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Can the Stock Market Rescue Social Security?

Part I, The Background

To understand why policy makers are now talking about investing Social Security funds in the stock market, a brief review of the program's history may be useful.

In 1950, roughly 3.5 million persons received a total of nearly $1 billion in Old Age and Survivors Insurance (OASI) benefits under Social Security. By 1994, 37 million OASI beneficiaries received $280 billion. The increase was only partly due to population growth, longer life expectancies, and price inflation. Much of the increase occurred because Congress frequently amended the program to increase benefits, which are now far more generous than they were originally designed to be.

Benefits have Soared

Each individual's benefits are based on a "Primary Insurance Amount" (PIA), calculated from his or her earnings history.[1] During the early days of the system it followed its initial design of providing a basic minimum income to elderly persons. In 1950, the *maximum* PIA at age 65 was $45.20 (about $294 in today's dollars). In 1994, this maximum was $1,147.50 per month. Most PIAs are much less than the maximum: the *average* PIA was $29.03 per month in 1950 (about $189 in today's dollars), and $741.90 at the end of 1994.

Benefits are financed with payroll taxes collected from workers. For most of the program's history the "trust fund" (into which tax revenue is paid and from which benefits are paid out) amounted to little more than a working balance — the taxes were only slightly greater, on average, than the benefits paid out. From the beginnings of the system, it was assumed that the benefits of future retirees were to be paid with the payroll taxes on future generations of workers.

However, the number of workers paying into the program has not kept pace with the number of retirees. While the number of beneficiaries increased tenfold and the total amount paid in benefits increased 280 times between 1950 and 1994, the number of covered workers with taxable earnings did not even triple. In 1950, there were 13 workers for every beneficiary, while today there are fewer than four.

As a result, Congress has increased payroll taxes (which were initially set at 2 percent — 1 percent on the employee and 1 percent on the employer — on a maximum of $3,000 of earnings), on many occasions. The OASI tax rate now stands at 10.7 percent (employee and employer rates combined).[2] The maximum amount of taxable earnings this year is $65,400. If it had been maintained at the same real level it was in 1949, adjusting only for price inflation, it would now be less than half this amount.

The "Crunch" Ahead

Looking ahead, it is apparent that if demographic trends develop as expected, the number of people collecting benefits will continue to increase faster than the number of workers supporting the program with their taxes. This demographic squeeze has been evident for decades, and many commissions and councils have studied ways to alleviate it. The 1983 Social Security reform act, for example, calls for a gradual increase in the age at which people become eligible to collect full retirement benefits (from the current 65 to 67, for people born in 1960 or later).

The 1983 reform also marked the first attempt to shift the program away from pay-as-you-go financing (where current payroll taxes pay for current benefits) toward a "prefunding" of future benefits. Payroll tax revenues were increased well above what has been needed to pay current benefits, and the surplus revenue has been accumulated in the Social Security Trust Fund.

For the past decade, Social Security has run surpluses of $40-50 billion every year, and the Trust Fund now stands at over half a trillion dollars. The "assets" in this Trust Fund consist of special-issue Government bonds. The Treasury uses the surplus Social Security taxes to pay for general government spending, and in return issues nonmarketable bonds to the Trust Fund, with a yield equal to the average on all outstanding long-term Government debt.

Many policy analysts treat the Trust Fund reserves as genuine assets. From their perspective, the difficulty of the current system is that the projected payments into the Trust Fund of payroll taxes to be collected from future workers *plus* the interest credited on the nonmarketable bonds held in the fund *plus* taxes on benefits credited to the fund under current law will *still* be insufficient to pay all the benefits that have been promised to future generations of retirees.

According to the Social Security Trustees' projections, total annual benefits will exceed total incoming payroll taxes soon after the first baby boomers retire. The Trust Fund balance will decrease to zero 15 or 20 years after that, at which point OASI taxes will have to be increased markedly, benefits curtailed, or both. Such projections are based on assumptions regarding future demographic trends (births, deaths, and immigration), employment, economic growth, price inflation and so forth. These assumptions may or may not be accurate, but the point is that we are headed for a "crunch" that will necessitate marked changes in the Social Security System.

[1] Actual monthly benefits paid may be less than the PIA, if the beneficiary retires before age 65, or larger than the PIA if the beneficiary is eligible for supplements for dependents.

[2] This does not include the taxes paid to support Social Security's disability program or Medicare, which bring the total payroll tax rate to 15.3 percent.

However, the "crunch" will begin long before the balance in the Trust Fund decreases to zero. Problems will be evident as soon as the balance in the fund begins to decrease. This is because the assets of the Trust Fund (IOUs of the Treasury) are simply promises to collect taxes or borrow from someone else in the future. "Prefunding" OASI benefits by raising payroll taxes by more than has been needed to pay benefits has only served to understate the recent deficits in other government programs.[3]

If the excess payroll taxes were not loaned to the Treasury, *i.e.,* if they had been used to purchase some other type of asset, the Treasury would have had to borrow more from the public, and the reported budget deficit — the portion of the budget financed by public borrowing — would be even larger than it has been. When the Trust Fund assets are eventually needed to pay for future Social Security benefits, these special bonds will have to be cashed in and the Treasury will have to pay back its loan. Thus, future generations will still end up paying for future Social Security benefits on a pay-as-you-go basis, whether through higher payroll taxes, higher other taxes, or bigger deficits. The futility (and essentially fraudulent nature) of "prefunding" future Social Security benefits with Treasury securities may be clearer if we consider the situation of private pension plans.

At one time many companies paid their retirees pensions out of the company's general revenue. Such pay-as-you-go plans left their beneficiaries totally dependent on the fortunes of their former employees. To ensure that pensioners would not be so dependent after they retired, the government has long required employers to set aside and invest funds to pay "defined benefit" pensions. However, if the funds set aside were entirely invested in the debt obligations of the employer, would it make the pensioners' benefits any less dependent on the fortunes of the company? Of course not — the company would have to meet its obligations to pensioners by coming up with the funds to redeem its bonds and notes, and if this happened when the company faced hard times the pensions might not be paid. This is why pension regulation, not to mention simple prudence, requires diversification of the assets held in private pension funds.

Social Security pensions remain largely a pay-as-you-go proposition and the limited prefunding is "invested" in the IOUs of the payer. This is only one reason for the commonplace observation that if a private pension fund operated in the same way as the Social Security system, its managers would quickly be placed under lock and key.

The Larger Myth

In short, the Social Security Trust Fund is an accounting artifice, a myth. It neither ensures that there will be funds available to pay future benefits nor does it cushion future workers and taxpayers from the burden of supporting future retirees. As such it is only one facet of a larger myth: that Social Security is an insurance program (with actuarial calculation of costs and benefits, investment returns, etc.) rather than the income transfer program (with its costs and benefits legislated by Congress) that it is.

The current and prospective imbalances of Social Security, fewer and fewer workers for every retiree (decreasing, by some estimates to only two workers paying in for every beneficiary by the middle of the next century), and poverty rates for the under-65 population (who pay for the program) that even now are higher than for the over-65 population (who receive the benefits) led the Government to appoint yet another advisory council to figure out yet again what to do about Social Security. The 13 members of the council could not agree on a single plan and instead offered 3 separate proposals. What all 3 proposals have in common is a strategy to invest some Social Security funds in securities other than Treasury IOUs, principally common stocks.

We will discuss these proposals in the second part of this article. ❑

[3] For example, in fiscal 1996, the deficit would have been $174 billion instead of the reported $107 billion, if the Treasury had not borrowed the difference from Social Security and other government trust funds.

Among other things, this means that the current battles over "balancing the budget" by the year 2002, or whenever, will seem trivial once the baby boomers claim their retirement benefits and the Social Security Trust Fund begins to decrease.

BUSINESS-CYCLE CONDITIONS

The outlook for the economy is favorable. The leading indicators point to further expansion, the coincident indicators show strength across many sectors of the economy, and there are few signs among the lagging indicators that bottlenecks that could hamper further growth are developing.

The *index of 500 common stock prices* was the only primary leading indicator to reach a new high in this month's appraisal of business-cycle conditions and there is little doubt that stock prices are clearly expanding (this index is adjusted for price inflation, as are all dollar-denominated series). Although not at new highs, there are six other leading indicators that are appraised as clearly expanding as well.

This month's increase in the *M2 money supply*, a broad measure of money, was enough to warrant upgrading its cyclical status to clearly expanding from probably expanding. M2, along with several other of our business-cycle indicators, was rebased this month into 1992 dollars. Although rebasing changes the dollar amounts of a constant-dollar series, it has little effect on the cyclical movements in the data[1]. The appraisal of the *average workweek in manufacturing* also was upgraded this month to clearly expanding. The base data for the average workweek increased to 42 hours in December — close to the record high of 42.2 hours reached at the beginning of 1995.

New orders for consumer goods and materials, now reported in 1992 dollars, decreased this month, but the drop was not sufficient to change its cyclical status. The series remains appraised as clearly expanding. *The ratio of manufacturing and trade sales to inventories* also remains appraised as clearly expanding, despite a decrease in the 3-month moving average. This decrease suggests that inventories were growing faster than sales in October, the latest month for which data are available. *Initial claims for state unemployment insurance* (inverted) fell this month too, despite an increase in the base data. However, the decrease was not sufficient to warrant changing its cyclical status. It remains appraised as clearly expanding. There were no new data for the *3-month change in sensitive materials prices*, therefore it remains appraised as clearly expanding.

[1] On a more technical note, both M1 and M2 are now deflated using the Personal Consumption Expenditure (PCE) deflator. In the past they were deflated using a Consumer Price Index based in 1987.

Comparison Between Conference Board Indicators and AIER Indicators

Revised Conference Board Leaders	*AIER Leaders*
Average weekly hours, manufacturing	Average weekly hours, manufacturing
Initial claims for state unemployment	Initial claims for state unemployment
New orders, consumer goods and materials	New orders, consumer goods and materials
Vendor performance	Vendor performance
New building permits	New building permits
Stock prices, 500 common stocks	*Real stock prices, 500 common stocks*
Money supply (M2), 1992 dollars	Money supply (M2), 1992 dollars
Mfgs. new orders, nondefense capital goods	Contract and orders for plant and equipment
Interest rate spread, F.F. rate and 10-yr. T-bond	Money supply (M1), 1992 dollars
Index of consumer expectations	Change in consumer debt
	Change in sensitive materials prices
	Ratio of mfg. and trade sales to inventories

Now that the series is eight months from its most recent peak, the appraisal for *contracts and orders for plant and equipment*, based in 1992 dollars, was downgraded to probably expanding from clearly expanding.

Vendor performance, the percentage of purchasing managers reporting slower deliveries from their suppliers, increased again this month, to 51.4 percent. However, this increase was too small to indicate a trend in the series and its cyclical status remains indeterminate.

The number of *new housing permits* decreased this month, despite an increase in the base data. Previously reported as an index, this series is now reported in millions of permits. In December, 1.42 million permits were issued, down by roughly 30,000 from the cyclical peak reached last spring. Previously indeterminate, this series is now probably contracting.

Both *the M1 money supply*, now reported in 1992 dollars, and the *3-month change in consumer debt* decreased again this month. They remain appraised as clearly contracting.

Overall, 73 percent (8 out of 11) of the leading indicators with apparent cyclical trends are expanding. As the chart on the next page indicates, this is lower than last month, when 80 percent were expanding. However, it is still within the range that indicates further expansion is likely. AIER's cyclical score increased this month to 64 from last month's revised score of 62. It, too, is within the range that signals continued economic expansion.

Five of the 6 primary roughly coincident indicators reached historical highs this month. *Nonagricultural payroll employment* increased by 262,000, and the *index of industrial production* increased to 129.1, or 5.1 percent higher than it was a year ago. *Manufacturing and trade sales*, the *ratio of civilian employment to population*, and *gross domestic product* also are at new highs. All five series are clearly expanding.

Personal income in manufacturing increased in November, but remains below the cyclical high reached two months earlier. It remains appraised as cyclically expanding. Thus, 100 percent (6 out of 6) of the coincident indicators are expanding.

Among the primary lagging indicators, the *average duration of unemployment* (inverted), *manufacturing and trade inventories*, and the *ratio of consumer debt to personal income* reached new highs. Total consumer debt now equals roughly 18 percent of total personal income, a historical high. However, this series has flattened out a bit in recent months. Along with the recent slowdown in consumer debt growth, this suggests that the burden of servicing their debts may be approaching an unsustainable level for some consumers.

The *composite of short-term interest rates* increased in December to 5.53 percent. Over the past year, short-term rates have fluctuated within a narrow band of 5.18 to 5.53 percent. These fluctuations have obscured the cyclical trend of the series, and it remains appraised as indeterminate.

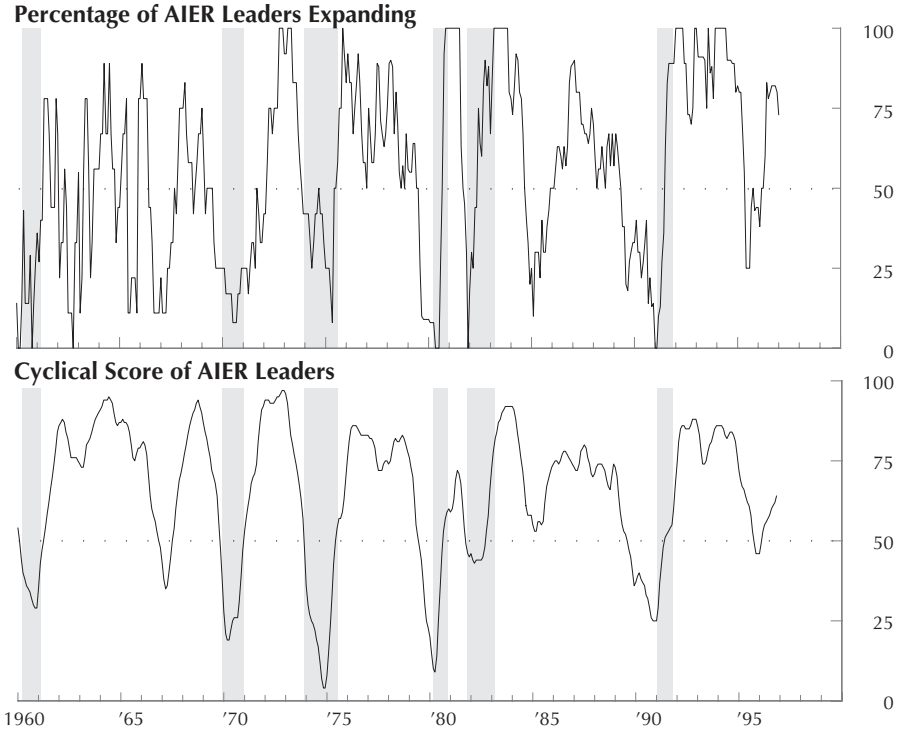
For several months, the 12-month *change in labor cost per unit of manufacturing output* did not display a clear trend, either. However, a decrease this month was sufficient to suggest that the series is probably contracting. Revisions to *commercial and industrial loans*, now based in 1992 dollars, indicate that this series is probably contracting as well. Prior to the revisions, commercial and industrial loans appeared to be clearly expanding.

Overall, 60 percent (3 out of 5) of the lagging indicators with apparent cyclical trends are expanding — down from 100 percent last month. This decrease suggests that there are few of the bottlenecks that typically choke off growth in the economy.

Statistical Indicators of Business-Cycle Changes

Change in Base Data					*Cyclical Status*		
Sep.	*Oct.*	*Nov.*	*Dec.*	***Primary Leading Indicators***	*Nov.*	*Dec.*	*Jan.*
-	-	-		M1 money supply	-	-	-
+	-	+		M2 money supply	+?	+?	+
+	-			Change in sensitive materials prices	+	+	+
+	+	-		New orders for consumer goods	+	+	+
+	-	-		Contracts and orders for plant and equipment	+	+	+?
-	-	+		Index of new housing permits	+?	?	-?
+	-			Ratio of manufacturing and trade sales to inventories	+	+	+
-	+	+	+	Vendor performance	?	?	?
+	+	+	+	Index of common stock prices (constant purchasing power)	+	+	+
nc	nc	nc	+	Average workweek in manufacturing	+?	+?	+
-	+	+		Initial claims for unemployment insurance (inverted)	+	+	+
-	-	+		Change in consumer debt	-	-	-
				Percentage expanding cyclically	82	80	73
				Primary Roughly Coincident Indicators			
-	+	+	+	Nonagricultural employment	+	+	+
+	-	+	+	Index of industrial production	+	+	+
-	-	+		Personal income in manufacturing	+	+	+
+	+			Manufacturing and trade sales	+	+	+
+	+	-	+	Civilian employment to population ratio	+	+	+
+				Gross domestic product (quarterly)	+	+	+
				Percentage expanding cyclically	100	100	100
				Primary Lagging Indicators			
+	+	+	+	Average duration of unemployment (inverted)	+?	+?	+
+	+			Manufacturing and trade inventories	+	+	+
+	-	-		Commercial and industrial loans	+	+	-?
-	+	+		Ratio of consumer debt to personal income	+?	+?	+
+[r]	-	-		Change in labor cost per unit of output, manufacturing	?	?	-?
+	-	nc	+	Composite of short-term interest rates	?	?	?
nc No change. [r] Revised.				*Percentage expanding cyclically*	100	100	60

Under "Change in Base Data," plus and minus signs indicate increases and decreases from the previous month or quarter and blank spaces indicate data not yet available. Under "Cyclical Status," plus and minus signs indicate expansions or contractions of each series as currently appraised; question marks indicate doubtful status when shown with another sign and indeterminate status when standing alone.



Restructuring the Composite Leading Index

During the past year, the Conference Board, a private organization, has taken over responsibility for compiling and publishing many of the business-cycle indicators that were previously available directly from the Commerce Department. In November, the Conference Board announced that it was restructuring the "composite leading index" that was previously compiled by the Commerce Department. Because this index includes many of the same series that AIER tracks in its monthly assessment of business conditions, this restructuring is worth discussing in some detail. Although most of the changes do not affect our 12 primary leading indicators, the Conference Board's composite leading index is designed to achieve the same goal as our indicators: to predict turning points in the business cycle several months in advance.

Prior to this month, the Conference Board's index was a composite of 11 leading indicators. With this month's publication of the revised index, two of these indicators have been replaced with one new one: the change in sensitive materials prices (one of our leaders) and the change in unfilled orders for durable goods have been replaced by a series measuring the spread between the rate on 10-year Treasury bonds and the federal funds rate. The table on page 11 shows how our list of leading indicators compares with the new list of Conference Board leading indicators. Before the change, we shared nine of the same series, but after the change we will share only seven. In addition, the Conference Board uses the current-dollar S&P 500 stock index, while we use the Consumer Price Index to convert it into a constant-purchasing-power stock index.

The table also highlights another change in the composite leading index. In the past, both AIER and the Conference Board's composite index used contracts and orders for plant and equipment as a leading indicator. Now, the Conference Board will instead use new orders for nondefense capital goods. This series is actually a subset of the contracts and orders series. The difference is that the latter series also includes the value of new contracts awarded to building, public works, and utilities contractors. These contracts — for the "plant" part of plant and equipment — cover such things as commercial buildings, warehouses, garage and service stations, and manufacturing buildings, as well as the value of privately-owned nonbuilding construction about to get under way on streets, bridges, parks, electric power systems, oil and gas pipelines, etc.

The difference in the two series is small and their cyclical trends are very similar. Currently, new orders for nondefense capital goods account for about 92 percent of the contracts and orders series, and historically they have comprised about 83 percent of it. The average difference, in constant dollars, is about $4.7 billion.

It is not clear why the Conference Board dropped contracts for plant from its index. One possibility is that the data are compiled by the F.W. Dodge Division of McGraw-Hill, and the Conference Board did not want to pay for them. In any event, the Conference Board claims that these and other changes in its composite leading index, such as rebasing it to 1992 instead of 1987, will improve its usefulness as a forecasting tool. An analysis of the revised historical data for the index suggests it is better than the old one. The most recent example is the false signal of recession given by the unrevised index in 1995. In the new index, the decline is less pronounced. Based on historical analysis, the new index should be better, but no two business cycles are the same and the full merit of the revised index will not be apparent at least until the next business-cycle contraction begins. According to our leading indicators, this may have to wait awhile. ❑

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PRICE OF GOLD

	1995	*1996*	*—— 1997 ——*	
	Jan. 26	*Jan. 25*	*Jan.16*	*Jan. 23*
Final fixing in London	$381.35	$406.60	$353.05	$349.80

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