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THE STRUCTURE AND PROPERTIES OF THE FRB MULTICOUNTRY MODEL
PART I: MODEL DESCRIPTION AND SIMULATION RESULTS

by

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Abstract

The FRB Multicountry Model (MCM) is a linked system of five quarterly national macroeconometric models of the United States, Canada, Germany, Japan, and the United Kingdom. The MCM emphasizes international linkages, and has equations for trade in goods and services, investment income flows, and exchange rates. This paper documents the current version of the MCM. The paper describes the theoretical structure of the model, and presents the empirical estimation results. The paper also describes a series of simulations of fiscal and monetary policy scenarios and external shocks. A complete listing of the model is given in an appendix.

The Structure and Properties of the FRB Multicountry Model

by

Hali J. Edison, Jaime R. Marquez, and Ralph W. Tryon*

I. Introduction and Summary

The FRB Multicountry Model is a linked system of five quarterly national macroeconometric models of the United States, Canada, Germany (Federal Republic), Japan, and the United Kingdom. The individual models vary in size from 150 to 250 behavioral equations and identities; also included in the system is an abbreviated sector representing the rest of the world. The country models are linked to each other by equations modeling bilateral trade in goods, trade in services, investment income flows, and exchange rates.

The Multicountry Model (MCM) was built in the late 1970's at the Federal Reserve Board by a team led by Guy Stevens. The volume by Stevens, et al. (1984) describes in detail the theoretical and empirical structure of the original model, and analyzes its theoretical and empirical simulation properties. Since the original model was completed in 1979 it has undergone a series of modifications, and was substantially reestimated in 1984-85. This paper describes the current version of the MCM.

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The major purpose of this paper is to document the MCM by providing as exact as possible a description of the equations of the model. We supplement this description with a series of simulations which show the basic multiplier properties of the MCM. The goal is to make the model accessible to those who might wish to analyze published simulation results of the MCM, to compare the MCM with other multicountry models, or to use MCM results in other work.

This effort is motivated in large part by the results of a recent conference at the Brookings Institution on multicountry modeling.[1] The proceedings of this conference made clear that there is a substantial demand for empirical results from multicountry models, both directly for policy analysis and to use in other, non-econometric, modeling efforts. (See, for example, Frankel (1986), Oudiz and Sachs (1984)). But it was also made evident at the conference that the use of multicountry model results by others was greatly inhibited by the wide range of results obtained and by the impenetrability of the models themselves.[2]

Our paper is an attempt to explain clearly what is in the MCM, why it is there, what happens when the model is simulated, and why. The paper is organized into three major sections and two appendices. Section II describes a simplified version of the theoretical model on

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[1]"Empirical Macroeconomics for Interdependent Economies: Where Do We Stand?", Brookings Institution, Washington, DC (March 1986). A volume of papers presented at the conference is forthcoming.

[2]Helliwell and Padmore (1985) presents an earlier effort to deal with this problem.

which the MCM is based. Section III describes the actual specification of the equations in the MCM, and summarizes the key estimation results. Section IV presents the results of simulations of fiscal and monetary policy actions, and exchange rate and price shocks, in the MCM.

The core of the paper is in the two appendices. Appendix 1 presents the detailed tables for the simulation exercises. There are four sets of simulations: a fiscal expansion, a monetary contraction, an exchange rate market shock, and a price shock. Each simulation is run for each country alone, and for all five together. The simulations are set up so that the results may conveniently be expressed as multipliers. The effects both on the home country and abroad are shown.

Appendix 2 is the complete listing of the MCM. The equations are listed first, followed by a cross-reference table and a listing of variable definitions. The equation listing includes the regression results (coefficients, t-statistics, and summary statistics) for each estimated equation. Appendix 2 is printed separately, in Part II of the paper.

II. Theoretical Structure

This section describes the theoretical structure of the Multicountry Model. We focus on a prototype model for a single open economy, since the Multicountry Model (MCM) is essentially five single country models linked together.

The prototype model is in many ways a conventional Keynesian macro model. There are four domestic agents: consumers, firms, commercial banks, and the government (fiscal and monetary authorities). There are four markets in the model: domestic output, labor, money, and bonds. Nominal wages are sticky, so that the amount of labor employed is variable and output can adjust to meet aggregate demand. The aggregate supply curve is given by producers, who set prices at a markup over variable cost. In contrast to the goods market, asset markets are perfectly competitive, and agents are assumed to be risk-neutral. short- and long-term securities are assumed to be perfect substitutes. Foreign and home currency bonds are also assumed to be perfect substitutes, so that open interest parity holds in the foreign exchange market. Expectations about future variables are adaptive.

The prototype model is shown in Table 1. This model contains the basic structural features of the MCM country model, but much of the disaggregated detail in the full model has been omitted. Furthermore, the functional form of the behavioral equations has been suppressed, and the notation has been simplified.

Table 1. Simplified MCM Country Model

Demand		
(1)	$C = C(R, A(L)Y_d)$	consumption
(2)	$I = I(K_{-1}, \Delta UC, \Delta Y)$	investment
(3)	$X_{gs} = X(Y^*, P/EP^*)$	real exports of goods and services
(4)	$M_{gs} = M(Y, P/EP^*)$	real imports of goods and services
(5)	$Y = C + I + G + X_{gs} - M_{gs}$	goods market equilibrium
(6)	$Y_d = Y + (TR-T)/P$	real disposable income
Money market		
(7)	$M/P = M_d(Y, i_s)$	money demand
(8)	$RF = RF(M, i_s, i_d)$	bank demand for free reserves
(9)	$RR = \rho M$	required reserves
(10)	$BU = RR + RF$	unborrowed monetary base (assuming no currency holdings)
(11)	$i_\ell = C(L)\, i_s$	term structure equation
(12)	$R = i_\ell - \dot{P}^e$	real long-term interest rate
Supply		
(13)	$Q = F(K, L, M_i)$	production function
(14)	$Y = Q - (P_{mi}/P_q)\, M_i$	definition of real GNP

(15)	$P_q = P_q(P \cdot UC, W, P_{mi}, Y)$	supply curve of domestic output
(16)	$P = P(P_q, P_{mf})$	price of domestic absorption
(17)	$UC = UC(R, \delta, t)$	real user cost of capital
(18)	$\dot{P}^e = B(L)\,\dot{P}_{-1}$	expected inflation
(19)	$K = \delta K_{-1} + I$	capital stock
(20)	$W-W_{-1} = \dot{P}^e - \lambda(\bar{L}-L)$	Phillips curve
(21)	$M_i = F_{mi}^{-1}\,(P_{mi}/P)$	imported intermediates

Exchange rate and balance of payments

(22)	$\dot{E}^e = i_s - i_s^*$	open interest parity condition
(23)	$\dot{E}^e = \gamma(\ln\bar{E} - \ln E) + \dot{P}^e - \dot{P}^{*e}$	exchange rate expectations
(24)	$\bar{E} = \bar{X}\cdot(\dot{P}^e \cdot P_{-1})/(\dot{P}^{*e} \cdot P^*_{-1})$	long-run equilibrum exchange rate
(25)	$CAB = P \cdot X_{gs} - EP^* \cdot M_{gs}$	current account balance
(26)	$CAB - DNFAP - DNFAG = 0$	balance of payments identity

Notes
1. an asterisk (*) denotes a foreign variable
2. A(L), B(L), and C(L) are polynominals in the lag operator
3. γ and λ are scalar coefficients
4. $F_x(\cdot)$ is the partial derivative of $F(\cdot)$ with respect to x.
5. a dot over a variable denotes percentage rate of change

Variable definitions

BU	unborrowed monetary base	(exogenous)
C	real consumption expenditure	
CAB	current account balance	
DNFAG	change in net foreign assets of the government	(exogenous)
DNFAP	change in net foreign assets of the private sector	
E	nominal exchange rate (local currency per unit of foreign exchange)	
$\dot{E}^e$	expected change in nominal exchange rate	
$\bar{E}$	expected long-run nominal exchange rate	
G	real government expenditure	(exogenous)
I	real investment expenditure	
i_d	nominal discount rate	(exogenous)
i_s	nominal short-term interest rate	
i_ℓ	nominal long-term interest rate	
i_s^*	foreign nominal short-term interest rate	(exogenous)
K	stock of physical capital	
L	labor employed	
$\bar{L}$	labor force	(exogenous)
M	money supply	
M_{gs}	real imports of goods and services	

M_i	imports of intermediate inputs	
P	price of domestic absorption	
P^*	price of foreign absorption	(exogenous)
$\dot{P}$	domestic inflation rate (absorption deflator)	(exogenous)
$\dot{P}^e$	expected domestic inflation rate (absorption deflator)	
$\dot{P}^{e*}$	foreign expected inflation rate (absorption deflator)	
P_{mf}	price of final imports	(exogenous)
P_{mi}	price of intermediate imports	(exogenous)
P_q	price of domestic output	
Q	gross output	
R	real long-term interest rate	
RF	free reserves of banks	
RR	required reserves of banks	
t	corporate tax rate	(exogenous)
T	nominal government tax revenue	(exogenous)
TR	nominal government transfers	(exogenous)
UC	real user cost of capital	
W	nominal wage rate	
X_{gs}	real exports of goods and sources	
$\bar{X}$	expected long-run real exchange rate	(exogenous)
Y	real gross national product	

Y_d	real disposable income	
Y^*	foreign real GNP	(exogenous)
δ	rate of real depreciation	(exogenous)
ρ	required reserve ratio	(exogenous)

Demand

Consumption (equation 1) is modeled using a conventional life-cycle/permanent income approach, with a distributed lag on disposable income serving as a proxy for permanent income. The real interest rate is also a determinant of consumption. The investment equation (2) is developed along standard neo-classical lines, with the desired capital stock as a function of both the level of output and the real user cost of capital. Net investment is the difference between the desired and the previous period's capital stocks. (In the full model, investment is disaggregated into residential and nonresidential components.)

Imports of final goods and services (equation 4) are a function of real income and relative prices. (Imports of intermediate inputs are included in the supply block.) Exports of goods and services (3) are a function of foreign real income and relative prices. These equations determine net exports of goods and services in real terms. The nominal value of net exports is determined by the current account identity (equation 25). Because home and foreign currency bonds are assumed to be perfect substitutes, the capital account of the balance of payments is a residual given the current account (equation 26).

The modeling of the international accounts in the full MCM is much richer than in the prototype model presented here. In the full model, goods trade is disaggregated by region. Trade in services, and direct and portfolio investment income receipts and payments are all modeled separately. Consumption of and trade in petroleum are also modeled, although these equations are auxiliary to the main model, since the goods trade equations are for total trade. The disaggregated detail adds a great deal to the empirical properties of the MCM, but the basic theoretical structure is essentially the same as in the model presented here.

Money Market

The money market is modeled with the private non-bank demand for money (equation 7), and banks' demand for free reserves (equation 8). Together these generate the demand for the unborrowed monetary base, which is set by the monetary authorities. (This definition of the base ignores currency holdings.) In the full MCM money demand is disaggregated into currency, demand deposits, and time deposits.

The bond market is not modeled explicitly, since with only two assets (money and bonds) it is redundant. For given nominal income the nominal short-term interest rate clears the asset market. (There is no equities market in this model.) The nominal long-term interest rate is determined by the term structure equation (11). Since long- and short-term bonds are assumed to be perfect substitutes, the long-term rate is the cumulation of expected short-term rates, which are modeled

as a distributed lag on past rates. The real long-term rate equation (12) is the difference between the nominal rate and expected inflation, which is in turn a distributed lag on past inflation (equation 18).

Supply

Equations 13-21 show the modeling of aggregate supply. The production function has three factors: capital, labor, and imported intermediates.[3] The production function determines gross output; real GNP is measured net of imported inputs, in equation 14.

The producer's problem is to maximize profits given the constraints imposed by the production function, the demand for output, and factor supplies. (We assume that producers can set prices in the market for output.) The first order conditions for this problem yield demand functions for each of the three factors, the supply curve of output, and the production function itself. Because aggregate demand is determined by equation (6), any one of these conditions is redundant, and may be omitted from the model. In the prototype model, the demand for labor function is omitted, and the quantity of labor employed is determined by the production function. The demand for capital is implicit in the investment equation, and the demand for imported inputs is given by the first order condition, equation 21.[4]

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[3]In the MCM itself, imported intermediate inputs are subdivided into oil and other inputs. "Other inputs" are then approximated by total non-fuel imports.

[4]In the full MCM, this equation is combined with imports of final goods to generate a demand function for total imports.

This prototype model suppresses some important details in the modeling of the supply side in the full MCM. Here we assume that capital is always fully employed, while in the MCM it is assumed that capital is employed at the economy-wide utilization rate, equal to the ratio of actual to potential output. This latter approach recognizes the empirically important fact that capital is not always fully utilized, while it avoids the difficult problem of modeling the decision to take capital out of use.

The full MCM also distinguishes between labor hours and employment. Again, the difference is empirically important in estimating the production function. However, we do not explicitly model the firm's choice between hiring new workers and paying overtime, and instead we simply link employment to hours worked. The labor force is also endogenous in the full model. And finally, the full model distinguishes between the price of exports and the price of domestic output for domestic consumption. Firms are assumed to be able to price-discriminate between the home and foreign markets, so that the price of exports can differ from the price of domestic output sold at home.

Exchange Rate

In the prototype model, and in the full MCM, we assume that bonds denominated in home and foreign currencies are perfect substitutes. That is, we assume agents are risk-neutral, so there is no risk premium

on foreign currency assets. As a result, the open interest parity condition holds (equation 22), which equates expected returns on home and foreign currency assets. This condition is used to determine the nominal exchange rate, given expectations about future appreciation or depreciation.

The expected change in the exchange rate, equation (23), is assumed to reflect partial adjustment toward long-run equilibrium and complete adjustment in response to expected inflation differentials. The long-run value (equation 24) is in turn a function of the long-run real exchange rate (assumed constant), and expected relative price levels. In this model the balance of payments identity (equation 26) serves only to identify the net private capital inflow or outflow which corresponds to the current account. Because of the assumption of perfect substitutability we do not need to model explicitly the demands for home and foreign currency assets.

This approach differs substantially from earlier versions of the MCM (Stevens et al. (1984) and Hooper et al. (1983)), which do not assume perfect substitutability and therefore model capital flows explicitly. Our present view is based on a growing body of empirical work which fails to obtain satisfactory estimates of capital flow or bond demand equations. While there are many studies which find evidence of a risk premium on foreign currency assets, we know of none which has succeeded in relating this premium to economic variables in a structural

equation. As a result we conclude that perfect substitutability is an appropriate assumption for a model of this type. Tryon (1983) and Danker et al. (1984) develop the empirical argument.

Comparative Statics

In addition to providing an overview of the MCM, the simple theoretical model presented above is of interest because it is analytically tractable. We now exploit this property to present some simple comparative statics exercises which derive the basic results to be expected from the simulation experiments in Section IV below.

The static solution to the model is straightforward to obtain, and is presented in a standard IS-LM framework. We assume for simplicity that the initial equilibrium is a stationary state, with no growth in real or nominal variables. The long-run solution also depends on dynamic effects, which enter the model in several ways. Consumption depends on lagged income, and investment depends on the change in income. The term structure of interest rates, expected inflation, exchange rate expectations, the capital stock, and wages all follow dynamic processes.

Without placing further restrictions on the form of these dynamic processes it is difficult to say anything definitive about the long-run solution of the model. In particular, it is not necessarily true that the economy in this model would return to a stationary equilibrium following a shock, or that agents would expect it to. Even in a model as simplified as this prototype, the dynamic properties can

only be determined by simulation. Here we just indicate some of the possibilities.

Figure 1 shows the interaction between the goods and asset markets with the usual IS, LM, and BOP schedules. The figure also includes a vertical line representing the full employment level of output, which is conditional on the amount of factor inputs. Changes in the amounts of either productive factor shift the full-employment output level, a shift that depends on the elasticities of substitution among different factors. Aggregate demand and supply schedules determine the price level, but they are omitted for simplicity.

The IS curve is obtained by substituting equations (1)-(4) into (5) to obtain

$$Y = C(R, Y_d, \dot{P}^e) + I(K_{-1}, \Delta UC, \Delta Y) + G + NX(Y, Y^*, P/EP^*),$$

where $NX = X_{gs} - M_{gs}$. An increase in domestic interest rates lowers aggregate demand and thus requires a reduction in real income to maintain equilibrium in the goods market, giving rise to a negative association between interest rates and income.

Asset market equilibrium is derived from equations (7)-(10), which can be arranged to yield[5]

$$P \cdot M_d(i_s, Y) = [1/r(i_s, i_d, \rho)]\ BU$$

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[5]Under the assumption of no currency holdings, money holdings just equal deposits in the banking system. As a result the money multiplier, M/BU, equals $((RR+RF)/M)^{-1}$ which is equal to the inverse of the reserve-deposit ratio.

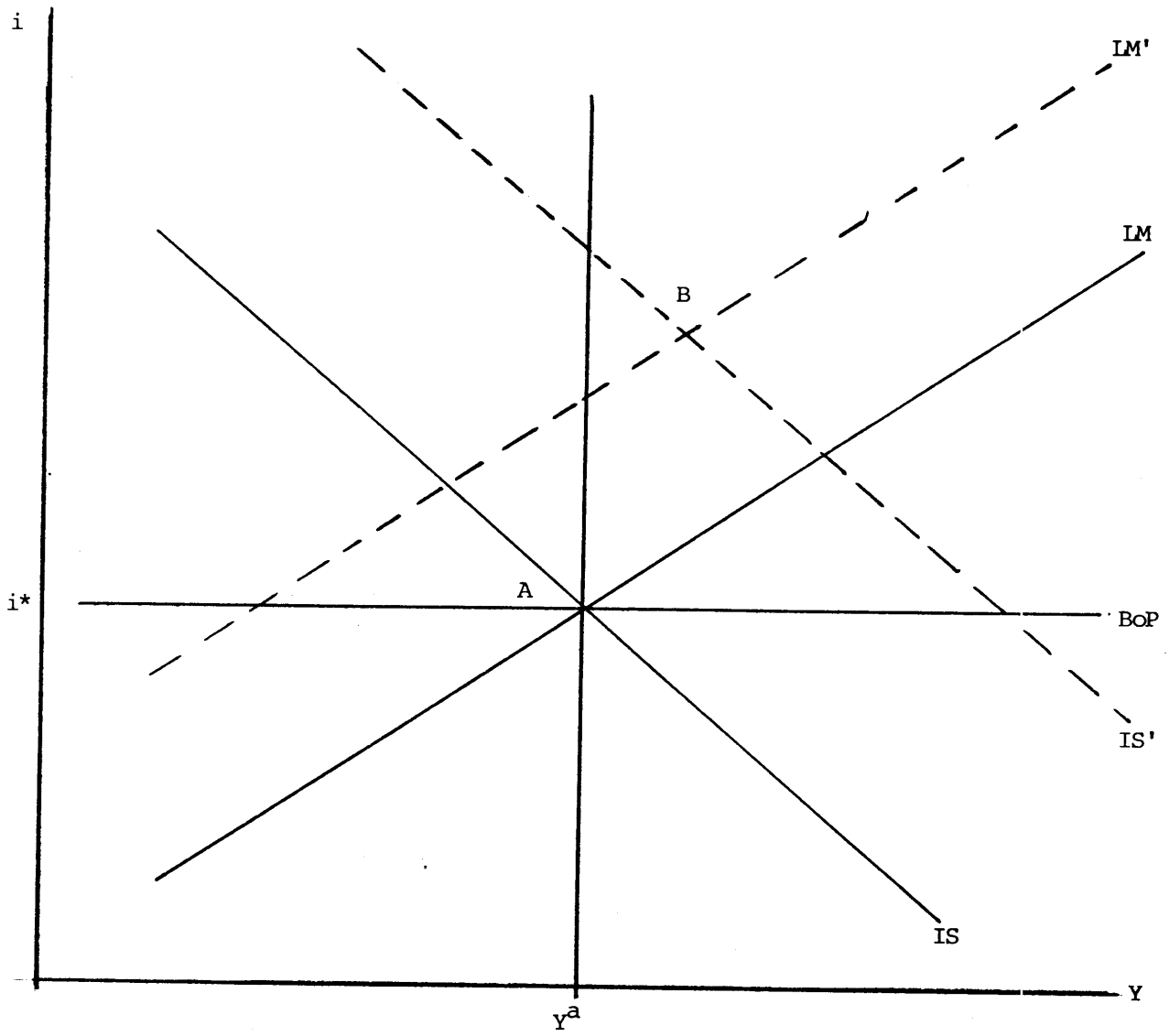

Figure 1
Fiscal Expansion

where r is the reserve/deposit ratio of commercial banks, with $(\partial r/\partial i_s) < 0$. An increase in real income produces an increase in the demand for real balances which, in the absence of any monetary accommodation, leads to an increase in nominal interest rates giving rise to an upward sloping LM schedule. However, because the MCM includes a banking sector, the increase in money demand is partly accommodated by a reduction in bank reserves. This partial accommodation tends to lower the slope of the LM schedule relative to the case of no monetary accommodation.

For the purposes of this comparative static exercise, the supply side of the model is represented by equations (13)-(14) as

$$Y = F(K, L, M_i) - (P_{mi}\, E/P_q)M_i.$$

Each argument of the production function is assumed to be at its optimal value as determined by equations (15), (17), and (19)-(21). In (i, Y)-space, the supply side of the model is represented by a vertical line, as in Figure 1.

Finally, the international capital market is represented by the horizontal line in Figure 1, where domestic interest rates are equal to foreign interest rates. This equalization of interest rates stems from the assumption of perfect capital mobility. Substitution of equation (22) into (23) yields

$$(1/\gamma)(i_s - i_s^*) = (\ln \bar{E} - \ln E) + (1/\gamma)(\dot{P}^e - \dot{P}^{*e}),$$

which can be re-arranged as

$$\ln E = \ln \bar{E} - (1/\gamma)[(i_s - \dot{P}^e) - (i_s^* - \dot{P}^{*e})].$$

If the original equilibrium is stationary, $E = \bar{E}$ and $\dot{P}^e = \dot{P}^{*e} = 0$, so that the domestic short-term interest rate is equal to the foreign rate. An increase in domestic interest rates over foreign interest rates produces a temporary appreciation of the home currency.

Fiscal Expansion

Figure 1 shows the effects of an exogenous increase in government purchases, with point A representing the initial equilibrium. An increase in G shifts the IS schedule to the right, raising aggregate demand above aggregate supply. This excess demand raises the price level and reduces real balances, producing an upward shift in the LM schedule. As a result, domestic interest rates are higher than foreign rates, and the home currency appreciates.

This appreciation has several effects which tend to offset the initial impact on output and prices. First, it lowers the domestic price of imports and raises the availability of imported inputs used in production. As a result, there is an increase in the full employment level of output. Second, there is a decrease in net exports which shifts the IS schedule to the left. Third, the increased supply of domestic output, along with the lower price of imported finished goods, lowers prices and raises the stock of real money shifting down the LM

schedule. These effects are presumably of a second order of magnitude, so the initial equilibrium is at a point such as B.

The rise in domestic interest rates also has important dynamic effects on investment demand. The real long-term rate rises over time, as the change in the short rate works through the term structure and as the drop in the price level affects inflationary expectations. The rise in the real rate lowers investment demand, and therefore lowers the real capital stock. This reduction tends to offset the positive effect on supply of the exchange appreciation, and over time the increase in output tends to be "crowded out."

Monetary Contraction

Figure 2 shows the effects of a decrease in the money supply. The initial equilibrium is at point A. A reduction in the stock of money is reflected as an upward shift in the LM schedule. The temporary equilibrium is depicted by point B, which shows that the interest rate is higher, and the level of output lower, relative to the original equilibrium. The fall in output reduces prices, which raises real money balances and tends to offset the initial shift in the LM curve.

At point B, there is an incipient capital inflow that appreciates the domestic currency which gives rise to several effects. As in the case of the fiscal expansion, this appreciation makes domestic output less competitive, shifting the IS schedule to the left. (This shift tends to be offset by the reduction in the overall price level.)

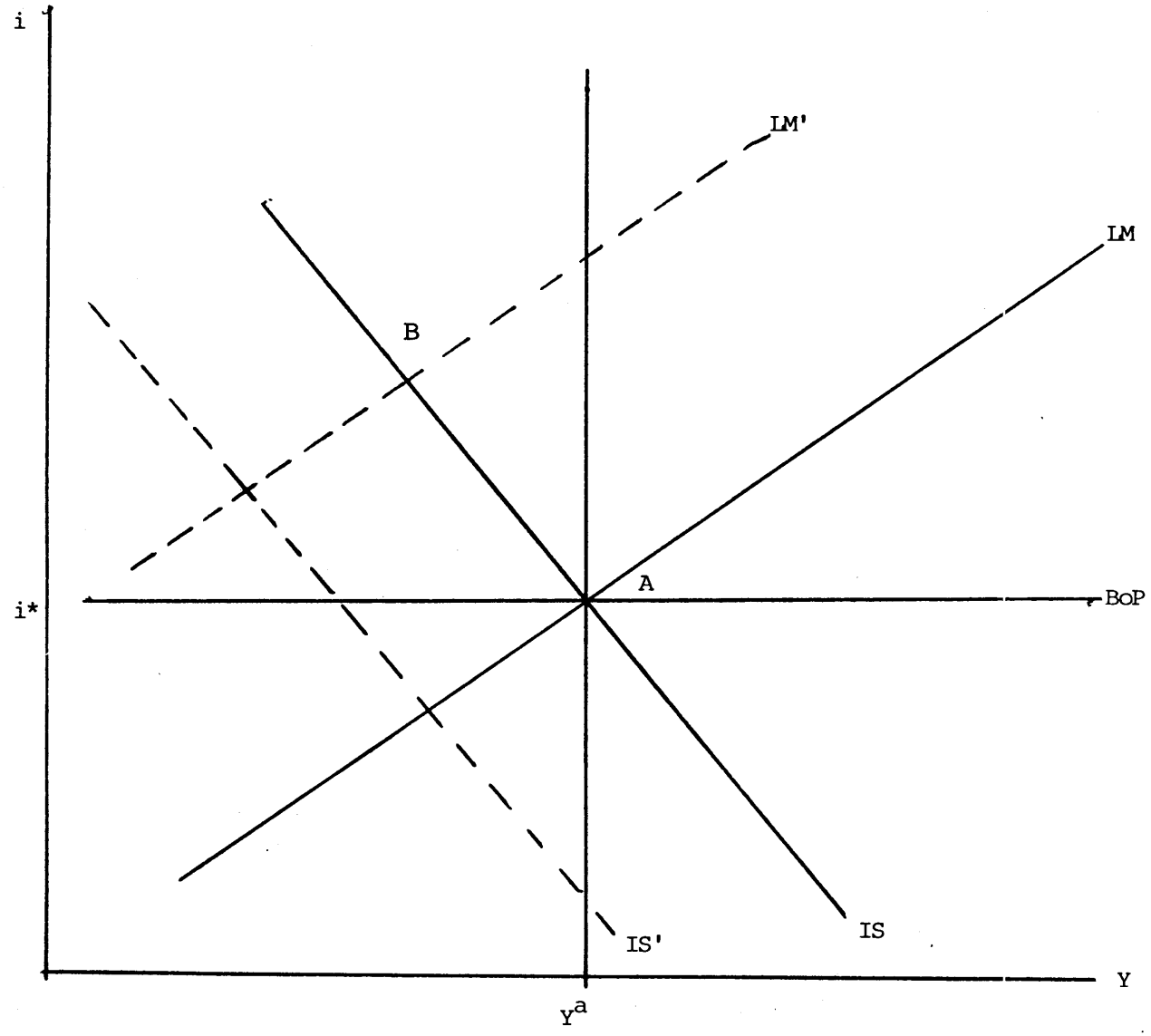

Figure 2
Monetary Contraction

The appreciation lowers import prices, again raising the real stock of money, and the LM schedule shifts rightward.

Investment is lower at the higher real interest rate, and is also reduced due to the fall in income. As a result the capital stock, and the level of full employment output, are lower than in the initial equilibrium.

Exchange Rate Depreciation

Because the exchange rate is an endogenous variable in this model, we assume that the long-run equilibrium real exchange rate, which is exogenous, undergoes a one-time increase which is immediately transmitted to the nominal exchange rate. This results in a rise in the exchange rate E (a depreciation of the home currency).

An exogenously-induced depreciation affects several sectors of the economy simultaneously. The depreciation raises the cost of imported intermediate inputs, which tends to reduce aggregate supply. At the same time, the depreciation also increases aggregate demand because of the switch in expenditure from foreign to domestic goods.

With the monetary base exogenous, an increase in the price level produces a reduction in the real stock of money that leads to an increase in domestic interest rates. Since both the IS and LM curves shift upward following a home currency depreciation, the impact effect of the depreciation on real output is ambiguous. Whether income rises

or falls, however, the initial effect will tend to be offset over time in the same way as described above for the fiscal and monetary shocks.

We might note here that there is no guarantee that the real exchange rate will actually adjust so as to reach the new equilibrium value. Because expectations are adaptive, and not "rational", inconsistencies between expectations and realizations can persist indefinitely. Furthermore, because we do not invoke rationality to keep the economy on a stable path to a steady state, the long-run properties of this model are essentially unconstrained.

Supply Shock

The initial impact of an exogenous reduction in labor productivity is to lower the level of full-employment output. As a result, there is an increase in the price level which lowers the real stock of money and therefore shifts the LM schedule to the left. Output necessarily falls, but the effect on interest rates is ambiguous.

Assuming that domestic interest rates rise, the home currency appreciates, shifting the IS schedule further to the left. The rise in interest rates also lowers investment and the capital stock, so that output remains below the initial equilibrium level. On the other hand, if the price effect is not strong enough to offset the fall in income and raise interest rates, rates will fall and output will tend to rise back toward its initial level.

III. Implementation of the Theoretical Prototype in the MCM

This section gives a detailed description of the structure of the Multicountry Model and discusses some of the highlights of the empirical estimation results. The aim of the section is to provide a link between the abstract theoretical prototype presented in Section II and the detailed listing of the MCM itself in Appendix 2. The focus in this part is on clarifying the specification of the individual sectors and equations. While conceptually the MCM follows closely the theoretical prototype described above, much of the disaggregated detail can be confusing. There is relatively little discussion of the actual estimation results, which are presented as part of the equation listing and largely speak for themselves.

The plan of this section is to describe in turn each of the sectors in the standard MCM country model. In some ways this is the same idea as in Section II, but here we discuss as much of the disaggregated detail as possible. Also, we introduce the notation actually used in the MCM, and make explicit the functional form of the equations. For the sake of concreteness the discussion uses examples from the German country model, which is listed in Appendix 2. The construction of the other country models is basically similar, although there are some important differences which we note below.

The General Structure of the MCM

Each MCM country model is organized in sectors and sub-sectors as follows:

I. Domestic Real Side
   - A. Domestic Spending and Disposable Income
   - B. Government Sector
   - C. Private Savings and Wealth

II. Current Account
   - A. Import of Goods
   - B. Export of Goods
   - C. Import of Services and Transfers
   - D. Export of Services and Transfers
   - E. Balances

III. Domestic Financial Market
   - A. Monetary Aggregate
   - B. Private Banking Sector Interest Rates
   - C. Monetary Authorities

IV. Prices and Supply
   - A. Prices
   - B. Wages
   - C. Capacity and Real Capital Stocks

V. International Financial Market
   - A. Direct Investment Claims and Liabilities
   - B. Other Capital Flows
   - C. Exchange Rate Relationships

VI. Official Intervention and Balance of Payments

VII. Foreign Variables

The general logic of this organization is to develop a model of increasing complexity. The country model starts with the real demand side of a closed economy (sector I). The addition of sector II, the current account, creates an open economy model. Sector III contains the equations of the domestic financial market, which extends the model to the standard IS-LM framework. The next sector, IV, endogenizes the supply side of the model. Sector V extends the model to include international financial stocks and flows and endogenizes the exchange rate. Sector VI contains the authorities' exchange rate intervention reaction function. This addition augments the model to include managed floating regimes. The last sector, VII, includes the definitions of weighted averages of foreign country variables.

Equation Specification and Estimation

The MCM is estimated using a quarterly database over the period from approximately 1968:1 to 1982:4. (The exact range for each equation is given in Appendix 2.) The data are from national sources, typically the central bank and the national statistical office, except for bilateral trade data, which are from the Direction of Trade data of the International Monetary Fund.

The equations are estimated using either ordinary least squares or generalized least squares. While simultaneous equations bias is obviously an important problem in any structural macro model, both systems estimation and single-equation methods for correcting

simultaneity were rejected as impractical for a project of this scale. Both estimation and simulation of the MCM are done using the TROLL statistical package.[6] (An important feature of TROLL is that it uses the Newton-Raphson solution algorithm, which does not require equations to be normalized on a single endogenous variable.) Our version of TROLL has been modified to generate regression test statistics and diagnostics similar to those in the GIVE package (Hendry, Morgan, and Srba (1984)).

In specifying the functional form for estimated equations we relied on three types of evaluation criteria. These were tests for data coherency (goodness of fit, absence of residual autocorrelation and heteroskedasticity), parameter constancy (stability across time periods), and consistency with theory. This last category included not only the usual restrictions on signs and sums of coefficients, but also a concern for the dynamic properties of the completed model. In some cases these criteria led us to do considerable experimentation with the functional form and to make compromises with both theoretical and econometric norms.

Domestic Spending and Disposable Income (Sector I.A.)

The first equation in each of the country models is the consumption function. The consumption equations are based on the permanent income (or life cycle) theory, and have two main explanatory

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[6]Center for Computational Research in Economics and Management Science, Massachusetts Institute of Technology, Cambridge, Massachusetts.

variables: personal disposable income, and the real interest rate, which is scaled by real wealth. Permanent income is approximated by a distributed lag on past disposable income. In the German equation (336, Appendix 2), GRS is the nominal short-term interest rate, and GPEXP is the expected inflation rate (a distributed lag on past inflation). GNWR is real net wealth, which is the cumulation of disposable income less consumption.

This consumption function is specified in logarithmic form. In order for the average propensity to consume out of permanent income to be a constant in this specification, it is necessary that the long-run elasticity of income with respect to income be unity. This condition is closely approximated in the MCM; the long-run elasticities in Germany, Japan, the U.K., and the U.S. are .976, 1.12, 1.0, and 1.09, respectively.

In all of the non-U.S. models, private fixed investment is broken down into residential and non-residential components. The U.S. model further divides nonresidential investment into producers' durables and producers' structures. Equation (2) in the theoretical model of Table 1 provides the basic point of departure for the investment equations. One innovation in the current MCM is a new measure of the user cost of capital. The formula used in the calculation is:

$$UC = [(1 - T \cdot Z - X)(R + D)]/(1 - T)$$

---

[7]The U.K. consumption function is estimated with an error-correction specification which imposes the long-run elasticity; the Canadian equation is estimated in levels.

where

UC = real user cost of capital

T = corporate tax rate

Z = present value of depreciation (tax allowance)

X = tax incentives to investment

R = real interest rate

D = rate of economic decay (rate of replacement)

The measure of the real interest rate, R, used here is the real after tax rate, defined as:

$$R = (1 - T)\, i - \dot{P}^{e}$$

where $\dot{P}^{e}$ is the expected inflation rate. As in the rest of the MCM, expected inflation is based on a polynomial lag on past inflation. The modeling of the expected inflation term is explained more fully below.

The German investment equations are numbers 337 and 338 in Appendix 2. In these equations, the constraint suggested by the theory is that GNP and user cost have the same coefficients. This constraint gave implausible results in estimation, and therefore the two terms were included separately and unconstrained. In the equation for German nonresidential investment (GIFPNR), the first term after the constant is depreciation on the last period's capital stock -- this puts the

equation on a net investment basis. The next term is the lagged dependent variable, followed by the change in GNP, which is a proxy for changes in the desired capital stock. The next term is the change in the real user cost, followed by the change in capacity utilization, which is another proxy for changes in the desired stock.

The equation for German residential investment (GIFPR) is similar to the nonresidential investment equation, except that the activity variable is real disposable income, and the user cost appears in level, and not change, form. This last detail is one of several theoretical anomalies in the MCM investment equations; these represent adjustments needed in order to obtain "plausible" results for the estimated coefficients.

The German model also contains an equation for inventory investment (equation 339). The specification is a standard stock adjustment equation, with the desired stock assumed to be a constant share of private sales (GC + GIF + GXG - GMG). This specification performed very poorly for the other country models, and in those models inventory investment is simply held exogenous.

Since the investment equations are estimated on a gross basis, it is necessary to explain capital consumption allowances (CCAV) in order to obtain net investment. The German equation is number 340. The real value of capital consumption (GCCAVNSA/GP) is regressed on the real capital stock (GK). This procedure in effect treats the consumption

The remainder of sector I.A includes the real GNP identity (equation 341, Appendix 2), and a series of identities defining nominal values of national income variable. Equation 354, in Appendix 2, defines disposable income as net national income plus net transfers from the government and foreign sectors.

Government Sector (Sector I.B.)

Real government spending on goods and services is exogenous in each of the models. However, total government expenditure is not, because government transfers are endogenous. Government tax revenue is also endogenous. The MCM aggregates over all levels of government, local, regional, and national, so there is usually only one tax and one transfer variable in each country model.

The general specification of the transfer equation is:

$$TRANV = a_0 + a_1(UN * LF/100) * P + a_2(L)\,[RL * (GDEBT - NGP)] + a_3(POP * P)$$

The first term captures unemployment compensation. This specification assumes that compensation per unemployed worker is held constant in real terms. The next term represents interest payments on government debt held in private hands. The lag is included to capture (at least to a rough approximation) the maturity structure of government debt. The last term captures social insurance payments, again assumed constant (per person) in real terms.

In the United States and Germany government interest payments are modeled separately. The German transfer equations are numbers 358 and 359. The German transfers equation omits the term in the population and price level; the interest payments equation uses the government debt held by the public multiplied by an average interest rate as an explanatory variable.

The aggregate tax equation for Germany (360) regresses the share of taxes in national income on the corporate and personal income tax rates (GTRYC and GTRY). This specification is also used for Japan and the United States. Tax revenue in Canada is disaggregated into direct and indirect receipts. In the U.K. model, taxes for expenditures (VAT), import duties, and all other taxes are broken out. The U.K. model, like the others, uses nominal GNP and personal and corporate tax rates to explain nominal government revenues.

Private Savings and Wealth (Section I.C.)

This sector contains the identities which define private wealth. Private wealth is divided into financial net worth (equations 365 and 366), which is assumed to consist of assets fixed in nominal terms, and real capital (equation 367), which is fixed in real terms.

Current Account (Sector II.)

This sector of the model contains the equations explaining merchandise trade, trade in services, including investment income flows, and external transfers. The current account sector of the U.S. model differs substantially from the other four country models because it is based on a more detailed model of the U.S. current account developed at

the Federal Reserve Board. (See Helkie (1986) for more details.) The major difference is that the U.S. model contains aggregate, not bilateral, equations to explain total nonagricultural exports and nonoil imports. Oil imports and agricultural exports are modeled separately in the U.S. model. Bilateral trade equations are used to explain intra-MCM trade flows vis-à-vis the United States, but not the U.S. totals.

Imports of Goods (Sector II.A.)

The Multicountry Model uses bilateral import-demand equations to explain each country's goods imports from each of the other four countries and ROW, as well as ROW's imports from each of the five MCM countries. Total imports of each country are obtained by summing its bilateral imports, and total exports are determined by summing the imports of the other countries and ROW from that country. (As noted above, the totals for the United States are obtained from separate equations.) The main advantage of using bilateral trade equations (as opposed to a trade share matrix) in a multicountry model context is that the effects of changes in bilateral endogenous exchange rates, which affect bilateral trade patterns, can be handled explicitly.

To estimate a given bilateral trade flow, one can use either the source country's export data or the receiving country's import data. In principle, the values ought to be the same, but due to differences in coverage and reporting delays this is usually not the case. In most cases, the MCM uses the bilateral export series of the shipping country in estimating the behavioral equations, and uses "bridge equations" to link the export series to the corresponding import data of the receiving country.

The basic specification of the bilateral import-demand equation used in the model is as follows:

$$\log[XIJV/(PXG_i \cdot EI_i)] = a_0 + a_{1ij} \log(GNP_j) + a_{2ij} \log(P_j \cdot EI_i/PXG_i \cdot EI_i)$$

where

XIJV = value of exports of country i to country j (customs basis) in billions of U.S. dollars

PXG_i = export unit value index of country i expressed in currency i

EI_i = exchange rate index of country i (U.S. dollars per unit of currency i)

GNP_j = real gross national product of country j.

Table 2 shows the estimated income and relative price elasticities for bilateral imports and exports of the five MCM countries.

The German bilateral import equations are numbers 372-377 in Appendix 2. In the German and Japanese models, the ROW sector is divided into other OECD (area "I"), non-oil LDC's ("L"), OPEC ("O"), and other ("Z"). German imports from the United States and Japan are estimated using foreign-country exports as the dependent variable; equations 381 and 382 in Appendix 2 are the quasi-identities which link to the corresponding German import series. (In fact, the variable MGUV appears on the left-hand side of both equations 375 and 382. This is possible because the model is automatically renormalized before simulation.)

TABLE 2

Income Elasticities of Bilateral Import Demand

IMPORTING COUNTRY	EXPORTING COUNTRY: Canada	United Kingdom	Germany	Japan	United States
Canada.....	--	0.2	1.2	2.2	1.1
United Kingdom..	1.1	--	1.5	1.0	1.6
Germany.....	1.4	1.0	--	1.5	1.2
Japan.....	1.0	1.0	1.0	--	0.8
United States...	1.5	1.1	2.0	1.9	--

Long Run Price Elasticities of Bilateral Import Demand

IMPORTING COUNTRY	EXPORTING COUNTRY: Canada	United Kingdom	Germany	Japan	United States
Canada.....	--	-1.5	-0.9	-1.2	-0.7
United Kingdom..	-0.7	--	-0.6	-1.4	-1.3
Germany.....	-0.8	-0.4	--	-1.9	-0.5
Japan.....	-0.8	-0.8	-0.7	--	-0.5
United States...	-0.7	-0.9	-1.8	-1.2	--

In addition to the aggregate goods trade equations, this sector contains equations which explain imports of petroleum. There is a demand function for oil consumption of the general form:

$$\log(COL) = a_0 + \log(GNP) + a_2 \log\left(\frac{OPOIL}{P * EI}\right)$$

where COL is the volume of oil imports, OPOIL is the price of oil (the average OPEC contract price), GNP in real income, P is the price level, and EI is the exchange rate index (dollars per unit of local currency). The unit income elasticity of oil demand is imposed in estimation.

The volume of oil imports is derived from an identity, assuming that domestic production, stockbuilding, and exports are all exogenous. This identity is equation 378 for Germany. The value of oil imports is obtained from a quasi-identity (equation 379), which links the value series to the volume of oil imports times the oil price expressed in local currency. German imports from OPEC are assumed to be a fixed share of German oil imports (equation 380). Oil imports from non-OPEC countries are added to total imports in equation 384; an exogenous adjustment factor (GMGVADJ) is subtracted from the total to avoid double counting. This procedure ensures that when the model is simulated, changes in the oil price will affect the value of imports.

Exports of Goods (Sector II.B.)

The goods export sector in each country model is quite limited, containing only the identities and bridge equations needed to

determine home country exports given foreign country imports. These are equations 386-390 for Germany in Appendix 2. Again, the U.S. model is an exception, with behavioral equations for total agricultural and non-agricultural exports. The Canadian and U.K. models also have identities linking the value of oil exports to oil prices.

Imports of Services and Transfers (Sector II.C.)

In addition to merchandise trade, the current account for each country includes equations which describe payments and receipts of services and transfers. However, unlike the goods trade flows, these components of the current account are treated on a multilateral rather than a bilateral basis. (This is because bilateral data on trade in services is not available for most countries.) Equation 391 in Appendix 2 explains German imports of services other than investment income payments (GMSOPV). The specification is straightforward, with real income and relative prices as the explanatory variables.

Investment income payments consist of interest payments on financial (portfolio) liabilities to foreigners and income on foreign direct investment holdings in the home country. The basic specification for the direct investment payments equation is

$$\frac{\text{MSYDV}}{\text{RLTDL} * \text{PGNP}} = a_0 + a_1 \text{ A}$$

where MSYDV is direct investment income payments, RLTDL is the stock of real direct investment liabilities, PGNP is the GNP deflator, and A

represents home activity -- either capacity utilization or unemployment. Equation 392 in Appendix 2 is the corresponding equation for Germany. The idea behind this specification is that nominal earnings on direct investment should vary directly with the stock of real direct investment holdings and the price level in the host country. They are also likely to depend on the level of business activity.

A different specification is used for the portfolio investment income payments equation. Here we are modeling mainly interest payments, and therefore the explanatory variables are the short-term and long-term domestic interest rates. The basic specification is:

$$\frac{MSYDNV}{FLP} = \alpha_0 + \alpha_1(L)\ RS + \alpha_2(L)\ RL$$

where MSYNDV is non-direct investment income payments, FLP is the stock of real non-direct liabilities to foreigners, RS is the short-term nominal interest rate, and RL is the long-term rate. The left-hand-side variable is simply the imputed interest rate on portfolio liabilities paid to foreigners, which is modeled as a distributed lag on home-country interest rates. Equation 393 in Appendix 2 is the German portfolio investment income equation.

The remaining item in the current account on the import side is transfer payments. In some cases these flows are broken down between government transfers and private transfers. Transfer payments are expressed as a function of nominal GNP or disposable income, as in

equation 394 in Appendix 2. This sector also contains the equations which link the balance of payments measure of total imports to the national income accounts.

Exports of services, and direct and portfolio investment income receipts (equations 403-414 for Germany in Appendix 2) are modeled in analogous fashion to service imports, in sector II.D. Weighted averages of foreign variables replace the home-country variables where appropriate. Sector II.E. contain the identities which define the current account balance and its components.

Domestic Financial Market (Sector III.)

The financial sector of the MCM country models contains two major components: the money demand equations and the term structure of interest rates. The modeling of each component is based on the portfolio approach. The monetary sectors in the MCM are similar to that in the MIT-Penn-SSRC model of the U.S. economy (Brayton and Mauskopf (1985)). One important difference is that in the non-U.S. models the unborrowed monetary base is treated as endogenous and the exogenous (target) variable is a monetary aggregate, or in the case of Canada, the short-term interest rate.

In the U.K. monetary system the demand for base money is not easy to define, in view of various special institutional factors. Therefore a different model was specified for the U.K. monetary sector: the short-term interest rate is assumed to be set by the

authorities and the money supply adjusted to accommodate this rate. The Bank of England's minimum lending rate is used as the target interest rate for the historical estimation period. The spread between long and short-term rates is determined by the stock of long-term government debt. Thus in the U.K. model, unlike the other country models, there is a direct link between the government deficit and interest rates. Stevens, et al. (1984) provide more details.

Monetary Aggregates (Sector III.A.)

In the MCM, the demands for currency, demand deposits, and time deposits are modeled separately. In each case the principal explanatory variables are the opportunity cost of holding the asset and the volume of transactions; the latter is approximated by either GNP or personal consumption expenditures. The functional forms for the equations for each country are as follows:

$$\log(CUR/P) = \alpha_0 + \alpha_1 (L) \log C + \alpha_2 (L) RS$$

$$\log(DD/P) = \alpha_0 + \alpha_1 (L) \log GNP + \alpha_2 (L) RS$$

$$\log(TD/P) = \alpha_0 + \alpha_1 (L) \log GNP + \alpha_2 (L) RTIME$$

where CUR, DD, and TD are currency, demand deposits, and time deposits, respectively, P is the price level, RS is the short-term interest rate, RTIME is the time deposit rate, C is real consumption expenditure, and GNP is real national product.

The German money demand equations are numbers 421-425 in Appendix 2. In addition to time deposits, savings deposits and bank deposits held by foreigners are also modeled; the functional form follows closely the prototype specified above. The upper part of Table 3 reports the long run elasticities of demand for currency and demand deposits with respect to income, for each country. The estimates for these long run elasticities lie in the range between .23 and 1.35, and are generally plausible and consistent with theory. The lower part of the table reports the interest rate semi-elasticities.

Private Banking Sector and Interest Rates (Sector III.B.)

To complete the specification of the monetary sector it is necessary to determine banks' demand for free reserves. This component, plus the demand for required reserves derived from money demand, generates the private sector demand for the unborrowed monetary base, which is assumed to be the authorities' control variable. In the free reserve equation two explanatory variables are used: the short term interest rate (RS) represents the opportunity cost of excess reserves, and the discount rate is the cost of borrowed reserves. Free reserves are scaled by net deposits at banks. The actual specification takes the form:

$$\frac{RF}{NDD} = \alpha_0 + \alpha_1 \, RS + \alpha_2 \, RD$$

TABLE 3

Long-Run Income Elasticities for Money Demand Equations

COUNTRY	Currency	Demand Deposits
Canada.....	1.17	0.81*
United Kingdom.	0.64	0.87
Germany.....	0.23	1.35
Japan.....	0.63	0.43
United States..	0.66	0.80

Long-Run Interest Rate Elasticities for Money Demand Equations

COUNTRY	Currency	Demand Deposits
Canada.....	-0.02	-2.53*
United Kingdom.	--	-0.33
Germany.....	-0.07**	-0.02**
Japan.....	-0.01	-0.06
United States..	-0.05	-0.01**

Notes to Table:

* Canadian M1

** semi-elasticity

where RF is free reserves, NDD is demand deposits net of required reserves, RS is the short-term rate, and RD is the discount rate. The free reserves equation for Germany (435, Appendix 2) is normalized on the short-term interest rate and is estimated in first difference form. The basic equation, however, is the same as that given above. Thisrespecification, which was also used for Japan and the United States, gives more plausible parameter estimates than the original form. This sector of the German model also has an equation for currency held by banks (343), which is a component of total reserves.

The short-term interest rate is determined in the money market. Given the derived demand for the monetary base, the central bank balance sheet identity (equation 442 for Germany) is the market equilibrium condition, and the interest rate clears the market. The German model is a variation on the basic structure, since central bank money (GCBM) is assumed to be exogenous, and the central bank balance sheet simply determines the change in position (GOTHBB) needed to support the target.

The time deposit rate and other short-term interest rates are linked to the treasury bill rate with bridge equations. Equations 436 and 437 in Appendix 2 give examples for Germany. This procedure is not quite consistent with our theory, since we do not model both sides of the market in these assets. However, the disaggregation of money demand into its components seems to be a more satisfactory approach from the empirical standpoint than estimating an aggregate equation.

Given the short-term interest rate, the modeling of the other interest rates reflects the assumption that arbitrage ensures that expected holding period yields are equal across assets. (This follows from our assumption that short and long-term bonds are perfect

substitutes.) This implies that the long-term bond rate equals the mean of the current and expected yields on short-term assets over the lifetime of the bond. Assuming that expected future yields on short-term assets can be roughly approximated by a distributed lag on past short-term rates, we can model long-term rates as a distributed lag on past short rates. The specification of the long-term interest rate is then simply:

$$RL = \alpha_0 + \alpha_1(L)\ RS$$

The German long-term interest rate equation is number 438. Some of the other models also have a mortgage rate or other long-term interest rate; these additional long-term rates are modeled using a similar specification.

Monetary Authorities (Sector III.C.)

Equation 442 is the balance sheet identity of the German central bank. Because the German authorities are assumed to set a target path for central bank money (equations 443 and 444), the balance sheet identity simply determines the change in base money (GOTHBB) needed to reach that target.

Prices (Sector IV.A.)

Each MCM country model has three key price variables: the export and import unit values (PXGUV and PMGUV), and the absorption (or domestic expenditure) deflator (P).[8] The basic specification differs

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[8]Domestic absorption is defined as GNP less exports, plus imports. Unit values are used because price data are not generally available for traded goods.

from the theoretical prototype, in that the absorption deflator is used instead of the price of gross output in the main price equation. Data on the price of gross output are not readily available for the MCM countries, because the price of imported intermediate inputs is not easily obtained.

As described in the theoretical section, prices are set by suppliers to maximize profits given demand, and thus the price equation represents the aggregate supply function in the model. The prices of exports and domestic output are treated separately, since producers are assumed to be able to price-discriminate in the home and foreign markets. The price of imports is given by the foreign export supply prices.

The absorption deflator is modeled as a weighted average of the price of domestic output and the price of imports. We substitute in the determinants of the domestic output price to obtain the general specification for the absorption deflator:

$$\log P = \alpha_0 + \alpha_1(L) \log UC + \alpha_2(L) \log W + \alpha_3(L) \log \frac{POIL}{EI}$$

$$+ \alpha_4(L) \log PMNOIL + \alpha_5(L)\, UN$$

where

P = absorption price deflator

UC = user cost of capital

W = nominal wage rate

POIL = price of imported oil in dollars

EI = exchange rate index ($/local currency)

PMNOIL = price of non-oil imports in local currency

UN = unemployment

The user cost of capital and nominal wages enter as part of the cost of production. The prices of nonoil imports and oil reflect both the cost of imported intermediate inputs and the price of components of final demand. The unemployment rate is included as a proxy for aggregate demand slackness. This last term is somewhat ad hoc; specifying a satisfactory demand variable is difficult in practice.

Equation 448 in Appendix 2 is the equation for the German absorption deflator. The factor price terms enter in such a way that the sum of their coefficients is necessarily 1.0, as implied by the production function.[9] The unemployment rate enters in inverse form, with the expected positive coefficient. Note that the price of net domestic output (GDPOM) implied by the absorption deflator is also computed, in equation 457.

Table 4 summarizes the parameter estimates of the absorption price equation for all countries. The elasticity of wages with respect to prices ranges from .55 to .74. This range is quite narrow, and is reasonably close to the shares of wages in national income. The effect of oil prices on the absorption deflator is consistently positive for all 5 countries. The unemployment rate, although specified differently

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[9]This constraint holds only if we assume that the prices of nonoil imports and oil reflect only the cost of inputs, and not the price of final demand. This constraint is not imposed on the production function in the other country models in the MCM.

TABLE 4

Elasticity of Absorption Price with Respect to Selected Variables

	VARIABLES			
	Wage	POIL/EI	PMNOIL	UN*
COUNTRY				
Canada.....	0.70	0.03	0.23	--
United Kingdom.	0.74	0.04	0.25	-0.001
Germany.....	0.71	0.02	0.25	0.048**
Japan.....	0.55	0.0004	0.07	-0.010
United States..	0.65	0.07***	--	-0.006**

Notes to Table:

* semi-elasticity
** coefficient estimated on (1/UN)
*** total energy price

in the different models, has a negative impact on prices in all cases except the United States, where the effect is very small. (Unemployment also affects the price level through its effect on nominal wages, as described below. In full model simulations this effect offsets the perverse coefficient in the U.S. price equation.)

The export price is determined with the same theoretical framework on the absorption deflator, although the econometric implementation is different, as shown in equation 450 for Germany. The factor costs are represented by the domestic output price, and the markup variable is the ratio of domestic prices to an average foreign export price. This last variable is intended to capture the effects of competitive pressure from other suppliers.

The import unit value is linked to a weighted average of foreign export prices by a bridge equation (equation 451). The coefficient on foreign prices is less than 1.0, which reflects either differences between the composition of each country's total exports and their exports to Germany, or incomplete pass-through of export price changes to German import prices. This result also occurs in some of the other country models. The implied price of German nonoil imports is computed from the aggregate unit value in equation 456.

The German model also contains equations for producer and consumer price indices (equations 449 and 452). These prices are somewhat auxiliary to the model, since they do not correspond to separate goods markets in the MCM. Producer prices are linked to the

price of domestic output in the German model, with an added term to reflect competitive pressure from abroad. The consumer price index is simply linked to the absorption deflator.

Finally, this sector of the model also includes the equation for expected inflation. We assume that inflationary expectations are based on a 3-year geometrically-declining weighted average of past inflation based on the percentage change of the GNP deflator. This specification was selected for all country models in order to impose uniformity and regularity on the expectations progress, since a satisfactory econometric specification of expected inflation is extremely difficult to define meaningfully, much less to estimate. The exact specification used is:

$$PEXP = 100 * \sum_{K=-11}^{0} .87^{-K} \frac{\left[(PGNP(K) - PGNP(K-4))/PGNP(K-4)\right]}{\sum_{J=0}^{11} .87^{J}}$$

Wages and Employment (Sector IV.B.)

The wage equation in the MCM is in effect the labor supply curve, although it can also be thought of as resulting from institutional factors (such as unions) which restrict the movement of real wages. The econometric specification is a Phillips curve in the real wage:

$$\left(\frac{W_t - W_{t-4}}{W_{t-4}} *100\right) - PEXP = \alpha_0 + \alpha_1 UN_t$$

where PEXP is the expected inflation variable defined above. Table 5 shows the α_1 coefficients for each model, which range from -.47 to -1.02; the Japanese real wage is by far the most sensitive to changes in unemployment. The econometric estimates of the wage equation are very poor -- only for the United States and Canada is the coefficient on wages statistically significant. This specification was used for the other countries because both the structure and the estimated coefficients seemed plausible, if not statistically meaningful. The results might best be interpreted as a particular assumption about real wage behavior, similar to the price expectations equation.

As described in the theoretical section above, the demand for labor hours is derived by estimating the production function. The specification of the production function takes the Cobb-Douglas form

$$\log(GNP + MGSNI) - \log(CU*K) = \alpha_0 + \alpha_1 \left(\log(LH) - \log(CU*K)\right) + \alpha_2 \left(\log(MGSNI - COL) - \log(CU*K)\right) + \alpha_3 \left(\log(COL) - \log(CU*K)\right) + \alpha_4 t$$

where:

(GNP + MGSNI) = gross domestic output

CU = capacity utilization

K = real capital stock

LH = labor hours

TABLE 5

Estimation Results for the Wage Equations

COUNTRY	Coefficient on UN
Canada.....	-0.54
United Kingdom..	-0.53
Germany.....	-0.47
Japan.....	-1.02
United States...	-0.56

MGSNI = imports of goods and services

COL = consumption of petroleum

t = time trend

Again we assume, for lack of better data, that total imports and total oil consumption both represent imported intermediate inputs. The assumption of constant returns to scale is imposed in estimation. Equation 463 in Appendix 2 is the estimated German production function. The same coefficient estimates are used to calculate potential output, assuming full employment and normal utilization of capital and labor (equation 464). Capacity utilization is then defined as the ratio of actual to potential output (equation 468).

Table 6 gives the coefficients estimates of the production function for each country. The estimated coefficients on labor hours have a relatively narrow range, from .6 in Germany to .79 in Japan. The coefficients on non-oil imports are much more dispersed, ranging from .08 in the United States to .19 in Canada. This coefficient tends to reflect the degree of openness of the country.

The level of employment is obtained from the number of total hours worked using a bridge equation (equation 461 for Germany). The decision of the firm to hire new workers or to pay overtime to current workers is not modeled explicitly.

There also are equations for the labor force participation rate in the MCM country models (for Germany, equation 462); the participation rate is a function of employment, population, and a time

TABLE 6

Coefficient Estimates of Production Function

COUNTRY	VARIABLES			
	LH/(CU*K)	(MGSNI-COL)/(CU*K)	COL/(CU*K)	t
Canada.....	0.71	0.19	0.07	0.001
United Kingdom..	0.71	0.15	0.04	0.003
Germany.....	0.60	0.17	0.09	0.004
Japan.....	0.79	0.11	0.05	0.006
United States...	0.77	0.08	0.07	0.002

Notes to Table:

LH = labor hours
CU = capacity utilization
K = capital stock
MGSNI = imports of goods and services, national income account basis
COL = oil consumption, volume
t = time

trend. This equation is intended to capture the secular response of the labor supply to changes in demand.

Sector IV.C. contains the identities which define capacity utilization, the real capital stock, and the user cost of capital.

International Financial Transactions (Sectors V. and VI.)

International financial transactions include direct investment flows (changes in claims on, and liabilities to, foreigners), long-term financial (portfolio) flows, other capital flows, and exchange market intervention by the government. The original version of the MCM, which was estimated over a period covering both the fixed rate period of the 1960's and the floating rate period of the early 1970's, included explicit capital flow equations in the international sector. The exchange rate was determined implicitly, using the balance of payments identity as a market clearing condition. (If the exchange rate was held fixed, the BOP identity determined the level of intervention.) Stevens et al. (1984) describe the modeling of the exchange rate in the first version of the MCM.

The original capital-flow equations did not hold up well as more data for the floating rate period became available. Several attempts were made to implement a portfolio-balance model of foreign asset demands for the MCM, and to estimate exchange rate equations based on inverted net capital flow equations. Hooper et al. 1983 describe some of this work.

None of these approaches proved wholly satisfactory, and the present version of the MCM drops the assumption of imperfect substitutability between home and foreign assets, and uses the open interest parity condition to explain the exchange rate. (More details are given in the theoretical section above.) As a result, the capital flow equations in the model are largely redundant, since the net private flow is given by the balance of payments identity.

However, the stocks of foreign claims and liabilities are still used in the model to explain the investment income flows in the current account, and the capital flow equations are retained to endogenize these stocks. The modeling of capital flows differs considerably across the different country models in the MCM, since in some cases new equations have been specified and in other cases not. In some cases equations from the old version have been retained which are not strictly consistent with the new theoretical structure, such as the equations for the forward premium.

International financial transactions are broken into three categories in the model: long-term direct capital flows, long-term portfolio flows, and total private capital flows.

Direct Investment (Sector V.A.)

The change in long-term direct investment claims on foreigners (DLTDC) is modeled as a function of a weighted average of changes in foreign GNP converted into the currency of the country undertaking the

direct investment, and of the differential between home and foreign long term interest rates:

$$DLTDC = \alpha_0 + \alpha_1 \Sigma \gamma_j \Delta (E_j \, GNPV_j) + \alpha_2 (RL - FRL)$$

where DLTDC = long-term direct investment outflows

RL = home country long-term interest rates

FRL = foreign long-term weighted average interest rate

E_j = exchange rate vis-à-vis country j

$GNPV_j$ = nominal gross national product in country j

γ_j = direct investment weights

The equation for direct investment inflows (changes in direct long term liabilities to foreigners) is similar:

$$DLTDL = \alpha_0 + \alpha_1(L) \, \Delta GNPV + \alpha_2(RL - FRL)$$

The direct investment flow equations for Germany are 479 and 481 in Appendix 2. They use the specification presented above, with the exception that the interest rate differential is dropped from the claims equation. Equations 480 and 482 are identities that define the stocks of real direct investment claims and liabilities, which are used in the investment income equations.

Other Capital Flows (Sector V.B.)

Four bilateral exchange rates are determined in the model: the U.S. dollar rates of the Canadian dollar, the British pound, the German mark, and the Japanese yen. These exchange rates are modeled (either bilaterally or as weighted averages) explicitly in single equations.

The exchange rate equation is derived from the open interest parity condition by substituting in an expression for expected appreciation, as described in the theoretical section above. In the United States (combined with the Rest-of-World sector, whose currency is tied to the dollar) the underlying equilibrium condition is redundant by Walras' Law and the exchange rate equation is dropped.[10]

The resulting exchange rate equations take the form

$$\log ERFW = \log(FP/P) + \alpha_2 (RS - FRS + PEXP^* - PEXP)$$

where

ERFW = weighted average exchange rate, foreign currency/home currency

FP = foreign price level

P = home price level

RS = home short-term (three month) interest rate

FRS = foreign short-term (three month) interest rate

$PEXP^*$ = expected foreign inflation rate

PEXP = expected home inflation rate

The coefficient α_2 is set equal to .03 for each country; the derivation of this coefficient is based on work presented in Hooper (1984). Equation 483 in Appendix 2 is the German exchange rate equation; equation 489 is an identity which identifies the $/DM bilateral rate.

This section also contains the equation for the stock of portfolio liabilities to foreigners (equation 484). This is an asset

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10For more details see Hooper (1986).

demand equation, with foreign wealth and rates of return as explanatory variables. Errors and omissions are modeled endogenously as a short-term financial capital flow (equation 485). The net private capital flow is determined by the balance of payment identity (486); equation 487 is an identity which makes the stock of portfolio claims consistent with the stock of liabilities and the net flow.

Sector V.C. contains an equation for the forward premium (which is used in the portfolio liabilities equation) and some identities.

All non-U.S. models contain an intervention reaction function (Sector VI). The specification of this equation is:

$$DNFA = \alpha_0 + \alpha_1 (EI/EI_{-1}) - \alpha_2 NFA_{-1}$$

where DNFA is the change in (and NFA is the stock of) net foreign assets, and EI is the spot exchange rate. This equation is based on the assumption that central banks wish to smooth out fluctuations in their bilateral dollar exchange rates and prevent large swings in their reserves. The specification of these reaction functions in described in more detail in Haas (1981).

The last sector of the country model (Sector VII) computes weighted averages of foreign variables used in various specifications elsewhere in the model. There are no behavioral equations in this sector.

The Rest-of-World Sector

The Rest-of-World (ROW) sector contains five bilateral import equations, and equations for industrial production and export prices (equations 916-926 in Appendix 2). The econometric specification of the import equations is similar to that for the other country trade equations. The industrial production index for ROW is linked to output in the MCM countries, and ROW prices are linked to MCM country prices. There is also a small sector which models OPEC exports and imports.

IV. Simulation Results for the MCM

This section highlights the simulation properties of the MCM. Two standard policy exercises, a fiscal expansion and a monetary contraction, are simulated for each country separately, and for all five countries together. In addition, two sets of simulations are included to illustrate the response of the model to changes in exchange rates and and the price level.

The analysis presented here serves in part to bring together the information presented in Sections II and III on the theoretical structure and parameter estimates of the MCM. The simulations also illustrate the performance of the country models and the MCM as a whole, and give the reader some impression of how the model can be used in practice. Finally, these simulations document for the record the basic simulation properties of the MCM.

This section begins with a brief summary of what the theoretical model underlying the MCM predicts for the effects at home and abroad of monetary and fiscal policy changes. We then describe the simulation design, and present the simulations results. Some summary tables are presented in the text of this section; Appendix 1 contains a series of tables giving more detailed results for each simulation. These tables are referred to in the text.

Experimental Design

Four types of simulations are analyzed: a fiscal expansion, a monetary contraction, a depreciation of the home currency, and a supply shock. The baseline used for these simulations specifies the paths to be followed by the components of GNP, prices, exchange rates, and interest rates in each country. For the most part, these paths are based on forecasts obtained from the OECD Economic Outlook for December 1984. We extrapolate the growth rates projected by the OECD for the first alf of 1986 through 1990. Exchange rates and interest rates are held constant over the projection period, using 1985Q4 data. The baseline path is generated using actual and forecasted values for all the exogenous variables. The residuals of these behavioral equations are added back to make the endogenous variables follow their constrained paths. The baseline solution runs from 1982Q4 to 1990Q4; each policy simulation begins in 1983Q1 and is continued until 1990Q4.

The first set of policy changes considered is an autonomous increase in real government purchases. To standardize the simulations, real government purchases are increased by one percent of baseline real GNP starting in 1983Q1 and sustained over the next seven years. In all countries except Canada, the path of the nominal money supply is eld unchanged during the simulation. (The monetary aggregate being targeted differs across countries; the target is M1 in the United States and the United Kingdom, M2 in Japan, and central bank money in Germany.)

In the Canadian model, we assume monetary policy is set so as to maintain approximate parity of real short-term interest rates between

Canada and the United States (equation 93). Any persistent interest differential between the two countries brings about large movements in the Canadian/U.S. bilateral exchange rate. Because the two countries are so closely linked by trade, these exchange rate movements have large impacts on Canadian real income. We assume the Canadian authorities attempt to minimize these effects by using monetary policy to control interest rates. This assumption is also adopted for the monetary, exchange rate, and supply side simulations, except in the Canadian monetary contraction.

The second exercise presented is a one hundred basis point increase in the home country treasury bill rate. In the country in which the policy change occurs, the nominal money supply is endogenized to be consistent with the higher level of interest rates. (That is, the authorities are assumed to target the nominal interest rate.) For the remaining four countries the money supply remains exogenous. The monetary contraction is calculated in terms of the interest rate so as to be comparable across countries -- since different aggregates are used as targets, equal percentage reductions in the money supply would not be comparable.

The third series of simulations is an exogenous five percent appreciation of the foreign currency vis-à-vis the dollar. This simulation is designed to highlight the transmission effects resulting from movements in exchange rates. The exercise is somewhat artificial, in that the exchange rate is normally an endogenous variable in the MCM.

In implementing this simulation, the exchange rate shock was assumed to be generated by a series of exogenous changes in the value of the expected long run exchange rate such that the home currency appreciates by a constant five percent over the baseline. The exchange rate change was not assumed to be induced or accompanied by any other changes in policy.

The last set of simulations analyzes the effects of a supply side shock. We consider an exogenous increase in costs (decrease in productivity) such that the price level (absorption deflator) rises initially by one percent. The shock is implemented by increasing the residual in the price equation. Because prices remain endogenous in the model, the actual change in prices, both in the first period and over time, depends on the response of wages, exchange rates, and other factors.

Fiscal Policy Results

We present some summary multipliers in Table 7. This table shows the effects on real GNP and prices of standardized fiscal shocks, for the United States, Japan, and Germany, and for all five MCM countries. The results summarize the degree of crowding out and the extent of foreign linkages in the MCM. The amounts shown in the table are percentage deviations from the baseline path. Because the fiscal expansion is scaled to be one percent of baseline GNP, the entries can also be interpreted as multipliers.

TABLE 7

Overview of Fiscal Multipliers in the MCM

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
(1) U.S. FISCAL SHOCK								
U.S. GNP (%)	2.0	1.7	1.2	0.8	0.5	0.1	-0.2	-0.4
U.S. Prices (%)	0.2	0.6	1.1	1.6	2.0	2.4	2.7	2.9
Foreign GNP (%)	0.4	0.6	0.6	0.5	0.4	0.4	0.3	0.3
Foreign Prices (%)	0.2	0.4	0.5	0.6	0.8	0.9	1.0	1.2
(2) JAPANESE FISCAL SHOCK								
Japanese GNP (%)	1.3	1.3	1.2	1.2	1.1	1.1	1.2	1.2
Japanese Prices (%)	0.2	0.5	0.8	1.0	1.2	1.3	1.5	1.7
U.S. GNP (%)	0.1	0.1	0.1	0.0	0.0	-0.0	-0.0	-0.0
U.S. Prices (%)	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2
(3) GERMAN FISCAL SHOCK								
German GNP (%)	1.3	1.3	1.2	1.0	0.7	0.5	0.3	0.1
German Prices (%)	0.1	0.3	0.6	0.9	1.3	1.7	2.2	2.7
U.S. GNP (%)	0.1	0.1	0.1	0.0	0.0	-0.0	-0.0	-0.0
U.S. Prices (%)	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2
(4) JOINT FISCAL SHOCK								
U.S. GNP (%)	2.5	2.2	1.5	1.0	0.5	0.1	-0.2	-0.5
U.S. Prices (%)	0.3	0.8	1.5	2.1	2.7	3.3	3.7	4.0
Foreign GNP (%)	1.7	1.9	1.9	1.6	1.3	1.1	0.9	0.8
Foreign Prices (%)	0.3	0.8	1.2	1.7	2.3	2.9	3.6	4.3

Notes to Table:

(1) Sustained increase in U.S. government purchases equal to 1% of GNP.
(2) Sustained increase in Japanese government purchases equal to 1% of GNP.
(3) Sustained increase in German government purchases equal to 1% of GNP.
(4) Sustained increase in 5-Country government purchases equal to 1% of GNP.

Amounts shown are percentage deviations from the baseline path.

Foreign GNP and price variables are non-U.S. 4-country averages using multilateral trade weights and constant exchange rate conversion factors.

The GNP multiplier in the United States is 2.0 in the first year; crowding out of the U.S. fiscal shock is virtually complete after six years, as GNP returns toward its baseline path. The GNP multipliers in Germany and Japan are much smaller, only 1.3 in the first year. In Germany, crowding out occurs, although at a slower rate than in the United States, while in Japan there is virtually no crowding out. In all three countries prices rise steadily following a fiscal expansion; the inflationary impact is lowest in Japan.

The spillover effects of the U.S. policy change on foreign economies are moderately strong, while a foreign fiscal expansion has much smaller effects on the United States. This is partly a scale effect -- one percent of U.S. GNP is a larger shock to the world economy than one percent of German or Japanese GNP. The result also reflects the greater share of trade in GNP in Germany and Japan, compared with the United States. Finally, the joint fiscal policy simulation is similar to the single country simulations, but magnifies the effects both on output and on prices.

Table A-5 (in Appendix 1) gives more detail for the fiscal expansion in the United States. In the MCM, an increase in real government purchases leads directly to an increase in real income in the United States. Given the assumption of a fixed path for nominal money supplies, interest rates tend to rise. This rise in U.S. interest rates leads to an appreciation of the trade-weighted dollar exchange rate. Furthermore, prices tend to rise relative to the baseline, even with the

appreciation of the dollar, as real output rises closer to full capacity.

In general, all of these factors tend to cause the U.S. current account to worsen. An increase in U.S. income increases demand for imports, while the dollar appreciation stimulates imports and depresses demand for U.S. exports. The U.S. model exhibits crowding out behavior after the first year of the simulation. The positive effects of an increase in government spending are offset by both the choking off of private domestic spending from higher interest rates and reduction in net exports resulting from the higher dollar. By the sixth year, real GNP deviates from the baseline by .1 percent. Even though real GNP returns to the baseline level, the U.S. current account continues to worsen.

The effects of the U.S. fiscal expansion on the four other MCM countries are felt through the direct increase in demand for their exports and as a depreciation of their exchange rates which increases demand for their exports further. One striking result is that Japanese real GNP rises throughout the period; by 1990 it is 1.7 percent over the baseline value. This result is due to the higher level of Japanese exports to the United States and, especially, the non-MCM rest of the world (ROW). The ROW sector is assumed to be a dollar area, so the appreciation of the dollar due to the fiscal expansion leads to increased third-country exports to ROW.

Prices and interest rates rise in foreign countries, as in the United States, but by smaller magnitudes. Each country experiences a rise in interest rates, but the magnitude varies in the different models. The large depreciation in the British pound causes a larger rise in prices, which reflects the openness of the U.K. economy. The only country which deviates from this pattern is Canada, due to the different monetary assumption used.

The results from the Canadian fiscal expansion simulation are shown in Table A-1 in Appendix 1. As in the previous simulation, Canadian real income rises with the increase in government spending. Several differences between the U.S. and Canadian results can be highlighted. First, prices rise more rapidly in the Canadian simulation, particularly in the second half of the period. Second, due to this higher inflation, the Canadian dollar tends to depreciate very quickly against the U.S. dollar. Third, while the fiscal multiplier is very low (1.2 in the first year) the Canadian model exhibits almost no crowding out. This result is due in part to the assumption that monetary policy is used to keep interest rates from rising, and in part to the depreciation of the Canadian dollar, which limits the negative effect of net exports. Lastly, the policy change in Canada has a large impact on the United States; this in turn feeds through to Japan. The change in Canadian fiscal policy has, however, very limited effects on Germany and the United Kingdom.

For the United Kingdom, although an increase in government purchases tends to have an immediate and positive effect on real income, the multiplier is less than one throughout the simulation period, as shown in Table A-2. This result stems from two features in the U.K. model, namely a very small short-run marginal propensity to consume and a very high marginal propensity to import. (The long-run marginal propensity to consume is 1.0, as reported in Section III.) In this respect the current model differs from earlier versions of the MCM, in which the marginal propensity to consume was higher, due partly to the inclusion of wealth in the consumption function.[11] Another noteworthy result is that the impact of the U.K. expansion on other foreign countries is even smaller than the Canadian expansion. This result can be explained by the very low multiplier in the U.K. model and by the relatively low volume of U.K. trade with the United States, Canada, and Japan.

Table A-3 presents the results of the fiscal expansion for Germany. In the case of Germany, real income initially increases by more than government purchases increase, but gradually this stimulus is crowded out. The behavior of the exchange rate path differs from our prior expectation in that there is an initial depreciation of the DM vis-à-vis the U.S. dollar. This result is due to the slow rise in German interest rates and the relatively rapid increase in German prices. In this case, as in the United Kingdom simulations, there is not a large

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[11]See Edison (forthcoming) and Stevens et al. (1984) for more discussion of this point.

stimulus to foreign real economies, even though foreign current accounts do improve.

Table A-4 reports the results of the Japanese fiscal expansion. The results reported here tend to resemble those found for Canada. Fiscal expansion stimulates real income, which remains above the baseline level throughout the simulation. Real income is not crowded out because of the strong accelerator effect in the Japanese investment equations and the depreciating yen, which limits the negative effect of net exports. The change in Japanese policy has a modest effect on GNP in the other MCM countries initially, but this impact rapidly fades away. The Japanese current account does improve permanently, due to an increase in exports to ROW and and the United States.

Table A-6 illustrates a simulation in which all five MCM countries synchronize their fiscal policies by expanding simultaneously. When all countries reflate together the effect on each country's GNP is greater than if it had expanded in isolation. Inflation is also higher in all countries under a synchronized expansionary fiscal policy. The dollar appreciates bilaterally against the other MCM currencies because of a relatively larger increase in U.S. interest rates. The current account balance for each MCM country either improves over, or remains close to, the single country case. In general, the results indicate that all the countries are better off, in terms of their income and balance of payments goals, when they all reflate together. However,

these benefits do come at the expense of a larger increase in price inflation.

Monetary Policy Simulations

Table 8 presents the summary multipliers for the monetary contraction simulations. The table shows the effect on real GNP and prices of a 100 basis point increase in treasury bill rates, for the United States, for Germany, for Japan, and for all five MCM countries jointly. The results can be interpreted as measuring the degree of neutrality of money and the extent of foreign linkages in the MCM. This summary table shows that higher interest rates tend to reduce real income, as expected. In the U.S. simulation money is not neutral in the long run; this is also true of the foreign models taken together. The spillover effects of U.S. policy on other countries are substantial, while again, economic policy actions abroad have much smaller effects on the United States.

Table A-11 presents more detailed results of the U.S. monetary policy simulations. The main channel through which monetary policy influences the model is through the effects of interest rates on the components of real expenditure. In the U.S. model, investment -- in producers' structures, producers' durables, and residential investment -- is a function of the user cost of capital, which in turn depends on the real interest rate. Consumption is also directly influenced by interest rates. Furthermore, in all MCM countries the exchange rate is

TABLE 8

Overview of Monetary Multipliers in the MCM

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
(1) U.S. MONETARY SHOCK								
U.S. GNP (%)	-0.4	-1.0	-1.4	-1.5	-1.5	-1.4	-1.2	-1.0
U.S. Prices (%)	-0.1	-0.2	-0.6	-1.0	-1.5	-2.1	-2.6	-3.2
Foreign GNP (%)	-0.0	-0.0	-0.0	0.1	0.2	0.3	0.4	0.6
Foreign Prices (%)	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
(2) JAPANESE MONETARY SHOCK								
Japanese GNP (%)	-0.6	-1.5	-2.3	-2.9	-3.4	-3.7	-3.9	-4.0
Japanese Prices (%)	-0.1	-0.3	-0.6	-1.1	-1.7	-2.3	-3.0	-3.7
U.S. GNP (%)	0.0	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.0
U.S. Prices (%)	0.0	0.0	0.0	0.0	-0.0	-0.1	-0.1	-0.1
(3) GERMAN MONETARY SHOCK								
German GNP (%)	-0.3	-0.7	-0.9	-0.9	-0.8	-0.8	-0.8	-0.9
German Prices (%)	-0.5	-0.7	-0.9	-1.2	-1.6	-2.0	-2.4	-2.8
U.S. GNP (%)	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0
U.S. Prices (%)	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2
(4) JOINT MONETARY SHOCK								
U.S. GNP (%)	-0.4	-0.9	-1.3	-1.5	-1.5	-1.4	-1.3	-1.1
U.S. Prices (%)	-0.0	-0.1	-0.4	-0.8	-1.3	-1.9	-2.5	-3.1
Foreign GNP (%)	-0.3	-0.6	-0.9	-0.9	-0.9	-0.7	-0.5	-0.3
Foreign Prices (%)	0.0	-0.0	-0.2	-0.4	-0.6	-0.9	-1.3	-1.6

Notes to Table:

(1) Sustained 100 basis point increase in U.S. treasury bill rate.
(2) Sustained 100 basis point increase in Japanese treasury bill rate.
(3) Sustained 100 basis point increase in German treasury bill rate.
(4) Sustained 100 basis point increase in 5-Country treasury bill rate.

Amounts shown are percentage deviations from the baseline path.

Foreign GNP and Price variables are non-U.S. 4-country averages using multilateral trade weights and constant exchange rate conversion factors.

directly affected by the level of interest rates. As a result, a rise in home interest rates tends to choke off real domestic spending and leads to an appreciation of the domestic currency. This appreciaton in turn affects the traded goods sector.

As can be seen from the table, the rise in U.S. interest rates leads to lower real income throughout the simulation. Real income falls because both investment and consumption are depressed. The appreciation of the dollar reduces exports, but initially reduces the value of imports (due to J-curve effects), which leads to a slight improvement in the U.S. current account. The decline in aggregate demand and the appreciation of the dollar combine to produce a decline in U.S. prices throughout the simulation.

The effects of the U.S. contraction on foreign countries vary by country. Canada, for example tends to, mirror the United States because Canada is assumed to tie its real short-term interest rate to the U.S. rate. Initially, Canada raises its nominal short-term rate by 100 basis points to match the rise in the U.S. rate. After a year or two, however, the difference in inflation rates causes the Canadian nominal interest rate to fall somewhat. The other three MCM countries, on the other hand, respond similarly to one another. The depreciation of their currencies against the dollar brought about by the rise in U.S. interest rates tends to stimulate their net exports and therefore raises real income. By the end of the simulation Japanese real GNP has grown by more, in percentage terms, than the fall in U.S. real GNP, due in

part to the large depreciation in the yen. The higher real income and depreciated exchange rates lead to higher prices in these countries.

Table A-7 presents the results for the Canadian monetary simulation. (For this simulation the equation linking Canadian and U.S. short-term interest rates was dropped from the model.) As expected, the monetary contraction causes a steady decline in Canadian real income, and a substantial appreciation of the Canadian dollar. Both of these factors tend to account for the large decline in prices. The major impact of the Canadian policy change abroad is once again on the United States. The fall in Canadian real income reduces demand for U.S. exports, which in turn depresses the U.S. current account and real income. These effects then feed back onto the other three countries.

Table A-8 presents the results of the U.K. monetary shock. Increased home interest rates and the resulting appreciation of sterling work to decrease demand and output in the U.K. As a consequence of the decline in output, prices are lower and unemployment is up slightly. For this particular shock, the trade balance deteriorates because the decline in demand reduces imports by less than the sterling appreciation depresses exports. As in the fiscal expansion, the U.K. monetary contraction has very little impact on the remaining MCM countries.

Tables A-9 and A-10 give the results for the German and Japanese monetary shocks. The results for these two countries are quite similar; in general, they replicate what we have seen for the other three MCM countries. The rise in interest rates leads to a decline in

real income because of the fall in consumption and investment. Moreover, domestic currencies appreciate, leading to a fall in prices. The results of the appreciation and the decline in real income lead to ambiguous effects on the trade balance. In the case of Japan, the trade balance initially deteriorates before improving. Exports decline by more than imports in the beginning; this trend reverses after three years. The German trade balance shows just the opposite pattern.

Table A-12 contains the results of a coordinated interest rate increase. In general, the results show a smaller decline each country's income and prices than in the single country shocks. In this simulation the monetary contractions abroad result in higher interest rates for all countries, so that interest rate differentials are smaller. As a result the exchange rate for each country does not appreciate by as much, and may even depreciate. This difference in exchange rates between the simulations tends to stimulate demand, relative to the single-country shock, in each country.

Exchange Rates

These simulations are included primarily for analytical purposes, and do not necessarily represent a plausible policy scenario. They highlight the responses in each country to an "exogenous" change in the exchange rate. Table 9 summarizes the exchange rate results obtained when the U.S. dollar depreciates, first vis-à-vis the other four MCM countries, then vis-à-vis Japan and Germany separately. In the

TABLE 9

Overview of Exchange Rate Multipliers in the MCM

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
(1) US$ EXCHANGE RATE SHOCK								
U.S. GNP (%)	0.2	0.3	0.2	0.1	0.1	0.1	0.0	0.0
U.S. Prices (%)	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.6
Foreign GNP (%)	-0.1	-0.6	-0.8	-0.7	-0.6	-0.5	-0.5	-0.4
Foreign Prices (%)	-0.5	-0.6	-0.7	-0.9	-1.1	-1.3	-1.5	-1.8
(2) YEN EXCHANGE RATE SHOCK								
Japanese GNP (%)	-0.6	-1.1	-1.2	-1.0	-1.0	-1.0	-1.0	-0.9
Japanese Prices (%)	-0.2	-0.4	-0.6	-0.7	-0.9	-1.1	-1.3	-1.5
U.S. GNP (%)	0.0	0.1	0.1	0.1	0.1	0.0	-0.0	-0.0
U.S. Prices (%)	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3
(3) DM EXCHANGE RATE SHOCK								
German GNP (%)	-0.2	-0.7	-1.0	-0.9	-0.7	-0.5	-0.4	-0.3
German Prices (%)	-1.0	-1.1	-1.4	-1.7	-2.0	-2.4	-2.8	-3.2
U.S. GNP (%)	0.1	0.2	0.1	0.1	0.1	0.0	0.0	-0.0
U.S. Prices (%)	0.1	0.1	0.2	0.3	0.3	0.3	0.4	0.4

Notes to Table:

(1) Sustained 5% Apreciation of the U.S. Dollar Against Four Currencies.
(2) Sustained 5% Depreciation of the Japanese Yen Against the U.S. Dollar.
(3) Sustained 5% Depreciation of the Deutsche Mark Against the U.S. Dollar.

Amounts shown are percentage deviations from the baseline path.

Foreign GNP and Price variables are non-U.S. 4-country averages using multilateral trade weights and constant exchange rate conversion factors.

4-country exchange rate simulation the U.S. dollar depreciates by five percent. This depreciation leads to a very small increase in both U.S. income and prices. On average, foreign income and prices fall. It appears that the crowding-in effect of lower interest rates in the non-U.S. countries is weaker than the crowding-out effect of higher interest rates in the United States. (Interest rates change as a result of the effects of the induced price changes on money demand.) The individual country exchange rate changes tend to exhibit large own-country effects following the 4-country shock pattern. They also have very limited impacts on the U.S. economy.

Tables A-13 to A-17 in Appendix 1 display in more detail the results of these exchange rate shocks. In all cases, the simulated impact on U.S. real GNP appears to be small initially. This last result is due to the rise in U.S. net exports, which offsets the depressing effects of higher U.S. interest rates in the first few years. With the stimulus to income through net exports, consumption and producers durable investment rise throughout the simulation period. The dollar depreciation also leads to higher U.S. prices, because import prices rise. U.S. prices rise by much less than the amount of the depreciation, partly because a large part of U.S. trade (with ROW) is not affected by the shock. The U.S. current account improves, as one would expect, but only moderately. The appreciation of foreign currency tends to depress income abroad, which feeds back to reduce foreign demand for U.S. goods. Further, as noted, U.S. trade with ROW is largely

unaffected in these simulations. Even with the decline in foreign interest rates, demand is not stimulated enough to increase income.

Supply Side Shock

The domestic price shock simulations, like the previous exchange rate exercise, serve primarily to illustrate the properties of the MCM. To implement the shock, we exogenously increase the error term in the domestic absorption deflator by one percent; no other policy changes are assumed to take place. Table 10 gives an overview of the simulation results. The increase in prices affects both the supply and the demand side of the economy. For example, in the U.S. price shock income falls as prices rise; the rise in prices tends to reduce labor supplied and hence to lower domestic production (the aggregate supply curve shifts to the left). Moreover, the rise in domestic prices lowers real money balances, causing the LM curve to shift leftward, and raising domestic interest rates and reducing expenditure. The rise in prices also shifts domestic spending away from domestic output and towards imports. Similar results are obtained for the other countries. Although exchange rates depreciate somewhat, the effects of this shock are not widely transmitted abroad. Tables A-18 to A-23 in Appendix 1 present further details of the supply side simulations.

TABLE 10

Overview of Supply Side Multipliers in the MCM

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
(1) U.S. SUPPLY SHOCK								
U.S. GNP (%)	-0.1	-0.3	-0.7	-1.1	-1.2	-1.1	-1.0	-0.8
U.S. Prices (%)	1.2	1.6	1.8	1.9	1.8	1.6	1.3	1.1
Foreign GNP (%)	0.1	0.1	0.0	-0.1	-0.1	-0.1	-0.0	0.0
Foreign Prices (%)	0.1	0.1	0.0	0.0	-0.1	-0.1	-0.2	-0.3
(2) JAPANESE SUPPLY SHOCK								
Japanese GNP (%)	-0.6	-0.9	-1.0	-1.2	-1.2	-1.0	-0.8	-0.6
Japanese Prices (%)	1.4	1.6	1.8	1.7	1.6	1.5	1.4	1.3
U.S. GNP (%)	0.0	-0.0	-0.1	-0.1	-0.1	-0.0	-0.0	0.0
U.S. Prices (%)	0.1	0.0	0.0	0.0	-0.0	-0.1	-0.1	-0.1
(3) GERMAN SUPPLY SHOCK								
German GNP (%)	-0.6	-0.8	-0.9	-1.0	-1.1	-1.3	-1.4	-1.5
German Prices (%)	0.9	1.6	2.2	2.6	3.0	3.2	3.4	3.5
U.S. GNP (%)	0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0
U.S. Prices (%)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
(4) JOINT SUPPLY SHOCK								
U.S. GNP (%)	-0.1	-0.3	-0.9	-1.2	-1.4	-1.2	-1.1	-0.8
U.S. Prices (%)	1.4	1.7	2.0	2.1	2.0	1.7	1.4	1.1
Foreign GNP (%)	-0.4	-0.7	-0.8	-1.0	-1.2	-1.3	-1.3	-1.2
Foreign Prices (%)	0.9	1.4	1.7	2.0	2.2	2.3	2.3	2.3

Notes to Table:

(1) Sustained 1% increase in U.S. price equation residual.
(2) Sustained 1% increase in Japanese price equation residual.
(3) Sustained 1% increase in German price equation residual.
(4) Sustained 1% increase in 5-Country price equation residuals.

Amounts shown are percentage deviations from the baseline path.

Foreign GNP and Price variables are non-U.S. 4-country averages using multilateral trade weights and constant exchange rate conversion factors

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Appendix 1: Detailed Simulation Tables

TABLE A-1: CANADIAN FISCAL SHOCK

Sustained increase in government purchases equal to 1% of GNP

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%).....	0.2	0.2	0.2	0.1	0.0	0.0	-0.0	-0.0
Price Level (%).....	0.0	0.1	0.1	0.2	0.3	0.4	0.4	0.5
Int. Rate (ST)(+/-).....	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.5
Exch. Rate (FX/US$)(%).....	0.1	0.2	0.3	0.5	0.7	1.0	1.3	1.6
Current Bal. (US$,B)(+/-)..	2.8	3.1	3.1	3.0	2.5	2.3	1.9	1.3
CANADA								
Real GNP (%).....	1.2	1.3	1.2	1.1	1.0	1.0	1.0	1.0
Price Level (%).....	0.2	0.6	1.2	2.1	3.1	4.3	5.7	7.1
Int. Rate (ST)(+/-).....	0.4	0.6	0.9	1.1	1.3	1.5	1.6	1.8
Exch. Rate (US$/C$)(%).....	0.3	0.2	-0.3	-1.0	-2.1	-3.2	-4.4	-5.7
Current Bal. (US$,B)(+/-)..	-1.1	-1.3	-1.4	-1.6	-2.0	-2.3	-2.7	-3.0
GERMANY								
Real GNP (%).....	0.1	0.1	0.1	0.1	0.0	0.0	-0.0	-0.0
Price Level (%).....	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.4
Int. Rate (ST)(+/-).....	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3
Exch. Rate (US$/DM)(%).....	-0.2	-0.4	-0.4	-0.4	-0.4	-0.5	-0.5	-0.7
Current Bal. (US$,B)(+/-)..	0.1	0.2	0.4	0.3	0.3	0.4	0.4	0.3
JAPAN								
Real GNP (%).....	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Price Level (%).....	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.3
Int. Rate (ST)(+/-).....	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Exch. Rate (US$/Y)(%).....	-0.3	-0.3	-0.4	-0.4	-0.5	-0.6	-0.7	-0.9
Current Bal. (US$,B)(+/-)..	0.3	0.7	0.9	1.0	1.3	1.6	2.0	2.5
UNITED KINGDOM								
Real GDP (%).....	0.0	0.0	0.1	0.0	0.0	0.0	-0.0	-0.0
Price Level (%).....	0.0	0.1	0.1	0.2	0.2	0.3	0.4	0.5
Int. Rate (ST)(+/-).....	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.3
Exch. Rate (US$/PS)(%).....	-0.2	-0.3	-0.3	-0.4	-0.4	-0.6	-0.7	-0.9
Current Bal. (US$,B)(+/-)..	0.2	0.4	0.6	0.7	0.7	0.8	0.9	1.1

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-2: UK FISCAL SHOCK

Sustained Increase in Government Purchases Equal to 1% of GNP

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%).....	0.1	0.1	0.0	0.0	0.0	-0.0	-0.0	-0.0
Price Level (%).....	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
Int. Rate (ST)(+/-).....	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Exch. Rate (FX/US$)(%).....	-0.0	0.0	-0.1	-0.0	0.0	0.0	0.1	0.1
Current Bal. (US$,B)(+/-)..	0.8	0.9	0.8	0.8	0.6	0.3	-0.0	-0.5
CANADA								
Real GNP (%).....	0.0	0.0	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1
Price Level (%).....	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Int. Rate (ST)(+/-).....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Exch. Rate (US$/C$)(%).....	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	0.0
Current Bal. (US$,B)(+/-)..	0.1	0.1	0.1	0.0	0.0	-0.0	-0.0	-0.0
GERMANY								
Real GNP (%).....	0.1	0.1	0.1	0.0	0.0	-0.0	-0.1	-0.1
Price Level (%).....	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Int. Rate (ST)(+/-).....	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Exch. Rate (US$/DM)(%).....	-0.1	-0.1	-0.1	-0.1	-0.0	0.0	0.0	0.0
Current Bal. (US$,B)(+/-)..	0.2	0.1	0.3	0.4	0.4	0.5	0.6	0.7
JAPAN								
Real GNP (%).....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Price Level (%).....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Int. Rate (ST)(+/-).....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exch. Rate (US$/Y)(%).....	-0.1	-0.1	-0.1	-0.1	-0.0	-0.0	-0.0	-0.0
Current Bal. (US$,B)(+/-)..	0.1	0.2	0.3	0.4	0.4	0.5	0.6	0.8
UNITED KINGDOM								
Real GDP (%).....	0.6	0.6	0.6	0.5	0.4	0.2	0.0	-0.2
Price Level (%).....	-0.1	0.0	0.1	0.5	1.0	1.5	2.1	2.7
Int. Rate (ST)(+/-).....	0.1	0.1	0.4	0.5	0.7	0.9	1.2	1.4
Exch. Rate (US$/PS)(%).....	0.4	0.3	0.6	0.3	0.0	-0.2	-0.4	-0.6
Current Bal. (US$,B)(+/-)..	-2.1	-1.8	-1.9	-2.3	-2.4	-2.5	-2.6	-2.6

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-3: GERMAN FISCAL SHOCK

Sustained Increase in Government Purchases Equal to 1% of GNP

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%).....	0.1	0.1	0.1	0.0	0.0	-0.0	-0.0	-0.0
Price Level (%).....	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2
Int. Rate (ST)(+/-).....	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Exch. Rate (FX/US$)(%).....	-0.0	0.2	0.2	0.2	0.1	0.1	0.1	0.1
Current Bal. (US$,B)(+/-)..	1.4	1.4	1.3	1.1	0.9	0.7	0.4	0.0
CANADA								
Real GNP (%).....	0.0	0.0	-0.0	-0.0	-0.1	-0.1	-0.1	-0.1
Price Level (%).....	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Int. Rate (ST)(+/-).....	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Exch. Rate (US$/C$)(%).....	0.0	-0.0	-0.1	-0.1	-0.1	-0.0	-0.0	0.0
Current Bal. (US$,B)(+/-)..	0.1	0.1	0.1	0.1	0.0	0.0	-0.0	-0.0
GERMANY								
Real GNP (%).....	1.3	1.3	1.2	1.0	0.7	0.5	0.3	0.1
Price Level (%).....	0.1	0.3	0.6	0.9	1.3	1.7	2.2	2.7
Int. Rate (ST)(+/-).....	0.1	0.1	0.4	0.7	0.9	1.2	1.5	1.8
Exch. Rate (US$/DM)(%).....	0.0	-0.4	-0.3	-0.2	-0.0	0.1	0.3	0.4
Current Bal. (US$,B)(+/-)..	-3.4	-3.8	-3.9	-3.9	-3.7	-3.3	-2.8	-2.1
JAPAN								
Real GNP (%).....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Price Level (%).....	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2
Int. Rate (ST)(+/-).....	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Exch. Rate (US$/Y)(%).....	-0.1	-0.1	-0.2	-0.2	-0.2	-0.3	-0.3	-0.4
Current Bal. (US$,B)(+/-)..	0.3	0.5	0.6	0.8	1.0	1.3	1.8	2.5
UNITED KINGDOM								
Real GDP (%).....	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Price Level (%).....	0.0	0.0	0.1	0.1	0.2	0.3	0.5	0.6
Int. Rate (ST)(+/-).....	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2
Exch. Rate (US$/PS)(%).....	0.0	0.0	-0.1	-0.1	-0.3	-0.4	-0.5	-0.6
Current Bal. (US$,B)(+/-)..	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.8

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-4: JAPANESE FISCAL SHOCK

Sustained Increase in Government Purchases Equal to 1% of GNP

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%).....	0.1	0.1	0.1	0.0	0.0	-0.0	-0.0	-0.0
Price Level (%).....	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Int. Rate (ST)(+/-).....	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Exch. Rate (FX/US$)(%).....	-0.3	-0.0	0.2	0.3	0.3	0.4	0.5	0.6
Current Bal. (US$,B)(+/-)..	1.8	2.1	1.7	1.4	1.2	1.0	0.8	0.5
CANADA								
Real GNP (%).....	0.1	0.0	0.0	-0.0	-0.0	-0.1	-0.1	-0.1
Price Level (%).....	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1
Int. Rate (ST)(+/-).....	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Exch. Rate (US$/C$)(%).....	0.0	-0.0	-0.1	-0.1	-0.1	-0.0	0.0	0.1
Current Bal. (US$,B)(+/-)..	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
GERMANY								
Real GNP (%).....	0.1	0.2	0.1	0.1	0.0	0.0	-0.0	-0.0
Price Level (%).....	0.0	0.1	0.2	0.2	0.2	0.3	0.3	0.4
Int. Rate (ST)(+/-).....	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Exch. Rate (US$/DM)(%).....	-0.0	-0.2	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2
Current Bal. (US$,B)(+/-)..	0.5	0.4	0.5	0.6	0.8	0.9	1.1	1.3
JAPAN								
Real GNP (%).....	1.3	1.3	1.2	1.2	1.1	1.1	1.2	1.2
Price Level (%).....	0.2	0.5	0.8	1.0	1.2	1.3	1.5	1.7
Int. Rate (ST)(+/-).....	0.7	0.7	0.6	0.5	0.5	0.4	0.4	0.4
Exch. Rate (US$/Y)(%).....	1.3	0.6	-0.1	-0.4	-0.7	-0.9	-1.2	-1.5
Current Bal. (US$,B)(+/-)..	-2.9	-4.5	-4.6	-4.5	-5.2	-6.0	-6.7	-7.7
UNITED KINGDOM								
Real GDP (%).....	0.0	0.0	0.1	0.0	0.0	0.0	0.0	-0.0
Price Level (%).....	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.4
Int. Rate (ST)(+/-).....	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
Exch. Rate (US$/PS)(%).....	0.0	-0.2	-0.3	-0.3	-0.4	-0.4	-0.5	-0.5
Current Bal. (US$,B)(+/-)..	0.4	0.5	0.7	0.7	0.7	0.8	0.9	1.0

NOTE: Amcunts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-5: US FISCAL SHOCK

Sustained Increase in Government Purchases Equal to 1% of GNP

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%).....	2.0	1.7	1.2	0.8	0.5	0.1	-0.2	-0.4
Price Level (%).....	0.2	0.6	1.1	1.6	2.0	2.4	2.7	2.9
Int. Rate (ST)(+/-).....	1.7	2.0	2.0	2.2	2.4	2.6	2.8	2.9
Exch. Rate (FX/US$)(%).....	2.2	3.1	3.0	3.1	3.2	3.4	3.6	3.9
Current Bal. (US$,B)(+/-)..	-10.2	-15.2	-21.6	-28.2	-37.3	-47.3	-59.3	-73.0
CANADA								
Real GNP (%).....	0.5	0.1	-0.2	-0.4	-0.6	-0.8	-1.0	-1.2
Price Level (%).....	0.2	0.4	0.5	0.5	0.3	-0.1	-0.6	-1.3
Int. Rate (ST)(+/-).....	1.6	1.7	1.5	1.6	1.7	1.8	1.9	1.9
Exch. Rate (US$/C$)(%).....	-0.3	-0.5	-0.2	0.3	0.9	1.7	2.5	3.4
Current Bal. (US$,B)(+/-)..	1.5	1.5	1.4	1.2	1.1	1.0	0.9	0.8
GERMANY								
Real GNP (%).....	0.2	0.4	0.7	0.7	0.5	0.4	0.3	0.3
Price Level (%).....	0.4	0.7	0.9	1.2	1.5	1.8	2.2	2.6
Int. Rate (ST)(+/-).....	0.7	0.6	0.6	0.7	0.9	1.2	1.4	1.7
Exch. Rate (US$/DM)(%).....	-2.2	-3.4	-3.5	-3.5	-3.5	-3.6	-3.8	-4.1
Current Bal. (US$,B)(+/-)..	-0.0	0.3	1.1	1.1	1.4	2.2	3.1	4.2
JAPAN								
Real GNP (%).....	0.7	1.3	1.3	1.2	1.3	1.4	1.5	1.7
Price Level (%).....	0.1	0.3	0.5	0.6	0.9	1.2	1.5	1.9
Int. Rate (ST)(+/-).....	0.2	0.4	0.4	0.4	0.4	0.5	0.6	0.7
Exch. Rate (US$/Y)(%).....	-3.1	-3.1	-3.1	-3.6	-4.0	-4.5	-5.1	-5.8
Current Bal. (US$,B)(+/-)..	2.0	5.0	6.3	7.2	9.2	11.1	13.4	16.4
UNITED KINGDOM								
Real GDP (%).....	0.2	0.3	0.4	0.3	0.2	0.1	0.0	-0.0
Price Level (%).....	0.6	1.0	1.2	1.6	2.1	2.5	3.0	3.5
Int. Rate (ST)(+/-).....	0.1	0.1	0.5	0.6	0.7	0.9	1.0	1.2
Exch. Rate (US$/PS)(%).....	-2.6	-4.0	-3.7	-3.9	-4.4	-4.9	-5.4	-6.0
Current Bal. (US$,B)(+/-)..	1.5	2.6	4.1	4.4	4.7	5.4	6.2	7.3

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-6: 5-COUNTRY FISCAL SHOCK

Sustained Increase in Government Purchases Equal to 1% of GNP

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%).....	2.5	2.2	1.5	1.0	0.5	0.1	-0.2	-0.5
Price Level (%).....	0.3	0.8	1.5	2.1	2.7	3.3	3.7	4.0
Int. Rate (ST)(+/-).....	2.1	2.5	2.7	3.0	3.2	3.5	3.8	4.0
Exch. Rate (FX/US$)(%).....	2.0	3.5	3.6	4.0	4.4	4.8	5.5	6.3
Current Bal. (US$,B)(+/-)..	-3.2	-7.4	-14.3	-21.6	-31.8	-43.0	-56.7	-73.0
CANADA								
Real GNP (%).....	1.8	1.5	1.0	0.6	0.2	-0.1	-0.3	-0.4
Price Level (%).....	0.5	1.2	2.1	3.0	3.9	4.7	5.4	6.0
Int. Rate (ST)(+/-).....	2.2	2.7	2.8	3.1	3.4	3.7	4.0	4.2
Exch. Rate (US$/C$)(%).....	0.0	-0.4	-0.7	-1.0	-1.3	-1.7	-2.1	-2.5
Current Bal. (US$,B)(+/-)..	0.7	0.5	0.3	-0.2	-0.8	-1.3	-1.8	-2.3
GERMANY								
Real GNP (%).....	1.7	2.0	2.3	1.9	1.3	0.9	0.6	0.3
Price Level (%).....	0.6	1.3	1.9	2.6	3.4	4.3	5.3	6.4
Int. Rate (ST)(+/-).....	1.0	0.9	1.2	1.7	2.3	3.0	3.6	4.2
Exch. Rate (US$/DM)(%).....	-2.4	-4.4	-4.5	-4.3	-4.1	-4.0	-4.1	-4.4
Current Bal. (US$,B)(+/-)..	-2.6	-2.7	-1.5	-1.4	-0.8	0.7	2.4	4.7
JAPAN								
Real GNP (%).....	2.2	2.8	2.7	2.5	2.6	2.8	3.0	3.3
Price Level (%).....	0.4	0.9	1.3	1.8	2.2	2.7	3.3	4.0
Int. Rate (ST)(+/-).....	1.0	1.3	1.2	1.0	1.0	1.1	1.2	1.3
Exch. Rate (US$/Y)(%).....	-2.2	-2.9	-3.7	-4.6	-5.3	-6.1	-7.1	-8.3
Current Bal. (US$,B)(+/-)..	-0.1	1.9	3.4	4.9	6.7	8.7	11.3	15.0
UNITED KINGDOM								
Real GDP (%).....	0.9	1.0	1.1	0.9	0.7	0.4	0.1	-0.2
Price Level (%).....	0.6	1.2	1.6	2.5	3.7	5.0	6.3	7.6
Int. Rate (ST)(+/-).....	0.3	0.3	1.0	1.4	1.8	2.3	2.9	3.4
Exch. Rate (US$/PS)(%).....	-2.3	-4.2	-3.7	-4.3	-5.3	-6.1	-7.2	-8.2
Current Bal. (US$,B)(+/-)..	0.3	2.1	4.0	3.9	4.2	5.0	6.1	7.6

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-7: CANADIAN MONETARY SHOCK

Sustained 100 Basis Point Increase in Treasury Bill Rate

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%).....	-0.0	-0.1	-0.2	-0.2	-0.1	-0.1	-0.0	0.0
Price Level (%).....	0.0	-0.0	-0.0	-0.1	-0.1	-0.2	-0.3	-0.3
Int. Rate (ST)(+/-).....	-0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3
Exch. Rate (FX/US$)(%).....	-0.5	-0.8	-1.3	-1.7	-2.2	-2.7	-3.3	-4.0
Current Bal. (US$,B)(+/-)..	-0.7	-1.9	-2.6	-2.9	-2.5	-2.5	-2.2	-1.6
CANADA								
Real GNP (%).....	-0.5	-1.2	-1.7	-2.0	-2.0	-2.1	-2.3	-2.5
Price Level (%).....	-0.9	-1.6	-2.6	-3.9	-5.5	-7.4	-9.5	-11.7
Int. Rate (ST)(+/-).....	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Exch. Rate (US$/C$)(%).....	3.5	5.2	7.1	9.5	12.4	15.7	19.4	23.4
Current Bal. (US$,B)(+/-)..	0.9	1.3	1.6	2.2	3.1	3.7	4.3	5.0
GERMANY								
Real GNP (%).....	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Price Level (%).....	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2
Int. Rate (ST)(+/-).....	0.0	-0.0	-0.0	0.0	0.1	0.1	0.1	0.2
Exch. Rate (US$/DM)(%).....	-0.0	0.1	0.2	0.4	0.5	0.6	0.7	0.9
Current Bal. (US$,B)(+/-)..	0.3	0.3	0.6	1.0	1.4	2.1	3.0	4.1
JAPAN								
Real GNP (%).....	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.3	-0.3
Price Level (%).....	0.0	0.0	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1
Int. Rate (ST)(+/-).....	0.0	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1
Exch. Rate (US$/Y)(%).....	-0.1	0.1	0.2	0.3	0.4	0.6	0.7	0.9
Current Bal. (US$,B)(+/-)..	0.1	-0.1	-0.5	-0.7	-0.9	-1.1	-1.4	-1.8
UNITED KINGDOM								
Real GDP (%).....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Price Level (%).....	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3
Int. Rate (ST)(+/-).....	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Exch. Rate (US$/PS)(%).....	-0.3	-0.3	-0.1	0.0	0.0	0.1	0.2	0.3
Current Bal. (US$,B)(+/-)..	0.1	0.0	0.0	-0.1	-0.0	0.0	0.0	0.1

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-8: UK MONETARY SHOCK

Sustained 100 Basis Point Increase in Treasury Bill Rate

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%)	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Price Level (%)	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
Int. Rate (ST)(+/-)	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
Exch. Rate (FX/US$)(%)	-0.6	-0.7	-0.9	-1.0	-1.3	-1.6	-2.0	-2.5
Current Bal. (US$,B)(+/-)	0.0	0.5	0.2	0.2	0.3	0.4	0.5	0.6
CANADA								
Real GNP (%)	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1	-0.1
Price Level (%)	0.0	0.0	0.1	0.1	0.1	0.0	0.0	-0.0
Int. Rate (ST)(+/-)	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Exch. Rate (US$/C$)(%)	-0.0	-0.0	-0.1	-0.1	-0.0	0.0	0.1	0.1
Current Bal. (US$,B)(+/-)	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
GERMANY								
Real GNP (%)	0.0	-0.0	0.0	0.0	0.0	0.0	0.1	0.1
Price Level (%)	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Int. Rate (ST)(+/-)	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.2
Exch. Rate (US$/DM)(%)	0.0	-0.0	0.0	0.0	0.0	0.1	0.1	0.2
Current Bal. (US$,B)(+/-)	0.0	0.0	0.2	0.2	0.4	0.7	1.1	1.6
JAPAN								
Real GNP (%)	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Price Level (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Int. Rate (ST)(+/-)	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exch. Rate (US$/Y)(%)	-0.1	-0.1	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1
Current Bal. (US$,B)(+/-)	-0.1	0.1	0.2	0.2	0.3	0.4	0.7	1.0
UNITED KINGDOM								
Real GDP (%)	-0.6	-0.9	-1.2	-1.4	-1.5	-1.8	-2.0	-2.4
Price Level (%)	-0.8	-1.1	-1.5	-2.0	-2.9	-3.9	-5.2	-6.7
Int. Rate (ST)(+/-)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Exch. Rate (US$/PS)(%)	3.0	3.6	4.2	5.0	6.2	7.9	9.9	12.4
Current Bal. (US$,B)(+/-)	-0.1	-0.2	-0.9	-0.9	-0.9	-1.4	-2.4	-3.8

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-9: GERMAN MONETARY SHOCK

Sustained 100 Basis Point Increase in Treasury Bill Rate

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%).....	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0
Price Level (%).....	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Int. Rate (ST)(+/-).....	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.3
Exch. Rate (FX/US$)(%).....	-0.9	-1.2	-1.3	-1.5	-1.6	-1.8	-2.0	-2.2
Current Bal. (US$,B)(+/-)..	0.2	0.9	1.0	1.1	1.3	1.4	1.2	1.0
CANADA								
Real GNP (%).....	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2
Price Level (%).....	0.0	0.1	0.1	0.1	0.1	0.0	-0.0	-0.1
Int. Rate (ST)(+/-).....	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Exch. Rate (US$/C$)(%).....	-0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.1	0.2
Current Bal. (US$,B)(+/-)..	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
GERMANY								
Real GNP (%).....	-0.3	-0.7	-0.9	-0.9	-0.8	-0.8	-0.8	-0.9
Price Level (%).....	-0.5	-0.7	-0.9	-1.2	-1.6	-2.0	-2.4	-2.8
Int. Rate (ST)(+/-).....	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Exch. Rate (US$/DM)(%).....	2.9	3.6	4.0	4.5	5.0	5.6	6.1	6.7
Current Bal. (US$,B)(+/-)..	0.5	0.1	-0.5	-0.5	-0.9	-1.4	-1.9	-2.3
JAPAN								
Real GNP (%).....	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Price Level (%).....	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Int. Rate (ST)(+/-).....	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Exch. Rate (US$/Y)(%).....	-0.2	-0.1	-0.2	-0.2	-0.2	-0.2	-0.3	-0.4
Current Bal. (US$,B)(+/-)..	0.3	0.3	0.3	0.7	0.9	1.1	1.5	1.9
UNITED KINGDOM								
Real GDP (%).....	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1
Price Level (%).....	0.3	0.4	0.4	0.5	0.6	0.7	0.9	1.0
Int. Rate (ST)(+/-).....	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4
Exch. Rate (US$/PS)(%).....	-0.4	-0.5	-0.4	-0.5	-0.6	-0.7	-0.7	-0.9
Current Bal. (US$,B)(+/-)..	0.0	0.1	0.4	0.4	0.5	0.7	0.9	1.1

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-10: JAPANESE MONETARY SHOCK

Sustained 100 Basis Point Increase in Treasury Bill Rate

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%).....	0.0	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.0
Price Level (%).....	0.0	0.0	0.0	0.0	-0.0	-0.1	-0.1	-0.1
Int. Rate (ST)(+/-).....	0.0	0.0	-0.0	-0.1	-0.1	-0.1	-0.2	-0.2
Exch. Rate (FX/US$)(%).....	-0.6	-0.7	-0.9	-1.3	-1.5	-1.8	-2.1	-2.3
Current Bal. (US$,B)(+/-)..	0.1	-0.5	-1.3	-1.9	-2.2	-2.4	-2.4	-2.1
CANADA								
Real GNP (%).....	0.0	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Price Level (%).....	0.0	0.1	0.0	0.0	-0.0	-0.1	-0.1	-0.2
Int. Rate (ST)(+/-).....	0.0	0.0	-0.0	-0.1	-0.1	-0.1	-0.2	-0.2
Exch. Rate (US$/C$)(%).....	-0.0	-0.1	-0.1	-0.1	-0.0	-0.0	0.0	0.0
Current Bal. (US$,B)(+/-)..	0.0	-0.1	-0.1	-0.2	-0.3	-0.3	-0.3	-0.3
GERMANY								
Real GNP (%).....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Price Level (%).....	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.3
Int. Rate (ST)(+/-).....	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2
Exch. Rate (US$/DM)(%).....	0.0	-0.0	0.0	0.1	0.2	0.2	0.3	0.3
Current Bal. (US$,B)(+/-)..	0.4	0.3	0.6	0.8	1.0	1.4	1.8	2.4
JAPAN								
Real GNP (%).....	-0.6	-1.5	-2.3	-2.9	-3.4	-3.7	-3.9	-4.0
Price Level (%).....	-0.1	-0.3	-0.6	-1.1	-1.7	-2.3	-3.0	-3.7
Int. Rate (ST)(+/-).....	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Exch. Rate (US$/Y)(%).....	2.7	3.2	4.1	5.2	6.3	7.4	8.4	9.3
Current Bal. (US$,B)(+/-)..	-1.1	-1.3	-0.5	0.0	0.3	0.5	0.7	0.7
UNITED KINGDOM								
Real GDP (%).....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Price Level (%).....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Int. Rate (ST)(+/-).....	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Exch. Rate (US$/PS)(%).....	-0.1	-0.2	-0.1	-0.1	-0.0	0.0	0.1	0.2
Current Bal. (US$,B)(+/-)..	0.1	0.0	-0.1	-0.4	-0.6	-0.8	-0.9	-1.1

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-11: US MONETARY SHOCK

Sustained 100 Basis Point Increase in Treasury Bill Rate

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%).....	-0.4	-1.0	-1.4	-1.5	-1.5	-1.4	-1.2	-1.0
Price Level (%).....	-0.1	-0.2	-0.6	-1.0	-1.5	-2.1	-2.6	-3.2
Int. Rate (ST)(+/-).....	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Exch. Rate (FX/US$)(%).....	1.6	2.5	3.1	3.9	4.7	5.4	6.1	6.7
Current Bal. (US$,B)(+/-)..	1.4	1.2	1.0	0.6	-0.3	-1.1	-2.1	-3.8
CANADA								
Real GNP (%).....	-0.4	-0.9	-1.3	-1.3	-1.1	-1.0	-0.8	-0.6
Price Level (%).....	-0.1	-0.3	-0.8	-1.5	-2.4	-3.4	-4.5	-5.6
Int. Rate (ST)(+/-).....	1.0	0.9	0.8	0.7	0.6	0.5	0.5	0.4
Exch. Rate (US$/C$)(%).....	0.0	-0.1	0.0	0.2	0.6	1.1	1.6	2.3
Current Bal. (US$,B)(+/-)..	-0.2	-0.4	-0.8	-0.8	-0.8	-0.9	-1.0	-1.1
GERMANY								
Real GNP (%).....	-0.1	-0.1	0.1	0.2	0.2	0.4	0.5	0.7
Price Level (%).....	0.3	0.4	0.6	0.8	0.9	1.2	1.4	1.7
Int. Rate (ST)(+/-).....	0.4	0.4	0.4	0.5	0.6	0.8	0.9	1.1
Exch. Rate (US$/DM)(%).....	-1.6	-2.6	-3.3	-4.2	-5.0	-5.8	-6.6	-7.3
Current Bal. (US$,B)(+/-)..	-0.6	-0.9	-1.5	-2.3	-3.0	-3.6	-4.2	-4.6
JAPAN								
Real GNP (%).....	0.3	0.5	0.6	0.8	1.0	1.3	1.6	1.9
Price Level (%).....	0.1	0.1	0.2	0.3	0.5	0.7	1.0	1.3
Int. Rate (ST)(+/-).....	0.1	0.2	0.2	0.2	0.3	0.4	0.5	0.6
Exch. Rate (US$/Y)(%).....	-2.2	-2.7	-3.6	-4.5	-5.4	-6.3	-7.3	-8.2
Current Bal. (US$,B)(+/-)..	0.7	1.1	0.9	1.9	3.3	4.9	7.0	9.7
UNITED KINGDOM								
Real GDP (%).....	0.1	0.1	0.2	0.1	0.0	-0.0	-0.1	-0.1
Price Level (%).....	0.5	0.9	1.1	1.5	1.9	2.3	2.7	3.0
Int. Rate (ST)(+/-).....	0.1	0.1	0.4	0.5	0.6	0.8	1.0	1.1
Exch. Rate (US$/PS)(%).....	-2.2	-3.5	-4.1	-5.1	-6.2	-7.0	-7.9	-8.6
Current Bal. (US$,B)(+/-)..	0.1	0.2	0.5	0.6	1.0	1.9	3.0	4.5

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-12: 5-COUNTRY MONETARY SHOCK

Sustained 100 Basis Point Increase in Treasury Bill Rate

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%).....	-0.4	-0.9	-1.3	-1.5	-1.5	-1.4	-1.3	-1.1
Price Level (%).....	-0.0	-0.1	-0.4	-0.8	-1.3	-1.9	-2.5	-3.1
Int. Rate (ST)(+/-).....	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Exch. Rate (FX/US$)(%).....	-0.0	0.4	0.7	1.1	1.5	1.9	2.3	2.6
Current Bal. (US$,B)(+/-)..	1.5	1.5	0.5	-0.7	-1.9	-3.0	-4.0	-5.3
CANADA								
Real GNP (%).....	-0.4	-1.0	-1.4	-1.6	-1.7	-1.7	-1.7	-1.6
Price Level (%).....	0.0	-0.2	-0.8	-1.7	-2.9	-4.4	-6.0	-7.8
Int. Rate (ST)(+/-).....	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Exch. Rate (US$/C$)(%).....	-0.1	0.1	0.6	1.5	2.7	4.2	5.9	7.8
Current Bal. (US$,B)(+/-)..	-0.2	-0.4	-0.7	-0.6	-0.4	-0.3	-0.1	0.1
GERMANY								
Real GNP (%).....	-0.2	-0.4	-0.4	-0.3	-0.0	0.3	0.6	0.9
Price Level (%).....	0.1	0.1	0.2	0.3	0.4	0.5	0.7	1.0
Int. Rate (ST)(+/-).....	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Exch. Rate (US$/DM)(%).....	-0.1	-0.4	-1.0	-1.8	-2.8	-3.8	-4.9	-6.1
Current Bal. (US$,B)(+/-)..	0.0	-0.5	-1.2	-1.9	-2.7	-3.5	-4.1	-4.4
JAPAN								
Real GNP (%).....	-0.3	-0.9	-1.4	-1.7	-1.8	-1.6	-1.3	-0.8
Price Level (%).....	-0.0	-0.1	-0.3	-0.6	-1.0	-1.3	-1.5	-1.6
Int. Rate (ST)(+/-).....	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Exch. Rate (US$/Y)(%).....	0.1	-0.1	-0.1	-0.3	-0.6	-1.1	-1.8	-2.6
Current Bal. (US$,B)(+/-)..	-0.5	0.1	0.8	2.2	3.9	5.6	7.7	10.0
UNITED KINGDOM								
Real GDP (%).....	-0.4	-0.6	-0.6	-0.6	-0.6	-0.7	-0.7	-0.8
Price Level (%).....	-0.1	0.1	0.3	0.4	0.3	0.1	-0.2	-0.6
Int. Rate (ST)(+/-).....	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Exch. Rate (US$/PS)(%).....	0.1	-1.0	-1.9	-2.7	-3.3	-3.6	-3.9	-3.8
Current Bal. (US$,B)(+/-)..	0.1	0.1	0.0	0.1	0.5	1.0	1.7	2.5

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-13: CANADIAN EXCHANGE RATE SHOCK

Sustained 5% Appreciation of Home Currency Against US Dollar

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%)	0.1	0.1	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Price Level (%)	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Int. Rate (ST)(+/-)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Exch. Rate (FX/US$)(%)	-1.2	-1.4	-1.6	-1.6	-1.4	-1.3	-1.2	-1.0
Current Bal. (US$,B)(+/-)	1.7	1.1	0.1	0.1	0.4	0.4	0.4	0.5
CANADA								
Real GNP (%)	-0.0	-0.6	-1.0	-0.9	-0.7	-0.5	-0.4	-0.3
Price Level (%)	-1.3	-1.5	-1.8	-2.2	-2.6	-3.0	-3.5	-3.9
Int. Rate (ST)(+/-)	0.1	-0.0	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3
Exch. Rate (US$/C$)(%)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Current Bal. (US$,B)(+/-)	0.4	0.3	0.4	0.5	0.6	0.6	0.6	0.5
GERMANY								
Real GNP (%)	0.1	0.0	-0.1	-0.1	-0.1	-0.1	-0.0	0.0
Price Level (%)	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Int. Rate (ST)(+/-)	-0.1	-0.0	-0.1	-0.0	-0.0	-0.0	-0.0	0.0
Exch. Rate (US$/DM)(%)	0.7	0.9	1.0	0.9	0.8	0.6	0.4	0.3
Current Bal. (US$,B)(+/-)	0.1	0.2	0.5	0.6	0.7	0.7	0.6	0.6
JAPAN								
Real GNP (%)	-0.2	-0.2	-0.2	-0.3	-0.2	-0.2	-0.2	-0.1
Price Level (%)	-0.0	-0.1	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3
Int. Rate (ST)(+/-)	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.0
Exch. Rate (US$/Y)(%)	0.5	0.7	1.0	0.9	0.8	0.7	0.6	0.5
Current Bal. (US$,B)(+/-)	-1.7	-0.7	-1.1	-1.6	-1.7	-1.7	-1.7	-1.7
UNITED KINGDOM								
Real GDP (%)	0.0	0.0	-0.0	0.0	0.0	0.1	0.1	0.1
Price Level (%)	-0.0	-0.2	-0.2	-0.3	-0.3	-0.2	-0.2	-0.1
Int. Rate (ST)(+/-)	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Exch. Rate (US$/PS)(%)	0.3	0.7	0.9	0.8	0.7	0.5	0.3	0.1
Current Bal. (US$,B)(+/-)	-0.2	-0.1	-0.3	-0.4	-0.4	-0.4	-0.4	-0.3

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-14: UK EXCHANGE RATE SHOCK

Sustained 5% Appreciation of Home Currency Against US Dollar

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%).....	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Price Level (%).....	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3
Int. Rate (ST)(+/-).....	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.4
Exch. Rate (FX/US$)(%).....	-1.6	-1.5	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6
Current Bal. (US$,B)(+/-)..	0.8	2.1	1.9	2.0	2.1	1.9	1.7	1.4
CANADA								
Real GNP (%).....	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1
Price Level (%).....	0.1	0.1	0.2	0.2	0.2	0.1	0.1	-0.0
Int. Rate (ST)(+/-).....	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Exch. Rate (US$/C$)(%).....	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.2	0.3
Current Bal. (US$,B)(+/-)..	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1
GERMANY								
Real GNP (%).....	0.1	0.0	-0.0	-0.1	-0.0	-0.0	0.0	0.0
Price Level (%).....	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Int. Rate (ST)(+/-).....	-0.1	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Exch. Rate (US$/DM)(%).....	0.9	0.9	1.0	1.0	0.9	0.9	0.9	0.8
Current Bal. (US$,B)(+/-)..	0.5	0.3	0.6	0.8	0.9	1.1	1.3	1.6
JAPAN								
Real GNP (%).....	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Price Level (%).....	-0.0	-0.0	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2
Int. Rate (ST)(+/-).....	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Exch. Rate (US$/Y)(%).....	1.1	0.7	1.0	1.0	0.9	0.9	1.0	1.0
Current Bal. (US$,B)(+/-)..	-0.4	-0.9	-0.4	-0.9	-1.2	-1.1	-1.2	-1.4
UNITED KINGDOM								
Real GDP (%).....	-0.4	-0.4	-0.5	-0.3	-0.1	0.1	0.3	0.4
Price Level (%).....	-1.3	-1.5	-1.8	-2.1	-2.4	-2.7	-3.0	-3.1
Int. Rate (ST)(+/-).....	-0.5	-0.4	-0.7	-0.9	-0.9	-1.0	-1.1	-1.1
Exch. Rate (US$/PS)(%).....	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Current Bal. (US$,B)(+/-)..	-0.1	-1.0	-2.0	-2.3	-2.6	-3.0	-3.5	-4.1

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-15: GERMAN EXCHANGE RATE SHOCK

Sustained 5% Appreciation of Home Currency Against US Dollar

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%).....	0.1	0.2	0.1	0.1	0.1	0.0	0.0	-0.0
Price Level (%).....	0.1	0.1	0.2	0.3	0.3	0.3	0.4	0.4
Int. Rate (ST)(+/-).....	0.1	0.2	0.3	0.3	0.4	0.4	0.4	0.4
Exch. Rate (FX/US$)(%).....	-2.7	-2.5	-2.6	-2.6	-2.7	-2.8	-2.8	-2.9
Current Bal. (US$,B)(+/-)..	1.6	3.1	2.4	2.4	2.5	2.2	1.9	1.4
CANADA								
Real GNP (%).....	-0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2
Price Level (%).....	0.2	0.2	0.3	0.3	0.2	0.1	-0.1	-0.2
Int. Rate (ST)(+/-).....	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2
Exch. Rate (US$/C$)(%).....	-0.1	-0.2	-0.2	-0.2	-0.1	0.1	0.3	0.5
Current Bal. (US$,B)(+/-)..	0.0	-0.1	-0.0	-0.0	-0.1	-0.1	-0.0	-0.0
GERMANY								
Real GNP (%).....	-0.2	-0.7	-1.0	-0.9	-0.7	-0.5	-0.4	-0.3
Price Level (%).....	-1.0	-1.1	-1.4	-1.7	-2.0	-2.4	-2.8	-3.2
Int. Rate (ST)(+/-).....	-1.3	-0.4	-0.7	-1.0	-1.2	-1.5	-1.7	-1.9
Exch. Rate (US$/DM)(%).....	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Current Bal. (US$,B)(+/-)..	-0.6	-0.8	-1.4	-1.6	-2.0	-3.0	-4.1	-5.6
JAPAN								
Real GNP (%).....	-0.4	-0.5	-0.4	-0.4	-0.5	-0.5	-0.5	-0.6
Price Level (%).....	-0.1	-0.1	-0.2	-0.2	-0.3	-0.4	-0.5	-0.6
Int. Rate (ST)(+/-).....	-0.1	-0.2	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2
Exch. Rate (US$/Y)(%).....	2.2	1.3	1.8	2.0	2.0	2.2	2.3	2.5
Current Bal. (US$,B)(+/-)..	-1.6	-1.7	-1.1	-2.2	-2.8	-3.1	-3.7	-4.6
UNITED KINGDOM								
Real GDP (%).....	0.0	-0.0	-0.0	0.0	0.1	0.1	0.1	0.1
Price Level (%).....	-0.3	-0.3	-0.4	-0.5	-0.6	-0.7	-0.8	-0.8
Int. Rate (ST)(+/-).....	-0.1	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.4
Exch. Rate (US$/PS)(%).....	2.0	1.8	1.8	1.9	2.0	2.1	2.1	2.2
Current Bal. (US$,B)(+/-)..	-0.3	-0.5	-0.7	-0.9	-1.0	-1.2	-1.5	-1.8

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-16: JAPANESE EXCHANGE RATE SHOCK

Sustained 5% Appreciation of Home Currency Against US Dollar

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%)	0.0	0.1	0.1	0.1	0.1	0.0	-0.0	-0.0
Price Level (%)	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3
Int. Rate (ST)(+/-)	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3
Exch. Rate (FX/US$)(%)	-1.8	-2.0	-2.0	-2.0	-1.9	-1.9	-1.8	-1.8
Current Bal. (US$,B)(+/-)	0.8	1.9	2.0	1.9	1.7	1.4	0.9	0.4
CANADA								
Real GNP (%)	0.0	-0.0	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1
Price Level (%)	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.1
Int. Rate (ST)(+/-)	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Exch. Rate (US$/C$)(%)	-0.0	-0.1	-0.2	-0.2	-0.1	-0.1	0.0	0.1
Current Bal. (US$,B)(+/-)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.0
GERMANY								
Real GNP (%)	0.2	0.1	-0.0	-0.1	-0.1	-0.1	-0.0	-0.0
Price Level (%)	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1
Int. Rate (ST)(+/-)	-0.2	-0.1	-0.1	-0.0	-0.0	-0.0	-0.0	0.0
Exch. Rate (US$/DM)(%)	1.0	1.3	1.4	1.4	1.3	1.2	1.1	1.0
Current Bal. (US$,B)(+/-)	0.9	0.7	0.9	1.2	1.4	1.6	1.7	1.9
JAPAN								
Real GNP (%)	-0.6	-1.1	-1.2	-1.0	-1.0	-1.0	-1.0	-0.9
Price Level (%)	-0.2	-0.4	-0.6	-0.7	-0.9	-1.1	-1.3	-1.5
Int. Rate (ST)(+/-)	-0.3	-0.4	-0.4	-0.4	-0.3	-0.3	-0.3	-0.3
Exch. Rate (US$/Y)(%)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Current Bal. (US$,B)(+/-)	-2.1	-4.7	-5.7	-6.5	-7.4	-8.2	-8.9	-9.7
UNITED KINGDOM								
Real GDP (%)	-0.0	-0.0	-0.0	0.0	0.1	0.1	0.1	0.2
Price Level (%)	-0.2	-0.3	-0.4	-0.4	-0.5	-0.5	-0.5	-0.5
Int. Rate (ST)(+/-)	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Exch. Rate (US$/PS)(%)	1.3	1.7	1.6	1.4	1.4	1.3	1.2	1.1
Current Bal. (US$,B)(+/-)	0.0	-0.2	-0.5	-0.7	-0.8	-0.9	-1.0	-1.1

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-17: 4-CURRENCY EXCHANGE RATE SHOCK

Sustained 5% Appreciation of Four Currencies Against US Dollar

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%).....	0.2	0.3	0.2	0.1	0.1	0.1	0.0	0.0
Price Level (%).....	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.6
Int. Rate (ST)(+/-).....	0.2	0.4	0.5	0.5	0.5	0.6	0.6	0.6
Exch. Rate (FX/US$)(%).....	-4.8	-4.8	-4.8	-4.8	-4.8	-4.8	-4.8	-4.8
Current Bal. (US$,B)(+/-)..	2.9	4.5	3.2	3.2	3.5	3.2	2.8	2.3
CANADA								
Real GNP (%).....	0.0	-0.6	-1.1	-1.1	-0.9	-0.8	-0.7	-0.5
Price Level (%).....	-1.2	-1.3	-1.5	-1.9	-2.4	-2.9	-3.4	-3.9
Int. Rate (ST)(+/-).....	0.2	0.2	0.1	0.0	0.0	0.0	0.1	0.1
Exch. Rate (US$/C$)(%).....	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Current Bal. (US$,B)(+/-)..	0.6	0.3	0.5	0.6	0.7	0.6	0.5	0.5
GERMANY								
Real GNP (%).....	0.1	-0.3	-0.7	-0.7	-0.5	-0.4	-0.4	-0.3
Price Level (%).....	-0.9	-0.9	-1.1	-1.2	-1.4	-1.7	-1.9	-2.2
Int. Rate (ST)(+/-).....	-1.1	-0.3	-0.5	-0.7	-0.8	-1.0	-1.1	-1.3
Exch. Rate (US$/DM)(%).....	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Current Bal. (US$,B)(+/-)..	0.8	0.7	0.6	0.8	0.8	0.3	-0.2	-1.0
JAPAN								
Real GNP (%).....	-0.6	-1.2	-1.3	-1.1	-1.1	-1.1	-1.0	-1.0
Price Level (%).....	-0.2	-0.3	-0.5	-0.6	-0.8	-1.0	-1.2	-1.4
Int. Rate (ST)(+/-).....	-0.2	-0.4	-0.4	-0.4	-0.3	-0.4	-0.4	-0.4
Exch. Rate (US$/Y)(%).....	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Current Bal. (US$,B)(+/-)..	-1.2	-4.5	-5.5	-6.3	-7.2	-8.0	-8.9	-9.8
UNITED KINGDOM								
Real GDP (%).....	-0.1	-0.2	-0.2	-0.1	0.0	0.1	0.2	0.3
Price Level (%).....	-1.0	-1.2	-1.4	-1.7	-1.9	-2.1	-2.2	-2.3
Int. Rate (ST)(+/-).....	-0.4	-0.4	-0.6	-0.7	-0.7	-0.8	-0.9	-0.8
Exch. Rate (US$/PS)(%).....	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Current Bal. (US$,B)(+/-)..	-0.1	-0.9	-1.8	-2.3	-2.6	-3.0	-3.6	-4.2

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-18: CANADIAN PRICE SHOCK

Sustained 1% Increase in Price Equation Residual

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%).....	-0.0	-0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0
Price Level (%).....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Int. Rate (ST)(+/-).....	-0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exch. Rate (FX/US$)(%).....	-0.2	0.2	0.5	0.8	0.9	1.1	1.2	1.3
Current Bal. (US$,B)(+/-)..	-0.6	-0.2	-0.0	0.1	-0.4	-0.7	-1.0	-1.3
CANADA								
Real GNP (%).....	-0.4	-0.4	-0.1	0.1	0.1	0.0	0.0	-0.0
Price Level (%).....	1.3	2.3	3.3	4.1	4.8	5.5	6.1	6.6
Int. Rate (ST)(+/-).....	1.2	1.0	0.9	0.8	0.7	0.6	0.5	0.5
Exch. Rate (US$/C$)(%).....	0.4	-1.6	-3.0	-4.0	-4.8	-5.4	-6.0	-6.5
Current Bal. (US$,B)(+/-)..	-0.2	-0.4	-0.4	-0.6	-0.8	-0.8	-0.8	-0.8
GERMANY								
Real GNP (%).....	0.0	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Price Level (%).....	0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.1
Int. Rate (ST)(+/-).....	0.0	-0.0	0.0	0.0	0.0	-0.0	-0.0	-0.1
Exch. Rate (US$/DM)(%).....	0.1	0.1	-0.0	-0.1	-0.1	-0.1	-0.2	-0.2
Current Bal. (US$,B)(+/-)..	0.2	-0.1	-0.2	-0.3	-0.4	-0.6	-0.8	-1.0
JAPAN								
Real GNP (%).....	-0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	0.1
Price Level (%).....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Int. Rate (ST)(+/-).....	0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	0.0
Exch. Rate (US$/Y)(%).....	0.1	0.0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2
Current Bal. (US$,B)(+/-)..	0.1	-0.3	-0.1	0.1	0.1	0.2	0.2	0.3
UNITED KINGDOM								
Real GDP (%).....	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Price Level (%).....	-0.1	-0.0	-0.0	0.0	0.0	0.0	0.0	0.0
Int. Rate (ST)(+/-).....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exch. Rate (US$/PS)(%).....	0.4	0.2	0.0	-0.1	-0.2	-0.2	-0.2	-0.2
Current Bal. (US$,B)(+/-)..	0.1	-0.1	-0.1	-0.0	-0.0	-0.0	-0.0	-0.0

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-19: UK PRICE SHOCK

Sustained 1% Increase in Price Equation Residual

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%).....	-0.0	-0.0	-0.1	-0.1	-0.1	-0.0	-0.0	-0.0
Price Level (%).....	0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Int. Rate (ST)(+/-).....	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1
Exch. Rate (FX/US$)(%).....	0.1	0.4	0.4	0.3	0.3	0.2	0.2	0.1
Current Bal. (US$,B)(+/-)..	-0.1	-0.5	-1.1	-1.4	-1.4	-1.6	-1.7	-1.6
CANADA								
Real GNP (%).....	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Price Level (%).....	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0
Int. Rate (ST)(+/-).....	0.0	-0.0	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1
Exch. Rate (US$/C$)(%).....	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1
Current Bal. (US$,B)(+/-)..	-0.0	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
GERMANY								
Real GNP (%).....	-0.0	-0.1	-0.1	-0.1	-0.2	-0.2	-0.1	-0.1
Price Level (%).....	0.0	-0.0	-0.0	-0.0	-0.1	-0.1	-0.2	-0.2
Int. Rate (ST)(+/-).....	0.0	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1	-0.1
Exch. Rate (US$/DM)(%).....	0.0	0.0	0.1	0.2	0.2	0.2	0.2	0.2
Current Bal. (US$,B)(+/-)..	-0.1	-0.3	-0.4	-0.5	-0.7	-0.9	-1.1	-1.4
JAPAN								
Real GNP (%).....	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1
Price Level (%).....	-0.0	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1
Int. Rate (ST)(+/-).....	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Exch. Rate (US$/Y)(%).....	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.3
Current Bal. (US$,B)(+/-)..	-0.0	-0.3	-0.3	-0.3	-0.4	-0.5	-0.6	-0.8
UNITED KINGDOM								
Real GDP (%).....	-0.3	-0.4	-0.6	-1.0	-1.3	-1.6	-1.8	-1.9
Price Level (%).....	1.5	2.5	3.1	3.6	4.0	4.2	4.1	3.8
Int. Rate (ST)(+/-).....	0.7	0.8	1.3	1.5	1.5	1.5	1.3	1.0
Exch. Rate (US$/PS)(%).....	-0.4	-2.1	-1.9	-1.7	-1.7	-1.6	-1.4	-1.2
Current Bal. (US$,B)(+/-)..	-0.6	-0.4	0.4	0.5	0.7	0.9	1.0	1.1

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-20: GERMAN PRICE SHOCK

Sustained 1% Increase in Price Equation Residual

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%).....	0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Price Level (%).....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Int. Rate (ST)(+/-).....	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Exch. Rate (FX/US$)(%).....	-0.9	-0.4	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2
Current Bal. (US$,B)(+/-)..	0.4	0.8	0.1	-0.3	-0.6	-0.8	-1.2	-1.5
CANADA								
Real GNP (%).....	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2
Price Level (%).....	0.1	0.1	0.1	0.0	-0.0	-0.1	-0.2	-0.3
Int. Rate (ST)(+/-).....	0.1	0.1	0.1	0.0	0.0	0.0	0.0	-0.0
Exch. Rate (US$/C$)(%).....	-0.1	-0.1	-0.1	-0.1	0.0	0.1	0.2	0.3
Current Bal. (US$,B)(+/-)..	-0.0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2
GERMANY								
Real GNP (%).....	-0.6	-0.8	-0.9	-1.0	-1.1	-1.3	-1.4	-1.5
Price Level (%).....	0.9	1.6	2.2	2.6	3.0	3.2	3.4	3.5
Int. Rate (ST)(+/-).....	1.6	1.7	1.7	1.8	1.9	1.9	1.9	1.8
Exch. Rate (US$/DM)(%).....	2.2	1.3	0.5	0.6	0.7	0.8	0.9	0.8
Current Bal. (US$,B)(+/-)..	0.8	0.7	1.7	2.6	3.2	4.1	5.1	6.2
JAPAN								
Real GNP (%).....	0.0	-0.0	0.0	0.0	0.0	0.1	0.1	0.1
Price Level (%).....	-0.0	-0.0	-0.0	0.0	0.0	0.0	0.1	0.1
Int. Rate (ST)(+/-).....	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.1
Exch. Rate (US$/Y)(%).....	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2
Current Bal. (US$,B)(+/-)..	0.1	-0.0	0.3	0.5	0.6	0.9	1.3	1.7
UNITED KINGDOM								
Real GDP (%).....	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Price Level (%).....	0.1	0.2	0.2	0.4	0.5	0.6	0.7	0.8
Int. Rate (ST)(+/-).....	-0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3
Exch. Rate (US$/PS)(%).....	0.4	-0.1	-0.3	-0.4	-0.5	-0.6	-0.6	-0.7
Current Bal. (US$,B)(+/-)..	-0.2	-0.1	0.1	0.1	0.1	0.2	0.3	0.4

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-21: JAPANESE PRICE SHOCK

Sustained 1% Increase in Price Equation Residual

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%).....	0.0	-0.0	-0.1	-0.1	-0.1	-0.0	-0.0	0.0
Price Level (%).....	0.1	0.0	0.0	0.0	-0.0	-0.1	-0.1	-0.1
Int. Rate (ST)(+/-).....	0.0	0.0	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1
Exch. Rate (FX/US$)(%).....	-0.2	0.4	0.4	0.3	0.3	0.3	0.2	0.2
Current Bal. (US$,B)(+/-)..	0.3	-0.4	-1.5	-1.6	-1.5	-1.3	-1.0	-0.6
CANADA								
Real GNP (%).....	0.0	-0.0	-0.1	-0.1	-0.0	-0.0	0.0	0.0
Price Level (%).....	0.1	0.0	-0.0	-0.1	-0.1	-0.2	-0.2	-0.2
Int. Rate (ST)(+/-).....	0.0	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Exch. Rate (US$/C$)(%).....	-0.1	-0.1	-0.0	0.0	0.1	0.1	0.1	0.1
Current Bal. (US$,B)(+/-)..	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.0
GERMANY								
Real GNP (%).....	0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.0
Price Level (%).....	0.0	0.0	0.0	-0.0	-0.1	-0.1	-0.1	-0.2
Int. Rate (ST)(+/-).....	0.0	0.0	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1
Exch. Rate (US$/DM)(%).....	0.1	-0.0	-0.0	0.1	0.1	0.1	0.1	0.1
Current Bal. (US$,B)(+/-)..	0.2	-0.2	-0.3	-0.3	-0.5	-0.6	-0.7	-0.8
JAPAN								
Real GNP (%).....	-0.6	-0.9	-1.0	-1.2	-1.2	-1.0	-0.8	-0.6
Price Level (%).....	1.4	1.6	1.8	1.7	1.6	1.5	1.4	1.3
Int. Rate (ST)(+/-).....	0.9	0.7	0.5	0.2	0.0	-0.1	-0.1	-0.1
Exch. Rate (US$/Y)(%).....	0.1	-1.5	-1.6	-1.4	-1.4	-1.3	-1.2	-1.1
Current Bal. (US$,B)(+/-)..	-2.9	-0.3	1.3	1.8	2.0	2.2	1.9	1.5
UNITED KINGDOM								
Real GDP (%).....	-0.1	-0.0	-0.0	0.0	-0.0	-0.0	-0.0	-0.0
Price Level (%).....	-0.1	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1
Int. Rate (ST)(+/-).....	-0.1	0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.1
Exch. Rate (US$/PS)(%).....	0.5	-0.0	-0.1	-0.2	0.0	0.1	0.1	0.2
Current Bal. (US$,B)(+/-)..	-0.1	-0.1	-0.3	-0.4	-0.5	-0.5	-0.5	-0.5

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-22: US PRICE SHOCK

Sustained 1% Increase in Price Equation Residual

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%).....	-0.1	-0.3	-0.7	-1.1	-1.2	-1.1	-1.0	-0.8
Price Level (%).....	1.2	1.6	1.8	1.9	1.8	1.6	1.3	1.1
Int. Rate (ST)(+/-).....	1.3	1.4	1.3	1.1	0,9	0.8	0.7	0.5
Exch. Rate (FX/US$)(%).....	0.3	0.4	0.1	0.1	0.0	0.1	0.2	0.2
Current Bal. (US$,B)(+/-)..	1.1	-1.5	-4.0	-5.6	-7.2	-8.7	-10.3	-11.6
CANADA								
Real GNP (%).....	0.1	-0.2	-0.8	-1.1	-1.1	-1.0	-0.8	-0.6
Price Level (%).....	0.3	-0.0	-0.4	-0.9	-1.5	-2.3	-3.1	-3.9
Int. Rate (ST)(+/-).....	0.4	0.8	0.7	0.6	0.4	0.2	0.1	-0.0
Exch. Rate (US$/C$)(%).....	-0.3	1.2	2.1	2.7	3.3	3.9	4.5	5.2
Current Bal. (US$,B)(+/-)..	0.0	0.2	-0.1	-0.2	-0.1	-0.1	-0.0	0.1
GERMANY								
Real GNP (%).....	0.0	0.1	0.2	0.1	0.0	-0.0	0.0	0.1
Price Level (%).....	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.6
Int. Rate (ST)(+/-).....	0.2	0.1	0.1	0.2	0.2	0.3	0.3	0.4
Exch. Rate (US$/DM)(%).....	-0.5	-0.7	-0.5	-0.5	-0.5	-0.6	-0.8	-1.0
Current Bal. (US$,B)(+/-)..	-0.1	0.1	0.3	0.1	0.2	0.4	0.6	0.9
JAPAN								
Real GNP (%).....	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3
Price Level (%).....	0.0	0.1	0.1	0.2	0.2	0.3	0.4	0.4
Int. Rate (ST)(+/-).....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Exch. Rate (US$/Y)(%).....	-0.5	-0.6	-0.5	-0.7	-0.7	-1.0	-1.2	-1.4
Current Bal. (US$,B)(+/-)..	1.8	1.0	1.5	1.4	1.6	1.8	2.5	3.3
UNITED KINGDOM								
Real GDP (%).....	0.0	0.1	0.2	0.2	0.1	0.1	0.1	0.0
Price Level (%).....	0.0	0.4	0.4	0.5	0.7	0.8	0.9	1.0
Int. Rate (ST)(+/-).....	-0.0	0.0	0.1	0.2	0.2	0.3	0.3	0.4
Exch. Rate (US$/PS)(%).....	0.2	-0.9	-0.8	-0.9	-1.0	-1.2	-1.4	-1.4
Current Bal. (US$,B)(+/-)..	0.4	0.5	0.8	0.4	0.2	0.2	0.4	0.8

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

TABLE A-23: 5-COUNTRY PRICE SHOCK

Sustained 1% Increase in Price Equation Residuals

	YEARS AFTER SHOCK							
	1	2	3	4	5	6	7	8
UNITED STATES								
Real GNP (%).....	-0.1	-0.3	-0.9	-1.2	-1.4	-1.2	-1.1	-0.8
Price Level (%).....	1.4	1.7	2.0	2.1	2.0	1.7	1.4	1.1
Int. Rate (ST)(+/-).....	1.4	1.5	1.4	1.1	0.9	0.8	0.6	0.5
Exch. Rate (FX/US$)(%).....	-0.9	1.0	1.3	1.4	1.4	1.4	1.5	1.6
Current Bal. (US$,B)(+/-)..	1.1	-1.8	-6.5	-8.7	-11.0	-13.1	-15.1	-16.7
CANADA								
Real GNP (%).....	-0.4	-0.7	-1.0	-1.2	-1.2	-1.1	-1.0	-0.8
Price Level (%).....	1.8	2.4	3.0	3.2	3.2	2.9	2.5	1.9
Int. Rate (ST)(+/-).....	1.7	1.8	1.6	1.2	0.9	0.7	0.5	0.3
Exch. Rate (US$/C$)(%).....	-0.1	-0.7	-1.2	-1.5	-1.6	-1.6	-1.5	-1.3
Current Bal. (US$,B)(+/-)..	-0.2	-0.5	-0.8	-1.1	-1.3	-1.3	-1.2	-1.2
GERMANY								
Real GNP (%).....	-0.5	-0.9	-1.1	-1.2	-1.5	-1.6	-1.7	-1.7
Price Level (%).....	1.1	1.8	2.4	2.9	3.2	3.5	3.6	3.7
Int. Rate (ST)(+/-).....	1.9	1.8	1.9	2.0	2.0	2.1	2.0	1.9
Exch. Rate (US$/DM)(%).....	1.9	0.7	0.1	0.3	0.4	0.3	0.2	-0.1
Current Bal. (US$,B)(+/-)..	0.9	0.3	1.2	1.6	1.8	2.3	3.0	3.8
JAPAN								
Real GNP (%).....	-0.3	-0.7	-0.8	-1.0	-1.0	-0.8	-0.5	-0.3
Price Level (%).....	1.4	1.7	1.9	1.9	1.8	1.8	1.7	1.8
Int. Rate (ST)(+/-).....	1.0	0.7	0.5	0.3	0.1	0.1	0.1	0.1
Exch. Rate (US$/Y)(%).....	-0.2	-2.1	-2.1	-2.0	-2.1	-2.3	-2.4	-2.6
Current Bal. (US$,B)(+/-)..	-0.9	0.1	2.9	3.5	4.0	4.7	5.6	6.2
UNITED KINGDOM								
Real GDP (%).....	-0.4	-0.2	-0.3	-0.7	-1.1	-1.4	-1.6	-1.8
Price Level (%).....	1.4	3.0	3.7	4.5	5.1	5.5	5.6	5.4
Int. Rate (ST)(+/-).....	0.6	1.0	1.7	1.9	2.0	2.1	1.9	1.7
Exch. Rate (US$/PS)(%).....	1.1	-2.9	-3.0	-3.2	-3.2	-3.2	-3.3	-3.1
Current Bal. (US$,B)(+/-)..	-0.3	-0.1	0.9	0.6	0.6	0.9	1.4	1.9

NOTE: Amounts shown are deviations from the baseline path.
(%) = percentage deviation from baseline
(+/-) = absolute deviation from baseline

Appendix 2: Model Listing

This appendix provides a complete listing of the current version of the Multicountry Model. There are three parts: the equation listing, the cross-reference table, and the variable definitions. The equations are grouped by country (in order, Canada, U.K., Germany, Japan, U.S. and ROW), and by sector as shown below. Each equation is reported with its coefficient values, with their t-statistics in parentheses, followed by some summary regression statistics. The equation comment line gives the equation number, the name of the associated left-hand-side variable in parentheses, and a short description. The values of any distributed lag coefficients are tabulated below the equation.

The cross-reference table gives the number of each equation in which each variable in the model appears. The variable listing gives each variable alphabetically with a short definition. Exogenous variables have the keyword "EXOG", while endogenous variables are shown with the number of corresponding equation.

The standard format of an MCM country model is:

I. Domestic Real Side
   - A. Domestic Spending and Disposable Income
   - B. Government Sector
   - C. Private Savings and Wealth

II. Current Account
   - A. Import of Goods
   - B. Export of Goods
   - C. Import of Services and Transfers
   - D. Export of Services and Transfers
   - E. Balances

III. Domestic Financial Market
   - A. Monetary Aggregate
   - B. Private Banking Sector Interest Rates
   - C. Monetary Authorities

IV. Prices and Supply
    A. Prices
    B. Wages
    C. Capacity and Real Capital Stocks

V. International Financial Market
    A. Direct Investment Claims and Liabilities
    B. Other Capital Flows
    C. Exchange Rate Relationships

VI. Official Intervention and Balance of Payments

VII. Foreign Variables

Each country model is presented in the equation listing as though it were a separate macroeconometric model. This, however, is not strictly correct, because the bilateral goods export equations are excluded from each country model to avoid double counting.

The sectors and sub-sectors are preceded by the following country mnemonics:

"C" Canada

"E" United Kingdom

"G" Germany

"J" Japan

"U" United States

"R" Rest-of-World

For example, "G.I" is the first sector of the German model (domestic demand). Equations are grouped within sectors and numbered consecutively throughout the whole model. Within most sub-sectors equations are ordered with behavioral (estimated) equations first and identities and quasi-identities (bridge equations) second.

The variable naming convention uses the first letter of the variable name to indicate the country. The middle portion of the name describes the variable, with the letters usually proceeding from the general to the specific. For example, EIF is U.K. fixed investment, and CIFPNR is Canadian nonresidential fixed private investment. The last letters of a variable name are sometimes used to indicate the units or basis of measurement. Some common codes are:

"V"	nominal value
"D"	measured in dollars
"SA"	seasonally adjusted
"NSA"	not seasonally adjusted
"NIA"	national income accounts basis
"Q"	quarterly rate

The bilateral trade flow variable are named as follows:

"XijV"	exports of goods from country i to country j, in current U.S. dollars
"MijV"	imports of goods by country i from country j, in current U.S. dollars

The same country codes as above are used, with "T" indicating total.

The standard units for measurement are as follows unless otherwise noted:

Sector I (domestic demand)	- billions of local currency units, 1972 prices, seasonally adjusted, at annual rate
Sector II (current account)	- billions of local currency units, current prices, not seasonally adjusted, at annual rate

Sector III (financial markets)		
monetary variables	-	billions of local currency units, current prices, seasonally adjusted, at annual rate
interest rates	-	percent per year
Sector IV (supply)		
prices and wages	-	index number, 1972 = 1.0
Sector V, VI (international financial)	-	billions of local currency units, current prices, not seasonally adjusted, at annual rate
Sector VII (foreign averages)		geometric average of country variables

CANADIAN MODEL: DOMESTIC REAL SIDE

C.I.A. DOMESTIC SPENDING AND DISPOSABLE INCOME

1. (CC) PRIVATE CONSUMPTION EXPENDITURE - 1972 PRICES

```
CC   =  8.05108   +  LAGCOEF1 * (CYD(I))
        (8.19893)

     +  LAGCOEF2 * ((((1 + CRS(I)/100)/(1 + CPEXP(I)/100) - 1) * CNWR(I)))   +  .466443 * Q1
                                                                               (2.97419)

     +  .181668 * Q2   +  .151054 * Q3
        (1.22711)         (1.04248)
```

CRSQ = .998 S.E.R. = .536 MEAN LHS = 65.406 RHO = .67 (7.1)
RANGE: 1964 Q4 TO 1982 Q4 NOB = 72 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.243	6.953	-0.000	0.011
(-1)	0.196	9.308	-0.051	2.515
(-2)	0.149	20.278	-0.053	2.714
(-3)	0.103	14.448	-0.008	0.282
(-4)	0.056	2.695	NA	NA
(-5)	0.009	0.270	NA	NA
SUM:	0.756		-0.113	

2. (CIFPR) PRIVATE GROSS RESIDENTIAL INVESTMENT - 1972 PRICES

```
CIFPR   =  3.84179 + 0.04 * CKPR(-1)   +  LAGCOEF1 * (DEL(1 : CYDV(I-1)/CP(I-1)))
           (8.555)

        +  LAGCOEF2 * (((CRL(I-1) - CPEXP(I-1)) * 100))
```

CRSQ = .918 S.E.R. = .375 MEAN LHS = 3.238 RHO = .88 (15.6)
RANGE: 1967 Q2 TO 1983 Q1 NOB = 63 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.101	2.027	-0.001	1.498
(-1)	0.050	2.027	-0.001	2.916
(-2)	NA	NA	-0.001	3.026
(-3)	NA	NA	-0.001	1.862
(-4)	NA	NA	-0.000	1.317
(-5)	NA	NA	-0.000	1.039
SUM:	0.151		-0.004	

3. (CIFPNR) PRIVATE GROSS NON-RESIDENTIAL INVESTMENT - 1972 PRICES

```
CIFPNR   =  -.741199 + 0.06 * CKPNR(-1)   +  .933677 * (CIFPNR(-1) - 0.06 * CKPNR(-2))
             (2.15797)                      (16.1958)

         +  .011463 * TIME   +  LAGCOEF1 * (DEL(CGNP(I-1)))   +  LAGCOEF2 * (DEL(CUCNR(I-1)))
            (1.64885)

         +  .093653 * DEL(CCU)
            (2.26003)

        CRSQ  = .95  S.E.R. =  .495  MEAN LHS = 6.326  DW = 1.701
        RANGE: 1966 Q3 TO 1983 Q1   NOB = 67   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.060	1.372	9.630	1.059
(-1)	0.082	3.480	-11.418	2.182
(-2)	0.087	3.243	-20.039	2.988
(-3)	0.075	2.577	-16.233	2.975
(-4)	0.046	2.218	NA	NA
SUM:	0.351		-38.059	

4. (CCCAV) CAPITAL CONSUMPTION ALLOWANCE - CURRENT PRICES

```
CCCAV    =  -9.73464   +  .003357 * Q2   -  .259592 * Q3   +  .176919 * Q4   +  .001929 * CKP(-1)
            (16.1768)     (.023182)       (1.28338)        (1.26362)        (.367002)

         +  21.0089 * CP(-1)   +  .016137 * (CGNPVNSA - CTV - CCVNSA)
            (43.205)           (1.9691)

        CRSQ  = .999  S.E.R. =  .456  MEAN LHS = 16.673  DW = .508
        RANGE: 1961 Q2 TO 1982 Q4   NOB = 87   ESTIMATED:  4/85
```

5. (CGNP) GROSS NATIONAL PRODUCT - 1972 PRICES

```
CGNP = CC + CIFP + CIFG + CII + CG + CXGSNI - CMGSNI + CRES
```

6. (CGNPV) GROSS NATIONAL PRODUCT - CURRENT PRICES

```
CGNPV = CCV + CIFPV + CIFGV + CIIV + CGV + CXGSNIV - CMGSNIV + CRESV
```

7. (CGNPVNSA) GROSS NATIONAL PRODUCT - CURRENT PRICES (NSA)

```
CGNPVNSA = CGNPV/CSAFGNPV
```

8. (CCV) PRIVATE CONSUMER EXPENDITURE - CURRENT PRICES

```
CCV = CC * CP
```

9. (CCVNSA) PRIVATE CONSUMER EXPENDITURE - CURRENT PRICES (NSA)

```
CCVNSA = CCV/CSAFCV
```

10. (CIFP) PRIVATE FIXED INVESTMENT - 1972 PRICES

```
CIFP = CIFPR + CIFPNR
```

11. (CIFPV) PRIVATE FIXED INVESTMENT - CURRENT PRICES

CIFPV = CIFP * CP

12. (CIFPVNSA) PRIVATE FIXED INVESTMENT - CURRENT PRICES (NSA)

CIFPVNSA = CIFPV/CSAFIFPV

13. (CIIV) PRIVATE INVENTORY INVESTMENT - CURRENT PRICES

CIIV = CII * CP

14. (CYDPVNSA) PERSONAL DISPOSABLE INCOME - CURRENT PRICES (NSA)

CYDPVNSA = CGNPVNSA - CTV - CTIIV + CTRANV - CCCAV

15. (CYDVNSA) DISPOSABLE INCOME PROXY - CURRENT PRICES (NSA) (QUASI IDENTITY)

CYDVNSA = -1.29373 + 2.89709 * Q1 + .759949 * Q2 + .762277 * Q3 + .953414 * CYDPVNSA
(3.59231) (8.61152) (2.11123) (2.277) (324.442)

CRSQ = 1 S.E.R. = 1.181 MEAN LHS = 79.323 RHO = .195 (1.7)
RANGE: 1960 Q3 TO 1980 Q4 NOB = 81 ESTIMATED: 4/85

16. (CYD) DISPOSABLE INCOME PROXY - 1972 PRICES

CYD = CSAFYDV * CYDPVNSA/CP

17. (CYDV) DISPOSABLE INCOME PROXY - CURRENT PRICES

CYDV = CYDVNSA * CSAFYDV

18. (CPCHGNP) PERCENTAGE CHANGE IN GNP - ANNUAL RATE

CPCHGNP = DEL(LOG(CGNP)) * 400

C.I.B. GOVERNMENT SECTOR

19. (CTRANV) GOVERNMENT TRANSFERS TO PRIVATE SECTOR

```
CTRANV   =  -8.65814   +  4.86928 * (CUN * CLF/100) * CP
             (6.7862)      (5.48526)

       +  LAGCOEF1 * (((CCUMDF(I) + CCUMDF(I-1) - CNGP(I) - CNGP(I-1))/2 * CRL/100 ))

       +  1.32282 * CPOP15 * CP   +  1.79932 * Q1   +  .837406 * Q2   -  .320985 * Q3
          (16.8741)                  (6.48836)       (2.68124)         (1.18989)
```

CRSQ = .998 S.E.R. = .921 MEAN LHS = 34.793 RHO = .524 (4.1)
RANGE: 1969 Q2 TO 1982 Q4 NOB = 54 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.145	2.540
(-1)	0.127	2.540
(-2)	0.109	2.540
(-3)	0.091	2.540
(-4)	0.073	2.540
(-5)	0.054	2.540
(-6)	0.036	2.540
(-7)	0.018	2.540
SUM:	0.654	

20. (CTV) TOTAL GOVERNMENT REVENUE - CURRENT PRICES

```
(CTV - CTINDV)/CGNPVNSA   =  .005325   +  .58815 * CTRY   +  .271793 * CTRYC   +  .001375 * Q1
                             (1.05639)    (35.3961)        (17.4816)            (1.96716)

       +  .001317 * Q2   -  .008336 * Q3
          (1.67976)        (12.0046)
```

CRSQ = .994 S.E.R. = .001 MEAN LHS = .191 RHO = .264 (1.5)
RANGE: 1974 Q1 TO 1983 Q1 NOB = 36 ESTIMATED: 4/85

21. (CTINDV) TAXES - INDIRECT - CURRENT PRICES (QUASI IDENTITY)

```
CTINDV   =  -2.86382   +  .163518 * (CGNPVNSA - CTINDV)   +  3.53212 * Q1   -  1.9896 * Q2
             (.594274)     (8.91316)                       (6.72876)         (3.69343)

       -  3.75983 * Q3
          (6.1548)
```

CRSQ = .98 S.E.R. = 1.311 MEAN LHS = 35.545 RHO = .769 (5.6)
RANGE: 1975 Q4 TO 1983 Q1 NOB = 29 ESTIMATED: 4/85

22. (CGV) GOVERNMENT CONSUMPTION PURCHASES - 1972 PRICES

```
CG = CGV/CP
```

23. (CIFGV) GOVERNMENT FIXED INVESTMENT - CURRENT PRICES

```
CIFGV = CIFG * CP
```

24. (CIFGVNSA) GOVERNMENT FIXED INVESTMENT - CURRENT PRICES (NSA)

```
CIFGVNSA = CIFGV/CSAFIFGV
```

25. (CGDEF) GOVERNMENT DEFICIT - NIA BASIS (PSBR)

CGDEF = CGV + CIFGV - CTV - CTIIV + CTRANV

26. (CCUMDF) CUMULATED GOVERNMENT DEFICIT - CURRENT PRICES

CCUMDF = CCUMDF(-1) + CGDEF/4

C.I.C. PRIVATE SAVINGS AND WEALTH

27. (CDNWFVNS) CHANGE IN FINANCIAL NET WORTH - CURRENT PRICES (NSA)

CDNWFVNS = CGNPVNSA - CTV - CTIIV + CXTRANV + CTRANV - CMTRANV - CRESNSA - (CIFPVNSA + CIFGVNSA + CIIV) - CCVNSA

28. (CDNWKVNS) CHANGE IN TANGIBLE NET WORTH - CURRENT PRICES (NSA)

CDNWKVNS = CIFPVNSA + CIFGVNSA + CIIV - CCCAV

29. (CNWFVNSA) FINANCIAL NET WORTH - CURRENT PRICES (NSA)

CNWFVNSA = CNWFVNSA(-1) + CDNWFVNS/4

30. (CNWKNSA) TANGIBLE NET WORTH - 1972 PRICES (NSA)

CNWKNSA = CNWKNSA(-1) + CDNWKVNS/(4 * CP)

31. (CNWVNSA) NET WORTH - CURRENT PRICES (NSA)

CNWVNSA = CNWFVNSA + CNWKNSA * CP

32. (CNWRNSA) NET WORTH - 1972 PRICES (NSA)

CNWRNSA = CNWVNSA/CP

33. (CNWR) NET WORTH - 1972 PRICES (SA)

CNWR = CSAFNW * CNWRNSA

34. (CNWV) NET WORTH - CURRENT PRICES (SA)

CNWV = CSAFNW * CNWVNSA

C.II. CURRENT ACCOUNT

C.II.A. IMPORTS OF GOODS

35. (CCOL) OIL CONSUMPTION - VOLUME (MBD)

```
LOG(CCOL)   =  -4.19508   +  LAGCOEF1 * (LOG(CPPETROL(I)/CP(I))) + LOG(CGNP)   +  .00033 * Q1
                (-272.03)                                                          (.03)

      -  .125755 * Q2   -  .12363 * Q3
        (-11.13)          (-12.05)

     CRSQ  = .91287  S.E.R. =  .0221  MEAN LHS = NA  RHO =  .2316 (1.18491)
     RANGE: 1973 Q1 TO 1980 Q4   NOB = 32   ESTIMATED:  5/82
```

LAG	LAGCOEF1	T-STAT
(-0)	-0.084	-0.740
(-1)	-0.060	-7.020
(-2)	-0.039	-0.680
(-3)	-0.018	-0.330
SUM:	-0.201	

36. (XECV) U.K. GOODS EXPORTS TO CANADA ($US)

```
LOG(XECV/(EPXGUV * EEI))   =  -.734207   -  .128257 * Q1   +  .038726 * Q2   -  .09291 * Q3
                               (1.3)        (4)              (1.2)            (3)

      +  .153154 * LOG(CGNPVNSA/CPGNP)   -  .141453 * D7231   -  .149972 * D7021
        (1.2)                             (1.5)               (1.7)

      -  .042997 * D701I   +  .064428 * D7221   -  .125475 * D6741
        (.7)                 (.7)                 (1.4)

      +  LAGCOEF1 * (LOG(CP(I)/(EPXGUV(I) * EEI(I)/CEI(I))))

     CRSQ  = .604  S.E.R. =  .089  MEAN LHS = NA  RHO =  .329 (NA)
     RANGE: 1961 Q1 TO 1975 Q4   NOB = 60   ESTIMATED:  1/78
```

LAG	LAGCOEF1	T-STAT
(-0)	-0.032	0.100
(-1)	0.289	3.200
(-2)	0.453	3.400
(-3)	0.460	2.500
(-4)	0.309	2.200
SUM:	1.479	

37. (XGCV) GERMAN GOODS EXPORTS TO CANADA ($US)

```
LOG(XGCV/(GPXGUV * GER))   =  -6.38227   +  1.25074 * LOG(CGNPVNSA/CP)
                             (-3.25353)    (3.69856)

      +  LAGCOEF1 * (LOG(GPXGUV(I) * GER(I)/(CP(I) * CEI(I))))   -  .009098 * Q1   -  .016728 * Q2
                                                                    (-.18582)         (-.38609)

      -  .22683 * Q3
        (-4.71796)

     CRSQ  = .52278  S.E.R. =  .1005  MEAN LHS = NA  DW = 1.73
     RANGE: 1970 Q2 TO 1980 Q4   NOB = 43   ESTIMATED:  4/82
```

LAG	LAGCOEF1	T-STAT
(-0)	0.003	0.021
(-1)	-0.027	-0.349
(-2)	-0.052	-1.188
(-3)	-0.072	-1.847
(-4)	-0.087	-1.735
(-5)	-0.097	-1.674
(-6)	-0.103	-1.775
(-7)	-0.103	-2.086
(-8)	-0.098	-2.552
(-9)	-0.089	-1.938
(-10)	-0.074	-0.910
(-11)	-0.055	-0.405
SUM:	-0.855	

38. (XJCV) JAPANESE GOODS EXPORTS TO CANADA ($US)

```
LOG(XJCV/(JPXGUV * JEI))   =  -10.5015   +  .052443 * Q1   +  .043189 * Q2   -  .129559 * Q3
                               (7.1)        (1.4)            (1.4)             (3.5)

      +  2.19887 * LOG(CGNPVNSA/CPGNP)   +  1.24822 * LOG(CP/(JPXGUV * JEI/CEI))
        (6.8)                              (2.4)

     CRSQ  = .615  S.E.R. =  .111  MEAN LHS = NA  RHO =  .853 (NA)
     RANGE: 1961 Q1 TO 1975 Q4   NOB = 60   ESTIMATED:  1/78
```

39. (XUCV) U.S. GOODS EXPORTS TO CANADA ($US)

```
LOG(XUCV/UPXNAG)   =  -2.77088   +  1.14957 * LOG(CGNP)
                       (6.96)       (13.52)

      +  LAGCOEF1 * (LOG(UPXNAG(I)/(CEI(I) * CP(I))))   -  .054315 * Q1   +  .062077 * Q2
                                                           (4.2)            (4.49)

      -  .113573 * Q3   +  LAGCOEF2 * (LOG(UPXNAG(I)/UCPCOMP(I)))   +  .014752 * CDVAUTST
        (9.02)                                                          (2.86)

     CRSQ  = .95  S.E.R. =  .036  MEAN LHS = NA  RHO =  .3 (1.91)
     RANGE: 1968 Q1 TO 1980 Q4   NOB = 52   ESTIMATED:  4/82
```

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	-0.126	1.390	-0.013	0.203
(-1)	-0.113	2.080	-0.028	0.590
(-2)	-0.099	3.870	-0.039	1.160
(-3)	-0.086	5.540	-0.046	1.720
(-4)	-0.074	2.730	-0.050	1.900
(-5)	-0.061	1.630	-0.050	1.830
(-6)	-0.048	1.140	-0.047	1.690
(-7)	-0.036	0.870	-0.041	1.570
(-8)	-0.024	0.700	-0.030	1.470
(-9)	-0.012	0.587	-0.017	1.400
SUM:	-0.679		-0.361	

40. (MCRV) CANADIAN GOODS IMPORTS FROM REST OF WORLD ($US)

LOG((MCRV - CMGOLV * CER)/ROWPXG) = -5.60998 (25.6) - .088075 * Q1 (2.9) + .025947 * Q2 (.9)
- .133769 * Q3 (4.4) + 1.52851 * LOG(CGNPVNSA/CPGNP) (30.8) + .290502 * LOG(CP/(ROWPXG/CEI)) (4)

CRSQ = .991 S.E.R. = .263 MEAN LHS = NA DW = 1.39
RANGE: 1961 Q1 TO 1975 Q4 NOB = 60 ESTIMATED: 1/78

41. (CMGOL) OIL IMPORTS - VOLUME (MBD)

CMGOL = CCOL + CXGOL + DEL(CSOL)/DAYSQ - CQOL + CMGOLER

42. (CMGOLV) OIL IMPORTS - VALUE

LOG(CMGOLV) = LOG(CMGOL * CPMGOL) + CMGOLVER

43. (XRCV) CANADIAN GOODS IMPORTS FROM REST OF WORLD ($US)

MCRV = .711974 (6.66712) + .581427 * XRCV (10.1759) + .193615 * XRCV(-1) (3.38368)

CRSQ = .984 S.E.R. = .653 MEAN LHS = 6.616 DW = 1.042
RANGE: 1961 Q2 TO 1982 Q4 NOB = 87 ESTIMATED: 4/85

44. (MCJV) CANADIAN GOODS IMPORTS FROM JAPAN ($US)

MCJV = .001796 (.11994) + .66205 * XJCV (11.9442) + .441247 * XJCV(-1) (7.91637)

CRSQ = .992 S.E.R. = .091 MEAN LHS = 1.204 DW = 2.001
RANGE: 1961 Q2 TO 1982 Q4 NOB = 87 ESTIMATED: 4/85

45. (MCGV) CANADIAN GOODS IMPORTS FROM GERMANY ($US)

MCGV = .001626 (.126313) + .918505 * XGCV (13.2467) + .210693 * XGCV(-1) (3.04231)

CRSQ = .978 S.E.R. = .068 MEAN LHS = .662 DW = 1.792
RANGE: 1961 Q2 TO 1982 Q4 NOB = 87 ESTIMATED: 4/85

46. (MCEV) CANADIAN GOODS IMPORTS FROM U.K. ($US)

MCEV = -.016348 (.692625) + .986396 * XECV (17.4346) + .131813 * XECV(-1) (2.3294)

CRSQ = .968 S.E.R. = .085 MEAN LHS = 1.089 DW = 1.418
RANGE: 1961 Q2 TO 1982 Q4 NOB = 87 ESTIMATED: 4/85

47. (MCUV) CANADIAN GOODS IMPORTS FROM U.S. ($US)

MCUV = -1.13266 + 1.26305 * XUCV + .013742 * XUCV(-1)
(6.72006) (31.847) (.34547)

CRSQ = .996 S.E.R. = .902 MEAN LHS = 20.049 DW = 1.174
RANGE: 1961 Q2 TO 1982 Q4 NOB = 87 ESTIMATED: 4/85

48. (MCTV) TOTAL CANADIAN GOODS IMPORTS - DOT BASIS ($US)

MCTV = MCJV + MCGV + MCEV + MCUV + MCRV

49. (CMGV) TOTAL CANADIAN GOODS IMPORTS - BOP BASIS - CURRENT PRICES

CMGV = MCTV/CER + CMGVER

50. (CMG) TOTAL CANADIAN GOODS IMPORTS - 1972 PRICES

CMG = CMGV/CPMGUV

C.II.B. EXPORTS OF GOODS

51. (CXGOLV) OIL EXPORTS - VALUE

```
LOG(CXGOLV) = LOG(CXGOL * CPXGOL) + CXGOLVER
```

52. (XCGV) CANADIAN EXPORTS TO GERMANY -- US$ (QUASI-IDENTITY)

```
MGCV   =  1.06925 * XCGV   +  .34321 * XCGV(-1)
         (8.47)              (2.59)

     CRSQ  = .923  S.E.R. =  .103  MEAN LHS = NA  RHO =  .2042 (NA)
     RANGE: 1968 Q1 TO 1980 Q1   NOB = 49   ESTIMATED:  1/80
```

53. (XCTV) TOTAL CANADIAN GOODS EXPORTS - DOT BASIS - CURRENT PRICES

```
XCTV = XCJV + XCGV + XCEV + XCUV + XCRV
```

54. (CXGV) TOTAL CAN. GOODS EXPORTS - BOP BASIS-CUR. PRICES (QUASI IDENTITY)

```
CXGV * CER   =  .490864   -  .368861 * Q2   -  .251798 * Q3
               (2.61065)    (1.92513)        (1.31279)

      +  .962639 * XCTV + CXGOLV * CER - CXGVADJ
        (250.629)

     CRSQ  = .999  S.E.R. =  .602  MEAN LHS = 37.835  DW = 1.866
     RANGE: 1968 Q2 TO 1982 Q4   NOB = 59   ESTIMATED:  4/85
```

55. (CXG) TOTAL CANADIAN GOODS EXPORTS - 1972 PRICES

```
CXG = CXGV/(CPXGOL**(CXGOLV/CXGV) * CPXGUV**(1 - CXGOLV/CXGV)) + CXGER
```

C.II.C. IMPORTS OF SERVICES AND TRANSFERS

56. (CMSOV) IMPORTS OF OTHER SERVICES

```
LOG(CMSOV/(UP/CER))   =  -4.59438   +  1.35957 * LOG(CGNP)   +  .56685 * LOG(CP/(UP/CER))
                        (15.9851)     (21.9454)               (.770581)

      -  .11867 * LOG(CP(-1)/(UP(-1)/CER(-1)))
        (.165678)

     CRSQ  = .955  S.E.R. =  .087  MEAN LHS = 1.653  RHO =  .291 (2.8)
     RANGE: 1961 Q1 TO 1983 Q1   NOB = 88   ESTIMATED:  4/85
```

57. (CMSYDV) DIRECT INVESTMENT INCOME PAYMENTS

```
CMSYDV/(CRLTDL * CPGNP)   =  -.079509   +  .030013 * 4 * (CPGNP/CPGNP(-1))   -  .018985 * Q1
                            (.684863)     (1.05742)                          (6.42407)

      -  .019360 * Q2   -  .020216 * Q3
        (6.715)          (6.99988)

     CRSQ  = .572  S.E.R. =  .007  MEAN LHS = .029  DW = 1.889
     RANGE: 1970 Q2 TO 1982 Q4   NOB = 51   ESTIMATED:  4/85
```

58. (CMTRANV) TRANSFER PAYMENTS - TOTAL

```
LOG(CMTRANV)   =  -3.74617   +  .723468 * LOG(CGNPV)
                 (37.1008)     (34.04)

     CRSQ  = .931  S.E.R. =  .142  MEAN LHS = -.349  RHO =  .037 (.3)
     RANGE: 1960 Q1 TO 1983 Q1   NOB = 92   ESTIMATED:  4/85
```

59. (CMSV) IMPORTS OF SERVICES - BOP BASIS - TOTAL

```
CMSV = CMSOV + CMSYV
```

60. (CMGSV) IMPORTS OF GOODS AND SERVICES

```
CMGSV = CMGV + CMSV
```

61. (CRLTDL) STOCK OF REAL LONG-TERM DIRECT LIABILITIES TO FOREIGNERS

```
CRLTDL = CRLTDL(-1) + 0.25 * (CDLTDL/CPGNP)
```

62. (CMSYNDV) NON-DIRECT INVESTMENT INCOME PAYMENTS

```
DEL(CMSYNDV) = - (DEL(CXSYNDV)) + CMSYNDER
```

63. (CMSYV) INVESTMENT INCOME PAYMENTS

```
CMSYV = CMSYDV + CMSYNDV + CMSYVER
```

64. (CMGSNIVS) IMPORTS - NIA BASIS - CURRENT PRICES (NSA) (QUASI IDENTITY)

CMGSNIVS = CMGV + CMSOV + CMSYV

65. (CMGSNIV) IMPORTS - NIA BASIS - CURRENT PRICES (SA)

CMGSNIV = CSAFMNIV * CMGSNIVS

66. (CMGSNINS) IMPORTS - NIA BASIS - 1972 PRICES (NSA)

CMGSNINS = CMG + (CMSOV + CMSYV)/CPMS

67. (CMGSNI) IMPORTS - NIA BASIS - 1972 PRICES (SA)

CMGSNI = CSAFMNI * CMGSNINS

C.II.D. EXPORTS OF SERVICES AND TRANSFERS

68. (CXSOV) EXPORTS OF OTHER SERVICES

```
LOG(CXSOV/CPGNP)   =  -5.91726   +  .887902 * LOG(UGNP)   +  .2685 * LOG(UP/CER/CPGNP)
                       (1.74735)     (1.50649)               (.515766)

      +  .341744 * LOG(CXG)
         (1.21506)
```

CRSQ = .662 S.E.R. = .23 MEAN LHS = 1.304 DW = 1.988
RANGE: 1961 Q2 TO 1983 Q1 NOB = 88 ESTIMATED: 4/85

69. (CXSYDV) DIRECT INVESTMENT INCOME RECEIPTS

```
CXSYDV/(CRLTDC * UPGNP/CER)   =  -.013914   +  .000685 * UCU
                                  (.572636)     (2.27768)
```

CRSQ = .165 S.E.R. = .009 MEAN LHS = .041 RHO = .219 (1.6)
RANGE: 1970 Q1 TO 1982 Q4 NOB = 51 ESTIMATED: 4/85

70. (CXSYNDV) NON-DIRECT INVESTMENT INCOME RECEIPTS

```
CXSYNDV - CMSYNDV   =  -2.23268   +  LAGCOEF1 * (URL(I) * (CFCP(I) - CFLP(I)))
                       (7.70971)
```

CRSQ = .95 S.E.R. = .574 MEAN LHS = -4.622 RHO = .594 (4.9)
RANGE: 1971 Q1 TO 1982 Q4 NOB = 47 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.002	12.834
(-1)	0.002	12.834
(-2)	0.001	12.834
(-3)	0.001	12.834
SUM:	0.006	

71. (CXTRANV) TOTAL TRANSFER RECEIPTS

```
LOG(CXTRANV)   =  -13.4607   +  .946232 * LOG(UPGNP)   +  1.89397 * LOG(UGNP)
                  (8.51444)     (6.8128)                (8.37905)
```

CRSQ = .97 S.E.R. = .132 MEAN LHS = -.11 RHO = .226 (2.2)
RANGE: 1960 Q1 TO 1983 Q1 NOB = 92 ESTIMATED: 4/85

72. (CXSV) EXPORTS OF SERVICES - BOP BASIS - TOTAL

```
CXSV = CXSOV + CXSYV
```

73. (CXGSV) EXPORTS OF GOODS AND SERVICES

```
CXGSV = CXGV + CXSV
```

74. (CRLTDC) STOCK OF REAL LONG-TERM DIRECT CLAIMS ON FOREIGNERS

```
CRLTDC = CRLTDC(-1) - 0.25 * CDLTDC * (CER/UPGNP)
```

75. (CXSYV) INVESTMENT INCOME RECEIPTS

CXSYV = CXSYDV + CXSYNDV + CXSYVER

76. (CXGSNIVS) EXPORTS - NIA BASIS - CURRENT PRICES (NSA)

CXGSNIVS = CXGV + CXSOV + CXSYV

77. (CXGSNIV) EXPORTS - NIA BASIS - CURRENT PRICES (SA)

CXGSNIV = CSAFXNIV * CXGSNIVS

78. (CXGSNINS) EXPORTS - NIA BASIS - 1972 PRICES (NSA)

CXGSNINS = CXG + (CXSOV + CXSYV)/CPXS

79. (CXGSNI) EXPORTS - NIA BASIS - 1972 PRICES (SA)

CXGSNI = CSAFXNI * CXGSNINS

C.II.E. BALANCES

80. (CGBAL) GOODS TRADE BALANCE

CGBAL = CXGV - CMGV

81. (CSBAL) CURRENT BALANCE ON SERVICES

CSBAL = CXSV - CMSV

82. (CGSBAL) CURRENT BALANCE ON GOODS AND SERVICES

CGSBAL = CGBAL + CSBAL

83. (CNETXNI) NET EXPORTS OF GOODS AND SERIVCES - NIA BASIS - 1972 PRICES

CNETXNI = CXGSNI - CMGSNI

84. (CCURBAL) CURRENT ACCOUNT BALANCE

CCURBAL = CXGV + CXSOV + CXSYV + CXTRANV - CMGV - CMSOV - CMSYV - CMTRANV

C.III. DOMESTIC FINANCIAL MARKET

C.III.A. MONETARY AGGREGATES

85. (CCUR) STOCK OF CURRENCY HELD BY RESIDENTS

```
CCUR/CNHVNSA   =  .004465   -  .001575 * Q2   -  .003854 * Q3   -  .001685 * Q4   -  .000147 * TIME
                    (4)          (4.8)            (7.7)            (5)              (4.4)

      +  .046619 * CGNPVNSA/CNHVNSA   -  .000329 * CRS
         (9.4)                           (4)

     CRSQ  = .941  S.E.R. =  .00075  MEAN LHS = NA  DW = .8
     RANGE: 1961 Q1 TO 1975 Q4   NOB = 60   ESTIMATED:  1/78
```

86. (CM1) MONEY SUPPLY - M1

```
LOG(CM1/CPGNP)   =  -1.53555   +  LAGCOEF1 * (LOG(CGNP(I)))   +  LAGCOEF2 * (LOG(1 + CRS(I)/100))
                     (1.31258)

      +  .03388 * D7541   +  .022883 * D8041   +  .025735 * D8131
         (3.28628)           (2.23858)           (2.49289)

     CRSQ  = .97  S.E.R. =  .014  MEAN LHS = 2.42  RHO =  .989 (161.5)
     RANGE: 1969 Q1 TO 1983 Q1   NOB = 56   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.439	2.347	-0.633	6.987
(-1)	0.371	1.941	-0.543	6.987
(-2)	NA	NA	-0.452	6.987
(-3)	NA	NA	-0.362	6.987
(-4)	NA	NA	-0.271	6.987
(-5)	NA	NA	-0.181	6.987
(-6)	NA	NA	-0.090	6.987
SUM:	0.810		-2.532	

87. (CSD) SAVINGS DEPOSITS

```
CSD/CNHVNSA   =  .099535   +  .001554 * Q2   -  .000671 * Q3   -  .000619 * Q4
                   (9.42654)    (2.03374)        (1.05583)        (.549044)

      -  .004279 * CCVNSA/CNHVNSA   +  LAGCOEF1 * (CRS(I))
         (.272794)

     CRSQ  = .997  S.E.R. =  .002  MEAN LHS = .182  RHO =  .958 (265.9)
     RANGE: 1970 Q3 TO 1982 Q4   NOB = 49   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT
(-0)	0.000	3.122
(-1)	0.000	3.122
(-2)	0.000	3.122
(-3)	0.000	3.122
(-4)	0.000	3.122
(-5)	0.000	3.122
(-6)	0.000	3.122
(-7)	0.000	3.122
SUM:	0.002	

88. (CND) NOTICE DEPOSITS

CND/CNMVNSA = -.043827 - .004238 * Q2 - .010941 * Q3 - .005664 * Q4
(15.3) (3.1) (7.7) (4.1)

+ .129316 * CGNPVNSA/CNMVNSA + .000801 * (CRS - URS) - .000983 * D62233 * CDEFIXE2
(31.2) (1.3) (3.2)

CRSQ = .957 S.E.R. = .004 MEAN LHS = NA DW = .52
RANGE: 1961 Q1 TO 1975 Q4 NOB = 60 ESTIMATED: 1/78

89. (CDD) DEMAND DEPOSITS HELD BY RESIDENTS

CDD = CM1 - CCUR + CDDER

90. (CTD) TIME DEPOSITS HELD BY RESIDENTS

CTD = CSD + CND

91. (CM2) MONEY SUPPLY - M2

CM2 = CM1 + CTD

92. (CPCHM1) PERCENTAGE CHANGE IN M1 - ANNUAL RATE

CPCHM1 = DEL(LOG(CM1)) * 400

C.III.B. PRIVATE BANKING SECTOR AND INTEREST RATES

93. (CRS) SHORT-TERM INTEREST RATE - 90-DAY FINANCE COMPANY PAPER

CRS = URS - UPCHP + CPCHP + CRSER

94. (CRL) LONG-TERM INTEREST RATE - GOVT. OF CANADA BONDS - 10 YEARS

CRL = 2.81127 + LAGCOEF1 * (CRS(I))
(4.51878)

CRSQ = .977 S.E.R. = .429 MEAN LHS = 8.623 RHO = .83 (12.5)
RANGE: 1964 Q1 TO 1982 Q4 NOB = 75 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.198	11.413
(-1)	0.165	11.413
(-2)	0.132	11.413
(-3)	0.099	11.413
(-4)	0.066	11.413
(-5)	0.033	11.413
SUM:	0.695	

C.III.C. MONETARY AUTHORITIES

95. (CRR) REQUIRED RESERVES (QUASI IDENTITY)

```
CRR   =  -.059145   +  1.00219 * (CA * CDD + CB * CTD)/100
        (.446071)     (24.5462)

     CRSQ  = .997  S.E.R. =  .109  MEAN LHS = 3.022  RHO =  1.144 (43.9)
     RANGE: 1960 Q3 TO 1982 Q4   NOB = 89   ESTIMATED:  4/85
```

96. (CNGP) NET GOVERNMENT POSITION OF THE MONETARY AUTHORITIES

```
CNGP = CNGP(-1) + CDNGP/4
```

97. (CRF) CENTRAL BANK BALANCE SHEET - USES

```
CBU = CRR + CRF + CCUR
```

98. (CBU) CENTRAL BANK BALANCE SHEET - SOURCES

```
CBU = (CNFAGACT(-1) + CNFAGACT) * 0.5 + CSDRVAL + CNGP + COTH
```

C.IV. PRICES AND SUPPLY

C.IV.A PRICES

99. (CP) ABSORPTION DEFLATOR

```
LOG(CP)   =  -.947848   +  LAGCOEF1 * (LOG(CW(I)))
               (6.72366)

        +  LAGCOEF2 * (LOG(OPOIL72(I)/CEI(I))) + 0.23 * LOG(CPMNOIL)

        +  .007480 * LOG(CP(-1) * LOG(1 + ( IF CUCNR(-1) LE 0 THEN 1.000000E - 06 ELSE CUCNR(-1))))
           (1.73381)

        -  .000405 * Q1   +  .001764 * Q2   +  .002109 * Q3
           (.238229)         (.85138)          (1.22265)

      CRSQ  = .999  S.E.R. =  .006  MEAN LHS = .417  RHO =  .943 (45.8)
      RANGE: 1973 Q1 TO 1983 Q1   NOB = 40   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.445	2.985	0.015	1.930
(-1)	0.251	1.757	0.010	1.319
SUM:	0.697		0.025	

100. (CP1) PROXY FOR ONE-PERIOD-AHEAD INFLATION RATE

```
CP1 = (CPEXP/100 + 1) * CP(-3)
```

101. (CPCPI) CONSUMER PRICE INDEX

```
LOG(CPCPI) = LOG(CP) + CPCPIER
```

102. (CPXGUV) EXPORT UNIT VALUE INDEX

```
LOG(CPXGUV)   =  .081678 + LOG(CPDOM)   -  .285795 * LOG(CPDOM(-1) * CEI(-1)/CFPXFTW(-1))
                 (1.36194)                (2.34369)

        +  .304655 * (1/CFUNFTW(-1))   +  .011976 * Q1   -  .009524 * Q2   +  .001093 * Q3
           (1.33873)                     (1.43498)         (1.01365)         (.136961)

      CRSQ  = .898  S.E.R. =  .027  MEAN LHS = .21  RHO =  .834 (14.3)
      RANGE: 1973 Q1 TO 1982 Q4   NOB = 39   ESTIMATED:  4/85
```

103. (CPMGUV) IMPORT UNIT VALUE INDEX

```
LOG(CPMGUV * CEI)   =  .222234   +  .639454 * LOG(CFPXVMW)   +  .010374 * LOG(CFPXVMW(-1))
                       (1.16952)    (10.6825)                  (.172353)

      CRSQ  = .998  S.E.R. =  .013  MEAN LHS = .424  RHO =  .985 (109.8)
      RANGE: 1970 Q2 TO 1982 Q4   NOB = 50   ESTIMATED:  4/85
```

104. (CPGNP) DEFLATOR FOR GROSS NATIONAL PRODUCT

```
CPGNP = CGNPV/CGNP
```

105. (CPXS) DEFLATOR FOR EXPORTS OF SERVICES

```
LOG(CPXS)   =  -.021650   +  1.07472 * LOG(CP)
              (5.6727)      (123.152)

     CRSQ  = .994  S.E.R. =  .035  MEAN LHS = .118  RHO =  -.023 (.2)
     RANGE: 1961 Q1 TO 1982 Q4   NOB = 87   ESTIMATED:  4/85
```

106. (CPMS) DEFLATOR FOR IMPORTS OF SERVICES

```
LOG(CPMS)   =  -.031576   +  .306747 * LOG(CPMGUV)   +  .655275 * LOG(CPMGUV(-1))
              (1.12235)     (2.59907)                  (5.57292)

     CRSQ  = .996  S.E.R. =  .026  MEAN LHS = .267  RHO =  .854 (14.4)
     RANGE: 1965 Q2 TO 1982 Q4   NOB = 70   ESTIMATED:  4/85
```

107. (CPMGSNI) IMPORT DEFLATOR - NIA BASIS

```
CPMGSNI = CMGSNIV/CMGSNI
```

108. (CPEXP) INFLATIONARY EXPECTATIONS

```
CPEXP = 100 * SUM(J = -11, 0 : 0.87**(-J) * (CPGNP(J ) - CPGNP(J - 4))/CPGNP(J - 4))/SUM ( J = 0
     TO 11 : 0.87**J)
```

109. (CPMNOIL) NON-OIL IMPORT PRICE

```
CPMNOIL = EXP(LOG(CPMGSNI)/0.953342 - (1 - 0.953342)/0.953342 * LOG(OPOIL72/CEI))
```

110. (CPDOM) DEFLATOR FOR IMPLICIT DOMESTIC ABSORPTION (IMPORTS REMOVED) (SA)

```
CPDOM = EXP((LOG(CP) - (1 - CSHARDOM) * LOG(CPMGSNI))/CSHARDOM)
```

111. (CPCHP) PERCENTAGE CHANGE IN PRICE LEVEL - ANNUAL RATE

```
CPCHP = DEL(LOG(CP)) * 400
```

C.IV.B WAGES AND EMPLOYMENT

112. (CW) HOURLY WAGE RATE IN MANUFACTURING

```
(CW - CW(-4)) * 100/CW(-4) - CPEXP    =  6.08925    -  .539436 * CUN
                                        (4.9655)     (3.25698)

     CRSQ  = .805  S.E.R. =  .786  MEAN LHS = 2.442  RHO = 1.016 (7.9)  RHO2 = -.271 (2.1)
     RANGE: 1967 Q1 TO 1983 Q1   NOB = 63   ESTIMATED:  4/85
```

113. (CLF) LABOR FORCE

```
LOG(CLF/CPOP15)   =  -.389051   +  LAGCOEF1 * (LOG(CLE(I)/CPOP15(I)))   +  .001607 * TIME
                    (6.09184)                                            (11.9035)

     CRSQ  = .993  S.E.R. =  .004  MEAN LHS = -.507  RHO =  .704 (8.3)
     RANGE: 1965 Q1 TO 1983 Q1   NOB = 72   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT
(-0)	0.203	5.934
(-1)	0.136	6.970
(-2)	0.081	5.566
(-3)	0.037	2.117
(-4)	0.006	0.291
(-5)	-0.013	0.615
(-6)	-0.021	1.131
(-7)	-0.016	1.459
SUM:	0.412	

114. (CUN) UNEMPLOYMENT RATE

```
CUN = 100 * (CLF - CLE)/CLF
```

115. (CLE) LABOR EMPLOYED

```
LOG(CLE)   =  -1.18327   +  LAGCOEF1 * (DEL(LOG(CLH(I))))   +  .000187 * TIME
               (3.7832)                                       (.702673)

      +  .327184 * LOG(CLH)   +  .661194 * LOG(CLE(-1))
        (4.60451)               (11.6232)

     CRSQ  = .998  S.E.R. =  .003  MEAN LHS = 2.285  DW = 1.302
     RANGE: 1972 Q4 TO 1983 Q1   NOB = 42   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT
(-0)	0.031	0.809
(-1)	0.047	0.809
(-2)	0.047	0.809
(-3)	0.031	0.809
SUM:	0.157	

116. (CLH) AVERAGE WEEKLY LABOR HOURS

```
LOG(CGNP + CMGSNI) - LOG(CCU * CK)   =  -.254043    +  .711824 * (LOG(CLH) - LOG(CCU * CK))
                                        (.49139)       (10.1066)

     +  .185155 * (LOG(CMGSNI - CCOL * 365/1000 * 2.32562) - LOG(CCU * CK))
        (4.20951)

     +  LAGCOEF1 * ((LOG(CCOL(I) * 365/1000 * 2.32562) - LOG(CCU(I) * CK(I))))   +  .000962 * TIME
                                                                                    (1.63757)

     -  .001965 * Q1   -  .002075 * Q2   +  .003277 * Q3
        (.574836)         (.48323)         (.995808)
```

CRSQ = .966 S.E.R. = .006 MEAN LHS = -5.295 RHO = .835 (11.3)
RANGE: 1972 Q4 TO 1983 Q1 NOB = 41 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.022	0.867
(-1)	0.046	1.716
SUM:	0.068	

117. (CPCHW) PERCENTAGE CHANGE IN WAGES - ANNUAL RATE

```
CPCHW = DEL(LOG(CW)) * 400
```

C.IV.C CAPACITY AND REAL CAPITAL STOCKS

118. (CCU) CAPACITY UTILIZATION RATE

```
DEL(LOG(CCU)) = DEL(LOG(CGNP/CGNPPOT)) + CCUER
```

119. (CGNPPOT) POTENTIAL GNP (COEFFICIENTS ESTIMATED IN CLH EQUATION)

```
CGNPPOT = - CMGSNI + EXP  (  -.254043 + LOG(98.9 * CK)
                            (.49139)

      +  .711824 * (LOG(CLF * 39.1492) - LOG(98.9 * CK))
         (10.1066)

      +  .185155 * (LOG(CMGSNI - CCOL * 365/1000 * 2.32562) - LOG(98.9 * CK))
         (4.20951)

      +  LAGCOEF1 * ((LOG(CCOL(I) * 365/1000 * 2.32562) - LOG(98.9 * CK)))   +  .000962 * TIME
                                                                               (1.63757)

      -  .001965 * Q1   -  .002075 * Q2   +  .003277 * Q3)
         (.574836)         (.48323)         (.995808)
```

LAG	LAGCOEF1	T-STAT
(-0)	0.022	0.867
(-1)	0.046	1.716
SUM:	0.068	

120. (CKPR) STOCK OF NET PRIVATE RESIDENTIAL CAPITAL - 1972 PRICES

```
CKPR = CKPR(-1) * (1 - 0.04/4) + CIFPR/4 * (1 - 0.04/4)**0.5
```

121. (CKPNR) STOCK OF NET PRIVATE NON-RESIDENTIAL CAPITAL - 1972 PRICES

```
CKPNR = CKPNR(-1) * (1 - 0.06/4) + CIFPNR/4 * (1 - 0.06/4)**0.5
```

122. (CKG) GROSS CAPITAL STOCK - GOVERNMENT

```
CKG = (1 - CSCRG/4) * CKG(-1) + CIFG/4
```

123. (CKP) GROSS CAPITAL STOCK - PRIVATE

```
CKP = CKPR + CKPNR
```

124. (CK) GROSS CAPITAL STOCK - TOTAL

```
CK = CKPR + CKPNR + CKG
```

125. (CECDEP) ECONOMIC DEPRECIATION

```
CECDEP = CBALNR/CLIFENR/((1 - CTRYC) * (CRL/100) + CBALNR /CLIFENR) * (1 - EXP((-((1 - CTRYC) *
     (CRL/100) + CBALNR/CLIFENR)) * (CLIFENR * (1 - 1/CBALNR)))) + EXP((-(CBALNR/CLIFENR)) * (CLIFENR
     * (1 - 1/CBALNR)))/((1 - CTRYC) * (CRL/100) * (CLIFENR - CLIFENR * (1 - 1/CBALNR))) * (EXP(-((1
     - CTRYC) * (CRL/100) * (CLIFENR * (1 - 1/CBALNR)))) - EXP((-((1 - CTRYC) * (CRL /100))) *
     CLIFENR))
```

126. (CUCNR) USER COST OF CAPITAL (NON-RESIDENTIAL)

```
CUCNR = (1 - CTRYC * CECDEP - CGRANTNR) * ((1 - CTRYC) * (CRL /100) - CPEXP/100 + CDECAYNR)/(1 -
     CTRYC)
```

127. (CUCR) USER COST OF CAPITAL (RESIDENTIAL)

```
CUCR = (1 - CGRANTR) * ((1 - CTRY) * (CRL/100) - CPEXP/100 + CDECAYR)
```

C.V. INTERNATIONAL FINANCIAL MARKET

C.V.A. DIRECT INVESTMENT CLAIMS AND LIABILITIES

128. (CLTDC) STOCK OF LONG-TERM DIRECT CLAIMS ON FOREIGNERS

CLTDC = CLTDC(-1) - CDLTDC/4

129. (CLTDL) STOCK OF LONG-TERM DIRECT LIABILITIES TO FOREIGNERS

CLTDL = CLTDL(-1) - CDLTDL/4

C.V.B. OTHER CAPITAL FLOWS

130. (CER) EXCHANGE RATE (INVERTED SHORT-TERM NET FOREIGN ASSET POSITION)

LOG(CER) = LOG(UP1(-1)/CP1(-1)) + 0.03 * (CRS - CPEXP - URS + UPEXP) + CERER

131. (CDNFAP) BOP IDENTITY - SOLVED FOR CHANGE IN NET FOREIGN ASSETS

CDNFAP = CXGV + CXSYV + CXSOV + CXTRANV - CMGV - CMSYV - CMSOV - CMTRANV + CDLTPL + CDLTPC +
CDLTDL + CDLTDC - CDNFAG + CNGKA + CSDRADJ + CBONDADJ

132. (CDLTPC) CHANGE IN LONG-TERM PORTFOLIO CLAIMS ON FOREIGNERS

CDLTPC * (-1) = .071756 - .116714 * Q2 + .019944 * Q3 + .097897 * Q4
(.7) (1.6) (.3) (1.4)

+ .098288 * Q2 * D62233 - .004868 * Q3 * D62233 - .106104 * Q4 * D62233
(1.1) (.1) (1.2)

+ .191468 * (DEL(URL) - DEL(CRL)) + .002121 * (1 - D62233) * DEL(CDEFLOAT)
(2.3) (.5)

- .167442 * D7411
(1.1)

CRSQ = .082 S.E.R. = .174 MEAN LHS = NA RHO = .774 (NA)
RANGE: 1961 Q1 TO 1975 Q4 NOB = 60 ESTIMATED: 1/78

133. (CDLTPL) CHANGE IN LONG-TERM PORTFOLIO LIABILITIES TO FOREIGNERS

CDLTPL = -8.43897 - .326762 * Q2 - .202651 * Q3 + .304315 * Q4 + .155382 * D6732
(1.3) (.9) (.5) (.8) (.2)

+ .589817 * DEL(CRL - URL) - 1.03683 * D6336 - 1.26071 * D65136 + .009407 * CDV6821
(1) (1.7) (2.8) (1.5)

+ 1.01939 * CDV6914 - .579488 * CDVLOBO + .790948 * D6336
(2.3) (.8) (.8)

+ LAGCOEF1 * (DEL(UNW(I))) + LAGCOEF2 * (1/CER(I)) - 1.36929 * D7141
(1.3)

CRSQ = .4442 S.E.R. = 1.001 MEAN LHS = NA DW = 1.31
RANGE: 1961 Q1 TO 1975 Q4 NOB = 60 ESTIMATED: 1/78

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.049	3.400	8.510	1.500
(-1)	0.041	3.400	3.906	1.900
(-2)	0.033	3.400	0.577	0.400
(-3)	0.024	3.400	-1.479	0.500
(-4)	0.016	3.400	-2.260	0.700
(-5)	0.008	3.400	-1.767	0.800
SUM:	0.171		7.486	

134. (CDSTC) CHANGE IN SHORT-TERM CLAIMS ON FOREIGNERS

```
CDSTC * (-1)   =  -.534013   -  .15959 * Q2   +  .952488 * Q3   +  .422901 * Q4
                    (1.7)        (.4)            (3)              (1.1)

      -  .483388 * DEL(CRS)   +  .548676 * DEL(CFRSCF)   +  .756985 * CDV6914
           (2.5)                   (3.4)                     (2.2)

      +  .03535 * (1 - D62233) * DEL(1 : CDEFLOAT)   +  .157137 * DEL(CXGV)   +  .128862 * CDLTPL
           (1.5)                                          (2)                     (1.5)

      -  1.17237 * D7411   +  .282114 * D6336   +  .124081 * D65136   -  1.49324 * D7131
           (1.4)               (.7)                (.5)                  (1.8)

     CRSQ  = .404  S.E.R. =  .771  MEAN LHS = NA  DW = 2.18
     RANGE: 1961 Q1 TO 1975 Q4   NOB = 60   ESTIMATED:  1/78
```

135. (CDSTL) CHANGE IN SHORT-TERM LIABILITIES TO FOREIGNERS

```
CDSTL   =  -.387408   -  .9431 * Q2   -  .324063 * Q3   -  .465823 * Q4   +  .091122 * DEL(CMGV)
             (.2)         (3.6)          (1.9)            (2)              (1.7)

      -  .405627 * CDVXCRIS   -  .114897 * DEL(URS)   +  .264562 * DEL(CMGV) * D62233
           (1.5)                  (1.5)                    (3.2)

      -  .446247 * D65136   -  .913979 * D7411   +  .307055 * CDV6914   +  LAGCOEF1 * (DEL(UNW(I)))
           (3)                 (1.9)                (1.6)

      +  LAGCOEF2 * (1/CER(I))   +  .850235 * D7141
                                      (1.9)

     CRSQ  = .4256  S.E.R. =  .424  MEAN LHS = NA  DW = 2.45
     RANGE: 1961 Q1 TO 1975 Q4   NOB = 60   ESTIMATED:  1/78
```

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.014	3.200	2.138	0.600
(-1)	0.011	3.200	0.140	0.200
(-2)	0.009	3.200	-0.882	0.500
(-3)	0.007	3.200	-0.929	0.500
(-4)	0.005	3.200	NA	NA
(-5)	0.002	3.200	NA	NA
SUM:	0.048		0.468	

136. (CEANDO) ERRORS AND OMMISSIONS

```
CEANDO   =  -1.12337   +  1.53083 * Q2   +  2.19216 * Q3   +  .930365 * Q4
              (4)          (4.4)            (4.6)            (2.6)

      -  .33818 * DEL(1 : CNWVNSA)   -  .528089 * (DEL(CXGV) - DEL(CMGV))
           (3.6)                        (3.1)

      -  .228708 * (CXGV + CXSOV + CXSYV + CXTRANV - CMGV - CMSOV - CMSYV - CMTRANV)
           (2.4)

      -  1.66243 * D7131   +  1.23528 * D7141
           (1.8)              (1.3)

     CRSQ  = .3805  S.E.R. =  .898  MEAN LHS = NA  DW = 2.48
     RANGE: 1961 Q1 TO 1975 Q4   NOB = 60   ESTIMATED:  1/78
```

137. (CLTPC) STOCK OF LONG-TERM PRIVATE PORTFOLIO CLAIMS ON FOREIGNERS

```
CLTPC = CLTPC(-1) - CDLTPC/4
```

138. (CLTPL) STOCK OF LONG-TERM PRIVATE PORTFOLIO LIABILITIES TO FOREIGNERS

```
CLTPL = CLTPL(-1) - CDLTPL/4
```

139. (CSTC) STOCK OF PRIVATE SHORT-TERM CLAIMS ON FOREIGNERS

CSTC = CSTC(-1) - CDSTC/4

140. (CSTL) STOCK OF PRIVATE SHORT-TERM LIABILITIES TO FOREIGNERS

CSTL = CSTL(-1) - CDSTL/4

141. (CFC) STOCK OF CLAIMS ON FOREIGNERS

CFC = CSTC + CLTPC + CLTDC + CNFAG + CNGK

142. (CFCP) PORTFOLIO CLAIMS ON FOREIGNERS

CFCP = CFC - CLTDC

143. (CFL) STOCK OF LIABILITIES TO FOREIGNERS

CFL = - (CSTL + CLTPL + CLTDL)

144. (CFLP) PORTFOLIO LIABILITIES TO FOREIGNERS

CFLP = CFL + CLTDL

C.V.C. EXCHANGE RATE RELATIONSHIPS

145. (CEILEAD) LED SPOT EXCHANGE RATE INDEX

```
CEILEAD   =  .588345 + D62233   *  -.241018   + LAGCOEF1 * (CEI(I-1))
              (4.6)                 (.6)

      +  LAGCOEF2 * (CEI(I-1)) * D62233   +  LAGCOEF3 * (CDNFAG(I))

      +  LAGCOEF4 * (CDNFAG(I)) * D62233   +  .055166 * CNGP   -  .056381 * CNGP(-1) +
                                               (2.7)               (2.6)

      (  -.090475 * CNGP   +  .091187 * CNGP(-1)) * D62233
        (3.1)                 (3.1)
```

CRSQ = .923 S.E.R. = .01 MEAN LHS = NA DW = 1.33
RANGE: 1961 Q1 TO 1975 Q4 NOB = 60 ESTIMATED: 1/78

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT	LAGCOEF3	T-STAT	LAGCOEF4	T-STAT
(-0)	1.133	5.600	-0.093	0.100	0.016	5.000	-0.013	3.200
(-1)	-0.226	0.800	0.574	0.500	0.005	1.000	-0.005	0.900
(-2)	-0.511	2.500	-0.253	0.400	-0.007	2.300	0.006	1.500
SUM:	0.396		0.228		0.013		-0.013	

146. (CDEFLOAT) PROXY FOR EXPECTED EXCHANGE RATE CHANGE (FLOATING RATE)

```
CDEFLOAT = (CEI/CEILEAD - 1) * 400
```

147. (CDEFIXE2) PROXY FOR EXPECTED EXCHANGE RATE CHANGE (FIXED RATE)

```
CDEFIXE2 = CMGV(-1)/(CNFAG(-1) + CNFAG(-2)) * 2
```

148. (CEI) SPOT EXCHANGE RATE INDEX

```
CER = CEI * 1.00937
```

C.VI. OFFICIAL INTERVENTION AND BALANCE OF PAYMENTS

149. (CDNFAG) CHANGE IN NET FOREIGN ASSETS OF GOVERNMENT

```
CDNFAG = (1 - D764I) *   (  2.2169    +  42.6951 * (CER/CER(-1) - 1)
                          (1.15)       (3.23)

       -  .4093 * CNFAG(-1)) + D764I * (    -  69.6424    -  77.7637 * (-CER)    -  1.33295 * CNFAG(-1))
         (-1.16)                            (-2.4)        (-2.34)                 (-2.56)

     CRSQ  = .376  S.E.R. =  2.84  MEAN LHS = NA  DW = 1.74
     RANGE: 1970 Q3 TO 1980 Q2   NOB = 40   ESTIMATED:  1/81
```

150. (CNGK) STOCK OF GOVERNMENT ASSETS

```
CNGK = CNGK(-1) - CNGKA/4
```

151. (CNFAG) STOCK OF NET FOREIGN ASSETS OF MONETARY AUTHORITIES

```
CNFAG = CNFAG(-1) + CDNFAG/4
```

C.VII. FOREIGN VARIABLES (WEIGHTED AVERAGES)

152. (CFPXVMW) FOREIGN EXPORT PRICE (VARIABLE IMPORT WEIGHTS)

```
CFPXVMW = UPXGUV**CWTM2U * (GPXGUV * GEI)**CWTM2G * (EPXGUV * EEI)**CWTM2E * (JPXGUV *
     JEI)**CWTM2J * ROWPXG**CWTM2R * CPMGOL**CWTM2O
```

153. (CFRSCF) FOREIGN SHORT-TERM INTEREST RATE - FOREIGN CLAIMS

```
CFRSCF = 0.268 * URS + 0.732 * RED
```

154. (CFPXFTW) FOREIGN EXPORT PRICE (FIXED TRADE WEIGHTS)

```
CFPXFTW = UPXGUV**0.328571 * (GPXGUV * GEI)**0.3 * (EPXGUV * EEI )**0.171429 * (JPXGUV * JEI)**0.2
```

155. (CFUNFTW) FOREIGN UNEMPLOYMENT RATE (FIXED TRADE WEIGHTS)

```
CFUNFTW = UUN**0.328571 * GUN**0.3 * EUN**0.171429 * JUN**0.2
```

U.K. MODEL: DOMESTIC REAL SIDE

E.I.A. DOMESTIC SPENDING AND DISPOSABLE INCOME

156. (EC) PRIVATE CONSUMPTION EXPENDITURE - 1972 PRICES

```
DEL(4 : LOG(EC))   =  .032238   +  .1797 * DEL(4 : LOG(EYD))   +  .085653 * DEL(4 : LOG(EYD(-1)))
                      (1.78347)    (3.37623)                     (1.65093)

      +  .013885 * EDVCONS   +  .135179 * LOG(EYD(-4)/EC(-4))
         (3.20061)              (2.24358)

      -  .005657 * SUM(K = -2, 0 : ERSLA(K - 1))/4
         (3.04148)
```

CRSQ = .688 S.E.R. = .015 MEAN LHS = .015 RHO = .633 (6.4)
RANGE: 1965 Q1 TO 1982 Q4 NOB = 71 ESTIMATED: 4/85

157. (EIFPNR) PRIVATE NONRESIDENTIAL INVESTMENT - 1972 PRICES

```
EIFPNR   =  -.67041 + EDECAYNR * EKPNR(-1)
            (.993116)

      +  .812799 * (EIFPNR(-1) - EDECAYNR * EKPNR(-2)) + 0.03 * DEL(EGDP)
         (11.2074)

      +  LAGCOEF1 * (EUCNR(I))   +  .011780 * ECU
                                    (1.58856)
```

CRSQ = .428 S.E.R. = .438 MEAN LHS = 1.821 RHO = -.482 (4.4)
RANGE: 1965 Q3 TO 1982 Q4 NOB = 69 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	-0.595	1.866
(-1)	-0.476	1.866
(-2)	-0.357	1.866
(-3)	-0.238	1.866
(-4)	-0.119	1.866
SUM:	-1.785	

158. (EIHP) PRIVATE RESIDENTIAL CONSTRUCTION INVESTMENT - 1972 PRICES

```
EIHP   =  -.665754 + EDECAYR * EKHP(-1)   +  LAGCOEF1 * (EYD(I-1))   -  .089813 * EUCR(-1) * 100.
          (1.03583)                                                     (3.06358)

      +  LAGCOEF2 * (EPEXP(I))   -  .057971 * Q1   +  .072273 * Q2   +  .001761 * Q3
                                    (2.04245)        (2.12811)        (.059341)
```

CRSQ = .685 S.E.R. = .099 MEAN LHS = 1.13 RHO = .53 (4.5)
RANGE: 1966 Q4 TO 1982 Q4 NOB = 64 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.011	1.427	-0.017	0.841
(-1)	0.014	3.581	-0.024	2.330
(-2)	0.013	2.542	-0.025	1.659
(-3)	0.011	1.706	-0.021	1.490
(-4)	0.005	0.832	-0.010	2.453
(-5)	-0.003	0.367	0.006	0.310
SUM:	0.051		-0.091	

159. (ECCAV) CAPITAL CONSUMPTION ALLOWANCE - CURRENT PRICES

ECCAV/EPGNP = -1.83122 + .096595 * EKP(-1)
(2.03306) (10.7948)

CRSQ = .998 S.E.R. = .073999 MEAN LHS = 6.71 RHO = .94 (20.6)
RANGE: 1965 Q2 TO 1982 Q4 NOB = 70 ESTIMATED: 4/85

160. (EGDP) GROSS DOMESTIC PRODUCT - 1972 PRICES

EGDP = (EC + EIF + EII + EG + EXGSNI - EMGSNI - EFCAV/EPFCA) * EGDPSW + EADJ

161. (EGDPV) GROSS DOMESTIC PRODUCT - CURRENT PRICES

EGDPV = (ECV + EIFV + EII * EP + EGV + EXGSNIV - EMGSNIV - EFCAV) * EGDPVSW + EADJV

162. (EGDPVNSA) GROSS DOMESTIC PRODUCT - CURRENT PRICES (NSA)

EGDPVNSA = EGDPV/ESAFGDPV

163. (EGNP) GROSS NATIONAL PRODUCT - 1972 PRICES

EGNP = EGDP

164. (EGNPV) GROSS NATIONAL PRODUCT - CURRENT PRICES

EGNPV = EGDPV

165. (ECV) PRIVATE CONSUMPTION EXPENDITURE - CURRENT PRICES

ECV = EC * EP

166. (ECVNSA) PRIVATE CONSUMPTION EXPENDITURE - CURRENT PRICES (NSA)

ECVNSA = ECV/ESAFCV

167. (EIF) TOTAL FIXED INVESTMENT - 1972 PRICES

EIF = EIFP + EIFGG + EIFPG

168. (EIFV) TOTAL FIXED INVESTMENT - CURRENT PRICES

EIFV = EIF * EP

169. (EIFP) PRIVATE FIXED INVESTMENT - 1972 PRICES

EIFP = EIFPNR + EIHP

170. (EIFPVNSA) PRIVATE FIXED INVESTMENT - CURRENT PRICES (NSA)

EIFPVNSA = EIFP * EP/ESAFIFPV

171. (EIIVNSA) EGDPV (NSA) - DETERMINES INVENTORY INVESTMENT

EGDPVNSA = ECVNSA + EIFV/ESAFIFV + EIIVNSA + EGVNSA + EXGSNIVS - EMGSNIVS - EFCAIV

172. (EYDVNSA) DISPOSABLE INCOME PROXY - CURRENT PRICES (NSA)

EYDVNSA = EGDPVNSA - ECCAV - ETV + ETRANV

173. (EYDV) DISPOSABLE INCOME PROXY - CURRENT PRICES

EYDV = EYDVNSA * ESAFYDV

174. (EYD) DISPOSABLE INCOME PROXY - (1972 PRICES)

EYD = (EYDV + ETEAV)/EP

175. (EPCHGNP) PERCENTAGE CHANGE IN GNP - ANNUAL RATE

EPCHGNP = DEL(LOG(EGNP)) * 400

E.I.B. GOVERNMENT SECTOR

176. (ETRANV) GOVERNMENT TRANSFERS TO PRIVATE SECTOR

ETRANV/(EPOP * EP) = .000151 (2.58912) + .002015 (4.93293) * EUN * ELF/100/EPOP
+ .85915 (1.00607) * (EKLBG + EKLBG(-1) + EKGSP + EKGSP(-1))/2 * SUM(J = -20, 0 : ERLM(J)/100)/21/(EPOP * EP)

CRSQ = .529 S.E.R. = 0 MEAN LHS = 0 RHO = .305 (2.1)
RANGE: 1971 Q1 TO 1982 Q4 NOB = 47 ESTIMATED: 4/85

177. (ETV) TOTAL GOVERNMENT REVENUE - CURRENT PRICES

ETV - ETEV - EXTRANGV = 3.76819 (.896309) + .923967 (2.60238) * ETRY * EGDPVNSA - .268911 (1.05314) * ETRYC * EGDPVNSA
+ 2.12876 (4.21859) * EQOL * 0.365 * OPOIL/EER + 16.6437 (8.70191) * Q1 - .88834 (.469707) * Q2 + 5.47684 (2.99126) * Q3

CRSQ = .959 S.E.R. = 4.066 MEAN LHS = 41.984 DW = 2.513
RANGE: 1973 Q2 TO 1983 Q1 NOB = 40 ESTIMATED: 4/85

178. (ETEAV) TAXES ON EXPENDITURES (VAT)

ETEAV - ETPROV = -2.98607 (5.82005) + .278756 (51.703) * ECV

CRSQ = .979 S.E.R. = 1.892 MEAN LHS = 20.163 DW = .188
RANGE: 1969 Q1 TO 1983 Q1 NOB = 57 ESTIMATED: 4/85

179. (ETPROV) CUSTOMS DUTIES

ETPROV = .195385 (5.07322) + .017984 (20.4353) * EMGV - .107899 (2.67357) * Q1 - .080996 (1.97285) * Q2 - .030290 (.737425) * Q3

CRSQ = .883 S.E.R. = .109 MEAN LHS = .645 DW = 1.172
RANGE: 1969 Q1 TO 1983 Q1 NOB = 57 ESTIMATED: 4/85

180. (EGV) GOVERNMENT EXPENDITURES - CURRENT PRICES

EGV = EG * EP

181. (EGVNSA) GOVERNMENT EXPENDITURES - CURRENT PRICES (NSA)

EGVNSA = EGV/ESAFGV

182. (ETEV) TAXES ON EXPENDITURES (VAT) (NSA)

ETEV = ETEAV/ESAFTEV

183. (EGDEF) GOVERNMENT DEFICIT - NIA BASIS (PSBR)

EGDEF = EGVNSA + ETRANV - ETV + EIFGG * EP/ESAFIFGV

184. (EFCAV) FACTOR COST ADJUSTMENT - CURRENT PRICES

EFCAV = ETEAV - EESABV

185. (EFCA1V) FACTOR COST ADJUSTMENT - CURRENT PRICES (NSA)

EFCA1V = EFCAV/ESAFFCAV

186. (EESABV) SUBSIDIES (NIA) - CURRENT PRICES

EESABV = EESAB * EPFCA

E.I.C. PRIVATE SAVINGS AND WEALTH

187. (EDNWNSA) CHANGE IN NET WORTH - CURRENT PRICES (NSA)

```
EDNWNSA = EXGSNIVS - EMGSNIVS + EXTRANV - EMTRANV + EGDEF + EIFPVNSA + EIIVNSA - ECCAV + EIFPG *
     EP/ESAFIFGV
```

188. (EDNW) CHANGE IN NET WORTH - CURRENT PRICES

```
EDNW = EDNWNSA + ESAFDNW
```

189. (ENWNSA) NET WORTH (NSA)

```
ENWNSA = ENWNSA(-1) + EDNWNSA * 0.25
```

190. (ENW) NET WORTH

```
ENW = ENW(-1) + EDNW * 0.25
```

E.II. CURRENT ACCOUNT

E.II.A. IMPORTS OF GOODS

191. (ECOL) OIL CONSUMPTION - VOLUME (MBD)

```
LOG(ECOL)   =  -3.06821   +  LAGCOEF1 * (LOG(OPOIL(I)/(EP(I) * EER(I)))) + LOG(EGDP)
                (-18.2816)

      +  .0637 * Q1   -  .10554 * Q2   -  .208155 * Q3
        (4.17411)       (-6.24544)       (-14.2302)

     CRSQ  = .94814  S.E.R. =  .0356  MEAN LHS = NA  RHO =  .7306 (NA)
     RANGE: 1975 Q1 TO 1980 Q4   NOB = 24   ESTIMATED:  5/82
```

LAG	LAGCOEF1	T-STAT
(-0)	-0.220	-2.199
(-1)	-0.129	-3.192
(-2)	-0.062	-1.057
(-3)	-0.019	-0.370
SUM:	-0.431	

192. (XCEV) CANADIAN GOODS EXPORTS TO THE U.K. ($ U.S.)

```
LOG(XCEV/(CPXGUV * CEI))   =  -3.04045   +  1.10463 * LOG(EGDP)
                               (.752209)     (1.06125)

      +  LAGCOEF1 * (LOG(CPXGUV(I-4) * CEI(I-4)/(EPWPI(I-4) * EEI(I-4))))   -  .015819 * TIME
                                                                              (3.47048)

      -  .027776 * Q1   +  .058893 * Q2   -  .081756 * Q3
        (.703991)         (1.36915)        (2.15889)

     CRSQ  = .535  S.E.R. =  .102  MEAN LHS = .091999  RHO =  .401 (2.2)
     RANGE: 1973 Q1 TO 1982 Q4   NOB = 39   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT
(-0)	-0.214	0.581
(-1)	-0.260	0.567
(-2)	-0.206	0.574
SUM:	-0.680	

193. (MEGV) U.K. GOODS IMPORTS FROM GERMANY ($ U.S.)

```
LOG(MEGV/(GPXGUV * GEI))   =  -6.6391   +  1.52166 * LOG(EGDP)
                               (2.4871)     (2.19211)

      +  LAGCOEF1 * (LOG(GPXGUV(I) * GEI(I)/(EPWPI(I) * EEI(I))))

      +  LAGCOEF2 * (LOG(JPXGUV(I) * JEI(I)/(EPWPI(I) * EEI(I))))   +  .019306 * TIME
                                                                       (3.83477)

      +  .011098 * Q1   +  .001683 * Q2   -  .047731 * Q3
        (.409361)         (.060376)        (2.15686)

     CRSQ  = .952  S.E.R. =  .07  MEAN LHS = 1.274  RHO =  .691 (5.1)
     RANGE: 1972 Q1 TO 1982 Q4   NOB = 43   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	-0.324	1.174	0.165	0.624
(-1)	-0.124	0.766	0.120	0.856
(-2)	-0.024	0.128	0.098	0.529
(-3)	-0.023	0.165	0.097	0.675
(-4)	-0.121	0.493	0.118	0.428
SUM:	-0.617		0.598	

194. (XJEV) JAPANESE GOODS EXPORTS TO THE U.K. ($ U.S.)

LOG(XJEV/(JPXGUV * JEI)) = -4.77128 + LOG(EGDP)
(22.046)

+ LAGCOEF1 * (LOG(JPXGUV(I) * JEI(I)/(EPWPI(I) * EEI(I)))) + .010469 * TIME
(4.36375)

CRSQ = .837 S.E.R. = .113 MEAN LHS = -3.896 DW = 2.037
RANGE: 1973 Q1 TO 1982 Q4 NOB = 40 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	-0.040	2.460
(-1)	-0.074	2.635
(-2)	-0.103	2.870
(-3)	-0.126	3.201
(-4)	-0.143	3.694
(-5)	-0.154	4.475
(-6)	-0.159	5.707
(-7)	-0.158	6.671
(-8)	-0.152	4.946
(-9)	-0.140	2.834
(-10)	-0.122	1.619
SUM:	-1.371	

195. (XUEV) U.S. GOODS EXPORTS TO THE U.K. ($ U.S.)

LOG(XUEV/UPXGUV) = -5.18255 + 1.56169 * LOG(EGDP)
(5.42017) (6.6403)

+ LAGCOEF1 * (LOG(EPXGUV(I) * EEI(I)/UPXGUV(I))) + .019865 * Q1 + .018735 * Q2
(.708276) (.59313)

- .076014 * Q3
(2.71475)

CRSQ = .864 S.E.R. = .101 MEAN LHS = 1.114 RHO = .45 (4.3)
RANGE: 1965 Q1 TO 1982 Q4 NOB = 71 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.143	0.484
(-1)	0.389	2.705
(-2)	0.445	2.018
(-3)	0.313	2.185
(-4)	-0.010	0.033
SUM:	1.280	

196. (XREV) REST OF WORLD GOODS EXPORTS TO THE U.K. ($ U.S.)

LOG((XREV - EMGOLV * EER)/ROWPXG) = -6.52666 + 2.29064 * LOG(EGDP)
(5.33373) (7.72401)

+ LAGCOEF1 * (LOG(ROWPXG(I-1)/(EPWPI(I-1) * EEI(I-1)))) - .242811 * D811I
(9.235)

CRSQ = .753 S.E.R. = .062 MEAN LHS = 2.704 RHO = .202 (1.1) RHO2 = -.231 (1.3)
RANGE: 1973 Q1 TO 1982 Q4 NOB = 38 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	-0.085	5.530
(-1)	-0.137	5.530
(-2)	-0.154	5.530
(-3)	-0.137	5.530
(-4)	-0.085	5.530
SUM:	-0.598	

197. (EMGOL) OIL IMPORTS - VOLUME (MBD)

EMGOL = ECOL + EXGOL + DEL(ESOL)/DAYSQ - EQOL + EMGOLER

198. (EMGOLV) OIL IMPORTS - VALUE (QUASI-IDENTITY)

EMGOLV * 250/EMGOL/DAYSQ = -.383908 (-1.38099) + .66463 * OPOIL/EER (5.9498) + .43708 * OPOIL(-1)/EER(-1) (3.78953)
- .315374 * Q1 (-1.77807) + .208852 * Q2 (1.08041) + .600376 * Q3 (3.45215)

CRSQ = .97759 S.E.R. = .4094 MEAN LHS = NA RHO = .3753 (NA)
RANGE: 1973 Q1 TO 1980 Q4 NOB = 32 ESTIMATED: 5/82

199. (MECV) U.K. GOODS IMPORTS FROM CANADA ($ U.S.) (QUASI-IDENTITY)

DEL(LOG(MECV)) = .115395 (7.14759) + .802325 * DEL(LOG(XCEV)) (16.1108) - .838766 * LOG(MECV(-1)/XCEV(-1)) (7.94169)

CRSQ = .751 S.E.R. = .069999 MEAN LHS = .007 DW = 1.929
RANGE: 1960 Q3 TO 1982 Q4 NOB = 90 ESTIMATED: 4/85

200. (MEJV) U.K. GOODS IMPORTS FROM JAPAN ($ U.S.) (QUASI-IDENTITY)

DEL(LOG(MEJV)) = -.063084 + 0.8 * DEL(LOG(XJEV)) (3.0839) - .781889 * LOG(MEJV(-1)/XJEV(-1)) (8.9757)

CRSQ = .472 S.E.R. = .18 MEAN LHS = .006 DW = 2.004
RANGE: 1960 Q3 TO 1982 Q4 NOB = 90 ESTIMATED: 4/85

201. (MEUV) U.K. GOODS IMPORTS FROM U.S. ($ U.S.) (QUASI-IDENTITY)

DEL(LOG(MEUV)) = .079481 (6.64008) + .70195 * DEL(LOG(XUEV)) (16.4152) - .672061 * LOG(MEUV(-1)/XUEV(-1)) (7.58039)

CRSQ = .756 S.E.R. = .07 MEAN LHS = .022 DW = 2.191
RANGE: 1960 Q3 TO 1982 Q4 NOB = 90 ESTIMATED: 4/85

202. (MERV) U.K. GOODS IMPORTS FROM REST OF WORLD ($ U.S.) (QUASI-IDENTITY)

DEL(LOG(MERV)) = .054400 (4.7265) + .814961 * DEL(LOG(XREV)) (29.5217) - .422339 * LOG(MERV(-1)/XREV(-1)) (4.32112)

CRSQ = .919 S.E.R. = .018 MEAN LHS = .021 DW = 2.109
RANGE: 1960 Q3 TO 1982 Q4 NOB = 90 ESTIMATED: 4/85

203. (METV) TOTAL U.K. GOODS IMPORTS - DOT BASIS ($ U.S.)

METV = MEUV + MEJV + MEGV + MECV + MERV

204. (EMGV) TOTAL U.K. GOODS IMPORTS - BOP BASIS

EMGV = METV/EER + EMGVER

205. (EMG) TOTAL U.K. GOODS IMPORTS - 1972 PRICES

EMG = EMGV/EPMGUV

E.II.B. EXPORTS OF GOODS

206. (EXGOLV) OIL EXPORTS - VALUE (QUASI-IDENTITY)

```
EXGOLV * 250/EXGOL/DAYSQ   =  .636103   +  .770827 * OPOIL/EER    +  .383008 * OPOIL(-1)/EER(-1)
                              (2.89723)    (7.2399)                 (3.47634)

       +  .18144 * Q1   +  .587903 * Q2   -  .119969 * Q3
         (.87041)         (2.83534)         (-.57577)

     CRSQ  = .98994  S.E.R. =  .4126  MEAN LHS = NA  DW = 1.83
     RANGE: 1973 Q1 TO 1980 Q4   NOB = 32   ESTIMATED:  5/82
```

207. (XEGV) U.K. GOODS EXPORTS TO GERMANY ($ U.S.)

```
MGEV   =  1.03327 * XEGV
         (167)

     CRSQ  = .997  S.E.R. =  .2019  MEAN LHS = NA  RHO =  -.215 (NA)
     RANGE: 1973 Q1 TO 1980 Q1   NOB = 29   ESTIMATED:  1/78
```

208. (EXETV) U.K. GOODS EXPORTS TO OTHER MCM COUNTRIES ($ U.S.)

```
EXETV = XEUV + XECV + XEJV + XEGV
```

209. (XETV) TOTAL U.K. GOODS EXPORTS - DOT BASIS ($ U.S.)

```
XETV = EXETV + XERV
```

210. (EXGV) TOTAL U.K. GOODS EXPORTS - BOP BASIS (QUASI-IDENTITY)

```
DEL(LOG(EXGV)) - DEL(LOG(XETV/EER + (EXGOLV - EXGVADJ)))   =  -.002271   +  .007083 * Q1
                                                             (.8)          (1.8)

      -  .002769 * Q2   -  .003429 * Q3   +  .055648 * DEL(LOG(EFRTL/EEI(-1)))
        (.7)             (.8)              (1.4)

     CRSQ  = .129  S.E.R. =  .011  MEAN LHS = NA  DW = 2.34
     RANGE: 1961 Q3 TO 1975 Q4   NOB = 58   ESTIMATED:  1/78
```

211. (EXG) TOTAL U.K. GOODS EXPORTS - 1972 PRICES

```
EXG = EXGV/(OPOIL72**(EXGOLV/EXGV) * EPXGUV**(1 - EXGOLV/EXGV)) + EXGER2
```

E.II.C. IMPORTS OF SERVICES AND TRANSFERS

212. (EMSOV) IMPORTS OF OTHER SERVICES

LOG(EMSOV/(EFPFW/EERFW)) = -2.18989 (2.73756) + 1.16248 * LOG(EGNP) (6.26717)
+ LAGCOEF1 * (LOG(EP(I)/(EFPFW(I)/EERFW(I))))

CRSQ = .547 S.E.R. = .113 MEAN LHS = 3.783 RHO = .146 (1.1)
RANGE: 1966 Q2 TO 1982 Q4 NOB = 66 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.344	0.804
(-1)	0.154	0.363
SUM:	0.498	

213. (EMSYDV) DIRECT INVESTMENT INCOME PAYMENTS

LOG(EMSYDV/(ERLTDL * EPGNP)) = -.366982 * LOG(EUN) (1.04768)

CRSQ = .994 S.E.R. = .233 MEAN LHS = -2.855 RHO = .989 (78.1)
RANGE: 1968 Q1 TO 1983 Q1 NOB = 60 ESTIMATED: 4/85

214. (EMSYNDV) NON DIRECT INVESTMENT INCOME PAYMENTS

EMSYNDV/EFLP = -.041278 (1.22856) + LAGCOEF1 * (ERS(I)/100) + LAGCOEF2 * (ERL(I)/100)

CRSQ = .752 S.E.R. = .029 MEAN LHS = .152 RHO = .424 (3.3)
RANGE: 1968 Q1 TO 1982 Q4 NOB = 59 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.462	4.705	0.158	2.009
(-1)	0.347	4.705	0.138	2.009
(-2)	0.231	4.705	0.118	2.009
(-3)	0.116	4.705	0.098	2.009
(-4)	NA	NA	0.079	2.009
(-5)	NA	NA	0.059	2.009
(-6)	NA	NA	0.039	2.009
(-7)	NA	NA	0.020	2.009
SUM:	1.156		0.709	

215. (EMTRANV) TRANSFER PAYMENTS - TOTAL

LOG(EMTRANV) = -6.10957 (48.5744) + 1.41304 * LOG(EGNPV) (47.4608)

CRSQ = .983 S.E.R. = .141 MEAN LHS = -.26 RHO = .361 (3.6)
RANGE: 1960 Q1 TO 1983 Q1 NOB = 92 ESTIMATED: 4/85

216. (EMSYV) INVESTMENT INCOME PAYMENTS

EMSYV = EMSYDV + EMSYNDV

217. (EMSV) IMPORTS OF SERVICES - TOTAL

EMSV = EMSOV + EMSYV

218. (EMGSV) IMPORTS OF GOODS AND SERVICES - BOP BASIS

EMGSV = EMSV + EMGV

219. (EMGSNIVS) IMPORTS - NIA BASIS - CURRRENT PRICES (NSA) (QUASI-IDENTITY)

EMGSNIVS = -.02514 + .009311 * Q1 + .007003 * Q2 + .004822 * Q3
(2.3) (1.6) (1.1) (.8)
+ 1.00067 * (EMGV + EMSOV)
(1405.4)

CRSQ = .99997 S.E.R. = .02 MEAN LHS = NA RHO = .539 (NA)
RANGE: 1961 Q1 TO 1975 Q4 NOB = 60 ESTIMATED: 1/78

220. (EMGSNIV) IMPORTS - NIA BASIS - CURRENT PRICES

EMGSNIV = EMGSNIVS * ESAFMNIV

221. (EMGSNI) IMPORTS - NIA BASIS - 1972 PRICES

EMGSNI = (EMG + EMSOV/EPMS) * ESAFMNIV

E.II.D. EXPORTS OF SERVICES AND TRANSFERS

222. (EXSOV) EXPORTS OF OTHER SERVICES

```
LOG(EXSOV/EPGNP)   =  -.680385   +  .64436 * LOG(EFGNPFTW)
                        (2.24489)     (16.1088)

      +  LAGCOEF1 * (LOG(EFPFW(I)/EERFW(I)/EPGNP(I)))

     CRSQ  = .815  S.E.R. =  .09  MEAN LHS = 1.522  DW = 1.755
     RANGE: 1966 Q3 TO 1982 Q4   NOB = 66   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT
(-0)	0.495	1.619
(-1)	0.197	0.654
SUM:	0.693	

223. (EXSYDV) DIRECT INVESTMENT INCOME RECEIPTS

```
LOG(EXSYDV/(ERLTDC * EFPGNPFG/EERFGW))   =  -.701732   -  1.04599 * LOG(EFUNFGW)
                                             (.946796)     (2.22099)

     CRSQ  = .735  S.E.R. =  .128  MEAN LHS = -2.308  RHO =  .81 (6.5)
     RANGE: 1976 Q1 TO 1982 Q4   NOB = 27   ESTIMATED:  4/85
```

224. (EXSYNDV) NON DIRECT INVESTMENT INCOME RECEIPTS

```
EXSYNDV/EFCP   =  .062066   +  LAGCOEF1 * (EFRSFGW(I)/100)
                  (2.82836)

     CRSQ  = .621  S.E.R. =  .018  MEAN LHS = .131  RHO =  .47 (2.6)
     RANGE: 1976 Q1 TO 1982 Q4   NOB = 27   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT
(-0)	0.195	3.389
(-1)	0.171	3.389
(-2)	0.147	3.389
(-3)	0.122	3.389
(-4)	0.098	3.389
(-5)	0.073	3.389
(-6)	0.049	3.389
(-7)	0.024	3.389
SUM:	0.880	

225. (EXTRANPV) PRIVATE TRANSFER RECEIPTS

```
LOG(EXTRANPV)   =  -7.43284   +  1.04157 * LOG(EFGNPVFT)
                    (11.394)     (10.3853)

     CRSQ  = .995  S.E.R. =  .046  MEAN LHS = -.977  RHO =  .912 (16.3)
     RANGE: 1965 Q2 TO 1982 Q4   NOB = 70   ESTIMATED:  4/85
```

226. (EXSYV) INVESTMENT INCOME RECEIPTS

```
EXSYV = EXSYDV + EXSYNDV
```

227. (EXSV) EXPORTS OF SERVICES - TOTAL

EXSV = EXSOV + EXSYV

228. (EXGSV) EXPORTS OF GOODS AND SERVICES

EXGSV = EXGV + EXSV

229. (EXGSNIVS) EXPORTS - NIA BASIS - CURRENT PRICES (NSA) (QUASI-IDENTITY)

EXGSNIVS = .001382 (.1) - .003446 * Q1 (.5) - .015848 * Q2 (2.2) - .001475 * Q3 (.2)
+ 1.00013 * (EXGV + EXSOV) (1040.1)

CRSQ = .99995 S.E.R. = .023 MEAN LHS = NA RHO = .567 (NA)
RANGE: 1961 Q1 TO 1975 Q4 NOB = 60 ESTIMATED: 1/78

230. (EXGSNIV) EXPORTS - NIA BASIS - CURRENT PRICES

EXGSNIV = EXGSNIVS * ESAFXNIV

231. (EXGSNIS) EXPORTS - NIA BASIS - 1972 PRICES (NSA)

EXGSNIS = EXG + EXSOV/EPXS

232. (EXGSNI) EXPORTS - NIA BASIS - 1972 PRICES

EXGSNI = EXGSNIS * ESAFXNIV

233. (EXTRANV) TOTAL TRANSFER RECEIPTS

EXTRANV = EXTRANPV + EXTRANGV

E.II.E. BALANCES

234. (EGBAL) TRADE BALANCE

EGBAL = EXGV - EMGV

235. (ESBAL) BALANCE ON SERVICES

ESBAL = EXSV - EMSV

236. (EGSBAL) BALANCE ON GOODS AND SERVICES

EGSBAL = EXGSV - EMGSV

237. (ENETXNI) NET EXPORTS OF GOODS AND SERVICES (NIA BASIS)-1972 PRICES

ENETXNI = EXGSNI - EMGSNI

238. (ECURBAL) CURRENT ACCOUNT BALANCE

ECURBAL = EXGV + EXSYV + EXSOV + EXTRANV - EMGV - EMSYV - EMSOV - EMTRANV + ECURBALR

239. (ECCURBAL) CUMULATIVE CURRENT ACCOUNT

ECCURBAL = ECURBAL/4 + ECCURBAL(-1)

E.III. DOMESTIC FINANCIAL MARKET

E.III.A. MONETARY AGGREGATES

240. (ECUR) CURRENCY HELD BY RESIDENTS

```
LOG(ECUR)   =  -.417158   +  .016181 * Q1   -  .002599 * Q2   -  .017971 * Q3
                 (1.7)        (1.4)            (.3)             (2.2)

     +  .031635 * EDV714I   -  .039568 * LOG(ERD/ERBD)   -  .064372 * DEL(LOG(ERD))
        (2.6)                  (1.9)                        (2.3)

     +  .270551 * LOG(ECVNSA/EP)   +  .321184 * LOG(EP)   +  .576163 * LOG(ECUR(-1))
        (3)                           (4.1)                  (5.5)

     CRSQ  = .997  S.E.R. =  .016  MEAN LHS = NA  RHO =  .378 (NA)
     RANGE: 1963 Q2 TO 1975 Q4   NOB = 51   ESTIMATED:  1/78
```

241. (EDD) DEMAND DEPOSITS HELD BY RESIDENTS

```
LOG(EDD)   =  -.653463   -  .015046 * Q1   -  .025125 * Q2   -  .010643 * Q3
                (2.2)        (2.1)            (3.5)            (1.5)

     +  LAGCOEF1 * (LOG(EGDPVNSA(I)/EPGDP(I)))   +  LAGCOEF2 * (LOG(EPGDP(I)))

     +  LAGCOEF3 * (LOG(ERSLA(I)))

     CRSQ  = .996  S.E.R. =  .018  MEAN LHS = NA  DW = 1.78
     RANGE: 1963 Q1 TO 1975 Q4   NOB = 52   ESTIMATED:  1/78
```

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT	LAGCOEF3	T-STAT
(-0)	0.434	10.500	0.319	2.400	-0.056	3.900
(-1)	0.290	10.500	0.297	29.400	-0.045	7.400
(-2)	0.145	10.500	0.237	3.200	-0.037	13.000
(-3)	NA	NA	0.138	1.900	-0.031	7.800
(-4)	NA	NA	NA	NA	-0.027	6.200
(-5)	NA	NA	NA	NA	-0.025	6.700
(-6)	NA	NA	NA	NA	-0.024	8.900
(-7)	NA	NA	NA	NA	-0.022	8.100
(-8)	NA	NA	NA	NA	-0.021	5.000
(-9)	NA	NA	NA	NA	-0.018	3.400
(-10)	NA	NA	NA	NA	-0.014	2.600
(-11)	NA	NA	NA	NA	-0.008	2.200
SUM:	0.869		0.991		-0.329	

242. (ETD) TIME DEPOSITS HELD BY RESIDENTS

```
ETD/ENWNSA(-1)   =  -.001009   -  .003669 * Q1   +  .001406 * Q2   +  .000632 * Q3
                      (.1)         (3.5)            (1.1)            (.6)

     +  .092423 * EGDPVNSA(-1)/ENWNSA(-1)   +  .023201 * EDV714I   -  .003976 * (ERD - ERS)
        (2.8)                                  (5.8)                  (1.3)

     -  .000127 * (ERLW - DEL(4 : EP) * 400/EP(-4))   +  .003473 * ERBD   +  .001668 * ERBD(-1)
        (2.1)                                            (4.9)               (2.3)

     CRSQ  = .927  S.E.R. =  .003  MEAN LHS = NA  RHO =  .617 (NA)
     RANGE: 1963 Q2 TO 1975 Q4   NOB = 51   ESTIMATED:  1/78
```

243. (EDTF) OVERSEAS STERLING DEPOSITS AT U.K. BANKS

```
EDTF/EFSFCPD(-1)   =  .066506   -  .005188 * EFRL   -  .001875 * ERSLA   +  .001057 * EFPRM
                        (3.3)       (4.6)             (3.4)               (2)

     +  .16761 * EMGSNIVS/EFSFCPD(-1)   +  .091234 * EXGSNIVS/EFSFCPD(-1)   +  .003753 * ELTOL(-1)
        (4.9)                              (1.8)                              (1.4)

     -  .005567 * ELTDL(-1)   -  .006096 * EDV66412   +  .009362 * EDV714I   -  .007217 * D7241
        (1.5)                    (4)                     (2.8)                  (1.8)

     -  .004954 * D6631   -  .007454 * D6311(-1)
        (1.3)             (1.9)
```

CRSQ = .96 S.E.R. = .004 MEAN LHS = NA DW = 1.42
RANGE: 1963 Q1 TO 1975 Q4 NOB = 52 ESTIMATED: 1/78

244. (EDOC) RESIDENT NON-STERLING DEPOSITS AT U.K. BANKS

```
EDOC/ENWNSA(-1)   =  .000754   -  .674565 * ELTOC/ENWNSA(-1)   +  .000027 * EPREM(-2)
                       (.8)        (7.6)                          (4)

     +  LAGCOEF1 * (EMGSNIVS(I)/ENWNSA(I-1))
```

CRSQ = .96 S.E.R. = .0003 MEAN LHS = NA RHO = .69 (NA)
RANGE: 1963 Q1 TO 1975 Q4 NOB = 52 ESTIMATED: 1/78

LAG	LAGCOEF1	T-STAT
(-0)	0.063	8.300
(-1)	0.045	24.700
(-2)	0.029	6.300
(-3)	0.014	3.200
SUM:	0.151	

245. (ETDEP) TOTAL LOANABLE FUNDS OF COMMERCIAL BANKS

```
ETDEP = (EDD + ETD + EDTF + EDGB) * (1 - ERR - ECGSD)
```

246. (EDNUK) CHANGE IN TOTAL DEPOSITS AT U.K. BANKS

```
EDNUK = 4 * (DEL(EDD) + DEL(ETD) + DEL(EDOC) + DEL(EDGB) - DEL (EDTR60)) - EDNUKVC
```

247. (EM1) MONEY SUPPLY - M1

```
EM1 = EDD + ECUR - EDTR60
```

248. (EPCHM1) PERCENTAGE CHANGE IN M1 - ANNUAL RATE

```
EPCHM1 = DEL(LOG(EM1)) * 400
```

249. (EM3V) CHANGE IN MONEY SUPPLY - M3

```
EM3V = DEL(ECUR) * 4. + EDNUK + EDNUKVC
```

250. (EM3) MONEY SUPPLY - M3

```
EM3 = EM3(-1) + EM3V * 0.25 + EM3ER
```

251. (EM3S) MONEY SUPPLY - STERLING M3

EM3S = EM3 - EDOC

252. (ECGSD) SPECIAL RATE OF CALL ON BANKS

ECGSD = ECGSD(-1) + EGSD/100.

E.III.B. PRIVATE BANKING SECTOR AND INTEREST RATES

253. (ERS) 91 DAY TREASURY BILL RATE

```
ERS   =  -.596135   +  .951966 * ERD   +  .06894 * RED   +  .004287 * EPREM(-2)
        (8.7)        (62.9)            (5.1)             (2.8)

     CRSQ  = .996  S.E.R. =  .158  MEAN LHS = NA  DW = 1.47
     RANGE: 1961 Q1 TO 1975 Q4   NOB = 60   ESTIMATED:  1/78
```

254. (ERSLA) LOCAL AUTHORITIES TEMPORARY LOAN RATE - 3 MONTH

```
ERSLA   =  .425229   +  1.25928 * ERS   +  .121146 * RED   -  .329308 * EKLBG
          (2.2)       (17.6)            (3.1)             (4.7)

      +  LAGCOEF1 * (ERSLA(I-1))   +  .092539 * ETDEP(-1)
                                     (4.7)

     CRSQ  = .984  S.E.R. =  .346  MEAN LHS = NA  DW = 1.547
     RANGE: 1963 Q2 TO 1975 Q4   NOB = 51   ESTIMATED:  1/78
```

LAG	LAGCOEF1	T-STAT
(-0)	-0.052	1.000
(-1)	-0.068	4.000
(-2)	-0.064	3.500
(-3)	-0.042	2.300
SUM:	-0.227	

255. (ERBD) RATE ON LONDON CLEARING BANK DEPOSIT ACCOUNTS

```
DEL(ERBD)   =  -.010738   +  .139375 * DEL(RED)   +  .455781 * DEL(ERSLA)   +  .263249 * DEL(ERD)
              (.1)         (2.5)                   (4.2)                     (1.7)

      -  .288056 * DEL(ETD)   +  .278428 * DEL(ETD(-1))
        (2)                     (2.1)

     CRSQ  = .757  S.E.R. =  .403  MEAN LHS = NA  DW = 1.93
     RANGE: 1963 Q3 TO 1975 Q4   NOB = 50   ESTIMATED:  1/78
```

256. (ERL) 2-1/2% CONSOL RATE

```
ERL   =  -.251081   +  1.02058 * ERLW
        (5.8)        (221.2)

     CRSQ  = .999  S.E.R. =  .097  MEAN LHS = NA  DW = 2.38
     RANGE: 1963 Q1 TO 1975 Q4   NOB = 52   ESTIMATED:  1/78
```

257. (ERLW) 3-1/2% WAR LOAN RATE

ERLW = 4.06436 (1.70843) + LAGCOEF1 * (ERSLA(I))

CRSQ = .93 S.E.R. = .709 MEAN LHS = 10.271 RHO = .917 (18.7)
RANGE: 1964 Q1 TO 1983 Q2 NOB = 77 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.099	3.561
(-1)	0.090	3.641
(-2)	0.082	3.692
(-3)	0.074	3.682
(-4)	0.066	3.560
(-5)	0.057	3.279
(-6)	0.049	2.826
(-7)	0.041	2.259
(-8)	0.033	1.668
(-9)	0.024	1.127
(-10)	0.016	0.667
(-11)	0.008	0.289
SUM:	0.639	

258. (ERLHZ) BUILDING SOCIETIES MORTGAGE RATE

ERLHZ = 111.211 (3.4) + 15.1849 * EDV714I (4.3) + .953204 * ERD (1.5) + 4.93138 * ERLW(-1) (9.7)
- 3.39524 * EDV714I(-1) * ERLW(-1) (5.1) + 6.91602 * (1 - EDV714I(-1)) * ERD(-1) (3)
+ 7.30576 * EDV714I(-1) * ERD(-1) (3) - 75.1042 * EDV732I (2.4) - 5.66754 * ERD(-1) (2.5)

CRSQ = .971 S.E.R. = 2.793 MEAN LHS = NA DW = 1.37
RANGE: 1963 Q2 TO 1975 Q4 NOB = 51 ESTIMATED: 1/78

E.III.C. PUBLIC SECTOR DEBT

259. (EGDOV) NET AQUISITION OF PUBLIC SECTOR DEBT BY FOREIGNERS

```
EGDOV + EBOF   =  -.022463    +  .590373 * EDLO    -  .009442 * DEL(RMEB(-1) * EFSFCPD(-1))
                    (.4)          (6.5)              (4.1)

      +  .003394 * DEL(ERLW * EFSFCPD)    -  .893156 * EFCECS    +  1.22621 * DEL(PPO(-2))
         (2.8)                               (5.1)                  (2.1)

      +  .00117 * DEL(EFPRM * EFSFCPD)    -  .56772 * D6741
         (2)                                 (1.5)

     CRSQ  = .647  S.E.R. =  .368  MEAN LHS = NA  DW = 2.42
     RANGE: 1963 Q1 TO 1975 Q4   NOB = 52   ESTIMATED:  1/78
```

260. (EGTB) TOTAL SALES OF GOVERNMENT BONDS (GILTS)

```
ELBG = EGDEF - EGSPV - EGDOV - DEL(ECUR) * 4. + EGDEFER
```

261. (EGSPV) CHANGE IN NON-BANK LENDING TO THE PUBLIC SECTOR

```
EGSPV = EGTB - EGDOV
```

262. (EKLBG) STOCK OF BANK LENDING TO THE PUBLIC SECTOR

```
EKLBG = EKLBG(-1) + ELBG * 0.25
```

263. (EKGSP) STOCK OF NON-BANK LENDING TO THE PUBLIC SECTOR

```
EKGSP = EKGSP(-1) + EGSPV * 0.25
```

E.IV. PRICES AND SUPPLY

E.IV.A. PRICES

264. (EP) ABSORPTION DEFLATOR

```
LOG(EP) - 0.25 * LOG(EPMNOIL)   =  -3.55764    +  .159137 * LOG(EW)    +  .287482 * LOG(EW(-1))
                                   (8.66034)      (1.07732)              (1.73034)

      +  .29241 * LOG(EW(-2))    +  .011115 * LOG(OPOIL/EEI)    +  .012761 * LOG(OPOIL(-1)/EEI(-1))
        (2.13275)                  (.618468)                      (.67367)

      +  .006768 * LOG(OPOIL(-2)/EEI(-2))    +  .006614 * LOG(OPOIL(-3)/EEI(-3))    -  .001305 * EUN
        (.336456)                              (.356312)                              (.195038)

      +  .000703 * Q1    +  .000716 * Q2    +  .001433 * Q3
        (.157372)          (.128783)          (.309273)

     CRSQ  = .998  S.E.R. =  .014  MEAN LHS = .613  RHO =  .864 (12.3)
     RANGE: 1973 Q2 TO 1983 Q1   NOB = 39   ESTIMATED:  4/85
```

265. (EPWPI) WHOLESALE PRICE INDEX - MANUFACTURING OUTPUT

```
DEL(LOG(EPWPI)) = DEL(LOG(EPDOM))
```

266. (EPCPI) CONSUMER PRICE INDEX

```
DEL(LOG(EPCPI))   =  .014665   +  .262503 * DEL(LOG(EW))   +  .088993 * DEL(LOG(EPMGSNI))
                    (5.25748)    (3.14437)                  (1.6312)

      -  .058033 * (LOG(EPCPI(-1)) - LOG(EW(-1)))
        (4.23414)

     CRSQ  = .442  S.E.R. =  .012  MEAN LHS = .024  DW = 1.687
     RANGE: 1964 Q1 TO 1982 Q4   NOB = 76   ESTIMATED:  4/85
```

267. (EPXGUV) EXPORT UNIT VALUE INDEX

```
LOG(EPXGUV)   =  .17056 + LOG(EPDOM)   -  .272327 * LOG(EPDOM(-1) * EEI(-1)/EFPXFTW(-1))
                (2.10154)                (4.06517)

      -  .008655 * EUN(-1)   +  .004301 * Q1   +  .009138 * Q2   +  .003618 * Q3
        (1.14955)              (.786013)         (1.4603)          (.679696)

     CRSQ  = .933  S.E.R. =  .022  MEAN LHS = .127  RHO =  .944 (22.5)
     RANGE: 1970 Q2 TO 1982 Q4   NOB = 50   ESTIMATED:  4/85
```

268. (EPMS) DEFLATOR FOR IMPORTS OF SERVICES

```
DEL(LOG(EPMS))   =  .003021   +  .653782 * DEL(LOG(EFPVXMD))
                   (.348475)    (3.14667)

      -  .081469 * (LOG(EPMS(-1)) - LOG(EFPVXMD(-1)))
        (1.63358)

     CRSQ  = .143  S.E.R. =  .056  MEAN LHS = .017  DW = 2.031
     RANGE: 1966 Q2 TO 1982 Q4   NOB = 67   ESTIMATED:  4/85
```

269. (EPXS) DEFLATOR FOR EXPORTS OF SERVICES

```
DEL(LOG(EPXS))   =  -.177365   +  .333651 * DEL(LOG(EW))   -  .191562 * DEL(LOG(EEI))
                    (2.29962)     (1.93756)                  (2.33127)

      -  .040880 * (LOG(EPXS(-1)) - LOG(EW(-1)))
         (2.3881)

     CRSQ  = .199  S.E.R. =  .027  MEAN LHS = .021  DW = 2.094
     RANGE: 1964 Q1 TO 1982 Q4   NOB = 76   ESTIMATED:  4/85
```

270. (EPFCA) FACTOR COST ADJUSTMENT DEFLATOR

```
DEL(LOG(EPFCA))   =  -.000750   -  .326371 * DEL(LOG(EPGDP))
                     (.094623)     (1.32583)

      +  1.09951 * DEL(LOG(ETEAV - EESABV/EGDPV))   -  .040504 * (LOG(EPFCA(-1)) - LOG(EPGDP(-1)))
         (7.98704)                                     (1.35326)

     CRSQ  = .466  S.E.R. =  .039  MEAN LHS = .025  DW = 2.479
     RANGE: 1961 Q2 TO 1983 Q2   NOB = 89   ESTIMATED:  4/85
```

271. (EPMGUV) IMPORT UNIT VALUE INDEX

```
DEL(LOG(EPMGUV * EEI))   =  -.023074   +  1.22628 * DEL(LOG(EFPXVMWD))
                            (2.33434)     (9.84492)

      -  .190945 * (LOG(EPMGUV(-1) * EEI(-1)) - LOG(EFPXVMWD(-1)))   -  .254466 * D7411
         (2.74307)                                                     (5.93639)

     CRSQ  = .725  S.E.R. =  .027  MEAN LHS = .027  DW = 1.909
     RANGE: 1973 Q2 TO 1982 Q4   NOB = 39   ESTIMATED:  4/85
```

272. (EPGDP) DEFLATOR FOR GROSS DOMESTIC PRODUCT

```
EPGDP = EGDPV/EGDP
```

273. (EPGNP) GNP DEFLATOR

```
EPGNP = EGNPV/EGNP
```

274. (EPMGSNI) IMPORT DEFLATOR - NIA BASIS

```
EPMGSNI = EMGSNIV/EMGSNI
```

275. (EPMNOIL) IMPORT DEFLATOR - NON-OIL IMPORT

```
EPMNOIL = EXP(LOG(EPMGSNI)/0.902194 - (1 - 0.902194)/0.902194 * LOG(OPOIL72/EEI))
```

276. (EPDOM) DEFLATOR FOR DOMESTIC ABSORPTION (WITHOUT IMPORTS)

```
EPDOM = EXP((LOG(EP) - (1 - ESHARDOM) * LOG(EPMGSNI))/ESHARDOM)
```

277. (EP1) PROXY FOR ONE-QUARTER-AHEAD EXPECTED INFLATION

```
EP1 = (EPEXP/100 + 1) * EP(-3)
```

278. (EPEXP) INFLATIONARY EXPECTATIONS - MOVING AVERAGE

```
EPEXP = 100 * SUM(K = -11, 0 : 0.87**(-K) * (EPGNP(K ) - EPGNP(K - 4))/EPGNP(K - 4))/SUM ( J = 0
     TO 11 : 0.87**J)
```

279. (EPCHP) PERCENTAGE CHANGE IN PRICE LEVEL - ANNUAL RATE

```
EPCHP = DEL(LOG(EP)) * 400
```

E.IV.B. WAGES AND EMPLOYMENT

280. (EW) HOURLY WAGE RATE IN MANUFACTURING

(EW - EW(-4)) * 100/EW(-4) - EPEXP = -.534397 * EUN
(1.30935)

CRSQ = .827 S.E.R. = 2.181 MEAN LHS = 2.105 RHO = .934 (24.4)
RANGE: 1959 Q4 TO 1983 Q2 NOB = 94 ESTIMATED: 4/85

281. (ELHOURS) LABOUR HOURS (WEEKLY)

LOG(EGNP + EMGSNI) - LOG(ECU * EKP) = -7.60138
(7.42257)

+ .709416 * (LOG(ELE * ELHOURS) - LOG(ECU * EKP))
(4.36712)

+ .151472 * (LOG(EMGSNI - ECOL * 365/1000 * 0.940981) - LOG(ECU * EKP))
(2.47254)

+ .041669 * (LOG(ECOL * 365/1000 * 0.940981) - LOG(ECU * EKP)) + .003328 * TIME
(.51491) (2.40474)

+ .008946 * Q1 + .008434 * Q2 + .004799 * Q3
(1.11642) (.621577) (.244402)

CRSQ = .473 S.E.R. = .014 MEAN LHS = -4.692 DW = 1.85
RANGE: 1973 Q1 TO 1980 Q4 NOB = 32 ESTIMATED: 4/85

282. (EGNPPOT) POTENTIAL GNP (COEFFICIENTS CALCULATED IN ELHOURS EQUATION)

EGNPPOT = - EMGSNI + EXP(LOG(98.2 * EKP) + .709416 * (LOG(ELF * 101.726) - LOG(98.2 * EKP))
(4.36712)

+ .151472 * (LOG(EMGSNI - ECOL * 365/1000 * 0.940981) - LOG(98.2 * EKP))
(2.47254)

+ .041669 * (LOG(ECOL * 365/1000 * 0.94981) - LOG(98.2 * EKP)) + .003328 * TIME
(.51491) (2.40474)

- 7.60138 + .008946 * Q1 + .008434 * Q2 + .004799 * Q3)
(7.42257) (1.11642) (.621577) (.244402)

283. (ELE) EMPLOYMENT

LOG(ELE) = -.808051 - .000099 * TIME + LAGCOEF1 * (LOG(ELHOURS(I) * ELE(I)))
(1.57417) (.921544)

+ .695675 * LOG(ELE(-1))
(7.11389)

CRSQ = .962 S.E.R. = .006 MEAN LHS = 10.014 DW = 1.831
RANGE: 1972 Q2 TO 1983 Q2 NOB = 45 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.053	3.084
(-1)	0.079	3.084
(-2)	0.079	3.084
(-3)	0.053	3.084
SUM:	0.264	

284. (ELF) LABOR FORCE

LOG(ELF/EPOP) = -.63053 (5.83624) + LAGCOEF1 * (LOG(ELE(I)/EPOP(I))) + .001546 * TIME (2.87583)

CRSQ = .95 S.E.R. = .004 MEAN LHS = -.859 RHO = .955 (62.6)
RANGE: 1965 Q1 TO 1983 Q2 NOB = 73 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.372	6.816
(-1)	0.219	6.974
(-2)	0.097	4.765
(-3)	0.005	0.203
(-4)	-0.057	2.082
(-5)	-0.088	3.084
(-6)	-0.089	3.608
(-7)	-0.060	3.922
SUM:	0.398	

285. (EUN) UNEMPLOYMENT RATE

EUN = 100 * (ELF - ELE)/ELF

286. (EPCHW) PERCENTAGE CHANGE IN WAGES -- ANNUAL RATE

EPCHW = DEL(LOG(EW)) * 400

E.IV.C. CAPACITY AND REAL CAPITAL STOCKS

287. (ECU) CAPACITY UTILIZATION RATE

```
DEL(LOG(ECU)) = DEL(LOG(EGNP/EGNPPOT)) + ECUER
```

288. (EKPNR) GROSS PRIVATE CAPITAL STOCK - NON-RESIDENTIAL

```
EKPNR = EKPNR(-1) * (1 - EDECAYNR/4) + EIFPNR/4 * (1 - EDECAYNR /4)**0.5
```

289. (EKHP) GROSS PRIVATE CAPITAL STOCK - HOUSING

```
EKHP = EKHP(-1) * (1 - EDECAYR/4) + EIHP/4 * (1 - EDECAYR/4) **0.5
```

290. (EKP) GROSS PRIVATE CAPITAL STOCK

```
EKP = EKPNR + EKHP
```

291. (EKII) STOCK OF INVENTORY INVESTMENT

```
EKII = EKII(-1) + EII * 0.25
```

292. (EUCNR) USER COST OF CAPITAL FOR NON-RESIDENTIAL INVESTMENT

```
EUCNR = (1 - ETRYC * EECDEP - EGRANTNR) * ((1 - ETRYC) * (ERL /100) - EPEXP/100 + EDECAYNR)/(1 -
     ETRYC)
```

293. (EECDEP) ECONOMIC DEPRECIATION OF NON RESIDENTIAL INVESTMENT

```
EECDEP = 2 * (1 - (1 - EXP(-((1 - ETRYC) * (ERL/100) * ELIFENR)) )/((1 - ETRYC) * (ERL/100) *
     ELIFENR))/((1 - ETRYC) * (ERL/100) * ELIFENR)
```

294. (EUCR) USER COST OF CAPITAL FOR RESIDENTIAL INVESTMENT

```
EUCR = (1 - EGRANTR) * ((1 - ETRY) * (ERLHZ/1000) - EPEXP/100 + EDECAYR)
```

E.V. INTERNATIONAL FINANCIAL MARKET

E.V.A. DIRECT INVESTMENT CLAIMS AND LIABILITIES

295. (EDLTDC) CHANGE IN DIRECT INVESTMENT CLAIMS ON FOREIGNERS

```
(EDLTDC - EDLTDCS) * EEINV  =  .774258  -  .002381 * TIME * EFDKPD  +  .121136 * D60150 * EFDKPD
                              (.9)        (2.8)                       (1.6)

      -  .22681 * D731I * EFDKPD  -  1.63268 * D60150  +  2.55839 * D731I
        (4.2)                      (1.4)                (3.4)

     CRSQ  = .925  S.E.R. =  .224  MEAN LHS = NA  DW = 1.69
     RANGE: 1961 Q1 TO 1975 Q4   NOB = 60   ESTIMATED:  1/78
```

296. (EDLTDL) CHANGE IN DIRECT INVESTMENT LIABILITIES TO FOREIGNERS

```
EDLTDL  =  -.06625  -  .031699 * Q1  +  .098569 * Q2  -  .042476 * Q3  +  .221812 * D6943
          (.8)       (.4)            (1.3)           (.6)             (2)

      +  .063849 * EIFPVNSA  -  .069371 * DEL(RED)  +  .131662 * DEL(ERLW)
        (6.3)                 (2.5)                  (3.1)

      +  .140544 * DEL(ERLW(-1)) - EDLTDLS
        (3.3)

     CRSQ  = .627  S.E.R. =  .184  MEAN LHS = NA  DW = 2.36
     RANGE: 1963 Q1 TO 1975 Q4   NOB = 52   ESTIMATED:  1/78
```

297. (ELTDC) STOCK OF DIRECT INVESTMENT CLAIMS ON FOREIGNERS

```
ELTDC = ELTDC(-1) - EDLTDC * 0.25
```

298. (ELTDL) STOCK OF DIRECT INVESTMENT LIABILITIES TO FOREIGNERS

```
ELTDL = ELTDL(-1) + EDLTDL * 0.25
```

299. (ERLTDC) REAL STOCK OF DIRECT CLAIMS

```
ERLTDC = ERLTDC(-1) - 0.25 * EDLTDC * (EERFGW/EFPGNPFG)
```

300. (ERLTDL) REAL STOCK OF DIRECT LIABILITIES

```
ERLTDL = ERLTDL(-1) + 0.25 * EDLTDL/EPGNP
```

301. (EBBAL) BASIC BALANCE

```
EBBAL = ECURBAL + EDLTDL + EDLTDC + ENGKA
```

E.V.B. OTHER CAPITAL FLOWS

302. (EERFW) WT. AVG. EXCHANGE RATE (NET PRIVATE CAPITAL FLOWS)

LOG(EERFW) = LOG(EFPFW1(-1)/EP1(-1)) + 0.03 * (ERSLA - EPEXP - (EFRS - EFDPFW1))

303. (EDLTPC) CHANGE IN LONG TERM PORTFOLIO CLAIMS ON FOREIGNERS

EDLTPC = -.028983 - .010342 * EDNWNSA(-2) - .245801 * EDV714I
(.3) (1.9) (1.9)

- .000151 * DEL(1 : EFPRM(-3) * ENWNSA(-3)) + LAGCOEF1 * (DEL(EXGV(I-1)))
(2.4)

+ LAGCOEF2 * (DEL((ERLW(I) - EFRL(I)) * ENWNSA(I)))

CRSQ = .607 S.E.R. = .133 MEAN LHS = NA RHO = .735 (NA)
RANGE: 1963 Q1 TO 1975 Q4 NOB = 52 ESTIMATED: 1/78

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.157	5.100	0.001	5.000
(-1)	0.162	4.400	0.001	3.700
(-2)	0.137	3.700	0.001	2.600
(-3)	0.083	3.300	0.001	2.000
(-4)	NA	NA	0.000	1.700
(-5)	NA	NA	NA	3.300
SUM:	0.540		0.004	

304. (EDLTPL) CHANGE IN LONG TERM PORTFOLIO LIABILITIES TO FOREIGNERS

EDLTPL = -.555283 + .001039 * DEL(RED * EFSFCPD)
(7.1) (4.1)

+ .014122 * DEL((EER - EER(-1))/EER(-1) * EFSFCPD) + .022985 * EFDSFCD + .10047 * EIFP
(2.8) (2.5) (7.6)

- .002658 * DEL(EFRL * EFSFCPD)
(3.6)

CRSQ = .65 S.E.R. = .071 MEAN LHS = NA DW = 1.86
RANGE: 1963 Q1 TO 1975 Q4 NOB = 52 ESTIMATED: 1/78

305. (EDNFAP) NET PRIV. CAPITAL OUTFLOW (BOP IDENTITY)

EDNFAP = - EDNFAG + ECURBAL + EDLTDL + EDLTDC + ENGKA + ESDRGIMF

306. (EBOF) BALANCE OF OFFICIAL FINANCING

EBOF = EBBAL - EDNFAP

307. (ELTPC) STOCK OF PRIVATE PORTFOLIO CLAIMS ON FOREIGNERS

ELTPC = ELTPC(-1) - EDLTPC * 0.25

308. (ELTPL) STOCK OF PRIVATE PORTFOLIO LIABILITIES TO FOREIGNERS

ELTPL = ELTPL(-1) + EDLTPL * 0.25

309. (ELTOC) STOCK OF OTHER LONG TERM CLAIMS ON FOREIGNERS

ELTOC = ELTOC(-1) - EDLTOC * 0.25

310. (ELTOL) STOCK OF OTHER LONG TERM LIABILITIES TO FOREIGNERS

ELTOL = ELTOL(-1) + EDLTOL * 0.25

311. (EFCP) FOREIGN PORTFOLIO CLAIMS -TOTAL

EFCP = ELTPC + ELTOC

312. (EFLP) FOREIGN PORTFOLIO LIABILITIES - TOTAL

EFLP = ELTPL + ELTOL

E.V.C. EXCHANGE RATE RELATIONSHIPS

313. (EEFR) THREE MONTH FORWARD EXCHANGE RATE

EEFR/2.48916 = .019692 (1.5) + .97945 * (1 - D60150) * (EEI - (ERSLA - RED)/400.) (71)

+ 1.03211 * D60150 * (EEI - (ERSLA - RED)/400.) (164.5) - .000542 * EBOF(-1) (1.7)

- .049728 * D60150 (3.4) + .000559 * EFPEEA (2.4)

CRSQ = .999 S.E.R. = .003 MEAN LHS = NA DW = 1.27
RANGE: 1963 Q1 TO 1975 Q4 NOB = 52 ESTIMATED: 1/78

314. (EER) EXCHANGE RATE - FIXED WEIGHTS (SOLVED FOR EER)

EERFW = (EER**0.23 * (EER/CER)**0.09 * (EER/GER)**0.21 * (EER /JER)**0.14)**(1/0.67)

315. (EERFGW) EXCHANGE RATE (GNP WEIGHTED)

EERFGW = (EER/CER)**0.05 * (EER/GER)**0.14 * (EER/JER)**0.21 * EER**0.52

316. (EEI) SPOT EXCHANGE RATE INDEX

EEI = EER/2.50091

317. (EFPRM) DOLLAR FORWARD PREMIUM ON STERLING

EFPRM = (EEFR/EER - 1) * 400

E.VI. OFFICIAL INTERVENTION AND BALANCE OF PAYMENTS

318. (EDNFAG) CHANGE IN NET FOREIGN ASSETS OF THE GOVERNMENT

```
EDNFAG   =  1.59438    +  62.2938 * D792I * (0.25 * SUM(J = -3, 0 : EER(J)) - EER)
             (1.7)         (2.1)

         -  74.808 * (0.25 * SUM(J = -3, 0 : EER(J)) - EER)
            (6)

         -  2.1366 * (1 - D792I) * (0.125 * SUM(J = -8, -1 : EDNFAG(J) ))   -  .36246 * ENFAG(-1)
            (3.2)                                                              (1)
```

CRSQ = .668 S.E.R. = 2.664 MEAN LHS = NA DW = 1.95
RANGE: 1976 Q1 TO 1980 Q2 NOB = 18 ESTIMATED: 1/81

319. (ENFAG) STOCK OF NET FOREIGN ASSETS OF THE GOVERNMENT

```
ENFAG = ENFAG(-1) + EDNFAG/4
```

E.VII. FOREIGN VARIABLES (WEIGHTED AVERAGES)

320. (E:FGNPFTW) FOREIGN REAL GNP (TRADE WEIGHTED)

```
EFGNPFTW = (CER * CGNP)**(0.09/0.67) * (GER * GGNP)**(0.21/0.67) * (JER * JGNP)**(0.14/0.67) *
     UGNP**(0.23/0.67)
```

321. (E:FGNPVFT) FOREIGN NOMINAL GNP (TRADE WEIGHTED)

```
EFGNPVFT = (CER * CGNPV)**(0.09/0.67) * (GER * GGNPV)**(0.21 /0.67) * (JER * JGNPV)**(0.14/0.67)
     * UGNPV**(0.23/0.67)
```

322. (E:FUNFGW) FOREIGN UNEMPLOYMENT (GNP WEIGHTED)

```
EFUNFGW = CUN**0.05 * GUN**0.14 * JUN**0.21 * UUN**0.52
```

323. (E:FPVXWD) FOREIGN AVERAGE ABSORPTION DEFLATOR - (VARIABLE WEIGHTED)

```
EFPVXWD = (GP * GEI)**EWTXG * UP**EWTXU * (JP * JEI)**EWTXJ * (CP * CEI)**EWTXC/EEI
```

324. (E:FPGNPFG) FOREIGN GNP DEFLATOR (GNP WEIGHTED)

```
EFPGNPFG = CPGNP**0.05 * GPGNP**0.14 * JPGNP**0.21 * UPGNP**0.52
```

325. (E:FPFW) FOREIGN AVERAGE ABSORPTION DEFLATOR - FIXED WEIGHTS

```
EFPFW = (UP**0.23 * CP**0.09 * GP**0.21 * JP**0.14)**(1/0.67)
```

326. (E:FPFW1) EXPECTED FOREIGN AVERAGE PRICE LEVEL

```
EFPFW1 = - 0.001189 + 1.55432 * EFPFW - 0.161953 * EFPFW(-1) - 0.398862 * EFPFW(-2) - 0.027459 *
     EFPFW(-3) - 0.184398 * EFPFW(-4) + 0.224744 * EFPFW(-5)
```

327. (E:FDPFW1) EXPECTED FOREIGN AVERAGE INFLATION RATE

```
EFDPFW1 = (EFPFW1/EFPFW1(-4) - 1) * 100
```

328. (E:FPXVMWD) FOREIGN AVERAGE EXPORT PRICE

```
EFPXVMWD = UPXGUV**EWTMU * (CPXGUV * CEI)**EWTMC * (GPXGUV * GEI )**EWTMG * (JPXGUV *
     JEI)**EWTMJ * ROWPXG**EWTMR * OPOIL72**EWTMO
```

329. (E:FPXFTW) FOREIGN AVERAGE EXPORT UNIT VALUE

```
EFPXFTW = UPXGUV**0.343284 * (GPXGUV * GEI)**0.313433 * (CPXGUV * CEI)**0.134328 * (JPXGUV *
     JEI)**0.2
```

330. (EFRS) FOREIGN AVERAGE TREASURY BILL RATE (TRADE WEIGHTED)

```
EFRS = 0.23/0.67 * URS + 0.09/0.67 * CRS + 0.21/0.67 * GRS + 0.14/0.67 * JRS
```

331. (EFRSFGW) FOREIGN AVERAGE TREASURY BILL RATE (GNP WEIGHTED)

```
EFRSFGW = CRS * 0.05 + GRS * 0.14 + JRS * 0.21 + URS * 0.52
```

332. (EFRL) FOREIGN AVERAGE LONG TERM INTEREST RATE

```
EFRL = GRL**0.2 * JRL**0.1 * URL**0.5 * CRL**0.3
```

333. (EFDKPD) CHANGE IN FOREIGN GROSS PRIVATE CAPITAL STOCKS

```
EFDKPD = DEL(GKP) * GP * GER * 0.2 + DEL(UKP) * UP * 0.6 + DEL (CKP) * CP * CER * 0.3
```

334. (EFSFCPD) PRIVATE FOREIGN CLAIMS ON REST OF WORLD

```
EFSFCPD = ((CSTC + CLTPC) * CER + JFCPD + UFCP + GFCP * GER)/EER
```

335. (EFDSFCD) CHANGE IN FOREIGN PRIVATE CLAIMS ON REST OF WORLD

```
EFDSFCD = DEL(EFSFCPD)
```

GERMAN MODEL: DOMESTIC REAL SIDE

G.I.A. DOMESTIC SPENDING AND DISPOSABLE INCOME

336. (GC) PRIVATE CONSUMPTION EXPENDITURE - 1972 PRICES

```
LOG(GC)   =  .013168   -  .000050 * ((1 + GRS/100)/(1 + GPEXP/100) - 1) * GNWR
            (.097756)    (1.02053)

      +  LAGCOEF1 * (LOG(GYD(I)))   +  .000177 * Q1   +  .000534 * Q2   +  .000681 * Q3
                                     (.090414)         (.239032)         (.355855)
```

CRSQ = .998 S.E.R. = .008 MEAN LHS = 6.106 RHO = .725 (9.2)
RANGE: 1964 Q1 TO 1983 Q1 NOB = 76 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.480	6.771
(-1)	0.323	13.094
(-2)	0.166	7.160
(-3)	0.009	0.126
SUM:	0.977	

337. (GIFPNR) PRIVATE NONRESIDENTIAL INVESTMENT - 1972 PRICES

```
GIFPNR   =  2.60032 + 0.06308 * GKPNR(-1)   +  .901702 * (GIFPNR(-1) - 0.06308 * GKPNR(-2))
           (1.74759)                          (20.2426)

      +  LAGCOEF1 * (DEL(GGNP(I-1)))   +  LAGCOEF2 * (DEL(GUCNR(I-1)))   +  .990952 * DEL(GCU)
                                                                           (2.47227)
```

CRSQ = .946 S.E.R. = 2.478 MEAN LHS = 38.433 DW = 2.126
RANGE: 1970 Q3 TO 1982 Q4 NOB = 50 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.011	0.188	-101.780	1.546
(-1)	0.053	1.926	-90.768	2.666
(-2)	0.065	1.742	-70.134	1.528
(-3)	0.047	1.502	-39.878	1.042
SUM:	0.175		-302.559	

338. (GIFPR) PRIVATE RESIDENTIAL INVESTMENT - 1972 PRICES

```
GIFPR   =  4.62315 + 0.018731 * GKPR(-1)   +  .893712 * (GIFPR(-1) - 0.018731 * GKPR(-2))
          (1.962)                           (18.9867)

      +  LAGCOEF1 * (DEL(GYDV(I-1)/GP(I-1)))   -  .338753 * GUCR(-1) * 100
                                                 (1.36516)
```

CRSQ = .731 S.E.R. = 3.227 MEAN LHS = 37.771 RHO = -.338 (2.9)
RANGE: 1964 Q3 TO 1983 Q1 NOB = 74 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.051	1.860
(-1)	0.044	1.860
(-2)	0.038	1.860
(-3)	0.032	1.860
(-4)	0.025	1.860
(-5)	0.019	1.860
(-6)	0.013	1.860
(-7)	0.006	1.860
SUM:	0.228	

339. (GII) INVENTORY INVESTMENT - 1972 PRICES

```
GII    =  10.7311    -  .018431 * GKII(-1)   +  LAGCOEF1 * (DEL(GC(I) + GIF(I) + GXG(I) - GMG(I)))
         (.442211)     (.217778)
```

CRSQ = .377 S.E.R. = 6.157 MEAN LHS = 5.954 RHO = .558 (4.4)
RANGE: 1971 Q1 TO 1983 Q1 NOB = 48 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	-0.163	1.943
(-1)	0.110	1.086
(-2)	0.179	1.772
(-3)	0.045	0.538
SUM:	0.172	

340. (GCCAVNSA) CAPITAL CONSUMPTION ALLOWANCE - CURRENT PRICES (NSA)

```
GCCAVNSA/GP   =  4.73751   +  .037589 * GK(-1)   +  .61779 * Q1   +  .213398 * Q2   +  .748502 * Q3
                (3.36825)     (59.8968)           (1.5532)         (.471226)         (1.94395)

      -  .000172 * Q1 * GK(-1)   +  .000166 * Q2 * GK(-1)   -  .000479 * Q3 * GK(-1)
        (.910335)                  (.775339)                 (2.63795)
```

CRSQ = .999 S.E.R. = .603 MEAN LHS = 80.649 RHO = .841 (16.9)
RANGE: 1960 Q2 TO 1982 Q4 NOB = 90 ESTIMATED: 4/85

341. (GGNP) GROSS NATIONAL PRODUCT - 1972 PRICES

```
GGNP = GC + GIFP + GIFG + GII + GG + GXGSNI - GMGSNI
```

342. (GGNPL) 8-QUARTER MOVING AVERAGE OF GNP

```
GGNPL = SUM(J = -7, 0 : GGNP(J)/8)
```

343. (GGNPV) GROSS NATIONAL PRODUCT - CURRENT PRICES

```
GGNPV = GP * (GC + GIFP + GIFG + GII + GG) + GXGSNIV - GMGSNIV
```

344. (GGNPVNSA) GROSS NATIONAL PRODUCT - CURRENT PRICES (NSA)

```
GGNPVNSA = GGNPV/GSAFGNPV
```

345. (GGNPNSA) GROSS NATIONAL PRODUCT - 1972 PRICES (NSA)

```
GGNPNSA = GGNPVNSA/GPGNP
```

346. (GCVNSA) PRIVATE CONSUMPTION EXPENDITURE - CURRENT PRICES (NSA)

```
GCVNSA = GC * GP/GSAFCV
```

347. (GIFP) PRIVATE FIXED INVESTMENT - 1972 PRICES

```
GIFP = GIFPNR + GIFPR
```

348. (GIF) TOTAL FIXED INVESTMENT - 1972 PRICES

```
GIF = GIFP + GIFG
```

349. (GIFV) TOTAL FIXED INVESTMENT - CURRENT PRICES

```
GIFV = GP * GIF
```

350. (GIFVNSA) TOTAL FIXED INVESTMENT - CURRENT PRICES (NSA)

```
GIFVNSA = GP * (GIFP + GIFG)/GSAFIFV
```

351. (GIIVNSA) INVENTORY INVESTMENT - CURRENT PRICES (NSA)

```
GIIVNSA = GIINSA * GP
```

352. (GIIV) INVENTORY INVESTMENT - CURRENT PRICES

```
GIIV = GIIVNSA * GSAFIIV
```

353. (GIINSA) INVENTORY INVESTMENT - 1972 PRICES (NSA)

```
GIINSA = GII/GSAFII
```

354. (GYDVNSAC) CALCULATED DISPOSABLE INCOME - CURRENT PRICES (NSA)

```
GYDVNSAC = GGNPVNSA - GCCAVNSA - (GTVNSA - GXTRANGV) + (GTRANVNS - GMTRANGV) + GXTRANPV - GMTRANPV
```

355. (GYDV) DISPOSABLE INCOME - CURRENT PRICES

```
GYDV = GYDVNSAC * GSAFYDV
```

356. (GYD) DISPOSABLE INCOME PROXY - 1972 PRICES

```
GYD = GYDV/GP
```

357. (GPCHGNP) PERCENTAGE CHANGE IN GNP - ANNUAL RATE

```
GPCHGNP = DEL(LOG(GGNP)) * 400
```

G.I.B. GOVERNMENT SECTOR

358. (GTRANVNS) GOVERNMENT TRANSFERS TO PRIVATE SECTOR (NSA)

```
GTRANVNS   =  338.601 + GGIP    +  .012148 * GUN * GLF/100 * GP   -  15.2151 * Q1   -  19.3569 * Q2
               (7.4778)           (1.11299)                        (5.49838)        (6.31619)

      -  17.1384 * Q3
        (6.52581)
```

CRSQ = .961 S.E.R. = 8.977 MEAN LHS = 272.57 RHO = .949 (52.6)
RANGE: 1974 Q1 TO 1982 Q4 NOB = 35 ESTIMATED: 4/85

359. (GGIP) GOVERNMENT INTEREST PAYMENTS

```
GGIP   =  -4.13111   +  .111364 * (GDEBTNSA + GDEBTNSA(-1) - GNGPBB - GNGPBB(-1))/2 * GRS/100
           (3.31474)     (3.65241)

       +  .856686 * (GDEBTNSA + GDEBTNSA(-1) - GNGPBB - GNGPBB(-1))/2 * SUM(J = -19, 0 : GRL(J)/20)/10
         (12.8891)


       +  .275017 * (GDEBTNSA + GDEBTNSA(-1) - GNGPBB - GNGPBB(-1))/2 * SUM(J = -19, 0 : GRL(J)/20)/10
         (4.90726)

     * Q1

       +  .03171 * (GDEBTNSA + GDEBTNSA(-1) - GNGPBB - GNGPBB(-1))/2 * SUM(J = -19, 0 : GRL(J)/20)/100
         (.760986)

     * Q2

       -  .036142 * (GDEBTNSA + GDEBTNSA(-1) - GNGPBB - GNGPBB(-1))/2 * SUM(J = -19, 0 : GRL(J)/20)/10
         (.622862)

     * Q3
```

CRSQ = .942 S.E.R. = 2.899 MEAN LHS = 26.378 RHO = -.396 (2)
RANGE: 1974 Q1 TO 1983 Q1 NOB = 36 ESTIMATED: 4/85

360. (GTVNSA) TOTAL GOVERNMENT REVENUE -- CURRENT PRICES (NSA)

```
GTVNSA/GGNPVNSA   =  .214896   +  .626547 * GTRY   +  .206649 * GTRYC   -  .026807 * Q1
                      (8.14396)    (4.86829)          (4.92427)           (4.52857)

      -  .010170 * Q2   -  .021678 * Q3
        (3.79077)         (3.60002)
```

CRSQ = .755 S.E.R. = .007 MEAN LHS = .425 RHO = -.606 (3.6)
RANGE: 1974 Q3 TO 1983 Q2 NOB = 35 ESTIMATED: 4/85

361. (GGVNSA) GOVERNMENT EXPENDITURES - CURRENT PRICES (NSA)

```
GGVNSA = GG * GP/GSAFGG
```

362. (GIFGVNSA) GOVERNMENT FIXED INVESTMENT - CURRENT PRICES (NSA)

```
GIFGVNSA = GIFG * GP/GSAFIFG
```

363. (GGDEFNSA) GOVERNMENT DEFICIT - NIA BASIS (NSA)

```
GGDEFNSA = GTRANVNS + GGVNSA + GIFGVNSA - GTVNSA
```

364. (GDEBTNSA) GOVERNMENT DEBT - NIA BASIS (NSA)

GDEBTNSA = GDEBTNSA(-1) + GGDEFNSA/4

G.I.C. PRIVATE SAVINGS AND WEALTH

365. (GDNWFVNS) CHANGE IN FINANCIAL NET WORTH-CUR PRICES ANN. RTE (NSA)

GDNWFVNS = GGNPVNSA - GTVNSA + GXTRANGV + GXTRANPV - GMTRANGV - GMTRANPV + GTRANVNS - GIFVNSA - GIIV - GCVNSA

366. (GNWFVNSA) FINANCIAL NEW WORTH-CURRENT PRICES (NSA)

GNWFVNSA = GNWFVNSA(-1) + GDNWFVNS/4

367. (GNWKNSA) NET WORTH - CAPITAL-REAL (NSA)

GNWKNSA = GNWKNSA(-1) + (GIFVNSA + GIIV - GCCAVNSA)/(4 * GP)

368. (GNWVNSA) TOTAL NEW WORTH-CURRENT PRICES (NSA)

GNWVNSA = GNWFVNSA + GNWKNSA * GP

369. (GNW) NET WORTH-CURRENT PRICES (SA)

GNW = GNWVNSA * GSAFNW

370. (GNWR) NET WORTH-REAL (SA)

GNWR = GNW/GP

G.II. CURRENT ACCOUNT

G.II.A. IMPORTS OF GOODS

371. (GCOL) OIL CONSUMPTION - VOLUME (MBD)

```
LOG(GCOL)   =  -5.18983 + LOG(GGNP)   +  LAGCOEF1 * (LOG(OPOIL(I)/(GP(I) * GER(I))))
                (34.0042)

      -  .002096 * Q1   -  .043761 * Q2   -  .019052 * Q3
        (.100873)         (1.90847)         (.967769)

     CRSQ  = .807  S.E.R. =  .059  MEAN LHS = -5.969  RHO =  .582 (3.8)
     RANGE: 1973 Q1 TO 1982 Q4   NOB = 39   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT
(-0)	-0.107	2.821
(-1)	-0.075	4.335
(-2)	-0.044	2.916
(-3)	-0.013	0.364
SUM:	-0.238	

372. (MGCV) GERMAN GOODS IMPORTS FROM CANADA ($ U.S.)

```
LOG(MGCV/(CPXGUV * CEI))   =  -8.93244   +  1.36586 * LOG(GGNPNSA)
                               (5.12112)     (6.39553)

      +  LAGCOEF1 * (LOG(GPIP(I) * GER(I)/(CPXGUV(I) * CEI(I))))   -  .137532 * Q1
                                                                     (2.82495)

      -  .047690 * Q2   -  .047349 * Q3
        (.952497)         (1.1014)

     CRSQ  = .853  S.E.R. =  .159  MEAN LHS = -.832  RHO =  .323 (3)
     RANGE: 1962 Q4 TO 1982 Q4   NOB = 80   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT
(-0)	0.322	2.583
(-1)	0.241	2.583
(-2)	0.161	2.583
(-3)	0.080	2.583
SUM:	0.804	

373. (MGEV) GERMAN GOODS IMPORTS FROM THE U.K. ($ U.S.)

```
LOG(MGEV/(EPXGUV * EEI))   =  -8.46981 + LOG(GGNPNSA)
                               (23.5852)

      +  LAGCOEF1 * (LOG(GPIP(I) * GEI(I)/(EPXGUV(I) * EEI(I))))   +  .029656 * TIME
                                                                     (7.39335)

      +  .498097 * D7731   +  .015047 * Q1   +  .022823 * Q2   -  .033587 * Q3
        (9.52459)            (.738109)         (1.00187)         (1.59545)

     CRSQ  = .961  S.E.R. =  .057  MEAN LHS = -5.824  RHO =  .539 (4.1)
     RANGE: 1973 Q1 TO 1982 Q3   NOB = 38   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT
(-0)	0.180	1.362
(-1)	0.135	1.362
(-2)	0.090	1.362
(-3)	0.045	1.362
SUM:	0.449	

374. (XJGV) JAPANESE GOODS EXPORTS TO GERMANY ($ U.S.)

LOG(XJGV/(JPXGUV * JEI)) = -8.99257 + LAGCOEF1 * (LOG(GPIP(I) * GER(I)/(JPXGUV(I) * JEI(I))))
(3.30868)

+ 1.48513 * LOG(GGNPNSA) + .016347 * TIME - .530921 * D6421 - .155321 * D7411
(3.90551) (6.29978) (6.1301) (1.83435)

+ .062836 * Q1 + .043135 * Q2 + .023502 * Q3
(1.36429) (1.18113) (.937237)

CRSQ = .989 S.E.R. = .087 MEAN LHS = -.178 RHO = .357 (3.2)
RANGE: 1963 Q4 TO 1983 Q1 NOB = 77 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.426	2.741
(-1)	0.326	3.958
(-2)	0.250	3.505
(-3)	0.198	2.341
(-4)	0.169	2.012
(-5)	0.164	2.302
(-6)	0.183	2.115
(-7)	0.225	1.382
SUM:	1.940	

375. (XUGV) U.S. GOODS EXPORTS TO GERMANY ($ U.S.)

LOG(XUGV/UPXGUV) = -6.38777 + 1.20189 * LOG(GGNPNSA)
(5.68919) (8.99379)

+ LAGCOEF1 * (LOG(GPIP(I) * GER(I)/UPXGUV(I))) + .091143 * Q1 + .081969 * Q2
(3.04584) (2.5971)

- .070622 * Q3
(2.59978)

CRSQ = .883 S.E.R. = .096999 MEAN LHS = 1.047 RHO = .319 (2.7)
RANGE: 1963 Q4 TO 1983 Q1 NOB = 77 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.130	0.740
(-1)	0.109	1.686
(-2)	0.090	1.275
(-3)	0.071	0.685
(-4)	0.054	0.521
(-5)	0.038	0.534
(-6)	0.023	0.322
(-7)	0.010	0.053
SUM:	0.526	

376. (MGLV) GERMAN GOODS IMPORTS FROM LDC ($ U.S.)

LOG(MGLV/LPXGUV) = -9.24676 + 1.5 * LOG(GGNPNSA)
(108.25)

+ LAGCOEF1 * (LOG(GPIP(I) * GEI(I)/LPXGUV(I))) + .006584 * TIME - .213271 * D7411
(6.5422) (5.20308)

+ .206319 * Q1 + .114336 * Q2 + .087433 * Q3
(12.2513) (9.26911) (5.28748)

CRSQ = .885 S.E.R. = .044 MEAN LHS = -8.642 RHO = .208 (1.5) RHO2 = .371 (3)
RANGE: 1970 Q1 TO 1983 Q1 NOB = 51 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.232	3.561
(-1)	0.174	3.561
(-2)	0.116	3.561
(-3)	0.058	3.561
SUM:	0.581	

377. (MGIV) GERMAN GOODS IMPORTS FROM NON MCM INDUSTRIAL COUNTRIES

```
LOG(MGIV/IPXGUV)   =  -3.98839   +  1.00639 * LOG(GGNPNSA)
                        (2.09339)     (3.36783)

     +  LAGCOEF1 * (LOG(GPIP(I) * GEI(I)/IPXGUV(I)))   +  .006148 * TIME   +  .085309 * Q1
                                                            (3.24061)          (2.48933)

     +  .075878 * Q2   -  .034723 * Q3
        (3.12098)         (2.11944)
```

CRSQ = .972 S.E.R. = .03 MEAN LHS = 3.379 RHO = .492 (3.8)
RANGE: 1970 Q1 TO 1983 Q1 NOB = 52 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.445	4.358
(-1)	0.334	4.358
(-2)	0.223	4.358
(-3)	0.111	4.358
SUM:	1.113	

378. (GMGOL) OIL IMPORTS - VOLUME (MBD)

```
GMGOL = GCOL + GXGOL + DEL(GSOL)/DAYSQ - GQOL + GMGOLER
```

379. (GMGOLV) OIL IMPORTS - VALUE (QUASI-IDENTITY)

```
GMGOLV   =  6.94385   +  LAGCOEF1 * (GMGOL(I) * DAYSQ(I) * 4 * OPOIL(I)/GER(I)/1000)
            (1.92498)

     -  .662283 * Q1   -  .302019 * Q2   +  .16503 * Q3
        (1.11418)         (.447137)        (.284658)
```

CRSQ = .988 S.E.R. = 1.91 MEAN LHS = 44.912 RHO = .808 (7.6)
RANGE: 1973 Q2 TO 1982 Q4 NOB = 38 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.927	13.645
(-1)	0.059	0.879
SUM:	0.986	

380. (MGOV) OIL IMPORTS FROM OPEC ($ U.S.)

```
MGOV = GMGOVSHR * GMGOLV * GER
```

381. (MGJV) GERMAN GOODS IMPORTS FROM JAPAN ($ U.S.) (QUASI-IDENTITY)

```
MGJV   =  .030344   +  LAGCOEF1 * (XJGV(I))
          (1.40546)
```

CRSQ = .994 S.E.R. = .154 MEAN LHS = 1.701 DW = 1.752
RANGE: 1960 Q3 TO 1982 Q4 NOB = 90 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.865	13.434
(-1)	0.125	1.920
SUM:	0.990	

382. (MGUV) GERMAN GOODS IMPORTS FROM U.S. ($ U.S.) (QUASI-IDENTITY)

XUGV = .136383 + LAGCOEF1 * (MGUV(I)) - .11227 * Q1 - .203212 * Q2 - .229127 * Q3
(1.02848) (1.22937) (2.02378) (2.24816)

CRSQ = .987 S.E.R. = .36 MEAN LHS = 4.178 RHO = .47 (4.8)
RANGE: 1960 Q2 TO 1982 Q4 NOB = 90 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.570	13.504
(-1)	0.234	5.521
SUM:	0.804	

383. (MGTV) TOTAL GERMAN GOODS IMPORTS - DOT BASIS ($ U.S.)

MGTV = MGCV + MGEV + MGJV + MGOV + MGIV + MGZV + MGLV + MGUV

384. (GMGV) TOTAL GERMAN GOODS IMPORTS - BOP BASIS

LOG(GMGV) = LOG(MGTV/GER + (GMGOLV - MGOV/GER) - GMGVADJ)

385. (GMG) TOTAL GERMAN GOODS IMPORTS - 1972 PRICES

GMG = GMGV/GPMGUV

G.II.B. EXPORTS OF GOODS

386. (XGEV) GERMAN GOODS EXPORTS TO THE U.K. ($ U.S.) (QUASI-IDENTITY)

LOG(XGEV) = -.011651 (.704286) + LAGCOEF1 * (LOG(MEGV(I))) + .329819 * D7731 (6.79041) + .082055 * D7741 (1.7012)

- .054285 * Q1 (4.06083) - .032805 * Q2 (2.68591) - .038197 * Q3 (2.59324)

CRSQ = .998 S.E.R. = .05 MEAN LHS = .807 RHO = .277 (2.6) RHO2 = .245 (2.3)
RANGE: 1960 Q2 TO 1982 Q4 NOB = 89 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.819	13.046
(-1)	0.191	3.038
SUM:	1.010	

387. (XGJV) GERMAN GOODS EXPORTS TO JAPAN ($ U.S.) (QUASI-IDENTITY)

XGJV = .059328 (3.12006) + LAGCOEF1 * (MJGV(I)) - .071375 * Q1 (3.12522) - .094316 * Q2 (4.10377) - .048474 * Q3 (2.10301)

CRSQ = .989 S.E.R. = .076 MEAN LHS = .894 DW = 1.939
RANGE: 1960 Q3 TO 1982 Q4 NOB = 90 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.812	11.484
(-1)	0.065	0.912
SUM:	0.877	

388. (XGTV) TOTAL GERMAN GOODS EXPORTS - DOT BASIS ($ U.S.)

XGTV = XGCV + XGEV + XGJV + XGRV + XGUV

389. (GXGV) TOTAL GERMAN GOODS EXPORTS - BOP BASIS

LOG(GXGV) = LOG(XGTV/GER)

390. (GXG) TOTAL GERMAN GOODS EXPORTS - 1972 PRICES

GXG = GXGV/GPXGUV

G.II.C. IMPORTS OF SERVICES AND TRANSFERS

391. (GMSOPV) PRIVATE IMPORTS OF OTHER SERVICES

```
LOG(GMSOPV/(GFPFW/GERFW))   =  -11.4528   +  2.23713 * LOG(GGNP)
                               (9.03279)     (11.8126)

      +  LAGCOEF1 * (LOG(GP(I)/(GFPFW(I)/GERFW(I))))
```

CRSQ = .888 S.E.R. = .152 MEAN LHS = 3.673 RHO = -.032 (.2)
RANGE: 1966 Q2 TO 1982 Q4 NOB = 66 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.376	0.746
(-1)	0.436	0.835
SUM:	0.812	

392. (GMSYDV) DIRECT INVESTMENT INCOME PAYMENTS

```
GMSYDV/(GRLTDL * GPGNP)   =  -.318184   +  .004593 * GCU   +  .094798 * D7141   +  .048734 * D7731
                            (4.35996)     (5.18399)        (5.10918)            (2.62509)

      -  .039178 * D8021
        (2.11369)
```

CRSQ = .643 S.E.R. = .019 MEAN LHS = .062 RHO = .274 (1.9)
RANGE: 1970 Q1 TO 1982 Q4 NOB = 51 ESTIMATED: 4/85

393. (GMSYNDV) INDIRECT INVESTMENT INCOME PAYMENTS

```
GMSYNDV/GFLP   =  .005465   +  LAGCOEF1 * (GFRSFLW(I)/100)   +  LAGCOEF2 * (GRS(I)/100)
                 (1.66653)
```

CRSQ = .609 S.E.R. = .009 MEAN LHS = .04 DW = 2.004
RANGE: 1963 Q2 TO 1982 Q4 NOB = 79 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.061	5.767	0.021	0.877
(-1)	0.054	5.767	0.027	1.845
(-2)	0.046	5.767	0.030	3.229
(-3)	0.038	5.767	0.031	3.373
(-4)	0.031	5.767	0.029	2.752
(-5)	0.023	5.767	0.026	2.301
(-6)	0.015	5.767	0.019	2.018
(-7)	0.008	5.767	0.011	1.830
SUM:	0.276		0.193	

394. (GMTRANPV) TRANSFER PAYMENTS - PRIVATE

```
LOG(GMTRANPV)   =  -4.37187   +  1.00953 * LOG(GYDV)
                  (4.62425)     (6.88075)
```

CRSQ = .946 S.E.R. = .111 MEAN LHS = 2.041 RHO = .78 (10.7)
RANGE: 1965 Q2 TO 1982 Q4 NOB = 70 ESTIMATED: 4/85

395. (GMSYV) TOTAL INVESTMENT INCOME PAYMENTS

```
GMSYV = GMSYDV + GMSYNDV
```

396. (GMSOV) IMPORTS OF OTHER SERVICES - TOTAL

GMSOV = GMSOPV + GMSOGV

397. (GMSV) IMPORTS OF SERVICES - TOTAL

GMSV = GMSOV + GMSYV

398. (GMGSV) IMPORTS OF GOODS AND SERVICES - BOP BASIS

GMGSV = GMGV + GMSV

399. (GMGSNIVS) IMPORTS - NIA BASIS - CURRENT PRICES (NSA) (QUASI-IDENTITY)

LOG(GMGSNIVS) = -.026533 + .998904 * LOG(GMGV + GMSYV + GMSOPV + GMSOGV) + .001715 * Q1
(1.25562) (246.889) (.78269)

+ .006419 * Q2 + .005238 * Q3
(2.58424) (2.43725)

CRSQ = 1 S.E.R. = .01 MEAN LHS = 5.078 RHO = .636 (7.9)
RANGE: 1960 Q2 TO 1982 Q4 NOB = 90 ESTIMATED: 4/85

400. (GMGSNIV) IMPORTS - NIA BASIS - CURRENT PRICES

GMGSNIV = GMGSNIVS * GSAFMNIV

401. (GMGSNIS) IMPORTS - NIA BASIS - 1972 PRICES (NSA) (QUASI-IDENTITY)

LOG(GMGSNIS) = -.006946 + .994002 * LOG(GMG + (GMSYV + GMSOPV + GMSOGV)/GP) + .014355 * Q1
(.08813) (67.4081) (3.4681)

+ .014308 * Q2 + .009002 * Q3
(3.20264) (2.24918)

CRSQ = .995 S.E.R. = .012 MEAN LHS = 5.295 RHO = .362 (2.6)
RANGE: 1970 Q1 TO 1982 Q4 NOB = 51 ESTIMATED: 4/85

402. (GMGSNI) IMPORTS - NIA BASIS - 1972 PRICES

GMGSNI = GMGSNIS * GSAFMNIV

G.II.D. EXPORTS OF SERVICES AND TRANSFERS

403. (GXSOPV) PRIVATE EXPORTS OF OTHER SERVICES

```
LOG(GXSOPV/GPGNP)   =  -6.9007    +  1.72111 * LOG(GFGNPFTW)
                       (5.69215)     (8.43096)

      +  LAGCOEF1 * (LOG(GFPFW(I)/GERFW(I)/GPGNP(I)))
```

CRSQ = .895 S.E.R. = .094 MEAN LHS = 3.325 RHO = .596 (5.7)
RANGE: 1966 Q2 TO 1982 Q4 NOB = 66 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.483	1.548
(-1)	0.242	0.769
SUM:	0.725	

404. (GXSYDV) DIRECT INVESTMENT INCOME RECEIPTS

```
GXSYDV/(GRLTDC * GFPGNPFC/GERFCW)   =  -.087777    +  .001319 * GFCUFCW    +  .000730 * Q1
                                       (1.44695)     (1.83071)               (.160442)

      +  .005608 * Q2    +  .013483 * Q3
        (1.11772)          (3.05688)
```

CRSQ = .423 S.E.R. = .013 MEAN LHS = .029 RHO = .486 (3.4)
RANGE: 1972 Q1 TO 1982 Q4 NOB = 43 ESTIMATED: 4/85

405. (GXSYNDV) INDIRECT INVESTMENT INCOME RECEIPTS

```
GXSYNDV/GFCP   =  .030126    +  LAGCOEF1 * (GRS(I)/100)    +  LAGCOEF2 * (GFRSFCW(I)/100)
                  (5.44645)
```

CRSQ = .431 S.E.R. = .013 MEAN LHS = .062 RHO = .141 (1.2)
RANGE: 1963 Q1 TO 1982 Q4 NOB = 79 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.136	3.929	0.048	1.341
(-1)	0.102	3.929	0.036	1.341
(-2)	0.068	3.929	0.024	1.341
(-3)	0.034	3.929	0.012	1.341
SUM:	0.340		0.119	

406. (GXTRANPV) TRANSFER RECEIPTS - PRIVATE

```
LOG(GXTRANPV)   =  -6.30295    +  .948888 * LOG(GFGNPVFT)
                   (7.08281)     (6.67161)
```

CRSQ = .918 S.E.R. = .175 MEAN LHS = -.48 RHO = .748 (9)
RANGE: 1965 Q2 TO 1982 Q4 NOB = 70 ESTIMATED: 4/85

407. (GXSYV) TOTAL INVESTMENT INCOME RECEIPTS

```
GXSYV = GXSYDV + GXSYNDV
```

408. (GXSOV) EXPORTS OF OTHER SERVICES - TOTAL

```
GXSOV = GXSOPV + GXSOGV
```

409. (GXSV) EXPORTS OF SERVICES - TOTAL

```
GXSV = GXSOV + GXSYV
```

410. (GXGSV) EXPORTS OF GOODS AND SERVICES - BOP BASIS

```
GXGSV = GXGV + GXSV
```

411. (GXGSNIVS) EXPORTS - NIA BASIS - CURRENT PRICES (NSA) (QUASI-IDENTITY)

```
LOG(GXGSNIVS)   =  -.046957   +  1.00445 * LOG(GXGV + GXSYV + GXSOPV + GXSOGV)   -  .003534 * Q1
                    (3.7337)      (425.878)                                          (2.08564)

      -  .004267 * Q2   +  .001793 * Q3
           (2.24924)        (1.07462)

     CRSQ  = 1  S.E.R. =  .007  MEAN LHS = 5.16  RHO =  .536 (6.2)
     RANGE: 1960 Q1 TO 1982 Q4   NOB = 91   ESTIMATED:  4/85
```

412. (GXGSNIV) EXPORTS - NIA BASIS - CURRENT PRICES

```
GXGSNIV = GXGSNIVS * GSAFXNIV
```

413. (GXGSNIS) EXPORTS - NIA BASIS - 1972 PRICES (NSA) (QUASI-IDENTITY)

```
LOG(GXGSNIS)   =  .218351   +  .959755 * LOG(GXG + (GXSYV + GXSOPV + GXSOGV)/GP)   +  .000592 * Q1
                   (.946588)     (23.5714)                                            (.175097)

      -  .001113 * Q2   +  .005357 * Q3
           (.357971)        (1.56548)

     CRSQ  = .998  S.E.R. =  .009  MEAN LHS = 5.456  RHO =  .913 (19.3)
     RANGE: 1970 Q1 TO 1982 Q4   NOB = 51   ESTIMATED:  4/85
```

414. (GXGSNI) EXPORTS - NIA BASIS - 1972 PRICES

```
GXGSNI = GXGSNIS * GSAFXNIV
```

G.II.E. BALANCES

415. (GGBAL) TRADE BALANCE

GGBAL = GXGV - GMGV

416. (GSBAL) BALANCE ON SERVICE ACCOUNT

GSBAL = GXSYV + GXSOPV + GXSOGV - GMSYV - GMSOPV - GMSOGV

417. (GGSBAL) BALANCE ON GOODS AND SERVICES

GGSBAL = GGBAL + GATB + GSBAL

418. (GNETXNI) NET EXPORTS OF GOODS AND SERVICES (NIA BASIS) - 1972 PRICES

GNETXNI = GXGSNI - GMGSNI

419. (GTRANBAL) TRANSFER PAYMENT BALANCE

GTRANBAL = GXTRANPV + GXTRANGV - GMTRANPV - GMTRANGV

420. (GCURBAL) CURRENT ACCOUNT BALANCE

GCURBAL = GGSBAL + GTRANBAL

G.III. DOMESTIC FINANCIAL MARKET

G.III.A MONETARY AGGREGATES

421. (GCUR) CURRENCY HELD BY RESIDENTS - PRIVATE

```
LOG(GCUR/GP)   =  .658244   +  .534263 * LOG(GCUR(-4)/GP(-4))   +  .079142 * LOG(GNWVNSA/GP)
                 (4.38111)     (7.77964)                          (4.39302)

      +  .107333 * LOG(GYDVNSA/GP)   -  .031180 * GRSAV   +  .036459 * D6631
        (4.6936)                      (6.34554)            (3.16364)

     CRSQ  = .988  S.E.R. =  .014  MEAN LHS = 3.765  RHO =  .721 (9.3)
     RANGE: 1962 Q2 TO 1982 Q4   NOB = 82   ESTIMATED:  4/85
```

422. (GDDP) DEMAND DEPOSITS HELD BY RESIDENTS - PRIVATE

```
LOG(GDDP/GP)   =  -4.522   +  LAGCOEF1 * (LOG(GGNPNSA(I)))   +  LAGCOEF2 * (GRS(I))
                 (24.4436)

      -  .083033 * Q1   -  .028519 * Q2   -  .053454 * Q3
        (9.18765)        (2.42863)        (6.52109)

     CRSQ  = .995  S.E.R. =  .018  MEAN LHS = 4.255  RHO =  .633 (7.1)
     RANGE: 1961 Q2 TO 1982 Q4   NOB = 86   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.381	7.791	-0.011	4.524
(-1)	0.508	9.716	-0.008	3.171
(-2)	0.273	5.600	NA	NA
(-3)	0.184	3.886	NA	NA
SUM:	1.346		-0.018	

423. (GTDP) TIME DEPOSITS HELD BY RESIDENTS - PRIVATE

```
LOG(GTDP/GP)   =  1.34506   +  .770171 * LOG(GTDP(-1)/GP(-1))   +  LAGCOEF1 * (LOG(GGNPNSA(I)))
                 (1.17586)     (13.4549)

      +  .025934 * (GRTIME - GRL)   +  .333338 * LOG(GNWVNSA/GP)   -  .106093 * Q1
        (3.97739)                    (2.90021)                      (4.79063)

      -  .106143 * Q2   -  .088772 * Q3
        (4.21068)        (5.21146)

     CRSQ  = .992  S.E.R. =  .051  MEAN LHS = 3.94  RHO =  .27 (2.4)
     RANGE: 1962 Q1 TO 1982 Q4   NOB = 83   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT
(-0)	-0.116	0.648
(-1)	-0.283	1.773
SUM:	-0.399	

424. (GSD) SAVINGS DEPOSITS HELD BY RESIDENTS - TOTAL

```
LOG(GSD/GP)   =  1.25808   +  .893918 * LOG(GSD(-1)/GP(-1))   -  .223702 * LOG(GGNP)
                (2.29012)    (20.588)                          (1.49318)

      +  .120754 * LOG(GNW/GP)   -  .006016 * (GRS - GRSAV)   -  .044725 * Q1   -  .055915 * Q2
        (2.95474)                  (4.21284)                    (9.25873)        (11.7654)

      -  .043898 * Q3
        (9.5001)

     CRSQ  = .991  S.E.R. =  .012  MEAN LHS = 5.429  DW = 2.25
     RANGE: 1970 Q2 TO 1982 Q4   NOB = 51   ESTIMATED:  4/85
```

425. (GFD) ALL FOREIGN HELD MARK DEPOSITS AT GERMAN BANKS

```
GFD   =  -40.6164   +  1917.7 * GXGV/(GFNWD/GER)   +  .676301 * GRS   -  1.08735 * RED
        (13.7869)     (14.7159)                     (2.71681)          (3.51302)

      -  1.14691 * GEFP   +  .001527 * (GFNWD/GER)   -  .480777 * Q1   -  2.21354 * Q2
        (3.61448)           (12.6517)                  (.663018)         (3.10904)

      -  .367 * Q3
        (.514096)

     CRSQ  = .951  S.E.R. =  1.529  MEAN LHS = 15.75  DW = 1.966
     RANGE: 1973 Q3 TO 1982 Q4   NOB = 38   ESTIMATED:  4/85
```

426. (GDD) DEMAND DEPOSITS - TOTAL

```
GDD = GDDP + GDDG
```

427. (GTD) TIME DEPOSITS HELD BY RESIDENTS - TOTAL

```
GTD = GTDP + GTDG
```

428. (GDT) TOTAL DEPOSITS

```
GDT = GDD + GTD + GSD + GFD
```

429. (GM1P) PRIVATELY HELD M1

```
GM1P = GCUR + GDDP
```

430. (GM1) MONEY SUPPLY - M1

```
GM1 = GM1P + GDDG
```

431. (GM2) MONEY SUPPLY - M2

```
GM2 = GM1 + GTD
```

432. (GM3) MONEY SUPPLY - M3

```
GM3 = GM2 + GSD
```

433. (GPCHM1) PERCENTAGE CHANGE IN M1 - ANNUAL RATE

```
GPCHM1 = DEL(LOG(GM1)) * 400
```

G.III.B. PRIVATE BANKING SECTOR AND INTEREST RATES

434. (GCURB) CURRENCY HELD BY BANKS

LOG(GCURB/GDT) = -4.78265 + .042601 * D781I + .152912 * Q1 + .207485 * Q2
(103.701) (.831876) (8.18671) (10.0653)

+ .151687 * Q3
(8.56019)

CRSQ = .738 S.E.R. = .06 MEAN LHS = -4.635 RHO = .751 (6.8)
RANGE: 1972 Q1 TO 1982 Q4 NOB = 43 ESTIMATED: 4/85

435. (GRF) FREE LIQUID RESERVES

DEL(GRS) = .041660 + LAGCOEF1 * (DEL(GRF(I)/GNDD(I))) + .765258 * DEL(GRD)
(.309201) (5.35065)

CRSQ = .46 S.E.R. = .774 MEAN LHS = -.069999 DW = 1.519
RANGE: 1974 Q3 TO 1982 Q4 NOB = 34 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	-0.912	0.387
(-1)	-0.456	0.387
SUM:	-1.367	

436. (GRTIME) TIME DEPOSIT RATE

GRTIME = -.555762 + .745365 * GRS + .234144 * GRL
(.946464) (17.5834) (2.43912)

CRSQ = .972 S.E.R. = .438 MEAN LHS = 6.642 RHO = .355 (2.9)
RANGE: 1967 Q2 TO 1983 Q1 NOB = 63 ESTIMATED: 4/85

437. (GRSAV) SAVINGS DEPOSIT RATE

GRSAV = .144615 + .709559 * GRSAV(-1) + .084830 * GRS + .053701 * GRL
(.668716) (14.2402) (5.5328) (1.20244)

CRSQ = .951 S.E.R. = .202 MEAN LHS = 4.265 DW = 1.722
RANGE: 1970 Q2 TO 1982 Q4 NOB = 51 ESTIMATED: 4/85

438. (GRL) LONG TERM INTEREST RATE

GRL = 3.9139 + .260923 * GRS + LAGCOEF1 * (GRS(I-1)) + .08442 * Q1 + .170427 * Q2
(8.61951) (8.07979) (1.07093) (2.01722)

+ .234061 * Q3
(3.25368)

CRSQ = .945 S.E.R. = .323 MEAN LHS = 7.891 RHO = .74 (8.5)
RANGE: 1963 Q1 TO 1982 Q4 NOB = 79 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.040	3.892
(-1)	0.037	4.257
(-2)	0.035	4.695
(-3)	0.033	5.177
(-4)	0.031	5.589
(-5)	0.029	5.678
(-6)	0.027	5.224
(-7)	0.025	4.362
(-8)	0.023	3.439
(-9)	0.020	2.651
(-10)	0.018	2.033
(-11)	0.016	1.555
SUM:	0.335	

439. (GRRC) CALCULATED VALUE OF REQUIRED RESERVES

GRRC = GRRRDD * GDD + GRRRTD * GTD + GRRRSD * GSD + GARRRFD * GFD

440. (GRR) ACTUAL REQUIRED RESERVES (QUASI-IDENTITY)

LOG(GRR + GCURB * D781I) = -5.37763 + 1.08623 * LOG(GRRC) + .052331 * Q1 + .055143 * Q2
(30.7008) (53.0125) (11.3712) (10.8744)

+ .049245 * Q3
(10.2676)

CRSQ = .993 S.E.R. = .011 MEAN LHS = 3.906 RHO = .289 (1.7)
RANGE: 1973 Q4 TO 1982 Q4 NOB = 36 ESTIMATED: 4/85

441. (GNDD) DEMAND DEPOSITS HELD BY RESIDENTS LESS RESERVES

GNDD = (1 - GRRRDD/100) * GDD

G.III.C. MONETARY AUTHORITIES

442. (GOTHBB) CENTRAL BANK BALANCE SHEET IDENTITY - OTHER CLAIMS OF THE BUNDESBANK

GRF + GCBMC = GNFAG - GNGPBB + GOTHBB - GRESADJ

443. (GCBMC) CALCULATED VALUE OF CENTRAL BANK MONEY

GCBMC = GCUR + GCURB + 0.166 * GDD + 0.124 * GTD + 0.081 * GSD

444. (GRS) GCBM - ACTUAL VALUE OF CENTRAL BANK MONEY ('DETERMINES' GRS)

LOG(GCBM) = .479618 + .88918 * LOG(GCBMC) - .005186 * Q1 - .009324 * Q2
(7.16098) (66.2436) (2.84741) (4.67027)

- .002315 * Q3
(1.30277)

CRSQ = .999 S.E.R. = .005 MEAN LHS = 4.845 RHO = .7 (5.8)
RANGE: 1973 Q1 TO 1982 Q4 NOB = 39 ESTIMATED: 4/85

445. (GCBMSA) ACTUAL VALUE OF CENTRAL BANK MONEY (SA)

GCBMSA = GCBM * GSAFCBM

446. (GRESADJ) ADJUST. TO GCBM TO ACCOUNT FOR 1974 RESERVE REQUIREMENTS

GRESADJ = 0.01 * ((GRRRDD - 16.61) * GDD + (GRRRTD - 12.44) * GTD + (GRRRSD - 8.12) * GSD +
GARRRFD * GFD)

447. (GPCHCBM) PERCENTAGE CHANGE IN CENTRAL BANK MONEY - ANNUAL BASIS

GPCHCBM = DEL(LOG(GCBMSA)) * 400

G.IV. PRICES AND SUPPLY

G.IV.A. PRICES

448. (GP) ABSORPTION DEFLATOR

```
LOG(GP)   =  -1.4373 + SUM(J = -3, 0 : LOG(GUCNRV(J))) * 0.25
               (11.8235)

      +  LAGCOEF1 * ((LOG(GW(I)) - LOG(GUCNRV(I))))

      +  .019172 * (LOG(OPOIL72/GEI) - LOG(GUCNRV))
         (3.626)

      +  LAGCOEF2 (I) * ((LOG(GPMNOIL(I)) - LOG(GUCNRV(I))))   +  LAGCOEF3 * ((1/GUN(I-1)))

      +  .000788 * Q1    +  .004952 * Q2    +  .002252 * Q3
         (.723351)          (3.75653)          (2.00716)


     CRSQ  = 1  S.E.R. =  .004  MEAN LHS = 2.682  RHO =  .962 (289.8)
     RANGE: 1973 Q2 TO 1982 Q2   NOB = 36   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT	LAGCOEF3	T-STAT
(-0)	0.032	0.749	0.204	4.302	0.018	0.551
(-1)	0.179	8.717	0.049	1.653	0.030	1.055
(-2)	0.251	27.593	NA	NA	NA	NA
(-3)	0.248	24.818	NA	NA	NA	NA
SUM:	0.711		0.253		0.048	

449. (GPIP) INDUSTRIAL PRICE INDEX

```
LOG(GPIP)   =  .049361 + LOG(GPDOM)   -  .129849 * LOG(GPDOM(-1) * GEI(-1)/GFPXFTW(-1))
                 (2.69098)               (4.18467)

      +  .002855 * Q1   -  .001951 * Q2   -  .000680 * Q3
         (1.33853)         (.794636)         (.319898)

     CRSQ  = .97  S.E.R. =  .01  MEAN LHS = .086  RHO =  .934 (38)
     RANGE: 1963 Q4 TO 1982 Q4   NOB = 76   ESTIMATED:  4/85
```

450. (GPXGUV) EXPORT UNIT VALUE INDEX

```
LOG(GPXGUV)   =  .054485 + LOG(GPDOM)   -  .178046 * LOG(GPDOM(-1) * GEI(-1)/GFPXFTW(-1))
                   (1.92478)               (4.32563)

      +  .004232 * Q1   -  .001463 * Q2   +  .000954 * Q3
         (1.27312)         (.388612)         (.295496)

     CRSQ  = .907  S.E.R. =  .013  MEAN LHS = .06  RHO =  .936 (17.6)
     RANGE: 1970 Q1 TO 1982 Q4   NOB = 51   ESTIMATED:  4/85
```

451. (GPMGUV) IMPORT UNIT VALUE INDEX (QUASI-IDENTITY)

```
LOG(GPMGUV * GEI)   =  -.074817   +  .858368 * LOG(GFPXVWD)   +  .012389 * Q1   -  .004986 * Q2
                         (.316058)     (7.56019)                 (1.85747)         (.663497)

      -  .022074 * Q3
         (3.36379)

     CRSQ  = .991  S.E.R. =  .022  MEAN LHS = .862  RHO =  .975 (27.3)
     RANGE: 1974 Q2 TO 1982 Q4   NOB = 34   ESTIMATED:  4/85
```

452. (GPCPI) CONSUMER PRICE INDEX (QUASI-INDENTITY)

```
LOG(GPCPI)   =  4.35291 + LOG(GP)   +  .005823 * Q1   +  .005887 * Q2   +  .001855 * Q3
                (1063.1)              (4.21644)        (3.69811)        (1.34359)

     CRSQ  = .725  S.E.R. =  .004  MEAN LHS = 4.358  RHO =  .818 (9.1)
     RANGE: 1973 Q4 TO 1982 Q4   NOB = 36   ESTIMATED:  4/85
```

453. (GPGNP) GROSS NATIONAL PRODUCT DEFLATOR

```
GPGNP = GGNPV/GGNP
```

454. (GPMGSNI) IMPORT DEFLATOR - NIA BASIS

```
GPMGSNI = GMGSNIV/GMGSNI
```

455. (GPCHP) PERCENTAGE CHANGE IN PRICE LEVEL - ANNUAL RATE

```
GPCHP = DEL(LOG(GP)) * 400
```

456. (GPMNOIL) PRICE INDEX FOR NON-OIL IMPORTS

```
GPMNOIL = EXP(LOG(GPMGSNI)/0.888115 - (1 - 0.888115)/0.888115 * LOG(OPOIL72/GEI))
```

457. (GPDOM) DEFLATOR FOR DOMESTIC ABSORPTION (WITHOUT IMPORTS)

```
GPDOM = EXP((LOG(GP) - (1 - GSHARDOM) * LOG(GPMGSNI))/GSHARDOM)
```

458. (GPEXP) INFLATIONARY EXPECTATIONS - MOVING AVERAGE

```
GPEXP = 100 * SUM(J = -11, 0 : 0.87**(-J) * (GPGNP(J ) - GPGNP(J - 4))/GPGNP(J - 4))/SUM ( K = 0
     TO 11 : 0.87**K)
```

459. (GP1) ONE-QUARTER-AHEAD EXPECTED PRICE LEVEL PROXY

```
GP1 = (GPEXP/100 + 1) * GP(-3)
```

G.IV.B. WAGES AND EMPLOYMENT

460. (GW) HOURLY WAGE RATE IN MANUFACTURING

(GW - GW(-4)) * 100/GW(-4) - GPEXP = -.472282 * GUN
(.832469)

CRSQ = .893 S.E.R. = 1.892 MEAN LHS = 4.648 RHO = .962 (27.4)
RANGE: 1967 Q1 TO 1983 Q1 NOB = 64 ESTIMATED: 4/85

461. (GLE) EMPLOYMENT

LOG(GLE) = 1.24673 + LAGCOEF1 * (DEL(LOG(GLHI(I)))) + .091306 * LOG(GLHI)
(3.20573) (2.61819)

+ .845326 * LOG(GLE(-1)) + .000228 * TIME
(18.8958) (2.70873)

CRSQ = .993 S.E.R. = .002 MEAN LHS = 9.999 RHO = .692 (8.6)
RANGE: 1961 Q1 TO 1983 Q2 NOB = 89 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.067	2.891
(-1)	0.100	2.891
(-2)	0.100	2.891
(-3)	0.067	2.891
SUM:	0.334	

462. (GLF) LABOR FORCE

LOG(GLF/GPOP) = -.675345 + LAGCOEF1 * (LOG(GLE(I)/GPOP(I))) + .001661 * TIME
(7.91629) (9.02432)

CRSQ = .992 S.E.R. = .002 MEAN LHS = -.978 RHO = .933 (71.2)
RANGE: 1965 Q1 TO 1983 Q4 NOB = 75 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.176	5.001
(-1)	0.124	6.004
(-2)	0.081	6.074
(-3)	0.046	3.255
(-4)	0.020	1.155
(-5)	0.002	0.100
(-6)	-0.007	0.486
(-7)	-0.008	0.850
SUM:	0.433	

463. (GLHI) TOTAL HOURS OF LABOR - INDEX

```
LOG(GGNP + GMGSNI) - LOG(GCU * GK) - 0.6 * (LOG(GLHI) - LOG(GCU * GK))   =  1.98908
                                                                           (3.88136)
      +  .169637 * (LOG(GMGSNI - GCOL * 0.365 * 7.48583) - LOG(GCU * GK))
         (4.45256)
      +  LAGCOEF1 * ((LOG(GCOL(I) * 0.365 * 7.48583) - LOG(GCU(I) * GK(I))))   +  .004230 * TIME
                                                                                  (5.85023)
      -  .001829 * Q1   -  .001531 * Q2   -  .000658 * Q3
         (1.06393)         (.732556)         (.387813)

     CRSQ  = .993  S.E.R. =  .005  MEAN LHS = .282  RHO =  .822 (12.3)
     RANGE: 1973 Q2 TO 1982 Q4   NOB = 38   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT
(-0)	0.015	0.908
(-1)	0.015	0.779
(-2)	0.036	1.916
(-3)	0.020	1.205
SUM:	0.087	

464. (GGNPPOT) POTENTIAL GNP (COEFFICIENTS CALCULATED IN GLHI EQUATION)

```
GGNPPOT = - GMGSNI + EXP  (  1.98908 + LOG(92 * GK) + 0.6 * (LOG(GLF * 0.001044) - LOG(92 * GK))
                            (3.88136)
      +  .169637 * (LOG(GMGSNI - GCOL * 0.365 * 7.48583) - LOG(92 * GK))
         (4.45256)
      +  LAGCOEF1 * ((LOG(GCOL(I) * 0.365 * 7.48583) - LOG(92 * GK(I))))   +  .004230 * TIME
                                                                             (5.85023)
      -  .001829 * Q1   -  .001531 * Q2   -  .000658 * Q3)
         (1.06393)         (.732556)         (.387813)
```

LAG	LAGCOEF1	T-STAT
(-0)	0.015	0.908
(-1)	0.015	0.779
(-2)	0.036	1.916
(-3)	0.020	1.205
SUM:	0.087	

465. (GUN) UNEMPLOYMENT RATE

```
GUN = 100 * (GLF - GLE)/GLF
```

466. (GLUNSA) UNEMPLOYMENT RATE (SA)

```
GLUNSA = (GLF - GLE)/GSAFLU
```

467. (GPCHW) PERCENTAGE CHANGE IN WAGES - ANNUAL RATE

```
GPCHW = DEL(LOG(GW)) * 400
```

G.IV.C. CAPACITY AND REAL CAPITAL STOCKS

468. (GCU) CAPACITY UTILIZATION RATE

```
DEL(LOG(GCU)) = DEL(LOG(GGNP/GGNPPOT))
```

469. (GKPR) GROSS PRIVATE CAPITAL STOCK - RESIDENTIAL

```
GKPR = (1 - 0.018731/4) * GKPR(-1) + GIFPR/4 * (1 - 0.018731/4) **0.5
```

470. (GKPNR) GROSS PRIVATE CAPITAL STOCK - NON-RESIDENTIAL

```
GKPNR = (1 - 0.06308/4) * GKPNR(-1) + GIFPNR/4 * (1 - 0.06308/4) **0.5
```

471. (GKP) GROSS PRIVATE CAPITAL STOCK

```
GKP = GKPNR + GKPR
```

472. (GKG) GROSS GOVERNMENT CAPITAL STOCK

```
GKG = (1 - 0.00675) * GKG(-1) + GIFG/4 * (1 - 0.00675)**0.5
```

473. (GK) TOTAL GROSS CAPITAL STOCK

```
GK = GKP + GKG
```

474. (GKII) STOCK OF INVENTORY INVESTMENT

```
GKII = GKII(-1) + GII/4
```

475. (GUCR) REAL USER COST OF CAPITAL - RESIDENTIAL

```
GUCR = (1 - GGRANTR) * ((1 - GTRY) * (GRL/100) - GPEXP/100 + GDECAYR)
```

476. (GUCNR) REAL USER COST OF CAPITAL - NON-RESIDENTIAL

```
GUCNR = (1 - GTRYC * GECDEP - GGRANTNR) * ((1 - GTRYC) * (GRL /100) - GPEXP/100 + GDECAYNR)/(1 -
    GTRYC)
```

477. (GUCNRV) NOMINAL USER COST OF CAPITAL - NON-RESIDENTIAL

```
GUCNRV = IF GUCNR LE 0. THEN LOG(1.00001) * GP ELSE LOG (1 + GUCNR) * GP
```

478. (GECDEP) ECONOMIC DEPRECIATION

```
GECDEP = (1 - EXP((-(1 - GTRYC)) * (GRL/100) * GLIFENR))/((1 - GTRYC) * (GRL/100) * GLIFENR)
```

G.V. INTERNATIONAL FINANCIAL MARKET

G.V.A. DIRECT INVESTMENT CLAIMS AND LIABILITIES

479. (GDLTDC) CHANGE IN DIRECT INVESTMENT CLAIMS ON FOREIGNERS

```
GDLTDC   =  5.7425
           (5.57951)

     +  LAGCOEF1 * (DEL((CGNPV(I) * (CER(I)/GER(I)))**0.155172 * (UGNPV(I)/GER(I ))**0.396552 *

    (EGNPV(I) * (EER(I)/GER(I)))**0.206897 * (JGNPV(I) * (JER(I)/GER (I)))**0.241379))

     +  5.10956 * D7211    -  .95324 * Q1    -  1.9203 * Q2    -  1.48577 * Q3
       (3.1764)             (1.74625)         (3.19292)         (2.82817)
```

CRSQ = .444 S.E.R. = 1.797 MEAN LHS = 5.833 RHO = .571 (4.6)
RANGE: 1969 Q2 TO 1982 Q4 NOB = 54 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.003	0.927
(-1)	0.003	1.241
(-2)	0.003	1.531
(-3)	0.003	1.669
(-4)	0.003	1.631
(-5)	0.003	1.511
(-6)	0.003	1.377
(-7)	0.003	1.251
(-8)	0.003	1.131
(-9)	0.003	1.007
(-10)	0.003	0.872
(-11)	0.002	0.721
(-12)	0.002	0.563
(-13)	0.002	0.410
(-14)	0.001	0.272
(-15)	0.001	0.157
SUM:	0.043	

480. (GRLTDC) REAL LONG-TERM DIRECT CLAIMS ON FOREIGNERS

```
GRLTDC = GRLTDC(-1) + 0.25 * GDLTDC * (GERFCW/GFPGNPFC)
```

481. (GDLTDL) CHANGE IN DIRECT INVESTMENT LIABILITIES TO FOREIGNER

GDLTDL/GP = 3.25803 + LAGCOEF1 * (DEL(GGNPV(I)/GP(I)))
(3.94402)

+ LAGCOEF2 * (DEL(GRL(I) - URL(I)) * GGNPL(I)) + 5.50186 * D7211
(3.50794)

CRSQ = .48 S.E.R. = 1.532 MEAN LHS = 2.97 DW = 1.799
RANGE: 1965 Q4 TO 1982 Q4 NOB = 69 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.001	0.596	0.000	1.914
(-1)	0.002	0.596	0.001	2.064
(-2)	0.003	0.596	0.001	2.255
(-3)	0.004	0.596	0.001	2.506
(-4)	0.005	0.596	0.001	2.844
(-5)	0.005	0.596	0.001	3.315
(-6)	0.006	0.596	0.001	3.974
(-7)	0.006	0.596	0.001	4.798
(-8)	0.006	0.596	0.001	5.307
(-9)	0.006	0.596	0.001	4.673
(-10)	0.005	0.596	0.001	3.455
(-11)	0.005	0.596	0.001	2.467
(-12)	0.004	0.596	0.000	1.793
(-13)	0.003	0.596	0.000	1.333
(-14)	0.002	0.596	0.000	1.006
(-15)	0.001	0.596	0.000	0.765
SUM:	0.068		0.010	

482. (GRLTDL) REAL LONG-TERM DIRECT LIABILITIES TO FOREIGNERS

GRLTDL = GRLTDL(-1) + 0.25 * GDLTDL/GPGNP

G.V.B. OTHER CAPITAL FLOWS

483. (GERFW) WT. AV. EXCH RATE (INVERTED NET PRIV CAP. EQ.)

LOG(GERFW) = LOG(GFPGNP1(-1)/GP1(-1)) + 0.03 * (GRS - GPEXP - GFRSFW + GFPGWEXP)

484. (GFLP) FINANCIAL PORTFOLIO LIABILITIES TO FOREIGNERS

GFLP = -75.6789 + .013957 * GFNWD + LAGCOEF1 * (GMGV(I)) + LAGCOEF2 * (GEFP(I))
(1.19203) (1.18798)

+ LAGCOEF3 * (RED(I)) + 10.7331 * D774I - 1.56331 * Q1 - 2.74949 * Q2
(1.6588) (.848721) (1.24882)

- .182521 * Q3
(.099122)

CRSQ = .995 S.E.R. = 5.401 MEAN LHS = 248.392 RHO = .715 (4.9)
RANGE: 1973 Q2 TO 1982 Q4 NOB = 38 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT	LAGCOEF3	T-STAT
(-0)	0.137	1.805	-0.284	0.366	0.111	0.202
(-1)	0.145	3.393	-0.610	0.977	-0.097	0.295
(-2)	0.153	5.690	-0.833	1.477	-0.305	1.072
(-3)	0.161	3.257	-0.952	1.738	-0.513	1.097
(-4)	0.169	2.023	-0.968	1.831	NA	NA
(-5)	NA	NA	-0.881	1.848	NA	NA
(-6)	NA	NA	-0.691	1.837	NA	NA
(-7)	NA	NA	-0.397	1.817	NA	NA
SUM:	0.763		-5.617		-0.805	

485. (GEANDO) ERRORS AND OMISSIONS

GEANDO = -38.117 - .003348 * (GXGV - GMGV) + LAGCOEF1 * (DEL(GRS(I) * GNMVNSA(I)))
(3.3025) (.013996)

+ LAGCOEF2 * (DEL(RED(I) * GNMVNSA(I))) + 92.4061 * D7541 + 33.4347 * Q1
(4.67736) (4.05152)

+ 40.5377 * Q2 + 36.156 * Q3
(5.06352) (4.45944)

CRSQ = .479 S.E.R. = 18.253 MEAN LHS = -8.184 DW = 2.387
RANGE: 1971 Q4 TO 1982 Q4 NOB = 45 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	-0.001	0.851	-0.000	0.597
(-1)	0.000	0.705	-0.000	0.558
(-2)	0.001	2.064	-0.000	0.420
(-3)	0.001	2.163	-0.000	0.179
(-4)	0.001	1.313	0.000	0.035
(-5)	-0.000	0.430	0.000	0.169
SUM:	0.002		-0.001	

486. (GDNFAP) NET PRIV CAPITAL OUTFLOW (BOP IDENTITY)

GDNFAP = - GDNFAG + GCURBAL - GNSKA + GDLO - GDLTDC + GDLTDL

487. (GFCP) FINANCIAL PORTFOLIO CLAIMS ON FOREIGNERS

DEL(GFCP) * 4 = GDNFAP + DEL(GFLP) * 4 + GEANDO

G.V.C. EXCHANGE RATE RELATIONSHIPS

488. (GEFP) THREE MONTH FORWARD EXCHANGE PREMIUM

```
GEFP   =  -10.218    +  .305792 * Q1    +  .202605 * Q2    +  .090042 * Q3 + GFLOAT *
           (5.1)         (1.8)             (1.2)              (.5)

       (  -1.12382 * (RED - GRS)    +  2.45239 * (GMGSNIV(-1)/GNFAG(-1))
           (13.3)                       (5.2)

       +  4.54158 * (GPXGUV(-1)/(GFPXVWD(-1)/GEI(-1)))) + (1 - GFLOAT) *   (  -.890741 * (RED - GRS)
           (2.9)                                                                (20.1)

       +  .254848 * (GMGSNIV(-1)/GNFAG(-1))    +  9.59386 * (GPXGUV(-1)/(GFPXVWD(-1)/GEI(-1))))
           (2.5)                                   (4.5)

       -  .976021 * D70120 * (GRS - REM)
           (17.4)

     CRSQ  = .927  S.E.R. =  .454  MEAN LHS = NA  DW = 1.73
     RANGE: 1960 Q2 TO 1975 Q4   NOB = 63   ESTIMATED:  1/78
```

489. (GER) EXCHANGE RATE - FIXED WEIGHTS (SOLVED FOR GER)

```
GERFW = (GER**0.23 * (GER/CER)**0.09 * (GER/EER)**0.12 * (GER /JER)**0.14)**(1/0.58)
```

490. (GEI) SPOT EXCHANGE RATE INDEX - ($/DM)

```
GER = GEI * 0.31364
```

G.VI. OFFICIAL INTERVENTION AND BALANCE OF PAYMENTS

491. (GDNFAG) BALANCE OF ALL TRANSACTIONS - CURRENT AND CAPITAL ACCTS

GDNFAG = 61.8216 + 180.834 * (GER/GER(-1) - 1) - 1.05721 * GNFAG(-1) - 24.999 * D774I
(2.58758) (2.39917) (2.86127) (2.17927)

CRSQ = .159 S.E.R. = 22.743 MEAN LHS = -4.121 DW = 1.815
RANGE: 1973 Q2 TO 1982 Q4 NOB = 39 ESTIMATED: 4/85

492. (GDNFAGT) CHG IN NET FOR. ASSETS OF THE GOVT. INC VALUATION EFFECTS

GDNFAGT = GDNFAG + GDFAGVAL

493. (GNFAG) STOCK OF NET FOREIGN ASSETS OF THE GOVERNMENT

GNFAG = (GDNFAGT - GDFAGVAL)/4 + GNFAG(-1)

G.VII. FOREIGN VARIABLES (WEIGHTED AVERAGES)

494. (GFNWD) FOREIGN NET WORTH ($)

```
GFNWD = CNWV * CER + ENW * EER + JNW * JER + UNW
```

495. (GFPXVWD) FOREIGN AVERAGE EXPORT PRICES - VARIABLE WEIGHTS ($)

```
GFPXVWD = UPXGUV**GWTMU * (CPXGUV * CEI)**GWTMC * (EPXGUV * EEI) **GWTME * (JPXGUV * JEI)**GWTMJ
     * IPXGUV**GWTMI * LPXGUV**GWTML * OPOIL72 **GWTMO
```

496. (GFPFW) FOREIGN AVERAGE ABSORPTION DEFLATOR - FIXED WEIGHTS

```
GFPFW = (UP**0.23 * CP**0.09 * EP**0.12 * JP**0.14)**(1/0.58)
```

497. (GFPGNPFW) FOREIGN ABSORPTION DEFLATOR - WEIGHTED

```
GFPGNPFW = (UPGNP**0.23 * CPGNP**0.09 * EPGNP**0.12 * JPGNP **0.14)**(1/0.58)
```

498. (GFPGNEXP) EXPECTED FOREIGN INFLATION RATE - WEIGHTED

```
GFPGNEXP = 100 * SUM(J = -11, 0 : 0.87**(-J) * (GFPGNPFW(J) - GFPGNPFW(J - 4))/GFPGNPFW(J -
     4))/SUM ( K = 0 TO 11 : 0.87 **K)
```

499. (GFPGNP1) EXPECTED FOREIGN PRICE LEVEL

```
GFPGNP1 = (GFPGNEXP/100 + 1) * GFPGNPFW(-3)
```

500. (GFRSFW) FOREIGN AVERAGE TREASURY BILL RATE

```
GFRSFW = 0.23/0.58 * URS + 0.09/0.58 * CRS + 0.12/0.58 * ERS + 0.14/0.58 * JRS
```

501. (GFPGNPFC) FOREIGN PRICE LEVEL - GNP BASIS - WEIGHTED BY FOR. CLAIMS

```
GFPGNPFC = CPGNP**0.04 * EPGNP**0.39 * JPGNP**0.16 * UPGNP**0.41
```

502. (GFCUFCW) FOREIGN CAPACITY UTILIZATION - WEIGHTED BY FOR. CLAIMS

```
GFCUFCW = CCU**0.04 * ECU**0.39 * JCU**0.16 * UCU**0.41
```

503. (GFRSFCW) FOREIGN SHORT-TERM INTEREST RATE - WTD. BY FOR. CLAIMS

```
GFRSFCW = CRS * 0.04 + ERS * 0.39 + JRS * 0.16 + URS * 0.41
```

504. (GFRSFLW) FOREIGN LONG-TERM INTEREST RATE - WTD. BY FOR. LIABS.

```
GFRSFLW = CRS * 0.03 + ERS * 0.61 + JRS * 0.07 + URS * 0.29
```

505. (GFGNPFTW) REAL FOREIGN GNP - WEIGHTED BY FIXED TRADE WEIGHTS.

```
GFGNPFTW = (CER * CGNP)**(0.09/0.58) * (EER * EGNP)**(0.12/0.58) * (JER * JGNP)**(0.14/0.58) *
     UGNP**(0.23/0.58)
```

506. (GFGNPVFT) NOMINAL FOR. GNP - WEIGHTED BY FIXED TRADE WEIGHTS

```
GFGNPVFT = (CER * CGNPV)**(0.09/0.58) * (EER * EGNPV)**(0.12 /0.58) * (JER * JGNPV)**(0.14/0.58)
     * UGNPV**(0.23/0.58)
```

507. (GERFCW) EXCHANGE RATE - WEIGHTED BY FOREIGN CLAIMS

```
GERFCW = (GER/CER)**0.04 * (GER/EER)**0.39 * (GER/JER)**0.16 * GER**0.41
```

508. (GFPXFTW) FOREIGN EXPORT UNIT VALUE - WTD. BY FIXED TRADE WEIGHTS

```
GFPXFTW = UPXGUV**0.396552 * (JPXGUV * JEI)**0.241379 * (EPXGUV * EEI)**0.206897 * (CPXGUV *
     CEI)**0.155172
```

JAPANESE MODEL: DOMESTIC REAL SIDE

J.I.A. DOMESTIC SPENDING AND DISPOSABLE INCOME

509. (JC) PRIVATE CONSUMPTION EXPENDITURE - 1972 PRICES

```
LOG(JC)  =  -.140903  +  .887279 * LOG(JC(-1))  +  .125757 * LOG(JYD)
            (.681709)    (19.3046)                 (2.08737)

         -  .288973 * LOG(1 + JRL/100)
            (1.15608)
```

CRSQ = .996 S.E.R. = .011 MEAN LHS = 10.95 DW = 1.747
RANGE: 1969 Q2 TO 1982 Q4 NOB = 55 ESTIMATED: 4/85

510. (JIFPNR) PRIVATE NONRESIDENTIAL INVESTMENT - 1972 PRICES

```
JIFPNR  =  1141.78 + 0.106 * JKPNR(-1)  +  .782659 * (JIFPNR(-1) - 0.106 * JKPNR(-2))
           (2.50538)                       (11.3995)

        +  LAGCOEF1 * (DEL(JGNP(I-1)))  +  LAGCOEF2 * (DEL(JUCNR(I-1)))  -  682.751 * D741I
                                                                           (3.02556)

        +  31.7009 * DEL(JCU)
           (1.52295)
```

CRSQ = .971 S.E.R. = 264.427 MEAN LHS = 4689.07 RHO = .551 (4.1)
RANGE: 1971 Q2 TO 1982 Q4 NOB = 46 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.049	1.478	-11316.000	1.390
(-1)	0.090	2.645	-5658.000	1.390
(-2)	0.096	2.533	NA	NA
(-3)	0.066	2.394	NA	NA
SUM:	0.300		-16974.000	

511. (JIFPR) RESIDENTIAL INVESTMENT - 1972 PRICES

```
JIFPR  =  -1315.25 + 0.082 * JKPR(-1)  +  .577476 * (JIFPR(-1) - 0.082 * JKPR(-2))
          (2.05896)                       (3.90676)

       +  .251599 * (JIFPR(-2) - 0.082 * JKPR(-3))  +  LAGCOEF1 * (DEL(JYDV(I-1)/JP(I-1)))
          (1.75198)

       +  LAGCOEF2 * (JNH(I-1)/JP(I-1))  +  LAGCOEF3 * (JUCR(I-1) * 100.)  -  773.356 * D741I
                                                                              (4.47901)
```

CRSQ = .872 S.E.R. = 319.647 MEAN LHS = 3246.04 RHO = -.27 (1.7) RHO2 = -.312 (2)
RANGE: 1970 Q4 TO 1983 Q1 NOB = 48 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT	LAGCOEF3	T-STAT
(-0)	0.087	4.716	0.004	3.461	-36.166	3.833
(-1)	0.076	4.716	0.004	3.461	-28.932	3.833
(-2)	0.065	4.716	0.003	3.461	-21.699	3.833
(-3)	0.055	4.716	0.003	3.461	-14.466	3.833
(-4)	0.044	4.716	0.002	3.461	-7.233	3.833
(-5)	0.033	4.716	0.002	3.461	NA	NA
(-6)	0.022	4.716	0.001	3.461	NA	NA
(-7)	0.011	4.716	0.001	3.461	NA	NA
SUM:	0.393		0.019		-108.497	

512. (JCCAPV) PRIVATE CAPITAL CONSUMPTION ALLOWANCE-CURRENT PRICES

JCCAPV = 39702.2 + .038 * (JKP(-1) * JP) + .026319 * (JGNPV - JTV - JCV)
(2.37991) (2.16876) (1.36982)

CRSQ = .997 S.E.R. = 501.361 MEAN LHS = 18624.6 RHO = .991 (475.4)
RANGE: 1967 Q4 TO 1982 Q4 NOB = 60 ESTIMATED: 4/85

513. (JGNP) GROSS NATIONAL PRODUCT - 1972 PRICES

JGNP = (JCV + JIFPV + JIFGV + JIIV + JGV)/JP + JXGSNI - JMGSNI

514. (JGNPV) GROSS NATIONAL PRODUCT - CURRENT PRICES

JGNPV = JCV + JIFPV + JIFGV + JIIV + JGV + JXGSNIV - JMGSNIV

515. (JGNPVNSA) GROSS NATIONAL PRODUCT - CURRENT PRICES (NSA)

JGNPVNSA = JGNPV/JSAFGNPV

516. (JCV) PRIVATE CONSUMPTION EXPENDITURE - CURRENT PRICES

JCV = JC * JP

517. (JIFP) PRIVATE FIXED INVESTMENT - 1972 PRICES

JIFP = JIFPNR + JIFPR

518. (JIFPV) PRIVATE FIXED INVESTMENT - CURRENT PRICES

JIFPV = JIFP * JP

519. (JIFPVNSA) PRIVATE FIXED INVESTMENT - CURRENT PRICES (NSA)

JIFPVNSA = JIFPV/JSAFIFPV

520. (JIIV) INVENTORY INVESTMENT - CURRENT PRICES

JIIV = JII * JP

521. (JIIVNSA) INVENTORY INVESTMENT - CURRENT PRICES (NSA)

JIIVNSA = JIIV/JSAFIIV

522. (JCCAV) CAPITAL CONSUMPTION ALLOWANCE - CURRENT PRICES

JCCAV = JCCAPV + JCCAGV

523. (JCCAVNSA) CAPITAL CONSUMPTION ALLOWANCE-CURRENT PRICES (NSA)

JCCAVNSA = JCCAV/JSAFCCAV

524. (JYDVNSA) DISPOSABLE INCOME - CURRENT PRICES (NSA)

JYDVNSA = JGNPVNSA - JTVNSA + JTRANVNS - JCCAVNSA

525. (JYDV) DISPOSABLE INCOME - CURRENT PRICES

JYDV = JYDVNSA * JSAFYDV

526. (JYD) DISPOSABLE INCOME - 1972 PRICES

JYD = JYDV/JP

J.I.B. GOVERNMENT SECTOR

527. (JTRANV) GOVERMENT TRANSFERS TO PRIVATE SECTOR

```
JTRANV/JP    =  -74031.4
                (6.48622)

      +  LAGCOEF1 * ((JGDEBT(I) + JGDEBT(I-1) - JNGP(I) - JNGP(I-1))/2 * JRL/100 /JP)

      +  .743109 * JPOP
         (6.88458)
```

CRSQ = .917 S.E.R. = 1083.54 MEAN LHS = 10099.8 RHO = .282 (1.9)
RANGE: 1969 Q4 TO 1982 Q4 NOB = 52 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.121	0.637
(-1)	0.101	0.637
(-2)	0.081	0.637
(-3)	0.061	0.637
(-4)	0.040	0.637
(-5)	0.020	0.637
SUM:	0.424	

528. (JTV) TOTAL GOVERNMENT REVENUE - CURRENT PRICES

```
JTV/JGNPVNSA   =  .079225   +  .228957 * JTRY   +  .207818 * JTRYC   +  .042587 * Q1
                 (.762504)    (2.73108)          (.80455)            (6.1608)

      +  .037445 * Q2   +  .033686 * Q3
         (4.93482)         (4.99852)
```

CRSQ = .609 S.E.R. = .019 MEAN LHS = .256 RHO = .328 (2)
RANGE: 1972 Q2 TO 1982 Q4 NOB = 42 ESTIMATED: 4/85

529. (JGV) GOVERNMENT EXPENDITURES - CURRENT PRICES

```
JGV = JG * JP
```

530. (JGVNSA) GOVERNMENT EXPENDITURES - CURRENT PRICES (NSA)

```
JGVNSA = JGV/JSAFGV
```

531. (JIFGV) GOVERNMENT FIXED INVESTMENT - CURRENT PRICES

```
JIFGV = JIFG * JP
```

532. (JIFGVNSA) GOVERNMENT FIXED INVESTMENT - CURRENT PRICES (NSA)

```
JIFGVNSA = JIFGV/JSAFIFGV
```

533. (JTRANVNS) GOVERNMENT TRANSFERS TO PRIVATE SECTOR (NSA)

```
JTRANVNS = JTRANV/JSAFTRAN
```

534. (JTVNSA) TOTAL GOVERNMENT REVENUE (NSA)

JTVNSA = JTV/JSAFTV

535. (JGDEF) GOVERNMENT DEFICIT - NIA BASIS

JGDEF = JGV + JIFGV - JTV + JTRANV

536. (JGDEBT) STOCK OF GOVERNMENT DEBT

JGDEBT = JGDEBT(-1) + 0.25 * JGDEF

J.I.C. PRIVATE SAVINGS AND WEALTH

537. (JDNWNSA) CHANGE IN NET WORTH-CURRENT PRICES (NSA-QTR RATE)

```
JDNWNSA = 0.25 * (JXGSV - JMGSV + JXTRANV - JMTRANV + (JGVNSA + JIFGVNSA + JTRANVNS - JTVNSA) +
     (JIFPVNSA + JIIVNSA - JCCAVNSA))
```

538. (JDNW) CHANGE IN NET WORTH-CURRENT PRICES (QTRLY RATE)

```
JDNW = JDNWNSA * JSAFDNW
```

539. (JNW) NET WORTH

```
JNW = JDNW + JNW(-1)
```

J.II. CURRENT ACCOUNT

J.II.A. IMPORTS OF GOODS

540. (JCOL) OIL CONSUMPTION - VOLUME (MBD)

```
LOG(JCOL)   =  -9.84831   +  LAGCOEF1 * (LOG(OPOIL72(I-1)/JEI(I-1)/JP(I-1))) + LOG(JGNP)
                 (8.08)

      +  .054992 * Q1   -  .137807 * Q2   -  .122816 * Q3
        (4.65)            (10.31)           (10.78)

     CRSQ  = .95  S.E.R. =  .017  MEAN LHS = NA  RHO =  .99 (NA)
     RANGE: 1975 Q1 TO 1980 Q4   NOB = 24   ESTIMATED:  5/82
```

LAG	LAGCOEF1	T-STAT
(-0)	-0.066	1.120
(-1)	-0.055	2.400
(-2)	-0.041	1.180
(-3)	-0.022	0.730
SUM:	-0.184	

541. (XCJV) CANADIAN GOODS EXPORTS TO JAPAN ($ U.S.)

```
LOG(XCJV/(CPXGUV * CEI))   =  -11.2859 + 1 * LOG(JGNP - JG - JIFG + JMGSNI)
                               (175.2)

      +  LAGCOEF1 * (LOG(JPWPI(I) * JEI(I)/(CPXGUV(I) * CEI(I))))

     CRSQ  = .4  S.E.R. =  .581  MEAN LHS = NA  RHO = .3766 (NA)  RHO2 = .2836 (NA)
     RANGE: 1971 Q1 TO 1979 Q4   NOB = 36   ESTIMATED:  2/82
```

LAG	LAGCOEF1	T-STAT
(-0)	0.158	0.467
(-1)	0.241	2.161
(-2)	0.242	1.287
(-3)	0.162	0.941
SUM:	0.804	

542. (XEJV) U.K. GOODS EXPORTS TO JAPAN ($ U.S.)

```
LOG(XEJV/(EPXGUV * EEI))   =  -12.2673 + 1 * LOG(JGNP - JG - JIFG + JMGSNI)
                               (101.1)

      +  LAGCOEF1 * (LOG(JPWPI(I) * JEI(I)/(EPXGUV(I) * EEI(I))))   -  .018051 * Q1
                                                                       (.3784)

      +  .068121 * Q2   -  .036378 * Q3
        (2.007)           (.78)

     CRSQ  = .33  S.E.R. =  .106  MEAN LHS = NA  RHO = .373 (NA)  RHO2 = .5106 (NA)
     RANGE: 1971 Q1 TO 1979 Q4   NOB = 36   ESTIMATED:  2/82
```

LAG	LAGCOEF1	T-STAT
(-0)	0.306	1.130
(-1)	0.249	2.040
(-2)	0.180	0.990
(-3)	0.096	0.618
SUM:	0.831	

543. (XUJV) U.S. GOODS EXPORTS TO JAPAN ($ U.S.)

LOG(XUJV/UPXGUV) = -7.19367 + .781827 * LOG(JGNP)
(-2.2733) (2.84)

+ LAGCOEF1 * (LOG(UPXGUV(I)/(JEI(I) * JP(I)))) + .689745 * LOG(UDVDSX@A)
(3.34)

- .013829 * Q1 - .04289 * Q2 - .058736 * Q3 + LAGCOEF2 * (LOG(UPXNAG(I)/UJPCOMP(I)))
(.715) (1.19) (3.02)

CRSQ = .56 S.E.R. = .068 MEAN LHS = NA RHO = .7947 (NA)
RANGE: 1968 Q1 TO 1980 Q4 NOB = 52 ESTIMATED: 4/82

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	-0.009	0.043	-0.110	0.304
(-1)	-0.108	1.130	-0.158	0.588
(-2)	-0.156	1.500	-0.122	0.464
(-3)	-0.155	1.320	NA	NA
(-4)	-0.103	1.197	NA	NA
SUM:	-0.530		-0.389	

544. (MJLV) JAPANESE GOODS IMPORTS FROM LDCS ($ U.S.)

LOG(MJLV/LPXGUV) = -11.9861 + 1.20114 * LOG(JGNP)
(4.7) (8.85)

+ LAGCOEF1 * (LOG(JPWPI(I) * JEI(I)/LPXGUV(I))) - .08534 * Q1 - .00967 * Q2
(5.03) (.51)

- .03229 * Q3
(1.97)

CRSQ = .856 S.E.R. = .079 MEAN LHS = NA RHO = .6033 (NA)
RANGE: 1970 Q1 TO 1979 Q4 NOB = 40 ESTIMATED: 2/82

LAG	LAGCOEF1	T-STAT
(-0)	0.069	0.713
(-1)	0.112	1.710
(-2)	0.141	2.630
(-3)	0.155	2.810
(-4)	0.154	2.630
(-5)	0.138	2.440
(-6)	0.107	2.280
(-7)	0.061	2.170
SUM:	0.936	

545. (MJIV) JAPANESE GOODS IMPORTS FROM NON MCM INDUSTRIAL COUNTRIES

LOG(MJIV/IPXGUV) = -14.3269 + 1.29908 * LOG(JGNP)
(3.09) (4.47)

+ LAGCOEF1 * (LOG(JPWPI(I) * JEI(I)/IPXGUV(I))) - .0844 * Q1 - .0385 * Q2
(4.5) (1.79)

- .01027 * Q3
(.548)

CRSQ = .682 S.E.R. = .102 MEAN LHS = NA RHO = .8297 (NA)
RANGE: 1970 Q1 TO 1979 Q2 NOB = 38 ESTIMATED: 2/82

LAG	LAGCOEF1	T-STAT
(-0)	0.720	2.280
(-1)	0.081	0.230
(-2)	-0.227	0.620
(-3)	0.229	0.680
SUM:	0.802	

546. (JMGOL) OIL IMPORTS - VOLUME (MBD)

JMGOL = JCOL + DEL(JSOL)/DAYSQ + JMGOLER

547. (JMGOLV) OIL IMPORTS - VALUE (QUASI-IDENTITY)

JMGOLV = 521.504 + .92733 * (JMGOL * DAYSQ * 4 * OPOIL/JER/1000)
(1.3565) (24.9083)

CRSQ = .991 S.E.R. = 331.839 MEAN LHS = 8410.31 RHO = .689 (5.3)
RANGE: 1973 Q2 TO 1982 Q4 NOB = 38 ESTIMATED: 4/85

548. (MJOV) OIL IMPORTS FROM OPEC ($ U.S.)

MJOV = JMGOLV * JER + JMJOVER

549. (MJUV) JAPANESE GOODS IMPORTS FROM THE U.S. -($ U.S.) (QUASI-IDENTITY)

MJUV = .783631 * XUJV + .39157 * XUJV(-1) - .582085 * D7411 + 1.10555 * D7421
(12.5733) (6.1335) (1.28751) (2.47202)

CRSQ = .999 S.E.R. = .443 MEAN LHS = 9.444 DW = 1.855
RANGE: 1961 Q1 TO 1982 Q4 NOB = 88 ESTIMATED: 4/85

550. (MJEV) JAPANESE GOODS IMPORTS FROM THE U.K. - ($ U.S.) (QUASI-IDENTITY)

MJEV = -.086361 + 1.03317 * XEJV + .427061 * XEJV(-1) + .935423 * D803I * XEJV
(.921241) (6.59594) (2.77938) (2.34404)

+ .885051 * D803I * XEJV(-1) - 1.62489 * D803I * XEJV(-2)
(1.84901) (4.04063)

CRSQ = .955 S.E.R. = .156 MEAN LHS = .795 RHO = .823 (7.3) RHO2 = -.122 (1.1)
RANGE: 1960 Q3 TO 1983 Q2 NOB = 90 ESTIMATED: 4/85

551. (MJCV) JAPANESE GOODS IMPORTS FROM CANADA -($ U.S.) (QUASI-IDENTITY)

MJCV = -.003627 + .895931 * XCJV + .310843 * XCJV(-1) - .233694 * D7341
(.179877) (16.5182) (5.7225) (1.84114)

+ .347495 * D7421
(2.72648)

CRSQ = .994 S.E.R. = .125 MEAN LHS = 1.799 DW = 1.842
RANGE: 1960 Q2 TO 1982 Q4 NOB = 91 ESTIMATED: 4/85

552. (MJGV) JAPANESE GOODS IMPORTS FROM GERMANY ($ U.S.)

LOG(MJGV/(GPXGUV * GER)) = -11.4861 + LOG(JGNP)
(21.0979)

+ LAGCOEF1 * (LOG(GPXGUV(I) * GER(I)/(JP(I) * JEI(I)))) + .010317 * Q1 - .009012 * Q2
(.420448) (.318951)

- .034117 * Q3
(1.39081)

CRSQ = .573 S.E.R. = .085 MEAN LHS = -10.635 RHO = .788 (7.6)
RANGE: 1971 Q4 TO 1982 Q4 NOB = 44 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	-0.145	0.792
(-1)	-0.151	1.414
(-2)	-0.145	1.515
(-3)	-0.126	1.180
(-4)	-0.096	0.949
(-5)	-0.054	0.810
SUM:	-0.717	

553. (MJRV) JAPANESE IMPORTS FROM REST OF WORLD ($ U.S.)

MJRV = MJLV + MJIV + MJOV + MJZV

554. (MJTV) TOTAL JAPANESE GOODS IMPORTS - DOT BASIS ($ U.S.)

MJTV = MJUV + MJCV + MJGV + MJEV + MJRV

555. (JMGVD) TOTAL JAPANESE GOODS IMPORTS-BOP BASIS (QUASI-IDENTITY)

JMGVD = -.42827 + .9854 * (JCIFR * MJTV)
(1.4497) (206.007)

CRSQ = .999 S.E.R. = 1.22 MEAN LHS = 42.388 RHO = .366 (3.6)
RANGE: 1961 Q2 TO 1982 Q4 NOB = 86 ESTIMATED: 4/85

556. (JMGV) TOTAL JAPANESE GOODS IMPORTS - BOP BASIS

JMGV = JMGVD * JEMG

557. (JMG) TOTAL JAPANESE GOODS IMPORTS - 1972 PRICES

JMG = JMGV/JPMGUV

J.II.B. EXPORTS OF GOODS

558. (XJTV) TOTAL JAPANESE GOODS EXPORTS - DOT BASIS ($ U.S.)

XJTV = XJUV + XJCV + XJGV + XJEV + XJRV

559. (JXGVD) TOTAL JAPANESE GOODS EXPORTS-BOP BASIS QUASI-IDENTITY

JXGVD = -.185207 + .985958 * XJTV
(1.03673) (388.522)

CRSQ = 1 S.E.R. = .812 MEAN LHS = 49.716 RHO = .294 (2.6)
RANGE: 1961 Q2 TO 1983 Q1 NOB = 87 ESTIMATED: 4/85

560. (JXGV) TOTAL JAPANESE GOODS EXPORTS - BOP BASIS

JXGVD = JXGV/JEXG

561. (JXG) TOTAL JAPANESE GOODS EXPORTS - 1972 PRICES

JXGV = JXG * JPXGUV

J.II.C. IMPORTS OF SERVICES AND TRANSFERS

562. (JMSYDV) DIRECT INVESTMENT INCOME PAYMENTS ($ U.S.)

```
LOG(JMSYDV/(JRLTDL * JPGNP))   =  -5.06769   +  .590662 * LOG(JCU)
                                  (2.05457)     (1.07662)

      +  1.28223 * 4 * LOG(JPGNP/JPGNP(-1))
        (1.37636)
```

CRSQ = .017 S.E.R. = .364 MEAN LHS = -2.337 DW = 2.407
RANGE: 1965 Q4 TO 1982 Q4 NOB = 69 ESTIMATED: 4/85

563. (JMSYNDV) NONDIRECT INVESTMENT INCOME PAYMENTS ($ U.S.)

```
JMSYNDV/JFLP   =  .015275   +  LAGCOEF1 * (JFRSFLW(I)/100)   +  LAGCOEF2 * (JRS(I)/100)
                 (2.49478)
```

CRSQ = .784 S.E.R. = .008 MEAN LHS = .06 RHO = .352 (3.3)
RANGE: 1961 Q4 TO 1982 Q4 NOB = 84 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.185	2.383	0.042	0.671
(-1)	0.159	10.713	0.028	1.492
(-2)	0.120	3.038	0.016	0.455
(-3)	0.067	1.742	0.006	0.200
SUM:	0.531		0.092	

564. (JMTRANPV) TRANSFER PAYMENTS - PRIVATE

```
LOG(JMTRANPV)   =  -6.80613   +  .973203 * LOG(JYDV)
                  (9.18826)     (14.8715)
```

CRSQ = .774 S.E.R. = .335 MEAN LHS = 4.191 RHO = .041 (.3)
RANGE: 1965 Q2 TO 1982 Q4 NOB = 70 ESTIMATED: 4/85

565. (JMSOPV) PRIVATE IMPORTS OF OTHER SERVICES

```
LOG(JMSOPV/(JFPFW/JERFW))   =  -12.3436   +  1.28561 * LOG(JGNP)
                              (6.04197)     (7.02453)

      +  .364507 * LOG(JP/(JFPFW/JERFW))   +  .21908 * LOG(JMG)   +  .008949 * Q1   -  .012914 * Q2
        (2.47944)                           (1.70955)              (.847495)          (1.23418)

      +  .011294 * Q3
        (1.09601)
```

CRSQ = .994 S.E.R. = .039 MEAN LHS = 2.354 RHO = .861 (15.1)
RANGE: 1966 Q1 TO 1982 Q4 NOB = 67 ESTIMATED: 4/85

566. (JMSOV) IMPORTS OF OTHER SERVICES - TOTAL

```
JMSOV = JMSOGV + JMSOPV
```

567. (JMSYVD) INVESTMENT INCOME PAYMENTS ($ U.S.)

```
JMSOYVD = JMSYVD - JMSDYVD
```

568. (JMSYV) INVESTMENT INCOME PAYMENTS

JMSYV = JMSYVD/JER

569. (JMSV) IMPORTS OF SERVICES - TOTAL

JMSV = JMSOPV + JMSOGV + (JMSDYVD + JMSOYVD) * JEMG

570. (JMGSV) IMPORTS OF GOODS AND SERVICES - BOP BASIS

JMGSV = JMGV + JMSV

571. (JMGSNINS) IMPORTS - NIA BASIS - 1972 PRICES (NSA)

JMGSNINS = 378.523 + .918842 * (JMG + JMSV/JP)
(1.77118) (46.0037)

CRSQ = .996 S.E.R. = 199.097 MEAN LHS = 9388.65 RHO = .664 (7.3)
RANGE: 1965 Q3 TO 1983 Q1 NOB = 70 ESTIMATED: 4/85

572. (JMGSNIVS) IMPORTS-NIA BASIS-CURRENT PRICES (NSA) (QUASI-IDENTITY)

JMGSNIVS = -26.3996 + 1.00101 * JMGSV
(.931527) (699.083)

CRSQ = 1 S.E.R. = 173.486 MEAN LHS = 14921.8 DW = 1.631
RANGE: 1961 Q2 TO 1982 Q4 NOB = 87 ESTIMATED: 4/85

573. (JMGSNIV) IMPORTS - NIA BASIS - CURRENT PRICES

JMGSNIV = JMGSNIVS * JSAFMNIV

574. (JMGSNI) IMPORTS - NIA BASIS - 1972 PRICES

JMGSNI = JMGSNINS * JSAFMNI

575. (JMTRANV) TRANSFER PAYMENTS - CURRENT PRICES

JMTRANV = JMTRANPV + JMTRANGV

576. (JRLTDL) DIRECT INVESTMENT LIABILITIES TO FOREIGNERS

JRLTDL = JRLTDL(-1) + 0.25 * JDLTDL/JPGNP

577. (JMSDYVD) DIRECT INVESTMENT INCOME PAYMENTS ($ U.S.)

JMSYDV = JMSDYVD/JER

578. (JMSOYVD) IMPORTS OF OTHER SERVICES - TOTAL (YEN)

JMSYNDV = JMSOYVD/JER

J.II.D. EXPORTS OF SERVICES AND TRANSFERS

579. (JXSYDV) DIRECT INVESTMENT INCOME RECEIPTS ($ U.S.)

```
LOG(JXSYDV/(JRLTDC * JFPGNPFC/JERFCW))   =  -3.59658   +  .146437 * LOG(JFCUFCW)   -  .720505 * Q1
                                           (1.20581)     (.21621)                    (7.32449)

      +  .041910 * Q2   -  .475173 * Q3
        (.428853)         (4.93179)

     CRSQ  = .605  S.E.R. =  .252  MEAN LHS = -3.231  RHO =  .029 (.2)
     RANGE: 1970 Q1 TO 1982 Q4   NOB = 51   ESTIMATED:  4/85
```

580. (JXSYNDV) NONDIRECT INVESTMENT INCOME RECEIPTS ($ U.S.)

```
JXSYNDV/JFCP   =  -.001506   +  LAGCOEF1 * (JFRSFCW(I)/100)
                 (.48021)

     CRSQ  = .827  S.E.R. =  .008  MEAN LHS = .047  RHO =  .165 (1.4)
     RANGE: 1962 Q4 TO 1982 Q4   NOB = 80   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT
(-0)	0.150	16.430
(-1)	0.131	16.430
(-2)	0.112	16.430
(-3)	0.093	16.430
(-4)	0.075	16.430
(-5)	0.056	16.430
(-6)	0.037	16.430
(-7)	0.019	16.430
SUM:	0.673	

581. (JXTRANV) TRANSFER RECEIPTS - PRIVATE

```
LOG(JXTRANV)   =  -7.55459   +  1.62208 * LOG(JFGNPFW * JFPFW/JERFW)
                 (15.5501)     (23.6267)

     CRSQ  = .921  S.E.R. =  .138  MEAN LHS = 3.909  RHO =  .177 (1.5)
     RANGE: 1965 Q2 TO 1982 Q4   NOB = 70   ESTIMATED:  4/85
```

582. (JXSOPV) PRIVATE EXPORTS OF OTHER SERVICES

```
LOG(JXSOPV/JPGNP)   =  -9.41928   +  3.5817 * LOG(JFGNPFW)   +  .896761 * LOG(JFPFW/JERFW/JPGNP)
                      (4.639)       (2.25022)                  (5.5254)

      +  .733768 * LOG(JXG)   +  .042758 * Q1   +  .009663 * Q2   +  .037043 * Q3
        (6.22254)               (2.10639)        (.643035)        (3.06719)

     CRSQ  = .99  S.E.R. =  .048  MEAN LHS = 7.253  RHO =  .835 (11.5)
     RANGE: 1966 Q1 TO 1982 Q4   NOB = 67   ESTIMATED:  4/85
```

583. (JXSOV) EXPORTS OF OTHER SERVICES - TOTAL

```
JXSOV = JXSOGV + JXSOPV
```

584. (JXSOYVD) EXPORTS OF OTHER SERVICES - TOTAL ($ U.S.)

```
JXSOYVD = JXSYVD - JXSDYVD
```

585. (JXSYV) INVESTMENT INCOME RECEIPTS

JXSYV = JXSYVD/JER

586. (JXSV) EXPORTS OF SERVICES - TOTAL

JXSV = JXSOPV + JXSOGV + (JXSDYVD + JXSOYVD) * JEXG

587. (JXGSV) EXPORTS OF GOODS AND SERVICES - BOP BASIS

JXGSV = JXGV + JXSV

588. (JXGSNINS) EXPORTS - NIA BASIS - 1972 PRICES (NSA)

JXGSNINS = -2220.26 + 1.2917 * (JXG + JXSV/JP)
(2.6988) (26.3014)

CRSQ = .996 S.E.R. = 516.451 MEAN LHS = 14484.8 RHO = .854 (13.6)
RANGE: 1965 Q3 TO 1983 Q1 NOB = 70 ESTIMATED: 4/85

589. (JXGSNIVS) EXPORTS-NIA BASIS-CURRENT PRICES (NSA) (QUASI-IDENTITY)

JXGSNIVS = -21.9047 + 1.00249 * JXGSV
(.377161) (351.117)

CRSQ = .999 S.E.R. = 350.273 MEAN LHS = 15533.7 DW = 1.907
RANGE: 1961 Q2 TO 1982 Q4 NOB = 87 ESTIMATED: 4/85

590. (JXGSNIV) EXPORTS - NIA BASIS - CURRENT PRICES

JXGSNIV = JXGSNIVS * JSAFXNIV

591. (JXGSNI) IMPORTS - NIA BASIS - 1972 PRICES

JXGSNI = JXGSNINS * JSAFXNI

592. (JXTRANVD) TRANSFER RECEIPTS ($ U.S.)

JXTRANV = JXTRANVD * JEXG

593. (JRLTDC) DIRECT INVESTMENT CLAIMS ON FOREIGNERS

JRLTDC = JRLTDC(-1) + 0.25 * JDLTDC * (JERFCW/JFPGNPFC)

594. (JXSDYVD) DIRECT INVESTMENT INCOME RECEIPTS ($ U.S.)

JXSYDV = JXSDYVD/JER

595. [JXSYVD) INVESTMENT INCOME RECEIPTS ($U.S.)

.JXSYNDV = JXSOYVD/JER

J.II.E. BALANCES

596. (JGBAL) TRADE BALANCE

JGBAL = (JXGVD - JMGVD)/JER

597. (JSBAL) BALANCE ON SERVICES

JSBAL = (JXSOPV + JXSOGV + (JXSDYVD + JXSOYVD) * JEXG)/JEXG/JER - (JMSOPV + JMSOGV + (JMSDYVD + JMSOYVD) * JEMG)/JEMG/JER

598. (JGSBAL) BALANCE ON GOODS AND SERVICES

JGSBAL = JXGSV - JMGSV

599. (JNETXNI) NET EXPORTS OF GOODS AND SERVICES (NIA BASIS) - 1972 PRICES

JNETXNI = JXGSNI - JMGSNI

600. (JTRANBAL) TRANSFER PAYMENT BALANCE

JTRANBAL = (JXTRANVD - JMTRANV/JEMG)/JER

601. (JCURBALD) CURRENT ACCOUNT BALANCE ($ U.S.)

JCURBALD = (JGBAL + JSBAL + JTRANBAL) * JER

602. (JCURBAL) CURRENT ACCOUNT BALANCE

JCURBAL = JCURBALD/JER

J.III. DOMESTIC FINANCIAL MARKET

J.III.A. MONETARY AGGREGATES

603. (JCUR) CURRENCY HELD BY RESIDENTS - PRIVATE

```
LOG(JCUR/JP)   =  1.75547   -  .148354 * Q1   -  .129832 * Q2   -  .195934 * Q3
                  (.675149)    (30.5475)        (23.2453)        (40.2341)

      +  .634495 * LOG(JGNPV/JP)   -  .013808 * LOG(JRS)
         (2.88909)                    (.566684)

     CRSQ  = .994  S.E.R. =  .022  MEAN LHS = 8.745  RHO =  .956 (72.8)
     RANGE: 1967 Q2 TO 1983 Q2   NOB = 64   ESTIMATED:  4/85
```

604. (JDD) DEMAND DEPOSITS HELD BY RESIDENTS

```
LOG(JDD/JP)   =  5.40183   -  .019759 * Q1   -  .022733 * Q2   -  .055653 * Q3
                 (1.73673)    (3.31726)        (3.31678)        (9.31335)

      +  .429175 * LOG(JGNPV/JP)   -  .064830 * LOG(JRS)
         (1.629)                      (2.1697)

     CRSQ  = .989  S.E.R. =  .027  MEAN LHS = 10.019  RHO =  .95 (67.8)
     RANGE: 1967 Q2 TO 1983 Q2   NOB = 64   ESTIMATED:  4/85
```

605. (JTD) TIME DEPOSITS HELD BY RESIDENTS

```
DEL(LOG(JTD/JP))   =  .069058   -  .01559 * Q1   +  .011916 * Q2   +  .005285 * Q3
                      (2.45463)    (3.29982)        (2.57943)        (1.11979)

      +  .363681 * DEL(LOG(JGNPV/JP))   +  .004475 * LOG(JRTD)   -  .026025 * LOG(JRTD(-1))
         (2.86134)                         (.088772)                (.563706)

      -  .069768 * LOG(JRS)   +  .061086 * LOG(JRS(-1))
         (3.4424)                (2.88843)

     CRSQ  = .573  S.E.R. =  .013  MEAN LHS = .019  DW = 1.828
     RANGE: 1967 Q2 TO 1983 Q2   NOB = 65   ESTIMATED:  4/85
```

606. (JDT) TOTAL DEPOSITS

```
JDT = JDD + JTD
```

607. (JM1) MONEY SUPPLY - M1

```
JM1 = JCUR + JDD
```

608. (JRD) OFFICIAL DISCOUNT RATE OF THE BANK OF JAPAN

```
JM2 = JM1 + JTD
```

J.III.B. PRIVATE BANKING SECTOR AND INTERESTS RATES

609. (JCURB) CURRENCY HELD BY BANKS

```
LOG(JCURB/JP)  =  -1.12497   +  3.15161 * Q1   +  2.32376 * Q2   +  3.89354 * Q3 +   (  .72868
                   (1.77915)     (5.28952)        (3.44066)        (6.68246)          (12.8467)

      -  .298721 * Q1   -  .231174 * Q2   -  .36691 * Q3) * LOG(JDT(-1)/JP(-1))
        (5.59388)        (3.81695)        (7.01417)

     CRSQ  = .911  S.E.R. =  .057  MEAN LHS = 6.842  RHO =  .479 (4)
     RANGE: 1967 Q2 TO 1983 Q2   NOB = 64   ESTIMATED:  4/85
```

610. (JRS) INTEREST RATE ON CALL MONEY - INVERTED FREE RESERVES

```
JRS   =  -2.31744   +  1.35811 * JRD   -  .000387 * JRF
          (1.69165)     (9.58204)        (3.33065)

     CRSQ  = .979  S.E.R. =  .363  MEAN LHS = 8.456  RHO =  .942 (18.3)
     RANGE: 1968 Q1 TO 1975 Q4   NOB = 31   ESTIMATED:  4/85
```

611. (JRLA) YIELD ON BANK DEBENTURES - AS A MOVING AVERAGE OF JRS

```
JRLA = 4 + 0.2 * JRS(-1) + 0.17 * JRS(-2) + 0.14 * JRS(-3) + 0.11 * JRS(-4) + 0.09 * JRS(-5) +
     0.05 * JRS(-6)
```

612. (JRLB) YIELD ON BANK DEBENTURES - FROM A NET SUPPLY FUNCTION OF BANK DEBENTURES

```
JRLB   =  1.96297   +  .15181 * JRTD   -  .12234 * (JRTD * D701I)   +  .01345 * JRS
           (5.62)       (1.31)           (1.769)                       (.279)

       +  .10417 * (JRS * D701I)   +  .60031 * JRL(-1)
          (2.01)                      (5.75)

     CRSQ  = .932  S.E.R. =  2.043  MEAN LHS = NA  DW = 1.62
     RANGE: 1965 Q4 TO 1980 Q4   NOB = 61   ESTIMATED:  5/82
```

613. (JRL) YIELD ON BANK DEBENTURES

```
JRL = JRLA * JPARJRL + JRLB * (1 - JPARJRL)
```

614. (JRHL) AVERAGE MORTGAGE INTEREST RATE

```
LOG(JRHL) = 1.8701 + 0.17 * LOG(JRS(-1)) + 0.14 * LOG(JRS(-2)) + 0.11 * LOG(JRS(-3)) + 0.09 *
     LOG(JRS(-4)) + 0.05 * LOG(JRS(-5)) + 0.03 * LOG (JRS(-6))
```

615. (JRDS) WEIGHTED AVERAGE OF JRD AND JRS

```
JRDS = JRD**JWJRD * JRS**(1 - JWJRD)
```

616. (JRFYZ) DESIRED VALUE OF JRFY

```
JRFYZ = IF JRS - JRRFY LT 0 THEN 0 ELSE JRS - JRRFY
```

617. (JRFY) PROXY FOR INTEREST RATE ON FREE YEN DEPOSITS

```
JRFY = IF JRFYZ LT JRTD THEN JRFYZ ELSE JRTD
```

618. (JDVFYD) DUMMY VARIABLE FOR CONTROLS ON FREE YEN DEPOSITS

```
JDVFYD = IF JRFYZ EQ 0 THEN 1 ELSE 0
```

619. (JRR) REQUIRED RESERVES

```
JRR = 0.01 * ((JBDL * JRRDL + JBDM * JRRDM + JBDS * JRRDS + JBDA * JRRDA) * JDD/100 + (JBTL *
     JRRTL + JBTM * JRRTM + JBTS * JRRTS + JBTA * JRRTA) * JTD/100 + JRRSEC * JSEC/100)
```

J.III.C. MONETARY AUTHORITIES

620. (JRF) CENTRAL BANK BALANCE SHEET - SOLVING FOR FREE RESERVES

0 = - JNFAG - JNGP - JOTH + JRR + JRF + JCUR + JCURB

621. (JRB) MONETARY AUTHORITIES CLAIMS ON DEPOSIT MONEY BANKS

JRB = JRX - JRF

622. (JNGP) NET GOVERNMENT POSITION

JNGP = JCGVT - JDGVT

J.IV. PRICES AND SUPPLY

J.IV.A. PRICES

623. (JP) ABSORPTION DEFLATOR

```
LOG(JP)   =  LAGCOEF1 * (LOG(JW(I)))   +  .004215 * LOG(OPOIL72/JEI)   +  .070770 * LOG(JPMNOIL)
                                          (.483852)                       (2.87893)

     +  LAGCOEF2 * (LOG(JP(I) * LOG(1 + ( IF JUCNR(I) LE 0 THEN 1.000000E - 05 ELSE JUCNR(I)))))

     -  .009647 * JUN   +  7.85998E-06 * Q1   +  .002033 * Q2   +  .000780 * Q3   -  3.74716
        (1.44966)          (.002662)           (.676458)         (.271896)         (29.1334)
```

CRSQ = .998 S.E.R. = .006 MEAN LHS = .565 DW = 1.161
RANGE: 1974 Q1 TO 1982 Q4 NOB = 36 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.335	5.042	0.004	2.236
(-1)	0.210	3.406	0.003	3.740
(-2)	NA	NA	0.003	2.891
(-3)	NA	NA	0.002	1.178
SUM:	0.545		0.012	

624. (JPNPI) WHOLESALE PRICE INDEX

```
LOG(JPNPI)   =  -.109599   +  1.15877 * LOG(JPDOM)
                (.991741)     (8.0515)
```

CRSQ = .996 S.E.R. = .019 MEAN LHS = .304 RHO = .964 (90.5)
RANGE: 1965 Q3 TO 1983 Q2 NOB = 71 ESTIMATED: 4/85

625. (JPXGUV) EXPORT UNIT VALUE INDEX

```
LOG(JPXGUV) = LOG(JPDOM)   -  .357084 * LOG(JPDOM(-1) * JEI(-1)/JFPXFTW(-1))   -  .059229
                              (3.36512)                                          (1.09489)

     -  .009370 * Q1   -  .002992 * Q2   -  .002214 * Q3
        (1.47059)         (.380941)        (.340579)
```

CRSQ = .942 S.E.R. = .031 MEAN LHS = .014 RHO = 1.102 (8) RHO2 = -.172 (1.3)
RANGE: 1966 Q3 TO 1983 Q1 NOB = 65 ESTIMATED: 4/85

626. (JPMGUVD) IMPORT UNIT VALUE INDEX ($ U.S.)

```
LOG(JPMGUVD)   =  .039633   +  .054303 * D7411   +  .049879 * D7421   +  .54455 * JFPXGFMW
                  (1.40267)    (1.93298)           (2.32261)           (7.60313)

     +  .318708 * JFPXGFMW(-1)
        (4.61961)
```

CRSQ = .997 S.E.R. = .023 MEAN LHS = .945 RHO = .674 (5.6)
RANGE: 1972 Q2 TO 1982 Q4 NOB = 42 ESTIMATED: 4/85

627. (JPCPI) CONSUMER PRICE INDEX (QUASI-IDENTITY)

```
DEL(LOG(JPCPI))  =  .005258  +  .968833 * DEL(LOG(JP))  -  .003284 * Q1  +  .005130 * Q2
                   (2.32878)    (14.0419)                 (1.15089)        (1.79855)

     -  .011649 * Q3
       (4.07495)

    CRSQ  = .812  S.E.R. =  .007  MEAN LHS = .018  DW = 2.408
    RANGE: 1970 Q3 TO 1983 Q2   NOB = 52   ESTIMATED:  4/85
```

628. (JPMGUV) IMPORT UNIT VALUE INDEX

```
JPMGUV = JPMGUVD/JEI
```

629. (JPGNP) GROSS NATIONAL PRODUCT DEFLATOR

```
JPGNP = JGNPV/JGNP
```

630. (JPMGSNI) IMPORT DEFLATOR - NIA BASIS

```
JPMGSNI = JMGSNIVS/JMGSNINS
```

631. (JPMNOIL) NONOIL IMPORTS

```
JPMNOIL = EXP(LOG(JPMGSNI)/0.768144 - (1 - 0.768144)/0.768144 * LOG(OPOIL72/JEI))
```

632. (JPDOM) DEFLATOR FOR DOMESTIC PRICE (WITHOUT IMPORTS)

```
JPDOM = EXP((LOG(JP) - (1 - JSHARDOM) * LOG(JPMGSNI))/JSHARDOM)
```

633. (JPEXP) INFLATIONARY EXPECTATIONS - MOVING AVERAGE

```
JPEXP = 100 * SUM(J = -11, 0 : 0.87**(-J) * (JPGNP(J ) - JPGNP(J - 4))/JPGNP(J - 4))/SUM ( J = 0
     TO 11 : 0.87**J)
```

634. (JP1) ONE QUARTER AHEAD INFLATION RATE

```
JP1 = (JPEXP/100 + 1) * JP(-3)
```

J.IV.B. WAGES AND EMPLOYMENT

635. (JW) HOURLY WAGE RATE IN MANUFACTURING

(JW - JW(-4)) * 100/JW(-4) - JPEXP = -1.02247 * JUN
(.68184)

CRSQ = .872 S.E.R. = 2.652 MEAN LHS = 5.455 RHO = .598 (4.4) RHO2 = .341 (2.5)
RANGE: 1970 Q1 TO 1983 Q2 NOB = 52 ESTIMATED: 4/85

636. (JLF) LABOR FORCE (10000 PERSONS)

LOG(JLF/JPOP)

= -1.04686 + 0.3 * LOG(JLE/JPOP) + 0.2 * LOG(JLE(-1)/JPOP(-1)) + 0.1 * LOG (JLE(-2)/JPOP(-2))
(379.902)

+ 0.05 * LOG(JLE(-3)/JPOP(-3)) - 3.38226E-06 * TIME
(.093946)

CRSQ = -.014 S.E.R. = .007 MEAN LHS = -1.047 DW = .83
RANGE: 1965 Q1 TO 1983 Q2 NOB = 74 ESTIMATED: 4/85

637. (JLE) EMPLOYMENT (10000 WORKERS)

LOG(JLE) = 1.07456 + .000714 * TIME + LAGCOEF1 * (LOG(JH(I) * JLE(I)))
(2.20584) (3.81842)

+ .669627 * LOG(JLE(-1))
(8.12271)

CRSQ = .99 S.E.R. = .006 MEAN LHS = 8.546 DW = 1.967
RANGE: 1963 Q1 TO 1982 Q4 NOB = 80 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.025	2.815
(-1)	0.037	2.815
(-2)	0.037	2.815
(-3)	0.025	2.815
SUM:	0.123	

638. (JH) AVERAGE MONTHLY HOURS WORKED

LOG(JGNP + JMGSNI) - LOG(JCU * JKP) = .789487 * (LOG(JLE * JH) - LOG(JCU * JKP))
(13.3809)

+ .110106 * (LOG(JMGSNI - JCOL * 365/1000 * 711.386) - LOG(JCU * JKP))
(2.65818)

+ .050027 * (LOG(JCOL * 365/1000 * 711.386) - LOG(JCU * JKP)) + .006814 * TIME
(1.50483) (6.73807)

- 1.98203 - .002605 * Q1 + .002496 * Q2 + .004813 * Q3
(5.92786) (.775026) (.417793) (.94254)

CRSQ = .988 S.E.R. = .007 MEAN LHS = -4.78 RHO = .501 (3.8)
RANGE: 1974 Q1 TO 1983 Q1 NOB = 36 ESTIMATED: 4/85

639. (JGNPPOT) POTENTIAL GNP (COEFFICIENTS ESTIMATED IN JH EQUATION)

```
JGNPPOT = - JMGSNI + EXP(LOG(100. * JKP)   +  .789487 * (LOG(JLF * 205.11) - LOG(100. * JKP))
                                              (13.3809)

      +  .110106 * (LOG(JMGSNI - JCOL * 365/1000 * 711.386) - LOG(100. * JKP))
         (2.65818)

      +  .050027 * (LOG(JCOL * 365/1000 * 711.386) - LOG(100. * JKP))   +  .006814 * TIME
         (1.50483)                                                          (6.73807)

      -  1.98203   -  .002605 * Q1   +  .002496 * Q2   +  .004813 * Q3)
         (5.92786)    (.775026)        (.417793)        (.94254)
```

640. (JLU) UNEMPLOYMENT (10000 WORKERS)

```
JLU = JLF - JLE
```

641. (JUN) UNEMPLOYMENT RATE

```
JUN = JLU/JLF * 100
```

J.IV.C. CAPACITY AND REAL CAPITAL STOCKS

642. (JCU) CAPACITY UTILIZATION RATE

```
DEL(LOG(JCU)) = DEL(LOG(JGNP/JGNPPOT))
```

643. (JKPR) GROSS PRIVATE CAPITAL STOCK - RESIDENTIAL

```
JKPR = JKPR(-1) * (1 - 0.084762/4) + JIFPR/4 * (1 - 0.084762/4) **0.5
```

644. (JKPNR) GROSS PRIVATE CAPITAL STOCK - NONRESIDENTIAL

```
JKPNR = JKPNR(-1) * (1 - 0.106047/4) + JIFPNR/4 * (1 - 0.106047 /4)**0.5
```

645. (JKP) GROSS PRIVATE CAPITAL STOCK

```
JKP = JKPNR + JKPR
```

646. (JKII) STOCK OF INVENTORY INVESTMENT

```
JKII = JKII(-1) + JII/4
```

647. (JECDEP) RATE OF DEPRECIATION OF PHYSICAL CAPITAL STOCK

```
JECDEP = (1 - EXP((-(1 - JTRYC)) * (JRL/100) * 23.5))/((1 - JTRYC) * (JRL/100) * 23.5)
```

648. (JUCNR) USER COST OF CAPITAL - NONRESIDENTIAL

```
JUCNR = (1 - JTRYC * JECDEP - JGRANTNR) * ((1 - JTRYC) * (JRL /100) - JPEXP/100 + 0.106)/(1 - JTRYC)
```

649. (JUCR) USER COST OF CAPITAL - RESIDENTIAL

```
JUCR = (1 - 0.03) * ((1 - JTRY) * (JRHL/100) - JPEXP/100 + 0.082 )
```

J.V. INTERNATIONAL FINANCIAL MARKET

J.V.A. DIRECT INVESTMENT CLAIMS AND LIABILITIES

650. (JDLTDCD) CHANGE IN DIRECT INVESTMENT CLAIMS ON FOREIGNERS ($ U.S.)

JDLTDCD = -.054009 + 1.30208 * D7331 + LAGCOEF1 * (JDFGNPFW(I))
(.088203) (2.75169)

+ LAGCOEF2 * (DEL(ROWIP(I) * ROWPXG(I)))

CRSQ = .841 S.E.R. = .601 MEAN LHS = 1.774 RHO = .766 (9.1)
RANGE: 1966 Q4 TO 1982 Q4 NOB = 64 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.015	3.854	-0.474	1.238
(-1)	0.013	3.854	-0.431	1.238
(-2)	0.012	3.854	-0.388	1.238
(-3)	0.011	3.854	-0.345	1.238
(-4)	0.009	3.854	-0.302	1.238
(-5)	0.008	3.854	-0.259	1.238
(-6)	0.007	3.854	-0.216	1.238
(-7)	0.005	3.854	-0.173	1.238
(-8)	0.004	3.854	-0.129	1.238
(-9)	0.003	3.854	-0.086	1.238
(-10)	0.001	3.854	-0.043	1.238
SUM:	0.089		-2.847	

651. (JDLTDC) CHANGE IN DIRECT INVESTMENT CLAIMS ON FOREIGNERS

JDLTDC = JDLTDCD/JER

652. (JDLTDL) CHANGE IN DIRECT INVESTMENT LIABILITIES TO FOREIGNERS

JDLTDL = JDLTDLD/JER

653. (JLTDKB) CHANGE IN LONG TERM DIRECT CLAIMS - NET

JLTDKB = (JDLTDCD - JDLTDLD)/JER

J.V.B. OTHER CAPITAL FLOWS

654. (JERFW) WT. AVER. EXCH. RATE - (INVERTED NET PRIVATE CAPITAL EQ.)

LOG(JERFW) = LOG(JFPGNP1(-1)/JP1(-1)) + 0.03 * (JRS - JPEXP - JFRSFW + JFPGNEXP)

655. (JLTPC1D) STOCK OF LONG TERM PORTFOLIO CLAIMS ($ U.S.) - FLOATING RATE

JLTPC1D = -6.89029 + .023678 * JNW * JER + LAGCOEF1 * ((RMEB(I) - JRL(I)))
(8.6) (6.2)

+ LAGCOEF2 * (JFORDISC(I)) + LAGCOEF3 * (JXGVD(I))

CRSQ = .994 S.E.R. = .574 MEAN LHS = NA DW = 1.19
RANGE: 1970 Q1 TO 1977 Q1 NOB = 29 ESTIMATED: 2/82

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT	LAGCOEF3	T-STAT
(-0)	1.045	3.900	0.109	4.300	0.004	0.100
(-1)	0.844	5.600	0.059	5.000	0.025	1.600
(-2)	0.640	5.000	0.024	1.000	0.039	4.500
(-3)	0.431	3.400	0.004	0.200	0.046	5.700
(-4)	0.218	2.400	NA	NA	0.045	4.900
(-5)	NA	NA	NA	NA	0.037	4.200
(-6)	NA	NA	NA	NA	0.022	3.800
SUM:	3.177		0.196		0.218	

656. (JSTBC) STOCK OF SHORT TERM BANKING CLAIMS ON FOREIGNERS

JSTBC = -1268.79 + .316126 * JXGV(-1) + .040825 * JUFLPY - 202.271 * JRD
(1.11861) (7.75263) (1.79413) (1.27114)

- 178.335 * JRD(-1) + LAGCOEF1 * (JFRSFCN(I))
(1.0344)

CRSQ = .983 S.E.R. = 574.306 MEAN LHS = 4880.73 RHO = .85 (12.6)
RANGE: 1965 Q1 TO 1983 Q1 NOB = 72 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	84.331	1.301
(-1)	32.987	0.777
(-2)	22.853	0.422
(-3)	53.931	1.061
(-4)	126.219	1.715
SUM:	320.320	

657. (JSTBL) STOCK OF SHORT TERM BANKING LIABILITIES TO FOREIGNERS

JSTBL = 651.489 + 276.201 * D644I - 95.3306 * D702I + 285.401 * D732I
(2.57835) (2.14673) (.80392) (1.23186)

+ LAGCOEF1 * (JRDS(I)) + LAGCOEF2 * (JFRSFLN(I)) + LAGCOEF3 * (JMGV(I))

CRSQ = .991 S.E.R. = 209.294 MEAN LHS = 2582.73 DW = 1.321
RANGE: 1962 Q3 TO 1975 Q4 NOB = 54 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT	LAGCOEF3	T-STAT
(-0)	7.172	0.334	-70.103	4.262	0.245	11.029
(-1)	5.169	0.412	-60.800	5.234	0.187	12.959
(-2)	3.166	0.444	-51.498	5.976	0.129	16.813
(-3)	1.163	0.097	-42.195	4.485	0.071	10.507
(-4)	-0.840	0.040	-32.892	2.468	0.013	0.985
(-5)	NA	NA	-23.589	1.276	-0.045	2.192
SUM:	15.831		-281.077		0.598	

658. (JSTBLYD) FREE YEN DEPOSITS ($ U.S.)

```
JSTBLYD   =  -7.19047   +  .001475 * UNN   +  .030405 * JRFY   -  .053875 * JFRSFLN
              (9.82202)     (10.5662)         (1.71436)          (3.66829)

      -  .006794 * JFORDISC   +  .145365 * JDVFYD
        (1.55285)               (1.33071)

     CRSQ  = .935  S.E.R. =  .091999  MEAN LHS = .707  RHO =  .572 (4.8)
     RANGE: 1965 Q4 TO 1975 Q4   NOB = 40   ESTIMATED:  4/85
```

659. (JDNFAP) CHANGE IN NET PRIVATE OUTFLOWS - (BOP IDENTITY)

```
JDNFAP = - JDNFAG + JCURBAL - JLTDKB - JKRES
```

660. (JLTPCD) STOCK OF LONG TERM PORTFOLIO CLAIMS ($ U.S.)

```
JLTPCD = JLTPC1D + JLTPCOD
```

661. (JDLTPCD) CHANGE IN LONG TERM PORTFOLIO CLAIMS ($ U.S.)

```
JDLTPCD = DEL(JLTPCD) * 4
```

662. (JDLTPC) CHANGE IN LONG TERM PORTFOLIO CLAIMS

```
JDLTPC = JDLTPCD/JER
```

663. (JDLTPL) CHANGE IN LONG TERM PORTFOLIO LIABILITIES

```
JDLTPL = JDLTPLD/JER
```

664. (JFKPB) CHANGE IN LONG TERM PORTFOLIO CLAIMS - NET

```
JFKPB = (JDLTPCD - JDLTPLD)/JER
```

665. (JLTPLD) STOCK OF LONG TERM PORTFOLIO LIABILITIES ($ U.S.)

```
JLTPLD = (JDLTPPLD + JDLTLOTH)/4 + JLTPLD(-1)
```

666. (JDSTBC) CHANGE IN SHORT TERM BANKING CLAIMS ON FOREIGNERS

```
JDSTBC = DEL(JSTBC) * 4
```

667. (JDSTBL) CHANGE IN SHORT TERM BANKING LIABILITIES TO FOREIGNERS

```
JDSTBL = DEL(JSTBL) * 4
```

668. (JSTKBB) STOCK OF SHORT TERM BANKING CLAIMS ON FOREIGNERS - NET

JSTKBB = JDSTBC - JDSTBL

669. (JDSTK) CHANGE IN SHORT TERM NONBANKING LIABILITIES TO FOREIGNERS

JDSTK = - JDNFAP - JEANDO + JFKPB + JSTKBB

670. (JSTK) STOCK OF SHORT TERM NONBANKING LIABILITIES TO FOREIGNERS

DEL(JSTK) * 4 = JDSTK

J.V.C. EXCHANGE RATE RELATIONSHIPS

671. (JFORDISC) THREE MONTH FOWARD EXCHANGE DISCOUNT

```
JFORDISC    =  3.48404    +  10.5337 * (JEI - UPXGUV/JPXGUV)
                (2.65498)     (1.07276)

      -  11.8859 * (JNFAGTD/(JMGV/JEMG)) + JFLOAT *    (  4.06603
         (4.35948)                                        (1.53394)

      -  6.38993 * (JEI - UPXGUV/JPXGUV)    -  .837861 * (JNFAGTD/(JMGV/JEMG)))    +  7.67789 * D7341
         (.558139)                             (.113515)                             (3.88889)

      +  14.7159 * D7411
         (7.4961)

     CRSQ  = .811  S.E.R. =  2.03  MEAN LHS = 1.352  RHO =  .568 (6.3)
     RANGE: 1961 Q1 TO 1983 Q1   NOB = 88   ESTIMATED:  4/85
```

672. (JER) WEIGHTED AVERAGE EXCHANGE RATE - IDENTITY

```
JERFW = (JER**0.23 * (JER/CER)**0.09 * (JER/EER)**0.12 * (JER /GER)**0.21)**(1/0.65)
```

673. (JERFCW) EXCHANGE RATE - WEIGHTED BY FOREIGN CLAIMS

```
JERFCW = (JER/EER)**0.17 * (JER/GER)**0.28 * JER**0.55
```

674. (JEI) SPOT EXCHANGE RATE INDEX - ($/YEN)

```
JER = JEI * 0.0033
```

675. (JEXG) EXPORT CONVERSION RATE - YEN/$

```
JEXG = JEXGR/JER
```

676. (JEMG) IMPORT CONVERSION RATE - YEN/$

```
JEMG = JEMGR/JER
```

J.VI. OFFICIAL INTERVENTION AND BALANCE OF PAYMENTS

677. (JDNFAGD) CHANGE IN NET FOREIGN ASSETS OF THE GOVERNMENT ($ U.S.)

```
JDNFAGD   =  -48.7824   -  30521.5 * (0.25 * SUM(J = -3, 0 : JER(J)) - JER)   +  .898717 * TIME
              (3.01065)    (5.26379)                                             (3.72857)

      -  1.49744 * JNFAGD(-1)
        (4.43489)

     CRSQ  = .541  S.E.R. =  7.107  MEAN LHS = .604  DW = 1.929
     RANGE: 1973 Q2 TO 1980 Q2   NOB = 29   ESTIMATED:  4/85
```

678. (JDNFAG) CHANGE IN NET FOREIGN ASSETS OF THE GOVERNMENT

```
JDNFAGD = JDNFAG * JER
```

679. (JNFAG) STOCK OF NET FOREIGN ASSETS OF THE GOVERNMENT

```
JNFAG = JDNFAG/4 + JNFAG(-1)
```

680. (JNFAGD) STOCK OF NET FOREIGN ASSETS OF THE GOVERNMENT ($ U.S.)

```
JNFAGD = JDNFAGD/4 + JNFAGD(-1)
```

681. (JVD) VALUATION ADJUSTMENT ON THE STOCK OF NET FOREIGN ASSETS ($ U.S.)

```
DEL(JVD)   =  .203112 * DEL(JSDRRATE) * JNFAGOD(-1)
             (6.09676)

     CRSQ  = .321  S.E.R. =  .025  MEAN LHS = .001  RHO =  -.453 (4.8)
     RANGE: 1960 Q2 TO 1983 Q2   NOB = 92   ESTIMATED:  4/85
```

682. (JNFAGTD) STOCK OF NET FOREIGN ASSETS OF THE GOVT INC VAL ADJ ($ U.S.)

```
JNFAGTD = JNFAGD + JSDRCAD + JVD
```

683. (JFCP) FINANCIAL PORTFOLIO CLAIMS ON FOREIGNERS

```
JFCP = JLTPCD/JER + JSTBC + JNFAG
```

684. (JFCPD) FINANCIAL PORTFOLIO CLAIMS ON FOREIGNERS ($ U.S.)

```
JFCPD = JLTPCD - JSTBC * JER + JSTBER
```

685. (JFLP) FINANCIAL PORTFOLIO LIABILITIES TO FOREIGNERS

```
JFLP = JSTBL + JLTPLD/JER + JSTBLYD/JER + JSTK
```

J.VII. FOREIGN VARIABLES (WEIGHTED AVERAGES)

686. (JFPGNPFC) FOREIGN AVERAGE GNP DEFLATOR - WEIGHTED BY FOREIGN CLAIMS

```
JFPGNPFC = EPGNP**0.17 * GPGNP**0.28 * UPGNP**0.55
```

687. (JFGNPFW) WEIGHTED AVERAGE FOREIGN GNP - FIXED WEIGHTS ($ U.S.)

```
JFGNPFW = 0.384 * LOG(UGNP) + 0.131 * LOG(EGDP) + 0.117 * LOG (GGNP) + 0.368 * LOG(ROWIP)
```

688. (JDFGNPFW) CHANGE IN FOREIGN GNP - FIXED WEIGHTS ($ U.S.)

```
JDFGNPFW = 0.5851 * DEL(UGNPV) + 0.0661 * DEL(CGNPV * CER) + 0.2434 * DEL(EGDPV * EER) + 0.1053
     * DEL(GGNPV * GER)
```

689. (JFCUFCW) FOR. AVERAGE CAPACITY UTIL. - WEIGHTED BY FOREIGN CLAIMS

```
JFCUFCW = ECU**0.17 * GCU**0.28 * UCU**0.55
```

690. (JFPFW) FOREIGN AVERAGE ABSORPTION DEFLATOR - FIXED WEIGHTS

```
JFPFW = (UP**0.23 * CP**0.09 * EP**0.12 * GP**0.21)**(1/0.65)
```

691. (JFPXGFMW) FOREIGN AVERAGE EXPORT PRICES - FIXED IMPORT WEIGHTS

```
JFPXGFMW = JWTMTUV * LOG(UPXGUV) + JWTMTCV * LOG(CPXGUV * CEI) + JWTMTGV * LOG(GPXGUV * GEI) +
     JWTMTEV * LOG(EPXGUV * EEI) + JWTMTLV * LOG (LPXGUV) + JWTMTIV * LOG(IPXGUV) + JWTMTOV *
     LOG(OPOIL72) + JWTMTZV * LOG (JPMGUVD)
```

692. (JFPXFTW) FOREIGN AVERAGE EXPORTS PRICES - FIXED EXPORT WEIGHTS

```
JFPXFTW = UPXGUV**0.353846 * (GPXGUV * GEI)**0.323077 * (EPXGUV * EEI)**0.206897 * (CPXGUV *
     CEI)**0.138461
```

693. (JFRSFW) FOREIGN AVERAGE ST-TERM INTEREST RATES-FIXED WEIGHTS

```
JFRSFW = 0.23/0.65 * URS + 0.09/0.65 * CRS + 0.12/0.65 * ERS + 0.21/0.65 * GRS
```

694. (JFRSFCW) WEIGHTED AVERAGE US ST-TERM INTEREST AND EURODOLLAR RATE (CLAIMS -- FIXED WEIGHTS)

```
JFRSFCW = ERS * 0.17 + GRS * 0.28 + URS * 0.55
```

695. (JFRSFLW) WEIGHTED AVERAGE US ST-TERM INTEREST AND EURODOLLAR RATE (LIABILITIES -- FIXED WEIGHTS)

```
JFRSFLW = ERS * 0.21 + GRS * 0.36 + URS * 0.43
```

696. (JFPGNPFW) WEIGHTED AVERAGE FOREIGN GNP DEFLATOR - FIXED WEIGHTS ($ U.S.)

```
JFPGNPFW = (UPGNP**0.353846 * CPGNP**0.138461 * EPGNP**0.206897 * GPGNP**0.323077)**(1/1.02228)
```

697. (JFPGNEXP) EXPECTED FOREIGN PRICE INFLATION- GNP BASED

```
JFPGNEXP = 100 * SUM(J = -11, 0 : 0.87**(-J) * (JFPGNPFW(J) - JFPGNPFW(J - 4))/JFPGNPFW(J -
     4))/SUM ( K = 0 TO 11 : 0.87 **K)
```

698. (JFPGNP1) EXPECTED AVERAGE FOREIGN GNP DEFLATOR

```
JFPGNP1 = (JFPGNEXP/100 + 1) * JFPGNPFW(-3)
```

U.S. MODEL: DOMESTIC REAL SIDE

U.I.A. DOMESTIC SPENDING AND DISPOSABLE INCOME

699. (UC) PRIVATE CONSUMPTION EXPENDITURE--1972 PRICES

LOG(UC) = -.691274 - .002188 * (URS(-1) - UPEXP(-1)) + LAGCOEF1 * (LOG(UYD(I)))
(3.08554) (3.28228)

CRSQ = .998 S.E.R. = .007 MEAN LHS = 6.623 RHO = .839 (14.2)
RANGE: 1964 Q1 TO 1983 Q2 NOB = 77 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.426	8.040
(-1)	0.323	16.689
(-2)	0.220	11.500
(-3)	0.118	2.235
SUM:	1.087	

700. (UIFPR) PRIVATE GROSS RESIDENTIAL INVESTMENT--1972 PRICES

UIFPR - 0.033839 * UKPR(-1) = -117.894 + .409366 * (UIFPR(-1) - 0.033839 * UKPR(-2))
(3.00357) (4.5831)

+ LAGCOEF1 * (UYD(I)) - 3.20556 * UUCR(-1) * 100
(5.86974)

CRSQ = .952 S.E.R. = 2.267 MEAN LHS = 22.931 RHO = .968 (102.4)
RANGE: 1965 Q1 TO 1983 Q2 NOB = 73 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.099	3.941
(-1)	0.050	3.941
SUM:	0.149	

701. (UIFPD) PRIVATE GROSS DURABLE EQUIPMENT INVESTMENT-- 1972 PRICES

UIFPD - 0.135625 * UKPD(-1) = -49.5125 + LAGCOEF1 * (DEL(UGNP(I-1))) + .86994 * UCU
(5.11952) (7.27682)

+ LAGCOEF2 * (DEL(UUCPD(I-1))) + 1.70061 * D7442
(1.28353)

CRSQ = .943 S.E.R. = 1.697 MEAN LHS = 23.713 RHO = .926 (20.1)
RANGE: 1965 Q1 TO 1982 Q4 NOB = 71 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	-0.001	0.075	-76.850	1.945
(-1)	0.023	1.475	-38.425	1.945
(-2)	0.038	2.278	NA	NA
(-3)	0.043	2.601	NA	NA
(-4)	0.038	2.740	NA	NA
(-5)	0.024	2.808	NA	NA
SUM:	0.164		-115.275	

702. (UIFPS) PRIVATE GROSS INVESTMENT IN PRODUCER'S STRUCTURES-- 1972 PRICES

```
DEL(UIFPS) - 0.066006 * DEL(UKPS(-1))   =  -.296097   +  .209219 * DEL(1 : UCU)
                                          (1.13422)     (2.62022)

      +  LAGCOEF1 * (DEL(UGNP(I-1)))   -  34.8585 * DEL(UUCPS(-1))
                                         (1.09301)

     CRSQ  = .315  S.E.R. =  1.187  MEAN LHS = .191  RHO =  .252 (2.1)
     RANGE: 1965 Q1 TO 1982 Q4   NOB = 71   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT
(-0)	0.019	1.799
(-1)	0.019	3.041
(-2)	0.016	2.119
(-3)	0.009	1.576
SUM:	0.063	

703. (UIFP) PRIVATE FIXED INVESTMENT--1972 PRICES

```
UIFP = UIFPR + UIFPS + UIFPD
```

704. (UCCAV) CAPITAL CONSUMPTION ALLOWANCE--CURRENT PRICES

```
UCCAV   =  -20.1085   +  LAGCOEF1 * ((UKP(I-1) * UP(I)))
          (5.31639)

     CRSQ  = 1  S.E.R. =  1.456  MEAN LHS = 155.262  RHO =  .915 (19.9)
     RANGE: 1963 Q1 TO 1983 Q2   NOB = 81   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT
(-0)	0.031	66.608
(-1)	0.023	66.608
(-2)	0.016	66.608
(-3)	0.008	66.608
SUM:	0.078	

705. (UGNP) GROSS NATIONAL PRODUCT--1972 PRICES

```
UGNP = UC + UIFP + UII + UG + UXGSNI - UMGSNI + UGNPER
```

706. (UGNPV) GROSS NATIONAL PRODUCT--CURRENT PRICES

```
UGNPV = UP * (UC + UIFP + UII + UG) + UXGSNI * UPXGSNI - UMGSNI * UPMGSNI + UGNPVER
```

707. (UCV) PRIVATE CONSUMPTION EXPENDITURE--CURRENT PRICES

```
UCV = UC * UP
```

708. (UIFPV) PRIVATE FIXED INVESTMENT--CURRENT PRICES

```
UIFPV = UIFP * UP
```

709. (UIIV) PRIVATE INVENTORY INVESTMENT--CURRENT PRICES

```
UIIV = UII * UP
```

710. (UIIF) CHANGE IN FARM INVENTORIES--1972 PRICES

```
UIIF = UIIFV/UP
```

711. (UYDV) DISPOSABLE INCOME--CURRENT PRICES

```
UYDV = UGNPV - UTV + UTRANV + UGIV - UINTGF - UCCAV + UYFRPV
```

712. (UYD) DISPOSABLE INCOME--1972 PRICES

```
UYD = UYDV/UP
```

713. (UPCHGNP) PERCENTAGE CHANGE IN GNP--ANNUAL RATE

```
UPCHGNP = ((UGNP/UGNP(-1))**4 - 1) * 100
```

U.I.B. GOVERNMENT SECTOR

714. (UTRANV) GOVERNMENT TRANSFERS TO PRIVATE SECTOR

```
LOG(UTRANV)    =  6.41368    +  .151698 * LOG(UUN * ULF/100 * SUM(J = -3, 0 : UP(J))/4)
                 (20.1569)     (2.98048)

      +  1.10053 * LOG(UPOP * SUM(J = -3, 0 : UP(J))/4)
        (4.59264)

     CRSQ  = .999  S.E.R. =  .026  MEAN LHS = 4.589  RHO =  .98 (181.5)
     RANGE: 1960 Q4 TO 1983 Q2   NOB = 90   ESTIMATED:  4/85
```

715. (UGIV) GOVERNMENT INTEREST PAYMENTS

```
UGIV - UYFRPV    =  76.9245
                   (2.76812)

      +  .593121 * (0.4 * URS1 + 0.6 * SUM(J = -11, 0 : URLGB(J)/12)) /100 * (UGDEBT - UNDA +
        (3.53261)

     (UGDEBT(-1) - UNDA(-1)))/2

     CRSQ  = .988  S.E.R. =  1.343  MEAN LHS = 15.73  RHO =  .994 (419.1)
     RANGE: 1963 Q1 TO 1983 Q1   NOB = 80   ESTIMATED:  4/85
```

716. (UINTGF) GOVERNMENT INTEREST PAYMENTS TO FOREIGNERS

```
UINTGF   =  -.000760    +  1.00005 * UMSYGV
           (.18197)       (1817.59)

     CRSQ  = 1  S.E.R. =  .031  MEAN LHS = 5.181  RHO =  -.109 (1)
     RANGE: 1963 Q1 TO 1983 Q1   NOB = 80   ESTIMATED:  4/85
```

717. (UYFRPV) FEDERAL RESERVE PROFIT

```
UYFRPV   =  -.077305    +  LAGCOEF1 * ((URS1(I-1)**0.5 * URLGB(I-1)**0.5 * UNDA(I-1)))
           (.75)

     CRSQ  = .952  S.E.R. =  .112  MEAN LHS = NA  RHO =  .726 (0)
     RANGE: 1962 Q1 TO 1975 Q4   NOB = 56   ESTIMATED:  1/78
```

LAG	LAGCOEF1	T-STAT
(-0)	0.004	9.500
(-1)	0.003	18.130
(-2)	0.002	19.600
(-3)	0.001	4.870
(-4)	0.000	1.640
(-5)	0.000	0.290
SUM:	0.010	

718. (UTVC) GOVERNMENT REVENUE (FED STATE AND LOCAL TAX RECEIPTS)

```
UTVC/UGNPV   =  .128533    +  .397729 * UTRY    +  .209059 * UTRYC
              (3.41188)      (6.91835)           (2.81493)

     CRSQ  = .839  S.E.R. =  .003  MEAN LHS = .311  RHO =  .887 (16.8)
     RANGE: 1969 Q4 TO 1983 Q2   NOB = 54   ESTIMATED:  4/85
```

719. (UGFRV) GOVERNMENT TRANSFERS TO FOREIGNERS

UGFRV = - (UJTRANG * UXTRANGV)

720. (UGV) GOVERNMENT PURCHASES (FED STATE AND LOCAL)

UGV = UG * UP

721. (UTV) GOVERNMENT REVENUE (SHIFT EQUATION)

UTV = UTRATE * UTVC + UTBASE

722. (UGDEF) GOVERNMENT DEFICIT (FED STATE AND LOCAL)-- CURRENT PRICES

UGDEF = UGV + UTRANV + UGFRV + UGIV + UGGV - UTV

723. (UGDEBT) GOVERNMENT DEBT

UGDEBT = UGDEF/4 + UGDEBT(-1)

U.I.C. PRIVATE SAVINGS AND WEALTH

724. (UDNW) CHANGE IN PRIVATE NET WORTH

```
UDNW = UYDV - UC * UP
```

725. (UNW) PRIVATE NET WORTH

```
UNW = 0.25 * UDNW + UNW(-1)
```

U.II. CURRENT ACCOUNT

U.II.A. IMPORTS OF GOODS

726. (UMGNFL) VOLUME OF NON-FUEL GOODS IMPORTS--1972 PRICES

LOG(UMGNFL) = -6.7105 (3.79077) - .470306 * LOG(UFCUFW10(-1)/UCU(-1)) (3.21695) + .900046 * LOG(UDVDSMNF) (8.37321)

+ LAGCOEF1 * (LOG((ICSUPPLY(I-1) + LDSUPPLY(I-1))/USUPPLY(I-1)))

+ LAGCOEF2 * (LOG(UTARIFF(I) * (UPMGNFL(I)/UPGBP(I)))) + 1.63382 * LOG(UGNP) (7.17192)

CRSQ = .988 S.E.R. = .032 MEAN LHS = 3.895 RHO = .492 (4.9)
RANGE: 1965 Q1 TO 1982 Q4 NOB = 71 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.131	4.671	-0.380	4.474
(-1)	0.229	4.671	-0.273	5.876
(-2)	0.294	4.671	-0.182	8.452
(-3)	0.327	4.671	-0.109	4.887
(-4)	0.327	4.671	-0.053	1.636
(-5)	0.294	4.671	-0.014	0.376
(-6)	0.229	4.671	0.008	0.246
(-7)	0.131	4.671	0.013	0.611
SUM:	1.961		-0.989	

727. (UELC) AGGREGATE ENERGY CONSUMPTION (BTUS)

LOG(UELC) = -2.38107 (3.63823) + .94592 * LOG(UGNP) (10.1229) + LAGCOEF1 * (LOG(UPWIFE(I)/UPGNP(I)))

+ .061848 * Q1 (8.89463) - .123823 * Q2 (16.7277) - .118402 * Q3 (17.8549) - .071134 * D7411 (3.37177)

CRSQ = .952 S.E.R. = .022 MEAN LHS = 4.203 RHO = .359 (2.6)
RANGE: 1968 Q1 TO 1982 Q4 NOB = 59 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	-0.018	2.773
(-1)	-0.017	3.057
(-2)	-0.017	3.400
(-3)	-0.016	3.818
(-4)	-0.016	4.336
(-5)	-0.015	4.985
(-6)	-0.015	5.798
(-7)	-0.014	6.792
(-8)	-0.014	7.904
(-9)	-0.013	8.869
(-10)	-0.013	9.220
(-11)	-0.012	8.724
(-12)	-0.011	7.713
(-13)	-0.011	6.629
(-14)	-0.010	5.684
(-15)	-0.010	4.916
(-16)	-0.009	4.304
(-17)	-0.009	3.813
(-18)	-0.008	3.415
(-19)	-0.008	3.089
(-20)	-0.007	2.817
(-21)	-0.006	2.588
(-22)	-0.006	2.393
(-23)	-0.005	2.225
(-24)	-0.005	2.079
(-25)	-0.004	1.951
(-26)	-0.004	1.838
(-27)	-0.003	1.737
(-28)	-0.002	1.647
(-29)	-0.002	1.566
(-30)	-0.001	1.492
(-31)	-0.001	1.426
SUM:	-0.302	

728. (UFLCNS) OIL CONSUMPTION (MBD NSA)

40 = UFLCNS * UBTUFL/UELC = 65.9133 - .328231 * D7411 - 1.30838 * Q1 + 2.48664 * Q2
(3.23288) (.412494) (5.67158) (9.70673)

+ 2.4415 * Q3 - 3.55652 * LOG(UCU) + LAGCOEF1 * (LOG(UPWIFC(I)/UPWIFL(I)))
(10.9149) (.765789)

+ LAGCOEF2 * (LOG(UPWIFNG(I)/UPWIFL(I)))

CRSQ = .901 S.E.R. = .977 MEAN LHS = 53.09 RHO = .785 (9.8)
RANGE: 1965 Q1 TO 1982 Q4 NOB = 71 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.259	3.984	3.557	1.949
(-1)	0.475	3.984	1.775	2.978
(-2)	0.648	3.984	0.588	0.561
(-3)	0.778	3.984	-0.004	0.004
(-4)	0.864	3.984	NA	NA
(-5)	0.907	3.984	NA	NA
(-6)	0.907	3.984	NA	NA
(-7)	0.864	3.984	NA	NA
(-8)	0.778	3.984	NA	NA
(-9)	0.648	3.984	NA	NA
(-10)	0.475	3.984	NA	NA
(-11)	0.259	3.984	NA	NA
SUM:	7.863		5.916	

729. (UFLPSCNS) OIL STOCK BUILDING--PRIVATE (MBD NSA)

UFLPSCNS = -.283846 - .555311 * Q1 + .758309 * Q2 + .886082 * Q3
(3.28808) (4.48753) (6.15918) (7.21432)

+ .004580 * (100 * ((UPWIFL/UPWIFL(-1))**4 - 1) - URS1)
(3.32744)

CRSQ = .729 S.E.R. = .366 MEAN LHS = .028 DW = 1.874
RANGE: 1965 Q1 TO 1982 Q4 NOB = 72 ESTIMATED: 4/85

730. (XCUV) CANADIAN GOODS EXPORTS TO U.S. (DOT)

LOG(XCUV/(CPXGUV * CEI)) = -8.79125 + 1.5 * LOG(UGNP)
(39.711)

+ LAGCOEF1 * (LOG(CPXGUV(I) * CEI(I)/UP(I))) + .417996 * (LOG(CGNP) - 0.588 * LOG(CCU))
(3.62)

- .052368 * Q1 + .024818 * Q2 - .12207 * Q3
(4.24) (1.788) (10.09)

CRSQ = .91 S.E.R. = .0411 MEAN LHS = NA RHO = .6062 (4.947)
RANGE: 1968 Q1 TO 1980 Q4 NOB = 52 ESTIMATED: 4/82

LAG	LAGCOEF1	T-STAT
(-0)	-0.219	2.535
(-1)	-0.166	3.067
(-2)	-0.120	3.576
(-3)	-0.081	2.759
(-4)	-0.049	1.410
(-5)	-0.025	0.620
(-6)	-0.008	0.196
(-7)	0.002	0.066
(-8)	0.005	0.240
SUM:	-0.660	

731. (XEUV) U.K. GOODS EXPORTS TO THE U.S. (DOT)

```
LOG(XEUV/(EPXGUV * EEI))   =  -7.40726   +  1.13738 * LOG(UGNP)
                             (1.2422)      (1.26317)

      +  LAGCOEF1 * (LOG(EPXGUV(I) * EEI(I)/UP(I)))   +  1.08007 * LOG(UDVDSMNF)
                                                        (3.97091)

      +  .007958 * TIME   -  .097909 * Q1   -  .029299 * Q2   -  .042590 * Q3
        (1.23023)          (4.29586)         (1.15961)         (1.95398)

     CRSQ  = .851  S.E.R. =  .09  MEAN LHS = 1.083  RHO =  .682 (6.9)
     RANGE: 1965 Q1 TO 1982 Q4   NOB = 71   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT
(-0)	-0.462	1.561
(-1)	-0.430	1.434
SUM:	-0.892	

732. (XGUV) GERMAN GOODS EXPORTS TO THE U.S. (DOT)

```
LOG(XGUV/(GPXGUV * GEI))   =  -12.6521   +  1.97904 * LOG(UGNP)   +  .590912 * LOG(UCU(-1)/GCU(-1))
                             (-5.95821)    (6.60822)               (2.44824)

      +  LAGCOEF1 * (LOG(GPXGUV(I-1) * GEI(I-1)/UP(I-1))) + 0.75 * (LOG(GGNP) - 1.43 * LOG(GCU))

      +  1.14553 * LOG(UDVDSMNF)   -  .087238 * Q1   -  .051036 * Q2   -  .118707 * Q3
        (2.76514)                   (-2.47398)        (-1.43108)        (-3.36668)

      +  LAGCOEF2 * (LOG(GPXGUV(I) * GEI(I)/UGPCOMP(I)))

     CRSQ  = .761  S.E.R. =  .089  MEAN LHS = NA  DW = 2.07
     RANGE: 1968 Q1 TO 1980 Q4   NOB = 52   ESTIMATED:  4/82
```

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.129	1.182	-0.439	-1.144
(-1)	-0.022	-0.310	-0.833	-1.750
(-2)	-0.142	-3.625	NA	NA
(-3)	-0.231	-9.763	NA	NA
(-4)	-0.290	-10.189	NA	NA
(-5)	-0.318	-8.426	NA	NA
(-6)	-0.316	-7.359	NA	NA
(-7)	-0.283	-6.722	NA	NA
(-8)	-0.219	-6.309	NA	NA
(-9)	-0.125	-6.021	NA	NA
SUM:	-1.816		-1.272	

733. (XJUV) JAPANESE GOODS EXPORTS TO THE U.S. (DOT)

```
LOG(XJUV/(JPXGUV * JEI))   =  -22.4634   +  1.85575 * LOG(UGNP)   +  .002218 * (UII - UIIF)
                             (24.3616)     (14.4723)               (3.19641)

      +  LAGCOEF1 * (LOG(JPXGUV(I) * JEI(I)/UP(I))) + LOG(JGNPPOT)   -  .100247 * Q1
                                                                       (6.76654)

      -  .048958 * Q2   -  .035405 * Q3
        (2.48915)         (2.41238)

     CRSQ  = .944  S.E.R. =  .039  MEAN LHS = -9.316  RHO = .854 (5.6)  RHO2 = -.568 (3.7)
     RANGE: 1974 Q2 TO 1982 Q4   NOB = 33   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT
(-0)	-0.313	2.280
(-1)	-0.299	6.341
(-2)	-0.260	3.845
(-3)	-0.198	2.288
(-4)	-0.111	1.710
SUM:	-1.181	

734. (MUCV) U.S. GOODS IMPORTS FROM CANADA (QUASI-IDENTITY)

MUCV = 2.10359 - .446829 * Q1 - .466096 * Q2 - .405351 * Q3 + .992406 * XCUV
(7.38) (1.81) (1.89) (1.64) (113.28)

CRSQ = .997 S.E.R. = .576 MEAN LHS = NA DW = 1.52
RANGE: 1970 Q1 TO 1980 Q4 NOB = 44 ESTIMATED: 4/82

735. (MUEV) U.S. GOODS IMPORTS FROM U.K. (QUASI-IDENTITY)

MUEV = .32522 + .156652 * Q1 + .198103 * Q2 + .129761 * Q3 - .20157 * UDVILST
(2.12) (1.07) (1.37) (.9) (1.15)

+ .915896 * XEUV
(46.9)

CRSQ = .982 S.E.R. = .33 MEAN LHS = NA DW = 1.72
RANGE: 1970 Q1 TO 1980 Q4 NOB = 44 ESTIMATED: 4/82

736. (MUGV) U.S. GOODS IMPORTS FROM GERMANY (QUASI-IDENTITY)

MUGV = -.011376 + .060925 * Q1 + .357972 * Q2 + .146399 * Q3 - .328765 * UDVILST
(.055) (.34) (2.02) (.824) (1.53)

+ 1.03449 * (0.65 * XGUV + 0.35 * XGUV(-1))
(48.06)

CRSQ = .98 S.E.R. = .404 MEAN LHS = NA DW = 1.96
RANGE: 1970 Q1 TO 1980 Q4 NOB = 44 ESTIMATED: 4/82

737. (MUJV) U.S. GOODS IMPORTS FROM JAPAN (QUASI-IDENTITY)

MUJV = -.523311 + .6216 * Q1 + 1.54971 * Q2 + .627533 * Q3
(1.9) (2.3) (5.76) (2.34)

+ 1.05716 * 0.5 * (XJUV + XJUV(-1))
(91.126)

CRSQ = .995 S.E.R. = .628 MEAN LHS = NA DW = 1.87
RANGE: 1970 Q1 TO 1980 Q4 NOB = 44 ESTIMATED: 4/82

738. (UMGNFLV) VALUE OF NON-FUEL GOODS IMPORTS--CURRENT PRICES

UMGNFLV = UMGNFL * UPMGNFL

739. (UMQGFL) VOLUME OF OIL IMPORTS (MBD) (SA)

UMQGFL = (UFLCNS - UFLQLUNS - UFLUCQNS + UXQFLNS + UFLPSCNS + UFLSPR + UFLDICNV)/UMQFLSF

740. (UMGFLV) VALUE OF FUEL IMPORTS--CURRENT PRICES

UMGFLV = UMQGFL * 0.365 * UPMGFLUV + UMGFLER

741. (UMGFL) VOLUME OF FUEL IMPORTS--1972 PRICES

UMGFL = UMGFLV/UPMGFL

742. (UMGV) VALUE OF TOTAL GOODS IMPORTS--CURRENT PRICES (BOP BASIS)

UMGV = UMGFLV + UMGNFLV

743. (UMG) VOLUME OF TOTAL GOODS IMPORTS--1972 PRICES (BOP BASIS)

UMG = UMGV/UPMGUV

744. (UMGNIV) VALUE OF TOTAL GOODS IMPORTS--CURRENT PRICES (NIA BASIS)

UMGNIV = UMGV - UMGOLD + UMIGOLD + UMGVNAER

745. (UMGNI) VOLUME OF TOTAL GOODS IMPORTS--1972 PRICES (NIA BASIS)

UMGNI = UMGNIV/UPMGNI + UMGNIER

746. (MUTV) TOTAL U.S. GOODS IMPORTS--CURRENT PRICES (DOT) (NSA)

MUTV = UMGV * UMGVSF

747. (MURV) U.S. GOODS IMPORTS FROM ROW (QUASI-IDENTITY)

MURV = MUTV - MUCV - MUEV - MUGV - MUJV

U.II.B. EXPORTS OF GOODS

748. (UXGNA) NON-AGRICULTURAL EXPORT VOLUME--1972 PRICES

```
LOG(UXGNA)   =  -.355194   +  .81178 * LOG(UDVDSXNA)   +  1.75287 * LOG(UFGNPXWM)
                (.238597)     (9.2273)                   (7.47988)

     +  LAGCOEF1 * (LOG(UEI10(I-1) * 100 * UPXNAG(I-1)/UFPCFW10(I-1)))

     +  LAGCOEF2 * (LOG((ICSUPPLY(I-1) + LDSUPPLY(I-1))/USUPPLY(I-1)))

    CRSQ  = .991  S.E.R. =  .026  MEAN LHS = 3.921  RHO =  .506 (4.3)
    RANGE: 1968 Q1 TO 1982 Q4   NOB = 59   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	-0.069	10.116	-0.122	3.012
(-1)	-0.121	10.116	-0.214	3.012
(-2)	-0.156	10.116	-0.276	3.012
(-3)	-0.173	10.116	-0.306	3.012
(-4)	-0.173	10.116	-0.306	3.012
(-5)	-0.156	10.116	-0.276	3.012
(-6)	-0.121	10.116	-0.214	3.012
(-7)	-0.069	10.116	-0.122	3.012
SUM:	-1.041		-1.837	

749. (UXGA) AGRICULTURAL EXPORT VOLUME--1972 PRICES

```
LOG(UXGA)   =  -7.86479   +  1.23124 * LOG(UFGNPXWM)
               (8.64572)     (8.47877)

     +  LAGCOEF1 * (LOG(100 * 100 * UPXAG(I-2)/UPCPI(I-2)))

     +  LAGCOEF2 * (LOG(100 * UPXAG(I-1)/UFPCFUS(I-1)))

    CRSQ  = .928  S.E.R. =  .087  MEAN LHS = 2.486  DW = 1.895
    RANGE: 1968 Q1 TO 1983 Q4   NOB = 64   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.033	0.360	-0.017	0.159
(-1)	0.056	1.184	-0.081	1.355
(-2)	0.072	2.912	-0.125	3.713
(-3)	0.080	2.464	-0.151	3.794
(-4)	0.079	1.810	-0.159	3.055
(-5)	0.071	1.497	-0.147	2.636
(-6)	0.056	1.324	-0.117	2.391
(-7)	0.032	1.216	-0.068	2.235
SUM:	0.478		-0.865	

750. (UXGNAV) NON-AGRICULTURAL GOODS EXPORTS--CURRENT PRICES

```
UXGNAV = UXGNA * UPXNAG
```

751. (UXGAV) AGRICULTURAL GOODS EXPORTS--CURRENT PRICES

```
UXGAV = UXGA * UPXAG
```

752. (UXGV) TOTAL GOODS EXPORTS--CURRENT PRICES (BOP BASIS)

```
UXGV = UXGAV + UXGNAV
```

753. (UXG) TOTAL GOODS EXPORTS--1972 PRICES (BOP BASIS)

UXG = UXGV/UPXGUV

754. (UXGNIV) TOTAL GOODS EXPORTS--CURRENT PRICES (NIA BASIS)

UXGNIV = UXGV - UXGOLD + UXGVNAER

755. (UXGNI) TOTAL GOODS EXPORTS--1972 PRICES (NIA BASIS)

UXGNI = UXGNIV/UPXGNI + UXGNIER

756. (XUTV) TOTAL US GOODS EXPORTS--CURRENT PRICES (DOT)(NSA)

XUTV = UXGV * UXGVSF

U.II.C. IMPORTS OF SERVICES AND TRANSFERS

757. (UMSOV) SERVICE PAYMENTS EXCLUDING INVESTMENT AND MILITARY

```
LOG(UMSOV)   =  -7.02481   +  .200295 * LOG(UMG)   +  .799796 * LOG(100 * UPGBP)
               (3.97995)     (3.45181)              (6.22043)

      +  .303692 * LOG(UFPCFW10/UEI10)   +  .708925 * LOG(UGNP)
        (3.45528)                         (2.46299)

     CRSQ  = .998  S.E.R. =  .026  MEAN LHS = 2.719  RHO =  .771 (9.7)
     RANGE: 1965 Q1 TO 1982 Q4   NOB = 71   ESTIMATED:  4/85
```

758. (UMSYPDNQ) PRIVATE DIRECT INVESTMENT INCOME PAYMENTS-- (NSA)

```
LOG(UMSYPDNQ - UCAPGM)   =  -15.0404   +  2.9712 * LOG(UCU)   +  .809727 * LOG(UPCPI * UDILCP)
                           (3.19387)     (2.93348)             (5.30359)

      +  .091001 * Q1   +  .199743 * Q2   +  .145998 * Q3   +  2.61208 * LOG(UGNP/UGNP(-1))
        (1.38495)         (2.75255)         (2.30756)         (.922399)

     CRSQ  = .886  S.E.R. =  .206  MEAN LHS = 1.162  RHO =  .673 (4.7)
     RANGE: 1972 Q1 TO 1982 Q4   NOB = 43   ESTIMATED:  4/85
```

759. (UMSYPNDV) PRIVATE NON-DIRECT INVESTMENT INCOME PAYMENTS

```
LOG(UMSYPNDV/UFLPAVG)   =  -2.4776   +  .535476 * LOG(URS1)
                          (8.32332)    (7.40097)

      +  .521964 * LOG(UMSYPNDV(-1)/UFLPAVG(-1))
        (9.09118)

     CRSQ  = .962  S.E.R. =  .059  MEAN LHS = -2.609  DW = 2.171
     RANGE: 1978 Q1 TO 1982 Q4   NOB = 20   ESTIMATED:  4/85
```

760. (UMSYGV) GOVERNMENT INVESTMENT INCOME PAYMENTS

```
LOG(UMSYGV/UFLGAVG)   =  -.675388   +  .122175 * LOG(URS1)
                        (3.70219)     (3.18074)

      +  .827872 * LOG(UMSYGV(-1)/UFLGAVG(-1))
        (18.3934)

     CRSQ  = .975  S.E.R. =  .034  MEAN LHS = -2.427  DW = 2.48
     RANGE: 1978 Q1 TO 1982 Q4   NOB = 20   ESTIMATED:  4/85
```

761. (UMSYPDV) PRIVATE DIRECT INVESTMENT INCOME PAYMENTS (NSA)

```
UMSYPDV = UMSYPDNQ * UMSYJDV
```

762. (UMSYV) TOTAL INVESTMENT INCOME PAYMENTS

```
UMSYV = UMSYPDV + UMSYPNDV + UMSYGV
```

763. (UMSV) TOTAL SERVICE PAYMENTS

```
UMSV = UMSOV + UMSYV + UMSMILV
```

764. (UMSFIV) FACTOR INCOME PAYMENTS--CURRENT PRICES (NIA BASIS)

UMSFIV = UMSYV - UMKGL - UMSYGV + UMSFIER

765. (UMSONIV) OTHER SERVICE PAYMENTS--CURRENT PRICES (NIA BASIS)

UMSONIV = UMSOV + UMSMILV + UMSOVER

766. (UMSNIV) TOTAL SERVICE PAYMENTS--CURRENT PRICES (NIA BASIS)

UMSNIV = UMSFIV + UMSONIV + UMSVNIER

767. (UMSFI) FACTOR INCOME PAYMENTS --1972 PRICES (NIA BASIS)

UMSFI = UMSFIV/UPMSFI + UMSFINER

768. (UMSONI) OTHER SERVICE PAYMENTS--1972 PRICES (NIA BASIS)

UMSONI = UMSONIV/UPMOSNI + UMSONER

769. (UMSNI) TOTAL SERVICE PAYMENTS--1972 PRICES (NIA BASIS)

UMSNI = UMSFI + UMSONI + UMSNIER

U.II.D. EXPORTS OF SERVICES AND TRANSFERS

770. (UXSOV) SERVICE RECEIPTS EXCLUDING INVESTMENT INCOME AND MILITARY

```
LOG(UXSOV)   =  -5.91477   +  1.09212 * LOG(100 * UPGBP)   +  .216754 * LOG(UFPCFW10/UEI10)
                (10.6082)     (14.6963)                      (3.48929)

      +  .528068 * LOG(UFGNPF10)   +  .232268 * LOG(UXG)
         (4.4527)                     (4.99781)

     CRSQ  = .999  S.E.R. =  .02  MEAN LHS = 2.782  RHO =  .642 (6.8)
     RANGE: 1965 Q1 TO 1982 Q4   NOB = 71   ESTIMATED:  4/85
```

771. (UXSYDVPQ) DIRECT INVESTMENT INCOME RECEIPTS--PETROLEUM (NSA)

```
LOG(UXSYDVPQ - UCAPGPX)   =  -45.9131   +  9.62376 * LOG(UFCUDIW)
                             (3.00891)     (2.91409)

      +  .969403 * LOG(UDICCPP * UFPDI10/UFEDI10)   -  .016788 * Q1   -  .088636 * Q2
         (5.13939)                                     (.32832)         (1.5863)

      -  .038966 * Q3   +  .493131 * UDV7279 * LOG(SAXPCP/SAXPCP(-1))
         (.797095)        (3.12701)

      +  .927022 * D801I * LOG(SANPCP/SAXPCP)
         (1.59651)

     CRSQ  = .897  S.E.R. =  .16  MEAN LHS = 1.976  RHO =  .692 (5.7)
     RANGE: 1972 Q1 TO 1982 Q4   NOB = 43   ESTIMATED:  4/85
```

772. (UXSYDVMQ) DIRECT INVESTMENT INCOME RECEIPTS--MANUFACTURING (NSA)

```
LOG(UXSYDVMQ - UCAPGMX)   =  -39.1671   +  8.55834 * LOG(UFCUDIW)
                             (3.39262)     (3.43936)

      +  .442228 * LOG(UDICCPM * UFPDI10/UFEDI10)   -  .126872 * Q1   -  .020553 * Q2
         (3.74806)                                     (2.91574)        (.426992)

      -  .299099 * Q3   +  2.3841 * LOG(UFPDI10/UFEDI10/(UFPDI10(-1)/UFEDI10(-1)))
         (7.13668)        (3.41827)

     CRSQ  = .825  S.E.R. =  .133  MEAN LHS = 2.038  RHO =  .609 (4.7)
     RANGE: 1972 Q1 TO 1982 Q4   NOB = 43   ESTIMATED:  4/85
```

773. (UXSYDVOQ) DIRECT INVESTMENT INCOME RECEIPTS--OTHER (NSA)

```
LOG(UXSYDVOQ - UCAPGOX - UXSYDNAT)   =  -12.359   +  2.3541 * LOG(UFCUDIW)
                                        (1.86387)    (1.6431)

      +  .83272 * LOG(UDICCPO * UFPDI10/UFEDI10)   -  .062919 * Q1   -  .024024 * Q2
         (14.5265)                                    (2.30397)        (.797812)

      -  .087994 * Q3   +  .566629 * LOG(UFPDI10/UFEDI10/(UFPDI10(-1)/UFEDI10(-1)))
         (3.3427)         (1.30072)

     CRSQ  = .966  S.E.R. =  .081  MEAN LHS = 2.028  RHO =  .555 (3.9)
     RANGE: 1972 Q1 TO 1982 Q4   NOB = 43   ESTIMATED:  4/85
```

774. (UXSYNPV) PRIVATE NON-DIRECT INVESTMENT INCOME RECEIPTS

```
LOG(UXSYNPV/UFCPAVG)   =  -2.32889   +  .49863 * LOG(URS1)
                         (13.6592)     (12.6015)

      +  .462595 * LOG(UXSYNPV(-1)/UFCPAVG(-1))
        (11.2097)

     CRSQ  = .982  S.E.R. =  .032  MEAN LHS = -2.185  DW = 2.584
     RANGE: 1978 Q1 TO 1982 Q4   NOB = 20   ESTIMATED:  4/85
```

775. (UXSYNGV) GOVERNMENT NON-DIRECT INVESTMENT INCOME RECEIPTS

```
LOG(UXSYNGV/UFCGAVG)   =  -1.78751   +  .134633 * LOG(URS1)
                         (2.28716)     (1.30573)

      +  .529042 * LOG(UXSYNGV(-1)/UFCGAVG(-1))
        (2.8154)

     CRSQ  = .573  S.E.R. =  .088  MEAN LHS = -3.154  DW = 2.484
     RANGE: 1978 Q1 TO 1982 Q4   NOB = 20   ESTIMATED:  4/85
```

776. (UXSYDVP) DIRECT INVESTMENT INCOME RECEIPTS--PETROLEUM (AR - SA)

```
UXSYDVP = (UXSYDVPQ - UCAPGPX)/UXSYJDVP + UCAPGPX
```

777. (UXSYDVOM) DIRECT INVESTMENT INCOME RECEIPTS--MANUF. + OTHER (AR - SA)

```
UXSYDVOM = (UXSYDVOQ - UCAPGOX + UXSYDVMQ - UCAPGMX)/UXSYJDVO + UCAPGOX + UCAPGMX
```

778. (UXSYV) TOTAL INVESTMENT INCOME RECEIPTS

```
UXSYV = UXSYPDV + UXSYNPV + UXSYNGV
```

779. (UXSYPDV) TOTAL PRIVATE DIRECT INVESTMENT INCOME RECEIPTS

```
UXSYPDV = UXSYDVP + UXSYDVOM
```

780. (UXSV) TOTAL SERVICE RECEIPTS

```
UXSV = UXSOV + UXSYV + UXSMILV
```

781. (UXSFIV) FACTOR INCOME RECEIPTS--CURRENT PRICES (NIA BASIS)

```
UXSFIV = UXSYV - UXKGL + UXSFIER
```

782. (UXSONIV) OTHER SERVICE RECEIPTS--CURRENT PRICES (NIA BASIS)

```
UXSONIV = UXSOV + UXSMILV - UXMILIS + UXSOVER
```

783. (UXSNIV) TOTAL SERVICE RECEIPTS--CURRENT PRICES (NIA BASIS)

UXSNIV = UXSFIV + UXSONIV + UXSVNIER

784. (UXSFI) FACTOR INCOME RECEIPTS--1972 PRICES (NIA BASIS)

UXSFI = 100 * UXSFIV/(100 * UPXSFI) + UXSFINER

785. (UXSONI) OTHER SERVICE RECEIPTS--1972 PRICES (NIA BASIS)

UXSONI = UXSONIV/UPXOSNI + UXSONER

786. (UXSNI) TOTAL SERVICE RECEIPTS--1972 PRICES (NIA BASIS)

UXSNI = UXSFI + UXSONI + UXSNIER

787. (UCURBAL) CURRENT ACCOUNT BALANCE (BOP)

UCURBAL = UGBAL + USBAL + UXTRANV

U.II.E. BALANCES

788. (UGBAL) TRADE BALANCE (BOP)

UGBAL = UXGV - UMGV

789. (USBAL) BALANCE OF SERVICES (BOP)

USBAL = UXSV - UMSV

790. (UXGSV) EXPORTS OF GOODS AND SERVICES--CURRENT PRICES (BOP)

UXGSV = UXGV + UXSV

791. (UMGSV) IMPORTS OF GOODS AND SERVICES--CURRENT PRICES (BOP)

UMGSV = UMGV + UMSV

792. (UGSBAL) BALANCE OF GOODS AND SERVICES (BOP)

UGSBAL = UXGSV - UMGSV

793. (UXTRANV) NET TRANSFER RECEIPTS (BOP)

UXTRANV = UXTRANPV + UXTRANGV

794. (UMGSNIV) IMPORTS OF GOODS AND SERVICES--CURRENT PRICES (NIA)

UMGSNIV = UMGNIV + UMSNIV + UMGSVNER

795. (UMGSNI) IMPORTS OF GOODS AND SERVICES--1972 PRICES (NIA BASIS)

UMGSNI = UMGNI + UMSNI + UMGSNER

796. (UXGSNIV) EXPORTS OF GOODS AND SERVICES--CURRENT PRICES (NIA)

UXGSNIV = UXGNIV + UXSNIV + UXGSVNER

797. (UXGSNI) EXPORTS OF GOODS AND SERVICES--1972 PRICES (NIA BASIS)

UXGSNI = UXGNI + UXSNI + UXGSNER

798. (UNETXNIV) NET EXPORTS OF GOODS AND SERVICES (NIA BASIS)

UNETXNIV = UXGSNIV - UMGSNIV

799. (UNETXNI) REAL NET EXPORTS OF GOODS AND SERVICES (NIA BASIS)

UNETXNI = UXGSNI - UMGSNI

U.III. DOMESTIC FINANCIAL MARKET

U.III.A. MONETARY AGGREGATES

800. (UCUR) CURRENCY HELD BY RESIDENTS

LOG(UCUR/UP) = -.216127 + LAGCOEF1 * (LOG(UC(I))) + LAGCOEF2 * (LOG(URS1(I)))
(NA)

CRSQ = .992 S.E.R. = .003 MEAN LHS = NA RHO = .887 (0)
RANGE: 1962 Q1 TO 1975 Q4 NOB = 56 ESTIMATED: 1/78

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.179	NA	-0.009	NA
(-1)	0.096	NA	-0.014	NA
(-2)	0.123	NA	-0.014	NA
(-3)	0.260	NA	-0.009	NA
SUM:	0.658		-0.046	

801. (UDD) DEMAND DEPOSITS HELD BY RESIDENTS

LOG(UDD/UP) = -.002408 + 1.08191 * LOG(1 - UALPHA1) + .004595 * TIME
(NA) (NA) (NA)

+ LAGCOEF1 * (URS1(I)) + LAGCOEF2 * (LOG(UGNP(I))) - .010789 * UDVDDCB
(NA)

CRSQ = .816 S.E.R. = .007 MEAN LHS = NA RHO = .937 (0)
RANGE: 1962 Q1 TO 1975 Q4 NOB = 56 ESTIMATED: 1/78

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	-0.005	NA	0.287	NA
(-1)	-0.004	NA	0.228	NA
(-2)	-0.002	NA	0.170	NA
(-3)	-0.001	NA	0.111	NA
SUM:	-0.013		0.796	

802. (UOCD) OTHER TIME DEPOSITS (UM1-UM1A)

LOG(UOCD/UP) = .267086 + 1.08191 * LOG(UALPHA1) + .004595 * TIME
(NA) (NA) (NA)

+ LAGCOEF1 * (D781I * (URS1(I) - URNOW(I))) + LAGCOEF2 * (LOG(UGNP(I)))

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	-0.005	NA	0.287	NA
(-1)	-0.004	NA	0.228	NA
(-2)	-0.002	NA	0.170	NA
(-3)	-0.001	NA	0.111	NA
SUM:	-0.013		0.796	

803. (UTD) TIME DEPOSITS HELD BY RESIDENTS

LOG(UTD/UNW) = -1.79654 - .01189 * URLGB
(20.186) (2.56)

+ LAGCOEF1 * (LOG((UGNPV(I) - UXGSNIV(I) + UMGSNIV(I))/UNW(I))) - -.01189 * URTD
(2.56)

CRSQ = .8065 S.E.R. = .0135 MEAN LHS = NA RHO = 1.3743 (0) RHO2 = .5192 (NA)
RANGE: 1973 Q1 TO 1981 Q2 NOB = 34 ESTIMATED: 9/82

LAG	LAGCOEF1	T-STAT
(-0)	0.002	0.008
(-1)	0.114	1.790
(-2)	0.182	6.158
(-3)	0.204	2.640
(-4)	0.181	2.030
(-5)	0.113	1.780
SUM:	0.796	

804. (URS1) MONEY SUPPLY--M1A ("DETERMINES" URS1)

UM1A = UCUR + UDD

805. (UM1A) MONEY SUPPLY--M1

UM1 = UM1A + UOCD

U.III.B. PRIVATE BANKING SECTOR AND INTEREST RATES

806. (URF) 3-MONTH TREASURY BILL RATE (INVERTED FREE RESERVES EQ .)

URS1 = .081584 + .934492 * URD - 96.838 * (URF/UNDD)
(.329832) (24.2722) (5.22076)

CRSQ = .965 S.E.R. = .573 MEAN LHS = 6.226 RHO = .412 (4.2)
RANGE: 1960 Q4 TO 1983 Q2 NOB = 90 ESTIMATED: 4/85

807. (URL) LONG-TERM AAA BOND INTEREST RATE

URL = 1.19523 + LAGCOEF1 * (URS(I)) + .228943 * UPEXP
(2.11652) (1.75471)

CRSQ = .985 S.E.R. = .351 MEAN LHS = 8.433 RHO = .813 (11.9)
RANGE: 1963 Q4 TO 1983 Q2 NOB = 78 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.127	8.280
(-1)	0.116	8.280
(-2)	0.106	8.280
(-3)	0.095	8.280
(-4)	0.084	8.280
(-5)	0.074	8.280
(-6)	0.063	8.280
(-7)	0.053	8.280
(-8)	0.042	8.280
(-9)	0.032	8.280
(-10)	0.021	8.280
(-11)	0.011	8.280
SUM:	0.823	

808. (URLGB) LONG TERM GOVERNMENT BOND INTEREST RATE

URLGB = 1.26581 + LAGCOEF1 * (URS1(I)) + .006972 * UPEXP
(2.00865) (.050028)

CRSQ = .981 S.E.R. = .344 MEAN LHS = 7.13 RHO = .842 (13.2)
RANGE: 1963 Q4 TO 1983 Q2 NOB = 78 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.138	8.034
(-1)	0.126	8.034
(-2)	0.115	8.034
(-3)	0.103	8.034
(-4)	0.092	8.034
(-5)	0.080	8.034
(-6)	0.069	8.034
(-7)	0.057	8.034
(-8)	0.046	8.034
(-9)	0.034	8.034
(-10)	0.023	8.034
(-11)	0.011	8.034
SUM:	0.897	

809. (URHL) EFFECTIVE YIELD ON MORTGAGES

URHL = .891642 + 1.25804 * URLGB
(3.25599) (34.0059)

CRSQ = .993 S.E.R. = .283 MEAN LHS = 9.222 RHO = .731 (10.2)
RANGE: 1960 Q1 TO 1983 Q2 NOB = 93 ESTIMATED: 4/85

810. (URCD) 90-DAY INTEREST RATE (QUASI-IDENTITY)

LOG(URCD) = .115511 (NA) + .857385 * LOG(URS) (NA) + .213619 * LOG(URS1) (NA)

CRSQ = .977 S.E.R. = .025 MEAN LHS = NA RHO = .669 (0)
RANGE: 1962 Q1 TO 1975 Q4 NOB = 56 ESTIMATED: 1/78

811. (URTD) TIME AND SAVINGS DEPOSIT INTEREST RATE

URTD = 514.8/611.4 * URCB + 96.6/611.4 * URCD

812. (URS) COMMERCIAL PAPER INTEREST RATE 4-6 MONTHS

URS = UJURS + URS1

813. (UMDS) DEMAND DEPOSITS SUBJECT TO RESERVE REQUIREMENTS

UMDS = (UDD/UJMSA + UDDG)/UJMSB

814. (URR) REQUIRED RESERVES

URR = UMDS * UBSMAL + UTD * UASMAL + URROTH + URRNM

815. (UNDD) DEMAND DEPOSITS NET OF FEDERAL RESERVE REQUIREMENTS (4Q MOVING AVERAGE)

UNDD = 0.25 * SUM(J = -3, 0 : (1 - UBSMAL(J)) * UMDS (J))

U.III.C. MONETARY AUTHORITIES

816. (UNDA) NET DOMESTIC ASSETS (FEDERAL RESERVE BALANCE SHEET)

UNDA = UBU - UNFAG

817. (UBU) NONBORROWED MONETARY BASE

UBU = URR + URF + UCUR

U.IV. PRICES AND SUPPLY

U.IV.A. PRICES

818. (UP) ABSORPTION DEFLATOR

```
LOG(UP) - UWTMGNFL * (0.5 * LOG(UPMGNFL) + 0.5 * LOG(UPMGNFL(-1)))   =  -1.01831
                                                                          (22.3414)
    +  LAGCOEF1 * (LOG(UW(I)))   +  LAGCOEF2 * (LOG(UPWIFE(I)))   -  .006420 * (1/UUN)
                                                                       (.089241)
    -  .001178 * Q1   -  .002297 * Q2   -  .001755 * Q3
       (1.07429)         (1.75607)         (1.54105)

  CRSQ  = 1  S.E.R. =  .003  MEAN LHS = .405  RHO =  .7 (5.2)
  RANGE: 1973 Q4 TO 1983 Q2   NOB = 38   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT	LAGCOEF2	T-STAT
(-0)	0.065	18.703	0.047	3.503
(-1)	0.130	18.703	0.018	1.845
(-2)	0.195	18.703	0.003	0.337
(-3)	0.260	18.703	0.003	0.158
SUM:	0.650		0.071	

819. (UPMGNFL) NON-OIL IMPORT UNIT VALUE

```
LOG(UPMGNFL)   =  -2.6406   +  .060853 * LOG(PIFSCOM)   +  .994952 * LOG(UFPCFW10)
                  (5.98787)    (1.75707)                  (23.6274)
    -  .207325 * LOG(UEI10)   -  .276317 * LOG(UEI10(-1))
       (2.81277)                 (3.75831)

  CRSQ  = .999  S.E.R. =  .017  MEAN LHS = .287  RHO =  .849 (14.1)
  RANGE: 1965 Q1 TO 1982 Q4   NOB = 71   ESTIMATED:  4/85
```

820. (UPXAG) AGRICULTURAL EXPORT UNIT VALUE

```
LOG(UPXAG)   =  -5.34969   +  1.07704 * LOG(UPGNP)   -  .236852 * LOG(UEI10)
                (1.11691)     (4.1531)                (1.36659)
    +  LAGCOEF1 * (LOG(0.7 * UFCUFW10(I) + 0.3 * UCU(I)))

  CRSQ  = .991  S.E.R. =  .041  MEAN LHS = .347  RHO = 1.391 (12.2)  RHO2 = -.444 (3.9)
  RANGE: 1965 Q1 TO 1982 Q4   NOB = 70   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT
(-0)	0.583	1.402
(-1)	0.438	1.402
(-2)	0.292	1.402
(-3)	0.146	1.402
SUM:	1.459	

821. (UPXNAG) NON-AGRICULTURAL EXPORT UNIT VALUE

```
LOG(UPXNAG)   =   .030387   +  1.13856 * LOG(UPWPIXW)   +  LAGCOEF1 * (LOG(UFPCFW10(I-1)/UEI10(I-1)))
                 (3.45462)    (17.9255)

     CRSQ  = .999  S.E.R. =  .012  MEAN LHS = .449  RHO =  .711 (7.1)
     RANGE: 1969 Q1 TO 1982 Q4   NOB = 55   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT
(-0)	0.020	1.343
(-1)	0.027	1.343
(-2)	0.020	1.343
SUM:	0.067	

822. (UPMGUV) GOODS IMPORT UNIT VALUE INDEX

```
100 * (UPMGUV/UPMGUV(-1) - 1) = 50 * (UPMGFL/UPMGFL(-1) - 1) + 50 * (UPMGNFL/UPMGNFL(-1) - 1) +
     UPMGER
```

823. (UPGNP) GNP DEFLATOR

```
UPGNP = UGNPV/UGNP
```

824. (UPCPI) CONSUMER PRICE INDEX

```
LOG(UPCPI) = LOG(UP) + UPCPIER
```

825. (UPGBP) U.S. GROSS BUSINESS PRODUCT--FIXED WEIGHT INDEX

```
LOG(UPGBP) = LOG(UPGNP) + UPGBPER
```

826. (UPWPIXW) U.S. WHOLESALE PRICE INDEX--EXPORT WEIGHTS

```
LOG(UPWPIXW) = LOG(UP) + UPWPIXER
```

827. (UPCHP) PERCENTAGE CHANGE IN PRICE LEVEL--ANNUAL RATE

```
UPCHP = ((UP/UP(-1))**4 - 1) * 100
```

828. (ULCHPCPI) DOMESTIC INFLATION (MOVING AVERAGE)

```
ULCHPCPI = 0.5 * (UPCPI/UPCPI(-4)) + 0.33 * (UPCPI/UPCPI(-8)) + 0.17 * (UPCPI/UPCPI(-12))
```

829. (UPEXP) EXPECTED INFLATION -- MOVING AVERAGE

```
UPEXP = 100 * SUM(K = -11, 0 : 0.87**(-K) * (UPGNP(K ) - UPGNP(K - 4))/UPGNP(K - 4))/SUM ( J = 0
     TO 11 : 0.87**J)
```

830. (UP1) PROXY FOR EXPECTED PRICE

```
UP1 = (UPEXP/100 + 1) * UP(-3)
```

831. (UPMGNI) IMPLICIT PRICE DEFLATOR FOR MERCHANDISE IMPORT

```
LOG(UPMGNI) = LOG((UMGFLV + UMGNFLV)/(UMGFL + UMGNFL)) + UPMGNER
```

832. (UPMSFI) IMPLICIT PRICE DEFLATOR FOR FACTOR INCOME PAYMENTS

```
LOG(UPMSFI) = LOG(UPGNP) + UPMSNER
```

833. (UPMOSNI) IMPLICIT PRICE DEFLATOR FOR OTHER SERVICE PAYMENTS

```
LOG(UPMOSNI) = 0.141 * LOG(UPGNP) + 0.273 * LOG(UPGBP) + 0.586 * LOG(UFPCFUS * 0.01) + UPMOSNER
```

834. (UPMGSNI) IMPORT DEFLATOR FOR GOODS AND SERVICES

```
UPMGSNI = UMGSNIV/UMGSNI + UPMGSNER
```

835. (UPMGFLUV) OIL IMPORT UNIT VALUE (DOLLARS PER BARREL)

```
UPMGFLUV = OPOIL + UOMPMKUP
```

836. (UPMGFL) OIL IMPORT UNIT VALUE (1972=100)

```
UPMGFL = UPMGFLUV * UPMGCNVF
```

837. (UPXGUV) GOODS EXPORT UNIT VALUE INDEX

```
100 * (UPXGUV/UPXGUV(-1) - 1) = 33.33 * (UPXAG/UPXAG(-1) - 1) + 66.67 * (UPXNAG/UPXNAG(-1) - 1)
     + UPXGER
```

838. (UPXGNI) IMPLICIT PRICE DEFLATOR FOR MERCHANDISE EXPORT

```
LOG(UPXGNI) = LOG((UXGAV + UXGNAV)/(UXGA + UXGNA)) + UPXGNER
```

839. (UPXSFI) PRICE DEFLATOR FOR FACTOR INCOME RECEIPTS

```
LOG(UPXSFI) = LOG(UPGNP) + UPXSNER
```

840. (UPXOSNI) IMPLICIT PRICE DEFLATOR FOR OTHER SERVICE RECEIPTS

```
LOG(UPXOSNI) = 0.281 * LOG(UPGNP) + 0.259 * LOG(UPGBP) + 0.46 * LOG(UPCPI) + UPXOSNER
```

841. (UPXGSNI) EXPORT DEFLATOR FOR GOODS AND SERVICES

```
UPXGSNI = UXGSNIV/UXGSNI + UPXGSNER
```

842. (UPWIFE) AGGREGATE ENERGY WHOLESALE PRICE INDEX

```
LOG(UPWIFE) = 0.6465 * LOG(UPWIFL) + 0.0344 * LOG(UPWIFC) + 0.1654 * LOG(UPWIFNG) + 0.1538 *
     LOG(UPWIFEL) + UPWIFER
```

U.IV.B. WAGES AND EMPLOYMENT

843. (ULH) HOURS PER EMPLOYEE (NON-FARM BUSINESS SECTOR)

```
LOG(UGNP + UMGSNI) - LOG(UCU * UKP)   =  1.58902   +  .767277 * (LOG(ULE * ULH) - LOG(UCU * UKP))
                                        (5.24102)    (22.2571)

      +  .0556 * (LOG(UMGSNI - UFLCNS * 365/1000 * 2.3475) - LOG(UCU * UKP))
        (4.23108)

      +  .022966 * (LOG(UMGSNI(-1) - UFLCNS(-1) * 365/1000 * 2.3475) - LOG(UCU(-1) * UKP(-1)))
        (1.75625)

      +  .033958 * (LOG(UFLCNS * 365/1000 * 2.3475) - LOG(UCU * UKP))
        (1.76706)

      +  .037600 * (LOG(UFLCNS(-1) * 365/1000 * 2.3475) - LOG(UCU(-1) * UKP(-1)))
        (2.06372)

      +  .002324 * TIME   -  .000201 * Q1   -  .000987 * Q2   +  .003228 * Q3
        (7.00407)           (.104801)         (.332573)         (1.75383)

     CRSQ  = .984  S.E.R. =  .005  MEAN LHS = -4.734  RHO =  .904 (35.6)
     RANGE: 1960 Q4 TO 1983 Q1   NOB = 89   ESTIMATED:  4/85
```

844. (UGNPPOT) U.S. POTENTIAL GNP

```
UGNPPOT = - UMGSNI + EXP(LOG(91.533 * UKP)   +  1.58902
                                              (5.24102)

      +  .767277 * (LOG(ULF * 1.94) - LOG(91.533 * UKP))
        (22.2571)

      +  .0556 * (LOG(UMGSNI - UFLCNS * 365/1000 * 2.3475) - LOG(91.533 * UKP))
        (4.23108)

      +  .022966 * (LOG(UMGSNI(-1) - UFLCNS(-1) * 365/1000 * 2.3475) - LOG(91.533 * UKP(-1)))
        (1.75625)

      +  .033958 * (LOG(UFLCNS * 365/1000 * 2.3475) - LOG(91.533 * UKP))
        (1.76706)

      +  .037600 * (LOG(UFLCNS(-1) * 365/1000 * 2.3475) - LOG(91.533 * UKP(-1)))
        (2.06372)

      +  .002324 * TIME   -  .000201 * Q1   -  .000987 * Q2   +  .003228 * Q3)
        (7.00407)           (.104801)         (.332573)         (1.75383)
```

845. (ULE) EMPLOYMENT (TOTAL CIVILIAN)--MILLIONS

```
LOG(ULE)   =  -.011684   +  LAGCOEF1 * (DEL(LOG(ULE(I) * ULH(I))))   +  .000862 * TIME
              (.132528)                                                (7.83605)

      +  .401112 * LOG(ULE * ULH)   +  .528203 * LOG(ULE(-1))
        (9.50594)                    (12.018)

     CRSQ  = 1  S.E.R. =  .002  MEAN LHS = 4.418  DW = 1.03
     RANGE: 1962 Q1 TO 1983 Q2   NOB = 86   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT
(-0)	0.045	2.586
(-1)	0.068	2.586
(-2)	0.068	2.586
(-3)	0.045	2.586
SUM:	0.226	

846. (ULF) LABOR FORCE--MILLIONS

LOG(ULF/UPOP) = 3.49893 (6.18026) + LAGCOEF1 * (LOG(ULE(I)/UPOP(I))) + .002255 * TIME (7.56798)

CRSQ = .999 S.E.R. = .003 MEAN LHS = 6.066 RHO = .925 (21.9)
RANGE: 1965 Q1 TO 1984 Q3 NOB = 78 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.137	4.019
(-1)	0.102	4.788
(-2)	0.072	4.608
(-3)	0.047	2.859
(-4)	0.027	1.467
(-5)	0.012	0.670
(-6)	0.003	0.195
(-7)	-0.001	0.113
SUM:	0.399	

847. (ULU) UNEMPLOYED WORKERS

ULU = ULF * UUN/100

848. (UUN) UNEMPLOYMENT RATE--PERCENT

UUN = 100. * (ULF - ULE)/ULF

849. (UW) WAGE RATE (NON-FARM PRIVATE BUSINESS SECTOR)

(UW - UW(-4)) * 100/UW(-4) - UPEXP = 5.01951 (9.01646) - .556341 * UUN (6.4616)

CRSQ = .853 S.E.R. = .547 MEAN LHS = 1.579 RHO = 1.052 (9.9) RHO2 = -.418 (3.9)
RANGE: 1964 Q4 TO 1984 Q3 NOB = 78 ESTIMATED: 4/85

850. (UPCHW) PERCENTAGE CHANGE IN WAGES--ANNUAL RATE

UPCHW = ((UW/UW(-1))**4 - 1) * 100

U.IV.C. CAPACITY AND REAL CAPITAL STOCKS

851. (UCU) MANUFACTURING CAPACITY UTILIZATION RATE

```
DEL(LOG(UCU)) = DEL(LOG(UGNP/UGNPPOT)) + UCUER
```

852. (UKPR) PRIVATE NET RESIDENTIAL CAPITAL STOCK--1972 PRICES

```
UKPR = UKPR(-1) * (1 - 0.033839/4) + UIFPR/4 * (1 - 0.033839/4) **0.5
```

853. (UKPD) PRIVATE NET STOCK OF DURABLE EQUIPMENT--1972 PRICES

```
UKPD = UKPD(-1) * (1 - 0.135625/4) + UIFPD/4 * (1 - 0.135625/4) **0.5
```

854. (UKPS) PRIVATE NET STOCK OF PRODUCER'S STRUCTURES-- 1972 PRICES

```
UKPS = UKPS(-1) * (1 - 0.066062/4) + UIFPS/4 * (1 - 0.066062/4) **0.5
```

855. (UKP) FIXED NET PRIVATE CAPITAL STOCK--1972 PRICES

```
UKP = UKPD + UKPS + UKPR
```

856. (UKII) STOCK OF INVENTORY INVESTMENT

```
UKII = UII * 0.25 + UKII(-1)
```

857. (UECDPS1) ECONOMIC DEPRECIATION FOR PRODUCER DURABLES (STRAIGHT LINE CALCULATION)

```
UECDPS1 = (1 - EXP((-(1 - UTRYC)) * (URL/100) * ULIFEPS))/((1 - UTRYC) * (URL/100) * ULIFEPS)
```

858. (UECDPS2) ECONOMIC DEPRECIATION FOR PRODUCER DURABLES (SUM OF YEARS)

```
UECDPS2 = 2 * (1 - (1 - EXP(-((1 - UTRYC) * (URL/100) * ULIFEPS) ))/((1 - UTRYC) * (URL/100) *
     ULIFEPS))/((1 - UTRYC) * (URL/100) * ULIFEPS)
```

859. (UECDPS3) ECONOMIC DEPRECIATION FOR PRODUCER DURABLES (150% DEPRECIATION)

```
UECDPS3 = UBALPS/ULIFEPS/((1 - UTRYC) * (URL/100) + UBALPS /ULIFEPS) * (1 - EXP((-((1 - UTRYC) *
     (URL/100) + UBALPS/ULIFEPS)) * (ULIFEPS * (1 - 1/UBALPS)))) + EXP((-(UBALPS/ULIFEPS)) * (ULIFEPS
     * (1 - 1/UBALPS)))/((1 - UTRYC) * (URL/100) * (ULIFEPS - ULIFEPS * (1 - 1/UBALPS))) * (EXP(-((1
     - UTRYC) * (URL/100) * (ULIFEPS * (1 - 1/UBALPS)))) - EXP((-((1 - UTRYC) * (URL /100))) *
     ULIFEPS))
```

860. (UECDPS4) ECONOMIC DEPRECIATION FOR PRODUCER DURABLES (175% DEPRECIATION)

```
UECDPS4 = (UBALPS - 0.25)/ULIFEPS/((1 - UTRYC) * (URL/100) + (UBALPS - 0.25)/ULIFEPS) * (1 -
     EXP((-((1 - UTRYC) * (URL/100) + (UBALPS - 0.25 )/ULIFEPS)) * (ULIFEPS * (1 - 1/(UBALPS -
     0.25))))) + EXP((-((UBALPS - 0.25) /ULIFEPS)) * (ULIFEPS * (1 - 1/(UBALPS - 0.25))))/((1 -
     UTRYC) * (URL/100) * (ULIFEPS - ULIFEPS * (1 - 1/(UBALPS - 0.25)))) * (EXP(-((1 - UTRYC) *
     (URL/100) * (ULIFEPS * (1 - 1/(UBALPS - 0.25))))) - EXP((-((1 - UTRYC) * (URL/100))) * ULIFEPS))
```

861. (UUCPS) REAL USER COST OF CAPITAL FOR PRODUCER STRUCTURES

```
UUCPS = (1 - UTRYC * ((1 - UDVCOSS) * UECDPS1 + D60137 * UDVCOSS * UECDPS2 + D693I * UDVCOSS *
     UECDPS3 + (1 - D60137 - D693I) * UDVCOSS * UECDPS4)) * ((1 - UTRYC) * (URL/100) - UPEXP/100 +
     UDECAYPS)/(1 - UTRYC)
```

862. (UUCPD1) COMPONENT OF REAL USER COST OF CAPITAL FOR PRODUCER DURABLES

```
UUCPD1 = (1 - UDVCOSP) * (1 - EXP((-(1 - UTRYC)) * (URL/100) * ULIFEPD))/((1 - UTRYC) *
     (URL/100) * ULIFEPD) + UDVCOSP * 2 * (1 - (1 - EXP(-( (1 - UTRYC) * (URL/100) * ULIFEPD)))/((1 -
     UTRYC) * (URL/100) * ULIFEPD))/((1 - UTRYC) * (URL/100) * ULIFEPD)
```

863. (UUCPD) REAL USER COST OF CAPITAL FOR PRODUCER DURABLES

```
UUCPD = (1 - UTRYC * (1 - UTINC * UGRANTPD) * UUCPD1 - UGRANTPD) * ((1 - UTRYC) * (URL/100) -
     UPEXP/100 + UDECAYPD)/(1 - UTRYC)
```

864. (UUCR) REAL USER COST OF CAPITAL FOR RESIDENTIAL INVESTMENT

```
UUCR = (1 - UTRY * (UBALR/ULIFER/((1 - UTRY) * (URHL/100) + UBALR/ULIFER) * (1 - EXP((-((1 -
     UTRY) * (URHL/100) + UBALR/ULIFER)) * (ULIFER * (1 - 1/UBALR)))) + EXP((-(UBALR/ULIFER)) *
     (ULIFER * (1 - 1/UBALR)))/((1 - UTRY) * (URHL/100) * (ULIFER - ULIFER * (1 - 1/UBALR))) *
     (EXP(-((1 - UTRY) * (URHL/100) * (ULIFER * (1 - 1/UBALR)))) - EXP((-((1 - UTRY) * (URHL/100))) *
     ULIFER))) - UGRANTR) * ((1 - UTRY) * (URHL/100) - UPEXP/100 + UDECAYR)/(1 - UTRY)
```

U.V. INTERNATIONAL FINANCIAL MARKET

U.V.A. DIRECT INVESTMENT CLAIMS AND LIABILITIES

865. (UDDICO) DIRECT INVESTMENT CAPITAL OUTFLOW--OTHER

```
UDDICO - UDDICOE - UDDICOIA - UCAPGOX   =  -8.37533
                                          (3.19933)

     +  LAGCOEF1 * (UFPDI10(I)/UFEDI10(I) * DEL(UFGNPF10(I)))   +  .42744 * UDICCPO(-1) * UFCHPLDI
                                                                  (4.35539)

     -  .480717 * (URS1 - RLIBBR)   -  .16716 * UDICO(-1).  +  1.50593 * Q1   +  .586679 * Q2
        (1.36881)                     (3.47768)               (1.69579)         (.668878)

     +  .060054 * Q3
        (.068943)

    CRSQ  = .48  S.E.R. =  1.94  MEAN LHS = 5.845  DW = 1.842
    RANGE: 1973 Q1 TO 1982 Q4   NOB = 40   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT
(-0)	0.061	0.422
(-1)	0.067	0.726
(-2)	0.068	0.896
(-3)	0.066	0.771
(-4)	0.061	0.632
(-5)	0.051	0.539
(-6)	0.038	0.478
(-7)	0.021	0.436
SUM:	0.433	

866. (UDDICM) DIRECT INVESTMENT CAPITAL OUTFLOW--MANUFACTURING

```
UDDICM - UCAPGMX   =  -9.33068   +  LAGCOEF1 * ((UFPDI10(I)/UFEDI10(I)) * DEL(UFGNPF10(I)))
                     (3.44695)

     +  .379927 * UDICCPM(-1) * UFCHPLDI   -  .610387 * (URS1 - RLIBBR)   -  .188554 * UDICM(-1)
        (5.72464)                          (2.05482)                      (5.92744)

     +  1.10942 * Q1   +  1.52975 * Q2   -  1.60851 * Q3
        (.637261)        (1.69196)         (.940434)

    CRSQ  = .583  S.E.R. =  2.307  MEAN LHS = 5.893  RHO =  -.547 (3.5)
    RANGE: 1973 Q1 TO 1982 Q4   NOB = 39   ESTIMATED:  4/85
```

LAG	LAGCOEF1	T-STAT
(-0)	0.195	1.606
(-1)	0.168	2.243
(-2)	0.142	2.414
(-3)	0.117	1.766
(-4)	0.092	1.229
(-5)	0.068	0.908
(-6)	0.045	0.709
(-7)	0.022	0.575
SUM:	0.848	

867. (UDDICP) DIRECT INVESTMENT CAPITAL OUTFLOW--PETROLEUM

```
UDDICP - UCAPGPX   =  -5.48318   +  LAGCOEF1 * ((UFPDI10(I)/UFEDI10(I)) * DEL(UFGNPF10(I)))
                      (.599688)

       -  .010107 * DEL(SAXPCP) * UFGNPF10   +  .179186 * UDICCPP(-1) * UFCHPLDI
          (1.86183)                             (.609402)

       -  .976939 * (URS1 - RLIBBR)
          (1.0665)
```

CRSQ = -.006 S.E.R. = 4.71 MEAN LHS = 2.648 RHO = .291 (1.7)
RANGE: 1973 Q1 TO 1982 Q4 NOB = 39 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.378	0.891
(-1)	0.285	1.036
(-2)	0.206	0.905
(-3)	0.139	0.559
(-4)	0.085	0.312
(-5)	0.044	0.165
(-6)	0.017	0.074
(-7)	0.002	0.013
SUM:	1.155	

868. (UDDIL) DIRECT INVESTMENT CAPITAL INFLOW--TOTAL

```
UDDIL - UCAPGM - UDDILSR   =  -3.78403   +  LAGCOEF1 * (DEL(1 : UGNP(I-1) * UPCPI(I-1)))
                              (2.14104)

       -  .093982 * UDILCP(-1) * ULCHPCPI   +  .20397 * UDIL(-1)
          (.351709)                           (1.48249)
```

CRSQ = .85 S.E.R. = 2.464 MEAN LHS = 7.391 RHO = .046 (.3)
RANGE: 1971 Q1 TO 1982 Q4 NOB = 47 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.051	4.194
(-1)	0.033	3.761
(-2)	0.019	1.958
(-3)	0.008	1.066
SUM:	0.111	

869. (UDDIC) DIRECT INVESTMENT CAPITAL OUTFLOW--TOTAL

```
UDDIC = UDDICO + UDDICM + UDDICP
```

870. (UDICP) U.S. NOMINAL DIRECT INVESTMENT ASSETS ABROAD-- PETROLEUM

```
UDICP = UDICP(-1) + UDDICP/4
```

871. (UDICM) U.S. NOMINAL DIRECT INVESTMENT ASSETS ABROAD-- MANUFACTURING

```
UDICM = UDICM(-1) + UDDICM/4
```

872. (UDICO) U.S. NOMINAL DIRECT INVESTMENT ASSETS ABROAD--OTHER

```
UDICO = UDICO(-1) + (UDDICO - UDDICOE - UDDICOIA)/4
```

873. (UDIL) NOMINAL DIRECT INVESTMENT CLAIMS BY FOREIGNERS ON U.S.

```
UDIL = UDIL(-1) + UDDIL/4
```

874. (UDICCPP) U.S. REAL DIRECT INVESTMENT ASSETS ABROAD-- PETROLEUM

```
UDICCPP = UDICCPP(-1) + UDDICP/(UFPDI10/UFEDI10)/4
```

875. (UDICCPM) U.S. REAL DIRECT INVESTMENT ASSETS ABROAD-- MANUFACTURING

```
UDICCPM = UDICCPM(-1) + UDDICM/(UFPDI10/UFEDI10)/4
```

876. (UDICCPO) U.S. REAL DIRECT INVESTMENT ASSETS ABROAD--OTHER

```
UDICCPO = UDICCPO(-1) + (UDDICO - UDDICOE - UDDICOIA)/(UFPDI10 /UFEDI10)/4
```

877. (UDILCP) REAL DIRECT INVESTMENT CLAIMS ON FOREIGNERS

```
UDILCP = UDILCP(-1) + UDDIL/UPCPI/4 * 0.798
```

U.V.B. OTHER CAPITAL FLOWS

878. (UDNFAP) CHANGE IN PRIVATE NET FOREIGN ASSETS (BOP IDENTITY)

```
UDNFAP = UCURBAL + UDDIL - UDDIC + UDFLG - UDFCG - UDNFASDR + UDEANDO + UBPSAR
```

879. (UDFCP) CHANGE IN PRIVATE CLAIMS ON FOREIGNERS

```
UDFCP = 0.5 * UDNFAP + UDFCPER
```

880. (UDFLP) CHANGE IN PRIVATE LIABILITIES TO FOREIGNERS

```
UDFLP = (-0.5) * UDNFAP + UDFLPER
```

881. (UDFLG) CHANGE IN GOVERNMENT LIABILITIES TO FOREIGNERS

```
UDFLG   =  -42.3744   -  232.812 * LOG(UEI10/UEI10(-1))   +  .979357 * TIME   -  .285469 * UFLG(-1)
          (2.5622)      (3.30826)                          (2.82261)          (2.12104)

     CRSQ  = .204  S.E.R. =  17.045  MEAN LHS = 8.751  DW = 1.579
     RANGE: 1965 Q1 TO 1982 Q4   NOB = 72   ESTIMATED:  4/85
```

882. (UFCP) PRIVATE CLAIMS ON FOREIGNERS (END OF PERIOD)

```
UFCP = UFCP(-1) + UDFCP/4
```

883. (UFLP) PRIVATE LIABILITIES TO FOREIGNERS (END OF PERIOD)

```
UFLP = UFLP(-1) + UDFLP/4
```

884. (UFCG) GOVERNMENT CLAIMS ON FOREIGNERS (END OF PERIOD)

```
UFCG = UFCG(-1) + (UDFCG - UDFCGOLD + UDNFASDR)/4
```

885. (UFLG) GOVERNMENT LIABILITIES TO FOREIGNERS (END OF PERIOD)

```
UFLG = UFLG(-1) + UDFLG/4
```

886. (UFCPAVG) PRIVATE CLAIMS ON FOREIGNERS (PERIOD AVG.)

```
UFCPAVG = (UFCP + UFCP(-1))/2
```

887. (UFLPAVG) PRIVATE LIABILITIES TO FOREIGNERS (PERIOD AVG.)

```
UFLPAVG = (UFLP + UFLP(-1))/2
```

888. (UFCGAVG) GOVERNMENT CLAIMS ON FOREIGNERS (PERIOD AVG.)

UFCGAVG = (UFCG + UFCG(-1))/2

889. (UFLGAVG) GOVERNMENT LIABILITIES TO FOREIGNERS (PERIOD AVG.)

UFLGAVG = (UFLG + UFLG(-1))/2

U.VI. OFFICIAL INTERVENTION AND BALANCE OF PAYMENTS

890. (UNFAG) STOCK OF OFFICIAL NET FOREIGN ASSETS

UNFAG = UNFAG(-1) + UDNFAG/4 + UNFAGVC/4

U.VII. FOREIGN VARIABLES (WEIGHTED AVERAGES)

891. (UFGNPFGW) FOREIGN WEIGHTED AVERAGE GNP - (GNP WEIGHTS)

```
UFGNPFGW = (CGNP * 1.07775)**0.1207 * (JGNP * 0.001236)**0.4146 * (EGNP * 1.85892)**0.15 * (GGNP
     * 0.130101)**0.31269
```

892. (UFGNPG10) G-10 FOREIGN GNP (GNP WEIGHTS)

```
LOG(UFGNPG10) = LOG(UFGNPFGW) + UFGNFGER
```

893. (UFGNPFTW) FOREIGN WEIGHTED AVERAGE GNP (MULTILATERAL TRADE WEIGHTS)

```
UFGNPFTW = (CGNP * 1.07775)**0.16426 * (JGNP * 0.001236) **0.245487 * (EGNP * 1.85892)**0.2148 *
     (GGNP * 0.130101)**0.37545
```

894. (UFGNPF10) G-10 FOREIGN GNP (MULTILATERAL TRADE WEIGHTS)

```
LOG(UFGNPF10) = LOG(UFGNPFTW) + UFGFTER
```

895. (UFGNPFXW) FOREIGN WEIGHTED AVERAGE GNP (BILATERAL TRADE WEIGHTS)

```
UFGNPFXW = (CGNP * 1.0775)**0.5787 * (JGNP * 0.001236)**0.1828 * (EGNP * 1.85892)**0.1296 *
     (GGNP * 0.130101)**0.108796
```

896. (UFGNPXWM) WORLD FOREIGN ECONOMIC ACTIVITY (BILATERAL TRADE WEIGHTS)

```
LOG(UFGNPXWM) = LOG(UFGNPFXW) + UFGNFXER
```

897. (UFCUFW10) FOREIGN CAPACITY UTILIZATION

```
LOG(UFCUFW10) = 0.121 * LOG(CCU) + 0.415 * LOG(JCU) + 0.15 * LOG (ECU) + 0.312 * LOG(GCU) + UFCU10ER
```

898. (UFCUDIW) FOREIGN CAPACITY UTILIZATION (DIRECT INVESTMENT WEIGHTS)

```
LOG(UFCUDIW) = 0.501 * LOG(CCU) + 0.075 * LOG(JCU) + 0.196 * LOG (ECU) + 0.23 * LOG(GCU) + UFCUDWER
```

899. (UFCPIFDW) FOREIGN WEIGHTED AVERAGE CONSUMER PRICE INDEX (DIRECT INVESTMENT WEIGHTS)

```
UFCPIFDW = CPCPI**0.500717 * (JPCPI * 110.764)**0.0746 * (EPCPI * 1.17206)**0.195956 * (GPCPI *
     1.40121)**0.229555
```

900. (UFPDI10) FOREIGN CONSUMER PRICE INDEX (DIRECT INVESTMENT WEIGHTS) - G-10

```
LOG(UFPDI10) = LOG(UFCPIFDW) + UFPDER
```

901. (UFCPIFTW) FOREIGN WEIGHTED AVERAGE CONSUMER PRICE INDEX (MULTILATERAL TRADE WEIGHTS)

```
UFCPIFTW = CPCPI**0.16426 * (JPCPI * 110.764)**0.245487 * (EPCPI * 1.17206)**0.195 * (GPCPI *
     1.40121)**0.229555
```

902. (UFPCFW10) FOREIGN CONSUMER PRICE INDEX (TRADE WEIGHTS) G-10

```
LOG(UFPCFW10) = LOG(UFCPIFTW) + UFPCPER
```

903. (UFPCFUS) FOREIGN CONSUMER PRICE INDEX EXPRESSED IN U.S. DOLLARS

```
UFPCFUS = 100 * (UFPCFW10/UEI10)/1.02762
```

904. (UFCHPLDI) FOREIGN INFLATION (MOVING AVERAGE) DIRECT INVESTMENT WEIGHTS

```
UFCHPLDI = 0.5 * (UFPDI10/UFEDI10)/(UFPDI10(-4)/UFEDI10(-4)) + 0.33 *
     (UFPDI10/UFEDI10)/(UFPDI10(-8)/UFEDI10(-8)) + 0.17 * (UFPDI10/UFEDI10)/
     (UFPDI10(-12)/UFEDI10(-12))
```

905. (UCPCOMP) THIRD COUNTRY COMPETING PRICES IN U.S.-CANADA TRADE EQUATION

```
UCPCOMP = (JPXGUV * JEI)**0.275 * (GPXGUV * GEI)**0.45 * (EPXGUV * EEI)**0.255
```

906. (UGPCOMP) THIRD COUNTRY COMPETING PRICES U.S.-GERMAN TRADE EQUATION

```
UGPCOMP = (JPXGUV * JEI)**0.395 * (EPXGUV * EEI)**0.34 * (CPXGUV * CEI)**0.265
```

907. (UJPCOMP) THIRD COUNTRY COMPETING PRICES U.S.-JAPAN TRADE EQUATION

```
UJPCOMP = (GPXGUV * GEI)**0.5 * (EPXGUV * EEI)**0.285 * (CPXGUV * CEI)**0.215
```

908. (UEI4FTW) AV. $ EX. RATE (FOR CUR/$)4-CURR MULTILT. TR. WT. (QUASI-ID)

```
UEI4FTW = (1.003/(1.00937 * CEI))**0.165 * (0.003819/(0.0033 * JEI))**0.245 * (0.3555/(0.3136 *
     GEI))**0.375 * (2.472/(2.50091 * EEI))**0.215
```

909. (UEIFTW) AV. $ EX. RATE (FOR CUR/$)4-CURR MULTILT. TR. WT. (QUASI-ID)

```
LOG(UEIFTW) = LOG(UEI4FTW)
```

910. (UEI10) FRB TRADE-WEIGHTED U.S. DOLLAR EXCHANGE RATE INDEX

```
LOG(UEI10)    =  4.61537    +  .962356 * LOG(UEIFTW)
                   (NA)         (NA)

     CRSQ  = .933  S.E.R. =  .0085  MEAN LHS = NA  RHO = 1.2 (0)  RHO2 = .4 (NA)
     RANGE: 1973 Q1 TO 1980 Q4   NOB = 32   ESTIMATED:  4/82
```

911. (UFERFDIW) EXCHANGE RATE INDEX (DIRECT INVESTMENT WEIGHTS)

```
UFERFDIW = (100.333/CER)**0.50017 * (0.3819/JER)**0.074605 * (247.24/EER)**0.195 *
     (35.5482/GER)**0.229555
```

912. (UFEDI10) EXCHANGE RATE INDEX (DIRECT INVESTMENT WEIGHTS)

```
LOG(UFEDI10) = LOG(UFERFDIW) + UFEDER
```

913. (UFRSFTW) FOREIGN SHORT-TERM INTEREST RATES MULTILATERAL TRADE WEIGHTS

```
UFRSFTW = CRS**0.165 * JRS**0.245 * GRS**0.375 * ERS**0.215
```

914. (RED) THREE MONTH EURODOLLAR INTEREST RATE

```
RED = URS    -  .323519    +  .156936 * UFRSFTW
                (1.005)       (4.08)

     CRSQ  = .98  S.E.R. =  .31  MEAN LHS = NA  RHO =  .55 (0)
     RANGE: 1972 Q1 TO 1980 Q4   NOB = 36   ESTIMATED:  4/82
```

915. (RMEB) EUROBOND RATE

```
RMEB    =  .966478 + URL    +  LAGCOEF1 * (RED(I))
           (NA)

     CRSQ  = .65  S.E.R. =  .32  MEAN LHS = NA  RHO = .633 (0)  RHO2 = .325 (NA)
     RANGE: 1972 Q1 TO 1980 Q4   NOB = 36   ESTIMATED:  4/82
```

LAG	LAGCOEF1	T-STAT
(-0)	-0.017	0.737
(-1)	-0.022	1.520
(-2)	-0.025	2.260
(-3)	-0.026	1.840
(-4)	-0.025	1.600
(-5)	-0.022	1.440
(-6)	-0.017	1.340
(-7)	-0.009	NA
SUM:	-0.163	

ROW MODEL: BILATERAL GOODS TRADE EQUATIONS

916. (XCRV) CANADIAN GOODS EXPORTS TO REST-OF-WORLD (CURRENT $ U.S. - NSA)

LOG(XCRV/(CPXGUV * CEI)) = 1.45031 (25.6) - .211247 * Q1 (-6.9) - .040599 * Q2 (-1.2) - .068398 * Q3 (-2.3)
+ 1.34722 * LOG(ROWIP) (-8.1) + .544368 * LOG(ROWPXG/(CPXGUV * CEI)) (1.7)

CRSQ = .772 S.E.R. = .109 MEAN LHS = NA RHO = .591 (NA)
RANGE: 1961 Q2 TO 1975 Q4 NOB = 59 ESTIMATED: 1/78

917. (XERV) U.K. GOODS EXPORTS TO REST-OF-WORLD (CURRENT $ U.S. - NSA)

LOG(XERV/(EPXGUV * EEI)) = 2.97581 (182.19) + .697715 * LOG(ROWIP) (8.77648)
+ LAGCOEF1 * (LOG(ROWPXG(I)/(EPXGUV(I) * EEI(I)))) - .042369 * Q1 (2.32788) - .000569 * Q2 (.030294)
- .088242 * Q3 (4.94146)

CRSQ = .949 S.E.R. = .054 MEAN LHS = 3.064 RHO = .124 (.9)
RANGE: 1967 Q1 TO 1982 Q4 NOB = 63 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.062	1.329
(-1)	0.056	1.749
(-2)	0.052	2.511
(-3)	0.047	3.840
(-4)	0.043	4.263
(-5)	0.040	3.003
(-6)	0.036	2.162
(-7)	0.034	1.740
(-8)	0.031	1.548
(-9)	0.030	1.513
(-10)	0.028	1.643
(-11)	0.027	2.028
(-12)	0.027	2.743
(-13)	0.026	2.461
(-14)	0.027	1.439
(-15)	0.027	0.912
(-16)	0.028	0.648
SUM:	0.622	

918. (XGRV) GERMAN GOODS EXPORTS TO REST-OF-WORLD (CURRENT $ U.S. - NSA)

LOG(XGRV/(GPXGUV * GEI)) = 3.73138 (250.007) - .061707 * Q1 (6.29956) - .044325 * Q2 (4.21952) - .090501 * Q3 (9.57917)
+ .977489 * LOG(ROWIP) (9.58854) + LAGCOEF1 * (LOG(ROWPXG(I)/(GPXGUV(I) * GEI(I))))

CRSQ = .971 S.E.R. = .026 MEAN LHS = 3.977 RHO = .326 (2)
RANGE: 1972 Q1 TO 1982 Q4 NOB = 43 ESTIMATED: 4/85

LAG	LAGCOEF1	T-STAT
(-0)	0.122	1.833
(-1)	0.088	3.031
(-2)	0.063	2.889
(-3)	0.046	1.497
(-4)	0.037	1.173
(-5)	0.036	1.573
(-6)	0.044	1.802
(-7)	0.060	1.039
SUM:	0.497	

919. (XJRV) JAPANESE GOODS EXPORTS TO REST-OF-WORLD (CURRENT $ U.S. - NSA)

LOG(XJRV/(JPXGUV * JEI)) = 2.91609 - .196094 * Q1 - .123774 * Q2 - .098913 * Q3
(12.3) (.156) (2.3) (1.57)

+ 2.08311 * LOG(ROWIP) + LAGCOEF1 * (LOG(ROWPXG(I)/(JPXGUV(I) * JEI(I))))
(2.34)

CRSQ = .973 S.E.R. = .06 MEAN LHS = NA RHO = .469 (NA)
RANGE: 1962 Q1 TO 1975 Q4 NOB = 56 ESTIMATED: 2/82

LAG	LAGCOEF1	T-STAT
(-0)	0.002	0.000
(-1)	0.150	2.000
(-2)	0.248	6.300
(-3)	0.296	4.100
(-4)	0.296	3.200
(-5)	0.247	2.800
(-6)	0.148	2.600
SUM:	1.386	

920. (XURV) U.S. GOODS EXPORTS TO REST OF WORLD (CURRENT $ U.S. - NSA)

XURV = XUTV - XUCV - XUEV - XUGV - XUJV

R.II. ROW WEIGHTED AVERAGE EQUATIONS

921. (MCM5GNP) WEIGHTED AVERAGE OF MCM COUNTRIES' GNP

```
MCM5GNP = EXP(0.51299 * LOG(UGNP) + 0.050531 * LOG(EGNP) + 0.194976 * LOG(GGNP) + 0.201103 *
     LOG(JGNP) + 0.040486 * LOG(CGNP))
```

922. (ROWIP) WEIGHTED AVERAGE OF INDUSTRIAL PRODUCTION INDEXES OF ROW (10-CTY)

```
LOG(ROWIP) = (ROWIPRAM - 0.75) * LOG(MCM5GNP) + ROWIPER
```

923. (IPXGUV) EXPORT UNIT VALUE INDEX: NON-MCM INDUSTRIAL COUNTRIES

```
LOG(IPXGUV) = (IPXPRAM - 0.75) * LOG(MCM5PXGD) + IPXGUVER
```

924. (LPXGUV) EXPORT UNIT VALUE INDEX: NON-OIL LDC'S

```
LOG(LPXGUV) = (LPXPRAM - 0.75) * LOG(MCM5PXGD) + LPXGUVER
```

925. (MCM5PXGD) WEIGHTED AVERAGE EXPORT UNIT VALUE INDEX: MCM COUNTRIES (CURRENT $ U.S. - NSA)

```
MCM5PXGD = EXP(0.51 * LOG(UPXGUV) + 0.05 * LOG(EPXGUV * EEI) + 0.2 * LOG(GPXGUV * GEI) + 0.2 *
     LOG(JPXGUV * JEI) + 0.04 * LOG(CPXGUV * CEI))
```

926. (ROWPXG) R.O.W. EXPORT PRICE INDEX

```
LOG(ROWPXG) = (RPPRAM - 0.75) * LOG(MCM5PXGD) + ROWPXGER
```

R.III. OPEC EQUATIONS

927. (OMGV) OPEC TOTAL GOODS IMPORTS (CURRENT $ U.S. - NSA)

LOG(OMGV) = .21901 (1.09) + LAGCOEF1 * (LOG(OXGV(I-1))) - .098208 * Q1 (-3.22) - .063134 * Q2 (-1.87) - .09845 * Q3 (.03)

CRSQ = .93938 S.E.R. = .0769 MEAN LHS = NA RHO = .5726 (3.48)
RANGE: 1973 Q1 TO 1980 Q4 NOB = 32 ESTIMATED: 4/82

LAG	LAGCOEF1	T-STAT
(-0)	0.122	3.900
(-1)	0.115	5.380
(-2)	0.108	8.220
(-3)	0.100	14.800
(-4)	0.091	20.550
(-5)	0.082	11.960
(-6)	0.072	7.590
(-7)	0.062	5.530
(-8)	0.051	4.380
(-9)	0.039	3.650
(-10)	0.027	3.150
(-11)	0.014	2.790
SUM:	0.883	

928. (OXGV) OPEC TOTAL GOODS EXPORTS (CURRENT $ U.S. - NSA)

OXGV = OPOIL * (CMGOL - OCMGOLX + EMGOL - OEMGOLX + GMGOL - OGMGOLX + JMGOL - OJMGOLX + UMQGFL - OUMGOLX) * 365/1000 + OXGVER * OPOIL

929. (OCURBAL) OPEC CURRENT ACCOUNT BALANCE (CURRENT $ U.S. - NSA)

OCURBAL = 44.5329 (48463) + OXGV - OMGV - .0846 * OXGV (-.00003) - .830068 * TIME (-.00001)

CRSQ = 1 S.E.R. = .000028 MEAN LHS = NA RHO = .9994 (11.49)
RANGE: 1973 Q1 TO 1980 Q4 NOB = 32 ESTIMATED: 4/82

930. (ONW) OPEC NET WORTH

ONW = ONW(-1) + OCURBAL/4

CROSS REFERENCE LIST OF VARIABLES AND EQUATIONS

VARIABLE	EQUATION NUMBER
CA	95
CB	95
CBALNR	125
CBONDADJ	131
CBU	97 98
CC	1 5 8
CCCAV	4 14 28
CCOL	35 41 116 119
CCU	3 116 118 502 730 897 898
CCUER	118
CCUMDF	19 26
CCUR	85 89 97
CCURBAL	84
CCV	6 8 9
CCVNSA	4 9 27 87
CDD	89 95
CDDER	89
CDECAYNR	126
CDECAYR	127
CDEFIXE2	88 147
CDEFLOAT	132 134 146
CDLTDC	74 128 131
CDLTDL	61 129 131
CDLTPC	131 132 137
CDLTPL	131 133 134 138
CDNFAG	131 145 149 151
CDNFAP	131
CDNGP	96
CDNWFVNS	27 29
CDNWKVNS	28 30
CDSTC	134 139
CDSTL	135 140
CDVAUTST	39
CDVLOBO	133
CDVXCRIS	135
CDV6821	133
CDV6914	133 134 135
CEANDO	136
CECDEP	125 126
CEI	36 37 38 39 40 99 102 103 109 145 146 148 192 323 328 329 372 495 508 541 691 692 730 906 907 908 916 925
CEILEAD	145 146
CER	40 49 54 56 68 69 74 130 133 135 148 149 314 315 320 321 333 334 479 489 494 505 506 507 672 688 911
CERER	130
CFC	141 142
CFCP	70 142
CFL	143 144
CFLP	70 144
CFPXFTW	102 154
CFPXVMW	103 152
CFRSCF	134 153
CFUNFTW	102 155
CG	5 22
CGBAL	80 82
CGDEF	25 26
CGNP	3 5 18 35 39 56 86 104 116 118 320 505 730 891 893 895 921
CGNPPOT	118 119
CGNPV	6 7 58 104 321 479 506 688
CGNPVNSA	4 7 14 20 21 27 36 37 38 40 85 88
CGRANTNR	126
CGRANTR	127
CGSBAL	82
CGV	6 22 25
CIFG	5 23 122
CIFGV	6 23 24 25
CIFGVNSA	24 27 28
CIFP	5 10 11
CIFPNR	3 10 121
CIFPR	2 10 120
CIFPV	6 11 12
CIFPVNSA	12 27 28
CII	5 13
CIIV	6 13 27 28
CK	116 119 124
CKG	122 124
CKP	4 123 333
CKPNR	3 121 123 124
CKPR	2 120 123 124
CLE	113 114 115
CLF	19 113 114 119
CLH	115 116
CLIFENR	125
CLTDC	128 141 142
CLTDL	129 143 144

VARIABLE	EQUATION NUMBER
CLTPC	137 141 334
CLTPL	138 143
CMG	50 66
CMGOL	41 42 928
CMGOLER	41
CMGOLV	40 42
CMGOLVER	42
CMGSNI	5 67 83 107 116 119
CMGSNINS	66 67
CMGSNIV	6 65 107
CMGSNIVS	64 65
CMGSV	60
CMGV	49 50 60 64 80 84 131 135 136 147
CMGVER	49
CMSOV	56 59 64 66 84 131 136
CMSV	59 60 81
CMSYDV	57 63
CMSYNDER	62
CMSYNDV	62 63 70
CMSYV	59 63 64 66 84 131 136
CMSYVER	63
CMTRANV	27 58 84 131 136
CM1	86 89 91 92
CM2	91
CND	88 90
CNETXNI	83
CNFAG	141 147 149 151
CNFAGACT	98
CNGK	141 150
CNGKA	131 150
CNGP	19 96 98 145
CNWFVNSA	29 31
CNWKNSA	30 31
CNWR	1 33
CNWRNSA	32 33
CNWV	34 494
CNWVNSA	31 32 34 85 87 88 136
COTH	98
CP	2 4 8 11 13 16 19 22 23 30 31 32 35 36 37 38 39 40 56 99 100 101 105 110 111 323 325 333 496 690
CPCHGNP	18
CPCHM1	92
CPCHP	93 111
CPCHW	117
CPCPI	101 899 901
CPCPIER	101
CPDOM	102 110
CPEXP	1 2 100 108 112 126 127 130
CPGNP	36 38 40 57 61 68 86 104 108 324 497 501 696
CPMGOL	42 152
CPMGSNI	107 109 110
CPMGUV	50 103 106
CPMNOIL	99 109
CPMS	66 106
CPOP15	19 113
CPPETROL	35
CPXGOL	51 55
CPXGUV	55 102 192 328 329 372 495 508 541 691 692 730 906 907 916 925
CPXS	78 105
CP1	100 130
CQOL	41
CRES	5
CRESNSA	27
CRESV	6
CRF	97
CRL	2 19 94 125 126 127 132 133 332
CRLTDC	69 74
CRLTDL	57 61
CRR	95 97
CRS	1 85 86 87 88 93 94 130 134 330 331 500 503 504 693 913
CRSER	93
CSAFCV	9
CSAFGNPV	7
CSAFIFGV	24
CSAFIFPV	12
CSAFMNI	67
CSAFMNIV	65
CSAFNW	33 34
CSAFXNI	79
CSAFXNIV	77
CSAFYDV	16 17
CSBAL	81 82
CSCRG	122
CSD	87 90
CSDRADJ	131
CSDRVAL	98
CSHARDOM	110
CSOL	41
CSTC	139 141 334

VARIABLE	EQUATION NUMBER										
CSTL	140	143									
CTD	90	91	95								
CTIIV	14	25	27								
CTINDV	20	21									
CTRANV	14	19	25	27							
CTRY	20	127									
CTRYC	20	125	126								
CTV	4	14	20	25	27						
CUCNR	3	99	126								
CUCR	127										
CUN	19	112	114	322							
CW	99	112	117								
CWTM2E	152										
CWTM2G	152										
CWTM2J	152										
CWTM2O	152										
CWTM2R	152										
CWTM2U	152										
CXG	55	68	78								
CXGER	55										
CXGOL	41	51									
CXGOLV	51	54	55								
CXGOLVER	51										
CXGSNI	5	79	83								
CXGSNINS	78	79									
CXGSNIV	6	77									
CXGSNIVS	76	77									
CXGSV	73										
CXGV	54	55	73	76	80	84	131	134	136		
CXGVADJ	54										
CXSOV	68	72	76	78	84	131	136				
CXSV	72	73	81								
CXSYDV	69	75									
CXSYNDV	62	70	75								
CXSYV	72	75	76	78	84	131	136				
CXSYVER	75										
CXTRANV	27	71	84	131	136						
CYD	1	16									
CYDPVNSA	14	15	16								
CYDV	2	17									
CYDVNSA	15	17									
DAYSQ	41	197	198	206	378	379	546	547			
D60137	861										
D60150	295	313									
D62233	88	132	134	135	145						
D6311	243										
D6336	133	134									
D6421	374										
D644I	657										
D65136	133	134	135								
D6631	243	421									
D6732	133										
D6741	36	259									
D693I	861										
D6943	296										
D701I	36	612									
D70120	488										
D702I	657										
D7021	36										
D7131	134	136									
D7141	133	135	136	392							
D7211	479	481									
D7221	36										
D7231	36										
D7241	243										
D731I	295										
D732I	657										
D7331	650										
D7341	551	671									
D741I	510	511									
D7411	132	134	135	271	374	376	549	626	671	727	728
D7421	549	551	626								
D7442	701										
D7541	86	485									
D764I	149										
D7731	373	386	392								
D774I	484	491									
D7741	386										
D781I	434	440	802								
D792I	318										
D801I	771										
D8021	392										
D803I	550										
D8041	86										
D811I	196										
D8131	86										
EADJ	160										
EADJV	161										
EBBAL	301	306									

VARIABLE	EQUATION NUMBER
EBOF	259 306 313
EC	156 160 165
ECCAV	159 172 187
ECCURBAL	239
ECGSD	245 252
ECOL	191 197 281 282
ECU	157 281 287 502 689 897 898
ECUER	287
ECUR	240 247 249 260
ECURBAL	238 239 301 305
ECURBALR	238
ECV	161 165 166 178
ECVNSA	166 171 240
EDD	241 245 246 247
EDECAYNR	157 288 292
EDECAYR	158 289 294
EDGB	245 246
EDLO	259
EDLTDC	295 297 299 301 305
EDLTDCS	295
EDLTDL	296 298 300 301 305
EDLTDLS	296
EDLTOC	309
EDLTOL	310
EDLTPC	303 307
EDLTPL	304 308
EDNFAG	305 318 319
EDNFAP	305 306
EDNUK	246 249
EDNUKVC	246 249
EDNW	188 190
EDNWNSA	187 188 189 303
EDOC	244 246 251
EDTF	243 245
EDTR60	246 247
EDVCONS	156
EDV66412	243
EDV714I	240 242 243 258 303
EDV732I	258
EECDEP	292 293
EEFR	313 317
EEI	36 152 154 192 193 194 195 196 210 264 267 269 271 275 313 316 323 373 495 508 542 691 692 731 905 906 907 908 917 925
EEINV	295
EER	177 191 196 198 204 206 210 304 314 315 316 317 318 334 479 489 494 505 506 507 672 673 688 911
EERFGW	223 299 315
EERFW	212 222 302 314
EESAB	186
EESABV	184 186 270
EFCAV	160 161 184 185
EFCA1V	171 185
EFCECS	259
EFCP	224 311
EFDKPD	295 333
EFDPFW1	302 327
EFDSFCD	304 335
EFGNPFTW	222 320
EFGNPVFT	225 321
EFLP	214 312
EFPEEA	313
EFPFW	212 222 325 326
EFPFW1	302 326 327
EFPGNPFG	223 299 324
EFPRM	243 259 303 317
EFPVXWD	268 323
EFPXFTW	267 329
EFPXVMWD	271 328
EFRL	243 303 304 332
EFRS	302 330
EFRSFGW	224 331
EFRTL	210
EFSFCPD	243 259 304 334 335
EFUNFGW	223 322
EG	160 180
EGBAL	234
EGDEF	183 187 260
EGDEFER	260
EGDOV	259 260 261
EGDP	157 160 163 191 192 193 194 195 196 272 687
EGDPSW	160
EGDPV	161 162 164 270 272 688
EGDPVNSA	162 171 172 177 241 242
EGDPVSW	161
EGNP	163 175 212 273 281 287 505 891 893 895 921
EGNPPOT	282 287
EGNPV	164 215 273 479 506
EGRANTNR	292
EGRANTR	294

VARIABLE	EQUATION NUMBER
EGSBAL	236
EGSD	252
EGSPV	260 261 263
EGTB	261
EGV	161 180 181
EGVNSA	171 181 183
EIF	160 167 168
EIFGG	167 183
EIFP	167 169 170 304
EIFPG	167 187
EIFPNR	157 169 288
EIFPVNSA	170 187 296
EIFV	161 168 171
EIHP	158 169 289
EII	160 161 291
EIIVNSA	171 187
EKGSP	176 263
EKHP	158 289 290
EKII	291
EKLBG	176 254 262
EKP	159 281 282 290
EKPNR	157 288 290
ELBG	260 262
ELE	281 283 284 285
ELF	176 282 284 285
ELHOURS	281 283
ELIFENR	293
ELTDC	297
ELTDL	243 298
ELTOC	244 309 311
ELTOL	243 310 312
ELTPC	307 311
ELTPL	308 312
EMG	205 221
EMGOL	197 198 928
EMGOLER	197
EMGOLV	196 198
EMGSNI	160 221 237 274 281 282
EMGSNIV	161 220 274
EMGSNIVS	171 187 219 220 243 244
EMGSV	218 236
EMGV	179 204 205 218 219 234 238
EMGVER	204
EMSOV	212 217 219 221 238
EMSV	217 218 235
EMSYDV	213 216
EMSYNDV	214 216
EMSYV	216 217 238
EMTRANV	187 215 238
EM1	247 248
EM3	250 251
EM3ER	250
EM3S	251
EM3V	249 250
ENETXNI	237
ENFAG	318 319
ENGKA	301 305
ENW	190 494
ENWNSA	189 242 244 303
EP	161 165 168 170 174 176 180 183 187 191 212 240 242 264 276 277 279 496 690
EPCHGNP	175
EPCHM1	248
EPCHP	279
EPCHW	286
EPCPI	266 899 901
EPDOM	265 267 276
EPEXP	158 277 278 280 292 294 302
EPFCA	160 186 270
EPGDP	241 270 272
EPGNP	159 213 222 273 278 300 497 501 686 696
EPMGSNI	266 274 275 276
EPMGUV	205 271
EPMNOIL	264 275
EPMS	221 268
EPOP	176 284
EPREM	244 253
EPWPI	192 193 194 196 265
EPXGUV	36 152 154 195 211 267 373 495 508 542 691 692 731 905 906 907 917 925
EPXS	231 269
EP1	277 302
EQOL	177 197
ERBD	240 242 255 258
ERD	240 242 253 255 258
ERL	214 256 292 293
ERLHZ	258 294
ERLTDC	223 299
ERLTDL	213 300
ERLW	176 242 256 257 258 259 296 303

VARIABLE	EQUATION NUMBER										
ERR	245										
ERS	214	242	253	254	500	503	504	693	694	695	913
ERSLA	156	241	243	254	255	257	302	313			
ESAFCV	166										
ESAFDNN	188										
ESAFFCAV	185										
ESAFGDPV	162										
ESAFGV	181										
ESAFIFGV	183	187									
ESAFIFPV	170										
ESAFIFV	171										
ESAFMNIV	220	221									
ESAFTEV	182										
ESAFXNIV	230	232									
ESAFYDV	173										
ESBAL	235										
ESDRGIMF	305										
ESHARDOM	276										
ESOL	197										
ETD	242	245	246	255							
ETDEP	245	254									
ETEAV	174	178	182	184	270						
ETEV	177	182									
ETPROV	178	179									
ETRANV	172	176	183								
ETRY	177	294									
ETRYC	177	292	293								
ETV	172	177	183								
EUCNR	157	292									
EUCR	158	294									
EUN	155	176	213	264	267	280	285				
EW	264	266	269	280	286						
EWTMC	328										
EWTMG	328										
EWTMJ	328										
EWTMO	328										
EWTMR	328										
EWTMU	328										
EWTXC	323										
EWTXG	323										
EWTXJ	323										
EWTXU	323										
EXETV	208	209									
EXG	211	231									
EXGER2	211										
EXGOL	197	206									
EXGOLV	206	210	211								
EXGSNI	160	232	237								
EXGSNIS	231	232									
EXGSNIV	161	230									
EXGSNIVS	171	187	229	230	243						
EXGSV	228	236									
EXGV	210	211	228	229	234	238	303				
EXGVADJ	210										
EXSOV	222	227	229	231	238						
EXSV	227	228	235								
EXSYDV	223	226									
EXSYNDV	224	226									
EXSYV	226	227	238								
EXTRANGV	177	233									
EXTRANPV	225	233									
EXTRANV	187	233	238								
EYD	156	158	174								
EYDV	173	174									
EYDVNSA	172	173									
GARRRFD	439	446									
GATB	417										
GC	336	339	341	343	346						
GCBM	444	445									
GCBMC	442	443	444								
GCBMSA	445	447									
GCCAVNSA	340	354	367								
GCOL	371	378	463	464							
GCU	337	392	463	468	689	732	897	898			
GCUR	421	429	443								
GCURB	434	440	443								
GCURBAL	420	486									
GCVNSA	346	365									
GDD	426	428	439	441	443	446					
GDDG	426	430									
GDDP	422	426	429								
GDEBTNSA	359	364									
GDECAYNR	476										
GDECAYR	475										
GDFAGVAL	492	493									
GDLO	486										
GDLTDC	479	480	486								
GDLTDL	481	482	486								
GDNFAG	486	491	492								

VARIABLE	EQUATION NUMBER
GDNFAGT	492 493
GDNFAP	486 487
GDNWFVNS	365 366
GDT	428 434
GEANDO	485 487
GECDEP	476 478
GEFP	425 484 488
GEI	152 154 193 323 328 329 373 376 377 448 449 450 451 456 488 490 691 692
	732 905 907 908 918 925
GER	37 314 315 320 321 333 334 371 372 374 375 379 380 384 389 425 479 489
	490 491 507 552 672 673 688 911
GERFCW	404 480 507
GERFW	391 403 483 489
GFCP	334 405 487
GFCUFCW	404 502
GFD	425 428 439 446
GFGNPFTW	403 505
GFGNPVFT	406 506
GFLOAT	488
GFLP	393 484 487
GFNWD	425 484 494
GFPFW	391 403 496
GFPGNEXP	483 498 499
GFPGNPFC	404 480 501
GFPGNPFW	497 498 499
GFPGNP1	483 499
GFPXFTW	449 450 508
GFPXVWD	451 488 495
GFRSFCW	405 503
GFRSFLW	393 504
GFRSFW	483 500
GG	341 343 361
GGBAL	415 417
GGDEFNSA	363 364
GGIP	358 359
GGNP	320 337 341 342 357 371 391 424 453 463 468 687 732 891 893 895 921
GGNPL	342 481
GGNPNSA	345 372 373 374 375 376 377 422 423
GGNPPOT	464 468
GGNPV	321 343 344 453 481 688
GGNPVNSA	344 345 354 360 365
GGRANTNR	476
GGRANTR	475
GGSBAL	417 420
GGVNSA	361 363
GIF	339 348 349
GIFG	341 343 348 350 362 472
GIFGVNSA	362 363
GIFP	341 343 347 348 350
GIFPNR	337 347 470
GIFPR	338 347 469
GIFV	349
GIFVNSA	350 365 367
GII	339 341 343 353 474
GIINSA	351 353
GIIV	352 365 367
GIIVNSA	351 352
GK	340 463 464 473
GKG	472 473
GKII	339 474
GKP	333 471 473
GKPNR	337 470 471
GKPR	338 469 471
GLE	461 462 465 466
GLF	358 462 464 465 466
GLHI	461 463
GLIFENR	478
GLUNSA	466
GMG	339 385 401
GMGOL	378 379 928
GMGOLER	378
GMGOLV	379 380 384
GMGOVSHR	380
GMGSNI	341 402 418 454 463 464
GMGSNIS	401 402
GMGSNIV	343 400 454 488
GMGSNIVS	399 400
GMGSV	398
GMGV	384 385 398 399 415 484 485
GMGVADJ	384
GMSOGV	396 399 401 416
GMSOPV	391 396 399 401 416
GMSOV	396 397
GMSV	397 398
GMSYDV	392 395
GMSYNDV	393 395
GMSYV	395 397 399 401 416
GMTRANGV	354 365 419
GMTPANPV	354 365 394 419

VARIABLE	EQUATION NUMBER
GM1	430 431 433
GM1P	429 430
GM2	431 432
GM3	432
GNDD	435 441
GNETXNI	418
GNFAG	442 488 491 493
GNGKA	486
GNGPBB	359 442
GNW	369 370 424
GNWFVNSA	366 368
GNWKNSA	367 368
GNWR	336 370
GNWVNSA	368 369 421 423 485
GOTHBB	442
GP	323 325 333 338 340 343 346 349 350 351 356 358 361 362 367 368 370 371 391 401 413 421 422 423 424 448 452 455 457 459 477 481 690
GPCHCBM	447
GPCHGNP	357
GPCHM1	433
GPCHP	455
GPCHW	467
GPCPI	452 899 901
GPDOM	449 450 457
GPEXP	336 458 459 460 475 476 483
GPGNP	324 345 392 403 453 458 482 686 696
GPIP	372 373 374 375 376 377 449
GPMGSNI	454 456 457
GPMGUV	385 451
GPMNOIL	448 456
GPOP	462
GPXGUV	37 152 154 193 328 329 390 450 488 552 691 692 732 905 907 918 925
GP1	459 483
GQOL	378
GRD	435
GRESADJ	442 446
GRF	435 442
GRL	332 359 423 436 437 438 475 476 478 481
GRLTDC	404 480
GRLTDL	392 482
GRR	440
GRRC	439 440
GRRRDD	439 441 446
GRRRSD	439 446
GRRRTD	439 446
GRS	330 331 336 359 393 405 422 424 425 435 436 437 438 483 485 488 693 694 695 913
GRSAV	421 424 437
GRTIME	423 436
GSAFCBM	445
GSAFCV	346
GSAFGG	361
GSAFGNPV	344
GSAFIFG	362
GSAFIFV	350
GSAFII	353
GSAFIIV	352
GSAFLU	466
GSAFMNIV	400 402
GSAFNW	369
GSAFXNIV	412 414
GSAFYDV	355
GSBAL	416 417
GSD	424 428 432 439 443 446
GSHARDOM	457
GSOL	378
GTD	427 428 431 439 443 446
GTDG	427
GTDP	423 427
GTRANBAL	419 420
GTRANVNS	354 358 363 365
GTRY	360 475
GTRYC	360 476 478
GTVNSA	354 360 363 365
GUCNR	337 476 477
GUCNRV	448 477
GUCR	338 475
GUN	155 322 358 448 460 465
GW	448 460 467
GWTMC	495
GWTME	495
GWTMI	495
GWTMJ	495
GWTML	495
GWTMO	495
GWTMU	495
GXG	339 390 413
GXGOL	378
GXGSNI	341 414 418

VARIABLE	EQUATION NUMBER
GXGSNIS	413 414
GXGSNIV	343 412
GXGSNIVS	411 412
GXGSV	410
GXGV	389 390 410 411 415 425 485
GXSOGV	408 411 413 416
GXSOPV	403 408 411 413 416
GXSOV	408 409
GXSV	409 410
GXSYDV	404 407
GXSYNDV	405 407
GXSYV	407 409 411 413 416
GXTRANGV	354 365 419
GXTRANPV	354 365 406 419
GYD	336 356
GYDV	338 355 356 394
GYDVNSA	421
GYDVNSAC	354 355
ICSUPPLY	726 748
IPXGUV	377 495 545 691 923
IPXGUVER	923
IPXPRAM	923
JBDA	619
JBDL	619
JBDM	619
JBDS	619
JBTA	619
JBTL	619
JBTM	619
JBTS	619
JC	509 516
JCCAGV	522
JCCAPV	512 522
JCCAV	522 523
JCCAVNSA	523 524 537
JCGVT	622
JCIFR	555
JCOL	540 546 638 639
JCU	502 510 562 638 642 897 898
JCUR	603 607 620
JCURB	609 620
JCURBAL	602 659
JCURBALD	601 602
JCV	512 513 514 516
JDD	604 606 607 619
JDFGNPFW	650 688
JDGVT	622
JDLTDC	593 651
JDLTDCD	650 651 653
JDLTDL	576 652
JDLTDLD	652 653
JDLTLOTH	665
JDLTPC	662
JDLTPCD	661 662 664
JDLTPL	663
JDLTPLD	663 664
JDLTPPLD	665
JDNFAG	659 678 679
JDNFAGD	677 678 680
JDNFAP	659 669
JDNW	538 539
JDNWNSA	537 538
JDSTBC	666 668
JDSTBL	667 668
JDSTK	669 670
JDT	606 609
JDVFYD	618 658
JEANDO	669
JECDEP	647 648
JEI	38 152 154 193 194 323 328 329 374 495 508 540 541 542 543 544 545 552 623 625 628 631 671 674 733 905 906 908 919 925
JEMG	556 569 597 600 671 676
JEMGR	676
JER	314 315 320 321 479 489 494 505 506 507 547 548 568 577 578 585 594 595 596 597 600 601 602 651 652 653 655 662 663 664 672 673 674 675 676 677 678 683 684 685 911
JERFCW	579 593 673
JERFW	565 581 582 654 672
JEXG	560 586 592 597 675
JEXGR	675
JFCP	580 683
JFCPD	334 684
JFCUFCW	579 689
JFGNPFW	581 582 687
JFKPB	664 669
JFLOAT	671
JFLP	563 685
JFORDISC	655 658 671
JFPFW	565 581 582 690

VARIABLE	EQUATION NUMBER
JFPGNEXP	654 697 698
JFPGNPFC	579 593 686
JFPGNPFW	696 697 698
JFPGNP1	654 698
JFPXFTW	625 692
JFPXGFMW	626 691
JFRSFCW	580 656 694
JFRSFLW	563 657 658 695
JFRSFW	654 693
JG	529 541 542
JGBAL	596 601
JGDEBT	527 536
JGDEF	535 536
JGNP	320 505 510 513 540 541 542 543 544 545 552 565 629 638 642 891 893 895 921
JGNPPOT	639 642 733
JGNPV	321 479 506 512 514 515 603 604 605 629
JGNPVNSA	515 524 528
JGRANTNR	648
JGSBAL	598
JGV	513 514 529 530 535
JGVNSA	530 537
JH	637 638
JIFG	531 541 542
JIFGV	513 514 531 532 535
JIFGVNSA	532 537
JIFP	517 518
JIFPNR	510 517 644
JIFPR	511 517 643
JIFPV	513 514 518 519
JIFPVNSA	519 537
JII	520 646
JIIV	513 514 520 521
JIIVNSA	521 537
JKII	646
JKP	512 638 639 645
JKPNR	510 644 645
JKPR	511 643 645
JKRES	659
JLE	636 637 638 640
JLF	636 639 640 641
JLTDKB	653 659
JLTPCD	660 661 683 684
JLTPCOD	660
JLTPC1D	655 660
JLTPLD	665 685
JLU	640 641
JMG	557 565 571
JMGOL	546 547 928
JMGOLER	546
JMGOLV	547 548
JMGSNI	513 541 542 574 599 638 639
JMGSNINS	571 574 630
JMGSNIV	514 573
JMGSNIVS	572 573 630
JMGSV	537 570 572 598
JMGV	556 557 570 657 671
JMGVD	555 556 596
JMJOVER	548
JMSDYVD	567 569 577 597
JMSOGV	566 569 597
JMSOPV	565 566 569 597
JMSOV	566
JMSOYVD	567 569 578 597
JMSV	569 570 571
JMSYDV	562 577
JMSYNDV	563 578
JMSYV	568
JMSYVD	567 568
JMTRANGV	575
JMTRANPV	564 575
JMTRANV	537 575 600
JM1	607 608
JM2	608
JNETXNI	599
JNFAG	620 679 683
JNFAGD	677 680 682
JNFAGOD	681
JNFAGTD	671 682
JNGP	527 620 622
JNW	494 511 539 655
JOTH	620
JP	323 325 496 511 512 513 516 518 520 526 527 529 531 540 543 552 565 571 588 603 604 605 609 623 627 632 634
JPARJRL	613
JPCPI	627 899 901
JPDOM	624 625 632
JPEXP	633 634 635 648 649 654
JPGNP	324 497 501 562 576 582 629 633

VARIABLE	EQUATION NUMBER
JPMGSNI	630 631 632
JPMGUV	557 628
JPMGUVD	626 628 691
JPMNOIL	623 631
JPOP	527 636
JPWPI	541 542 544 545 624
JPXGUV	38 152 154 193 194 328 329 374 495 508 561 625 671 733 905 906 919 925
JP1	634 654
JRB	621
JRD	610 615 656
JRDS	615 657
JRF	610 620 621
JRFY	617 658
JRFYZ	616 617 618
JRHL	614 649
JRL	332 509 527 612 613 647 648 655
JRLA	611 613
JRLB	612 613
JRLTDC	579 593
JRLTDL	562 576
JRR	619 620
JRRDA	619
JRRDL	619
JRRDM	619
JRRDS	619
JRRFY	616
JRRSEC	619
JRRTA	619
JRRTL	619
JRRTM	619
JRRTS	619
JRS	330 331 500 503 504 563 603 604 605 610 611 612 614 615 616 654 913
JRTD	605 612 617
JRX	621
JSAFCCAV	523
JSAFDNW	538
JSAFGNPV	515
JSAFGV	530
JSAFIFGV	532
JSAFIFPV	519
JSAFIIV	521
JSAFMNI	574
JSAFMNIV	573
JSAFTRAN	533
JSAFTV	534
JSAFXNI	591
JSAFXNIV	590
JSAFYDV	525
JSBAL	597 601
JSDRCAD	682
JSDRRATE	681
JSEC	619
JSHARDOM	632
JSOL	546
JSTBC	656 666 683 684
JSTBER	684
JSTBL	657 667 685
JSTBLYD	658 685
JSTK	670 685
JSTKBB	668 669
JTD	605 606 608 619
JTRANBAL	600 601
JTRANV	527 533 535
JTRANVNS	524 533 537
JTRY	528 649
JTRYC	528 647 648
JTV	512 528 534 535
JTVNSA	524 534 537
JUCNR	510 623 648
JUCR	511 649
JUFLPY	656
JUN	155 322 623 635 641
JVD	681 682
JW	623 635
JWJRD	615
JWTMTCV	691
JWTMTEV	691
JWTMTGV	691
JWTMTIV	691
JWTMTLV	691
JWTMTOV	691
JWTMTUV	691
JWTMTZV	691
JXG	561 582 588
JXGSNI	513 591 599
JXGSNINS	588 591
JXGSNIV	514 590
JXGSNIVS	589 590
JXGSV	537 587 589 598

VARIABLE	EQUATION NUMBER
JXGV	560 561 587 656
JXGVD	559 560 596 655
JXSDYVD	584 586 594 597
JXSOGV	583 586 597
JXSOPV	582 583 586 597
JXSOV	583
JXSOYVD	584 586 595 597
JXSV	586 587 588
JXSYDV	579 594
JXSYNDV	580 595
JXSYV	585
JXSYVD	584 585
JXTRANV	537 581 592
JXTRANVD	592 600
JYD	509 526
JYDV	511 525 526 564
JYDVNSA	524 525
LDSUPPLY	726 748
LPXGUV	376 495 544 691 924
LPXGUVER	924
LPXPRAM	924
MCEV	46 48
MCGV	45 48
MCJV	44 48
MCM5GNP	921 922
MCM5PXGD	923 924 925 926
MCRV	40 43 48
MCTV	48 49
MCUV	47 48
MECV	199 203
MEGV	193 203 386
MEJV	200 203
MERV	202 203
METV	203 204
MEUV	201 203
MGCV	52 372 383
MGEV	207 373 383
MGIV	377 383
MGJV	381 383
MGLV	376 383
MGOV	380 383 384
MGTV	383 384
MGUV	382 383
MGZV	383
MJCV	551 554
MJEV	550 554
MJGV	387 552 554
MJIV	545 553
MJLV	544 553
MJOV	548 553
MJRV	553 554
MJTV	554 555
MJUV	549 554
MJZV	553
MUCV	734 747
MUEV	735 747
MUGV	736 747
MUJV	737 747
MURV	747
MUTV	746 747
OCMGOLX	928
OCURBAL	929 930
OEMGOLX	928
OGMGOLX	928
OJMGOLX	928
OMGV	927 929
ONW	930
OPOIL	177 191 198 206 264 371 379 547 835 928
OPOIL72	99 109 211 275 328 448 456 495 540 623 631 691
OUMGOLX	928
OXGV	927 928 929
OXGVER	928
PIFSCOM	819
PPO	259
Q4	4 85 87 88 132 133 134 135 136
RED	153 253 254 255 296 304 313 425 484 485 488 914 915
REM	488
RLIBBR	865 866 867
RMEB	259 655 915
ROWIP	650 687 916 917 918 919 922
ROWIPER	922
ROWIPRAM	922
ROWPXG	40 152 196 328 650 916 917 918 919 926
ROWPXGER	926
RPPRAM	926
SANPCP	771
SAXPCP	771 867
UALPHA1	801 802
UASMAL	814

VARIABLE	EQUATION NUMBER											
UBALPS	859	860										
UBALR	864											
UBPSAR	878											
UBSMAL	814	815										
UBTUFL	728											
UBU	816	817										
UC	699	705	706	707	724	800						
UCAPGM	758	868										
UCAPGMX	772	777	866									
UCAPGOX	773	777	865									
UCAPGPX	771	776	867									
UCCAV	704	711										
UCPCOMP	39	905										
UCU	69	502	689	701	702	726	728	732	758	820	843	851
UCUER	851											
UCUR	800	804	817									
UCURBAL	787	878										
UCV	707											
UDD	801	804	813									
UDDG	813											
UDDIC	869	878										
UDDICM	866	869	871	875								
UDDICO	865	869	872	876								
UDDICOE	865	872	876									
UDDICOIA	865	872	876									
UDDICP	867	869	870	874								
UDDIL	868	873	877	878								
UDDILSR	868											
UDEANDO	878											
UDECAYPD	863											
UDECAYPS	861											
UDECAYR	864											
UDFCG	878	884										
UDFCGOLD	884											
UDFCP	879	882										
UDFCPER	879											
UDFLG	878	881	885									
UDFLP	880	883										
UDFLPER	880											
UDICCPM	772	866	875									
UDICCPO	773	865	876									
UDICCPP	771	867	874									
UDICM	866	871										
UDICO	865	872										
UDICP	870											
UDIL	868	873										
UDILCP	758	868	877									
UDNFAG	890											
UDNFAP	878	879	880									
UDNFASDR	878	884										
UDNW	724	725										
UDVCOSP	862											
UDVCOSS	861											
UDVDDCB	801											
UDVDSMNF	726	731	732									
UDVDSXNA	543	748										
UDVILST	735	736										
UDV7279	771											
UECDPS1	857	861										
UECDPS2	858	861										
UECDPS3	859	861										
UECDPS4	860	861										
UEIFTW	909	910										
UEI10	748	757	770	819	820	821	881	903	910			
UEI4FTW	908	909										
UELC	727	728										
UFCG	884	888										
UFCGAVG	775	888										
UFCHPLDI	865	866	867	904								
UFCP	334	882	886									
UFCPAVG	774	886										
UFCPIFDW	899	900										
UFCPIFTW	901	902										
UFCUDIW	771	772	773	898								
UFCUDWER	898											
UFCUFW10	726	820	897									
UFCU10ER	897											
UFEDER	912											
UFEDI10	771	772	773	865	866	867	874	875	876	904	912	
UFERFDIW	911	912										
UFGFTER	894											
UFGNFGER	892											
UFGNFXER	896											
UFGNPFGW	891	892										
UFGNPFTW	893	894										
UFGNPFXW	895	896										
UFGNPF10	770	865	866	867	894							
UFGNPG10	892											
UFGNPXWM	748	749	896									

VARIABLE	EQUATION NUMBER
UFLCNS	728 739 843 844
UFLDICNV	739
UFLG	881 885 889
UFLGAVG	760 889
UFLP	883 887
UFLPAVG	759 887
UFLPSCNS	729 739
UFLQLUNS	739
UFLSPR	739
UFLUCQNS	739
UFPCFUS	749 833 903
UFPCFW10	748 757 770 819 821 902 903
UFPCPER	902
UFPDER	900
UFPDI10	771 772 773 865 866 867 874 875 876 900 904
UFRSFTW	913 914
UG	705 706 720
UGBAL	787 788
UGDEBT	715 723
UGDEF	722 723
UGFRV	719 722
UGGV	722
UGIV	711 715 722
UGNP	68 71 320 505 687 701 702 705 713 726 727 730 731 732 733 757 758 801 802 823 843 851 868 921
UGNPER	705
UGNPPOT	844 851
UGNPV	321 479 506 688 706 711 718 803 823
UGNPVER	706
UGPCOMP	732 906
UGRANTPD	863
UGRANTR	864
UGSBAL	792
UGV	720 722
UIFP	703 705 706 708
UIFPD	701 703 853
UIFPR	700 703 852
UIFPS	702 703 854
UIFPV	708
UII	705 706 709 733 856
UIIF	710 733
UIIFV	710
UIIV	709
UINTGF	711 716
UJMSA	813
UJMSB	813
UJPCOMP	543 907
UJTRANG	719
UJURS	812
UKII	856
UKP	333 704 843 844 855
UKPD	701 853 855
UKPR	700 852 855
UKPS	702 854 855
ULCHPCPI	828 868
ULE	843 845 846 848
ULF	714 844 846 847 848
ULH	843 845
ULIFEPD	862
ULIFEPS	857 858 859 860
ULIFER	864
ULU	847
UMDS	813 814 815
UMG	743 757
UMGFL	741 831
UMGFLER	740
UMGFLV	740 741 742 831
UMGNFL	726 738 831
UMGNFLV	738 742 831
UMGNI	745 795
UMGNIER	745
UMGNIV	744 745 794
UMGOLD	744
UMGSNER	795
UMGSNI	705 706 795 799 834 843 844
UMGSNIV	794 798 803 834
UMGSV	791 792
UMGSVNER	794
UMGV	742 743 744 746 788 791
UMGVNAER	744
UMGVSF	746
UMIGOLD	744
UMKGL	764
UMQFLSF	739
UMQGFL	739 740 928
UMSFI	767 769
UMSFIER	764
UMSFINER	767
UMSFIV	764 766 767

VARIABLE	EQUATION NUMBER
UMSMILV	763 765
UMSNI	769 795
UMSNIER	769
UMSNIV	766 794
UMSONER	768
UMSONI	768 769
UMSONIV	765 766 768
UMSOV	757 763 765
UMSOVER	765
UMSV	763 789 791
UMSVNIER	766
UMSYGV	716 760 762 764
UMSYJDV	761
UMSYPDNQ	758 761
UMSYPDV	761 762
UMSYPNDV	759 762
UMSYV	762 763 764
UM1	805
UM1A	804 805
UNDA	715 717 816
UNDD	806 815
UNETXNI	799
UNETXNIV	798
UNFAG	816 890
UNFAGVC	890
UNW	133 135 494 658 725 803
UOCD	802 805
UOMPMKUP	835
UP	56 68 323 325 333 496 690 704 706 707 708 709 710 712 714 720 724 730 731 732 733 800 801 802 818 824 826 827 830
UPCHGNP	713
UPCHP	93 827
UPCHW	850
UPCPI	749 758 824 828 840 868 877
UPCPIER	824
UPEXP	130 699 807 808 829 830 849 861 863 864
UPGBP	726 757 770 825 833 840
UPGBPER	825
UPGNP	69 71 74 324 497 501 686 696 727 820 823 825 829 832 833 839 840
UPMGCNVF	836
UPMGER	822
UPMGFL	741 822 836
UPMGFLUV	740 835 836
UPMGNER	831
UPMGNFL	726 738 818 819 822
UPMGNI	745 831
UPMGSNER	834
UPMGSNI	706 834
UPMGUV	743 822
UPMOSNER	833
UPMOSNI	768 833
UPMSFI	767 832
UPMSNER	832
UPOP	714 846
UPWIFC	728 842
UPWIFE	727 818 842
UPWIFEL	842
UPWIFER	842
UPWIFL	728 729 842
UPWIFNG	728 842
UPWPIXER	826
UPWPIXW	821 826
UPXAG	749 751 820 837
UPXGER	837
UPXGNER	838
UPXGNI	755 838
UPXGSNER	841
UPXGSNI	706 841
UPXGUV	152 154 195 328 329 375 495 508 543 671 691 692 753 837 925
UPXNAG	39 543 748 750 821 837
UPXOSNER	840
UPXOSNI	785 840
UPXSFI	784 839
UPXSNER	839
UP1	130 830
URCB	811
URCD	810 811
URD	806
URF	806 817
URHL	809 864
URL	70 132 133 332 481 807 857 858 859 860 861 862 863 915
URLGB	715 717 803 808 809
URNOW	802
URR	814 817
URRNM	814
URROTH	814
URS	88 93 130 135 153 330 331 500 503 504 693 694 695 699 807 810 812 914
URS1	715 717 729 759 760 774 775 800 801 802 806 808 810 812 865 866 867
URTD	803 811

VARIABLE	EQUATION NUMBER							
USBAL	787	789						
USUPPLY	726	748						
UTARIFF	726							
UTBASE	721							
UTD	803	814						
UTINC	863							
UTRANV	711	714	722					
UTRATE	721							
UTRY	718	864						
UTRYC	718	857	858	859	860	861	862	863
UTV	711	721	722					
UTVC	718	721						
UUCPD	701	863						
UUCPD1	862	863						
UUCPS	702	861						
UUCR	700	864						
UUN	155	322	714	818	847	848	849	
UW	818	849	850					
UWTMGNFL	818							
UXG	753	770						
UXGA	749	751	838					
UXGAV	751	752	838					
UXGNA	748	750	838					
UXGNAV	750	752	838					
UXGNI	755	797						
UXGNIER	755							
UXGNIV	754	755	796					
UXGOLD	754							
UXGSNER	797							
UXGSNI	705	706	797	799	841			
UXGSNIV	796	798	803	841				
UXGSV	790	792						
UXGSVNER	796							
UXGV	752	753	754	756	788	790		
UXGVNAER	754							
UXGVSF	756							
UXKGL	781							
UXMILIS	782							
UXQFLNS	739							
UXSFI	784	786						
UXSFIER	781							
UXSFINER	784							
UXSFIV	781	783	784					
UXSMILV	780	782						
UXSNI	786	797						
UXSNIER	786							
UXSNIV	783	796						
UXSONER	785							
UXSONI	785	786						
UXSONIV	782	783	785					
UXSOV	770	780	782					
UXSOVER	782							
UXSV	780	789	790					
UXSVNIER	783							
UXSYDNAT	773							
UXSYDVMQ	772	777						
UXSYDVOM	777	779						
UXSYDVOQ	773	777						
UXSYDVP	776	779						
UXSYDVPQ	771	776						
UXSYJDVO	777							
UXSYJDVP	776							
UXSYNGV	775	778						
UXSYNPV	774	778						
UXSYPDV	778	779						
UXSYV	778	780	781					
UXTRANGV	719	793						
UXTRANPV	793							
UXTRANV	787	793						
UYD	699	700	712					
UYDV	711	712	724					
UYFRPV	711	715	717					
XCEV	53	192	199					
XCGV	52	53						
XCJV	53	541	551					
XCRV	53	916						
XCTV	53	54						
XCUV	53	730	734					
XECV	36	46	208					
XEGV	207	208						
XEJV	208	542	550					
XERV	209	917						
XETV	209	210						
XEUV	208	731	735					
XGCV	37	45	388					
XGEV	386	388						
XGJV	387	388						
XGRV	388	918						
XGTV	388	389						

VARIABLE	EQUATION NUMBER		
XGUV	388	732	736
XJCV	38	44	558
XJEV	194	200	558
XJGV	374	381	558
XJRV	558	919	
XJTV	558	559	
XJUV	558	733	737
XRCV	43		
XREV	196	202	
XUCV	39	47	920
XUEV	195	201	920
XUGV	375	382	920
XUJV	543	549	920
XURV	920		
XUTV	756	920	

ALPHABETICAL LIST OF VARIABLES FOR MODEL MCM

MNEMONIC	EQUATION	DEFINITION
CA	(EXOG)	RESERVE REQUIREMENTS ON DEMAND DEPOSITS
CB	(EXOG)	RESERVE REQUIREMENTS ON TIME DEPOSITS
CBALNR	(EXOG)	DEPRECIATION SCHEME USED TO CALCULATE TAX DEPRECIATION
CBONDADJ	(EXOG)	ADJUSTMENT TO RECONCILE INTERVENTION WITH CHANGE IN OFFICAL ASSETS
CBU	98	UNBORROWED RESERVES (RR+RF+CUR)
CC	1	PRIVATE CONSUMPTION EXPENDITURE - 1972 PRICES
CCCAV	4	CAPITAL CONSUMPTION ALLOWANCE - CURRENT PRICES
CCOL	35	OIL CONSUMPTION - VOLUME
CCU	118	CAPACITY UTILIZATION RATE
CCUER	(EXOG)	STATISTICAL DISCREPANCY IN CAPACITY UTILIZATION EQUATION
CCUMDF	26	CUMULATED GOVERNMENT DEFICIT - CURRENT PRICES
CCUR	85	STOCK OF CURRENCY HELD BY RESIDENTS
CCURBAL	84	CURRENT ACCOUNT BALANCE
CCV	8	CONSUMER EXPENDITURE - CURRENT PRICES
CCVNSA	9	CONSUMER EXPENDITURE - CURRENT PRICES (NSA)
CDD	89	STOCK OF DEMAND DEPOSITS HELD BY RESIDENTS
CDDER	(EXOG)	STATISTICAL DISCREPANCY IN DEMAND DEPOSIT EQUATION
CDECAYNR	(EXOG)	ECONOMIC DECAY OF ASSETS - NON-RESIDENTIAL
CDECAYR	(EXOG)	ECONOMIC DECAY OF ASSETS - RESIDENTIAL
CDEFIXE2	147	PROXY FOR EXPECTED EXCHANGE RATE CHANGE (FIXED RATE)
CDEFLOAT	146	PROXY FOR EXPECTED EXCHANGE RATE CHANGE (FLOATING RATE)
CDLTDC	(EXOG)	CHANGE IN LONG TERM DIRECT CLAIMS ON FOREIGNERS
CDLTDL	(EXOG)	CHANGE IN LONG-TERM DIRECT LIABILITIES TO FOREIGNERS
CDLTPC	132	CHANGE IN LONG-TERM PORTFOLIO CLAIMS ON FOREIGNERS
CDLTPL	133	CHANGE IN LONG-TERM PORTFOLIO LIABILITIES TO FOREIGNERS
CDNFAG	149	CHANGE IN NET FOREIGN ASSETS OF THE CENTRAL BANK
CDNFAP	131	CHANGE IN PRIVATE NET FOREIGN ASSETS - SHORT-TERM
CDNGP	(EXOG)	CHANGE IN NET GOVERNMENT POSITION OF THE MONETARY AUTHORITIES
CDNWFVNS	27	CHANGE IN FINANCIAL NET WORTH - CURRENT PRICES (NSA)
CDNWKVNS	28	CHANGE IN TANGIBLE NET WORTH - CURRENT PRICES (NSA)
CDSTC	134	CHANGE IN SHORT-TERM CLAIMS ON FOREIGNERS
CDSTL	135	CHANGE IN SHORT-TERM LIABILITIES TO FOREIGNERS
CDVAUTST	(EXOG)	DUMMY TO REFLECT U.S. AUTO STRIKE
CDVLOBO	(EXOG)	DUMMY FOR FEDERAL POLICY DISCOURAGING FOREIGN BORROWING
CDVXCRIS	(EXOG)	DUMMY FOR EXCHANGE RATE CRISES IN 1962 AND 1968
CDV6821	(EXOG)	DUMMY TO ACCOUNT FOR FEDERAL BORROWING IN DEUTSCHE MARKS
CDV6914	(EXOG)	DUMMY FOR DIVERGENCE OF WEIGHTED FOREIGN EXCHANGE RATE FROM ACTUAL VALUE
CEANDO	136	ERRORS AND OMMISSIONS
CECDEP	125	ECONOMIC DEPRECIATION
CEI	148	SPOT EXCHANGE RATE INDEX
CEILEAD	145	ONE QUARTER LEAD SPOT EXCHANGE RATE INDEX
CER	130	SPOT EXCHANGE RATE ($US/$C)
CERER	(EXOG)	STATISTICAL DISCREPANCY IN EXCHANGE RATE EQUATION
CFC	141	STOCK OF FINANCIAL CLAIMS ON FOREIGNERS
CFCP	142	STOCK PF PORTFOLIO CLAIMS ON FOREIGNERS
CFL	143	STOCK OF FINANCIAL LIABILITIES TO FOREIGNERS
CFLP	144	STOCK OF PORTFOLIO LIABILITIES TO FOREIGNERS
CFPXFTW	154	FOREIGN EXPORT PRICE (FIXED TRADE WEIGHTS) - 1972=1.00
CFPXVMW	152	FOREIGN EXPORT PRICE (VARIABLE IMPORT WEIGHTS) - 1972=1.00
CFRSCF	153	FOREIGN SHORT-TERM INTEREST RATE - FOREIGN CLAIMS
CFUNFTW	155	FOREIGN UNEMPLOYMENT RATE (FIXED TRADE WEIGHTS)
CG	(EXOG)	GENERAL GOVERNMENT PURCHASES - 1972 PRICES (SA)
CGBAL	80	GOODS TRADE BALANCE
CGDEF	25	GOVERNMENT DEFICIT - NIA BASIS (PSBR)
CGNP	5	GROSS NATIONAL PRODUCT - 1972 PRICES
CGNPPOT	119	POTENTIAL REAL GROSS NATIONAL PRODUCT
CGNPV	6	GROSS NATIONAL PRODUCT - CURRENT PRICES
CGNPVNSA	7	GROSS NATIONAL PRODUCT - CURRENT PRICES (NSA)
CGRANTNR	(EXOG)	TAX INCENTIVES - PRIVATE NON-RESIDENTIAL INVESTMENT
CGRANTR	(EXOG)	TAX INCENTIVES - PRIVATE RESIDENTIAL INVESTMENT
CGSBAL	82	CURRENT BALANCE ON GOODS AND SERVICES
CGV	22	GENERAL GOVERNMENT PURCHASES - CURRENT PRICES
CIFG	(EXOG)	GOVERNMENT FIXED INVESTMENT - 1972 PRICES (SA)
CIFGV	23	GOVERNMENT FIXED INVESTMENT - CURRENT PRICES
CIFGVNSA	24	GOVERNMENT FIXED INVESTMENT - CURRENT PRICES (NSA)
CIFP	10	PRIVATE FIXED INVESTMENT - 1972 PRICES
CIFPNR	3	PRIVATE GROSS NON-RESIDENTIAL INVESTMENT - 1972 PRICES
CIFPR	2	PRIVATE GROSS RESIDENTIAL INVESTMENT - 1972 PRICES
CIFPV	11	PRIVATE FIXED INVESTMENT - CURRENT PRICES
CIFPVNSA	12	PRIVATE FIXED INVESTMENT - CURRENT PRICES (NSA)
CII	(EXOG)	PRIVATE INVENTORY INVESTMENT - 1972 PRICES
CIIV	13	PRIVATE INVENTORY INVESTMENT - CURRENT PRICES
CK	124	GROSS CAPITAL STOCK - TOTAL
CKG	122	GROSS CAPITAL STOCK - GOVERNMENT
CKP	123	GROSS CAPITAL STOCK - PRIVATE
CKPNR	121	STOCK OF NET PRIVATE NON-RESIDENTIAL CAPITAL - 1972 PRICES
CKPR	120	STOCK OF NET PRIVATE RESIDENTIAL CAPITAL - 1972 PRICES
CLE	115	LABOR EMPLOYMENT RATE
CLF	113	LABOR FORCE - MILLIONS OF PERSONS
CLH	116	AVERAGE WEEKLY LABOR HOURS
CLIFENR	(EXOG)	LIFE OF ASSETS - PRIVATE - NON-RESIDENTIAL
CLTDC	128	STOCK OF LONG-TERM DIRECT CLAIMS ON FOREIGNERS
CLTDL	129	STOCK OF LONG-TERM DIRECT LIABILITIES TO FOREIGNERS
CLTPC	137	STOCK OF PRIVATE PORTFOLIO CLAIMS ON FOREIGNERS

MNEMONIC	EQUATION	DEFINITION
CLTPL	138	STOCK OF PRIVATE PORTFOLIO LIABILITIES TO FOREIGNERS
CMG	50	TOTAL CANADIAN GOODS IMPORTS - 1972 PRICES
CMGOL	41	OIL IMPORTS - VOLUME
CMGOLER	(EXOG)	STATISTICAL DISCREPANCY IN VOLUME OF OIL IMPORTS EQUATION
CMGOLV	42	OIL IMPORTS - VALUE
CMGOLVER	(EXOG)	STATISTICAL DISCREPANCY IN VALUE OF OIL IMPORTS EQUATION
CMGSNI	67	IMPORTS - NIA BASIS - 1972 PRICES (SA)
CMGSNINS	66	IMPORTS - NIA BASIS - 1972 PRICES (NSA)
CMGSNIV	65	IMPORTS - NIA BASIS - CURRENT PRICES (SA)
CMGSNIVS	64	IMPORTS - NIA BASIS - CURRENT PRICES (NSA)
CMGSV	60	IMPORTS OF GOODS AND SERVICES - CURRENT PRICES
CMGV	49	TOTAL CANADIAN GOODS IMPORTS - BOP BASIS - CURRENT PRICES
CMGVER	(EXOG)	STATISTICAL DISCREPANCY IN CANADIAN GOODS IMPORTS EQUATION
CMSOV	56	IMPORTS OF OTHER SERVICES - CURRENT PRICES
CMSV	59	IMPORTS OF SERVICES - BOP BASIS - TOTAL - CURRENT PRICES
CMSYDV	57	DIRECT INVESTMENT INCOME PAYMENTS - CURRENT PRICES
CMSYNDER	(EXOG)	STATISTICAL DISCREPANCY IN NON-DIRECT INVESTMENT INCOME PAYMENTS EQUATION
CMSYNDV	62	NON-DIRECT INVESTMENT INCOME PAYMENTS - CURRENT PRICES
CMSYV	63	INVESTMENT INCOME PAYMENTS - CURRENT PRICES
CMSYVER	(EXOG)	STATISTICAL DISCREPANCY IN INVESTMENT INCOME PAYMENTS EQUATION
CMTRANV	58	TRANSFER PAYMENTS - TOTAL
CM1	86	MONEY SUPPLY - M1
CM2	91	MONEY SUPPLY - M2
CND	88	NOTICE DEPOSITS
CNETXNI	83	NET EXPORTS - NIA BASIS - 1972 PRICES
CNFAG	151	STOCK OF NET FOREIGN ASSETS OF MONETARY AUTHORITIES
CNFAGACT	(EXOG)	ACTUAL (HISTORICAL) STOCK OF OFFICIAL NET FOREIGN ASSETS
CNGK	150	STOCK OF GOVERNMENT ASSETS
CNGKA	(EXOG)	NET GOVERNMENT CAPITAL ACCOUNT
CNGP	96	NET GOVERNMENT POSITION OF THE MONETARY AUTHORITIES
CNWFVNSA	29	FINANCIAL NET WORTH - CURRENT PRICES (NSA)
CNWKNSA	30	REAL NET WORTH - 1972 PRICES (NSA)
CNWR	33	NET WORTH - 1972 PRICES (SA)
CNWRNSA	32	NET WORTH - 1972 PRICES (NSA)
CNWV	34	NET WORTH - CURRENT PRICES (SA)
CNWVNSA	31	NET WORTH - CURRENT PRICES (NSA)
COTH	(EXOG)	OTHER ASSETS OF THE BANK OF CANADA
CP	99	ABSORPTION DEFLATOR - 1972=1.00
CPCHGNP	18	PERCENTAGE CHANGE IN GNP - ANNUAL RATE
CPCHM1	92	PERCENTAGE CHANGE IN M1 - ANNUAL RATE
CPCHP	111	PERCENTAGE CHANGE IN PRICE LEVEL - ANNUAL RATE
CPCHW	117	PERCENTAGE CHANGE IN WAGES - ANNUAL RATE
CPCPI	101	CONSUMER PRICE INDEX - 1970=100.00
CPCPIER	(EXOG)	STATISTICAL DISCREPENCY IN CANADIAN CONSUMER PRICE INDEX EQUATION
CPDOM	110	IMPLICIT DOMESTIC ABSORPTION DEFLATOR (IMPORTS REMOVED) (SA) - 1972=1.00
CPEXP	108	EXPECTED INFLATION
CPGNP	104	GROSS NATIONAL PRODUCT DEFLATOR - 1972=1.00
CPMGOL	(EXOG)	OIL IMPORT PRICE INDEX - 1972=1.00
CPMGSNI	107	IMPORT DEFLATOR - NIA BASIS - 1972=1.00
CPMGUV	103	IMPORT UNIT VALUE INDEX - 1972=1.00
CPMNOIL	109	NON-OIL IMPORT PRICE - 1972=1.00
CPMS	106	DEFLATOR FOR IMPORTS OF SERVICES - 1972=1.00
CPOP15	(EXOG)	CANADIAN POPULATION - 15 YEARS OF AGE AND OLDER
CPPETROL	(EXOG)	DOMESTIC PETROLEUM PRICE INDEX - 1972=1.00
CPXGOL	(EXOG)	OIL EXPORT PRICE INDEX - 1972=1.00
CPXGUV	102	EXPORT UNIT VALUE INDEX - 1972=1.00
CPXS	105	DEFLATOR FOR EXPORTS OF SERVICES - 1972=1.00
CP1	100	EXPECTED ONE PERIOD AHEAD INFLATION RATE - 1972 =1.0
CQOL	(EXOG)	CANADIAN OIL PRODUCTION - VOLUME
CRES	(EXOG)	RESIDUAL ERROR OF ESTIMATE - FROM GNP COMPONENT
CRESNSA	(EXOG)	RESIDUAL ERROR OF ESTIMATE - FROM GNP COMPONENT (NSA)
CRESV	(EXOG)	RESIDUAL ERROR OF ESTIMATE - FROM GNP COMPONENT (NOMINAL)
CRF	97	FREE RESERVES (EXCESS RESERVES - BORROWED RESERVES)
CRL	94	LONG-TERM INTEREST RATE - GOVERNMENT OF CANADA BONDS - 10 YEARS
CRLTDC	74	STOCK OF REAL LONG-TERM DIRECT CLAIMS ON FOREIGNERS
CRLTDL	61	STOCK OF REAL LONG-TERM DIRECT LIABLITIES TO FOREIGNERS
CRR	95	REQUIRED RESERVES
CRS	93	SHORT-TERM INTEREST RATE - 90-DAY FINANCE COMPANY PAPER
CRSER	(EXOG)	STATISTICAL DISCREPANCY IN INTEREST RATE EQUATION
CSAFCV	(EXOG)	SEASONAL ADJ. FACTOR : PRIVATE CONSUMPTION - CURRENT PRICES
CSAFGNPV	(EXOG)	SEASONAL ADJ. FACTOR : GNP - CURRENT PRICES
CSAFIFGV	(EXOG)	SEASONAL ADJ. FACTOR: GOVERNMENT FIXED INVESTMENT - CURRENT PRICES
CSAFIFPV	(EXOG)	SEASONAL ADJ. FACTOR: PRIVATE FIXED INVESTMENT - CURRENT PRICES
CSAFMNI	(EXOG)	SEASONAL ADJ. FACTOR: IMPORTS OF GOODS AND SERVICES - NIA BASIS - 1972 PRICES
CSAFMNIV	(EXOG)	SEASONAL ADJ. FACTOR: IMPORTS OF GOODS AND SERVICES - NIA BASIS - CURRENT PRICES
CSAFNW	(EXOG)	SEASONAL ADJ. FACTOR: NET WORTH
CSAFXNI	(EXOG)	SEASONAL ADJ. FACTOR: EXPORTS OF GOODS AND SERVICES - NIA BASIS - 1972 PRICES
CSAFXNIV	(EXOG)	SEASONAL ADJ. FACTOR: EXPORTS OF GOODS AND SERVICES - NIA BASIS - CURRENT PRICES
CSAFYDV	(EXOG)	SEASONAL ADJ. FACTOR: DISPOSABLE INCOME - CURRENT PRICES
CSBAL	81	CURRENT BALANCE ON SERVICES
CSCRG	(EXOG)	DISCARD RATE FOR GROSS GOVERNMENT FIXED CAPITAL STOCK
CSD	87	SAVINGS DEPOSITS
CSDRADJ	(EXOG)	IMF SDR ALLOCATIONS
CSDRVAL	(EXOG)	SDR ALLOCATIONS AND VALUATION ADJUSTMENT (CDNFAT-CNFA)
CSHARDOM	(EXOG)	DOMESTIC SHARE OF GROSS NATIONAL PRODUCT (IMPORTS REMOVED)
CSOL	(EXOG)	OIL STOCK - MILLIONS OF BARRELS PER DAY
CSTC	139	STOCK OF PRIVATE SHORT-TERM CLAIMS ON FOREIGNERS

MNEMONIC	EQUATION	DEFINITION
CSTL	140	STOCK OF PRIVATE SHORT-TERM LIABILITIES TO FOREIGNERS
CTD	90	STOCK OF TIME DEPOSITS HELD BY RESIDENTS
CTIIV	(EXOG)	GOVERNMENT REVENUE: TOTAL INVESTMENT INCOME
CTINDV	21	TAXES - INDIRECT - CURRENT PRICES
CTRANV	19	GOVERNMENT TRANSFERS TO PRIVATE SECTOR
CTRY	(EXOG)	STANDARD RATE OF INCOME TAX
CTRYC	(EXOG)	ANNUAL TAX RATE ON CORPORATE INCOME
CTV	20	TOTAL GOVERNMENT REVENUE
CUCNR	126	USER COST OF CAPITAL - PRIVATE - NON-RESIDENTIAL
CUCR	127	USER COST OF CAPITAL - PRIVATE - RESIDENTIAL
CUN	114	UNEMPLOYMENT RATE
CW	112	HOURLY WAGE RATE IN MANUFACTURING
CWTM2E	(EXOG)	CANADIAN IMPORT TRADE WEIGHTS (INCLUDING REST OF WORLD): U.K.
CWTM2G	(EXOG)	CANADIAN IMPORT TRADE WEIGHTS (INCLUDING REST OF WORLD): GERMANY
CWTM2J	(EXOG)	CANADIAN IMPORT TRADE WEIGHTS (INCLUDING REST OF WORLD): JAPAN
CWTM2O	(EXOG)	CANADIAN IMPORT TRADE WEIGHTS (INCLUDING REST OF WORLD): OPEC
CWTM2R	(EXOG)	CANADIAN IMPORT TRADE WEIGHTS (INCLUDING REST OF WORLD): R.O.W.
CWTM2U	(EXOG)	CANADIAN IMPORT TRADE WEIGHTS (INCLUDING REST OF WORLD): U.S.
CXG	55	TOTAL CANADIAN GOODS EXPORTS - 1972 PRICES
CXGER	(EXOG)	STATISTICAL DISCREPANCY IN TOTAL CANADIAN GOODS EXPORTS EQUATION
CXGOL	(EXOG)	EXPORTS OF PETROLEUM - MILLION BARRELS PER DAY (NSA)
CXGOLV	51	EXPORTS OF PETROLEUM - VALUE
CXGOLVER	(EXOG)	STATISTICAL DISCREPANCY IN VALUE OF EXPORTS OF PETROLEUM EQUATION
CXGSNI	79	EXPORTS - NIA BASIS - 1972 PRICES (SA)
CXGSNINS	78	EXPORTS - NIA BASIS - 1972 PRICES (NSA)
CXGSNIV	77	EXPORTS - NIA BASIS - CURRENT PRICES (SA)
CXGSNIVS	76	EXPORTS - NIA BASIS - CURRENT PRICES (NSA)
CXGSV	73	EXPORTS OF GOODS AND SERVICES
CXGV	54	TOTAL CANADIAN GOODS EXPORTS - BOP BASIS - CURRENT PRICES
CXGVADJ	(EXOG)	STATISTICAL DISCREPANCY IN GOODS EXPORTS EQUATION - BOP BASIS - CURRENT PRICES
CXSOV	68	EXPORTS OF OTHER SERVICES
CXSV	72	EXPORTS OF SERVICES - BOP BASIS - TOTAL
CXSYDV	69	DIRECT INVESTMENT INCOME RECEIPTS
CXSYNDV	70	NON-DIRECT INVESTMENT INCOME RECEIPTS
CXSYV	75	INVESTMENT INCOME RECEIPTS
CXSYVER	(EXOG)	STATISTICAL DISCREPANCY IN INVESTMENT INCOME RECEIPTS EQUATION
CXTRANV	71	TOTAL TRANSFER RECEIPTS
CYD	16	DISPOSABLE INCOME PROXY - 1972 PRICES
CYDPVNSA	14	PERSONAL DISPOSABLE INCOME - CURRENT PRICES (NSA)
CYDV	17	DISPOSABLE INCOME PROXY - CURRENT PRICES
CYDVNSA	15	DISPOSABLE INCOME PROXY - CURRENT PRICES (NSA)
DAYSQ	(EXOG)	NUMBER OF DAYS PER QUARTER
D60137	(EXOG)	DUMMY VARIABLE = 1.0 IN 60Q1 - FOR 37 QUARTERS
D60150	(EXOG)	DUMMY VARIABLE = 1.0 IN 60Q1 - FOR 50 QUARTERS
D62233	(EXOG)	DUMMY VARIABLE = 1.0 IN 62Q2 - FOR 33 QUARTERS
D6311	(EXOG)	DUMMY VARIABLE = 1.0 IN 63Q1 - FOR 1 QUARTER
D6336	(EXOG)	DUMMY VARIABLE = 1.0 IN 63Q3 - FOR 6 QUARTERS
D6421	(EXOG)	DUMMY VARIABLE = 1.0 IN 64Q2 - FOR 1 QUARTER
D644I	(EXOG)	DUMMY VARIABLE = 1.0 IN 64Q4 - FOR ALL REMAINING QUARTERS
D65136	(EXOG)	DUMMY VARIABLE = 1.0 IN 65Q1 - FOR 36 QUARTERS
D6631	(EXOG)	DUMMY VARIABLE = 1.0 IN 66Q3 - FOR 1 QUARTER
D6732	(EXOG)	DUMMY VARIABLE = 1.0 IN 67Q3 - FOR 2 QUARTERS
D6741	(EXOG)	DUMMY VARIABLE = 1.0 IN 67Q4 - FOR 1 QUARTER
D693I	(EXOG)	DUMMY VARIABLE = 1.0 IN 69Q3 - FOR ALL REMAINING QUARTERS
D6943	(EXOG)	DUMMY VARIABLE = 1.0 IN 69Q4 - FOR 3 QUARTERS
D701I	(EXOG)	DUMMY VARIABLE = 1.0 IN 70Q1 - FOR ALL REMAINING QUARTERS
D70120	(EXOG)	DUMMY VARIABLE = 1.0 IN 70Q1 - FOR 20 QUARTERS
D702I	(EXOG)	DUMMY VARIABLE = 1.0 IN 70Q2 - FOR ALL REMAINING QUARTERS
D7021	(EXOG)	DUMMY VARIABLE = 1.0 IN 70Q2 - FOR 1 QUARTER
D7131	(EXOG)	DUMMY VARIABLE = 1.0 IN 71Q3 - FOR 1 QUARTER
D7141	(EXOG)	DUMMY VARIABLE = 1.0 IN 71Q4 - FOR 1 QUARTER
D7211	(EXOG)	DUMMY VARIABLE = 1.0 IN 72Q1 - FOR 1 QUARTER
D7221	(EXOG)	DUMMY VARIABLE = 1.0 IN 72Q2 - FOR 1 QUARTER
D7231	(EXOG)	DUMMY VARIABLE = 1.0 IN 72Q3 - FOR 1 QUARTER
D7241	(EXOG)	DUMMY VARIABLE = 1.0 IN 72Q4 - FOR 1 QUARTER
D731I	(EXOG)	DUMMY VARIABLE = 1.0 IN 73Q1 - FOR ALL REMAINING QUARTERS
D732I	(EXOG)	DUMMY VARIABLE = 1.0 IN 73Q2 - FOR ALL REMAINING QUARTERS
D7331	(EXOG)	DUMMY VARIABLE = 1.0 IN 73Q3 - FOR 1 QUARTER
D7341	(EXOG)	DUMMY VARIABLE = 1.0 IN 73Q4 - FOR 1 QUARTER
D741I	(EXOG)	DUMMY VARIABLE = 1.0 IN 74Q1 - FOR ALL REMAINING QUARTERS
D7411	(EXOG)	DUMMY VARIABLE = 1.0 IN 74Q1 - FOR 1 QUARTER
D7421	(EXOG)	DUMMY VARIABLE = 1.0 IN 74Q2 - FOR 1 QUARTER
D7442	(EXOG)	DUMMY VARIABLE = 1.0 IN 74Q4 - FOR 2 QUARTERS
D7541	(EXOG)	DUMMY VARIABLE = 1.0 IN 75Q4 - FOR 1 QUARTER
D764I	(EXOG)	DUMMY VARIABLE = 1.0 IN 76Q4 - FOR ALL REMAINING QUARTERS
D7731	(EXOG)	DUMMY VARIABLE = 1.0 IN 77Q3 - FOR 1 QUARTER
D774I	(EXOG)	DUMMY VARIABLE = 1.0 IN 77Q4 - FOR ALL REMAINING QUARTERS
D7741	(EXOG)	DUMMY VARIABLE = 1.0 IN 77Q4 - FOR 1 QUARTER
D781I	(EXOG)	DUMMY VARIABLE = 1.0 IN 78Q1 - FOR ALL REMAINING QUARTERS
D792I	(EXOG)	DUMMY VARIABLE = 1.0 IN 79Q2 - FOR ALL REMAINING QUARTERS
D801I	(EXOG)	DUMMY VARIABLE = 1.0 IN 80Q1 - FOR ALL REMAINING QUARTERS
D8021	(EXOG)	DUMMY VARIABLE = 1.0 IN 80Q2 - FOR 1 QUARTER
D803I	(EXOG)	DUMMY VARIABLE = 1.0 IN 80Q3 - FOR ALL REMAINING QUARTERS
D8041	(EXOG)	DUMMY VARIABLE = 1.0 IN 80Q4 - FOR 1 QUARTER
D811I	(EXOG)	DUMMY VARIABLE = 1.0 IN 81Q1 - FOR ALL REMAINING QUARTERS
D8131	(EXOG)	DUMMY VARIABLE = 1.0 IN 81Q3 - FOR 1 QUARTER
EADJ	(EXOG)	RESIDUAL TERM IN CONSTANT PRICE GDP IDENTITY - 1972 PRICES (SA)

MNEMONIC	EQUATION	DEFINITION
EADJV	(EXOG)	RESIDUAL TERM IN GDP IDENTITY - CURRENT PRICES (SA)
EBBAL	301	BASIC BALANCE
EBOF	306	BALANCE OF OFFICIAL FINANCING
EC	156	PRIVATE CONSUMPTION EXPENDITURE - 1972 PRICES (SA)
ECCAV	159	CAPITAL CONSUMPTION ALLOWANCE - CURRENT PRICES (SA)
ECCURBAL	239	CUMULATIVE CURRENT ACCOUNT
ECGSD	252	SPECIAL RATE OF CALL ON BANKS - PERCENT - END OF QUARTER
ECOL	191	OIL CONSUMPTION - MILLIONS OF BARRELS PER DAY
ECU	287	CAPACITY UTILIZATION RATE - PERCENT
ECUER	(EXOG)	CAPACITY UTILIZATION RATE ADJUSTMENT
ECUR	240	CURRENCY HELD BY RESIDENTS
ECURBAL	238	CURRENT ACCOUNT BALANCE
ECURBALR	(EXOG)	RESIDUAL TERM IN CURRENT ACCOUNT IDENTITY
ECV	165	PRIVATE CONSUMPTION EXPENDITURE - CURRENT PRICES (SA)
ECVNSA	166	PRIVATE CONSUMPTION EXPENDITURE - CURRENT PRICES (NSA)
EDD	241	DEMAND DEPOSITS HELD BY RESIDENTS - END OF QUARTER STOCKS
EDECAYNR	(EXOG)	ECONOMIC DECAY OF NON-RESIDENTIAL CAPITAL
EDECAYR	(EXOG)	ECONOMIC DECAY OF RESIDENTIAL CAPITAL
EDGB	(EXOG)	STOCK OF PUBLIC SECTOR DEPOSITS (POUND STERLING) - TOTAL
EDLO	(EXOG)	CHANGE IN LIABILITIES TO OFFICIAL HOLDERS - BOP BASIS
EDLTDC	295	CHANGE IN DIRECT INVESTMENT CLAIMS ON FOREIGNERS
EDLTDCS	(EXOG)	MERGER TRANSACTIONS - DIRECT INVESTMENT OUTFLOWS
EDLTDL	296	CHANGE IN DIRECT INVESTMENT LIABILITIES TO FOREIGNERS
EDLTDLS	(EXOG)	MERGER TRANSACTIONS - DIRECT INVESTMENT INFLOWS
EDLTOC	(EXOG)	U.K. PRIVATE INVESTMENT OVERSEAS - OTHER
EDLTOL	(EXOG)	OVERSEAS INVESTMENT IN U.K. PRIVATE SECTOR - OTHER
EDLTPC	303	CHANGE IN LONG TERM PORTFOLIO CLAIMS ON FOREIGNERS
EDLTPL	304	CHANGE IN LONG TERM PORTFOLIO LIABILITIES TO FOREIGNERS
EDNFAG	318	CHANGE IN NET FOREIGN ASSETS OF THE GOVERNMENT
EDNFAP	305	NET PRIVATE CAPITAL OUTFLOW (BOP IDENTITY)
EDNUK	246	CHANGE IN TOTAL DEPOSITS AT U.K. BANKS - PUBLIC AND PRIVATE
EDNUKVC	(EXOG)	VALUATION CHANGE IN U.K. RESIDENTS TOTAL BANK DEPOSITS (FLOW)
EDNW	188	CHANGE IN NET WORTH - CURRENT PRICES (SA)
EDNWNSA	187	CHANGE IN NET WORTH - CURRENT PRICES (NSA)
EDOC	244	RESIDENT NON-STERLING DEPOSITS AT U.K. BANKS - PUBLIC AND PRIVATE - END QTR STOCKS
EDTF	243	OVERSEAS STERLING DEPOSITS AT U.K. BANKS - END OF QUARTER STOCKS
EDTR60	(EXOG)	60% OF TRANSIT ITEMS - FLOAT - END OF QUARTER STOCKS
EDVCONS	(EXOG)	DUMMY VARIABLE IN CONSUMPTION EQUATION
EDV66412	(EXOG)	DUMMY VARIABLE - FOREIGN EXCHANGE RESTRICTIONS 66:4 = 0.5 67:1-69:3 = 1.0
EDV714I	(EXOG)	DUMMY VARIABLE - NEW CREDIT CONTROLS - 71:4 = 0.5 72:1 ON = 1.0
EDV732I	(EXOG)	DUMMY VARIABLE - INTRODUCTION OF OPTION MORTGAGES THROUGH 73:1 = 1.0 73:2 ON = 0.9
EECDEP	293	ECONOMIC DEPRECIATION OF NON RESIDENTIAL INVESTMENT
EEFR	313	THREE MONTH FORWARD EXCHANGE RATE - US$/POUND STERLING
EEI	316	SPOT EXCHANGE RATE INDEX - 1972=1.00
EEINV	(EXOG)	INVESTMENT EXCHANGE RATE - US$/POUND STERLING
EER	314	SPOT EXCHANGE RATE - US$/POUND STERLING
EERFGW	315	WEIGHTED AVERAGE EXCHANGE RATE (GNP WEIGHTED)
EERFW	302	WEIGHTED AVERAGE EXCHANGE RATE (INVERTED NET PRIVATE CAPITAL EQUATION)
EESAB	(EXOG)	REAL GOVERNMENT SUBSIDIES - NIA BASIS
EESABV	186	SUBSIDIES - NIA BASIS - CURRENT PRICES (SA)
EFCAV	184	FACTOR COST ADJUSTMENT - CURRENT PRICES (SA)
EFCA1V	185	FACTOR COST ADJUSTMENT - CURRENT PRICES (NSA)
EFCECS	(EXOG)	FOREIGN CURRENCY BORROWING - EXCHANGE COVER SCHEME
EFCP	311	FOREIGN PORTFOLIO CLAIMS - TOTAL
EFDKPD	333	CHANGE IN FOREIGN PRIVATE CAPITAL STOCKS
EFDPFW1	327	EXPECTED FOREIGN AVERAGE INFLATION RATE
EFDSFCD	335	CHANGE IN FOREIGN PRIVATE CLAIMS ON REST OF WORLD
EFGNPFTW	320	FOREIGN REAL GNP (TRADE WEIGHTED)
EFGNPVFT	321	FOREIGN NOMINAL GNP (TRADE WEIGHTED)
EFLP	312	FOREIGN PORTFOLIO LIABILITIES - TOTAL
EFPEEA	(EXOG)	BANK OF ENGLAND FORWARD POSITION IN FOREIGN CURRENCY
EFPFW	325	FOREIGN AVERAGE ABSORPTION DEFLATOR FIXED WEIGHTS - 1972=1.00
EFPFW1	326	EXPECTED FOREIGN AVERAGE PRICE LEVEL - 1972=1.00
EFPGNPFG	324	FOREIGN GNP DEFLATOR (GNP WEIGHTED) - 1972=1.00
EFPRM	317	US$ FORWARD PREMIUM ON POUND STERLING - PERCENT PER YEAR
EFPVXWD	323	FOREIGN AVERAGE ABSORBTION DEFLATOR (VARIABLE WEIGHTED) - 1972=1.00
EFPXFTW	329	FOREIGN AVERAGE EXPORT UNIT VALUE - TRADE WEIGHTS - 1972=1.00
EFPXVMWD	328	FOREIGN AVERAGE EXPORT PRICE - VARIABLE IMPORT WEIGHTS - 1972=1.00
EFRL	332	FOREIGN WEIGHTED LONG TERM INTEREST RATES
EFRS	330	FOREIGN AVERAGE TREASURY BILL RATE
EFRSFGW	331	FOREIGN AVERAGE TREASURY BILL RATE (GNP WEIGHTED)
EFRTL	(EXOG)	GERMAN LINER FREIGHT INDEX - 1972=1.00
EFSFCPD	334	PRIVATE FOREIGN CLAIMS ON REST OF WORLD
EFUNFGW	322	FOREIGN UNEMPLOYMENT (GNP WEIGHTED)
EG	(EXOG)	GENERAL GOVERNMENT PURCHASES - 1972 PRICES (SA)
EGBAL	234	MERCHANDISE TRADE BALANCE
EGDEF	183	GOVERNMENT DEFICIT - NIA BASIS (PSBR)
EGDEFER	(EXOG)	RESIDUAL TERM IN GOVERNMENT DEFICIT EQUATION
EGDOV	259	NET AQUISITION OF PUBLIC SECTOR DEBT BY FOREIGNERS
EGDP	160	GROSS DOMESTIC PRODUCT - 1972 PRICES (SA)
EGDPSW	(PARM)	PARAMETER TO EXOGENIZE (=0) OR ENDOGENIZE (=1.0) UK GDP
EGDPV	161	GROSS DOMESTIC PRODUCT - CURRENT PRICES (SA)
EGDPVNSA	162	GROSS DOMESTIC PRODUCT - CURRENT PRICES (NSA)
EGDPVSW	(PARM)	PARAMETER TO EXOGENIZE (=0) OR ENDOGENIZE (=1.0) UK NOMINAL GDP
EGNP	163	GROSS NATIONAL PRODUCT - 1972 PRICES
EGNPPOT	282	POTENTIAL GNP (ESTIMATE DERIVED FROM THE PRODUCTION FUNCTION)
EGNPV	164	GROSS NATIONAL PRODUCT - CURRENT PRICES

MNEMONIC	EQUATION	DEFINITION
EGRANTNR	(EXOG)	TAX INCENTIVES NON-RESIDENTIAL INVESTMENT
EGRANTR	(EXOG)	TAX INCENTIVES RESIDENTIAL INVESTMENT
EGSBAL	236	BALANCE ON GOODS AND SERVICES
EGSD	(EXOG)	CHANGE IN PERCENTAGE RATE OF CALL - PER QUARTER
EGSPV	261	CHANGE IN NON-BANK LENDING TO THE PUBLIC SECTOR
EGTB	260	TOTAL SALES OF GOVERNMENT BONDS (GILTS)
EGV	180	GOVERNMENT PURCHASES - CURRENT PRICES (SA)
EGVNSA	181	GOVERNMENT PURCHASES - CURRENT PRICES (NSA)
EIF	167	TOTAL FIXED INVESTMENT - 1972 PRICES (SA)
EIFGG	(EXOG)	FIXED CAPITAL FORMATION - GENERAL GOVERNMENT - 1972 PRICES (SA)
EIFP	169	PRIVATE FIXED INVESTMENT - 1972 PRICES (SA)
EIFPG	(EXOG)	FIXED INVESTMENT - PUBLIC CORPORATIONS - 1972 PRICES (SA)
EIFPNR	157	PRIVATE NONRESIDENTIAL INVESTMENT - 1972 PRICES (SA)
EIFPVNSA	170	PRIVATE FIXED INVESTMENT - CURRENT PRICES (NSA)
EIFV	168	TOTAL FIXED INVESTMENT - CURRENT PRICES
EIHP	158	PRIVATE RESIDENTIAL CONSTRUCTION INVESTMENT - 1972 PRICES (SA)
EII	(EXOG)	PRIVATE INVENTORY INVESTMENT - 1972 PRICES (SA)
EIIVNSA	171	EGDPV - DETERMINES INVENTORY INVESTMENT (NSA)
EKGSP	263	STOCK OF NON-BANK LENDING TO THE PUBLIC SECTOR - END OF QUARTER STOCKS
EKHP	289	GROSS PRIVATE CAPITAL STOCK - HOUSING - 1972 PRICES - END OF QUARTER (SA)
EKII	291	STOCK OF INVENTORY INVESTMENT - 1972 PRICES - END OF QUARTER (SA)
EKLBG	262	STOCK OF BANK LENDING TO THE PUBLIC SECTOR - END OF QUARTER STOCKS
EKP	290	GROSS PRIVATE CAPITAL STOCK - 1972 PRICES - END OF QUARTER (SA)
EKPNR	288	GROSS PRIVATE CAPITAL STOCK - NON-RESIDENTIAL - 1972 PRICES - END OF QUARTER (SA)
ELBG	(EXOG)	CHANGE IN BANK LENDING TO THE PUBLIC SECTOR
ELE	283	EMPLOYMENT - THOUSANDS (SA)
ELF	284	LABOR FORCE - THOUSANDS
ELHOURS	281	WEEKLY LABOUR HOURS WORKED
ELIFENR	(EXOG)	LIFE OF NON-RESIDENTIAL CAPITAL ASSETS
ELTDC	297	STOCK OF DIRECT INVESTMENT CLAIMS ON FOREIGNERS
ELTDL	298	STOCK OF DIRECT INVESTMENT LIABILITIES TO FOREIGNERS
ELTOC	309	STOCK OF OTHER LONG TERM CLAIMS ON FOREIGNERS
ELTOL	310	STOCK OF OTHER LONG TERM LIABILITIES TO FOREIGNERS
ELTPC	307	STOCK OF PRIVATE PORTFOLIO CLAIMS ON FOREIGNERS
ELTPL	308	STOCK OF PRIVATE PORTFOLIO LIABILITIES TO FOREIGNERS
EMG	205	TOTAL U.K. GOODS IMPORTS - 1972 PRICES (FOB)
EMGOL	197	OIL IMPORTS - MILLIONS OF BARRELS PER DAY
EMGOLER	(EXOG)	RESIDUAL TERM IN PHYSICAL OIL IMPORTS IDENTITY
EMGOLV	198	OIL IMPORTS - VALUE
EMGSNI	221	IMPORTS - NIA BASIS - 1972 PRICES (SA)
EMGSNIV	220	IMPORTS - NIA BASIS - CURRENT PRICES (SA)
EMGSNIVS	219	IMPORTS - NIA BASIS - CURRENT PRICES (NSA)
EMGSV	218	IMPORTS OF GOODS AND SERVICES - BOP BASIS
EMGV	204	TOTAL U.K. GOODS IMPORTS - BOP BASIS
EMGVER	(EXOG)	RESIDUAL TERM TO RECONCILE U.K. ECONOMIC TRENDS AND DIRECTION OFTRADE DATA
EMSOV	212	IMPORTS OF OTHER SERVICES
EMSV	217	IMPORTS OF SERVICES - TOTAL
EMSYDV	213	DIRECT INVESTMENT INCOME PAYMENT
EMSYNDV	214	NON DIRECT INVESTMENT INCOME PAYMENT
EMSYV	216	INVESTMENT INCOME PAYMENTS
EMTRANV	215	TRANSFER PAYMENTS - TOTAL
EM1	(EXOG)	MONEY SUPPLY - M1 - END OF QUARTER STOCKS
EM3	250	MONEY SUPPLY - M3 - END OF QUARTER STOCKS
EM3ER	(EXOG)	RESIDUAL IN M3 EQUATION
EM3S	251	MONEY SUPPLY - STERLING M3 - END OF QUARTER STOCKS
EM3V	249	CHANGE IN MONEY SUPPLY - M3
ENETXNI	237	NET EXPORTS - GOODS AND SERVICES - NIA BASIS - 1972 PRICES (SA)
ENFAG	319	STOCK OF NET FOREIGN ASSETS OF THE GOVERNMENT - END OF QUARTER STOCKS
ENGKA	(EXOG)	OFFICIAL LONG TERM CAPITAL INFLOWS (BOP)
ENW	190	NET WORTH - END OF QUARTER (SA)
ENWNSA	189	NET WORTH - END OF QUARTER (NSA)
EP	264	DOMESTIC ABSORPTION DEFLATOR - 1972=1.00 (SA)
EPCHGNP	175	PERCENTAGE CHANGE IN GNP - ANNUAL RATE
EPCHM1	248	PERCENTAGE CHANGE IN M1 - ANNUAL RATE
EPCHP	279	PERCENTAGE CHANGE IN PRICE LEVEL - ANNUAL RATE
EPCHW	286	PERCENTAGE CHANGE IN WAGES - ANNUAL RATE
EPCPI	266	CONSUMER PRICE INDEX - 1972=100.00
EPDOM	276	IMPLICIT DEFLATOR - DOMESTIC ABSORPTION - 1972=1.00
EPEXP	278	INFLATION EXPECTATIONS - MOVING AVERAGE
EPFCA	270	FACTOR COST ADJUSTMENT DEFLATOR - 1972=1.00 (SA)
EPGDP	272	GROSS DOMESTIC PRODUCT DEFLATOR - 1972=1.00 (SA)
EPGNP	273	GNP DEFLATOR - 1972=1.00
EPMGSNI	274	IMPORT DEFLATOR - NIA BASIS - 1972=1.00 (SA)
EPMGUV	271	IMPORT UNIT VALUE INDEX - 1972=1.00 (SA)
EPMNOIL	275	IMPORT DEFLATOR - NON-OIL IMPORT - 1972=1.00 (SA)
EPMS	268	DEFLATOR FOR IMPORTS OF SERVICES - 1972=1.00
EPOP	(EXOG)	U.K. POPULATION - PERSONS - THOUSANDS
EPREM	(EXOG)	PREMIUM ON INVESTMENT CURRENCY
EPWPI	265	WHOLESALE PRICE INDEX - MANUFACTURING OUTPUT - 1972=1.00
EPXGUV	267	EXPORT UNIT VALUE INDEX - 1972=1.00
EPXS	269	DEFLATOR FOR EXPORTS OF SERVICES - 1972=1.00
EP1	277	EXPECTED ONE PERIOD AHEAD INFLATION RATE
EQOL	(EXOG)	U.K. PRODUCTION OF PETROLEUM - MILLIONS OF BARRELS PER DAY
ERBD	255	RATE ON LONDON CLEARING BANK DEPOSIT ACCOUNTS
ERD	(****)	BANK OF ENGLAND MINIMUM LENDING RATE
ERL	256	2-1/2% CONSOL RATE
ERLHZ	258	BUILDING SOCIETIES MORTGAGE RATE

MNEMONIC	EQUATION	DEFINITION
ERLTDC	299	REAL STOCK OF DIRECT CLAIMS
ERLTDL	300	REAL STOCK OF DIRECT LIABILITIES
ERLW	257	3-1/2% WAR LOAN RATE
ERR	(EXOG)	RESERVE RATIO FOR U.K. BANKS (REQUIRED RESERVE DEPOSITS/ELIGIBLE LIABILITIES)
ERS	253	91 DAY TREASURY BILL RATE
ERSLA	254	LOCAL AUTHORITIES TEMPORARY LOAN RATE - 3 MONTH
ESAFCV	(EXOG)	SEASONAL ADJUSTMENT FACTOR - ECV
ESAFDNW	(EXOG)	SEASONAL ADJUSTMENT FACTOR - EDNW
ESAFFCAV	(EXOG)	SEASONAL ADJUSTMENT FACTOR - EFCAV
ESAFGDPV	(EXOG)	SEASONAL ADJUSTMENT FACTOR - EGDPV
ESAFGV	(EXOG)	SEASONAL ADJUSTMENT FACTOR - EGV
ESAFIFGV	(EXOG)	SEASONAL ADJUSTMENT FACTOR - EIFGV
ESAFIFPV	(EXOG)	SEASONAL ADJUSTMENT FACTOR - EIFPV
ESAFIFV	(EXOG)	SEASONAL ADJUSTMENT FACTOR - EIFV
ESAFMNIV	(EXOG)	SEASONAL ADJUSTMENT FACTOR - EMGSNIV
ESAFTEV	(EXOG)	SEASONAL ADJUSTMENT FACTOR - ETEV
ESAFXNIV	(EXOG)	SEASONAL ADJUSTMENT FACTOR - EXGSNIV
ESAFYDV	(EXOG)	SEASONAL ADJUSTMENT FACTOR - EYDV
ESBAL	235	BALANCE ON SERVICES
ESDRGIMF	(EXOG)	ALLOCATION OF SDR AND GOLD SUBSCRIPTION TO IMF
ESHARDOM	(EXOG)	DOMESTIC SHARE OF GDP (IMPORTS REMOVED) (SA)
ESOL	(EXOG)	U.K. PETROLEUM STOCKS - MILLIONS OF BARRELS PER DAY
ETD	242	TIME DEPOSITS HELD BY RESIDENTS - END OF QUARTER STOCKS
ETDEP	245	TOTAL LOANABLE FUNDS OF COMMERCIAL BANKS - END OF QUARTER STOCKS
ETEAV	178	TAXES ON EXPENDITURES (VAT) (SA)
ETEV	182	TAXES ON EXPENDITURES (VAT) (NSA)
ETPROV	179	CUSTOMS DUTIES
ETRANV	176	GOVERNMENT TRANSFERS TO PRIVATE SECTOR
ETRY	(EXOG)	STANDARD RATE OF INCOME TAX
ETRYC	(EXOG)	ANNUAL TAX RATE ON CORPORATE INCOME
ETV	177	TOTAL GOVERNMENT REVENUE
EUCNR	292	USER COST OF CAPITAL FOR NON RESIDENTIAL INVESTMENT
EUCR	294	USER COST OF CAPITAL FOR RESIDENTIAL INVESTMENT
EUN	285	UNEMPLOYMENT RATE
EW	280	HOURLY WAGE RATE IN MANUFACTURING - 1972=100.00
EWTMC	(EXOG)	SHARE OF GOODS IMPORT FROM CANADA OF TOTAL U.K. IMPORTS (US$)
EWTMG	(EXOG)	SHARE OF GOODS IMPORT FROM GERMANY OF TOTAL U.K. IMPORTS (US$)
EWTMJ	(EXOG)	SHARE OF GOODS IMPORT FROM JAPAN OF TOTAL U.K. IMPORTS (US$)
EWTMO	(EXOG)	SHARE OF GOODS IMPORT FROM OPEC OF TOTAL U.K. IMPORTS (US$)
EWTMR	(EXOG)	SHARE OF GOODS IMPORT FROM REST OF WORLD - EXCL. OPEC - OF U.K. IMPORTS ($US)
EWTMU	(EXOG)	SHARE OF GOODS IMPORT FROM U.S. OF TOTAL U.K. IMPORTS (US$)
EWTXC	(EXOG)	SHARE OF EXPORTS TO CANADA OF U.K. GOODS EXPORTS TO OTHER MCM COUNTRIES (US$)
EWTXG	(EXOG)	SHARE OF EXPORTS TO GERMANY OF U.K. GOODS EXPORTS TO OTHER MCM COUNTRIES (US$)
EWTXJ	(EXOG)	SHARE OF EXPORTS TO JAPAN OF U.K. GOODS EXPORTS TO OTHER MCM COUNTRIES (US$)
EWTXU	(EXOG)	SHARE OF EXPORTS TO U.S. OF U.K. GOODS EXPORTS TO OTHER MCM COUNTRIES (US$)
EXETV	208	U.K. GOODS EXPORTS TO OTHER MCM COUNTRIES (US$)
EXG	211	TOTAL U.K. GOODS EXPORTS - 1972 PRICES
EXGER2	(EXOG)	RESIDUAL IN EXPORT EQUATION
EXGOL	(EXOG)	U.K. EXPORTS OF PETROLEUM - MILLIONS OF BARRELS PER DAY (NSA)
EXGOLV	206	OIL EXPORTS - VALUE
EXGSNI	232	EXPORTS - NIA BASIS - 1972 PRICES (SA)
EXGSNIS	231	EXPORTS - NIA BASIS - 1972 PRICES (NSA)
EXGSNIV	230	EXPORTS - NIA BASIS - CURRENT PRICES (SA)
EXGSNIVS	229	EXPORTS - NIA BASIS - CURRENT PRICES (NSA)
EXGSV	228	EXPORTS OF GOODS AND SERVICES
EXGV	210	TOTAL U.K. GOODS EXPORTS - BOP BASIS
EXGVADJ	(EXOG)	ADJUSTMENT TO NOMINAL EXPORTS (=EXGOLV)
EXSOV	222	EXPORTS OF OTHER SERVICES
EXSV	227	EXPORTS OF SERVICES - TOTAL
EXSYDV	223	DIRECT INVESTMENT INCOME RECEIPTS
EXSYNDV	224	NON-DIRECT INVESTMENT INCOME RECEIPTS
EXSYV	226	INVESTMENT INCOME RECEIPTS
EXTRANGV	(EXOG)	GOVERNMENT TRANSFER CREDITS - BOP BASIS - CURRENT PRICES
EXTRANPV	225	PRIVATE TRANSFER RECEIPTS
EXTRANV	233	TOTAL TRANSFER RECEIPTS
EYD	174	DISPOSABLE INCOME PROXY - 1972 PRICES (SA)
EYDV	173	DISPOSABLE INCOME PROXY - CURRENT PRICES (SA)
EYDVNSA	172	DISPOSABLE INCOME PROXY - CURRENT PRICES (NSA)
GARRRFD	(EXOG)	AVERAGE REQUIRED RESERVE RATIO ON FOREIGN DEPOSITS
GATB	(EXOG)	ADJUSTMENT TO TRADE BALANCE (MAINLY TRANSIT TRADE)
GC	336	PRIVATE CONSUMPTION EXPENDITURE - 1972 PRICES
GCBM	(EXOG)	ACTUAL VALUE OF CENTRAL BANK MONEY
GCBMC	443	CALCULATED VALUE OF CENTRAL BANK MONEY
GCBMSA	445	ACTUAL VALUE OF CENTRAL BANK MONEY (SA)
GCCAVNSA	340	CAPITAL CONSUMPTION ALLOWANCE - CURRENT PRICES (NSA)
GCOL	371	OIL CONSUMPTION - MILLIONS OF BARRELS PER DAY
GCU	468	CAPACITY UTILIZATION RATE
GCUR	421	CURRENCY HELD BY RESIDENTS - PRIVATE
GCURB	434	CURRENCY HELD BY BANKS
GCURBAL	420	CURRENT ACCOUNT BALANCE
GCVNSA	346	PRIVATE CONSUMPTION EXPENDITURE - CURRENT PRICES (NSA)
GDD	426	DEMAND DEPOSITS - TOTAL
GDDG	(EXOG)	DEMAND DEPOSITS HELD BY GOVERNMENT - TOTAL
GDDP	422	DEMAND DEPOSITS HELD BY RESIDENTS - PRIVATE
GDEBTNSA	364	GOVERNMENT DEBT - NIA BASIS
GDECAYNR	(EXOG)	ECONOMIC DEPRECIATION RATE - NON-RESIDENTIAL
GDECAYR	(EXOG)	ECONOMIC DEPRECIATION RATE - RESIDENTIAL

MNEMONIC	EQUATION	DEFINITION
GDFAGVAL	(EXOG)	BOP ALLOCATION OF SDR AND VALUATION EFFECT ON RESERVES DUE TO DM PARITY CHANGES
GDLO	(EXOG)	CHANGE IN S.T. LIABILITIES OF DOM. CREDIT INST. TO FORN. MONETARY AUTHORITIES
GDLTDC	479	CHANGE IN DIRECT INVESTMENT CLAIMS ON FOREIGNERS
GDLTDL	481	CHANGE IN DIRECT INVESTMENT LIABILITIES TO FOREIGNERS
GDNFAG	491	CHANGE IN NET FOREIGN ASSETS OF THE GOVERNMENT
GDNFAGT	492	CHANGE IN NET FOREIGN ASSETS OF THE GOVERNMENT INCLUDING VALUATION ADJUSTMENT
GDNFAP	486	NET PRIVATE CAPITAL OUTFLOW
GDNWFVNS	365	CHANGE IN FINANCIAL NET WORTH
GDT	428	TOTAL DEPOSITS
GEANDO	485	ERRORS AND OMISSIONS
GECDEP	478	ECONOMIC DEPRECIATION
GEFP	488	THREE MONTH FORWARD EXCHANGE PREMIUM
GEI	490	SPOT EXCHANGE RATE INDEX - US$/DM
GER	489	SPOT EXCHANGE RATE - US$/DM
GERFCW	507	EXCHANGE RATE - WEIGHTED BY FOREIGN CLAIMS
GERFW	483	WEIGHTED AVERAGE EXCHANGE RATE
GFCP	487	FINANCIAL PORTFOLIO CLAIMS ON FOREIGNERS
GFCUFCW	502	FOREIGN CAPACITY UTILIZATION - WEIGHTED BY FOREIGN CLAIMS
GFD	425	ALL FOREIGN HELD MARK DEPOSITS AT GERMAN BANKS
GFGNPFTW	505	REAL FOREIGN GNP - FIXED TRADE WEIGHTS
GFGNPVFT	506	NOMINAL FOREIGN GNP - FIXED TRADE WEIGHTS
GFLOAT	(EXOG)	DUMMY FOR FLOATING EXCHANGE RATE
GFLP	484	FINANCIAL PORTFOLIO LIABILITIES TO FOREIGNERS
GFNWD	494	FOREIGN NET WORTH - US$
GFPFW	496	FOREIGN AVERAGE ABSORPTION DEFLATOR - BY FIXED WEIGHTS - 1972=1.00
GFPGNEXP	498	EXPECTED FOREIGN INFLATION
GFPGNPFC	501	FOREIGN PRICE LEVEL - GNP BASIS - WEIGHTED BY FOREIGN CLAIMS - 1972=1.00
GFPGNPFW	497	FOREIGN ABSORPTION DEFLATOR - 1972=1.00
GFPGNP1	499	EXPECTED FOREIGN PRICE LEVEL - 1972=1.00
GFPXFTW	508	FOREIGN EXPORT UNIT VALUE - BY FIXED TRADE WEIGHTS - 1972=1.00
GFPXVWD	495	FOREIGN AVERAGE EXPECTED PRICES - BY VARIABLE WEIGHTS - 1972=1.00 (US$)
GFRSFCW	503	FOREIGN SHORT-TERM INTEREST RATE - WEIGHTED BY FOREIGN CLAIMS
GFRSFLW	504	FOREIGN SHORT-TERM INTEREST RATE - WEIGHTED BY FOREIGN LIABILITIES
GFRSFW	500	FOREIGN AVERAGE TREASURY BILL RATE
GG	(EXOG)	REAL GOVERMENT PURCHASES - 1972 PRICES
GGBAL	415	TRADE BALANCE
GGDEFNSA	363	GOVERNMENT DEFICIT - NIA BASIS (NSA)
GGIP	359	GOVERNMENT INTEREST PAYMENTS
GGNP	341	GROSS NATIONAL PRODUCT - 1972 PRICES
GGNPL	342	8-QUARTER MOVING AVERAGE OF GGNP
GGNPNSA	345	GROSS NATIONAL PRODUCT - 1972 PRICES (NSA)
GGNPPOT	464	POTENTIAL GNP
GGNPV	343	GROSS NATIONAL PRODUCT - CURRENT PRICES
GGNPVNSA	344	GROSS NATIONAL PRODUCT - CURRENT PRICES (NSA)
GGRANTNR	(EXOG)	GOVERNMENT GRANTS (TAX INCENTIVES) - NON-RESIDENTIAL
GGRANTR	(EXOG)	GOVERNMENT GRANTS (TAX INCENTIVES) - RESIDENTIAL
GGSBAL	417	BALANCE ON GOODS AND SERVICES
GGVNSA	361	GOVERNMENT PURCHASES - CURRENT PRICES (NSA)
GIF	348	TOTAL FIXED INVESTMENT - 1972 PRICES
GIFG	(EXOG)	GOVERMENT FIXED INVESTMENT - 1972 PRICES
GIFGVNSA	362	GOVERNMENT FIXED INVESTMENT - CURRENT PRICES (NSA)
GIFP	347	PRIVATE FIXED INVESTMENT - 1972 PRICES
GIFPNR	337	PRIVATE NONRESIDENTIAL INVESTMENT - 1972 PRICES
GIFPR	338	PRIVATE FIXED RESIDENTIAL INVESTMENT - 1972 PRICES
GIFV	349	TOTAL FIXED INVESTMENT - CURRENT PRICES
GIFVNSA	350	TOTAL FIXED INVESTMENT - CURRENT PRICES (NSA)
GII	339	INVENTORY INVESTMENT - 1972 PRICES
GIINSA	353	INVENTORY INVESTMENT - 1972 PRICES (NSA)
GIIV	352	INVENTORY INVESTMENT - CURRENT PRICES
GIIVNSA	351	INVENTORY INVESTMENT - CURRENT PRICES (NSA)
GK	473	TOTAL GROSS CAPITAL STOCK
GKG	472	GOVERNMENT GROSS CAPITAL STOCK
GKII	474	STOCK OF INVENTORY INVESTMENT
GKP	471	PRIVATE GROSS CAPITAL STOCK
GKPNR	470	PRIVATE GROSS CAPITAL STOCK - NON-RESIDENTIAL
GKPR	469	PRIVATE GROSS CAPITAL STOCK - RESIDENTIAL
GLE	461	EMPLOYED PERSONS - EXCLUDING SELF-EMPLOYED - THOUSANDS (SA)
GLF	462	LABOR FORCE - THOUSANDS
GLHI	463	INDEX OF TOTAL HOURS OF LABOR
GLIFENR	(EXOG)	LIFE OF A NON-RESIDENTIAL ASSET (YEARS)
GLUNSA	466	MILLIONS OF UNEMPLOYED WORKERS (NSA)
GMG	385	TOTAL GERMAN GOODS IMPORTS - 1972 PRICES
GMGOL	378	OIL IMPORTS - MILLIONS OF BARRELS PER DAY
GMGOLER	(EXOG)	RESIDUAL TERM IN PHYSICAL OIL IMPORTS IDENTITY
GMGOLV	379	OIL IMPORTS - VALUE
GMGOVSHR	(EXOG)	SHARE OF OIL IMPORTS FROM OPEC
GMGSNI	402	IMPORTS - NIA BASIS - 1972 PRICES
GMGSNIS	401	IMPORTS - NIA BASIS - 1972 PRICES (NSA)
GMGSNIV	400	IMPORTS - NIA BASIS - CURRENT PRICES
GMGSNIVS	399	IMPORTS - NIA BASIS - CURRENT PRICES (NSA)
GMGSV	398	IMPORTS OF GOODS AND SERVICES - BOP BASIS
GMGV	384	TOTAL GERMAN GOODS IMPORTS - BOP BASIS
GMGVADJ	(EXOG)	ADJUSTMENT TO NOMINAL OIL IMPORTS
GMSOGV	(EXOG)	GOVERNMENT SERVICE ACCOUNT PAYMENTS
GMSOPV	391	PRIVATE IMPORTS OF OTHER SERVICES
GMSOV	396	IMPORTS OF OTHER SERVICES - TOTAL
GMSV	397	IMPORTS OF SERVICES - TOTAL

MNEMONIC	EQUATION	DEFINITION
GMSYDV	392	DIRECT INVESTMENT INCOME PAYMENTS
GMSYNDV	393	INDIRECT INVESTMENT INCOME PAYMENTS
GMSYV	395	INVESTMENT INCOME PAYMENTS
GMTRANGV	(EXOG)	GOVERNMENT TRANSFER PAYMENTS
GMTRANPV	394	TRANSFER PAYMENTS - PRIVATE
GM1	430	MONEY SUPPLY - M1
GM1P	429	PRIVATELY HELD M1
GM2	431	MONEY SUPPLY - M2
GM3	432	MONEY SUPPLY - M3
GNDD	441	DEMAND DEPOSITS HELD BY RESIDENTS LESS RESERVES
GNETXNI	418	NET EXPORTS OF GOODS AND SERVICES - NIA BASIS - 1972 PRICES
GNFAG	493	STOCK OF NET FOREIGN ASSETS OF THE GOVERNMENT
GNGKA	(EXOG)	NET GOVERMENT CAPITAL ACCOUNT
GNGPBB	(EXOG)	NET GOVERMENT POSITION WITH THE BUNDESBANK
GNW	369	NET WORTH
GNWFVNSA	366	STOCK OF FINANCIAL ASSETS
GNWKNSA	367	REAL VALUE OF FIXED AND INVENTORY INVESTMENT
GNWR	370	REAL NET WORTH
GNWVNSA	368	NOMINAL NET WORTH
GOTHBB	442	OTHER CLAIMS OF THE BUNDESBANK
GP	448	ABSORPTION DEFLATOR - 1972=1.00
GPCHCBM	447	PERCENTAGE CHANGE IN CENTRAL BANK MONEY - ANNUAL RATE (SA)
GPCHGNP	357	PERCENTAGE CHANGE IN GNP - ANNUAL RATE
GPCHM1	433	PERCENTAGE CHANGE IN M1 - ANNUAL RATE
GPCHP	455	PERCENTAGE CHANGE IN PRICE LEVEL - ANNUAL RATE
GPCHW	467	PERCENTAGE CHANGE IN WAGES - ANNUAL RATE
GPCPI	452	CONSUMER PRICE INDEX - 1976=100.00
GPDOM	457	DOMESTIC SHARE OF PRICE LEVEL (IMPORTS REMOVED) - 1972=1.00
GPEXP	458	EXPECTED RATE OF INFLATION - YEAR-ON-YEAR - PERCENT
GPGNP	453	GROSS NATIONAL PRODUCT DEFLATOR - 1972=1.00
GPIP	449	INDUSTRIAL PRICE INDEX - 1972=1.00
GPMGSNI	454	IMPORT DEFLATOR - NIA BASIS - 1972=1.00
GPMGUV	451	IMPORT UNIT VALUE INDEX - 1972=1.00
GPMNOIL	456	PRICE OF NON-OIL IMPORTS INDEX - 1972=1.00
GPOP	(EXOG)	GERMAN POPULATION - THOUSANDS
GPXGUV	450	EXPORT UNIT VALUE INDEX - 1972=1.00
GP1	459	ONE QUARTER AHEAD EXPECTED PRICE LEVEL PROXY
GQOL	(EXOG)	DOMESTIC CRUDE OIL PRODUCTION - MILLIONS OF BARRELS PER DAY
GRD	(EXOG)	LOMBARD RATE
GRESADJ	446	ADJUSTMENT TO GCBM TO ACCOUNT FOR 1974 RESERVE REQUIREMENTS
GRF	435	FREE LIQUID RESERVES
GRL	438	LONG TERM INTEREST RATE
GRLTDC	480	REAL LONG-TERM DIRECT CLAIMS
GRLTDL	482	REAL LONG-TERM DIRECT LIABILITIES
GRR	440	ACTUAL REQUIRED RESERVES
GRRC	439	CALCULATED VALUE OF REQUIRED RESERVES
GRRRDD	(EXOG)	REQUIRED RESERVE RATIO ON DEMAND DEPOSITS
GRRRSD	(EXOG)	REQUIRED RESERVE RATIO ON SAVINGS DEPOSITS
GRRRTD	(EXOG)	REQUIRED RESERVE RATIO ON TIME DEPOSITS
GRS	444	3-MONTH TREASURY BILL RATE
GRSAV	437	SAVINGS DEPOSIT RATE
GRTIME	436	TIME DEPOSIT RATE
GSAFCBM	(EXOG)	SEASONAL ADJUSTMENT FOR CENTRAL BANK MONEY
GSAFCV	(EXOG)	SEASONAL ADJUSTMENT FOR NOMINAL CONSUMPTION
GSAFGG	(EXOG)	SEASONAL ADJUSTMENT FOR GOVERNMENT EXPENDITURE
GSAFGNPV	(EXOG)	SEASONAL ADJUSTMENT FOR NOMINAL GNP
GSAFIFG	(EXOG)	SEASONAL ADJUSTMENT FOR FIXED INVESTMENT BY GOVERNMENT
GSAFIFV	(EXOG)	SEASONAL ADJUSTMENT FOR NOMINAL FIXED INVESTMENT
GSAFII	(EXOG)	SEASONAL ADJUSTMENT FOR INVENTORY INVESTMENT
GSAFIIV	(EXOG)	SEASONAL ADJUSTMENT FOR INVENTORY INVESTMENT
GSAFLU	(EXOG)	SEASONAL ADJUSTMENT FOR UNEMPLOYED WORKERS
GSAFMNIV	(EXOG)	SEASONAL ADJUSTMENT FOR NOMINAL IMPORTS
GSAFNW	(EXOG)	SEASONAL ADJUSTMENT FOR NET WORTH
GSAFXNIV	(EXOG)	SEASONAL ADJUSTMENT FOR NOMINAL EXPORTS
GSAFYDV	(EXOG)	SEASONAL ADJUSTMENT FOR NOMINAL DISPOSABLE INCOME
GSBAL	416	BALANCE ON SERVICE ACCOUNT
GSD	424	SAVINGS DEPOSITS HELD BY RESIDENTS - TOTAL
GSHARDOM	(EXOG)	DOMESTIC SHARE OF GNP (IMPORTS REMOVED)
GSOL	(EXOG)	STOCKS OF OIL - MILLIONS OF BARRELS PER DAY
GTD	427	TIME DEPOSITS HELD BY RESIDENTS - TOTAL
GTDG	(EXOG)	TIME DEPOSITS HELD BY GOVERNMENT
GTDP	423	TIME DEPOSITS HELD BY RESIDENTS - PRIVATE
GTRANBAL	419	TRANSFER PAYMENT BALANCE
GTRANVNS	358	GOVERNMENT TRANSFERS TO PRIVATE SECTOR (NSA)
GTRY	(EXOG)	PERSONAL INCOME TAX RATIO
GTRYC	(EXOG)	CORPORATE INCOME TAX RATIO
GTVNSA	360	TOTAL GOVERNMENT REVENUE (NSA)
GUCNR	476	REAL USER COST OF CAPITAL - NON-RESIDENTIAL
GUCNRV	477	NOMINAL USER COST OF CAPITAL - NON-RESIDENTIAL
GUCR	475	REAL USER COST OF CAPITAL - RESIDENTIAL
GUN	465	UNEMPLOYMENT RATE
GW	460	HOURLY WAGE RATE IN MANUFACTURING
GWTMC	(EXOG)	SHARE OF CANADA IN TOTAL GERMAN GOODS IMPORTS (US$)
GWTME	(EXOG)	SHARE OF U.K. IN TOTAL GERMAN GOODS IMPORTS (US$)
GWTMI	(EXOG)	SHARE OF NON-MCM INDUSTRIAL COUNTRIES IN TOTAL GERMAN GOODS IMPORTS (US$)
GWTMJ	(EXOG)	SHARE OF JAPAN IN TOTAL GERMAN GOODS IMPORTS (US$)
GWTML	(EXOG)	SHARE OF LDCS IN TOTAL GERMAN GOODS IMPORTS (US$)

MNEMONIC	EQUATION	DEFINITION
GWTMO	(EXOG)	SHARE OF OIL IMPORTS FROM OPEC OF TOTAL GERMAN GOODS IMPORTS (US$)
GWTMU	(EXOG)	SHARE OF U.S. IN TOTAL GERMAN GOODS IMPORTS (US$)
GXG	390	TOTAL GERMAN GOODS EXPORTS - 1972 PRICES
GXGOL	(EXOG)	EXPORTS OF PETROLEUM PRODUCTS
GXGSNI	414	EXPORTS - NIA BASIS - 1972 PRICES
GXGSNIS	413	EXPORTS - NIA BASIS - 1972 PRICES (NSA)
GXGSNIV	412	EXPORTS - NIA BASIS - CURRENT PRICES
GXGSNIVS	411	EXPORTS - NIA BASIS - CURRENT PRICES (NSA)
GXGSV	410	EXPORTS OF GOODS AND SERVICES - BOP BASIS
GXGV	389	TOTAL GERMAN GOODS EXPORTS - BOP BASIS
GXSOGV	(EXOG)	GOVERNMENT SERVICE ACCOUNT RECEIPTS
GXSOPV	403	PRIVATE EXPORTS OF OTHER SERVICES
GXSOV	408	EXPORTS OF OTHER SERVICES - TOTAL
GXSV	409	EXPORTS OF SERVICES - TOTAL
GXSYDV	404	DIRECT INVESTMENT INCOME RECEIPTS
GXSYNDV	405	INDIRECT INVESTMENT INCOME RECEIPTS
GXSYV	407	INVESTMENT INCOME RECEIPTS
GXTRANGV	(EXOG)	GOVERNMENT TRANFER RECEIPTS
GXTRANPV	406	TRANSFER RECEIPTS - PRIVATE
GYD	356	DISPOSABLE INCOME PROXY - 1972 PRICES
GYDV	355	DISPOSABLE INCOME - CURRENT PRICES
GYDVNSA	(EXOG)	DISPOSABLE INCOME - CURRENT PRICES (NSA)
GYDVNSAC	354	CALCULATED DISPOSABLE INCOME - CURRENT PRICES (NSA)
ICSUPPLY	(EXOG)	PROXY FOR OUTPUT IN NON-US INDUSTRIAL COUNTRIES (INDEX)
IPXGUV	923	EXPORT UNIT VALUE INDEX: NON-MCM INDUSTRIAL COUNTRIES - 1972=1.00
IPXGUVER	(EXOG)	RESIDUAL IN NON-MCM INDUSTRIAL COUNTRIES EXPORT UNIT VALUE INDEX EQUATION
IPXPRAM	(PARM)	PARAMETER IN EQUATION FOR IPXGUV (SET EQUAL TO 1.0)
JBDA	(EXOG)	SHARE OF DEMAND DEPOSITS HELD BY THE CENTRAL COOPERATIVE BANK OF AG. + FOR.
JBDL	(EXOG)	SHARE OF DEMAND DEPOSITS HELD BY LARGE SCALE BANKS
JBDM	(EXOG)	SHARE OF DEMAND DEPOSITS HELD BY MEDIUM SCALE BANKS
JBDS	(EXOG)	SHARE OF DEMAND DEPOSITS HELD BY SMALL SCALE BANKS
JBTA	(EXOG)	SHARE OF TIME DEPOSITS HELD BY THE CENTRAL COOPERATIVE BANK OF AG. + FOR.
JBTL	(EXOG)	SHARE OF TIME DEPOSITS HELD BY LARGE SCALE BANKS
JBTM	(EXOG)	SHARE OF TIME DEPOSITS HELD BY MEDIUM SCALE BANKS
JBTS	(EXOG)	SHARE OF TIME DEPOSITS HELD BY SMALL SCALE BANKS
JC	509	PRIVATE CONSUMPTION EXPENDITURE - 1972 PRICES
JCCAGV	(EXOG)	CAPITAL CONSUMPTION BY GOVERMENT
JCCAPV	512	PRIVATE CAPITAL CONSUMPTION ALLOWANCE - CURRENT PRICES
JCCAV	522	CAPITAL CONSUMPTION ALLOWANCE - CURRENT PRICES
JCCAVNSA	523	CAPITAL CONSUMPTION ALLOWANCE - CURRENT PRICES (NSA)
JCGVT	(EXOG)	MONETARY AUTHORITIES CLAIMS ON GOVERNMENT
JCIFR	(EXOG)	FOB/CIF INDEX
JCOL	540	OIL CONSUMPTION - VOLUME
JCU	642	CAPACITY UTILIZATION RATE
JCUR	603	CURRENCY HELD BY RESIDENTS - PRIVATE
JCURB	609	CURRENCY HELD BY BANKS
JCURBAL	602	CURRENT ACCOUNT BALANCE
JCURBALD	601	CURRENT ACCOUNT BALANCE (US$)
JCV	516	PRIVATE CONSUMPTION EXPENDITURE - CURRENT PRICES
JDD	604	DEMAND DEPOSITS HELD BY RESIDENTS
JDFGNPFW	688	CHANGE IN FOREIGN GNP - FIXED WEIGHTS (US$)
JDGVT	(EXOG)	MONETARY AUTHORITIES GOVERNMENT DEPOSITS
JDLTDC	651	CHANGE IN DIRECT INVESTMENT CLAIMS ON FOREIGNERS
JDLTDCD	650	CHANGE IN DIRECT INVESTMENT CLAIMS ON FOREIGNERS (US$)
JDLTDL	652	CHANGE IN DIRECT INVESTMENT LIABILITIES TO FOREIGNERS
JDLTDLD	(EXOG)	CHANGE IN LONG TERM DIRECT LIABILITIES (US$)
JDLTLOTH	(EXOG)	CHANGE IN OTHER LONG TERM LIABILITIES
JDLTPC	662	CHANGE IN LONG TERM PORTFOLIO CLAIMS
JDLTPCD	661	CHANGE IN LONG TERM PORTFOLIO CLAIMS (US$)
JDLTPL	663	CHANGE IN LONG TERM PORTFOLIO LIABILITIES
JDLTPLD	(EXOG)	CHANGE IN LONG TERM PORTFOLIO LIABILITIES (US$)
JDLTPPLD	(EXOG)	CHANGE IN LONG TERM PRIVATE PORTFOLIO LIABILITIES (US$)
JDNFAG	678	CHANGE IN NET FOREIGN ASSETS OF THE GOVERNMENT
JDNFAGD	677	CHANGE IN NET FOREIGN ASSETS OF THE GOVERNMENT (US$)
JDNFAP	659	CHANGE IN NET PRIVATE OUTFLOWS (BOP IDENTITY)
JDNW	538	CHANGE IN NET WORTH - CURRENT PRICES - QUARTERLY RATE
JDNWNSA	537	CHANGE IN NET WORTH - CURRENT PRICES - QUARTERLY RATE (NSA)
JDSTBC	666	CHANGE IN SHORT TERM BANKING CLAIMS ON FOREIGNERS
JDSTBL	667	CHANGE IN SHORT TERM BANKING LIABILITIES TO FOREIGNERS
JDSTK	669	CHANGE IN SHORT TERM NON-BANKING LIABILITIES TO FOREIGNERS
JDT	606	TOTAL DEPOSITS
JDVFYD	618	DUMMY VARIABLE FOR CONTROLS ON FREE YEN DEPOSITS
JEANDO	(EXOG)	ERRORS AND OMISSIONS ON BOP BALANCE SHEET
JECDEP	647	RATE OF DEPRECIATION OF PHYSICAL CAPITAL STOCK
JEI	674	SPOT EXCHANGE RATE INDEX (US$/YEN)
JEMG	676	IMPORT CONVERSION RATE (YEN/US$)
JEMGR	(EXOG)	RATIO OF IMPORT CONVERSION RATE TO MARKET EXCHANGE RATE
JER	672	SPOT EXCHANGE RATE (US$/YEN)
JERFCW	673	EXCHANGE RATE - WEIGHTED BY FOREIGN CLAIMS
JERFW	654	WEIGHTED AVERAGE EXCHANGE RATE
JEXG	675	EXPORT CONVERSION RATE (YEN/US$)
JEXGR	(EXOG)	RATIO OF EXPORT CONVERSION RATE TO MARKET EXCHANGE RATE
JFCP	683	FINANCIAL PORTFOLIO CLAIMS ON FOREIGNERS
JFCPD	684	FINANCIAL PORTFOLIO CLAIMS ON FOREIGNERS (US$)
JFCUFCW	689	FOREIGN AVERAGE CAPACITY UTILILIZATION - WEIGHTED BY FOREIGN CLAIMS
JFGNPFW	687	WEIGHTED AVERAGE FOREIGN GNP - FIXED WEIGHTS (US$)
JFKPB	664	CHANGE IN LONG TERM PORTFOLIO CLAIMS - NET

MNEMONIC	EQUATION	DEFINITION
JFLOAT	(EXOG)	DUMMY FOR FLOATING EXCHANGE RATE PERIOD (1 AFTER 73 1)
JFLP	685	FINANCIAL PORTFOLIO LIABILITIES TO FOREIGNERS
JFORDISC	671	THREE MONTH FOWARD EXCHANGE DISCOUNT
JFPFW	690	FOREIGN AVERAGE ABSORPTION DEFLATOR - FIXED WEIGHTS - 1972=1.00
JFPGNEXP	697	EXPECTED FOREIGN PRICE INFLATION- GNP BASED
JFPGNPFC	686	FOREIGN AVERAGE GNP DEFLATOR - WEIGHTED BY FOREIGN CLAIMS - 1972=1.00
JFPGNPFW	696	WEIGHTED AVERAGE FOREIGN GNP DEFLATOR - FIXED WEIGHTS - 1972=1.00 (US$)
JFPGNP1	698	EXPECTED AVERAGE FOREIGN GNP DEFLATOR - 1972=1.00
JFPXFTW	692	FOREIGN AVERAGE EXPORTS PRICES - FIXED WEIGHTS - 1972=1.00
JFPXGFMW	691	FOREIGN AVERAGE EXPORT PRICES - FIXED EXPORT WEIGHTS
JFRSFCW	694	FOREIGN AVERAGE SHORT TERM INTEREST RATES - FIXED CLAIM WEIGHTS
JFRSFLW	695	FOREIGN AVERAGE SHORT TERM INTEREST RATES - FIXED LIABILITY WEIGHTS
JFRSFW	693	FOREIGN AVERAGE SHORT-TERM INTEREST RATES - FIXED WEIGHTS
JG	(EXOG)	GENERAL GOVERNMENT PURCHASES
JGBAL	596	TRADE BALANCE
JGDEBT	536	STOCK OF GOVERNMENT DEBT
JGDEF	535	GOVERNMENT DEFICIT - NIA BASIS
JGNP	513	GROSS NATIONAL PRODUCT - 1972 PRICES
JGNPPOT	639	POTENTIAL GNP
JGNPV	514	GROSS NATIONAL PRODUCT - CURRENT PRICES
JGNPVNSA	515	GROSS NATIONAL PRODUCT - CURRENT PRICES (NSA)
JGRANTNR	(EXOG)	GOVERNMENT GRANTS (TAX INCENTIVES) - NON-RESIDENTIAL
JGSBAL	598	BALANCE ON GOODS AND SERVICES
JGV	529	GOVERNMENT PURCHASES - CURRENT PRICES
JGVNSA	530	GOVERNMENT PURCHASES - CURRENT PRICES (NSA)
JH	638	AVERAGE MONTHLY HOURS WORKED
JIFG	(EXOG)	FIXED INVESTMENT BY GOVERNMENT
JIFGV	531	GOVERNMENT FIXED INVESTMENT - CURRENT PRICES
JIFGVNSA	532	GOVERNMENT FIXED INVESTMENT - CURRENT PRICES (NSA)
JIFP	517	PRIVATE FIXED INVESTMENT - 1972 PRICES
JIFPNR	510	PRIVATE NONRESIDENTIAL INVESTMENT - 1972 PRICES
JIFPR	511	PRIVATE RESIDENTIAL INVESTMENT - 1972 PRICES
JIFPV	518	PRIVATE FIXED INVESTMENT - CURRENT PRICES
JIFPVNSA	519	PRIVATE FIXED INVESTMENT - CURRENT PRICES (NSA)
JII	(EXOG)	GROSS DOMENTIC CAPITAL FORMATION - INCREASE IN STOCKS
JIIV	520	INVENTORY INVESTMENT - CURRENT PRICES
JIIVNSA	521	INVENTORY INVESTMENT - CURRENT PRICES (NSA)
JKII	646	STOCK OF INVENTORY INVESTMENT
JKP	645	GROSS PRIVATE CAPITAL STOCK
JKPNR	644	GROSS PRIVATE CAPITAL STOCK - NON-RESIDENTIAL
JKPR	643	GROSS PRIVATE CAPITAL STOCK - RESIDENTIAL
JKRES	(EXOG)	CHANGE IN SHORT TERM MONEY MOVEMENTS EXCLUDING GOLD AND FOREIGN EXCHANGE
JLE	637	EMPLOYMENT
JLF	636	LABOR FORCE (10000 PERSONS)
JLTDKB	653	CHANGE IN LONG TERM DIRECT CLAIMS - NET
JLTPCD	660	STOCK OF LONG TERM PORTFOLIO CLAIMS (US$)
JLTPC0D	(EXOG)	STOCK VALUE OF LONG-TERM PORTFOLIO CLAIMS ON FOREIGNERS
JLTPC1D	655	STOCK OF LONG TERM PORTFOLIO CLAIMS (US$) - FLOATING RATE
JLTPLD	665	STOCK OF LONG TERM PORTFOLIO LIABILITIES (US$)
JLU	640	NUMBER OF UNEMPLOYED (10000 WORKERS)
JMG	557	TOTAL JAPANESE GOODS IMPORTS - 1972 PRICES
JMGOL	546	OIL IMPORTS - VOLUME
JMGOLER	(EXOG)	STATISTICAL DISCREPANCY IN VOLUME OF OIL IMPORTS EQUATION
JMGOLV	547	OIL IMPORTS - VALUE
JMGSNI	574	IMPORTS - NIA BASIS - 1972 PRICES
JMGSNINS	571	IMPORTS - NIA BASIS - 1972 PRICES (NSA)
JMGSNIV	573	IMPORTS - NIA BASIS - CURRENT PRICES
JMGSNIVS	572	IMPORTS - NIA BASIS - CURRENT PRICES (NSA)
JMGSV	570	IMPORTS OF GOODS AND SERVICES - BOP BASIS
JMGV	556	TOTAL JAPANESE GOODS IMPORTS - BOP BASIS
JMGVD	555	TOTAL JAPANESE GOODS IMPORTS - BOP BASIS (US$)
JMJOVER	(EXOG)	STATISTICAL DISCREPANCY IN OIL IMPORTS FROM OPEC EQUATION
JMSDYVD	577	DIRECT INVESTMENT INCOME PAYMENTS (US$)
JMSOGV	(EXOG)	ALL SERVICE ACCOUNT PAYMENTS OTHER THAN INVESTMENT INCOME - GOVERNMENT
JMSOPV	565	IMPORTS OF OTHER SERVICES - PRIVATE
JMSOV	566	IMPORTS OF OTHER SERVICES - TOTAL
JMSOYVD	578	IMPORTS OF OTHER SERVICES - TOTAL (US$)
JMSV	569	IMPORTS OF SERVICES - TOTAL
JMSYDV	562	DIRECT INVESTMENT INCOME PAYMENTS (YEN)
JMSYNDV	563	NONDIRECT INVESTMENT INCOME PAYMENTS (YEN)
JMSYV	568	INVESTMENT INCOME PAYMENTS
JMSYVD	567	INVESTMENT INCOME PAYMENTS (US$)
JMTRANGV	(EXOG)	TRANSFER PAYMENTS - GOVERNMENT
JMTRANPV	564	TRANSFER PAYMENTS - PRIVATE
JMTRANV	575	TRANSFER PAYMENTS - CURRENT PRICES
JM1	607	MONEY SUPPLY - M1
JM2	(EXOG)	MONEY SUPPLY - M2
JNETXNI	599	NET EXPORTS OF GOODS AND SERVICES - NIA BASIS - 1972 PRICES
JNFAG	679	STOCK OF NET FOREIGN ASSETS OF THE GOVERNMENT
JNFAGD	680	STOCK OF NET FOREIGN ASSETS OF THE GOVERNMENT (US$)
JNFAGOD	(EXOG)	NET FOREIGN ASSETS - GOLD RESERVES - IMF POSITION - SDR'S ONLY (US$)
JNFAGTD	682	STOCK OF NET FOREIGN ASSETS OF THE GOVERNMENT INCLUDING VALUATION ADJUSTMENT (US$)
JNGP	622	NET GOVERNMENT POSITION
JNW	539	NET WORTH
JOTH	(EXOG)	MONETARY AUTHORITIES UNCLASSIFIED ASSETS
JP	623	ABSORPTION DEFLATOR - 1972=1.00
JPARJRL	(PARM)	PARAMETER TO CHOOSE BETWEEN EQUATION JRLA (=0) AND JRLB (=1) TO DETERMINE JRL

MNEMONIC	EQUATION	DEFINITION
JPCPI	627	CONSUMER PRICE INDEX - 1972=1.00
JPDOM	632	DOMESTIC PRICE DEFLATOR - 1972=1.00
JPEXP	633	EXPECTED INFLATION RATE
JPGNP	629	GROSS NATIONAL PRODUCT DEFLATOR - 1972=1.00
JPMGSNI	630	IMPORT DEFLATOR - NIA BASIS - 1972=1.00
JPMGUV	628	IMPORT UNIT VALUE INDEX - 1972=1.00
JPMGUVD	626	IMPORT UNIT VALUE INDEX (US$) - 1972=1.00
JPMNOIL	631	NONOIL IMPORTS - 1972=1.00
JPOP	(EXOG)	POPULATION - THOUSANDS OF PERSONS
JPWPI	624	WHOLESALE PRICE INDEX - 1972=1.00
JPXGUV	625	EXPORT UNIT VALUE INDEX - 1972=1.00
JP1	634	ONE QUARTER AHEAD EXPECTED INFLATION RATE
JRB	621	MONETARY AUTHORITIES CLAIMS ON DEPOSIT MONEY BANKS
JRD	608	OFFICIAL DISCOUNT RATE OF THE BANK OF JAPAN
JRDS	615	WEIGHTED AVERAGE OF JRD AND JRS
JRF	620	FREE RESERVES
JRFY	617	PROXY FOR INTEREST RATE ON FREE YEN DEPOSITS
JRFYZ	616	DESIRED VALUE OF JRFY
JRHL	614	AVERAGE MORTGAGE INTEREST RATE
JRL	613	YIELD ON BANK DEBENTURES
JRLA	611	YIELD ON BANK DEBENTURES - AS A MOVING AVERAGE OF JRS
JRLB	612	YIELD ON BANK DEBENTURES - FROM A NET SUPPLY FUNCTION OF BANK DEBENTURES
JRLTDC	593	DIRECT INVESTMENT CLAIMS ON FOREIGNERS
JRLTDL	576	DIRECT INVESTMENT LIABILITIES TO FOREIGNERS
JRR	619	REQUIRED RESERVES
JRRDA	(EXOG)	REQUIRED RESERVE RATIO: CTRL. COOP. BANK OF AG. + FOR. - DEMAND DEPOSITS
JRRDL	(EXOG)	REQUIRED RESERVE RATIO ON DEMAND DEPOSITS HELD BY LARGE SCALE BANKS
JRRDM	(EXOG)	REQUIRED RESERVE RATIO ON DEMAND DEPOSITS HELD BY MEDIUM SCALE BANKS
JRRDS	(EXOG)	REQUIRED RESERVE RATIO ON DEMAND DEPOSITS HELD BY SMALL SCALE BANKS
JRRFY	(EXOG)	RESERVE REQUIREMENT FOR FREE YEN DEPOSITS
JRRSEC	(EXOG)	REQUIRED RESERVE RATIO ON BANK DEBENTURES
JRRTA	(EXOG)	REQUIRED RESERVE RATIO: CTRL. COOP. BANK OF AG. + FOR. - TIME DEPOSITS
JRRTL	(EXOG)	REQUIRED RESERVE RATIO ON TIME DEPOSITS HELD BY LARGE SCALE BANKS
JRRTM	(EXOG)	REQUIRED RESERVE RATIO ON TIME DEPOSITS HELD BY MEDIUM SCALE BANKS
JRRTS	(EXOG)	REQUIRED RESERVE RATIO ON TIME DEPOSITS HELD BY SMALL SCALE BANKS
JRS	610	INTEREST RATE ON CALL MONEY - INVERTED FREE RESERVES EQUATION
JRTD	(EXOG)	INTEREST RATE ON ONE YEAR TIME DEPOSITS
JRX	(EXOG)	EXCESS RESERVES
JSAFCCAV	(EXOG)	SEASONAL ADJUSTMENT FACTOR - JCCAV
JSAFDNW	(EXOG)	SEASONAL ADJUSTMENT FACTOR - JDNW
JSAFGNPV	(EXOG)	SEASONAL ADJUSTMENT FACTOR - JGNPV
JSAFGV	(EXOG)	SEASONAL ADJUSTMENT FACTOR - JGV
JSAFIFGV	(EXOG)	SEASONAL ADJUSTMENT FACTOR - JIFGV
JSAFIFPV	(EXOG)	SEASONAL ADJUSTMENT FACTOR - JIFPV
JSAFIIV	(EXOG)	SEASONAL ADJUSTMENT FACTOR - JIIV
JSAFMNI	(EXOG)	SEASONAL ADJUSTMENT FACTOR - JMGSNI
JSAFMNIV	(EXOG)	SEASONAL ADJUSTMENT FACTOR - JMGSNIV
JSAFTRAN	(EXOG)	SEASONAL ADJUSTMENT FACTOR - JTRANV
JSAFTV	(EXOG)	SEASONAL ADJUSTMENT FACTOR - JTV
JSAFXNI	(EXOG)	SEASONAL ADJUSTMENT FACTOR - JXGSNI
JSAFXNIV	(EXOG)	SEASONAL ADJUSTMENT FACTOR - JXGSNIV
JSAFYDV	(EXOG)	SEASONAL ADJUSTMENT FACTOR - JYDV
JSBAL	597	BALANCE ON SERVICES
JSDRCAD	(EXOG)	CUMULATIVE SDR ALLOCATIONS EXCLUDING VALUATION ADJUSTMENT
JSDRRATE	(EXOG)	US$/SDR RATE
JSEC	(EXOG)	OUTSTANDING CURRENT VALUE OF BANK DEBENTURES
JSHARDOM	(EXOG)	DOMESTIC SHARE OF GNP (IMPORTS REMOVED)
JSOL	(EXOG)	OIL STOCK - MILLIONS OF BARRELS PER DAY
JSTBC	656	STOCK OF SHORT TERM BANKING CLAIMS ON FOREIGNERS
JSTBER	(EXOG)	STATISTICAL DISCREPANCY IN FINANCIAL PORTFOLIO CLAIMS ON FOREIGNERS EQUATION
JSTBL	657	STOCK OF SHORT TERM BANKING LIABILITIES TO FOREIGNERS
JSTBLYD	658	FREE YEN DEPOSITS (US$)
JSTK	670	STOCK OF SHORT TERM NON-BANKING LIABILITIES TO FOREIGNERS
JSTKBB	668	STOCK OF SHORT TERM BANKING CLAIMS ON FOREIGNERS - NET
JTD	605	TIME DEPOSITS HELD BY RESIDENTS
JTRANBAL	600	TRANSFER PAYMENT BALANCE
JTRANV	527	GOVERMENT TRANSFERS TO PRIVATE SECTOR - CURRENT PRICES
JTRANVNS	533	GOVERNMENT TRANSFERS TO PRIVATE SECTOR (NSA)
JTRY	(EXOG)	PERSONAL INCOME TAX RATIO
JTRYC	(EXOG)	CORPORATE INCOME TAX RATIO
JTV	528	TOTAL GOVERNMENT REVENUE
JTVNSA	534	TOTAL GOVERNMENT REVENUE (NSA)
JUCNR	648	REAL USER COST OF CAPITAL - NON-RESIDENTIAL
JUCR	649	REAL USER COST OF CAPITAL - RESIDENTIAL
JUFLPY	(EXOG)	STOCK OF U.S. PRIVATE LIABILITIES TO FOREIGNERS (YEN)
JUN	641	UNEMPLOYMENT RATE
JVD	681	VALUATION ADJUSTMENT ON THE STOCK OF NET FOREIGN ASSETS
JW	635	HOURLY WAGE RATE IN MANUFACTURING
JWJRD	(EXOG)	PERCENTAGE OF BORROWED MONEY IN JWJRDT
JWTMTCV	(EXOG)	IMPORTS FROM CANADA AS A SHARE OF IMPORTS FROM MCM COUNTRIES + ROW
JWTMTEV	(EXOG)	IMPORTS FROM THE U.K. AS A SHARE OF IMPORTS FROM MCM COUNTRIES + ROW
JWTMTGV	(EXOG)	IMPORTS FROM GERMANY A SHARE OF IMPORTS FROM MCM COUNTRIES + ROW
JWTMTIV	(EXOG)	IMPORTS FROM NON-MCM COUNTRIES AS A SHARE OF IMPORTS FROM MCM COUNTRIES + ROW
JWTMTLV	(EXOG)	IMPORTS FROM LDC'S AS A SHARE OF IMPORTS FROM MCM COUNTRIES + ROW
JWTMTOV	(EXOG)	IMPORTS FROM OPEC AS A SHARE OF IMPORTS FROM MCM COUNTRIES + ROW
JWTMTUV	(EXOG)	IMPORTS FROM THE U.S. AS A SHARE OF IMPORTS FROM MCM COUNTRIES + ROW
JWTMTZV	(EXOG)	IMPORTS FROM ROW AS A SHARE OF IMPORTS FROM MCM COUNTRIES + ROW

MNEMONIC	EQUATION	DEFINITION
JXG	561	TOTAL JAPANESE GOODS EXPORTS - 1972 PRICES
JXGSNI	591	EXPORTS - NIA BASIS - 1972 PRICES
JXGSNINS	588	EXPORTS - NIA BASIS - 1972 PRICES (NSA)
JXGSNIV	590	EXPORTS - NIA BASIS - CURRENT PRICES
JXGSNIVS	589	EXPORTS - NIA BASIS - CURRENT PRICES (NSA)
JXGSV	587	EXPORTS OF GOODS AND SERVICES - BOP BASIS
JXGV	560	TOTAL JAPANESE GOODS EXPORTS - BOP BASIS
JXGVD	559	TOTAL JAPANESE GOODS EXPORTS - BOP BASIS (US$)
JXSDYVD	594	DIRECT INVESTMENT INCOME RECEIPTS (US$)
JXSOGV	(EXOG)	ALL SERVICE ACCOUNT RECIEPTS OTHER THAN INVESTMENT INCOME - GOVERNMENT
JXSOPV	582	EXPORTS OF OTHER SERVICES - PRIVATE
JXSOV	583	EXPORTS OF OTHER SERVICES - TOTAL
JXSOYVD	584	EXPORTS OF OTHER SERVICES (US$)
JXSV	586	EXPORTS OF SERVICES - TOTAL
JXSYDV	579	DIRECT INVESTMENT INCOME RECEIPTS (YEN)
JXSYNDV	580	NONDIRECT INVESTMENT INCOME RECEIPTS (YEN)
JXSYV	585	INVESTMENT INCOME RECIEPTS
JXSYVD	595	INVESTMENT INCOME RECIEPTS (US$)
JXTRANV	581	TRANSFER RECEIPTS - PRIVATE
JXTRANVD	592	TRANSFER RECEIPTS (US$)
JYD	526	DISPOSABLE INCOME - 1972 PRICES
JYDV	525	DISPOSABLE INCOME - CURRENT PRICES
JYDVNSA	524	DISPOSABLE INCOME - CURRENT PRICES (NSA)
LDSUPPLY	(EXOG)	PROXY FOR OUTPUT IN DEVELOPING COUNTRIES (INDEX) - 1976=1000.00
LPXGUV	924	EXPORT UNIT VALUE INDEX - NON-OIL LDC'S - 1972=1.00
LPXGUVER	(EXOG)	RESIDUAL IN NON-OIL LDC EXPORT UNIT VALUE INDEX EQUATION
LPXPRAM	(PARM)	PARAMETER IN EQUATION FOR LPXGUV (SET EQUAL TO 1.0)
MCEV	46	CANADIAN GOODS IMPORTS FROM U.K. - CURRENT PRICES (US$) (NSA)
MCGV	45	CANADIAN GOODS IMPORTS FROM GERMANY - CURRENT PRICES (US$) (NSA)
MCJV	44	CANADIAN GOODS IMPORTS FROM JAPAN - CURRENT PRICES (US$) (NSA)
MCM5GNP	921	WEIGHTED AVERAGE OF MCM COUNTRIES GNP
MCM5PXGD	925	EXPORT UNIT VALUE INDEX: MCM COUNTRIES - 1972=1.00 (US$)
MCRV	40	CANADIAN GOODS IMPORTS FROM REST-OF-WORLD - CURRENT PRICES (US$) (NSA)
MCTV	48	TOTAL CANADIAN GOODS IMPORTS - DOT BASIS - CURRENT PRICES (US$) (NSA)
MCUV	47	CANADIAN GOODS IMPORTS FROM U.S. - CURRENT PRICES (US$) (NSA)
MECV	199	U.K. GOODS IMPORTS FROM CANADA - CURRENT PRICES (US$) (NSA)
MEGV	193	U.K. GOODS IMPORTS FROM GERMANY - CURRENT PRICES (US$) (NSA)
MEJV	200	U.K. GOODS IMPORTS FROM JAPAN - CURRENT PRICES (US$) (NSA)
MERV	202	U.K. GOODS IMPORTS FROM REST-OF-WORLD - CURRENT PRICES (US$) (NSA)
METV	203	TOTAL U.K. GOODS IMPORTS - DOT BASIS - CURRENT PRICES (US$) (NSA)
MEUV	201	U.K. GOODS IMPORTS FROM U.S. - CURRENT PRICES (US$) (NSA)
MGCV	372	GERMAN GOODS IMPORTS FROM CANADA - CURRENT PRICES (US$) (NSA)
MGEV	373	GERMAN GOODS IMPORTS FROM U.K. - CURRENT PRICES (US$) (NSA)
MGIV	377	GERMAN GOODS IMPORTS FROM NON-MCM IND. COUNTRIES - CURRENT PRICES (US$) (NSA)
MGJV	381	GERMAN GOODS IMPORTS FROM JAPAN - CURRENT PRICES (US$) (NSA)
MGLV	376	GERMAN GOODS IMPORTS FROM LDC'S - CURRENT PRICES (US$) (NSA)
MGOV	380	GERMAN GOODS IMPORTS FROM OPEC - CURRENT PRICES (US$) (NSA)
MGTV	383	TOTAL GERMAN GOODS IMPORTS - DOT BASIS - CURRENT PRICES (US$) (NSA)
MGUV	382	GERMAN GOODS IMPORTS FROM U.S. - CURRENT PRICES (US$) (NSA)
MGZV	(EXOG)	TOTAL GERMAN IMPORTS FROM EASTERN BLOCK - CURRENT PRICES (US$) (NSA)
MJCV	551	JAPAN GOODS IMPORTS FROM CANADA - CURRENT PRICES (US$) (NSA)
MJEV	550	JAPAN GOODS IMPORTS FROM U.K. - CURRENT PRICES (US$) (NSA)
MJGV	552	JAPAN GOODS IMPORTS FROM GERMANY - CURRENT PRICES (US$) (NSA)
MJIV	545	JAPAN GOODS IMPORTS FROM NON-MCM IND. COUNTRIES - CURRENT PRICES (US$)(NSA)
MJLV	544	JAPAN GOODS IMPORTS FROM LDC'S - CURRENT PRICES (US$) (NSA)
MJOV	548	JAPANESE GOODS IMPORTS FROM OPEC - CURRENT PRICES (US$) (NSA)
MJRV	553	JAPAN GOODS IMPORTS FROM REST-OF-WORLD - CURRENT PRICES (US$) (NSA)
MJTV	554	TOTAL JAPAN GOODS IMPORTS - DOT BASIS - CURRENT PRICES (US$) (NSA)
MJUV	549	JAPANESE GOODS IMPORTS FROM U.S. - CURRENT PRICES (US$) (NSA)
MJZV	(EXOG)	TOTAL JAPAN IMPORTS FROM EASTERN BLOCK - CURRENT PRICES (US$) (NSA)
MUCV	734	U.S. GOODS IMPORTS FROM CANADA - CURRENT PRICES (US$) (NSA)
MUEV	735	U.S. GOODS IMPORTS FROM U.K. - CURRENT PRICES (US$) (NSA)
MUGV	736	U.S. GOODS IMPORTS FROM GERMANY - CURRENT PRICES (US$) (NSA)
MUJV	737	U.S. GOODS IMPORTS FROM JAPAN - CURRENT PRICES (US$) (NSA)
MURV	747	U.S. GOODS IMPORTS FROM REST-OF-WORLD - CURRENT PRICES (US$) (NSA)
MUTV	746	TOTAL U.S. GOODS IMPORTS - DOT BASIS - CURRENT PRICES (US$) (NSA)
OCMGOLX	(EXOG)	CANADIAN IMPORTS OF OIL FROM NON-OPEC COUNTRIES - MILLIONS OF BARRELS PER DAY
OCURBAL	929	OPEC CURRENT ACCOUNT BALANCE - CURRENT PRICES (US$) (NSA)
OEMGOLX	(EXOG)	U.K. IMPORTS OF OIL FROM NON-OPEC COUNTRIES - MILLIONS OF BARRELS PER DAY
OGMGOLX	(EXOG)	GERMAN IMPORTS OF OIL FROM NON-OPEC COUNTRIES - MILLIONS OF BARRELS PER DAY
OJMGOLX	(EXOG)	JAPANESE IMPORTS OF OIL FROM NON-OPEC COUNTRIES - MILLIONS OF BARRELS PER DAY
OMGV	927	OPEC TOTAL GOODS IMPORTS - CURRENT PRICES (US$) (NSA)
ONW	930	OPEC NET WORTH
OPOIL	(EXOG)	OPEC AVERAGE EXPORT PRICE OF OIL (US$/BARREL)
OPOIL72	(EXOG)	OPEC AVERAGE EXPORT PRICE OF OIL INDEX - 1972=1.00
OUMGOLX	(EXOG)	U.S. IMPORTS OF OIL FROM NON-OPEC COUNTRIES - MILLIONS OF BARRELS PER DAY
OXGV	928	OPEC TOTAL GOODS EXPORTS - CURRENT PRICES (US$) (NSA)
OXGVER	(EXOG)	RESIDUAL IN OPEC TOTAL GOODS EXPORTS IDENTITY
PIFSCOM	(EXOG)	IFS COMMODITY PRICE INDEX - PRIMARY AND AGR. PRODUCTS - EXCLUDING OIL
PPO	(EXOG)	UN DOLLAR EXPORT PRICE INDEX - PRIMARY PRODUCTS EXCLUDING CEREALS - 1972=1.00
Q4	(EXOG)	SEASONAL DUMMY: FOURTH QUARTER = 1.0
RED	914	3-MONTH EURODOLLAR DEPOSIT RATE
REM	(EXOG)	3-MONTH EUROMARK DEPOSIT RATE
RLIBBR	(EXOG)	LIBOR RATE (3 MONTH)
RMEB	915	3-MONTH EURODOLLAR BOND RATE
ROWIP	922	10-COUNTRY WEIGHTED AVERAGE ROW INDUSTRIAL PRODUCTION INDEX
ROWIPER	(EXOG)	RESIDUAL IN WEIGHTED AVERAGE ROW INDUSTUSTRIAL PRODUCTION INDEX IDENTITY

MNEMONIC	EQUATION	DEFINITION
ROWIPRAM	(PARM)	PARAMETER IN ROWIP EQUATION (SET EQUAL TO 1.0)
ROWPXG	926	R.O.W. EXPORT PRICE INDEX - 1972=1.00
ROWPXGER	(EXOG)	RESIDUAL IN ROW EXPORT PRICE INDEX IDENTITY
RPPRAM	(PARM)	PARAMETER IN ROWPXG EQUATION (SET EQUAL TO 1.0)
SANPCP	(EXOG)	NET BACK PRICE FOR SAUDI ARABIAN LIGHT CRUDE OIL
SAXPCP	(EXOG)	SAUDI ARABIAN EXPORT PRICE OF CRUDE OIL AND PETROLEUM
UALPHA1	(EXOG)	NOW ACCOUNT USAGE INDEX
UASMAL	(EXOG)	IMPLICIT RESERVE REQUIREMENT AGAINST DEMAND DEPOSITS AT MEMBER BANKS - RATIO
UBALPS	(EXOG)	TYPE OF DECLINING BALANCE IN STRUCTURES DEPRECIATION CALCULATIONS
UBALR	(EXOG)	TYPE OF DECLINING BALANCE IN RESIDENTIAL DEPRECIATION CALCULATIONS
UBPSAR	(EXOG)	SEASONAL FACTOR FOR CAPITAL ACCOUNT
UBSMAL	(EXOG)	IMPLICIT RESERVE REQUIREMENT AGAINST NET DEMAND DEPOSITS MEMBER BANKS - RATIO
UBTUFL	(EXOG)	CONVERSION FACTOR (BARRELS PER DAY PER BTU)
UBU	817	NONBORROWED MONETARY BASE
UC	699	PRIVATE CONSUMPTION EXPENDITURE - 1972 PRICES
UCAPGM	(EXOG)	CAPITAL GAINS AND LOSSES IN DIRECT INVESTMENT LIABILITIES
UCAPGMX	(EXOG)	CAPITAL GAINS AND LOSSES IN DIRECT INVESTMENT CLAIMS - MANUFACTURING
UCAPGOX	(EXOG)	CAPITAL GAINS AND LOSSES IN DIRECT INVESTMENT CLAIMS - OTHER
UCAPGPX	(EXOG)	CAPITAL GAINS AND LOSSES IN DIRECT INVESTMENT CLAIMS - PETROLEUM
UCCAV	704	CAPITAL CONSUMPTION ALLOWANCE - CURRENT PRICES
UCPCOMP	905	THIRD-COUNTRY COMPETING PRICES IN US-CANADA TRADE EQUATION - 1972=1.00
UCU	851	MANUFACTURING CAPACITY UTILIZATION RATE - PERCENT
UCUER	(EXOG)	RESIDUAL IN MANUFACTURING CAPACITY UTILIZATION EQUATION
UCUR	800	CURRENCY HELD BY RESIDENTS
UCURBAL	787	U.S. CURRENT ACCOUNT BALANCE
UCV	707	PRIVATE CONSUMPTION EXPENDITURE - CURRENT PRICES
UDD	801	DEMAND DEPOSITS HELD BY RESIDENTS
UDDG	(EXOG)	US GOVERNMENT DEMAND DEPOSITS SUBJECT TO RESERVE REQUIREMENTS
UDDIC	869	CHANGE IN DIRECT INVESTMENT CLAIMS ON FOREIGNERS - TOTAL (NSA)
UDDICM	866	CHANGE IN DIRECT INVESTMENT CLAIMS ON FOREIGNERS - MANUFACTURING (NSA)
UDDICO	865	CHANGE IN DIRECT INVESTMENT CLAIMS ON FOREIGNERS - OTHER (NSA)
UDDICOE	(EXOG)	DIRECT INVESTMENT CAPITAL OUTFLOWS TO NETHERLANDS ANTILLES - EQUITY
UDDICOIA	(EXOG)	DIRECT INVESTMENT CAPITAL OUTFLOWS TO NETHERLANDS ANTILLES - INTERCOMPANY ACCOUNTS
UDDICP	867	CHANGE IN DIRECT INVESTMENT CLAIMS ON FOREIGNERS - PETROLEUM (NSA)
UDDIL	868	CHANGE IN DIRECT INVESTMENT LIABILITIES TO FOREIGNERS (NSA)
UDDILSR	(EXOG)	DIRECT INVESTMENT CAPITAL INFLOW STRUCTURAL RESIDUAL
UDEANDO	(EXOG)	ERRORS AND OMISSIONS IN BALANCE OF PAYMENT OF ACCOUNTS (NSA)
UDECAYPD	(EXOG)	ECONOMIC DECAY RATE - DURABLES
UDECAYPS	(EXOG)	ECONOMIC DECAY RATE - PRODUCER'S STRUCTURES
UDECAYR	(EXOG)	ECONOMIC DECAY RATE - RESIDENTIAL INVESTMENT
UDFCG	(EXOG)	CHANGE IN GOVERNMENT ASSETS EXCLUDING SDR'S
UDFCGOLD	(EXOG)	CHANGE IN GOVERNMENT ASSETS - GOLD
UDFCP	879	CHANGE IN PRIVATE CLAIMS ON FOREIGNERS
UDFCPER	(EXOG)	RESIDUAL IN CHANGE IN PRIVATE CLAIMS ON FOREIGNERS EQUATION
UDFLG	881	CHANGE IN GOVERNMENT LIABLILITIES TO FOREIGNERS
UDFLP	880	CHANGE IN PRIVATE LIABILITIES TO FOREIGNERS
UDFLPER	(EXOG)	RESIDUAL IN CHANGE IN PRIVATE LIABILITIES TO FOREIGNERS EQUATION
UDICCPM	875	U.S. REAL DIRECT INVESTMENT CLAIMS ON FOREIGNERS - MANUFACTURING - 1972 PRICES
UDICCPO	876	U.S. REAL DIRECT INVESTMENT CLAIMS ON FOREIGNERS - OTHER - 1972 PRICES
UDICCPP	874	REAL DIRECT INVESTMENT CLAIMS ON FOREIGNERS - PETROLEUM - 1972 PRICES
UDICM	871	STOCK OF DIRECT INVESTMENT CLAIMS ON FOREIGNERS - MANUFACTURING
UDICO	872	STOCK OF DIRECT INVESTMENT CLAIMS ON FOREIGNERS - OTHER
UDICP	870	STOCK OF DIRECT INVESTMENT CLAIMS ON FOREIGNERS - PETROLEUM
UDIL	873	STOCK OF DIRECT INVESTMENT LIABILITIES TO FOREIGNERS
UDILCP	877	REAL DIRECT INVESTMENT LIABILITIES TO FOREIGNERS - 1972 PRICES
UDNFAG	(EXOG)	CHANGE IN TOTAL OFFICIAL RESERVE ASSETS - NET (NSA)
UDNFAP	878	CHANGE IN PRIVATE NET FOREIGN ASSETS (NSA)
UDNFASDR	(EXOG)	CHANGES IN GOVERNMENT FOREIGN ASSETS - SDRS
UDNW	724	CHANGE IN PRIVATE NET WORTH
UDVCOSP	(EXOG)	DUMMY VARIABLE ASSOCIATED WITH CALCULATION OF ECONOMIC DEPRECIATION FOR DURABLES
UDVCOSS	(EXOG)	DUMMY VARIABLE ASSOCIATED WITH CALCULATION OF ECONOMIC DEPRECIATION FOR STRUCTURES
UDVDDCB	(EXOG)	DUMMY VARIABLE: INCREASES FROM 1 TO 11 BY 1 FOR 74 1 - 76 3 AND =12 FROM 76 4 ON
UDVDSMNF	(EXOG)	DOCK STRIKE DUMMY FOR IMPORTS
UDVDSXNA	(EXOG)	DOCK STRIKE DUMMY FOR EXPORTS
UDVILST	(EXOG)	DUMMY FOR INTERNATIONAL LONGSHOREMENS STRIKE
UDV7279	(EXOG)	DUMMY VARIABLE: =1 FROM 72 1 TO 79 4
UECDPS1	857	ECONOMIC DEPRECIATION FOR PRODUCER DURABLES (STRAIGHT LINE CALCULATION)
UECDPS2	858	ECONOMIC DEPRECIATION FOR PRODUCER DURABLES (SUM OF YEARS)
UECDPS3	859	ECONOMIC DEPRECIATION FOR PRODUCER DURABLES (150% DEPRECIATION)
UECDPS4	860	ECONOMIC DEPRECIATION FOR PRODUCER DURABLES (175% DEPRECIATION)
UEIFTW	909	4-COUNTRY TRADE WEIGHTED EXCHANGE RATE (FOREIGN EXCHANGE/US$) - 1973=1.00
UEI10	910	FRB TRADE-WEIGHTED U.S. DOLLAR EXCHANGE RATE INDEX - 1973=100.00
UEI4FTW	908	4-COUNTRY TRADE WEIGHTED EXCHANGE RATE (FOREIGN EXCHANGE/US$) - 1973=1.00
UELC	727	AGGREGATE ENERGY CONSUMPTION (BTU'S)
UFCG	884	GOVERNMENT CLAIMS ON FOREIGNERS (END OF PERIOD)
UFCGAVG	888	GOVERNMENT CLAIMS ON FOREIGNERS (PERIOD AVERAGE)
UFCHPLDI	904	MOVING AVERAGE OF FOREIGN INFLATION - DIRECT INVESTMENT WEIGHTS
UFCP	882	PRIVATE CLAIMS ON FOREIGNERS (END OF PERIOD)
UFCPAVG	886	PRIVATE CLAIMS ON FOREIGNERS (PERIOD AVERAGE)
UFCPIFDW	899	FOREIGN WEIGHTED AVERAGE CPI - DIRECT INVESTMENT WEIGHTS - 1972=1.00
UFCPIFTW	901	FOREIGN WEIGHTED AVERAGE CPI - MULTILATERAL TRADE WEIGHTS - 1972=1.00
UFCUDIW	898	FOREIGN CAPACITY UTILIZATION - DIRECT INVESTMENT WEIGHTS - PERCENT
UFCUDWER	(EXOG)	RESIDUAL IN DIRECT INVESTMENT WEIGHTED FOREIGN CAPACITY UTILIZATION EQUATION
UFCUFW10	897	FOREIGN CAPACITY UTILIZATION - FOREIGN TRADE WEIGHTS - PERCENT
UFCU10ER	(EXOG)	STATISTICAL DISCREPANCY IN TRADE WEIGHTED FOREIGN CAPACITY UTILIZATION EQ.
UFEDER	(EXOG)	RESIDUAL IN G-10 FOREIGN GNP EQUATION (TRADE WEIGHTS)
UFEDI10	912	G-10 EXCHANGE RATE INDEX - DIRECT INVESTMENT WEIGHTS

MNEMONIC	EQUATION	DEFINITION
UFERFDIW	911	EXCHANGE RATE INDEX - DIRECT INVESTMENT WEIGHTS
UFGFTER	(EXOG)	RESIDUAL IN G-10 TRADE WEIGHTED FOREIGN GNP EQUATION
UFGNFGER	(EXOG)	RESIDUAL IN G-10 GNP WEIGHTED FOREIGN GNP EQUATION
UFGNFXER	(EXOG)	RESIDUAL IN WORLD FOREIGN ECONOMIC ACTIVITY EQUATION
UFGNPFGW	891	FOREIGN WEIGHTED AVERAGE GNP - GNP WEIGHTS
UFGNPFTW	893	FOREIGN WEIGHTED AVERAGE GNP - TRADE WEIGHTS
UFGNPFXW	895	FOREIGN WEIGHTED AVERAGE GNP - EXPORT WEIGHTS
UFGNPF10	894	G-10 FOREIGN GNP - TRADE WEIGHTS
UFGNPG10	892	G-10 FOREIGN GNP - GNP WEIGHTS
UFGNPXWM	896	WORLD FOREIGN ECONOMIC ACTIVITY - BILATERAL TRADE WEIGHTS
UFLCNS	728	DOMESTIC CONSUMPTION OF CRUDE OIL AND PRODUCTS (NSA)
UFLDICNV	(EXOG)	IMPORT CONVERSION FACTOR: DEPARTMENT OF ENERGY TO NIA BASIS
UFLG	885	GOVERNMENT LIABILITIES TO FOREIGNERS (END OF PERIOD)
UFLGAVG	889	GOVERNMENT LIABILITIES TO FOREIGNERS (PERIOD AVERAGE)
UFLP	883	PRIVATE LIABILITIES TO FOREIGNERS (END OF PERIOD)
UFLPAVG	887	PRIVATE LIABILITIES TO FOREIGNERS (PERIOD AVERAGE)
UFLPSCNS	729	PRIVATE OIL STOCKBUILDING (NSA)
UFLQLUNS	(EXOG)	DOMESTIC PETROLEUM PRODUCTION (LESS UNACCOUNTED FOR CRUDE)
UFLSPR	(EXOG)	STRATEGIC PETROLEUM RESERVE FILL RATE
UFLUCQNS	(EXOG)	DOMESTIC PETROLEUM STATISTICAL DISCREPANCY (UNACCOUNTED FOR CRUDE)
UFPCFUS	903	FOREIGN CONSUMER PRICE INDEX - 1972=100.00 (US$)
UFPCFW10	902	FOREIGN CONSUMER PRICE INDEX - TRADE WEIGHTS - 1970=100.00
UFPCPER	(EXOG)	RESIDUAL IN FOREIGN CONSUMER PRICE INDEX EQUATION (TRADE WEIGHTS)
UFPDER	(EXOG)	RESIDUAL IN FOREIGN CONSUMER PRICE INDEX EQUATION (DIRECT INVESTMENT WEIGHTS)
UFPDI10	900	FOREIGN CONSUMER PRICE INDEX - DIRECT INVESTMENT WEIGHTS - 1970=100.00
UFRSFTW	913	FOREIGN SHORT-TERM INTEREST RATES - MULTILATERAL TRADE WEIGHTS
UG	(EXOG)	GOVERNMENT PURCHASES OF GOODS AND SERVICES - FEDERAL STATE AND LOCAL - 1972 PRICES
UGBAL	788	TRADE BALANCE
UGDEBT	723	GOVERNMENT DEBT
UGDEF	722	GOVERNMENT DEFICIT -- FEDERAL STATE AND LOCAL - CURRENT PRICES
UGFRV	719	GOVERNMENT TRANSFERS TO FOREIGNERS
UGGV	(EXOG)	GOVERNMENT SUBSIDIES LESS SURPLUS OF GOVERNMENT ENTERPRISES
UGIV	715	GOVERNMENT INTEREST PAYMENTS
UGNP	705	GROSS NATIONAL PRODUCT - 1972 PRICES
UGNPER	(EXOG)	RESIDUAL IN GNP EQUATION -1972 PRICES
UGNPPOT	844	U.S. POTENTIAL GNP
UGNPV	706	GROSS NATIONAL PRODUCT - CURRENT PRICES
UGNPVER	(EXOG)	RESIDUAL IN GNP EQUATION - CURRENT PRICES
UGPCOMP	906	THIRD-COUNTRY COMPETING PRICES IN US-GERMAN TRADE EQUATION - 1972=1.00
UGRANTPD	(EXOG)	GRANTS(TAX INCENTIVES) FOR PRODUCER DURABLES
UGRANTR	(EXOG)	GRANTS(TAX INCENTIVES) FOR RESIDENTIAL INVESTMENT
UGSBAL	792	BALANCE OF GOODS AND SERVICES
UGV	720	GOVERNMENT PURCHASES - FEDERAL STATE AND LOCAL- 1972 PRICES
UIFP	703	PRIVATE FIXED INVESTMENT - 1972 PRICES
UIFPD	701	PRIVATE GROSS DURABLE EQUIPMENT INVESTMENT - 1972 PRICES
UIFPR	700	PRIVATE GROSS RESIDENTIAL INVESTMENT - 1972 PRICES
UIFPS	702	PRIVATE GROSS INVESTMENT IN PRODUCER'S STRUCTURES - 1972 PRICES
UIFPV	708	PRIVATE FIXED INVESTMENT - CURRENT PRICES
UII	(EXOG)	CHANGE IN REAL FARM AND NON-FARM BUSINESS INVENTORIES
UIIF	710	CHANGE IN FARM INVENTORIES - 1972 PRICES
UIIFV	(EXOG)	CHANGE IN FARM INVENTORIES - CURRENT PRICES
UIIV	709	CHANGE IN TOTAL PRIVATE INVENTORIES - CURRENT PRICES
UINTGF	716	GOVERNMENT INTEREST PAYMENTS TO FOREIGNERS
UJMSA	(EXOG)	SEASONAL ADJUSTMENT FACTOR FOR DEMAND DEPOSITS
UJMSB	(EXOG)	RATIO OF TOTAL DEMAND DEPOSITS TO DEMAND DEPOSITS SUBJECT TO RESERVE REQUIREMENTS
UJPCOMP	907	THIRD-COUNTRY COMPETING PRICES IN US-JAPAN TRADE EQUATIONS - 1972=1.00
UJTRANG	(EXOG)	BRIDGE FACTOR BETWEEN GOVERNMENT (NET) TRANSFER PAYMENTS IN GNP AND BOP ACCOUNTS
UJURS	(EXOG)	DISCREPANCY BETWEEN URS AND URS1
UKII	856	STOCK OF INVENTORY INVESTMENT
UKP	855	FIXED NET PRIVATE CAPITAL STOCK - 1972 PRICES
UKPD	853	PRIVATE NET STOCK OF DURABLE EQUIPMENT - 1972 PRICES
UKPR	852	PRIVATE NET RESIDENTIAL CAPITAL STOCK - 1972 PRICES
UKPS	854	PRIVATE NET STOCK OF PRODUCER'S STRUCTURES - 1972 PRICES
ULCHPCPI	828	DOMESTIC INFLATION - MOVING AVERAGE
ULE	845	EMPLOYMENT - TOTAL CIVILIAN - MILLIONS OF PERSONS
ULF	846	LABOR FORCE - MILLIONS OF PERSONS
ULH	843	HOURS PER EMPLOYEE (NON-FARM BUSINESS SECTOR)
ULIFEPD	(EXOG)	LIFE OF ASSET - PRODUCER DURABLES
ULIFEPS	(EXOG)	LIFE OF ASSET - PRODUCER STRUCTURES
ULIFER	(EXOG)	LIFE OF ASSET - RESIDENTIAL
ULU	847	UNEMPLOYED WORKERS - MILLIONS OF PERSONS
UMDS	813	DEMAND DEPOSITS SUBJECT TO RESERVE REQUIREMENTS
UMG	743	TOTAL US GOODS IMPORTS - 1972 PRICES
UMGFL	741	OIL IMPORTS - 1972 PRICES
UMGFLER	(EXOG)	RESIDUAL IN OIL IMPORTS EQUATION - 1972 PRICES
UMGFLV	740	OIL IMPORTS - CURRENT PRICES
UMGNFL	726	US NON-OIL IMPORTS OF GOODS - 1972 PRICES
UMGNFLV	738	US NON-OIL IMPORTS - CURRENT PRICES
UMGNI	745	MERCHANDISE IMPORTS - NIA BASIS - 1972 PRICES
UMGNIER	(EXOG)	RESIDUAL IN MERCHANDISE IMPORT EQUATION - 1972 PRICES
UMGNIV	744	MERCHANDISE IMPORTS - NIA BASIS - CURRENT PRICES
UMGOLD	(EXOG)	GOLD ADJUSTMENT TO BOP MERCHANDISE IMPORTS
UMGSNER	(EXOG)	RESIDUAL IN IMPORTS OF GOODS AND SERVICES - 1972 PRICES
UMGSNI	795	IMPORTS OF GOODS AND SERVICES - NIA BASIS - 1972 PRICES
UMGSNIV	794	IMPORTS OF GOODS AND SERVICES - NIA BASIS - CURRENT PRICES
UMGSV	791	TOTAL US GOODS IMPORTS - BOP BASIS
UMGSVNER	(EXOG)	RESIDUAL IN IMPORTS OF GOODS AND SERVICES EQUATION - CURRENT PRICES

MNEMONIC	EQUATION	DEFINITION
UMGV	742	TOTAL COMMODITY IMPORT VALUE
UMGVNAER	(EXOG)	RESIDUAL IN MERCHANDISE IMPORTS EQUATION - CURRENT PRICES
UMGVSF	(EXOG)	SEASONAL ADJUSTMENT FACTOR FOR U.S. GOODS IMPORTS
UMIGOLD	(EXOG)	IMPORTS OF INDUSTRIAL GOLD
UMKGL	(EXOG)	CAPITAL GAINS/LOSSES ADJUSTMENT TO BOP SERVICE PAYMENTS
UMQFLSF	(EXOG)	SEASONAL ADJUSTMENT FACTOR FOR OIL IMPORTS - NIA BASIS
UMQGFL	739	VOLUME OF PETROLEUM IMPORTS - NIA BASIS - MILLIONS OF BARRELS PER DAY (SA)
UMSFI	767	FACTOR INCOME PAYMENTS - NIA BASIS - 1972 PRICES
UMSFIER	(EXOG)	RESIDUAL IN FACTOR INCOME PAYMENTS EQUATION - CURRENT PRICES
UMSFINER	(EXOG)	RESIDUAL IN FACTOR INCOME PAYMENTS EQUATION - 1972 PRICES
UMSFIV	764	FACTOR INCOME PAYMENTS - NIA BASIS - CURRENT PRICES
UMSMILV	(EXOG)	MILITARY SERVICE PAYMENTS
UMSNI	769	SERVICE PAYMENTS - NIA BASIS - 1972 PRICES
UMSNIER	(EXOG)	RESIDUAL IN SERVICE PAYMENTS EQUATION - 1972 PRICES
UMSNIV	766	SERVICE PAYMENTS - CURRENT PRICES
UMSONER	(EXOG)	RESIDUAL IN OTHER SERVICE PAYMENTS EQUATION - 1972 PRICES
UMSONI	768	OTHER SERVICE PAYMENTS - NIA BASIS - 1972 PRICES
UMSONIV	765	OTHER SERVICE PAYMENTS - CURRENT PRICES
UMSOV	757	IMPORTS OF SERVICES OTHER THAN INVESTMENT INCOME
UMSOVER	(EXOG)	RESIDUAL IN OTHER SERVICE PAYMENTS EQUATION - CURRENT PRICES
UMSV	763	TOTAL IMPORTS OF SERVICES
UMSVNIER	(EXOG)	RESIDUAL IN SERVICES PAYMENTS EQUATION - CURRENT PRICES
UMSYGV	760	GOVERNMENT INTEREST PAYMENTS TO FOREIGNERS
UMSYJDV	(EXOG)	SEASONAL FACTOR -DIRECT INVESTMENT INCOME PAYMENTS
UMSYPDNQ	758	DIRECT INVESTMENT INCOME PAYMENTS (NSA)
UMSYPDV	761	TOTAL INVESTMENT INCOME PAYMENTS ON PRIVATE LIABILITIES
UMSYPNDV	759	PRIVATE INVESTMENT INCOME PAYMENTS EXCLUDING DIRECT INVESTMENT
UMSYV	762	TOTAL INVESTMENT INCOME PAYMENTS
UM1	(EXOG)	MONEY SUPPLY - M1B
UM1A	805	MONEY SUPPLY - M1
UNDA	816	NET DOMESTIC ASSETS (FEDERAL RESERVE BALANCE SHEET)
UNDD	815	DEMAND DEPOSITS NET OF RESERVE REQUIREMENTS - FOUR QUARTER MOVING AVERAGE
UNETXNI	799	NET EXPORTS OF GOODS AND SERVICES - NIA BASIS - 1972 PRICES
UNETXNIV	798	NET EXPORTS OF GOODS AND SERVICES - NIA BASIS - CURRENT PRICES
UNFAG	890	STOCK OF OFFICIAL NET FOREIGN ASSETS
UNFAGVC	(EXOG)	VALUATION CHANGE IN OFFICIAL NET FOREIGN ASSETS
UNW	725	PRIVATE NET WORTH
UOCD	802	OTHER TIME DEPOSITS (UM1-UM1A)
UOMPMKUP	(EXOG)	OIL IMPORT UNIT VALUE MARK-UP FACTOR (US$/BARREL)
UP	818	ABSORPTION DEFLATOR - 1972=1.00
UPCHGNP	713	PERCENTAGE CHANGE IN GNP - ANNUAL RATE
UPCHP	827	PERCENTAGE CHANGE IN PRICE LEVEL - ANNUAL RATE
UPCHW	850	PERCENTAGE CHANGE IN WAGES - ANNUAL RATE
UPCPI	824	CONSUMER PRICE INDEX - 1972=1.00
UPCPIER	(EXOG)	RESIDUAL IN CONSUMER PRICE INDEX EQUATION
UPEXP	829	EXPECTED INFLATION RATE
UPGBP	825	U.S. GROSS BUSINESS PRODUCT FIXED WEIGHT INDEX - 1972=1.00
UPGBPER	(EXOG)	RESIDUAL U.S. GROSS BUSINESS PRODUCT FIXED WEIGHT INDEX EQUATION
UPGNP	823	U.S. GNP DEFLATOR - 1972=1.00
UPMGCNVF	(EXOG)	CONVERSION FACTOR (US$/BARREL TO 1972=1.00)
UPMGER	(EXOG)	RESIDUAL IN GOODS IMPORT UNIT VALUE INDEX EQUATION
UPMGFL	836	IMPORT UNIT VALUE INDEX - 1972=1.00
UPMGFLUV	835	PETROLEUM IMPORT UNIT VALUE - CURRENT PRICES (US$/BARREL)
UPMGNER	(EXOG)	RESIDUAL IN IMPLICIT PRICE DEFLATOR FOR MERCHANDISE IMPORTS EQUATION
UPMGNFL	819	NONOIL IMPORT UNIT VALUE - 1972=1.00
UPMGNI	831	IMPLICIT PRICE DEFLATOR FOR MERCHANDISE IMPORTS - NIA BASIS - 1972=1.00
UPMGSNER	(EXOG)	RESIDUAL IN GOODS AND SERVICES IMPORT DEFLATOR EQUATION
UPMGSNI	834	GOODS AND SERVICES IMPORT DEFLATOR - NIA BASIS - 1972=1.00
UPMGUV	822	GOODS IMPORT UNIT VALUE INDEX - 1972=1.00
UPMOSNER	(EXOG)	RESIDUAL IN OTHER SERVICE PAYMENTS IMPLICIT PRICE DEFLATOR EQUATION
UPMOSNI	833	OTHER SERVICE PAYMENTS IMPLICIT PRICE DEFLATOR - NIA BASIS - 1972=1.00
UPMSFI	832	FACTOR INCOME PAYMENTS IMPLICIT PRICE DEFLATOR - NIA BASIS - 1972=1.00
UPMSNER	(EXOG)	RESIDUAL IN FACTOR INCOME PAYMENTS IMPLICIT PRICE DEFLATOR EQUATION
UPOP	(EXOG)	US POPULATION - BILLIONS OF PERSONS
UPWIFC	(EXOG)	PRODUCER PRICE INDEX FOR COAL - 1967=1.00
UPWIFE	842	PRODUCER PRICE INDEX FOR ENERGY - 1967=1.00
UPWIFEL	(EXOG)	PRODUCER PRICE INDEX FOR ELECTRICITY - 1967=1.00
UPWIFER	(EXOG)	RESIDUAL FOR PRODUCER PRICE INDEX FOR ENERGY EQUATION
UPWIFL	(EXOG)	PRODUCER PRICE INDEX FOR REFINED PETROLEUM PRODUCTS - 1967=1.00
UPWIFNG	(EXOG)	INDEX OF AVERAGE DOMESTIC WELLHEAD PRICE OF NATURAL GAS - 1967=1.00
UPWPIXER	(EXOG)	RESIDUAL IN PRODUCER PRICE INDEX EQUATION (EXPORT WEIGHTS)
UPWPIXN	826	PRODUCER PRICE INDEX - EXPORT WEIGHTS - 1972=1.00
UPXAG	820	AGRICULTURAL EXPORT UNIT VALUE - 1972=1.00
UPXGER	(EXOG)	RESIDUAL IN GOODS EXPORT UNIT VALUE INDEX EQUATION
UPXGNER	(EXOG)	RESIDUAL IN IMPLICIT PRICE DEFLATOR FOR MERCHANDISE EXPORTS EQUATION
UPXGNI	838	IMPLICIT PRICE DEFLATOR FOR MERCHANDISE EXPORTS - NIA BASIS - 1972=1.00
UPXGSNER	(EXOG)	RESIDUAL IN GOODS AND SERVICES EXPORT DEFLATOR EQUATION
UPXGSNI	841	GOODS AND SERVICES EXPORT DEFLATOR - NIA BASIS - 1972=1.00
UPXGUV	837	GOODS EXPORT UNIT VALUE INDEX - 1972=1.00
UPXNAG	821	NON-AGRICULTURAL EXPORT UNIT VALUE - 1972=1.00
UPXOSNER	(EXOG)	RESIDUAL IN OTHER SERVICE RECEIPTS IMPLICIT PRICE DEFLATOR EQUATION
UPXOSNI	840	OTHER SERVICE RECEIPTS IMPLICIT PRICE DEFLATOR - NIA BASIS - 1972=1.00
UPXSFI	839	FACTOR INCOME RECEIPTS IMPLICIT PRICE DEFLATOR - NIA BASIS - 1972=1.00
UPXSNER	(EXOG)	RESIDUAL IN FACTOR INCOME RECEIPTS IMPLICIT PRICE DEFLATOR EQUATION
UP1	830	ONE PERIOD AHEAD INFLATION RATE
URCB	(EXOG)	RATE ON COMMERCIAL BANK PASSBOOK AND SMALL TIME DEPOSITS - PERCENT
URCD	810	INTEREST RATE ON 3-MONTH CERTIFICATES OF DEPOSITS - PERCENT

MNEMONIC	EQUATION	DEFINITION
URD	(EXOG)	FEDERAL RESERVE DISCOUNT RATE QUARTERLY AVERAGE - PERCENT
URF	806	FREE RESERVES AT ALL MEMBER BANKS
URHL	809	EFFECTIVE YIELD ON MORTGAGES
URL	807	LONG TERM AAA BOND INTEREST RATE - PERCENT
URLGB	808	LONG TERM GOVERNMENT BOND INTEREST RATE - PERCENT
URNOW	(EXOG)	CEILING RATE ON NOW ACCOUNTS
URR	814	REQUIRED RESERVES
URRNM	(EXOG)	REQUIRED RESERVE - NON-MEMBER INSTITUTIONS
URROTH	(EXOG)	REQUIRED RESERVES AGAINST NO-DEPOSIT ITEMS (NSA)
URS	812	COMMERCIAL PAPER INTEREST RATE 4-6 MONTHS - PERCENT
URS1	804	RATE ON 3-MONTH TREASURY BILLS
URTD	811	TIME AND SAVINGS DEPOSIT INTEREST RATE - PERCENT
USBAL	789	BALANCE OF SERVICES
USUPPLY	(EXOG)	PROXY FOR REAL PRIVATE FIXED CAPITAL STOCK
UTARIFF	(EXOG)	TARIFF RATES
UTBASE	(EXOG)	EQUAL TO ZERO
UTD	803	TIME DEPOSITS HELD BY RESIDENTS (NSA)
UTINC	(EXOG)	PROPORTION OF INVESTMENT TAX CREDIT DEDUCTED FROM DEPRECIATION EXPENSE
UTRANV	714	GOVERNMENT TRANSFERS TO PRIVATE SECTOR
UTRATE	(EXOG)	TAX RATE SHIFT VARIABLE: =1 THROUGHOUT
UTRY	(EXOG)	PERSONAL INCOME TAX RATE
UTRYC	(EXOG)	CORPORATE INCOME TAX RATE
UTV	721	GOVERNMENT REVENUE (FEDERAL STATE AND LOCAL TAX RECEIPTS)
UTVC	718	GOVERNMENT REVENUE (FEDERAL STATE AND LOCAL TAX RECEIPTS)
UUCPD	863	REAL USER COST OF CAPITAL FOR PRODUCER DURABLES
UUCPD1	862	COMPONENT OF REAL USER COST OF CAPITAL FOR PRODUCER DURABLES
UUCPS	861	REAL USER COST OF CAPITAL
UUCR	864	REAL USER COST OF CAPITAL FOR RESIDENTIAL INVESTMENT
UUN	848	UNEMPLOYMENT RATE (GLOBAL) - PERCENT
UW	849	WAGE RATE (NON FARM PRIVATE BUSINESS SECTOR) - US$/HOUR
UWTMGNFL	(EXOG)	WEIGHT ON NON-FUEL IMPORTS
UXG	753	TOTAL US GOODS EXPORTS - 1972 PRICES
UXGA	749	US AGRICULTURAL GOODS EXPORTS - 1972 PRICES
UXGAV	751	AGRICULTURAL EXPORTS - CURRENT PRICES
UXGNA	748	US NON-AGRICULTURAL GOODS EXPORTS - 1972 PRICES
UXGNAV	750	NON-AGRICULTURAL EXPORTS - CURRENT PRICES
UXGNI	755	REAL MERCHANDISE EXPORTS - 1972 PRICES (NIA)
UXGNIER	(EXOG)	RESIDUAL IN REAL MERCHANDISE EXPORTS EQUATION
UXGNIV	754	MERCHANDISE EXPORTS - CURRENT PRICES
UXGOLD	(EXOG)	GOLD ADJUSTMENT TO BOP EXPORTS - CURRENT PRICES
UXGSNER	(EXOG)	RESIDUAL IN EXPORTS OF GOODS AND SERVICES EQUATION - 1972 PRICES
UXGSNI	797	EXPORTS OF GOODS AND SERVICES - NIA BASIS - 1972 PRICES
UXGSNIV	796	EXPORTS OF GOODS AND SERVICES - NIA BASIS - CURRENT PRICES
UXGSV	790	TOTAL EXPORTS OF GOODS AND SERVICES - BOP BASIS - CURRENT PRICES
UXGSVNER	(EXOG)	RESIDUAL IN EXPORTS OF GOODS AND SERVICES EQUATION - CURRENT PRICES
UXGV	752	TOTAL GOODS EXPORTS - BOP BASIS - CURRENT PRICES
UXGVNAER	(EXOG)	RESIDUAL IN EXPORTS OF GOODS EQUATION - CURRENT PRICES
UXGVSF	(EXOG)	SEASONAL ADJUSTMENT FACTOR U.S. GOODS EXPORTS
UXKGL	(EXOG)	CAPITAL GAINS/LOSSES ADJUSTMENT TO BOP SERVICE RECEIPTS
UXMILIS	(EXOG)	MILITARY SALES TO ISRAEL
UXQFLNS	(EXOG)	VOLUME OF OIL EXPORTS - MILLIONS OF BARRELS PER DAY (NSA)
UXSFI	784	FACTOR INCOME RECEIPTS - NIA BASIS - 1972 PRICES
UXSFIER	(EXOG)	RESIDUAL IN FACTOR INCOME RECEIPTS EQUATION - CURRENT PRICES
UXSFINER	(EXOG)	RESIDUAL IN FACTOR INCOME RECEIPTS EQUATION - 1972 PRICES
UXSFIV	781	FACTOR INCOME RECEIPTS - NIA BASIS - CURRENT PRICES
UXSMILV	(EXOG)	U.S. MILITARY SALES - SERVICE RECEIPTS
UXSNI	786	REAL SERVICE RECEIPTS - NIA BASIS - 1972 PRICES
UXSNIER	(EXOG)	RESIDUAL IN REAL SERVICE RECEIPTS EQUATION - 1972 PRICES
UXSNIV	783	SERVICE RECEIPTS - NIA BASIS - CURRENT PRICES
UXSONER	(EXOG)	RESIDUAL IN OTHER SERVICE RECEIPTS EQUATION - 1972 PRICES
UXSONI	785	OTHER SERVICE RECEIPTS - NIA BASIS - 1972 PRICES
UXSONIV	782	OTHER SERVICE RECEIPTS - NIA BASIS - CURRENT PRICES
UXSOV	770	EXPORTS OF SERVICES OTHER THAN INVESTMENT INCOME
UXSOVER	(EXOG)	RESIDUAL IN OTHER SERVICE RECEIPTS EQUATION - CURRENT PRICES
UXSV	780	TOTAL EXPORTS OF SERVICES
UXSVNIER	(EXOG)	RESIDUAL IN SERVICE RECEIPTS EQUATION - CURRENT PRICES
UXSYDNAT	(EXOG)	DIRECT INVESTMENT INCOME FROM NETHERLANDS ANTILLES FINANCE AFFILIATES
UXSYDVMQ	772	DIRECT INVESTMENT INCOME RECEIPTS - MANUFACTURING
UXSYDVOM	777	DIRECT INVESTMENT INCOME RECEIPTS - MANUFACTURING AND OTHER - ANNUAL RATES (SA)
UXSYDVOQ	773	DIRECT INVESTMENT INCOME RECEIPTS - OTHER
UXSYDVP	776	DIRECT INVESTMENT INCOME RECEIPTS - PETROLEUM ANNUAL RATES (SA)
UXSYDVPQ	771	DIRECT INVESTMENT INCOME RECEIPTS - PETROLEUM
UXSYJDVO	(EXOG)	SEASONAL FACTOR - DIRECT INVESTMENT INCOME RECEIPTS - OTHER MANUFACTURING
UXSYJDVP	(EXOG)	SEASONAL FACTOR - DIRECT INVESTMENT INCOME RECEIPTS - PETROLEUM
UXSYNGV	775	GOVERNMENT PORTFOLIO INVESTMENT INCOME RECEIPTS
UXSYNPV	774	PRIVATE PORTFOLIO INVESTMENT INCOME RECEIPTS
UXSYPDV	779	TOTAL DIRECT INVESTMENT INCOME RECEIPTS
UXSYV	778	TOTAL INVESTMENT INCOME RECEIPTS
UXTRANGV	(EXOG)	NET GOVERNMENT TRANSFERS - GRANTS
UXTRANPV	(EXOG)	NET PRIVATE TRANSFER PAYMENTS - REMITTANCES AND PENSIONS
UXTRANV	793	NET TRANSFER PAYMENTS
UYD	712	DISPOSABLE INCOME - 1972 PRICES
UYDV	711	DISPOSABLE INCOME - CURRENT PRICES
UYFRPV	717	FEDERAL RESERVE PROFIT
XCEV	192	CANADIAN GOODS EXPORTS TO THE U.K. - CURRENT PRICES (US$) (NSA)
XCGV	52	CANADIAN GOODS EXPORTS TO GERMANY - CURRENT PRICES (US$) (NSA)
XCJV	541	CANADIAN GOODS EXPORTS TO JAPAN - CURRENT PRICES (US$) (NSA)