

Entitlements, Social Security and Medicare

Picture of you teacher worrying about entitlements.



... from **Red Ink**:

In the investigation of any aspect of human enterprise, we seldom get very far before we encounter either a budget in some form or a crisis explained by the lack of a budget or by disregard of budgetary discipline. The ultimate constraint upon our consumption of goods and services is imposed by a budget that is capped by income and access to credit. Think of how differently we would all live without such constraints (although it wouldn't be in this world – budgets exist because *both* financial and real resources are limited). The business that ignores the financial rules of cost control is a doomed business. Although governments have more latitude for financial excess, ultimately financial strength is a necessary prior condition for political and military strength, a lesson discovered by the Soviet Union in the late 1980s. Over time, no regime can endure without good books. And the numbers are indifferent to the politics. No political stance nor ethical imperative, whether liberal or conservative, can override the need to keep the books in order. Resources and programs cannot be paid for with lofty declarations, with the best of intentions, nor with moral righteousness. Just cash. Maybe cash borrowed rather than cash taxed, but only up to a point.

... from **Red Ink**:

The Government as Check Writer

The author William Grieder once wrote that "the most important function of the federal government is mailing checks to citizens." By that he meant Social Security checks, pension, welfare, and veterans' checks, checks to hospitals and doctors for medical care, and checks sent for a host of other reasons.

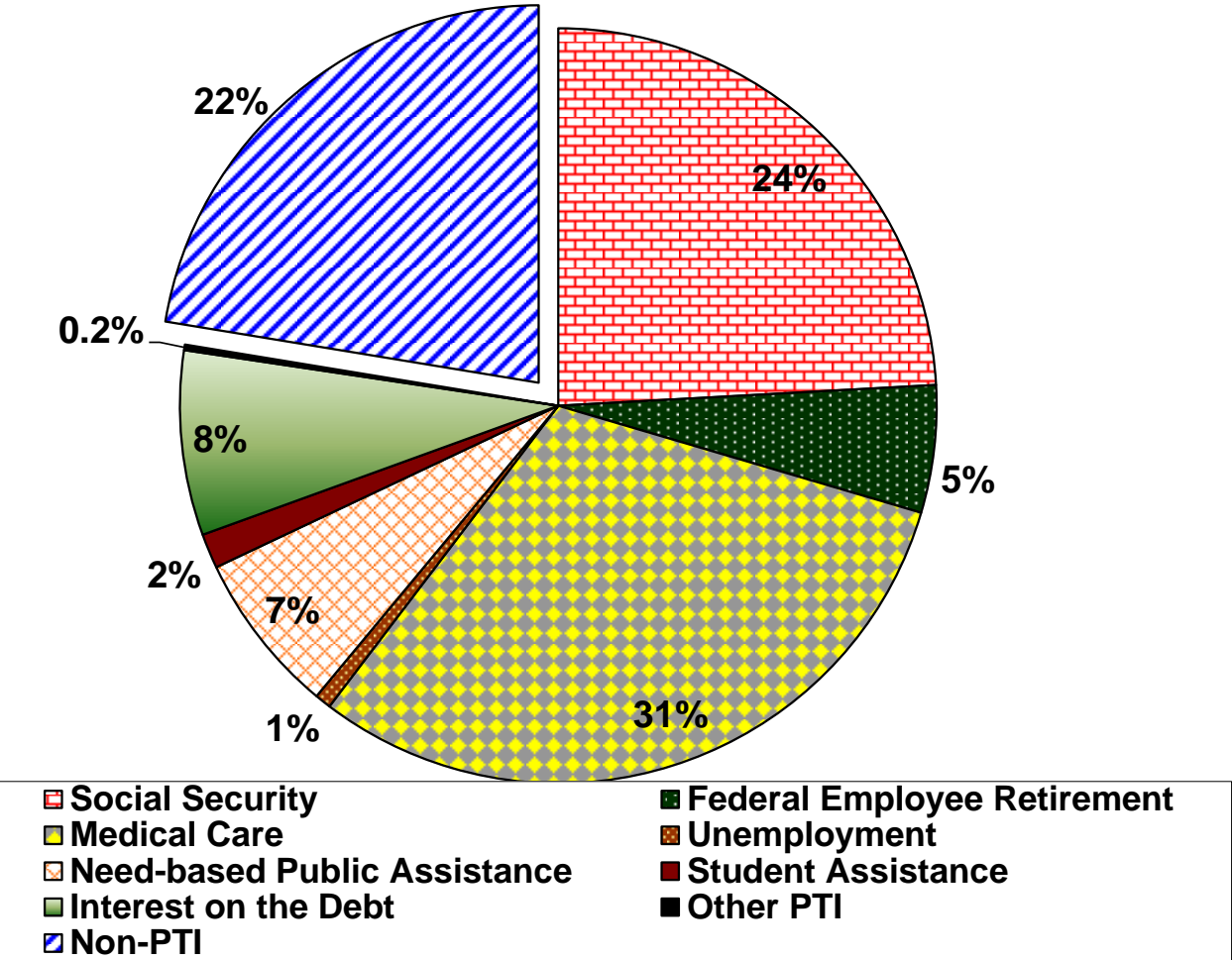
When Grieder wrote that in 1981, such disbursements equaled 48% of outlays. Now

Red Ink page 108.

Payments to Individuals - 2019

Greider's complaint: Now **80%** of all checks written by government are to individuals.

\$3.63 trillion PTI



Need-based public assistance is what we normally think of as **welfare**:

Housing Assistance (\$50.1b)

Food and Nutrition (\$101.6)

Public Assistance (\$195.6b).

What are entitlements?

- The law extends a financial right ...
- ... which implies an ongoing legal financial obligation of government ...
- ... therefore outlays over time are determined by
 1. ... the original law and any amendments
 2. ... demographics
- There are no annual appropriations for entitlements
- Examples:
 1. Social Security
 2. Medicare
 3. need-based programs
 4. federal pensions

So what is the connection to trust funds?

Federal Trust Funds

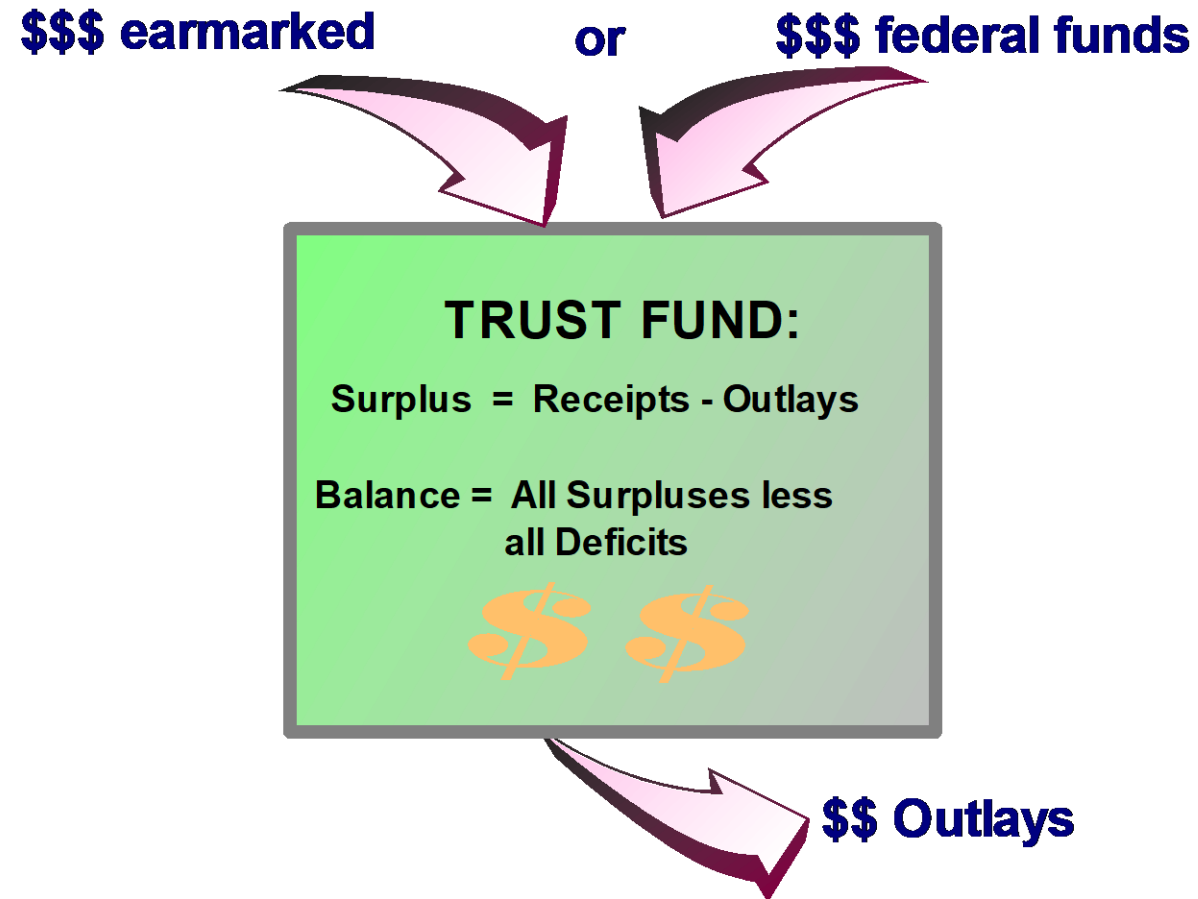


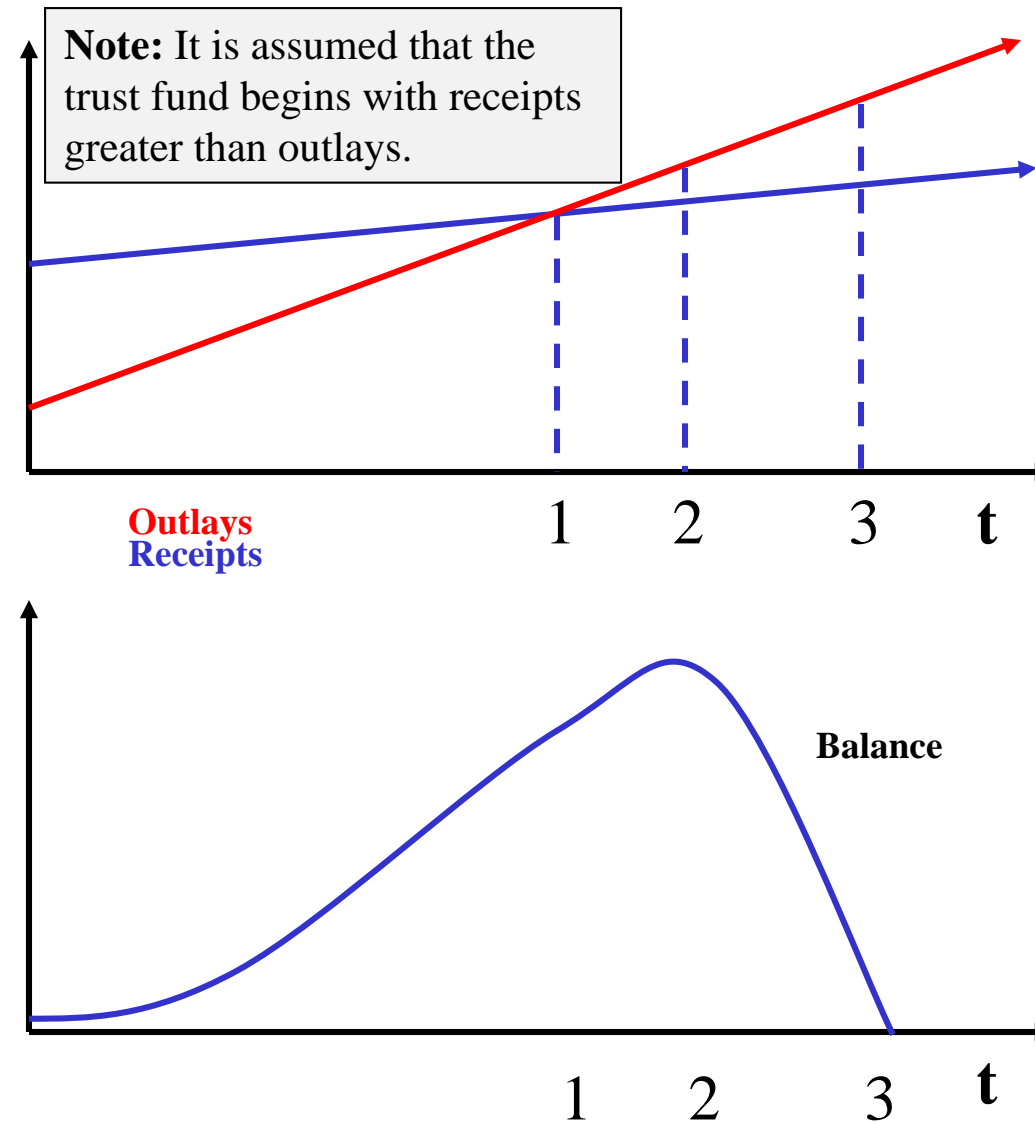
Figure 7.1

About Trust Funds

- Subaccounts within the Unified Budget
 - like a check book within a checkbook
- Revenue sources internal and external
- Balances held as **non-marketable U.S. Treasury Debt**
- If externally financed (like Social Security)
 - fund surplus reduces the unified deficit, fund deficit adds to it
 - interest earned is internal and basically a bookkeeping entry, and nothing else

Three critical inflection points for Trust Funds

1. When outlays exceed receipts. At this point the trust fund is adding to the deficit.
2. When outlays exceed receipts by more than interest earned by the trust fund. At this point the trust fund's balance begins to decline.
3. When interest earned goes to absolute zero and trust fund balances are depleted and spending authority is eliminated.



... from Red Ink

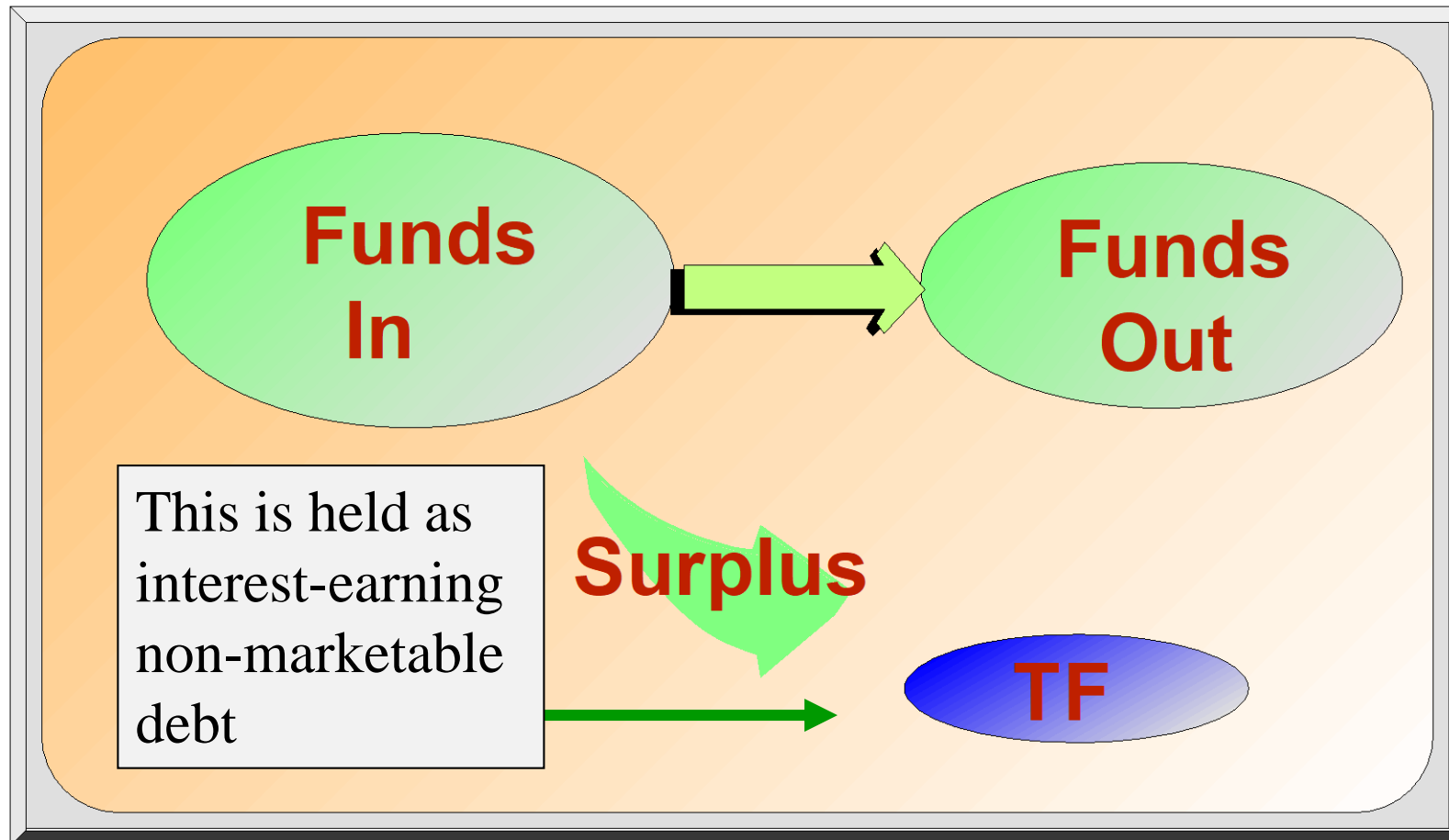
College students graduating in 1996 will begin paying, as soon as they find work. 7.65% of their earned income into three federal trust funds, and their employers will make a matching contribution. These students will be expected to make this contribution, and possibly more, throughout the 45 years or so they are employed. One of these trust funds, the Medicare Trust fund is running a deficit for the first time in 1996 and is expected to run out of funds in the year 2006. ... The largest share of taxes goes to .. the Social Security retirement fund, currently running a sizeable surplus which contributes to a large fund balance presently. ... By current projections the retirement fund will begin running a deficit around the year 2012 and the funds revenues are expected to be exhausted in the year 2031, about the time these students turn 55.

Red Ink - chapter 7, page 7. The forecasts are made by the trustees of the funds, published under "Actuarial Status of the Social Security and Medicare Programs," Summer 1995.

Note: Since this publication, the date for fund deficit changed to 2018 (already happened) and exhaustion has been bumped up, to 2035 (in 2015 and current as of two days ago).

Social Security Financing

.. the general picture



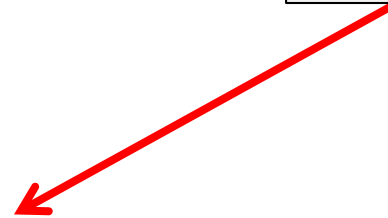
Govt. Account NM Debt = Trust Fund Assets

**Total U.S. Treasury Securities Outstanding
Gross and Net Public Debt
\$ billions
December 2019**

Instrument	Amount
Marketable	16,657.9
Bills	2,416.4
Notes	9,920.8
Bonds	2,373.5
Inflation-indexed	1,506.4
Floating rate notes	440.8
Non-Marketable	6,526.5
Government Account	6,014.0
Non-marketable privately held	512.5
TOTAL PUBLIC DEBT:	23,222.6
NET PUBLIC DEBT:	17,208.6

(Net is total less govt. account but not less FRS holdings)

These are the trust fund balances, including the all-important Social Security and Medicare Trust Funds.



The role of the FICA/SECA payroll tax in funding trust funds ...



Employment Payroll (FICA/SECA) tax rates effective 2020		
	Employer/Employee (each)	Self-employed
OASI:	5.30%	10.60%
DI:	0.90%	1.80%
OASDI Income cap:	\$137,700	\$137,700
Medicare:	1.45%	2.90%
Total (each):	7.65%	15.30%
Total (combined):	15.30%	

Source: IRS publication 1038 (2020)

Social Security OASI Trust Fund

status end of FY2019

... still running a tiny surplus, but is running a *cash deficit* because interest earned, which is a bookkeeping entry only, exceeds the surplus. This puts this trust fund in *region II*.

This means that this trust fund is no longer mitigating the over-all deficit. It is now contributing to that deficit on an annually growing scale.

In the last fiscal year (2018) the OASI Trust Fund ran a cash deficit for the first time in history.

Social Security Old Age Survivors Insurance Trust Fund ID 20-8006-0-7-651 FY2019 \$ Billions

	Receipts and Outlays	Balance
Beginning of Year		2,801.1
RECEIPTS		
FICA/SECA Taxes	767.7	
Interest earned	79.8	
Other	50.4	
Total Receipts	897.9	
OUTLAYS		
Retirement payments	889.0	
Total Outlays	897.8	
SURPLUS/DEFICIT	0.1	
Cash surplus/deficit	-79.7	
End of Year		2,801.3

Memo: The 2012 “Greek” solution

In 2011/12 there was a new obscure entry called General Fund Payments for Payroll Tax Holiday. It gave the trust fund new NM debt assets to offset cut in FICA taxes of those years. This certainly sets a precedent for arbitrarily pumping “thin-air” entries into these trust funds.

Source: FY2014 Budget of the United States Government, Table 13-1. Payroll Tax Holiday data are found in Appendix, page 1193.

Social Security Old Age Survivors Insurance Trust Fund
ID 20-8006-0-7-651
FY2012 \$ Billions

**OLD
SLIDE**

	Receipts and Outlays	Balance
Beginning of Year		2,492.0
RECEIPTS		
FICA/SECA Taxes	486.8	
Interest earned	105.2	
Payroll Tax Holiday	96.5	
Other	40.5	
Total Receipts	729.0	
OUTLAYS		
Retirement payments	627.2	
Total Outlays	634.7	
SURPLUS	94.3	
Cash surplus/deficit	-107.4	
End of Year		2,586.3

The “Greek”
solution.

Social Security DI Trust Fund

status end of FY2019

Social Security Disability Insurance Trust Fund
ID 20-8007-0-7-651
FY2019 \$ Millions

Receipts and
Outlays Balance

Beginning of Year		93,142
RECEIPTS		
FICA/SECA Taxes	143,367	
Interest earned	2,935	
Other	4,106	
Total Receipts	150,408	
OUTLAYS		
Disability payments	146,411	
Total Outlays	149,558	
SURPLUS	850	
Cash surplus/deficit	-2,085	
End of Year		94,043

Social Security DI Trust Fund

status end of FY2015

... and this scandal-ridden trust fund for disability insurance is two years away from the level 3 inflection point, causing the trustees to say this ...

"However, the DI Trust Fund reserves become depleted in 2016, at which time continuing income to the DI Trust Fund would be sufficient to pay 81 percent of DI benefits. Therefore, legislative action is needed as soon as possible to address the DI program's financial imbalance. [Lawmakers may consider responding to the impending DI Trust Fund reserve depletion as they did in 1994, solely by reallocating the payroll tax rate between OASI and DI.](#) Such a response might serve to delay DI reforms and much needed corrections for OASDI as a whole."

From the *2014 Annual Report of the Board Of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Trust Funds*, July 28, 2014, page 4.

Social Security Disability Insurance Trust Fund

ID 20-8007-0-7-651

FY2015 \$ Millions

**OLD
SLIDE**

	Receipts and Outlays	Balance
Beginning of Year		69,926
RECEIPTS		
FICA/SECA Taxes	111,829	
Interest earned	2,733	
Other	3,474	
Total Receipts	118,036	
OUTLAYS		
Disability payments	142,846	
Total Outlays	146,306	
SURPLUS	-28,270	
Cash surplus/deficit	-31,003	
End of Year		41,656

Source: FY2017 Budget of the United States
Government, Table 13-1.

Social Security DI Trust Fund

status end of FY2017

... and the Congress did exactly as the trustees recommended, changing the allocation of the payroll tax as shown below in 2015, which is *not* reform and of course shortens the life of the retirement fund!

	OASI	DI	Total
2015	5.300	0.900	6.200
2016	5.015	1.185	6.200

This is the amount that each employee pays, matched in the same proportions as each employer pays. E.g. in 2015, each employee paid 6.2% of income total, 5.3% to OASI and 0.9% to DI. The employer matched this amount.

2017 ...

Social Security Disability Insurance Trust Fund		
ID 20-8007-0-7-651		
FY2017 \$ Millions		
OLD SLIDE	Receipts and Outlays	Balance
Beginning of Year		45,740
RECEIPTS		
FICA/SECA Taxes	162,570	
Interest earned	1,625	
Other	5,364	
Total Receipts	169,559	
OUTLAYS		
Disability payments	142,805	
Total Outlays	145,855	
SURPLUS	23,704	
Cash surplus/deficit	22,079	
End of Year		69,444

Source: FY2019 Budget of the United States Government, Table 13-1.

Payroll Tax Rate for:		
	OASI	DI
2015	10.60	1.80
2016	10.03	2.37
2017	10.03	2.37
2018	10.03	2.37
2019	10.60	1.80

Medicare Hospital Trust Fund

status at end of FY 2019

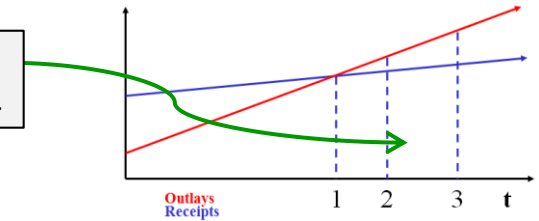
This hopeless trust fund, the heart of Medicare, is well into region II, is contributing to the current overall deficit, and is barely scraping by.

Note: The [Medicare Prescription Drug Plan](#) (passed 2003) added about \$15 billion per year to Medicare costs and was largely unfunded. The law passed in 2015 to not cut doctor's pay will cost an additional **\$21** billion per year, part of that funded by higher fees, **\$14 b** is unfunded.

Medicare Federal Hospital Insurance Trust Fund ID 20-8005-0-7-571 FY2019 \$ Billions

	Receipts and Outlays	Balance
Beginning of Year		203.2
RECEIPTS		
FICA/SECA Taxes	276.3	
Interest earned	7.1	
Other	41.1	
Total Receipts	324.5	
OUTLAYS		
Hospital Payments	325.5	
Total Outlays	331.6	
Deficit	-7.1	
Cash surplus/deficit	-14.2	
End of Year		196.2

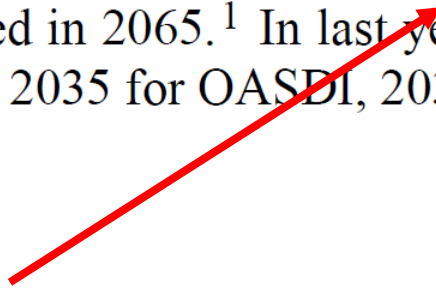
This is in the category 2 region.



From THE 2020 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE
FEDERAL OLD-AGE AND SURVIVORS INSURANCE AND FEDERAL
DISABILITY INSURANCE TRUST FUND, published April 22, 2020

Long-Range Results (2020-94)

Under the Trustees' intermediate assumptions, OASDI cost is projected to exceed total income starting in 2021, and the dollar level of the hypothetical combined trust fund reserves declines until reserves become depleted in 2035. Figure II.D2 shows the implications of reserve depletion for the combined OASI and DI Trust Funds. Considered separately, the OASI Trust Fund reserves become depleted in 2034 and the DI Trust Fund reserves become depleted in 2065.¹ In last year's report, the projected reserve depletion years were 2035 for OASDI, 2034 for OASI, and 2052 for DI.

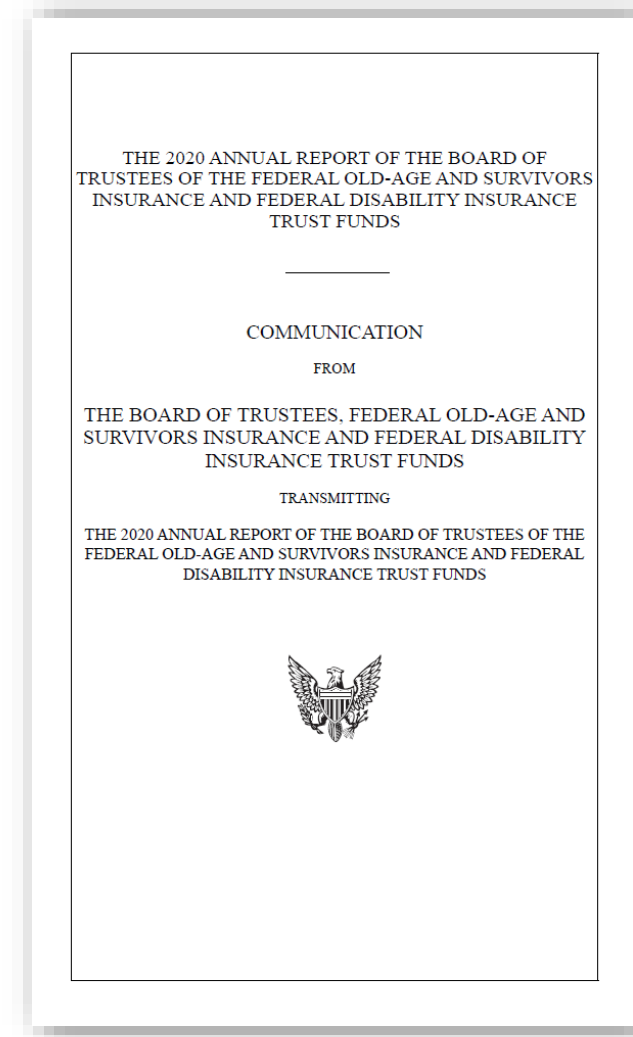


The OASIDI trustee's trust fund forecast:

<https://www.ssa.gov/oact/tr/2020/>

Three forecasts:		
Low Cost (Best case)	Intermediate (what we see)	High Cost (Worst case)

Forecast Assumptions	
Demographic	Economic
Fertility	Productivity
Mortality	Inflation
Immigration	Average Earnings
Population	Real Wage Spreads
Life Expectancy	Labor Force Size
	Unemployment
	Real GDP
	Interest Rates



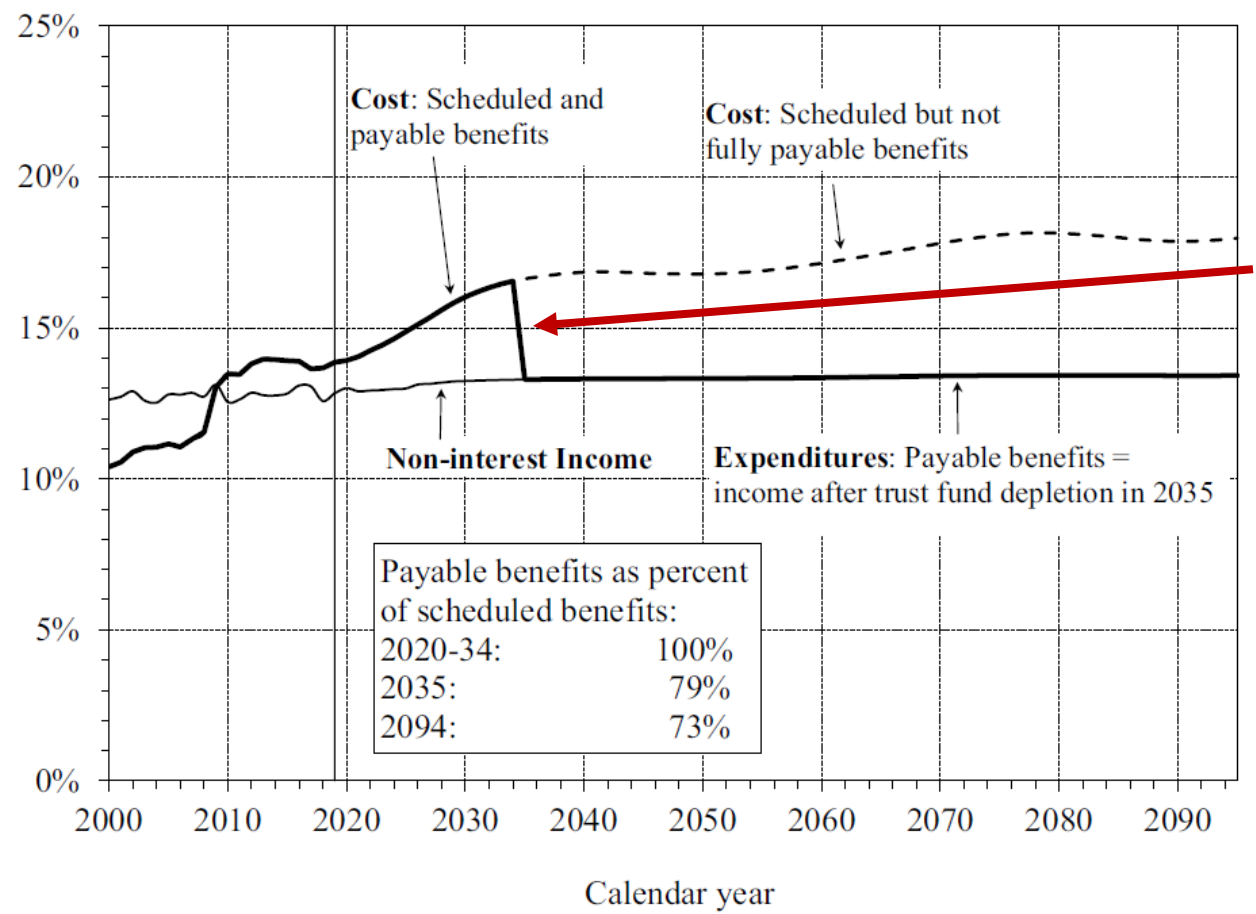
For extremely detailed treatment of all assumptions, including history and graphs:

Long-range demographic: https://www.ssa.gov/oact/tr/2020/2020_Long-Range_Demographic_Assumptions.pdf

Economic assumptions: https://www.ssa.gov/oact/tr/2020/2020_Long-Range_Economic_Assumptions.pdf

Disability assumptions: https://www.ssa.gov/oact/tr/2020/2020_Long-Range_Disability_Assumptions.pdf

Figure II.D2.—OASDI Income, Cost, and Expenditures as Percentages of Taxable Payroll
[Under intermediate assumptions]



This is the “plunge” that the trustees anticipate...

What would it take to mitigate the plunge??

.. if the steps are taken now?

To illustrate the magnitude of the deficit, consider that for the combined OASI and DI Trust Funds to remain fully solvent throughout the 75-year projection period: (1) revenue would have to be increased by an amount equivalent to an immediate and permanent payroll tax rate increase of 3.14 percentage points to 15.54 percent; (2) scheduled benefits would have to be reduced by an amount equivalent to an immediate and permanent reduction of about 19 percent applied to all current and future beneficiaries, or about 23 percent if the reductions were applied only to those who become initially eligible for benefits in 2020 or later; or (3) some combination of these approaches would have to be adopted.

... my generation is stealing
from your generation.

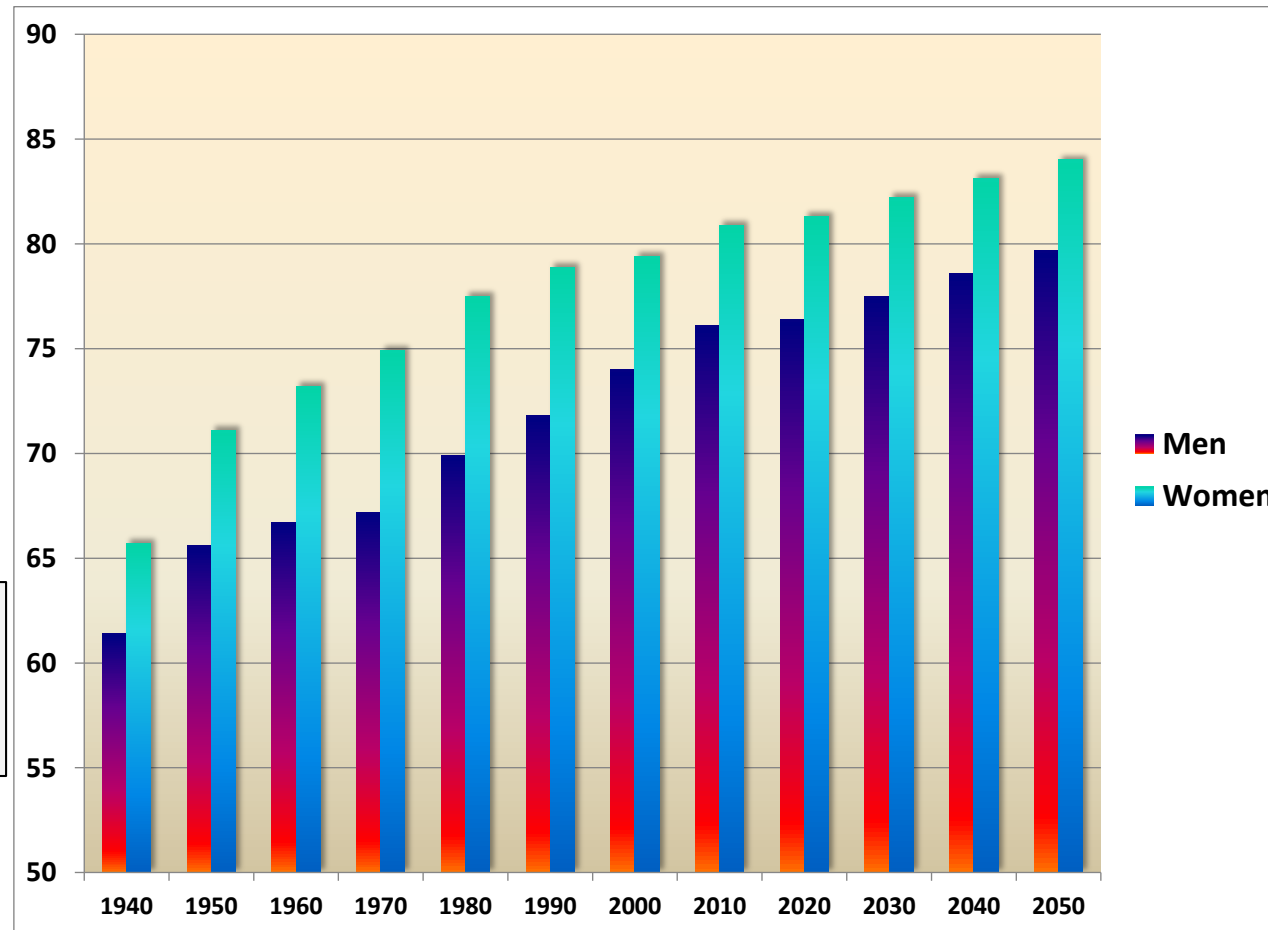
.. if the steps are taken when funds are depleted?

If actions are deferred for several years, the changes necessary to maintain Social Security solvency become concentrated on fewer years and fewer generations.

Life Expectancy of Those Born in the Years Indicated

	Men	Women
1940	61.4	65.7
1950	65.6	71.1
1960	66.7	73.2
1970	67.2	74.9
1980	69.9	77.5
1990	71.8	78.9
2000	74.0	79.4
2010	76.1	80.9
2020	76.4	81.3
2030	77.5	82.2
2040	78.6	83.1
2050	79.7	84.0

Implications for
Medicare and Soc
Sec are obvious.



The assumptions for 2010 and beyond reflect the "intermediate" demographic assumptions made by the trustees.

Source: 2020 Annual Report of the Board Of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Trust Funds, Table V.A.4 Period life expectancy.

From **Red Ink**

**Population Aged 65 and Above as % Total
and Median Population Age, Select Years**

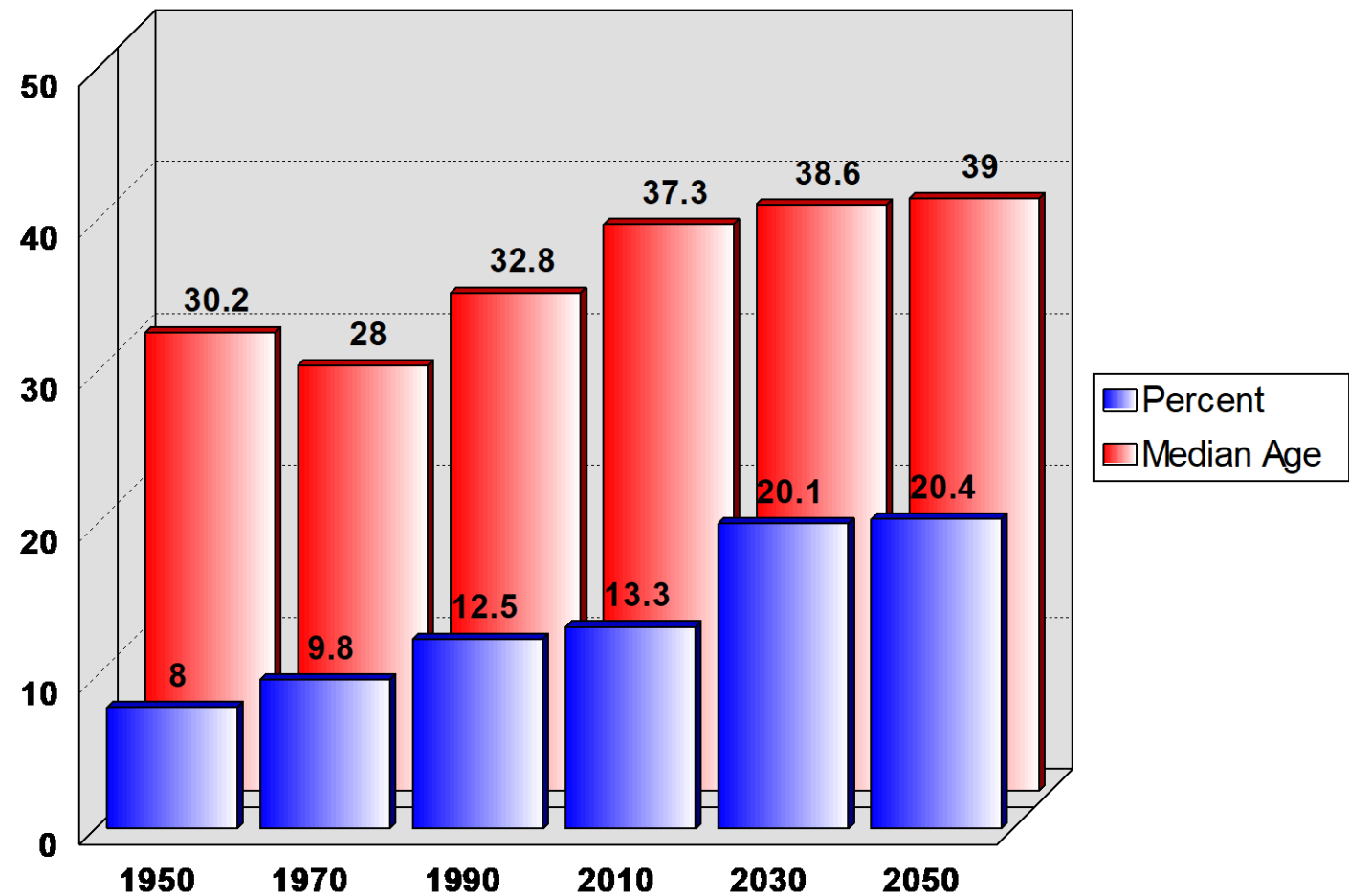


Figure 7.2

Ratio: Contributors to Beneficiaries

OASI (retirement) and OASDI (combined) Trust Funds

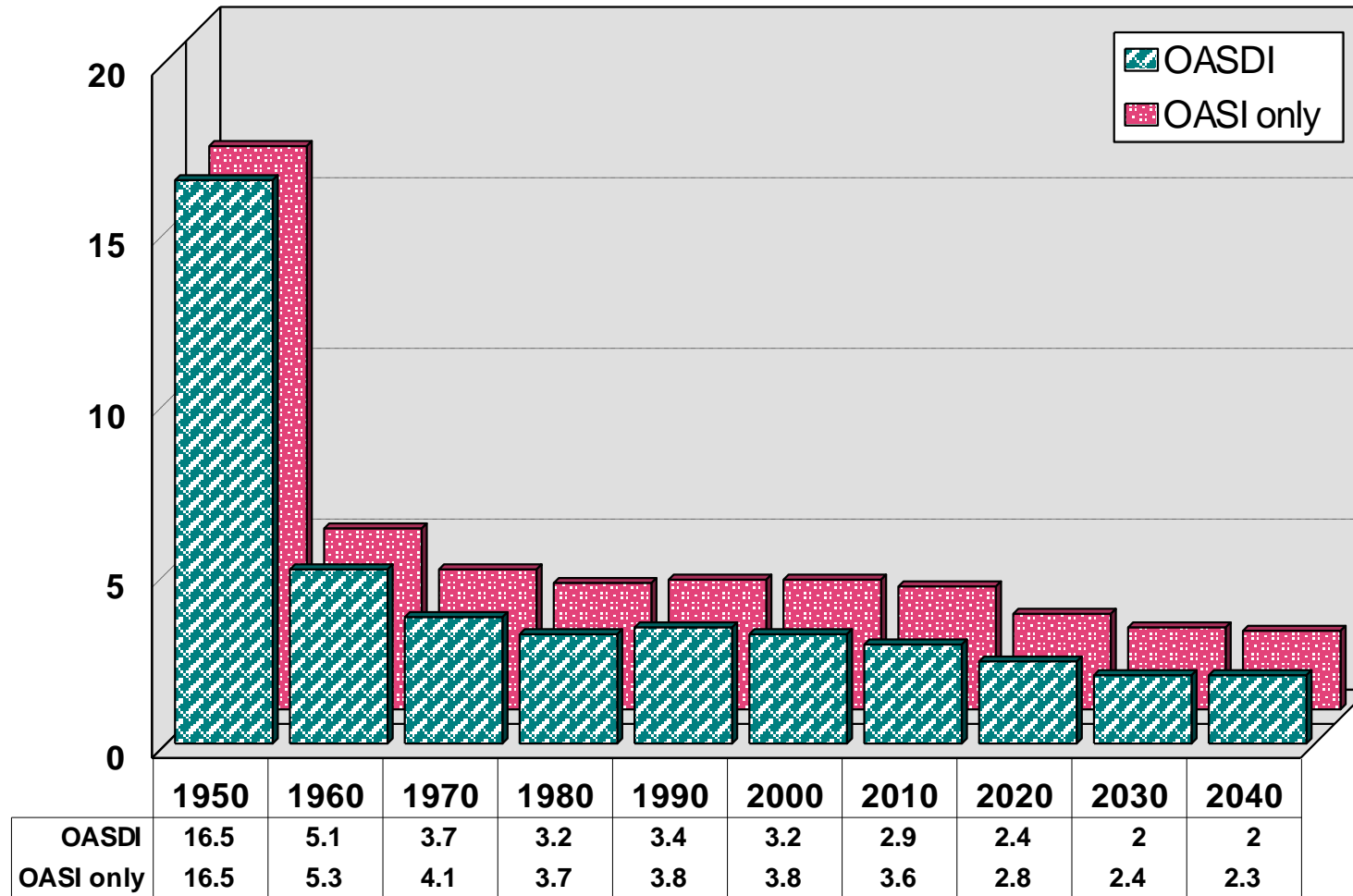
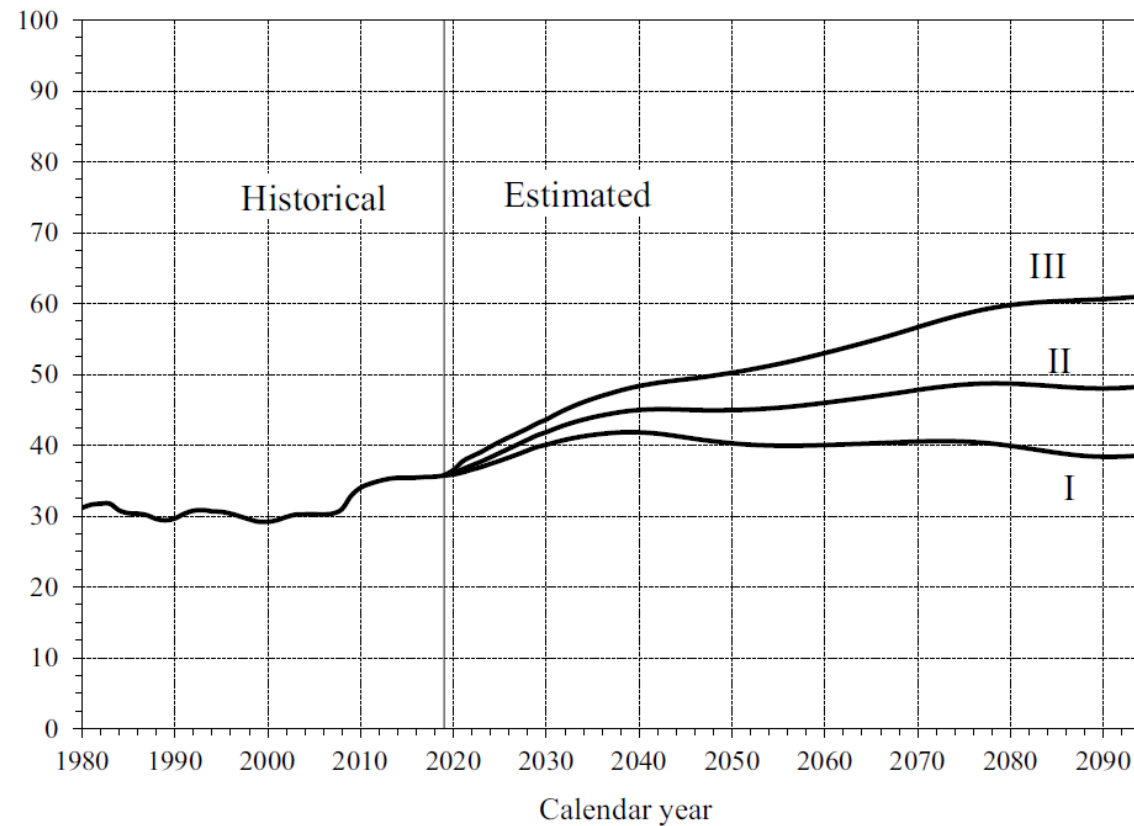
From **Red Ink**

Figure 7.3 This old slide from my book still conformed, with only small differences, by Table IV.B2. Covered Workers and Beneficiaries, Calendar Years 1945-2085., 2010 Trustee's Report. Past 2010 reflect the intermediate assumptions.

The trustee's way of showing the same thing ...

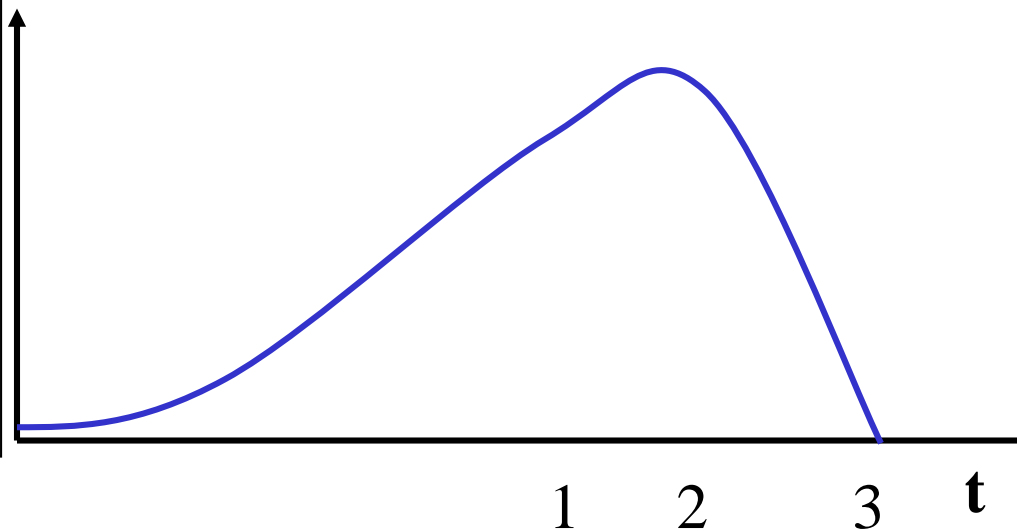
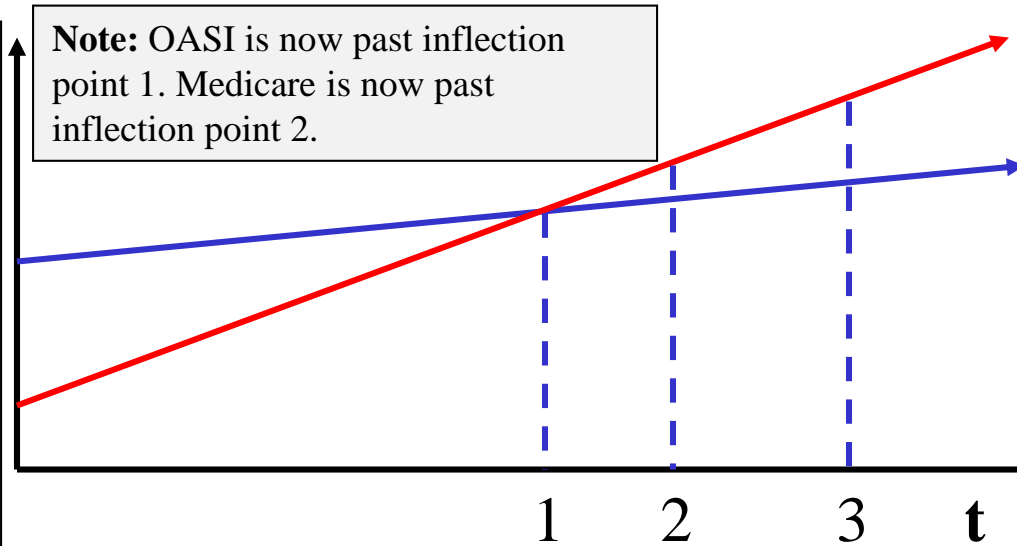
Figure IV.B2.—Number of OASDI Beneficiaries Per 100 Covered Workers



Three critical inflection points for Trust Funds

1. When outlays exceed receipts. At this point the trust fund is adding to the deficit.
2. When outlays exceed receipts by more than interest earned by the trust fund.
3. When interest earned goes to absolute zero and trust fund balances are depleted and spending authority is eliminated.

Note: OASI is now past inflection point 1. Medicare is now past inflection point 2.



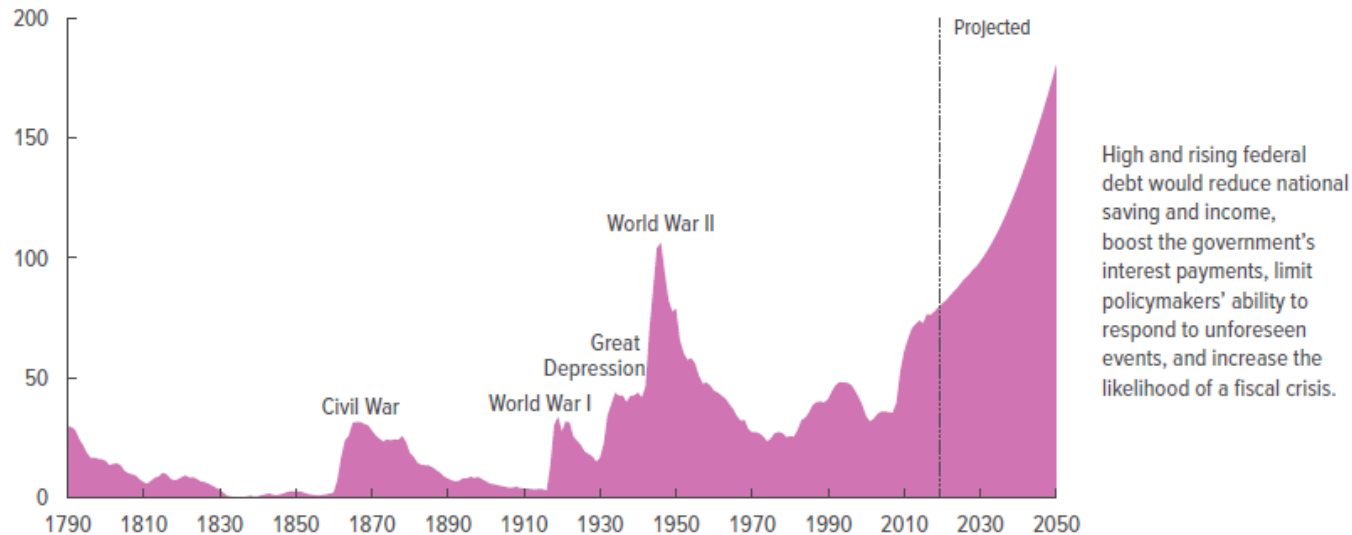
Going back to the future ...

Do you remember this slide from the last lecture?

Figure 1-4.

Federal Debt Held by the Public

Percentage of GDP



High and rising federal debt would reduce national saving and income, boost the government's interest payments, limit policymakers' ability to respond to unforeseen events, and increase the likelihood of a fiscal crisis.

Source: Congressional Budget Office.

GDP = gross domestic product.

Source: The Budget and Economic Outlook, 2020 to 2030, Congressional Budget Office, January 2020

These variables (and others) drive the projections ...

Key Demographic and Economic Long-Term Assumptions for Three Scenarios for the OASDI Trust Fund

	Best Case I	Intermediate II	Worst Cast III	Current	Year
Total fertility rate (2030):	2.15	1.95	1.80	1.68	2019
Annual net immigration (2040):	1,627,000	1,277,000	951,000	1,467,000	2019
Productivity gain annual (2029+):*	1.93	1.63	1.33	1.19	2019
CPI annual (2029+):	3	2.4	1.8	1.66	2019
Unemployment rate % (2023+):	4	5.5	6.0	3.7	2019
Trust Fund real interest rate % (2030+):	2.8	2.3	1.8	-1.5	Now

*Productivity gains defined to the ratio of Real GDP to hours worked by all workers.

Source: 2020 Annual Report of the Board Of Trustees of the Federal Old-Age and Survivors
Insurance and Federal Disability Trust Funds, Tables V.A1, V.A2, V.B1, V.B2

For extremely detailed treatment of all assumptions, including history and graphs:

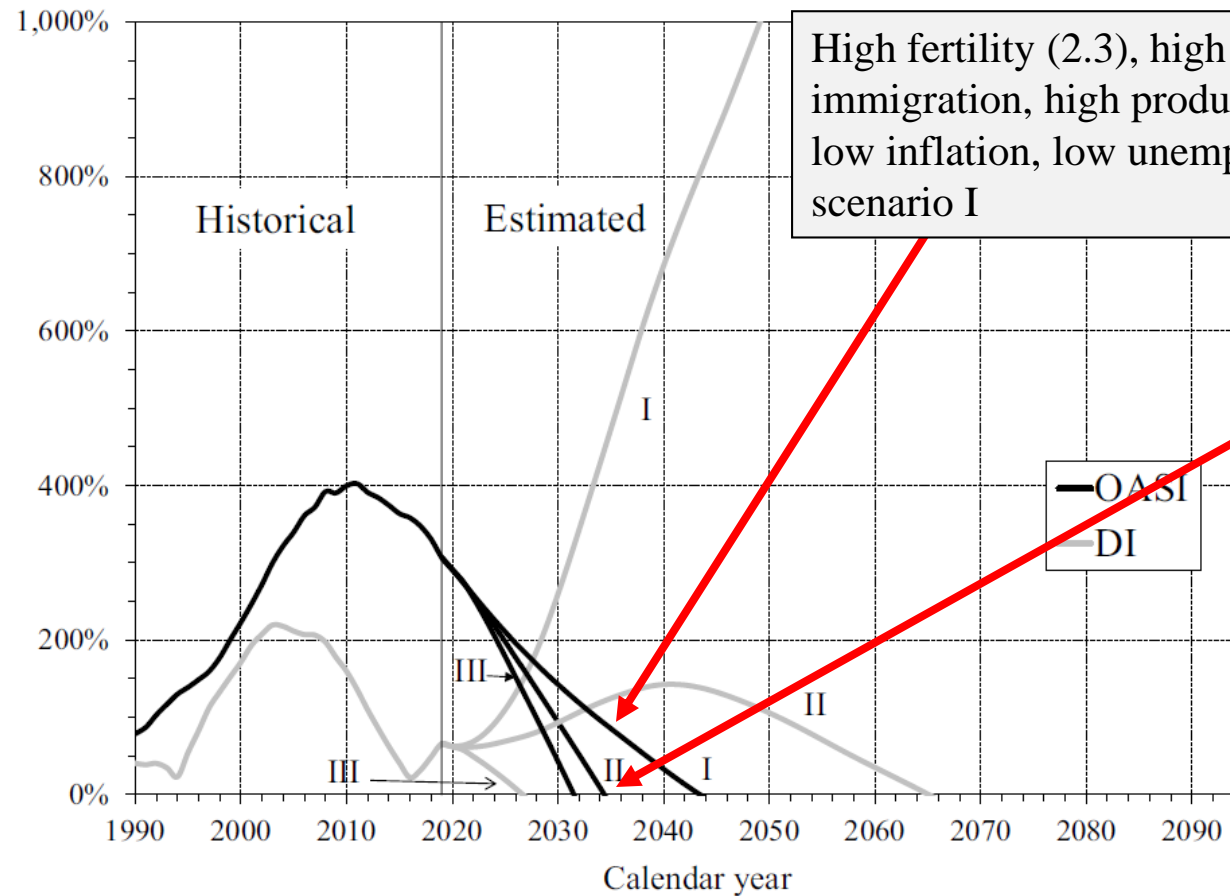
Long-range demographic: https://www.ssa.gov/oact/tr/2020/2020_Long-Range_Demographic_Assumptions.pdf

Economic assumptions: https://www.ssa.gov/oact/tr/2020/2020_Long-Range_Economic_Assumptions.pdf

Disability assumptions: https://www.ssa.gov/oact/tr/2020/2020_Long-Range_Disability_Assumptions.pdf

The Three Trustee Scenarios

Figure IV.B3.—Long-Range OASI and DI Trust Fund Ratios
[Asset reserves as a percentage of annual cost]



High fertility (2.3), high immigration, high productivity, low inflation, low unemployment: scenario I

This is their intermediate forecast that is so well publicized. It is capped now with full depletion in 2034. This estimate was 2037 in 2010.

Source: The 2020 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds.

Primary fiscal concerns

- How will these deficits be reduced?
- How will this integrate with FRS monetary policy?
- Will Social Security and Medicare be “fixed”?
- Does any fix imply inflation?
- Will future medical costs be met?
- Will the arrangement be fair?
 - (Hint for students: *Not for you*).

... and that is it for this class (and, literally, my career). Good luck to all of you. I hope you learned something useful in this class.

Key take-aways that you *should* understand ...



1. 80% of federal government outlays are payments to individual!
2. The bulk of federal spending is entitlements, and
 - There are no annual appropriations
 - Spending is determined by demographics and the law
3. Understand how trust funds work!
 - How they are funded
 - How and why they hold government account debt
 - The key annual drivers in the trust fund (receipts, outlays, interest earned)
4. There are three inflection points
 - What are they?
 - What relationship do they have with the overall budget deficit?
 - Where are they now?
5. There are three, not one, forecasts
6. All of these data are going to severely distort in the coming months.

... and how does this all look for you???

That's it ...

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