

# **Analytic Issues<sup>1</sup>**

**April 18, 2006**

Social Security data in these records are extracted from files designed for program administration, and not for research. They are inherently not "user friendly" and are easy to misunderstand. To a great extent that is because the programs are far more complicated than they appear initially. The following is a quick overview and explanation of some of the more complicated data usage issues that may come up in the Master Beneficiary Record (MBR) and the Supplemental Security Record (SSR).

In addition, the Social Security Administration website at [www.ssa.gov](http://www.ssa.gov) is also a wonderful resource; in particular, the Social Security Program Rules at [www.ssa.gov/regulations/index.htm](http://www.ssa.gov/regulations/index.htm) and the Social Security Bulletin's Annual Statistical Supplements. The Rand Corporation has also published a useful SSA Program Data User's Manual (Panis et al., 2000)<sup>1</sup>. The majority of the information contained in this document is excerpted from the Rand SSA User's Manual.

## **I. Master Beneficiary Record (MBR)**

This section discusses some MBR data usage issues related to types of claimants, benefits and payments (including calculating monthly benefit payments), dates related to filing and eligibility, and dual entitlement.

### **I.a. Types of Claimants**

In identifying a particular type of beneficiary or claimant, users may need to account for several fields. Specifically, the following fields are relevant:

BIC Beneficiary Identification Code  
LAF Ledger Account File  
TOC Type of Claim

The BIC shows the benefit category for which the individual has applied (self, spouse, etc.). The presence of a beneficiary data group, including BIC, does not necessarily mean that the person was approved for the benefit or that the benefit is currently active. A BIC value of 'A' indicates primary beneficiary, i.e., the person whose earnings are the basis of the record/account. Other BIC values are for persons related to the primary. Under some circumstances, such as the death of the primary beneficiary before retirement, records may exist for dependents but not for the primary beneficiary.

The LAF provides the MBR payment status (current payment, denied, suspended, etc.) for the beneficiary and can be used to determine active benefits.

The TOC defines the type of claim made by the beneficiary (retirement or disability, primary or auxiliary), although as noted above it may not have been approved. TOC helps distinguish between different types of persons with BIC codes of A (primary

claimant) or C (child), such as whether they are receiving benefits because of disability or because they are a school age minor child of a primary claimant.

### **I.b. Payment-related Data Elements**

The MBR contains several fields related to the amount of benefits received on a given account. Among those of interest are:

- PIA Primary Insurance Amount
- CRIM-C Cumulative Retirement Increment Months Current
- OFA Offset Amount
- FMAX Family Maximum
- OMBA Monthly Benefit Amount
- OMBC Monthly Benefit Credited
- OMBP Monthly Benefit Payable

The worker's entire history of earnings is used to calculate the monthly payment amount. First the highest thirty-five years of earnings are kept. Next, each computation year is adjusted using factors according to the year of first eligibility (usually when the individual reaches age 62). The adjusted, or indexed, annual amounts are summed and then divided by the number of months in the computation years. This produces the average indexed monthly earnings (AIME- Not available in NCHS files), stored in data element Indexed Monthly Earnings (IME- Not available in NCHS files). From the IME, the PIA is computed using a formula that varies for each year, determined by Eligibility Year (ELY- Not available in NCHS files).

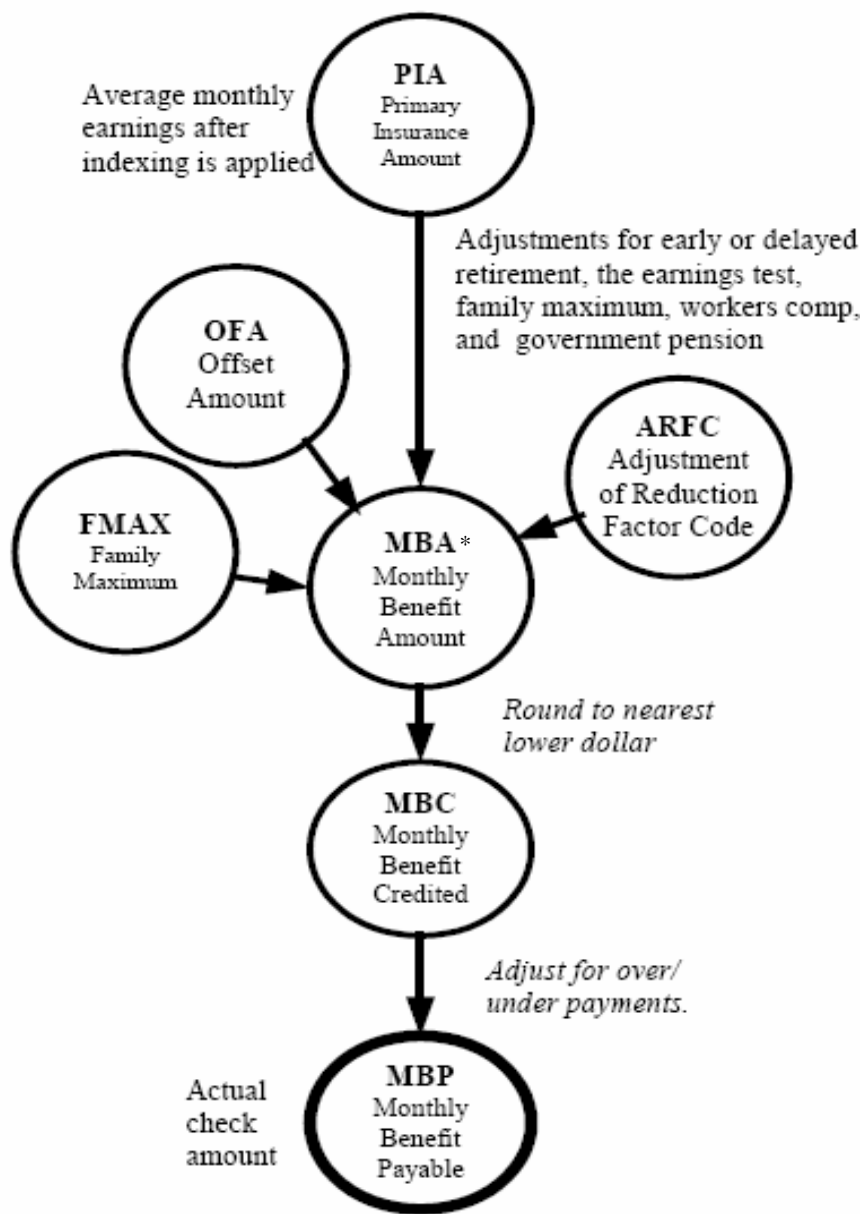
The OMBA is computed from the PIA with adjustments for early or delayed retirement, the earnings test, offset reductions (OFA) because of payments from other pension sources (federal employees or workmen's compensation), family maximum (FMAX) and others. The OMBA also takes into account the type of claim (disability or old-age) and whether the claimant is the primary account holder or an auxiliary beneficiary. The OMBC is the OMBA rounded to the nearest lower dollar with a deduction for Supplemental Medical Insurance. The OMBP is the actual check amount after the OMBC is adjusted for overpayments and underpayments. Figure 1.1 presents a simple illustration of the computation of OMBP from PIA. Any increase due to the delayed retirement credit is also reflected in the OMBA. However, the OMBA is not necessarily equal to the amount beneficiaries would pay income taxes on or see in their monthly checks. For the former, look to the OMBC. Under law, the OMBC is calculated by first subtracting the Part B Medicare Premium (if any) from the OMBA, then rounding the result down to the nearest whole dollar, and adding the Part B premium to the rounded amount. The OMBP is the OMBC minus the Part B premium and reflects the dollar amount of the check or direct deposit that the respondent was credited for receiving. In addition, from January 1962 through May 1982, the monthly OMBA and OMBC variables were the same.<sup>i</sup>

From January 1962 through December 2003<sup>ii</sup> these benefit variables are available on a monthly basis. However, they should only be used in conjunction with the ledger account file (OLAF) variable for the month. If the OLAF variable for a particular month

is equal to C or C2, then the benefit is in current pay status, that is, the person received credit for a benefit on the record for the particular month. If both the OLAF code in the first part of the record and the OLAF code in the second part of the record equal C or C2 for the month, add the benefit variables from both parts of the record to get the total benefit. Generally, other OLAF code values indicate why the benefit was suspended or terminated.

Two important general points should be made about the Social Security benefit records. First, the benefit records reflect what should have happened for a particular month. For example, if SSA determines in 1986 that a beneficiary's 1985 earnings exceeded amounts set by the earnings test, then retroactive payment adjustments are made and the 1985 OLAF's and OMBA's will be changed to reflect what should have happened in 1985. Second, a benefit for a particular month is actually paid in the following month. The PIA, OMBA, OMBC, and OMBP fields are updated for every benefit rate increase for beneficiaries in current or suspended pay status (see the OLAF codes). Records for terminated beneficiaries show the PIA increase but their benefit variables are not updated. (The benefit fields should always be used with the OLAF code for the month.)

With the passage of the 1983 Amendments to the Social Security Act, a portion of Social Security benefits have been subject to federal income taxes. Starting with 1984, it is possible to determine the actual amount of the check or direct deposit that the respondent received. In order to provide beneficiaries with an IRS Forms 1099 for income tax reporting the aggregate amount of benefit payments, repayments and reductions with respect to an individual in a calendar year was collected in the Payment History Update System (PHUS) file. Each DIRECT-PAY variable is the actual amount that a beneficiary received in a check or direct deposit in a specific month unlike OMBA, OMBC, and OMBP which reflect for which month an amount is payable. As an example the December 1992 OMBP is reflected in the January 1993 DIRECT-PAY variable.



**Figure 1.1 Computation of Monthly Payment**

\* MBA, MBC, MBP REFERS TO OMBA, OMBC & OMBP IN THE NCHS-SSA LINKED FILES

## **I.c. Dates Related to Filing and Eligibility**

Date fields are critical to determining eligibility of SSA benefits. Among those of interest are:

- DOB Date of Birth
- DODP Date of Death of Primary
- DOF Date of Filing
- DDO Date of Disability Onset
- DOEC Date of Current Entitlement
- DOED Date of Entitlement to Disability
- DOEI Date of Initial Entitlement
- DOST Date of Suspension/Termination
- OED Date of Effective Offset
- OTD Date of Offset Termination

Date of Birth of the Primary (DOBP) is used to determine early and late retirement and the amount of outside income allowed without the loss of benefits. Date of Death of Primary (DODP) determines the time at which survivor benefits are allowed to spouses and children (The primary is the person on whose work in Social Security covered employment the benefit is based.) Another field, BDOD, shows the date the beneficiary died. The beneficiary date of birth (BDOB) according to SSA records and as used for benefit eligibility is also available. (No attempt has been made to make the date consistent with the date of birth as reported in the NCHS surveys.)

The disability dates are quite complex and should be used carefully. To determine the date one is eligible to begin receiving benefits (DOED), one must determine when the person became technically disabled (DDO), as well when the application was filed (DOF). More detail is available in the usage notes for these data elements.

Two additionally important variables are the month and year of initial entitlement (DOEI) and the month and year of current (or most recent) entitlement (DOEC). The date of initial entitlement is the date of the earliest entitlement on the particular record. It is never overwritten. The date of current entitlement is the date of the most recent entitlement on the particular record. <sup>iii</sup>

Identified for each date is the beneficiary identification code (BIC) and the type of benefit (TOB) which show why the benefit was received. For example, DOECBIC=A and DOECTOB=1 would indicate a retired-worker beneficiary as of the current entitlement. DOEIBIC=A and DOEITOB=2 would indicate a disabled-worker beneficiary as of the initial entitlement. The DOEC\_BIC and DOEI\_BIC are also important in determining the amount and from whose account payments are made. If BIC=A, the PIA is the primary insurance amount based on the person's own work in Social Security covered employment. If BIC is not equal to A, then the PIA is based on work in covered employment by someone else (for example, the person's spouse or former spouse).

## **Example**

For example, as of December 1980, Mrs. Jones began receiving retired worker benefits based on her own work in Social Security covered employment (DOEI=121980 and DOEITOB=1) and an aged spouse benefit based on her husband's work in covered employment (ODOEI=121980 and ODOEITOB=3). In December of 1982, her husband died. Her spouse benefit would be terminated and she would begin receiving a widow benefit based on her deceased husband's work in covered employment (ODOEC=121982 and ODOECTOB=5).<sup>iv</sup> She would have a two part record describing her benefits. The first part would show her retired worker benefit, and the second part would show her wife benefit from her initial entitlement through the month prior to termination and her widow benefit from the date of her current entitlement through 12/93. Her husband's date of death would be shown by ODODP= 121982 on the second part of her record.

## **I.d. Dual Entitlement**

The term dual entitlement (DE) applies to a situation where a beneficiary is eligible for benefits from more than one account. A common example is a woman who is eligible for retirement benefits based on both her own and her husband's earnings history. The term dual entitlement is only used if the auxiliary (spousal) entitlement is greater than the primary entitlement.

**Example 1.** Upon retirement, a married woman is entitled to spousal benefits equal to one-half her husband's retirement benefits, regardless of her own work history and lifetime earnings. If a married woman is eligible for benefits based on her own earnings history, she is considered dually entitled if one-half her husband's benefit exceeds her own benefit. For example, Mary gets \$200 a month in SSA retirement based on her own work history. Her husband, Paul, gets \$1000 a month for his SSA benefits. Mary is entitled to spousal benefits of \$500 a month on Paul's account. Since the \$500 is more than Mary's \$200, she is dually entitled. She will receive \$200 against her own account and an additional \$300 against Paul's. If Mary's own benefit were \$600 instead of \$200 she would not be termed dually entitled. Similarly, Paul is not dually entitled on Mary's account, because he is only eligible for half her benefit (\$100), which is less than what he receives on his own account.

**Example 2.** It is possible to be triply entitled. Suppose Mary was previously married to Eric, and Eric passed away. Further, suppose that Eric would have been entitled to \$900. As Eric's widow, Mary is entitled to the full amount of his entitlement. Mary would receive \$200 based on her own earnings history, an additional \$300 from Paul's account, and \$400 from Eric's account for a total of \$900. Only one check is cut in this situation based on the OMBP data element.

**Example 3.** Dual entitlement may straddle programs. Suppose Paul is disabled and receives Disability Insurance benefits. The computations in the examples above would be the same, but separate checks would be cut for payments from the DI and RSI trust funds.

Following Example 1 above, Mary would receive one check for \$200 from the RSI trust fund and another check for \$300 from the DI trust fund. Correspondingly, there would be two OMBP data elements, as further explained below.

For every person receiving benefits, there is a group of Fixed Benefit data elements on the MBR. If two people claim benefits from the same account, there will be two Fixed Benefits groups, one for the primary beneficiary and another for the auxiliary beneficiary. If the auxiliary beneficiary is dually entitled to benefits based on his/her own work experience, then this person will also have his/her own MBR record. The Dual Entitlement Data (DED) group holds relevant information on both records.

Consider the simplest situation in which one person receives benefits based on his own earnings history. The MBR contains one record with one Fixed Benefit data group:

Fixed Benefit 1
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Now consider a married couple. The husband is entitled to benefits based on his earnings history. The wife worked very little and collected insufficient quarters of coverage, so that she is only entitled to benefits based on her husband's earnings history. The MBR contains one record with two Fixed Benefit data groups:

Fixed Benefit 1	Fixed Benefit 2
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Consider another married couple in which both spouses are entitled to benefits based on their own earnings histories. The spouses earned comparable amounts, so that dual entitlement is not applicable. The MBR contains two records with one Fixed Benefit data group on each.

Fixed Benefit 1
Fixed Benefit 1

Now consider a married couple in which one spouse is dually entitled, as in Example 1. The MBR contains two records; both include a DED group:

Fixed Benefit 1	DED	
Fixed Benefit 1	Fixed Benefit 2	DED

The DED group contains fields that are only used in dual entitlement. The most pertinent fields are:

- DESC Dual Entitlement Status Code
- LEMBA Larger Excess Monthly Benefit Amount
- LFMBA Larger Full Monthly Benefit Amount
- OTAN Other Account Number
- OTBIC Other Beneficiary Identification Code

OTDOE Other Date of Entitlement  
 OTPIA Other Primary Insurance Amount  
 SAMBA Smaller Actuarially Reduced Monthly Benefit Amount  
 TOD Type of Dual Entitlement

Fields OTAN, OTBIC, and OTDOE give identifying information about the other, matching account. DESC and TOD describe the basis under which the dual entitlement exists. OTPIA, LEMBA, LFMBA, SFMBA and SAMBA hold dollar amounts used in the calculation of payments. The following illustrations assume that the reader has familiarity with the data element descriptions in the data dictionary.

Consider again Paul and Mary from Example 1. Paul's PIA is \$1000, and Mary's PIA is \$200. To illustrate an adjustment of monthly benefits for early retirement, suppose Mary retires before the normal retirement age. Their records contain the following fields.

Mary's record:

Fixed Benefit 1					DED				
BIC	LAF	PIA	MBA	MBP	OTPIA	SFMBA	SAMBA	LFMBA	LEMBA
A	C	200	460	460	1000	200	160	500	300

Paul's record:

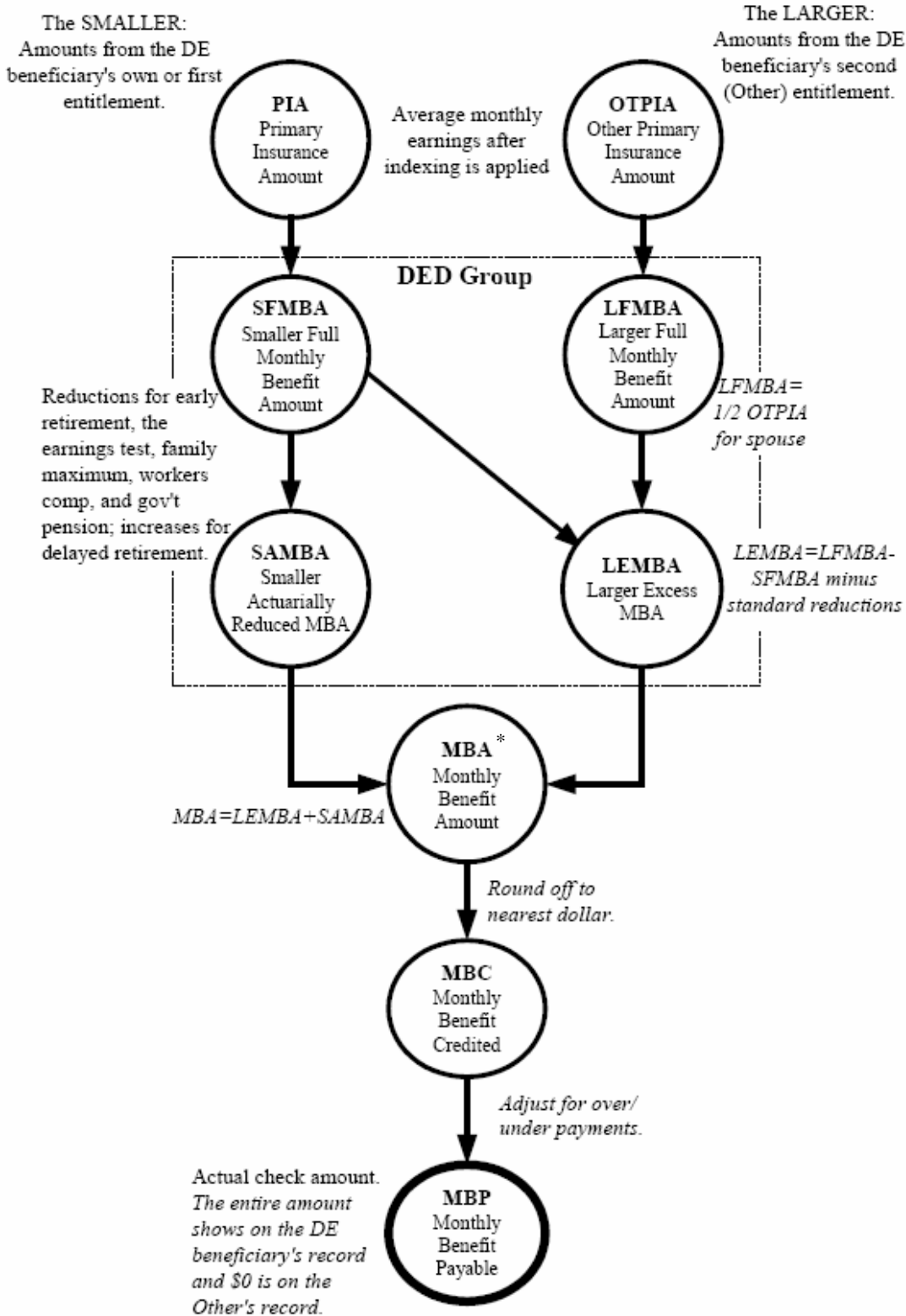
Fixed Benefit 1					Fixed Benefit 2					DED				
BIC	LAF	PIA	MBA	MBP	BIC	LAF	PIA	MBA	MBP	OTPIA	SFMBA	SAMBA	LFMBA	LEMBA
A	C	1000	1000	1000	B	AD	1000	300	0	200	200	160	500	300

Note that the OTPIA field on Mary's record is equal to Paul's PIA and vice versa. DED fields SFMBA, SAMBA, LFMBA and LEMBA are equal on the two records. Mary's PIA is the basis for the Smaller Full Monthly Benefit Amount (SFMBA=200), whereas Paul's PIA is the basis for the Larger Full Monthly Benefit Amount (LFMBA=500, or one-half of \$1000). The Larger Excess Monthly Benefit Amount (LEMBA) is the difference of LFMBA and SFMBA, \$500-\$200. Mary retired before the normal retirement age, so her SFMBA of \$200 has been reduced to yield the Smaller Actuarially Reduced Monthly Benefit Amount (SAMBA=160).

The LEMBA is the amount that will be paid to Mary against Paul's account and is stored in the OMBA field of Fixed Benefit 2 on his record. The OLAF code of AD and an OMBP of \$0 indicate that no check should be cut for this benefit. This is because one check will be cut to cover the payments from both accounts, written from Mary's record. The OMBP amount on Mary's own record is the full amount she will be paid, LEMBA plus SAMBA for a total of \$460.

Figure 1.2 illustrates the computation of benefits under this dual entitlement. It shows the data elements pertaining to the "smaller" beneficiary on the left and the data elements for the "larger" on the right.





**Figure 1.2 Dual Entitlement**

\* MBA, MBC, MBP REFERS TO OMBA, OMBC & OMBP IN THE NCHS-SSA LINKED FILES

If Paul's entitlement were based on disability instead of retirement, the benefits paid to him and to Mary, as his spouse, would come from different trust funds. In this situation two checks would be cut. The LEMBA amount would come from the DI trust fund and the SAMBA would come from the RSI trust fund. The records would only differ in the places shown below in bold typeface. Mary's OMBA and OMBP reflect only the portion from her account (the RSI check). On Paul's record the OLAF field in the second Fixed Benefit group (Mary's) is C and the OMBP is \$300 to show a check will be written for \$300 from the DI trust fund.

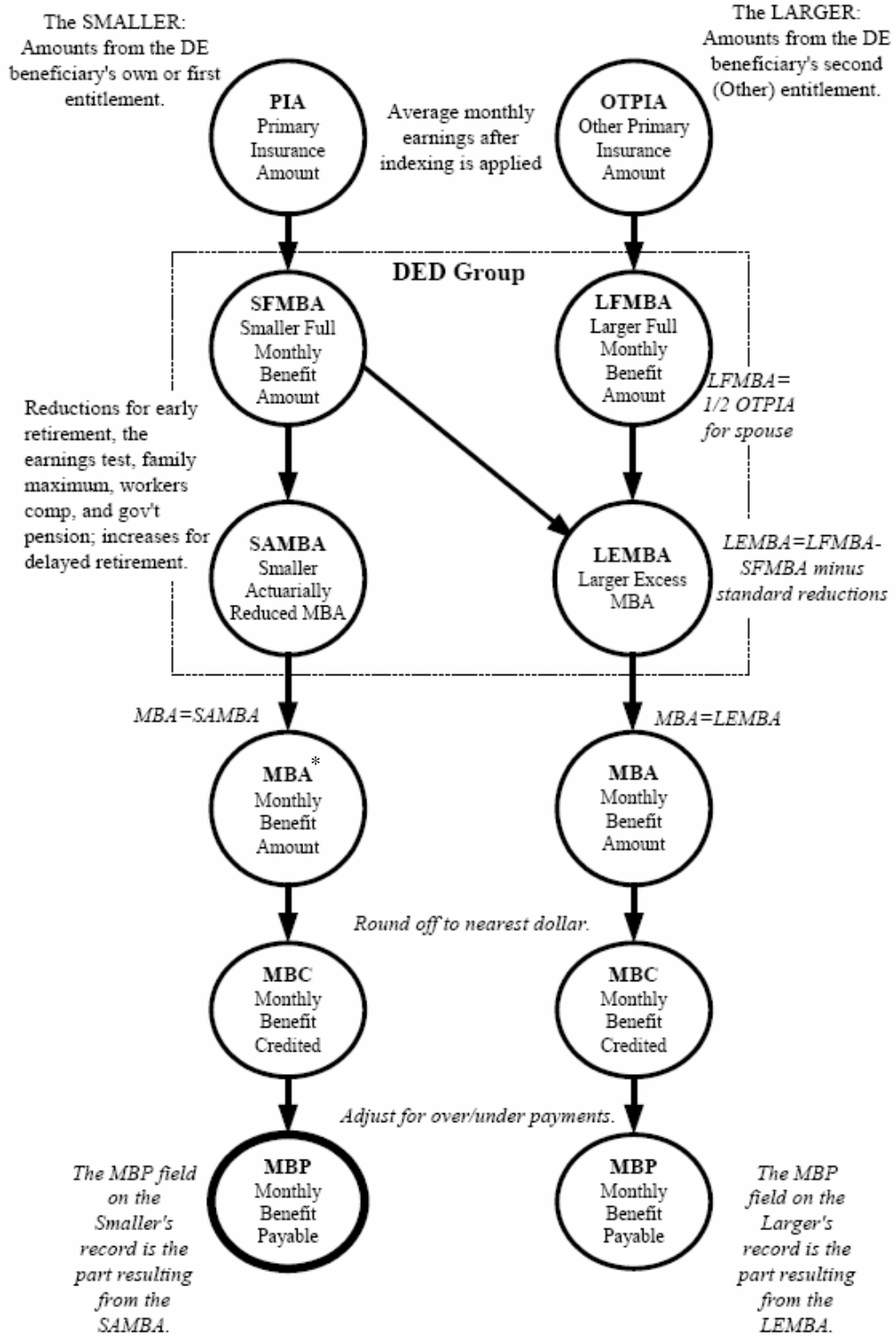
Mary's record:

Fixed Benefit 1					DED				
BIC	LAF	PIA	MBA	MBP	OTPIA	SFMB	SAMBA	LFMBA	LEMBA
A	C	200	<b>160</b>	<b>160</b>	1000	200	160	500	300

Paul's record:

Fixed Benefit 1					Fixed Benefit 2					DED				
BIC	LAF	PIA	MBA	MBP	BIC	LAF	PIA	MBA	MBP	OTPIA	SFMB	SAMBA	LFMBA	LEMBA
A	C	1000	1000	1000	B	<b>C</b>	1000	300	<b>300</b>	200	200	160	500	300

This illustrates the computation of benefits under this dual entitlement with two trust funds.



**Figure 1.3 Dual Entitlement from Two Trust Funds**

\* MBA, MBC, MBP REFERS TO OMBA, OMBC & OMBP IN THE NCHS-SSA LINKED FILES

## **II. SSR Master File**

In this section, we discuss some SSR data usage issues related to eligibility; benefit determination; deeming; payment versus eligibility; and monthly accounting, including adjustments for underpayments and overpayments.

### **II.a. Types of Claimants**

In identifying a particular type of beneficiary or claimant, users may need to account for several fields. Below are some fields to be particularly aware of:

TOA Type of Action – program category of unit  
MFT Master File Type – program category of person  
PSTAT Payment Status – eligibility status

### **II.b. Eligibility**

Eligibility is determined based on citizenship, income, financial resources, and age or disability. Data elements related to income and financial resources are listed under the next subheading; for other criteria, the following fields describe or affect a person's eligibility for SSI.

BIRTH-JD Birth Date  
DENCDE Denial Code  
PSTAT Payment Status Code  
STCONCATM State Program Category Eligibility Code

### **II.c. Benefit Determination**

The SSR contains a number of fields related to the amount of benefits received on a given account. Among those of interest are the following:

CLM-FIL-JD Claim Filed Date  
DISPAYCDE Disability Payment Code  
DIS-ONST-JD Disability Onset Date  
EINCM Earned Income Chargeable Amount  
UINCM Unearned Income Chargeable Amount  
PDSCC Residence State and County  
FEDAMT Federal Money Due Amount  
SUPAMT State Money Due Amount  
FEDPMT Federal Money Paid Amount  
STATPMT State Money Paid Amount  
PSTAT Payment Status Code

## **II.d. Deeming**

The income and resources of people responsible for the welfare of an eligible individual are considered in determining the eligibility and payment amount for an SSI recipient. This process is called “deeming” and is based on the idea that those who have a responsibility for each other share their income and resources. It is not material whether money is actually provided to an eligible individual for deeming to apply. There are four types of situations where income and resources are deemed:

- From an ineligible spouse to an eligible individual living in the same household;
- From a parent to a child under 18 living in the same household;
- From a sponsor to an alien;
- From an essential person to an eligible individual living in the same household.

Income data elements are recorded for individuals responsible for the welfare of an eligible individual, except for sponsors to an alien, even if they themselves are not eligible.

## **II.e. Payment versus Eligibility**

Published data on caseloads reflect actual payments made during a specific month. SSI recipients are usually eligible in the month they apply, although actual payment is not made until all eligibility factors are met and an award is made. Therefore, eligibility usually occurs before actual payment, which could make counts based on eligibility (SSR data elements FEDAMT and SUPAMT) larger or smaller than corresponding counts based on actual payments (SSR data elements FEDPMT and STATPMT) received in any given year. This situation would affect disability cases more than aged cases, because it takes longer to establish disability.

Depending on the research objective, eligibility may be more or less appropriate than actual payment. The RSDI program has always based its caseload counts on the eligibility concept; however, since RSDI benefits are not based on reporting of current income, there is seldom much difference in that program between eligibility and actual payment. However, there are often differences between eligibility and actual payment in SSI cases. (See Monthly Accounting, below.) For example, an ineligible recipient (FEDAMT=SUPAMT=0) may continue to receive actual payments (FEDPMT and/or STATPMT greater than zero) through Goldberg-Kelly during the appeals process. Therefore, the distinction between current counts as measured by eligibility versus actual payment is important, particularly while cases are moving through the appeals process.

## **II.f. Monthly Accounting**

Two types of computations are performed routinely on active SSR records. The first, eligibility computations, use information from the current month to determine whether a person is eligible for a monthly payment. Information such as state of residence (PDSCC), income fields, and payment status (PSTAT) are used. Payment computations determine the amount of money that should be paid to individuals. For

payment determination, income data over a three-month period are used: the previous month, the current month, and the next month. The income for the next month is estimated. Because the processing of monthly checks must be done weeks before the check will be sent, the “next” month referred to here corresponds to the month in which the check is actually mailed to the SSI recipient, the payment month. In other words, the computations are being performed for the payment month using that month’s estimated data and actual data from the two months preceding it.

The payment computation data and related fields are stored on the SSR for each month a record is active. The amount due and the amount actually paid are both recorded. New information may become available that changes the amount due (FEDAMT and SUPAMT) retrospectively. When this occurs, a new computation is performed and the monthly due amounts are changed. If the previous amount was too low, an underpayment results. If the previous amount was too high, an overpayment results. The amount paid (FEDPMT and STATPMT) show the sum of the individual checks actually issued during that month. To compensate for the earlier underpayment, the amount paid may be greater than the amount due. The amount paid may be less than the amount due because funds are being withheld to recover an overpayment. Therefore, the amount paid (FEDPMT and STATPMT) may differ from the amount due (FEDAMT and SUPAMT) for the same month. Earned and unearned income amounts are key factors in computing the amount to which a person is entitled. Income that may affect the amount of benefits is translated into one of the following categories. All the earned income fields are added, with the total countable earned income amount stored in EINCM. The same is true for unearned income categories, with the total countable stored in UINCM.

Finally, both types of income are combined to get the total countable income. Based on this figure and the current limits and program rules, two amounts are calculated. FEDAMT is the amount of money to be paid for federal SSI benefits; SUPAMT is the amount of federally-administered state supplement to be paid. Federal benefits and state supplements are paid with one combined check.

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<sup>1</sup> The majority of this text was excerpted from the Rand corporation’s SSA Program Data User’s Manual (Panis, Constantijn; Euller, Ronald; Grant, Cynthia; Bradley, Melissa; Peterson, Christin E.; Hirscher, Randall; and Paul Steinberg. 2000. SSA Program Data User’s Manual. Rand Corporation Contract PM-973-SSA).

<sup>i</sup> Dimes rounding down was effective with the June 1982 benefit. Prior to that the Part B premium amount on the MBR only reflected the current amount being paid by the beneficiary and did not reflect the historical premium amounts. Effective with June 1982 the historical SMI amount variable (HSA, not included) was created and associated with the history field that the premium change was effective. To be consistent, since all three variables can be processed as an array using a single subscript, we have kept all three variables.

<sup>ii</sup> 3 SSA does not have information in an electronic form for benefits prior to 1962. Thus, some early benefits are not documented in these records.

<sup>iii</sup> In SSA records, the DOEC is overwritten whenever the TOB changes (e.g., a disabled worker to a retired worker; a young spouse (widow) with children in care to an aged spouse (widow)).

<sup>iv</sup> There would be no termination recorded in history if the DOEC for the widow's benefit is the same month as the termination of the aged wife benefit.