

# *How to Pay for Social Security's Missing Trust Fund?*

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# Outline of presentation

- Introduction
- The Cost of the Missing Trust Fund
- The Source of the Missing Trust Fund
- Paths Forward
- Conclusion

# The Trust Fund is projected to be depleted in 2035, and understanding why is important.

- The reason for the financial shortfall can provide valuable context for the appropriate policy response.
- If the cost of scheduled benefits exceeds the contributions of today's workers, the traditional proposals to reduce benefits or raise payroll taxes would be most relevant.
- If the shortfall results from the lack of contributions made by early beneficiaries, a broader approach may be appropriate.

# This presentation explores which reason is responsible, and considers the implications.

- It will first show that the cost of the program exceeds contributions because the Trust Fund is essentially missing.
- It will then illustrate that the Missing Trust Fund is the result of the earliest beneficiaries, not the much-maligned Baby Boomers.
- Given this context, it concludes by considering different ways in which the shortfall might be paid.

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# A little bit of history can help understand why the Trust Fund is missing.

- The original 1935 amendments that created Social Security bore resemblance to a private insurance plan, with alignment of benefits and contributions for a given cohort.
- But the 1939 amendments altered this structure: it tied benefits to average earnings over a minimum period, added spousal and survivor benefits, and was effectively unfunded.
- So, in the early stages of the program, beneficiaries received far more than they had paid into the system.

# A stylized retirement system can show the implications of these missing contributions.

- Imagine an average earner who saves continuously from ages 25 to 67 and receives real interest of 2.7 percent (Social Security's Intermediate assumption).
- How much would this individual need to save to buy an annuity that replaces 36 percent of their income – as Social Security would – when he retires?
- This amount would reflect the contribution rate required in a fully-funded system.

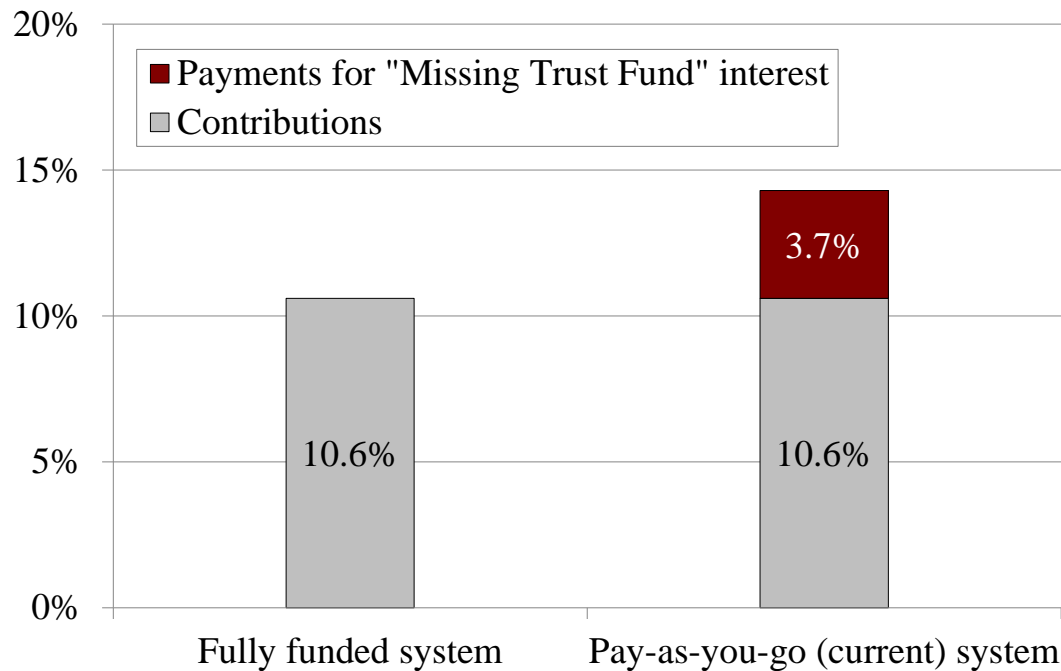
This amount could then be compared to what is required in a pay-as you-go system.

- Under a pay-as-you go system with two workers for each retiree and real wage growth of 1.2 percent, a 36-percent replacement rate requires a contribution rate of 14.3 percent.
- The fully-funded contribution amount is less than 14.3 percent, and the difference reflects the cost of the interest on the Missing Trust Fund.



# The fully-funded amount is similar to the current Social Security payroll tax rate.

Cost as Percentage of Payroll for Funded and Pay-as-you-go Retirement Plan



Note: The fully funded system assumes contributions from ages 25 to 67 that accrue interest at a real rate of 2.7 percent, with assets used to buy an actuarially fair annuity at age 67.

Source: Authors' calculations.

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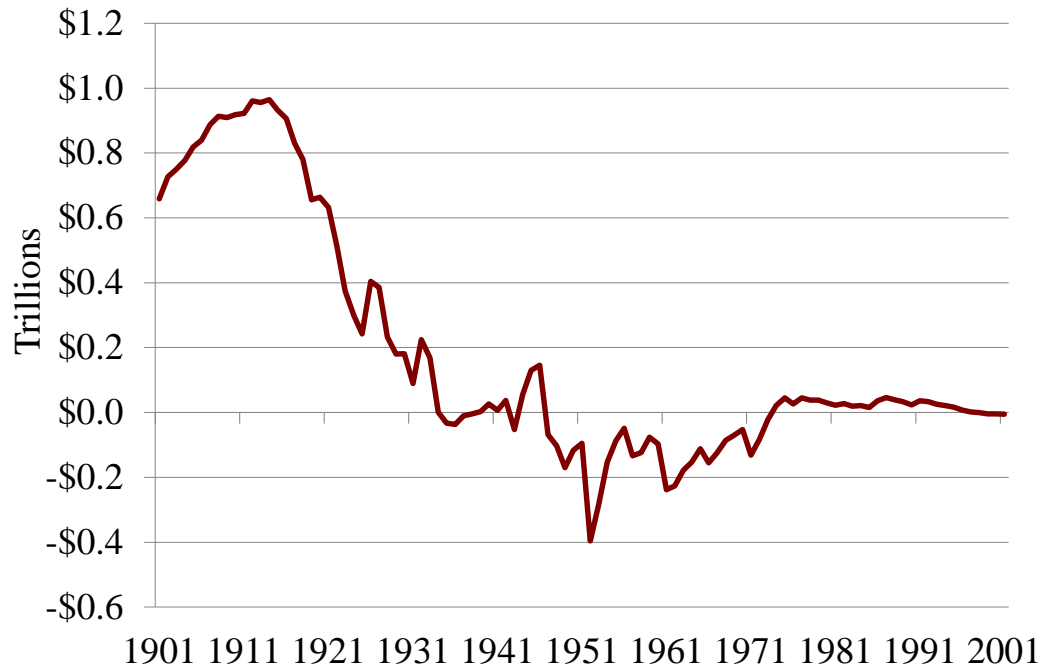
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# The “Missing Trust Fund” consists of two components.

1. Benefits paid to early cohorts in excess of their contributions.
2. Net transfers to subsequent cohorts.

# Net transfers under current law suggest the Missing Trust Fund is entirely due to early cohorts...

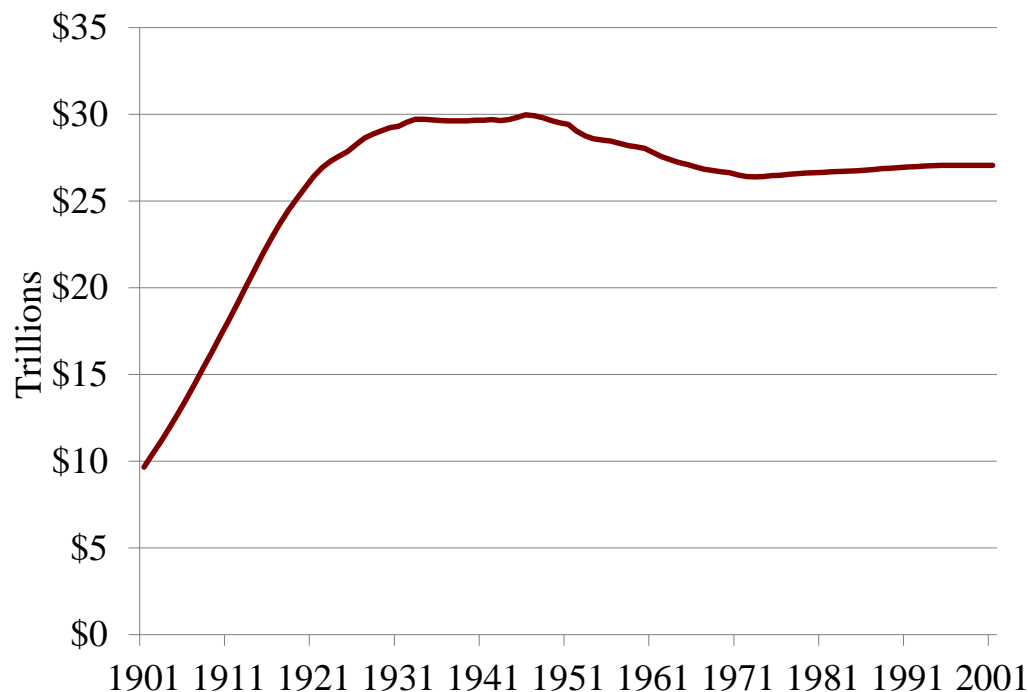
Net Transfers Under Current Law,  
by Birth Cohort, Trillions of 2016 Dollars



Sources: 2016 Social Security Trustees Report; Current Population Survey (1962-2016); and Leimer (2007).

...so that the cumulative net transfers have actually shrunk somewhat recently.

Cumulative Net Transfers Under Current Law,  
by Birth Cohort, Trillions of 2016 Dollars



Note: "Cumulative net transfers" include \$9.0 trillion to pre-1901 birth cohorts.

Sources: 2016 Social Security Trustees Report; Current Population Survey (1962-2016); and Leimer (2007).

# The Missing Trust Fund is due to early cohorts, not current beneficiaries.

- Social Security has made net transfers of \$27.0 trillion in excess of contributions.
- But these transfers are all the result of “Legacy Debt,” often defined as net transfers to pre-1931 birth cohorts.
- It is clear that these missing contributions are the result of long ago decisions, not any gap between contributions and promised benefits for today’s workers.

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# If Social Security benefits are maintained, two ways exist to deal with the shortfall.

1. Raise taxes permanently to replace the missing interest, roughly holding constant the present value of the missing portion of the Trust Fund going forward.
2. Increase taxes by a higher amount, but only temporarily, until a Trust Fund consistent with a fully funded program is built up.



# Within these two broad approaches, several ways exist to implement the tax increases.

- The payroll tax could simply be increased, maintaining the current cap of \$132,900 (adjusted annually for wage growth).
- A payroll tax increase could be combined with an expansion of the tax base by eliminating the payroll tax cap (for the calculations that follow, without increasing benefits).
- Some of the burden could be shifted from the payroll tax to the income tax, reflecting the fact that the shortfall reflects a historical societal choice, not costs for current participants.

The size of the required tax increase depends on both the approach to pay for the missing contributions and the tax chosen.

Required Percentage-Point Increases in Taxes to Finance  
Missing Trust Fund Under Policy Alternatives

	Raise payroll tax	Raise payroll tax + eliminate cap	Raise income tax
<i>Pay back interest only</i>	3.7%	3.0%	2.3%
<i>Replace missing Trust Fund in:</i>			
150 years	4.5	3.7	2.8
125 years	4.8	4.0	3.0
100 years	5.4	4.5	3.4
75 years	6.5	5.3	4.1

Sources: 2017 Social Security Trustees Report; and authors' calculations.

# The specific tax increase chosen affects the distribution of who pays it.

- To analyze the distributional effect, this analysis uses NBER's TaxSim program in conjunction with the *Survey of Consumer Finances* (SCF).
- Once variables for each household are appropriately coded, they can be run through the program to produce the household's income and payroll tax liability.
- These amounts can then be adjusted to see how different ways of addressing the Missing Trust Fund impact households at different points in the income distribution.

The uncapped payroll tax increase is the most evenly distributed, with the income tax more top-weighted.

Share of Tax Increases Paid Under Policy Alternative,  
by Income Quartile

	Raise payroll tax	Raise payroll tax + eliminate cap	Raise income tax
Top quartile	54%	65%	84%
Second quartile	29	22	12
Third quartile	13	10	4
Lowest quartile	4	3	1

Sources: 2017 Social Security Trustees Report; and authors' calculations using the Survey of Consumer Finances (2013) and Feenberg and Coutts ("TaxSim").

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# Conclusion

- The Missing Trust Fund is a result of Legacy Debt built up during the early years of the Social Security program.
- This origin suggests that if society wants to maintain scheduled benefits, an income tax increase could be appropriate and provide a more equitable distribution.
- In any case, this tax increase could be spread infinitely over future generations, or used to create a Trust Fund consistent with a fully funded program.