MODELING CONTRIBUTIONS FOR SOCIAL INSURANCE IN LIFT

R. M. Monaco[1]

Introduction

Social insurance contributions accounted for about 41 percent of Federal receipts in 1993 and about 8 percent of state and local receipts. At the Federal level, contributions for social insurance were almost equal to receipts from the personal income tax. At the state and local level, they were about half the size of income tax receipts. Thus, at both the Federal and state and local levels, contributions for social insurance are an extremely important source of revenue. There are many Federal social insurance programs to which business and persons contribute. Among the largest are:

- Social Security -- Old Age, Survivors, and Disability (OASDI)
- Medicare -- Hospital Insurance (HI), also known as Medicare part A
- Medicare -- Supplemental Medical Insurance (SMI), also known as Medicare part B
- Unemployment insurance
- Federal civilian retirement for civilian workers starting service prior to 1984.

At the state and local level there are three main social insurance programs:

- State and local employee retirement
- Temporary disability insurance
- Unemployment insurance

Slightly more than half of all social insurance contributions is accounted for by payments from business (and government as an employer). In LIFT, contributions to social insurance by persons and business are modeled separately. Contributions made by the self-employed (proprietorships and partnerships) are treated as personal contributions, following National Income and Product Account (NIPA) convention. In this paper, we first discuss personal contributions for social insurance. Next we outline how LIFT handles contributions by business. Finally, we describe factors to consider when running LIFT simulations that are related to social insurance contributions and fund balances.

[1] Lorraine Sullivan Monaco and Jeffry J. Janoska gave useful comments on the work and this paper.

Personal Contributions

Personal contributions for social insurance are handled as macrovariables in LIFT. A separate variable is defined for each concept that we need. Historical values for these variables are contained in the MACROACT.DAT file in the ADATA directory. Fixes and exogenous forecast values are contained in the MACROFIX.DAT file, also in the ADATA directory

Social Security Background

Social Security -- Old Age, Survivors and Disability Insurance (OASDI) -- and Medicare -- (HI and SMI) -- are the largest social insurance funds. Personal contributions for these funds account for about 85 percent of all personal social insurance fund contributions. Personal contributions to these funds are primarily made by payroll deduction. The size of the deduction is determined by the "contribution" rate, which is a percentage of "covered earnings." There are separate contribution rates for OASI (OAS Insurance), disability insurance (DI), and hospital insurance (HI). In early 1994, the personal contribution rates were:

- 5.6 percent for OASI
- 0.6 percent for DI
- 1.45 percent for HI

The total of these contribution rates is 7.65 percent. Legislation has set the total of these contribution rates to remain constant indefinitely. In 2000, the contribution rate for OASI is scheduled to fall 0.11 percentage points, and the contribution rate for DI is scheduled to rise by 0.11 percentage points.[2] Values for the legislated contribution rates are in LIFT variable SOCRAT. Appendix B of this paper lists the values of SOCRAT, along with several other variables, from 1960 through 1992.

If there were no other complications, we could forecast personal contributions by multiplying SOCRAT by total wages forecasted by LIFT. There are three major complications, however.

First, not all employees are covered by these social insurance funds. For example, Federal employees hired prior to 1984 were not eligible for OASDI payments and did not make contributions. In 1987, about 42 percent of Federal employees were covered by OASDHI. State and local government employees can be, but are not necessarily covered by the OASDI system. In 1987, about 72 percent were covered. For farmers, domestic workers, and the self-employed, special minimum requirements must be met before these workers are covered by OASDHI. To take a reasonably famous recent example, domestic workers must receive at least $50 in a calendar quarter from a single employer to qualify for benefits (and to qualify for making

[2]It is important to note that the employer contribution is identical to the personal rate. Thus the total contribution made out of wages is the sum of the employer and employee legislated contribution rate for these social insurance funds.

payments at the contribution rate). In LIFT, variable FSSWAG (Federal Social insurance Share of WAGes) shows the share of the total wage bill that is "covered" under OASDHI.

A second complication is that not all wages of covered employees are subject to taxation. Along with contribution rates, the law sets ceilings on the earnings that are subject to the tax. For example, in 1993 only the first $57,600 of wages were subject to the tax. Thus, two earners, one with earnings of $75,000 and one with $57,600 would pay exactly the same contribution to the OASDI fund. To further complicate matters, after 1990, the HI part of OASDHI began to use a higher maximum taxable earnings. To return to our previous example, the $75,000-earner would make larger contributions to the HI fund than would the $57,600 earner, even though their OASDI contribution were the same. After 1993, the maximum taxable earnings are set to rise automatically with average earnings. In LIFT, the variable TXERNS shows the share of covered wages subject to taxation.

A third complication is that not all returns to labor are wage income -- proprietorships and partnerships have special rules for Social Security contributions. As a rule, after 1984, the contribution rate for the self-employed is the sum of the employer rate and the personal rate; that is, the self-employed pay both the employer and employee share of contributions. This would suggest that the appropriate contribution rate facing the self-employed is twice the personal contribution rate. However, in 1990 a new system was put into place, which was designed to make self-employed contributions behave more like employee contributions. This was done by allowing deductions from the self-employed earnings base as well as Federal income tax deductions. The result is to keep the effective self-employed rate below the sum of employer and employee contributions.

In addition, as with wages, not all self-employed earnings are covered, and not all covered earnings are taxable. Data were available to construct an analog of LIFT variable FSSWAG for the self-employed (FSSYP). But, there was no readily available data to show what share of covered self-employed income was subject to taxation. So LIFT uses TXERNS -- the same variable used for wage-earner contributions -- for the self-employed.

Modeling and Forecasting Social Security and Other Social Insurance Fund Contributions

LIFT explicitly accounts for personal contributions for three types of Federal social insurance funds. Total contributions (LIFT variable COSSF) are divided into:

- Premiums paid for Supplementary Medical Insurance (Medicare part B or SMI, LIFT variable SMIPRM)
- Federal retirement (LIFT variable GFRETP)
- A residual (LIFT variable SOSCEP).

The residual component is largely Social Security (OASDHI) and is by far the largest of the three

components. Modeling SMI premiums and Federal retirement is discussed in a separate sub-section below.

To model SOSECP, we divide total payments into those made by the self-employed and those made from wages and salaries. The implied contribution rate (LIFT variable RCOSSF) is calculated as the ratio of remaining social insurance fund contributions to the Social Security earnings base. The difference between SOCRAT and RCOSSF is the implied contribution rate for all other Federal social insurance funds. These are primarily unemployment insurance, railroad retirement, and veterans' life insurance. Forecasts of these personal contributions along with OASDHI are made by multiplying RCOSSF by the adjusted wage base (GYW*FSSWAG*TXERNS).

A similar calculation is done for the self-employed, although the contributions here only apply to OASDHI. LIFT variable RCOSFP is calculated historically as the ratio of self-employed contributions to the adjusted proprietor income base (YP*FSSYP*TXERNS). To mimic the current tax system, we calculate the difference between RCOSFP and SOCRAT multiplied by 2. Values for RCOSFP are typically lower than twice the values of SOCRAT.

Forecasts for social insurance contributions depend crucially on the values for covered wages as a share of total wages (FSSWAG), covered proprietor income as a share of total proprietor income (FSSYP), and the share of covered earnings that are taxable (TXERNS). For example, an increase of one percentage point in TXERNS is equivalent to a 1 percentage point increase in the legislated contribution rate (SOCRAT).

At first we tried a trend approach for forecasting FSSWAG, FSSYP, and TXERNS. Time trend equations were estimated to provide forecasts for these variables, using several different starting dates for each regression. This approach worked well for FSSWAG and TXERNS, but FSSYP showed no relationship with a time trend. Despite their good fit, we abandoned the trend approach for FSSWAG and TXERNS because it resulted in unreasonably high forecasts for personal social insurance contributions.

A closer look at FSSWAG shows significant jumps in years when the laws changed to incorporate more workers into the system. Overall the time trend was catching the expansion of system coverage at these law changes over the last 30 years. But almost all of the eligible workers are already covered and there appears to be no compelling reason to assume that workers not covered will automatically join the system. For example, in 1991 97.8 percent of all civilian workers were already covered by OASDHI. The significant exceptions were Federal employees hired prior to 1984 and some portion of state and local employees. While the number of Federal employees not covered will decline over time (and the coverage ratio will rise slightly), there is no evidence that states and localities will change their coverage. As a result, in the forecast, the default value for FSSWAG is set at 91.6 (the value in 1991) and increases by 0.1 percentage points each year to capture the effect of retiring noncovered Federal workers being replaced by covered Federal workers. This has the effect of raising the effective tax rate in the forecast by 1.5 percentage points over a 15 year forecast horizon.

The share of covered self-employed earnings (FSSYP) has been extremely volatile. With little information about this sector, we chose simply to keep FSSYP at its average since 1985; 60.2 percent.

TXERNS showed a strong positive relation with a time trend, but forecasting TXERNS through 2010 using the time trend resulted in predicted values that reached 100 percent in 2010. Logically, this implies that all workers are earning less than or equal to the taxable wage ceiling. Since this cannot be true by current construction of the earnings ceiling, in the forecast we abandoned the time trend approach. Further, from 1985 through 1991, TXERNS actually declined by almost 2 percentage points, although it rose slightly in 1991. In the absence of information about this variable, and until we can research a better approach, we set TXERNS at 87.4, the average from 1985 through 1991. More work needs to be done in this area.

Values for all of these variables can be altered in the MACROFIX file. The LIFT equations will automatically raise RCOSSF and RCOSFP when the legislated social insurance contribution rate (SOCRAT) rises. To mimic an increase in other social insurance taxes, use a C fix on RCOSSF and/or RCOSFP.

Modeling Other Federal Social Insurance Funds

There are several other Federal social insurance funds to which people make contributions (tax payments). For our purposes, the most important is Supplementary Medical Insurance (Medicare part B). This program is a voluntary medical insurance program that covers physician services and outpatient hospital treatment for those qualifying for Medicare part A (the easiest qualifier to remember is age, but there are exceptions here too). In general, participants in this social insurance program make premium payments, like a regular insurance program. However, premium payments roughly cover only 25 percent of Medicare part B spending. Because these premiums are not related to wages or proprietor income, it is useful to separate them out in modeling total personal contributions (LIFT variable SMIPRM). To forecast SMIPRM, we take 25 percent of the outlays of Medicare part B (LIFT variable TRPSMI).

About 2-to-3 percent of personal contributions for Federal social insurance are accounted for by contributions made by Federal employees into the Federal retirement system. These contributions are most important for Federal employees not covered by OASDI (largely those hired prior to 1984). Because the Federal government changed its pension system in 1984, this part of personal contributions to Federal social insurance funds is has been falling as a share of Federal wages. To avoid mixing these contributions -- which can only be made by Federal employees -- with overall social insurance fund contributions, we model these contributions separately (LIFT variable GFRETP). To forecast GFRETP, we begin with the last observed ratio of contributions to the Federal wage bill (LIFT variable COWF) as a default. As a percent, the value is 2.72. There is a decided downward trend in this variable, as the part of the Federal workforce hired prior to 1984 dwindles. As a default forecast, we arbitrarily chose to reduce this ratio by 0.1 percentage point a year. This is intended to capture the shift from contributions to the Federal retirement fund to the OASDI fund, and will result in effectively eliminating this

source of contributions in about 25 years.

State and Local Social Insurance Funds

Contributions to state employee retirement plans account for more than 85 percent of personal contributions to state social insurance funds. Because, like the Federal retirement case, these contributions can only be made by state and local employees, we link personal retirement contributions (SLRETP) to the state and local wage bill (COWS). Thus, forecasts of SLRETP are a constant 4.4 percent of the state and local wage bill, which has been the average from 1965 through 1991.

The remaining amount of personal contributions for state and local social insurance funds is quite small. To forecast this, we define LIFT variable RCOSSL as the ratio of these contributions to overall wages and proprietor income (GYW+YP). As a default, we keep RCOSSL constant in the forecast.

Employer Contributions for Social Insurance

Employer contributions account for more than half of total contributions to social insurance funds. While personal contributions for social insurance are handled using LIFT macrovariables, employer contributions are modeled as part of the price side of LIFT. Employer contributions for social insurance are one of the components of labor compensation, which is modeled at the 51 industry level. The LIFT mnemonic for the value of employer contributions by industry is ECI**, where ** represents a one or two digit industry number. The LIFT mnemonic for the rates facing each industry is REC**. Historical values for these variables by industry are contained in the file PRICE.DAT (in the ADATA directory). Fixes for these variables are entered in the PFIXES.DAT file, also in the ADATA directory.

Currently, our source of industry contributions for social insurance is NIPA table 6.10C. That table shows only the total amount of social insurance contributions by industry, and does not break down the data into the categories that are available for personal contributions. That is, there is no distinction at the industry level between contributions to Federal and state and local governments. In LIFT, two macrovariables (RCOFP and RCOLP) are used to split total private employer contributions into Federal and state and local contributions. No splitting is necessary for the Federal government as an employer. However, splits are done for state and local enterprises as employers to account for contributions to Federal and state and local insurance funds. (RCOFSE and RCOLSE). State and local industry (government) has similar variables (RCOFSI and RCOLSI). In general these "splitting" variables are held constant at their last known values.

TABLE 1
Employer Contributions of Social Insurance
percent of wages

		1989	1990	1991
1	Farm & agricultural services	7.3	8.0	9.0
2	Crude petrol. & nat. gas	6.3	6.2	6.0
3	Mining	10.1	9.8	9.9
4	Contract construction	9.1	9.4	10.0
5	Food & tobacco	9.2	9.4	9.2
6	Textile mill products	7.1	7.4	7.2
7	Apparel and related products	7.5	7.6	7.6
8	Paper and allied products	7.6	7.6	7.6
9	Printing and publishing	7.0	7.0	7.0
10	Chemical and allied products	7.8	7.7	7.7
11	Petroleum and related indust	15.2	14.7	14.6
12	Rubber & misc plastic produc	8.8	8.8	8.8
13	Leather and leather products	7.8	7.7	7.5
14	Lumber & wood products,ex fu	8.1	8.2	8.3
15	Furniture and fixtures	8.1	8.4	8.4
16	Stone, clay, & glass product	8.5	8.8	8.8
17	Primary metal industries	10.4	10.7	10.7
18	Metal products	8.6	8.9	8.9
19	Trans eq + ord ex motor veh	7.9	8.2	8.3
20	Machinery, except electrical	7.5	7.7	7.7
21	Electrical machinery	7.6	7.8	7.8
22	Motor vehicles and equipment	10.1	10.5	10.9
23	Instruments and related prod	7.1	7.3	7.3
24	Misc. manufacturing ind.	7.3	7.6	7.4
25	Railroads	14.8	14.6	13.9
26	Air transportation	11.5	11.3	11.5
27	Trucking and other transport	9.2	9.1	9.2
28	COMMUNICATIONS	7.2	7.0	7.3
30	Electric, gas, and sanitary	7.4	7.4	7.3
31	Wholesale and retail trade	8.0	8.1	8.1
32	Financial & insurance servic	7.4	7.4	7.4
33	Real estate & combinations o	5.9	6.0	6.1
34	Hotels & repair (not auto)	8.2	8.1	8.4
35	Misc. business services	6.6	6.4	6.6
36	Auto repair	7.0	6.8	7.1
37	Motion pictures & amusements	7.7	7.2	7.5
38	Educational services	5.9	5.8	5.8
51	Health services	7.9	7.7	7.8
39	Private households	1.0	1.0	1.0
40	Fed. gov't enterprises	26.7	26.5	27.5
41	State & local gov't enterpr	22.6	24.9	24.3
44	Fed gov't general administ.	25.4	26.2	27.3
45	State & local general admin	16.8	16.2	16.1

Not only are there no NIPA data separating employer contributions into Federal and state and local, there is also no industry detail about the amounts employers contribute to particular programs, like OASDHI or unemployment insurance. LIFT makes no distinction on the employer side for contributions to social insurance. Although this is an omission, it is less serious on the employer side than on the personal side because:

- Self-employed are part of personal contributions.
- Contributions for SMI are only made from the personal side.

Because the employer data lack some of the detail available for personal contributions, we

model employer contributions much more simply than personal contributions. Social insurance contributions by industry are determined as the product of contribution rates by industry (REC) and wages (not total labor compensation) by industry. Table 1 shows the 1991 distribution of REC by industry.

Table 1 shows wide variation in implicit employer contribution rates by industry, despite facing identical OASDHI rates. Several features of the tax system contribute to this variation. First, the relatively high social insurance contribution rates by government reflect the fact that government pension plans are classified as social insurance funds, to which employers must contribute.

Second, different industries face different tax rates for unemployment insurance. The unemployment insurance (UI) system is financed by a combination of Federal and state and local taxes. States largely finance regular unemployment insurance benefits (which provides eligible workers up to 26 weeks of benefits) and half of "extended" benefits. Extended benefits provide insurance beyond 26 weeks and typically are used only during recessions or protracted growth slowdowns. Tax rates facing companies are "experience rated", that is, companies with a history of sizable layoffs face higher tax rates. Since these companies are, for the most part, concentrated in certain industries, the industry tax rates differ. Each state sets maximum and minimum tax rates for companies, and it is not necessary that these rates be the same across all states. Thus, differing industry tax rates can reflect not only the clustering of high-layoff companies in certain cyclically-sensitive industries, but also the geographical dispersion of industries.

Third, contributions for temporary disability insurance -- workman's compensation -- differ by industry. Table 1 shows higher rates on cyclical industries (construction) and more "dangerous" industries (construction, mining, petroleum refining).

Forecasting Employer Contributions

To forecast employer contributions, we hold constant the last observed values of REC by industry and multiply them by the amount of wage income in each industry. To ensure that if legislation changes the social security contribution rate (SOCRAT), the business contribution also changes, the general equation for REC** is (there is a separate REC for each industry):

```
REC(t) = REC(t-1) + [SOCRAT(t)-SOCRAT(t-1)] + [TXERNS(t)-TXERNS(t-1)] + [FSSWAG(t)-FSSWAG(t-1)]
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If SOCRAT is unchanged throughout a forecast or simulation, then the values of REC that are used in the forecast are the last actual implied contribution rate, currently the 1991 implied rate. Forecasted values of total employer contributions for social insurance are in LIFT macrovariable VECI.

Running Simulations That Involve Social Insurance Contributions

The important variables to consider when running LIFT are those that are exogenous to the social insurance system: the OASDHI contribution rate (SOCRAT), and the variables that account for difference between total wages, covered wages, and taxable covered wages (FSSWAG, FSSYP, and TXERNS). Users can alter contributions by altering FSSWAG, TXERNS, or, SOCRAT.

It is also possible to endogenize SOCRAT. That is, LIFT will solve for the Federal social insurance contribution rate that, when combined with wages and proprietor income, meets some Federal revenue target. We define the revenue target in terms of the relationship of the size of the Federal social insurance fund out of which payments are made relative to the payment outflow from the fund. To be more concrete, we define LIFT variable FSIFTA as a target "solvency" ratio -- the ratio of the trust funds to the payment outflow. A value of 100 for this variable means that the size of the Federal social insurance trust fund should be equal to payment outflow, or that the Federal government could meet last year's benefit payments obligations without any extra revenue. Typical values for this variable for the major social insurance trust fund (OASDI) was around 120 percent to 130 percent between 1989 and 1991. Because the OASDI system is supposed to be actuarially sound, this ratio is likely to rise through about 2005, and then begin to decline as the baby boom generation retires.

In a LIFT simulation with SOCRAT endogenous, the model compares this year's target (FSIFTA) with the previous year's actual ratio. It calculates the dollar amount of the shortfall (or overage) and adjusts SOCRAT accordingly. To activate this mechanism in LIFT, users need only specify FSIFTA in the MACROFIX file. To keep SOCRAT at the legislated rates, either take out or comment out the fix on FSIFTA. For reference here is a list of variables relevant to the mechanism:

- SOCFT -- Federal trust fund total (includes social insurance as well as several small trust funds that are not related to social insurance.) (SOCSLT)

- GGIFMS -- Current year balance on social insurance inflows and outflows. (GSLSI)

- SOCFR -- Interest receipts on the Federal trust fund. (SOCSLR)

- SOCFAX -- Administrative expenses of the social insurance funds. (SOCSLA)

Similar variables exist for the state and local sector. These are noted in parentheses in the above definitions. At present, there is no mechanism that engodenizes non-retirement contributions to state and local insurance funds.

It is useful to note that Federal social insurance fund outlays are the sum of several transfer payment variables in LIFT. Outlays are the sum of:

- TRPUI -- Federal unemployment insurance outlays
- TRPOAS -- Old age, survivors, and disability outlays
- TRPRET -- Federal retirement outlays
- TRPMR -- Federal military retirement outlays
- TRPHOS -- Medicare Hospital Insurance (HI)
- SMIPRM -- Outlays equal to the value of Medicare part B premiums.
- TRPSIO -- Other benefits (a residual)

Only the premium part of Medicare part B is included in the social insurance outlay calculation. The reason for this is not straight-forward. Unlike the other social insurance programs, about 75 percent of Medicare part B is financed out of general revenue, not out of the social insurance fund. In actuality, the Federal government makes an intra-governmental transfer into the social insurance fund equal to 75 percent of Medicare part B. In LIFT, the overall Federal deficit is calculated first, then the social insurance fund deficit, and the non-social insurance fund deficit is calculated as a residual. It is important to note that all of Medicare outlays are counted as Federal outlays in calculating the overall Federal deficit. However, including all Part B outlays in the social insurance fund outlays would necessitate programming to accommodate an intra-government transfer. Leaving general-revenue funded Medicare spending out of the social insurance fund outlays altogether accomplishes the proper split in the deficit figures without adding intra-governmental transfers.

Conclusion and Future Directions

This paper has laid out the methods that LIFT uses to forecast contributions for social insurance. The state of the current work points to several possibilities for further data work and research. Among these are:

- Better models for FSSWAG, FSSYP, and TXERNS
- Separating employer contributions into constituent parts at the industry level, and modeling the unemployment insurance aspect of these contributions more carefully.
- Disaggregating the single LIFT Federal social insurance fund into its constituent pieces to be able to better address policy simulations concerning individual funds.

More Information

Data on personal contributions are in NIPA table 3.6. Date for employer contributions are in NIPA table 6.10C.

An excellent source of information on the rules and legislated contribution rates, and the source for most of the detailed data and laws discussed here is:

Overview of the Federal Tax System
U.S. House of Representatives
Committee on Ways and Means

The 1993 edition was released June 14, 1993 and is committee print WMCP:103-17. The 103 in the number represents the 103rd Congress. A new edition of this document appears each Congress.

An overview of the Federal social insurance system can be found in any public finance textbook. Rosen (1992) is especially good. Another useful source is Steven Sheffrin Markets and Majorities, 1993.

Historical data for specific Federal receipts and spending can be found in Historical Tables: Budget of the U.S. Government, Fiscal Year 1994. Note that these data are in fiscal years only, not calendar years. Any Budget of the United States Government will have some detail on the current receipts and outlays for social insurance, as well as a discussion of Federal trust funds.

APPENDIX A
RELEVANT FORECASTING EQUATIONS AND VARIABLES

Total personal contributions

```
SOCI = COSSF + COSSL
```

Federal personal contributions

```
COSSF = SMIPRM + GFRETP + SOSECP
```

Supplemental Medical Insurance

```
SMIPRM = 0.25 * TRPSMI
```

Federal Retirement

```
GFRETP = ((0.027 - 0.1*(NYR-91))* COWF
```

Social Security and all other funds

```
SOSECP = (RCOSSF/100)*(TXERNS/100)*(FSSWAG/100)*GYW
       + (RCOSFP/100)*(TXERNS/100)*(FSSYP/100)*YP
```

Implied Wage Contribution Rate

```
RCOSSF =  0.38 + SOCRAT
```

Implied Proprietor Income Contribution Rate

```
RCOSFP = -3.66 + 2 * SOCRAT
```

Covered Wage Share

```
FSSWAG = 91.63 + 0.1 * (NYR - 91)
```

Covered Proprietor Income Share

```
FSSYP = 60.20  --  average 1985-91
```

Taxable Income Share of Covered Income

```
TXERNS = 87.4  --  average 1985-91
```

State and local Social Insurance Contributions

```
COSSL = SLRETP + (RCOSSL/100) * (GYW+YP)
```

State and local retirement contributions

```
SLRETP = 0.044 * COWS
```

APPENDIX B
HISTORICAL DATA FOR RELEVANT VARIABLES

Difference between RCOSSF and SOCRAT 1980-1991, %

80.000	0.1785831	0.2031178	0.1916075	0.2610893	-0.0392227
85.000	0.2569709	0.2941570	0.3016629	0.3392220	0.3228884
90.000	0.2939100	0.3797069			

Difference between RCOSFP and 2*SOCRAT 1990-91, %

90.000	-4.752848	-3.657240

Share of covered wage income to total wage income -- FSSWAG, %

60.000	86.51026	85.81105	86.10091	85.95934	86.14154
65.000	85.62001	86.61004	88.01585	87.64569	87.92206
70.000	87.68813	87.08298	88.19477	88.11742	88.26729
75.000	88.03240	88.61716	88.84306	89.41029	89.62001
80.000	89.38689	88.95487	89.44329	89.18180	90.35135
85.000	90.34386	91.24156	90.98708	91.06426	91.54810
90.000	91.34791	91.63380			

Share of covered proprietor income to total proprietor income (with IVA and CCADJ) -- FSSYP, %

60.000	56.26204	55.24862	55.49645	54.93934	55.53719
65.000	62.00000	63.40057	63.18759	61.78429	59.69582
70.000	60.07509	58.81670	56.05750	53.47639	56.54813
75.000	58.08581	57.78781	55.12294	55.87358	55.11551
80.000	56.86845	54.70133	57.76216	60.63203	54.78814
85.000	54.75183	56.67959	57.99484	64.16898	63.63374
90.000	58.62923	56.58874			

Share of taxable earnings in total covered earnings -- TXERNS, %

60.000	78.10000	77.40000	75.80000	74.60000	72.80000
65.000	71.30000	80.00000	78.10000	81.70000	80.10000
70.000	78.20000	76.30000	78.30000	81.80000	85.30000
75.000	84.40000	84.30000	84.70000	83.70000	87.70000
80.000	88.50000	89.40000	89.50000	90.00000	89.30000
85.000	89.00000	88.60000	87.60000	85.90000	86.70000
90.000	86.80000	87.10000			

Legislated Social Security contribution rate -- SOCRAT, %

60.000	3.000000	3.000000	3.125000	3.625000	3.625000
65.000	3.625000	4.200000	4.400000	4.400000	4.800000
70.000	4.800000	5.200000	5.200000	5.850000	5.850000
75.000	5.850000	5.850000	5.850000	6.050000	6.130000
80.000	6.130000	6.650000	6.700000	6.700000	7.000000
85.000	7.050000	7.150000	7.150000	7.510000	7.510000
90.000	7.650000	7.650000			

Implied Combined social insurance contribution rate on wage income -- RCOSSF, %

60.000	3.526552	3.542639	3.634751	4.111606	4.108130
65.000	4.143618	4.687049	4.884212	4.823752	5.205256
70.000	5.182783	5.587498	5.577423	6.226025	6.123100
75.000	6.129022	6.145471	6.109743	6.282475	6.314456
80.000	6.308583	6.853118	6.891607	6.961089	6.960777
85.000	7.306971	7.444157	7.451663	7.849222	7.832889
90.000	7.943910	8.029707			

Implied social insurance contribution rate on taxable proprietor income -- RCOSFP, %

60.000	3.069476	3.445306	3.371913	3.805786	4.088174
65.000	3.480209	3.125000	5.144504	4.220655	4.771106
70.000	5.061808	4.911579	4.912074	4.905674	5.573976
75.000	5.722209	5.406039	5.705684	5.482813	5.689875
80.000	6.476647	6.672955	7.705645	6.968983	7.361545
85.000	8.606600	8.703661	9.074042	8.894711	9.446419
90.000	10.54715	11.64276			

Personal contributions to Federal Retirement -- GFRETP (bill $)

60.000	0.8000000	0.9000000	0.9000000	1.0000000	1.100000
65.000	1.100000	1.200000	1.300000	1.400000	1.500000
70.000	1.900000	2.000000	2.100000	2.200000	2.500000
75.000	2.700000	2.900000	3.000000	3.300000	3.500000
80.000	3.800000	4.000000	4.300000	4.500000	4.700000
85.000	4.800000	4.700000	4.700000	4.500000	4.500000
90.000	4.500000	4.600000			

Personal contributions to State and local Retirement -- SLRETP (bill $)

60.000	1.200000	1.300000	1.300000	1.400000	1.600000
65.000	1.700000	1.900000	2.200000	2.400000	2.700000
70.000	3.100000	3.400000	3.800000	4.200000	4.400000
75.000	4.800000	5.300000	5.800000	6.300000	6.700000
80.000	7.100000	7.800000	8.600000	8.800000	9.200000
85.000	10.000000	11.00000	11.60000	12.50000	13.50000
90.000	15.20000	16.90000			

Implied contribution rate for non-retirement state and local insurance funds -- RCOSSL, %

60.000	0.0307977	0.0298686	0.0562271	0.0536913	0.0502260
65.000	0.0699790	0.0638706	0.0600240	0.0548446	0.0669792
70.000	0.0475135	0.0596392	0.0543405	0.0484789	0.0563380
75.000	0.0534245	0.0484262	0.0526131	0.0465622	0.0556676
80.000	0.0258331	0.0412638	0.0453515	0.0534502	0.0671141
85.000	0.0489716	0.0669708	0.0777786	0.0794999	0.0613560
90.000	0.0643439	0.0752045			