traced to increases in private consumption. And as chart 3 shows, those within the household sector who consumed the most were older generations. The chart, provided by Professor Ronald Lee of the University of California at Berkeley shows a dramatic increase over time in the absolute and relative consumption of the elderly.

Countries that save less invest less. And chart 2 shows not just a remarkable postwar decline in the U.S. net national saving rate. It also shows a remarkable postwar decline in our nation's net domestic investment rate. Given that investment is one of the key factors underlying real wage growth, it's not surprising that average real wages of U.S. workers have grown so little in recent decades. There are obviously other factors involved – relatively poor primary and secondary education, competition with foreign workers, and competition with smart machines/robots. But having a net domestic investment rate of 4 percent rather than 15 percent is a prescription for limited real wage growth.

Conclusion -- The Emperor's New Clothes

Make no mistake, the standard measure of fiscal excess and generational policy – the government's debt – is, economically speaking, content-free. Thus we find ourselves, quite frankly, in Hans Christian Anderson's story of the Emperor's New Clothes with his chief tailors comprising the CBO, OMB, GAO, the IMF, the World Bank, and the OECD.

In Anderson's story, convincing the King that he was, in fact, naked proved an impossible task. Indeed, at the end of the story when a young child shouts that the King, who is leading a parade to celebrate his new clothes, is naked, the crowd stops cheering and starts murmuring. But then, as the King ignores the child and continues his promenade, the crowd starts cheering once again.

Distinguished members of the Senate Budget Committee, you are, by analogy, the crowd in this story. You can continue to steer America's fiscal policy using a metric – the federal debt – that the economics profession, whether on the left, right, or in the center, is saying, loud and clear, is a number in search of a concept. Or you can organize passage of The Inform Act and also take the painful steps needed to eliminate our nation's massive fiscal gap.

At www.thepurpleplans.org, I've laid out a series of very simple fiscal and other reforms that can close our country's fiscal gap. This reform proposals have been endorsed by economists with, again, widely varying political beliefs. They are called purple plans because they are designed to appeal to red Republicans and blue Democrats.

As these plans make clear, we don't need to abandon any generation, we don't need to eliminate social insurance, and we don't need to discard the poor to turn things around. What we do need is to understand the fiscal hole we've placed ourselves and our children and start digging ourselves out in a sensible, efficient, and humane manner.

Chart 2

U.S. Net National Saving and Net Domestic Investment Rates, 1950-2013

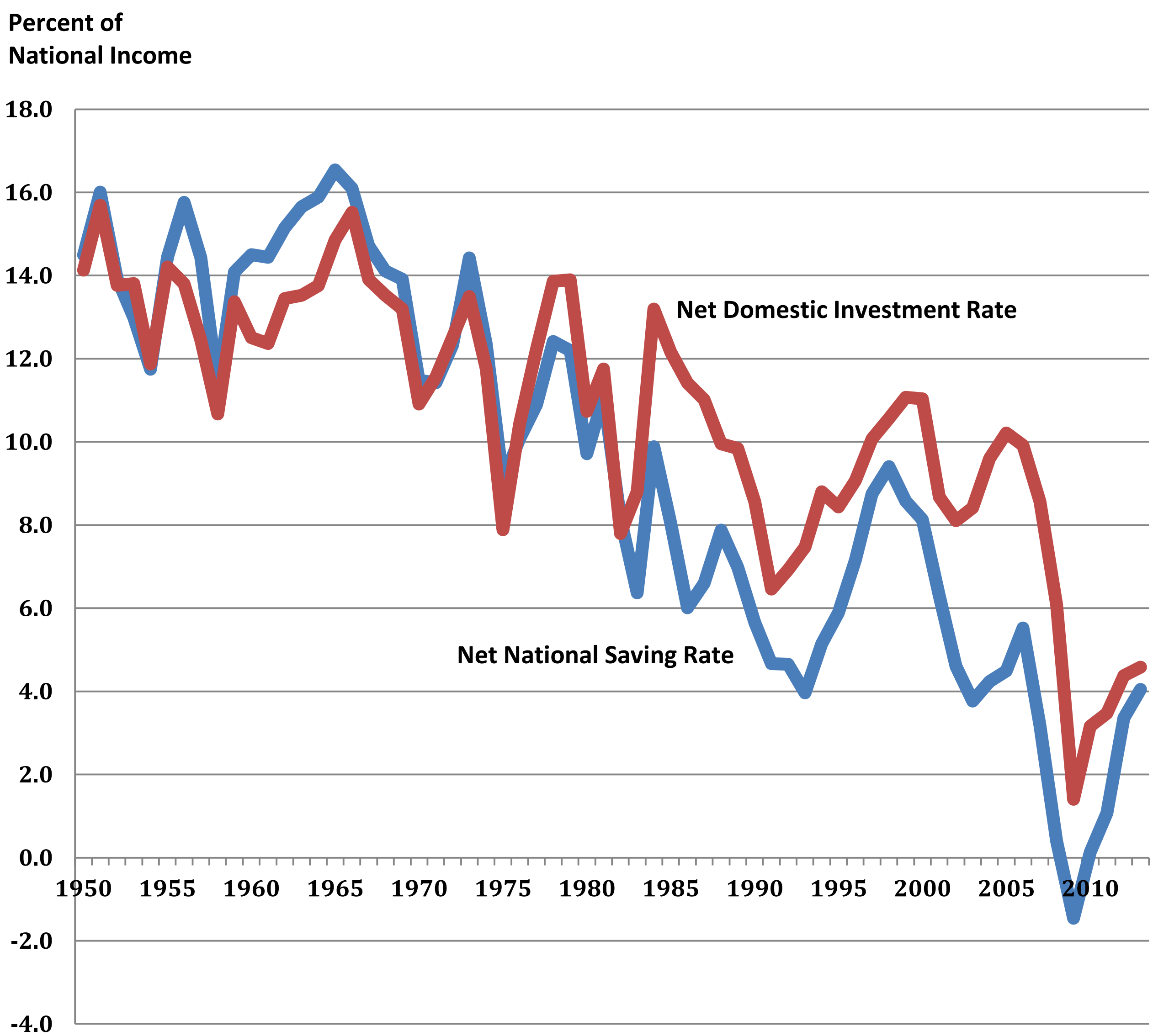
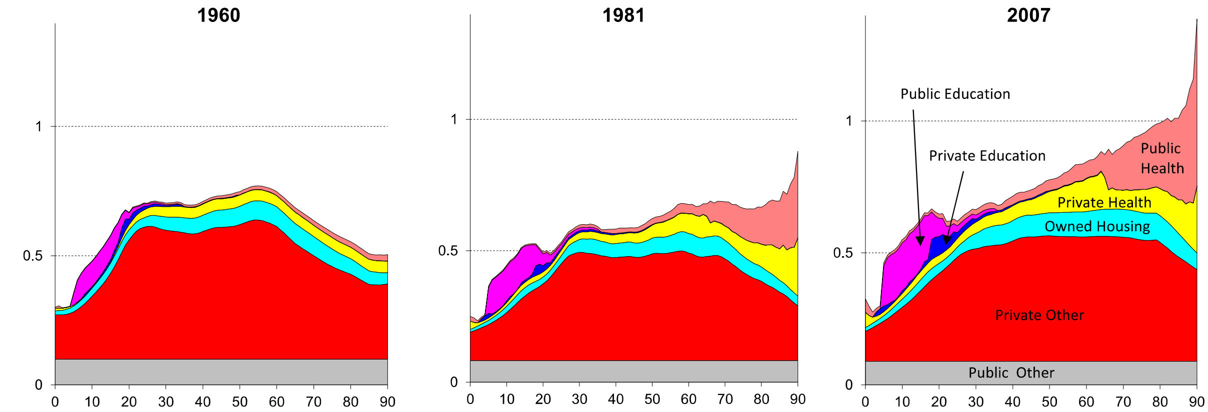


Chart 3

US consumption Per Capita by Age, 1960, 1981 and 2007

(Ratio to average labor income ages 30-49)



Source: US National Transfer Accounts, Lee and Donehower, 2011