

A MODEL SURVEY OF INSURANCE SERVICES

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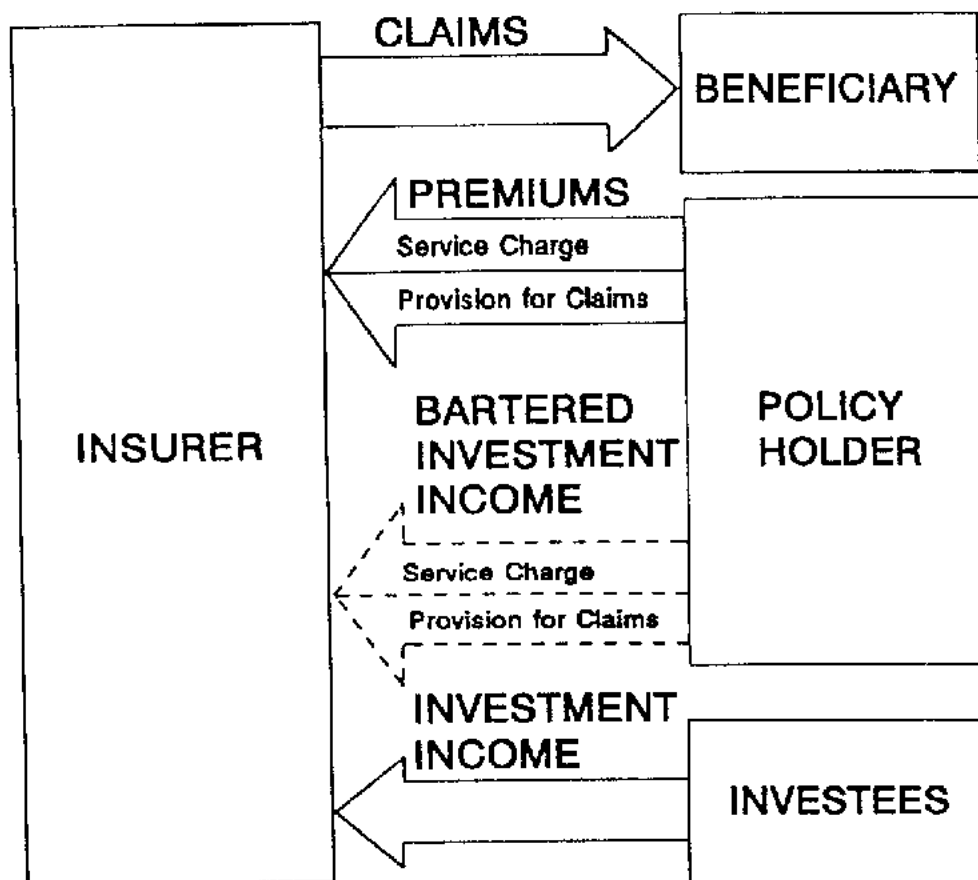
STATISTICS CANADA

INTRODUCTION

1. Insurers provide a variety of services. Those services are exported and imported and have become an important issue, along with other financial services, in international trade. The methods to measure output, particularly real output need to be developed. This would also provide a basis for determining how to measure international flows of insurance services.
2. Insurers are engaged in the pooling of risk. Insured persons or businesses pay a premium to insurance carriers to perform this function. In addition, there is an associated function of providing annuities and managing pension funding. All of these activities involve investment of the policyholders funds.
3. These two main functions - underwriting insurance and investing funds are reflected in two accounts - an underwriting account and an investment account. From the point of view of the insurer much of the income is derived from capital gains and investment income. These are not traditionally considered income from the production of goods and services in macro-economic accounts. Rather they are considered as transfers.
4. The premium received should be considered as consisting of two parts - an amount placed in reserve to pay future claims and the remainder used to cover expenses including a return to shareholders of the insurer. The reserves are used to generate investment income which is used to cover expenses and the cost of claims.
5. In this model the insured persons, governments and businesses barter the investment income for a lower rate of premium.
6. Chart 1 shows the various service and payment flows.
 - Between the insurer and the beneficiary, there is a payment in respect of claims incurred in the current period.
 - Between the insured and the insurer, there is a premium flow. This premium flow consists of two components - a payment for a service and a payment which is a provision for future claims. The payment for future claims is a transfer to the insurer.
 - Between the insurer and the insured there is a barter arrangement in which the insured barter the investment income on the reserves to pay future claims to lower the overall payment for service charges and claims.
 - Between the investee and the insurer is a flows of investment income. This investment income is a transfer between the investee and the insurer. The right to retain the investment funds represents the barter arrangement with the insured.

There are variants on this model. In some kinds of insurance the insured may receive a return of premiums, where the claim experience is lower than expected or where the investment income is higher than expected. In mutual insurance, for example, the insured is equivalent to a shareholder.

7. In their annuity activities, insurers are accepting funds in the current period and agreeing to repay those funds in future period, along with a return from investing those funds. There are variations on this basic product. Since the original principal amount would be repaid over the period of the annuity, the value of the service provided is the difference in the return to the insurer and the return to the beneficiary.



MODULE 1 - INCOME AND EXPENSES SUMMARY

1. Revenue and Expenses of Insurers

	Value
INSURANCE (UNDERWRITING) OPERATIONS	
A. Premiums	
(a) Direct	
(b) Reinsurance Assumed	
(c) Reinsurance Ceded	
(d) Decrease (Increase) in unearned premiums	
B. Annuity considerations	
C. Other premium or annuity income (specify)	
TOTAL PREMIUM AND ANNUITY INCOME	
D. Commissions	
E. Claims	
F. Payments under settlement annuities	
G. Taxes, licences and fees (excluding income and real estate)	
H. General expenses (applicable to insurance operations)	
I. Policyholder dividends and rating adjustments	
INSURANCE UNDERWRITING INCOME (LOSS)	
INVESTMENT OPERATIONS	
I. Investment Operations before realized gains (loss) on disposal of assets	
J. Realized gain (loss) on disposal of assets	
K. Investment Expenses	
OTHER REVENUE AND EXPENSES	
L. Income (loss) from auxiliary operations	
M. Share of net income (loss) of subsidiaries and affiliates	
N. Gains (losses) from fluctuations in foreign exchange rates	
O. Other (specify)	
INCOME (LOSS) BEFORE INCOME TAXES AND EXTRAORDINARY ITEMS	

MODULE 2 - REVENUES FROM THE SALE OF GOODS AND SERVICES

This module is concerned with the revenues generated by this organization from the sale of goods and services both to the domestic and the export market. For the purpose of this survey transactions with related parties (sales at market prices or transfers at internal prices) should be included. Please exclude from the amounts reported any taxes collected by this organization on behalf of the government.

Reinsurance assumed should be included as revenue under the appropriate product category and reinsurance ceded should not be deducted.

Issues

The System of National Accounts

The current proposals for the treatment of investment income in the SNA are different for the two types of insurers. Investment income of Property and Casualty Insurers will be treated as revenue of the insurers. The treatment of investment income of life insurance will be unchanged, that is, it will continue to be considered income of persons.

For Property and Casualty Insurers, not including investment income results in negative operating surplus and often negative value-added.

There are several issues. First should investment income always be included in revenue of the insurer. Secondly, which types of investment income should be included in revenue. Finally, how should net underwriting revenue be derived.

For the first question, the conceptually correct treatment for the SNA does not include investment income for life insurance and does for property and casualty insurance. For business type statistics, there is little doubt that it should be included as income .

The suggested response to the second question is that all investment income should be included.

Net underwriting income is defined generally as premiums less claims. However, for both types of insurance and for annuities, the question is how premiums and claims, especially claims, should be measured. Premiums should include those due for the period - that is, paid and unpaid premiums for the period but should exclude prepayment for future periods.

Claims present more problems because the level of the claims estimate can potentially be quite different. For life insurance, the option is to use current period claims or the expected claims associated with those premiums. Since it is the value of the service that is being measured, it is proposed that the expected value of claims associated with those premiums be used, that is, the actuarial liability associated with those premiums. The same holds true for annuities. For property and casualty insurance, the contracts are usually for a year, so there are no actuarial liabilities in the normal sense. However, there are some reserves whose change should be taken into account in measuring service revenues.

For reinsurance there are a number of possible treatments. However, the first point to determine is whether the gross output of the reinsurer should be included in the gross output of the direct insurer. In reinsurance, the direct insurer transfers some of the risk to the reinsurer. A portion of the premium income is ceded to the reinsurer. The reinsurer invests these funds and receives the investment income directly. The direct insurer is responsible for the administration of the insurance - collection of premiums and annuity considerations, engaging and paying agents, paying benefits and settling claims. The reinsurer pays for a portion of these and other expense, such as policy acquisition.

One important consideration in deciding if reinsurance ceded should be considered output of the direct insurer is the need to match outputs with the inputs used to produce them. On the input side, expenses on primary and intermediate inputs should be recorded at gross values. Attributing these inputs to the reinsurer (which is the other possible choice) would mean that they were not attributed to the user of those resources and would result in them being recorded with having the wrong geography. Attributing all inputs related to reinsurance ceded to the direct insurer implies that an equivalent output must be attributed to the direct insurer.

However, there remains a question of how to value the output. This can be thought of in terms of whether the major revenue and expense items should be at gross values or net of reinsurance ceded.

Option 1 consists of recording only the administrative expenses attributable to reinsurance ceded as gross output.

Option 2 consists of recording all incomes and expenses except investment income at gross values.

Option 3 consists of recording all incomes and expenses including investment income at gross values.

There are some implications to all of these treatments.

Option 1 has the advantage of simplicity for measurement of outputs in current prices. However, it reduces reinsurance to the provision of services to the reinsurer by the direct insurer. This seems intuitively incorrect. Further it would not simplify deflation.

Option 3 is the most consistent with the overall model but presents the problems of estimating investment income for insurance ceded - although this is possible for domestic insurers. It would simplify deflation because the reinsurance would be equivalent to direct insurance and would appear as both gross output and intermediate input.

Option 2 has the virtue of being measurable but creates a conceptual problem. If the insured is bartering his right to investment funds for a lower premium, then the direct insurer must be doing the same.

In any of the options, income from reinsurance assumed should be treated as revenue from the provision of insurance services.

Some additional tables would be necessary if different options or variants are chosen as the correct conceptual treatment.

The treatment of exports and imports would also be different depending on the option chosen.

2.1 Revenues from the Provision of Life Insurance, Annuity and Pension Services

Issue:

How should revenue by product be measured. The proposed treatment is to combine underwriting income with investment income by product. An alternative would be to treat underwriting activity and investment activity as two separate categories of products each with a different commodity composition and each with a separate deflation methodology. Investment activities would be a single product and underwriting would be divided into a variety of products.

The argument for the proposed treatment is that insurers take account of the expected return on investments to set rates. This is especially true for whole life insurance - which includes a savings element - and annuities. In addition, property and casualty insurers generally have a negative return on underwriting operations and an overall positive return due to investing activities.

Schedule 1 - Summary

This schedule includes totals of Investment income and underwriting revenue by product.

	Total	Investment Income	Net Underwriting Revenue
	(1)	(2)	(3)
A. Individual Life Insurance			
(a) Participating			
(b) Non-Participating			
B. Group Life Insurance			
(a) Participating			
(b) Non-Participating			
C. Individual Annuity Services			
(a) Participating			
(b) Non-Participating			
D. Group Annuity Services			
(a) Participating			
(b) Non-Participating			
E. Other Annuity Services			
(a) Settlement Annuities			
(b) Disability Annuities			
F. Staff Pension and Insurance			
(a) Staff Pension and Insurance			
TOTAL LIFE INSURANCE ANNUITY AND PENSION SERVICES (A TO F)			

1. Sum of Columns 2 and 3
2. Schedule 2 Column 1
3. Schedule 3 Column 6

Schedule 2 - Sources of Investment Income

Issue:

The issue is which types of investment income should be included. It is proposed to include all investment income, including capital gains. The rationale for this is that the insured has bartered to the insurer the rights to the income from investing those funds in return for a lower premium. The investment income is thus viewed as though it were an additional premium payment paid from the income resulting from investing the reserves.

	Value
A. Interest Earned	
(a) Bonds and Debentures	
(b) Mortgage Loans	
(c) Loans to Policyholders	
(d) Other	
B. Amortization	
(a) Bonds and Debentures	
(b) Mortgage Loans	
C. Dividends	
D. Real Estate	
(a) Real Estate	
(b) Gains on the Sale of Property	
E. Gains on the Sale of Securities	
TOTAL INVESTMENT INCOME	

Schedule 3 - Investment Income Distribution by Product (Direct Insurance less Reinsurance Ceded plus Reinsurance Assumed)

Issue:

Investment income is not segregated by product. However, the actuarial liability is available by product. The proposal is to use the actuarial liability by product to distribute the investment income by product. Ideally, the actuarial liability should be weighted by the number of days during the period during which it was available to earn investment income. Although the ideal is presented here, it would be possible to use some approximation e.g. average of opening and closing liabilities.

	Investment Income (Distributed)	Actuarial Liabilities Weighted by Days Remaining in Period	Investment Income	Change in Investment Reserves
	(1)	(2)	(3)	(4)
A. Individual Life Insurance				
(a) Participating				
(b) Non-Participating				
B. Group Life Insurance				
(a) Participating				
(b) Non-Participating				
C. Individual Annuity Services				
(a) Participating				
(b) Non-Participating				
D. Group Annuity Services				
(a) Participating				
(b) Non-Participating				
E. Other Annuity Services				
(a) Settlement Annuities				
(b) Disability Annuities				
F. Staff Pension and Insurance				
(a) Staff Pension and Insurance				
TOTAL LIFE INSURANCE ANNUITY AND PENSION SERVICES (A TO F)				

1. Sum of Columns 3 and 4 distributed with Column 2

2,3, 4. Collected

Schedule 4 - Investment Income on Reinsurance Ceded

Issue:

Following option 3, investment income on reinsurance ceded should be estimated and included in gross output (it should also be included in intermediate inputs). Ideally this data should be obtained from the reinsurer (i.e. the rate of return on liabilities of the reinsurer applied to the liabilities ceded to that insurer). In this case, it is proposed to approximate this return using the rate of return of the direct insurer. The same estimate should be included in the intermediate inputs of the direct insurer.

	Investment Income (Distributed)	Actuarial Liabilities Weighted by Days Remaining in Period
	(1)	(2)
A. Individual Life Insurance		
(a) Participating		
(b) Non-Participating		
B. Group Life Insurance		
(a) Participating		
(b) Non-Participating		
C. Individual Annuity Services		
(a) Participating		
(b) Non-Participating		
D. Group Annuity Services		
(a) Participating		
(b) Non-Participating		
E. Other Annuity Services		
(a) Settlement Annuities		
(b) Disability Annuities		
F. Staff Pension and Insurance		
(a) Staff Pension and Insurance		
TOTAL LIFE INSURANCE ANNUITY AND PENSION SERVICES (A TO F)		

1. Column 2 * Module 2, Section 2.1 (column 1) / Module 2, section 2.1 (column 2)
2. Collected

Schedule S - Underwriting Income by Product

Issue:

The measure of premium income would vary according to whether the insurance is participating or not. Policy dividends or refunds based on rating experience are treated as a reduction in the actual premium paid.

The intent is to measure claims associated with the current period's premiums, including changes in actuarial liabilities resulting from those premiums.

The treatment of reinsurance assumed and ceded is also an issue. In this case it is assumed that reinsurance assumed is included and reinsurance ceded is not deducted.

	Premiums	Rating Experience Refunds	Policyholder Dividends	Changes in Actuarial Liabilities	Claims less Payments from Actuarial Reserve	Net Underwriting Revenue
	(1)	(2)	(3)	(4)	(5)	(6)
A. Individual Life Insurance						
(a) Participating						
(b) Non-Participating						
B. Group Life Insurance						
(a) Participating						
(b) Non-Participating						
C. Individual Annuity Services						
(a) Participating						
(b) Non-Participating						
D. Group Annuity Services						
(a) Participating						
(b) Non-Participating						
E. Other Annuity Services						
(a) Settlement Annuities						
(b) Disability Annuities						
F. Staff Pension and Insurance						
(a) Staff Pension and Insurance						
TOTAL LIFE INSURANCE ANNUITY AND PENSION SERVICES (A TO F)						

1,2,3,4,5. Collected

6. Column 1 less Columns 2,3,4 and 5

2.2 Revenues from the Provision of Property and Casualty Insurance Services

Schedule 1 - Summary

	Total	Investment Income	Net Underwriting Revenue
	(1)	(2)	(3)
G. Property			
(a) Personal			
(b) Commercial			
H. Automobile			
(a) Liability			
(b) Personal Accident			
(c) Other			
I. Aircraft			
J. Boiler and Machinery			
K. Credit			
L. Fidelity			
M. Hail			
N. Legal Expenses			
O. Liability			
P. Mortgage			
Q. Surety			
R. Title			
S. Marine			
T. Accident and Sickness			
TOTAL PROPERTY AND CASUALTY INSURANCE (G TO T)			

1. Sum of Columns 2 and 3
2. Schedule 2 Column 1
3. Schedule 3 Column 6

Schedule 2 - Sources of Investment Income

	Value
A. Interest Earned	
(a) Bonds and Debentures	
(b) Mortgage Loans	
(c) Loans to Policyholders	
(d) Other	
B. Amortization	
(a) Bonds and Debentures	
(b) Mortgage Loans	
C. Dividends	
D. Real Estate	
(a) Real Estate	
(b) Gains on the Sale of Property	
TOTAL INVESTMENT INCOME	

Schedule 3 - Investment Income Distribution by Product (Direct Insurance less Reinsurance Ceded plus Reinsurance Assumed)

Issue:

As with life insurance and annuity products, investment income is not usually attributed to particular products (although there may be some segregation along product lines). One problem is how to allocate the investment income by product. The proposal is to allocate the investment income on the basis of unpaid anticipated claims.

The second problem is to weight these claims on the basis of the time period for which they were available to earn investment income.

The third issue is to measure total investment income. It is proposed to include gains and losses in investments.

	Investment Income (Distributed)	Unpaid Claims and Unreported Claims Weighted by Remaining Days in The Period	Policy Reserves Weighted by Days Remaining in the Period	Investment Reserves Weighted by Days Remaining in the Period	Total Claims, Policy and Investment Reserves	Change in Investment Reserves	Investment Income
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
G. Property							
(a) Personal							
(b) Commercial							
H. Automobile							
(a) Liability							
(b) Personal Accident							
(c) Other							
I. Aircraft							
J. Boiler and Machinery							
K. Credit							
L. Fidelity							
M. Hail							
N. Legal Expenses							
O. Liability							
P. Mortgage							
Q. Surety							
R. Title							
S. Marine							
T. Accident and Sickness							
TOTAL PROPERTY AND CASUALTY INSURANCE (G TO T)							

1. Sum of Columns 6 and 7 Distributed by Column 5

2,3,4,6,7 Collected

5. Sum of Columns 2,3 and 4

Schedule 4 - Investment Income on Reinsurance Ceded

	Value
General and Investment Expenses	
A. Wages, salaries and employee benefits	
(a) Wages and Salaries	
(b) Other employee benefits	
B. External Business Services	
(c) External Legal Expenses (CPC 881)	
(d) External Adjustment and Appraisal Services (CPC 81401)	
(e) Purchased computer services for own use (CPC 84)	
(f) Advertising and sales promotion (CPC 871)	
(g) Medical examination fees (CPC 931)	
(h) Other services incidental to insurance and pension funding (CPC 81402, 81404, 81405, 81409)	
(i) Other purchased business services	
(j) Counselling fees (CPC 81332)	
C. Occupancy and rental property costs	
(a) Depreciation	
(b) Rental and leasing of land and buildings (CPC 82)	
(c) Other occupancy costs (not elsewhere specified)	
D. Telecommunication services (CPC 752)	
E. Real estate services (CPC 822)	
F. Utilities (CPC 17)	
G. Material and supplies for own use	
H. Property and other non-commodity indirect taxes	
(a) Property and school taxes	
(b) Permits, licenses and other non-commodity indirect taxes	
I. Royalties and patent fees paid	
J. Services from related parties (not included above)	
L. Other operating, administrative and general expenses (please specify _____)	
TOTAL OPERATING, ADMINISTRATIVE AND GENERAL EXPENSES	

Schedule 5 - Underwriting Income by Product

	Premiums	Claims - Current Period	Unreported Claims	Change in Policy Reserves	Change in Contingency Reserves	Net Underwriting Income
	(1)	(2)	(3)	(4)	(5)	(6)
G. Property						
(a) Personal						
(b) Commercial						
H. Automobile						
(a) Liability						
(b) Personal Accident						
(c) Other						
I. Aircraft						
J. Boiler and Machinery						
K. Credit						
L. Fidelity						
M. Hail						
N. Legal Expenses						
O. Liability						
P. Mortgage						
Q. Surety						
R. Title						
S. Marine						
T. Accident and Sickness						
TOTAL PROPERTY AND CASUALTY INSURANCE (G TO T)						

1,2,3,4,5 Collected

6. Column 1 less columns 2,3,4 and 5

2.3 Revenues From Other Sources

1.3 Other Services

	Value
A. Services Charges on Deposits	
B. Portfolio Management Services	
C. Insurance Broking and Agency Services (CPC 81401)	
D. Average and Loss Adjustment Services (CPCC 81403)	
E. Other Services Auxiliary to Insurance and Pension Funding (CPC 81402,81404,81409)	
F. Other Services	

MODULE 3 - INVESTMENT, UNDERWRITING, REINSURANCE AND GENERAL EXPENSES

This module is concerned with the expenses incurred by this organization for goods and services used in the regular conduct of its business. For this purpose of this survey transactions with related parties (transfers at market prices or transfers at internal prices) should be included. Please exclude capital expenditures and income taxes.

For services such as those of agents, adjusters, appraisers, lawyers and investigators, a distinction is made between expenses purchased outside the business and expenses on those functions performed within the business. Within the business, these expenses should be treated as wages and salaries and commissions.

Underwriting and general expenses related to reinsurance should not be deducted.

Issues:

The tables presented are based on option 3 for reinsurance ceded. If option 1 or 2 is the appropriate conceptual treatment, then some tables would not be necessary.

3.1 Intermediate Inputs related to Life, Annuity and Pension

Services (Reinsurance) Ceded

Schedule 1 - Summary

	Total	Investment Income	Net Underwriting Revenue
	(1)	(2)	(3)
A. Individual Life Insurance			
(a) Participating			
(b) Non-Participating			
B. Group Life Insurance			
(a) Participating			
(b) Non-Participating			
C. Individual Annuity Services			
(a) Participating			
(b) Non-Participating			
D. Group Annuity Services			
(a) Participating			
(b) Non-Participating			
E. Other Annuity Services			
(a) Settlement Annuities			
(b) Disability Annuities			
F. Staff Pension and Insurance			
(a) Staff Pension and Insurance			
TOTAL LIFE INSURANCE ANNUITY AND PENSION SERVICES (A TO F)			

1. Sum of Columns 2 and 3
2. Schedule 2 Column 1
3. Schedule 3 Column 8

Schedule 2 - Investment Income Ceded by Product

Issues:

This table is presented here to show how it would fit in the overall estimate of intermediate inputs but it has already been collected in the gross output (Module 2, Section 2.1, Schedule 4)

	Investment Income (Distributed)	Actuarial Liabilities Weighted by Days Remaining in Period
	(1)	(2)
A. Individual Life Insurance		
(a) Participating		
(b) Non-Participating		
B. Group Life Insurance		
(a) Participating		
(b) Non-Participating		
C. Individual Annuity Services		
(a) Participating		
(b) Non-Participating		
D. Group Annuity Services		
(a) Participating		
(b) Non-Participating		
E. Other Annuity Services		
(a) Settlement Annuities		
(b) Disability Annuities		
F. Staff Pension and Insurance		
(a) Staff Pension and Insurance		
TOTAL LIFE INSURANCE ANNUITY AND PENSION SERVICES (A TO F)		

1. Column 2 * Module 2, Section 2.1 (column 1) / Module 2, section 2.1 (column 2)

2. Collected

Schedule 3 - Underwriting Services Purchased by Product

	Premiums	Rating Experience Refunds	Policyholder Dividends
	(1)	(2)	(3)
A. Individual Life Insurance			
(a) Participating			
(b) Non-Participating			
B. Group Life Insurance			
(a) Participating			
(b) Non-Participating			
C. Individual Annuity Services			
(a) Participating			
(b) Non-Participating			
D. Group Annuity Services			
(a) Participating			
(b) Non-Participating			
E. Other Annuity Services			
(a) Settlement Annuities			
(b) Disability Annuities			
F. Staff Pension and Insurance			
(a) Staff Pension and Insurance			
TOTAL LIFE INSURANCE ANNUITY AND PENSION SERVICES (A TO F)			

1,2. Collected

3.2 Intermediate Inputs related to Property and Casualty Insurance

Services (Reinsurance) Ceded

Schedule 1 - Summary

	Total	Investment Income	Net Underwriting Revenue
	(1)	(2)	(3)
G. Property			
(a) Personal			
(b) Commercial			
H. Automobile			
(a) Liability			
(b) Personal Accident			
(c) Other			
I. Aircraft			
J. Boiler and Machinery			
K. Credit			
L. Fidelity			
M. Hail			
N. Legal Expenses			
O. Liability			
P. Mortgage			
Q. Surety			
R. Title			
S. Marine			
T. Accident and Sickness			
TOTAL PROPERTY AND CASUALTY INSURANCE (G TO T)			

1. Sum of Columns 2 and 3
2. Schedule 2 Column 1
3. Schedule 3 Column 6

Schedule 2 - Investment Income Ceded by Product

Issues:

This table is presented here to show how it would fit in the overall estimate of intermediate inputs but it has already been collected in the gross output (Module 2, Section 2.2, Schedule 4)

	Investment Income (Distributed)	Unpaid Claims and Unreported Claims Weighted by Remaining Days in The Period	Policy Reserves Weighted by Days Remaining in the Period	Investment Reserves Weighted by Days Remaining in the Period	Total Claims, Policy and Investment Reserves
	(1)	(2)	(3)	(4)	(5)
G. Property					
(a) Personal					
(b) Commercial					
H. Automobile					
(a) Liability					
(b) Personal Accident					
(c) Other					
I. Aircraft					
J. Boiler and Machinery					
K. Credit					
L. Fidelity					
M. Hail					
N. Legal Expenses					
O. Liability					
P. Mortgage					
Q. Surety					
R. Title					
S. Marine					
T. Accident and Sickness					
TOTAL PROPERTY AND CASUALTY INSURANCE (G TO T)					

1. Column 5 * Module2,Section 2.2,Schedule3(Column1) / Module2,Section2.2,Schedule3(column 5)

2,3,4. Collected

Schedule 3 - Underwriting Services Purchased by Product

	Premiums
	(1)
G. Property	
(a) Personal	
(b) Commercial	
H. Automobile	
(a) Liability	
(b) Personal Accident	
(c) Other	
I. Aircraft	
J. Boiler and Machinery	
K. Credit	
L. Fidelity	
M. Hail	
N. Legal Expenses	
O. Liability	
P. Mortgage	
Q. Surety	
R. Title	
S. Marine	
T. Accident and Sickness	
TOTAL PROPERTY AND CASUALTY INSURANCE (G TO T)	

1,2,3,4,5 Collected

6. Column1 less columns 2,3,4 and 5

3.3 Other Purchased Goods and Services

	Value
General and Investment Expenses	
A. Wages, salaries and employee benefits	
(a) Wages and Salaries	
(b) Other employee benefits	
B. External Business Services	
(c) External Legal Expenses (CPC 861)	
(d) External Adjustment and Appraisal Services (CPC 81401)	
(e) Purchased computer services for own use (CPC 84)	
(f) Advertising and sales promotion (CPC 871)	
(g) Medical examination fees (CPC 931)	
(h) Other services incidental to insurance and pension funding (CPC 81402, 81404, 81405, 81409)	
(i) Other purchased business services	
(j) Counselling fees (CPC 81332)	
C. Occupancy and rental property costs	
(a) Depreciation	
(b) Rental and leasing of land and buildings (CPC 82)	
(c) Other occupancy costs (not elsewhere specified)	
D. Telecommunication services (CPC 752)	
E. Real estate services (CPC 822)	
F. Utilities (CPC 17)	
G. Material and supplies for own use	
H. Property and other non-commodity indirect taxes	
(a) Property and school taxes	
(b) Permits, licenses and other non-commodity indirect taxes	
I. Royalties and patent fees paid	
J. Services from related parties (not included above)	
L. Other operating, administrative and general expenses (please specify _____)	
TOTAL OPERATING, ADMINISTRATIVE AND GENERAL EXPENSES	

MODULE 4. INVENTORIES

This module is concerned with the change in the level of the inventories held by your organization during the period covered by this report.

	Opening (1)	Closing (2)
Total Inventories		

MODULE 5 - EXPORTS

This module is concerned with exports of goods and services. If this organization has foreign clients, please provide an estimate of the proportion of total premiums or liabilities due to non-residents for each of the following products. Sales or transfers to or holdings of foreign related parties should be included. Reinsurance assumed from foreign insurers should be included.

Amounts booked by subsidiaries or branches resident in other countries should not be included.

5.1 Life Insurance, Annuity and Pension Services (Reinsurance assumed)

Schedule 1 - Summary

Issues:

More elaborate instruction on what to include, in exports and in gross output generally, are needed.

This schedule includes totals of investment income and underwriting revenue by product.

	Total (1)	Investment Income (2)	Net Underwriting Revenue (3)
A. Individual Life Insurance			
(a) Participating			
(b) Non-Participating			
B. Group Life Insurance			
(a) Participating			
(b) Non-Participating			
C. Individual Annuity Services			
(a) Participating			
(b) Non-Participating			
D. Group Annuity Services			
(a) Participating			
(b) Non-Participating			
E. Other Annuity Services			
(a) Settlement Annuities			
(b) Disability Annuities			
F. Staff Pension and Insurance			
(a) Staff Pension and Insurance			
TOTAL LIFE INSURANCE ANNUITY AND PENSION SERVICES (A TO F)			

1. Sum of Columns 2 and 3
2. Schedule 2 Column 1
3. Schedule 3 Column 6

Schedule 2 - Investment Income Distribution by Product

	Investment Income (Distributed)	Actuarial Liabilities Weighted by Days Remaining in Period	Investment Income	Change in Investment Reserves
	(1)	(2)	(3)	(4)
A. Individual Life Insurance				
(a) Participating				
(b) Non-Participating				
B. Group Life Insurance				
(a) Participating				
(b) Non-Participating				
C. Individual Annuity Services				
(a) Participating				
(b) Non-Participating				
D. Group Annuity Services				
(a) Participating				
(b) Non-Participating				
E. Other Annuity Services				
(a) Settlement Annuities				
(b) Disability Annuities				
F. Staff Pension and Insurance				
(a) Staff Pension and Insurance				
TOTAL LIFE INSURANCE ANNUITY AND PENSION SERVICES (A TO F)				

1. Sum of Columns 3 and 4 distributed with Column 2

2,3, 4. Collected

Schedule 3 - Underwriting Income by Product

	Premiums (1)	Rating Experience Refunds (2)	Policyholder Dividends (3)	Net Underwriting Revenue (4)
A. Individual Life Insurance				
(a) Participating				
(b) Non-Participating				
B. Group Life Insurance				
(a) Participating				
(b) Non-Participating				
C. Individual Annuity Services				
(a) Participating				
(b) Non-Participating				
D. Group Annuity Services				
(a) Participating				
(b) Non-Participating				
E. Other Annuity Services				
(a) Settlement Annuities				
(b) Disability Annuities				
F. Staff Pension and Insurance				
(a) Staff Pension and Insurance				
TOTAL LIFE INSURANCE ANNUITY AND PENSION SERVICES (A TO F)				

1,2,3. Collected

4. Module 2, Section 2.1 Schedule 3, (Column 6) * Column 1 / Module 2 Section 2.1, Schedule 3 (Column 1)
Column 1 less Columns 2,3.

5.2 Property and Casualty Insurance Services (Reinsurance assumed)

Schedule 1 - Summary

This schedule includes totals of investment income and underwriting revenue by product.

	Total	Investment Income	Net Underwriting Revenue
	(1)	(2)	(3)
G. Property			
(a) Personal			
(b) Commercial			
H. Automobile			
(a) Liability			
(b) Personal Accident			
(c) Other			
I. Aircraft			
J. Boiler and Machinery			
K. Credit			
L. Fidelity			
M. Hail			
N. Legal Expenses			
O. Liability			
P. Mortgage			
Q. Surety			
R. Title			
S. Marine			
T. Accident and Sickness			
TOTAL PROPERTY AND CASUALTY INSURANCE (G TO T)			

1. Sum of Columns 2 and 3
2. Schedule 2 Column 1
3. Schedule 3 Column 6

Schedule 2 - Investment Income Distribution by Product

	Investment Income (Distributed)	Unpaid Claims and Unreported Claims Weighted by Remaining Days in The Period	Policy Reserves Weighted by Days Remaining in the Period	Investment Reserves Weighted by Days Remaining in the Period	Total Claims, Policy and Investment Reserves
	(1)	(2)	(3)	(4)	(5)
G. Property					
(a) Personal					
(b) Commercial					
H. Automobile					
(a) Liability					
(b) Personal Accident					
(c) Other					
I. Aircraft					
J. Boiler and Machinery					
K. Credit					
L. Fidelity					
M. Hail					
N. Legal Expenses					
O. Liability					
P. Mortgage					
Q. Surety					
R. Title					
S. Marine					
T. Accident and Sickness					
TOTAL PROPERTY AND CASUALTY INSURANCE (G TO T)					

1. Module 1, Section 2.2, Schedule 2 (Column 1) * Column 5 / Module 2, Section 2.2, Schedule 2 (Column 5)

2,3,4. Collected

5. Sum of Columns 2,3, and 4.

Schedule 3 - Underwriting Income by Product

	Premiums	Net Underwriting Income
	(1)	(2)
G. Property		
(a) Personal		
(b) Commercial		
H. Automobile		
(a) Liability		
(b) Personal Accident		
(c) Other		
I. Aircraft		
J. Boiler and Machinery		
K. Credit		
L. Fidelity		
M. Hail		
N. Legal Expenses		
O. Liability		
P. Mortgage		
Q. Surety		
R. Title		
S. Marine		
T. Accident and Sickness		
TOTAL PROPERTY AND CASUALTY INSURANCE (G TO T)		

1. Collected

2. Module 2, Section 2.2, Schedule 4 (Column 7) * Column 1 / Module 2, Section 2.2, Schedule 4 (Column 6)

5.3 Revenues from Other Sources

1.3 Other Services

	Value
A. Services Charges on Deposits	
B. Portfolio Management Services	
C. Insurance Broking and Agency Services (CPC 81401)	
D. Average and Loss Adjustment Services (CPC 81403)	
E. Other Services Auxiliary to Insurance and Pension Funding (CPC 81402,81404,81409)	
F. Other Services	

MODULE 6 - IMPORTS

This module is concerned with imports of insurance related services. If this organization has directly imported goods and services from foreign suppliers, please provide an estimate of the purchase value of the following imported goods and services.

In addition, please provide information on reinsurance ceded to non-resident insurers.

Issue:

Regardless of which model of reinsurance is accepted, it is proposed to collect reinsurance ceded to foreign insurers. In these options for reinsurance, there would be a different treatment of reinsurance as imports. The first treatment would not consider reinsurance to be an intermediate input of the direct insurer. Reinsurance would therefore not be considered a direct import of the direct insurer. In this model reinsurance ceded to foreign carriers would be treated as direct imports by the insured. However, if it were not collected from the direct insurer, there would be no other source of data available.

In the second and third options, reinsurance is treated as a direct import of the direct insurer. In option two investment income would not be collected. In option three, investment income would have to be collected.

6.1 Life Insurance, Annuity and Pension Services (Reinsurance ceded)

Schedule 1 - Summary

	Total	Investment Income	Net Underwriting Revenue
	(1)	(2)	(3)
A. Individual Life Insurance			
(a) Participating			
(b) Non-Participating			
B. Group Life Insurance			
(a) Participating			
(b) Non-Participating			
C. Individual Annuity Services			
(a) Participating			
(b) Non-Participating			
D. Group Annuity Services			
(a) Participating			
(b) Non-Participating			
E. Other Annuity Services			
(a) Settlement Annuities			
(b) Disability Annuities			
F. Staff Pension and Insurance			
(a) Staff Pension and Insurance			
TOTAL LIFE INSURANCE ANNUITY AND PENSION SERVICES (A TO F)			

1. Sum of Columns 2 and 3
2. Schedule 2 Column 1
3. Schedule 3 Column 8

Schedule 2 - Distribution of Investment Income

Issues:

Since option 3 is the preferred method of estimating reinsurance ceded, it implies that investment income associated with reinsurance ceded must be either collected from the reinsurer or estimated from data available from the direct insurer. the table presented assumes that the investment income will be estimated based on the experience of the direct insurer.

	Investment Income (Distributed)	Actuarial Liabilities Weighted by Days Remaining In Period
	(1)	(2)
A. Individual Life Insurance		
(a) Participating		
(b) Non-Participating		
B. Group Life Insurance		
(a) Participating		
(b) Non-Participating		
C. Individual Annuity Services		
(a) Participating		
(b) Non-Participating		
D. Group Annuity Services		
(a) Participating		
(b) Non-Participating		
E. Other Annuity Services		
(a) Settlement Annuities		
(b) Disability Annuities		
F. Staff Pension and Insurance		
(a) Staff Pension and Insurance		
TOTAL LIFE INSURANCE ANNUITY AND PENSION SERVICES (A TO F)		

1. Column 2 * Module 2, Section 2.1 (column 1) / Module 2, section 2.1 (column 2)

2. Collected

Schedule 3 - Underwriting Income

	Premiums	Rating Experience Refunds	Policyholder Dividends	Changes in Actuarial Liabilities	Claims less Payments from Actuarial Reserves	Net Underwriting Revenue
	(1)	(2)	(3)	(4)	(5)	(6)
A. Individual Life Insurance						
(a) Participating						
(b) Non-Participating						
B. Group Life Insurance						
(a) Participating						
(b) Non-Participating						
C. Individual Annuity Services						
(a) Participating						
(b) Non-Participating						
D. Group Annuity Services						
(a) Participating						
(b) Non-Participating						
E. Other Annuity Services						
(a) Settlement Annuities						
(b) Disability Annuities						
F. Staff Pension and Insurance						
(a) Staff Pension and Insurance						
TOTAL LIFE INSURANCE ANNUITY AND PENSION SERVICES (A TO F)						

1,2,3,4,5. Collected

6. Column 1 less Columns 2,3,4 and 5

6.2 Property and Casualty Insurance Services (Reinsurance Ceded)

Schedule 1 - Summary

	Total	Investment Income	Net Underwriting Revenue
	(1)	(2)	(3)
G. Property			
(a) Personal			
(b) Commercial			
H. Automobile			
(a) Liability			
(b) Personal Accident			
(c) Other			
I. Aircraft			
J. Boiler and Machinery			
K. Credit			
L. Fidelity			
M. Hail			
N. Legal Expenses			
O. Liability			
P. Mortgage			
Q. Surety			
R. Title			
S. Marine			
T. Accident and Sickness			
TOTAL PROPERTY AND CASUALTY INSURANCE (G TO T)			

1. Sum of Columns 2 and 3
2. Schedule 2 Column 1
3. Schedule 3 Column 6

Schedule 2 - Distribution of Investment Income

	Investment Income (Distributed)	Unpaid Claims and Unreported Claims Weighted by Remaining Days in The Period	Policy Reserves Weighted by Days Remaining in the Period	Investment Reserves Weighted by Days Remaining in the Period	Total Claims, Policy and Investment Reserves
	(1)	(2)	(3)	(4)	(5)
G. Property					
(a) Personal					
(b) Commercial					
H. Automobile					
(a) Liability					
(b) Personal Accident					
(c) Other					
I. Aircraft					
J. Boiler and Machinery					
K. Credit					
L. Fidelity					
M. Hail					
N. Legal Expenses					
O. Liability					
P. Mortgage					
Q. Surety					
R. Title					
S. Marine					
T. Accident and Sickness					
TOTAL PROPERTY AND CASUALTY INSURANCE (G TO T)					

1. Column 5 = Module2,Section 2.2,Schedule3(Column1) / Module2,Section2.2,Schedule3(column 5)

2,3,4. Collected

5: Sum of Columns 2,3 and 4

Schedule 3 - Underwriting Income

	Premiums	Rating Experience Refunds	Policyholder Dividends	Changes in Actuarial Liabilities	Claims less Payments from Actuarial Reserves	Net Underwriting Revenue
	(1)	(2)	(3)	(4)	(5)	(6)
A. Individual Life Insurance						
(a) Participating						
(b) Non-Participating						
B. Group Life Insurance						
(a) Participating						
(b) Non-Participating						
C. Individual Annuity Services						
(a) Participating						
(b) Non-Participating						
D. Group Annuity Services						
(a) Participating						
(b) Non-Participating						
E. Other Annuity Services						
(a) Settlement Annuities						
(b) Disability Annuities						
F. Staff Pension and Insurance						
(a) Staff Pension and Insurance						
TOTAL LIFE INSURANCE ANNUITY AND PENSION SERVICES (A TO F)						

1,2,3,4,5. Collected

6. Column 1 less Columns 2,3,4 and 5

6.3 Revenues from Other Sources

	Value	OR	Percentage of Total Revenue
A. External Business Services			
(a) External Legal Expenses (CPC 861)			
(b) External Adjustment and Appraisal Services (CPC 81401)			
(c) Purchased computer services for own use			
(d) Advertising and sales promotion (CPC 871)			
(e) Medical examination fees (CPC 831)			
(f) Other services incidental to insurance and pension funding (CPC 81402,81404,81405,81409)			
(g) Counselling fees (CPC 81332)			
(h) Other purchased business services			
B. Services from related parties excluding reinsurance (not included above)			
C. Other operating, administrative and general expenses (please specify _____)			
TOTAL OPERATING, ADMINISTRATIVE AND GENERAL EXPENSES			

MODULE 7 - EMPLOYMENT

	MALES (1)	FEMALES (2)
Paid Employees		
. Full Time		
. Part Times **		
Agents & Brokers (Own Staff)		
. Full Time		
. Part Times **		
TOTAL		

** No definition of part-time is provided as it differs between countries. Each country should define part-time according to its own conventions.

MODULE 8 - FIXED ASSETS, ADDITIONS AND DISPOSALS

Include all fixed assets shown on your book of accounts and all assets operated by your business under finance lease arrangements. Exclude expenditures on maintenance and on intangible assets such as goodwill.

Issues:

Should the rental properties be separated. Insurers currently do this in their accounts.

	Additions During the Period	Disposal during the Period	Book Value at the end of the Period
Land			
Building:			
residential			
non-residential			
Other construction			

MODULE 9. RESEARCH AND DEVELOPMENT

The information requested in this module should also have been reported in modules 3 and 10. Has this organization been involved in research and development during the period covered by this survey.

YES ☐ go to B NO ☐ end of this module

B. Please estimate the following categories of expenditure for the performance of research and development within this company in this country in 199...

	VALUE (1)
CURRENT EXPENDITURE ON R&D	
a) Salaries and Wages (incl. fringe benefits of persons engaged R&D)	
b) Other current costs (incl. contracts for services required to carry R&D but excl. contracts for R&D work. Excl. capital depreciation).	
TOTAL CURRENT	
CAPITAL EXPENDITURE ON R&D	
a) Land	
b) Buildings	
c) Equipment	
TOTAL CAPITAL	
TOTAL EXPENDITURE ON R&D	

C. In its financial accounts does this organization normally capitalize or expense the development expenditures reported as current expenditure above?

	Capitalized (1)	Expensed (2)
Wages, salaries and benefits		
R&D Contracts (Sub-Contracting of the R&D Work)		

Appendix to:

A MODEL SURVEY OF INSURANCE SERVICES

VOORBURG GROUP CONFERENCE

Williamsburg, Virginia, U.S.A.

October 19-23, 1992

R. W. Collins

STATISTICS CANADA

INTRODUCTION

1. Insurers provide a variety of services. Those services are exported and imported and have become an important issue, along with other financial services, in international trade. The methods to measure output, particularly real output need to be developed. This would also provide a basis for determining how to measure international flows of insurance services.
2. Insurers are engaged in the pooling of risk. Insured persons or businesses pay a premium to insurance carriers to perform this function. In addition, there is an associated function of providing annuities and managing pension funding. All of these activities involve investment of the policyholders funds.
3. These two main functions - underwriting insurance and investing funds are reflected in two accounts - an underwriting account and an investment account. From the point of view of the insurer much of the income is derived from capital gains and investment income. These are not traditionally considered income from the production of goods and services in macro-economic accounts. Rather they are considered as transfers.
4. The premium received should be considered as consisting of two parts - an amount placed in reserve to pay future claims and the remainder used to cover expenses including a return to shareholders of the insurer. The reserves are used to generate investment income which is used to cover expenses and the cost of claims.
5. In this model the insured persons, governments and businesses barter the investment income for a lower rate of premium.
6. Chart 1 shows the various service and payment flows.
 - Between the insurer and the beneficiary, there is a payment in respect of claims incurred in the current period.
 - Between the insured and the insurer, there is a premium flow. This premium flow consists of two components - a payment for a service and a payment which is a provision for future claims. The payment for future claims is a transfer to the insurer.
 - Between the insurer and the insured there is a barter arrangement in which the insured barter the investment income on the reserves to pay future claims to lower the overall payment for service charges and claims.
 - Between the investee and the insurer is a flows of investment income. This investment income is a transfer between the investee and the insurer. The right to retain the investment funds represents the barter arrangement with the insured.

There are variants on this model. In some kinds of insurance the insured may receive a return of premiums, where the claim experience is lower than expected

or where the investment income is higher than expected. In mutual insurance, for example, the insured is equivalent to a shareholder.

7. In their annuity activities, insurers are accepting funds in the current period and agreeing to repay those funds in future period, along with a return from investing those funds. There are variations on this basic product. Since the original principal amount would be repaid over the period of the annuity, the value of the service provided is the difference in the return to the insurer and the return to the beneficiary.

MODULE 1 - INCOME AND EXPENSES SUMMARY

1. Revenue and Expenses of Insurers

MODULE 2 - REVENUES FROM THE SALE OF GOODS AND SERVICES

This module is concerned with the revenues generated by this organization from the sale of goods and services both to the domestic and the export market. For the purpose of this survey transactions with related parties (sales at market prices or transfers at internal prices) should be included. Please exclude from the amounts reported any taxes collected by this organization on behalf of the government.

Reinsurance assumed should be included as revenue under the appropriate product category and reinsurance ceded should not be deducted.

ISSUES

The System of National Accounts

The current proposals for the treatment of investment income in the SNA are different for the two types of insurers. Investment income of Property and Casualty Insurers will be treated as revenue of the insurers. The treatment of investment income of persons will be unchanged, that is, it will continue to be considered income of persons.

For Property and Casualty Insurers, not including investment income results in negative operating surplus and often negative value-added.

There are several issues. First should investment income always be included in revenue of the insurer. Secondly, which types of investment income should be included in revenue. Finally, how should net underwriting revenue be derived.

For the first question, the conceptually correct treatment for the SNA does not include investment income for life insurance and does for property and casualty insurance. For business type statistics, there is little doubt that it should be included as income .

The suggested response to the second question is that all investment income should be included.

Net underwriting income is defined generally as premiums less claims. However, for both types of insurance and for annuities, the question is how premiums and claims, especially claims, should be measured. Premiums should include those due for the period - that is, paid and unpaid premiums for the period but should exclude prepayment for future periods.

Claims present more problems because the level of the claims estimate can potentially be quite different. For life insurance, the option is to use current period claims or the expected claims associated with those premiums. Since it is the value of the service that is being measured, it is proposed that the expected value of claims associated with those premiums be used, that is, the actuarial liability associated with those premiums. The same holds true for annuities. For property and casualty insurance, the contracts are usually for a year, so there are no actuarial liabilities in the normal sense. However, there are some reserves whose change should be taken into account in measuring service revenues.

ISSUE

For reinsurance there are a number of possible treatments. However, the first point to determine is whether the gross output of the reinsurer should be included in the gross output of the direct insurer. In reinsurance, the direct insurer transfers some of the risk to the reinsurer. A portion of the premium income is ceded to the reinsurer. The reinsurer invests these funds and receives the investment income directly. The direct insurer is responsible for the administration of the insurance - collection of premiums and annuity considerations, engaging and paying agents, paying benefits and settling claims. The reinsurer pays for a portion of these and other expense, such as policy acquisition.

One important consideration in deciding if reinsurance ceded should be considered output of the direct insurer is the need to match outputs with the inputs used to produce them. On the input side, expenses on primary and intermediate inputs should be recorded at gross values. Attributing these inputs to the reinsurer (which is the other possible choice) would mean that they were not attributed to the user of those resources and would result in them being recorded with having the wrong geography. Attributing all inputs related to reinsurance ceded to the direct insurer implies that an equivalent output must be attributed to the direct insurer.

However, there remains a question of how to value the output. This can be thought of in terms of whether the major revenue and expense items should be at gross values or net of reinsurance ceded.

Option 1 consists of recording only the administrative expenses attributable to reinsurance ceded as gross output.

Option 2 consists of recording all incomes and expenses except investment income at gross values.

Option 3 consists of recording all incomes and expenses including investment income at gross values.

There are some implications to all of these treatments.

Option 1 has the advantage of simplicity for measurement of outputs in current prices. However, it reduces reinsurance to the provision of services to the reinsurer by the direct insurer. This seems intuitively incorrect. Further it would not simplify deflation.

Option 3 is the most consistent with the overall model but presents the problems of estimating investment income for insurance ceded - although this is possible for domestic insurers. It would simplify deflation because the reinsurance would be equivalent to direct insurance and would appear as both gross output and intermediate input.

Option 2 has the virtue of being measurable but creates a conceptual problem. If the insured is bartering his right to investment funds for a lower premium, then the direct insurer must be doing the same.

In any of the options, income from reinsurance assumed should be treated as revenue from the provision of insurance services.

Some additional tables would be necessary if different options or variants are chosen as the correct conceptual treatment.

The treatment of exports and imports would also be different depending on the option chosen.

2.1 Revenues from the Provision of Life Insurance, Annuity and Pension Services

Issue:

How should revenue by product be measured. The proposed treatment is to combine underwriting income with investment income by product. An alternative would be to treat underwriting activity and investment activity as two separate categories of products each with a different commodity composition and each with a separate deflation methodology. Investment activities would be a single product and underwriting would be divided into a variety of products.

The argument for the proposed treatment is that insurers take account of the expected return on investments to set rates. This is especially true for whole life insurance - which includes a savings element - and annuities. In addition, property and casualty insurers generally have a negative return on underwriting operations and an overall positive return due to investing activities.

Schedule 1 - Summary

This schedule includes totals of Investment income and underwriting revenue by product.

2 - Sources of Investment Income

Issue:

The issue is which types of investment income should be included. It is proposed to include all investment income, including capital gains. The rationale for this is that the insured has bartered to the insurer the rights to the income from investing those funds in return for a lower premium. The investment income is thus viewed as though it were an additional premium payment paid from the income resulting from investing the reserves.

Schedule 3 - Investment Income Distribution by Product (Direct Insurance less Reinsurance Ceded plus Reinsurance Assumed)

Issue:

Investment income is not segregated by product. However, the actuarial liability is available by product. The proposal is to use the actuarial liability by product to distribute the investment income by product. Ideally, the actuarial liability should be weighted by the number of days during the period during which it was available to earn investment income. Although the ideal is presented here, it would be possible to use some approximation e.g. average of opening and closing liabilities.

Schedule 5 - Underwriting Income by Product

ISSUES:

The measure of premium income would vary according to whether the insurance is participating or not. Policy dividends or refunds based on rating experience are treated as a reduction in the actual premium paid.

The intent is to measure claims associated with the current period's premiums, including changes in actuarial liabilities resulting from those premiums.

The treatment of reinsurance assumed and ceded is also an issue. In this cases it is assumed that reinsurance assumed is included and reinsurance ceded is not deducted.

2.2 Revenues from the Provision of Property and Casualty Insurance Services

Schedule 1 - Summary

Schedule 2 - Sources of Investment Income

Schedule 3 - Investment Income Distribution by Product (Direct Insurance less Reinsurance Ceded plus Reinsurance Assumed)

ISSUE:

As with life insurance and annuity products, investment income is not usually attributed to particular products (although there may be some segregation along product lines). One problem is how to allocate the investment income by product. The proposal is to allocate the investment income on the basis of unpaid anticipated claims.

The second problem is to weight these claims on the basis of the time period for which they were available to earn investment income.

The third issue is to measure total investment income. It is proposed to include gains and losses in investments.

Schedule 5 - Underwriting Income by Product

2.3 Revenues From Other Sources

MODULE 3 - INVESTMENT, UNDERWRITING, REINSURANCE AND GENERAL EXPENSES

This module is concerned with the expenses incurred by this organization for goods and services used in the regular conduct of its business. For this purpose of this survey transactions with related parties (transfers at market prices or transfers at internal prices) should be included. Please exclude capital expenditures and income taxes.

For services such as those of agents, adjusters, appraisers, lawyers and investigators, a distinction is made between expenses purchased outside the business and expenses on those functions performed within the business. Within the business, these expenses should be treated as wages and salaries and commissions.

Underwriting and general expenses related to reinsurance should not be deducted.

ISSUES:

The tables presented are based on option 3 for reinsurance ceded. If option 1 or 2 is the appropriate conceptual treatment, then some tables would not be necessary.

3.1 Intermediate Inputs related to Life, Annuity and Pension

Services (Reinsurance) Ceded

Schedule 1 - Summary

Schedule 2 - Investment Income Ceded by Product

ISSUES:

This table is presented here to show how it would fit in the overall estimate of intermediate inputs but it has already been collected in the gross output (Module 2, Section 2.1, Schedule 4)

Schedule 3 - Underwriting Services Purchased by Product

3.2 Intermediate Inputs related to Property and Casualty Insurance

Services (Reinsurance) Ceded

Schedule 1 - Summary

Schedule 2 - Investment Income Ceded by Product

Issues:

This table is presented here to show how it would fit in the overall estimate of intermediate inputs but it has already been collected in the gross output (Module 2, Section 2.2, Schedule 4)

Schedule 3 - Underwriting Services Purchased by Product

3.3 Other Purchased Goods and Services

MODULE 4. INVENTORIES

This module is concerned with the change in the level of the inventories held by your organization during the period covered by this report.

MODULE 5 - EXPORTS

This module is concerned with exports of goods and services. If this organization has foreign clients, please provide an estimate of the proportion of total premiums or liabilities due to non-residents for each of the following products. Sales or transfers to or holdings of foreign related parties should be included. Reinsurance assumed from foreign insurers should be included.

Amounts booked by subsidiaries or branches resident in other countries should not be included.

5.1 Life Insurance, Annuity and Pension Services (Reinsurance assumed)

Schedule 1 - Summary

Issues:

More elaborate instruction on what to include, in exports and in gross output generally, are needed.

This schedule includes totals of investment income and underwriting revenue by product.

Schedule 2 - Investment Income Distribution by Product

Schedule 3 - Underwriting Income by Product

5.2 Property and Casualty Insurance Services (Reinsurance assumed)

Schedule 1 - Summary

This schedule includes totals of investment income and underwriting revenue by product.

Schedule 2 - Investment Income Distribution by Product

Schedule 3 - Underwriting Income by Product

5.3 Revenues from Other Sources**MODULE 6 - IMPORTS**

This module is concerned with imports of insurance related services. If this organization has directly imported goods and services from foreign suppliers, please provide an estimate of the purchase value of the following imported goods and services. In addition, please provide information on reinsurance ceded to non-resident insurers.

Issue:

Regardless of which model of reinsurance is accepted, it is proposed to collect reinsurance ceded to foreign insurers. In these options for reinsurance, there would be a different treatment of reinsurance as imports. The first treatment would not consider reinsurance to be an intermediate input of the direct insurer. Reinsurance would therefore not be considered a direct import of the direct insurer. In this model reinsurance ceded to foreign carriers would be treated as direct imports by the insured. However, if it were not collected from the direct insurer, there would be no other source of data available.

In the second and third options, reinsurance is treated as a direct import of the direct insurer. In option two investment income would not be collected. In option three, investment income would have to be collected.

6.1 Life Insurance, Annuity and Pension Services (Reinsurance ceded)

Schedule 1 - Summary

Schedule 2 - Distribution of Investment Income

Issues:

Since option 3 is the preferred method of estimating reinsurance ceded, it implies that investment income associated with reinsurance ceded must be either collected from the reinsurer or estimated from data available from the direct insurer. the table presented assumes that the investment income will be estimated based on the experience of the direct insurer.

Schedule 3 - Underwriting Income

6.2 Property and Casualty Insurance Services (Reinsurance Ceded)

Schedule 1 - Summary

Schedule 2 - Distribution of Investment Income

Schedule 3 - Underwriting Income

6.3 Revenues from Other Sources

MODULE 7 - EMPLOYMENT

MODULE 8 - FIXED ASSETS, ADDITIONS AND DISPOSALS

Include all fixed assets shown on your book of accounts and all assets operated by your business under finance lease arrangements. Exclude expenditures on maintenance and on intangible assets such as goodwill.

Issues:

Should the rental properties be separated. Insurers currently do this in their accounts.

MODULE 9. RESEARCH AND DEVELOPMENT

The information requested in this module should also have been reported in modules 3 and 10.

YES<T> go to B<T> <T>NO<T> <T>end of this module

B. Please estimate the following categories of expenditure for the performance of research and development within this company in this country in 199...

C. In its financial accounts does this organization normally capitalize or expense the development expenditures reported as current expenditure above?

APPENDIX 1

INSURANCE - OVERVIEW OF MODEL QUESTIONNAIRE

The model questionnaire has several underlying assumptions:

- The questionnaire is intended to derive data that can be used for output measurement. It is assumed that measurement of gross output will be derived as the sum of real output of individual commodities.
- In Canada, probably as in most countries, a great deal of data is already collected by regulators for their own purposes. In Canada there is no existing survey of commodities in the insurance industries. As much as possible it is desirable to use this data for the measurement of output.
- There is a need to test the validity of the CPC. The model survey presents the administrative (regulator's) data in a form that can be used to measure output. In this context, it would be useful if all countries examined the data that is currently available from the regulators to see what commodity classification is possible.
- Current SNA proposals are to include the investment income from "technical reserves" in the output of the insurers. This has been included in the questionnaire along with a method of allocating those reserves by commodity. Insurers do not distinguish in the investment income between different commodities. Since it is not attributed to particular products, it is reasonable to assume that it is distributed according to the liabilities of the insurer related to each product (assets of the beneficiary).
- The approach to output measurement should provide geographical data.
- Reinsurance ceded should be treated as intermediate input of the primary insurer and reinsurance assumed should be treated as gross output of the reinsurer. The treatment, in the insurers own accounts in Canada, is to include reinsurance assumed in revenue and to deduct reinsurance ceded from revenue. The primary insurer also reduces expenses by the amount of the reinsurance ceded since these expenses are legally the responsibility of the reinsurer.

THE COMMODITY CLASSIFICATION

SUMMARY OF INSURANCE CATEGORIES

Life Insurance, Annuity and Pension Services

- A. Individual Life Insurance
 - (a) Participating
 - (b) Non-participating
- B. Group Life Insurance
 - (a) Participating
 - (b) Non-participating
- C. Individual Annuity Services
 - (a) Participating
 - (b) Non-participating
- D. Group Annuity Services
 - (a) Participating
 - (b) Non-participating
- E. Other Annuity Services
 - (a) Settlement Annuities
 - (b) Disability Annuities
- F. Staff Pension and Insurance
 - (a) Staff Pension and Insurance

Property and Casualty Insurance Services

- G Property
 - (a) Personal
 - (b) Commercial
- H. Automobile
 - (a) Liability
 - (b) Personal Accident
 - (c) Other
- I. Aircraft
- J. Boiler and Machinery
- K. Credit
- L. Fidelity
- M. Hail
- N. Legal Expenses
- O. Liability
- P. Mortgage
- Q. Surety
- R. Title
- S. Marine
- T. Accident and Sickness

RELATIONSHIP TO THE CPC

The categories of insurance for which data are available consists of the above. Their relationship with the CPC is contained in the table below.

RELATIONSHIP WITH CPC

CATEGORY	CPC
A. Individual Life Insurance (a) Participating (b) Non-participating B. Group Life Insurance (a) Participating (b) Non-participating	81211 - Life insurance services
C. Individual Annuity Services (a) Participating (b) Non-participating D. Group Annuity Services (a) Participating (b) Non-participating E. Other Annuity Services (a) Settlement Annuities (b) Disability Annuities F. Staff Pension and Insurance (a) Staff Pension and Insurance	81212 - Pension and annuity services
G. Property (a) Personal (b) Commercial K. Credit L. Fidelity M. Hail N. Legal Expenses P. Mortgage Q. Surety R. Title	81294 - Freight insurance services 81295 - Fire and other property damage insurance services 81296 - Pecuniary loss insurance services
H. Automobile (a) Liability (b) Personal Accident (c) Other	81292 - Motor vehicle insurance services
I. Aircraft S. Marine	81293 - Marine, aviation and other transport insurance services
J. Boiler and Machinery O. Liability	81297 - General liability insurance services
T. Accident and Sickness	81291 - Accident and sickness insurance services
	81299 - Other insurance services

As the table suggests directly available data in Canada does not permit some of the distinctions made in the CPC.

DEFINITION OF THE CATEGORIES OF INSURANCE

Life Insurance, Annuity and Pension Services

A. Individual Life Insurance

Life insurance includes insurance that is payable on the death of a person, on an event or contingency dependent on human life or for a term dependent on human life. It also includes insurance that provides for the establishment, accumulation and payment of sinking, redemption, accumulation, renewal or endowment funds. Provided that it is part of a life insurance policy it can include disability benefits or accidental death, dismemberment, and loss of sight. There are a set of conditions that must be met in order for the policy to be considered life insurance rather than another category of insurance. Individual life insurance means insurance purchased on an individual basis.

(a) Participating

Insurance in which the policyholders share in the surplus earnings distributed by the company. "Policy dividends" are payable.

(b) Non-participating

Insurance in which the policyholders do not share in the surplus earnings distributed by the company.

B. Group Life Insurance

See A for a general description of life insurance. Group insurance is issued, usually without medical examination, on a group of people under a master contract. It is usually issued to an employer for the benefit of employees.

(a) Participating

Insurance in which the policyholders share in the surplus earnings distributed by the company. "Policy dividends" are payable.

(b) Non-participating

Insurance in which the policyholders do not share in the surplus earnings distributed by the company.

C. Individual Annuity Services

A contract that provides income payments at regular (typically monthly) intervals, usually for a specified period or for the lifetime of the annuitant. Individual annuities are issued on an

individual basis.

(a) Participating

Annuities in which the annuitants share in the surplus earnings distributed by the company.

(b) Non-participating

Annuities in which the annuitants do not share in the surplus earnings distributed by the company.

D. Group Annuity Services

A contract providing annuities at retirement to a group of people in a pension plan. Usually it is issued to an employer for the benefit of employees.

(a) Participating

Annuities in which the annuitants share in the surplus earnings distributed by the company.

(b) Non-participating

Annuities in which the annuitants do not share in the surplus earnings distributed by the company.

E. Other Annuity Services

(a) Settlement Annuities

Annuities arising out of settlement of claims other than disability.

(b) Disability Annuities

Annuities arising out of claims for disability.

F. Staff Pension and Insurance

(a) Staff Pension and Insurance

Property and Casualty Insurance

G Property

Property insurance generally means insurance against the loss of, or damage to, movable or personal property but does not include insurance within the categories of automobile or aircraft insurance.

Examples of perils included are:

fire

theft

earthquake

explosion

water damage

weather

vandalism

sprinkler system

forgery

inland transportation insurance
falling aircraft insurance
civil commotion insurance
livestock
plate glass

(a) Personal

Insurance against the loss of or damage to personal property.

(b) Commercial

Insurance against the loss of or damage to commercial property.

H. Automobile

(a) Liability

Insurance against liability arising out of bodily injury or death of a person or loss or damage to property arising out of the operation of a motor vehicle.

(b) Personal Accident

Personal accident insurance arising from the operation of a motor vehicle.

(c) Other

Other insurance related to the operation of a motor vehicle, including loss of or damage to the vehicle.

I. Aircraft

Insurance against liability arising out of bodily injury or death of a person or property damage that results from the operation of an aircraft.

J. Boiler and Machinery

Insurance against liability arising from bodily injury or death of a person or against loss or damage to property resulting from explosion or rupture of pressure vessels of any kind or from a breakdown of machinery.

K. Credit

Insurance against loss resulting from granting credit to a person or business that subsequently becomes insolvent or defaults on payment. This does not include mortgage insurance.

L. Fidelity

Insurance against loss caused by unfaithful performance of duties by a person in a position of trust. Insurance whereby an insurer undertakes to guarantee the proper fulfilment of the duties of an office.

M. Hail

Insurance against loss or damage to crops on the field or other property due to hail

N. Legal Expenses

Insurance against the cost incurred by a person or business for specified legal services, including fees or other costs incurred relative to those services.

O. Liability

Insurance covering two classes of liability - public liability and employers liability. Public liability covers a number of classes of insurance including personal liability insurance

Public liability insurance insures against liability arising out of bodily injury or death of a person or property damage from circumstances not covered by aircraft or automobile insurance. It may include payments for bodily injury to a person not a member of the family of the insured even when there is no liability provided that it is a part of a liability insurance contract.

P. Mortgage

Insurance against loss caused by default on the part of a borrower under a mortgage loan.

Q. Surety

Insurance which guarantees the due performance of a contract or undertaking or the payment of a penalty or indemnity for any default.

R. Title

Insurance against a loss or damage caused by a defect in title to real property, the existence of a lien, encumbrance or servitude on real property, a defect in the execution of a mortgage, hypothec or deed of trust in respect of real property or any other matter affecting the title to real property or the right to enjoyment or use of real property.

S. Marine

Insurance against liability arising out of personal injury or death or damage to property or the loss of or damage to property occurring during a marine voyage or during transit incidental to a marine voyage.

T. Accident and Sickness

Personal accident or sickness insurance. Sickness insurance is insurance against loss resulting from the illness or disability of a person (excluding death) or where an insurer undertakes to pay a certain sum or sums of money in the event of the illness or disability of a person.