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JEL Classification Numbers
E43, F31, F33

Summary of
WP/93/1

"French-German Interest Rate Differentials and Time-Varying Realignment Risk" by Francesco Caramazza

Since the realignment of currencies in the exchange rate mechanism of the European Monetary System (EMS) in January 1987, the differential between French and German interest rates has narrowed considerably. Nevertheless, the persistence of a significant differential across the maturity spectrum suggests that market participants anticipate a realignment of central parities in the EMS before exchange rates are irrevocably fixed in the final stage of European economic and monetary union.

This paper explores the determinants of expected rates of realignment of the French franc/deutsche mark exchange rate. It does so by first estimating expected parity changes and then relating these to economic variables that are believed to influence market participants' realignment expectations. Time-varying expected rates of realignment are estimated in two ways: one, by adjusting short-term Euromarket interest rate differentials for the expected rate of change of the FF/DM exchange rate within the EMS fluctuation band and, two, by using the differential in the yield on long-term government bonds.

The behavior of the exchange rate within the band is found to be consistent with mean reversion, and the expected change is nontrivial. Thus, by filtering out the expected mean reversion within the band from short-term interest rate differentials, more precise measures of expected changes in the central parity are obtained than those given simply by interest differentials. This adjustment is important because the "credibility bounds" on short-term interest rates are rather large. Realignment expectations are found to be related to the evolution of such fundamental economic variables as inflation differentials, competitiveness, unemployment, government financing requirements, foreign reserves, and, for shorter horizons, the position of the franc in the fluctuation band. France's favorable economic performance, especially on inflation, the external position, and the fiscal situation, has allowed the implicit expected rate of devaluation to decrease considerably. The analysis in this paper suggests that interest differentials could be narrowed further by an improved labor market performance and, in the case of short-term rates, by a strengthened position of the franc in the fluctuation band.

JEL Classification Numbers
H24, H25, H87

Summary of
WP/93/2

"Cash-Flow Tax" by Parthasarathi Shome
and Christian Schutte

Conceptually, cash-flow taxation is based on consumption and is therefore neutral with respect to capital formation. The paper identifies three variants of the corporate cash-flow tax (CCFT) as follows: (1) The R--or real--base CCFT taxes net real transactions (the difference between sales and purchases of real goods and services). As opposed to a corporate income tax (CIT), it allows immediate expensing of capital outlays but not the deduction of interest payments. Interest received is not taxable. (2) The RF--or real plus financial--base CCFT, in addition, includes in its tax base nonequity financial transactions (the difference between borrowing and lending). Interest and retirement of debt are deductible, while borrowing and interest received are taxable. (3) The S--or shareholder--base CCFT taxes the net flow from the corporation to shareholders (dividends paid plus purchases of shares minus issues of new shares) and conforms closely to the interpretation that the CCFT is a "silent partnership" of the government in any investment.

The success of a CCFT, the paper argues, depends on the existing CIT structure, the structure of the corporate sector, and the relative importance of foreign investors. The CCFT's advantages, it claims, lie primarily in the theoretical clarity of the tax base insofar as it does away with the problems of defining true economic depreciation, measuring capital gains, costing inventories, and accounting for inflation (although not in all variants of the tax).

However, the paper observes, the CCFT can give rise to problems--for example, tax-base erosion through avoidance and evasion. This, the authors argue, could be contained by carefully designing the tax code and by selecting an RF-base over the R-base CCFT, thereby including the financial sector. On the other hand, an important advantage of the R-base CCFT--nondeductibility of interest, which eliminates incentives for debt over equity financing and obviates any need for inflation adjustments for the calculation of real interest--is not shared by the RF-base variant. The S-base CCFT, while sometimes favored because it has been perceived to be administratively simpler, could, the paper contends, lead to a tax rate of over 100 percent because of the definition of the S base. Thus, the choice among variants of the CCFT is not at all clear.

Observing that international considerations turn out to be important in any future implementation of the CCFT because of the unresolved treatment of foreign tax credits under a CCFT, the paper nevertheless argues that the prevalence of excess foreign tax credits and the existence of tax-sparing arrangements would tend to dampen the negative impact of a CCFT on foreign investment. The paper concludes that the CCFT remains a theoretically attractive option with accompanying practical difficulties. However, it notes, the CCFT may prove particularly difficult to implement for a single--especially developing--country in an environment that may not necessarily accommodate its smooth and effective operation.

JEL Classification Numbers
E61, F33, N24

Summary of
WP/93/3

"Stabilization Programs and External Enforcement:
Experience from the 1920s" by Julio A. Santaella

Since the early 1980s, international institutions have played an increasing role in helping to design and implement the stabilization and reform programs undertaken by developing countries and, more recently, by a number of formerly centrally planned economies. This paper examines the role that external institutions can play in assisting an adjusting country. It analyzes the reasons that may motivate a country to rely on an "external agent" to assist in implementing a stabilization program. The examination is based on the experience of six European countries that implemented currency stabilizations under the auspices of the League of Nations during the 1920s.

Countries may seek external advice in the design and "enforcement" of a program for several reasons. First, national authorities alone may lack the reputation needed to make a stabilization program sufficiently credible to be implemented successfully. Second, external institutions can help the adjusting country to obtain the financial resources needed during adjustment. Using a simple model to illustrate the credibility problem and the role of external enforcement, the paper shows that the extent of nominal instability is likely to be a major determinant of an external institution's involvement in a stabilization or reform program.

Within this theoretical framework, the paper examines the extent to which external institutions were involved in the European currency stabilizations that took place during the 1920s. The evidence indicates that these stabilization programs sponsored by the League of Nations were comprehensive and stressed the need to achieve a balanced budget, monetary discipline, and institutional reform. External enforcement was a crucial element in increasing the national authorities' credibility and in ensuring their commitment to the program.

The paper presents empirical evidence in support of the view that the goals of enhancing credibility and resolving financing problems were important in determining whether a country decided to rely on an external agent to assist its stabilization. Countries with greater nominal instability tended to rely more heavily on external enforcement to stabilize their currencies. The League's programs appear to have been effective in enforcing fundamental changes in the monetary and fiscal regime.

JEL Classification Numbers
E31, F31, H22

Summary of
WP/93/5

"Taxes and the Price Level: A Further Examination of the PPP Hypothesis" by Ephraim Kleiman

The effects of taxation on the general price level have traditionally been thought to reflect monetary rather than fiscal policy. This view derives from the possible endogeneity of monetary expansion with respect to tax hikes and from the possible effects of taxation on wages, particularly on the reserve price of entrepreneurial labor. This paper examines the extent to which international differences in taxation may explain departures of national price levels from purchasing power parity (PPP).

Investigating a sample of 51 (out of a total of 60) countries for which price level data were available from stage IV of the project on the international comparison of purchasing powers and the real products for 1980, the study finds, as did earlier research, that real per capita income explains most differences in price levels. However, some factors identified in previous studies of the PPP hypothesis, such as trade openness, fail to show significant effects in the present study, while other factors, hitherto untried or discarded, notably, transportation costs and size of the economy, do reveal such effects.

The study also suggests that the overall burden of central government taxation, especially of indirect domestic taxes, raises the general price level. Consistent with the accepted view that direct taxes cannot be shifted forward, no such effect is associated with the direct tax burden. Contrary to expectations, however, the burden of domestic indirect taxes expresses itself in the prices of tradables rather than of nontradables. Another unexpected result--that import duties seem to have no discernible effect on the price level--is consistent with earlier findings. The study finds no evidence that tax-induced higher prices are offset by lower prices in the untaxed sectors as the price neutrality of taxation would require. It suggests some possible explanations for these phenomena.

JEL Classification Numbers
D20, H23, L50, P40

Summary of
WP/93/6

"Resource Allocation During the Transition to a Market Economy: Policy Implications of Supply Bottlenecks and Adjustment Costs"

by Joshua Aizenman and Peter Isard

This paper discusses the case against countries using a laissez-faire approach to resource allocation in restructuring the inherited state industrial sector. The analysis focuses on externalities associated with supply bottlenecks and adjustment costs. While much of the concern with bottlenecks has centered on impediments to international trade, bottlenecks can also arise whenever the requirements for certain inputs to production are stochastic (such as needs for energy sources or spare parts) and the opportunity cost of holding inventories is high. These conditions are likely to prevail in the state industrial sector--whose creditworthiness is currently limited by its outdated production technologies--once budget constraints are hardened and credit markets begin to function effectively.

In modeling the externalities associated with production bottlenecks and considering the policy implications in the presence of adjustment costs, the paper recognizes that producers have incentives to enter into pooling arrangements, supported potentially by market mechanisms, for reallocating stocks of critical inputs. Such arrangements, however, do not suffice to eliminate the externalities. Moreover, the externalities rise in a highly nonlinear manner (for example, exponentially) as critical inputs become more scarce.

However, many other factors need to be considered in designing policies to influence resource allocation. The analysis suggests, first, that once budget constraints are hardened and credit markets begin to function appropriately, the externalities associated with production bottlenecks and adjustment costs provide a case for subsidizing the costs of critical inputs for the state industrial sector but not for the new private sector. Second, the appropriate policy has an important time dimension, with the optimal subsidy declining as the private sector grows. Finally, countries should "finance" the subsidy by taxing the wage income generated in the state sector, which will strengthen incentives for workers to move out of that sector. It is also suggested that the provision of such subsidies be governed largely by rules rather than by discretion and that eligibility requirements be made conditional on maintaining wage restraint and meeting prespecified benchmarks in restructuring and in other enterprise reforms.

Although financing requirements constrain the size of the subsidies that can be provided to the state sector without undermining macroeconomic stability, countries should view the amount of financing to raise as a fundamental policy choice in designing their reform strategy. Their willingness and ability to finance a gradual or moderate-speed contraction of the state industrial sector--and thereby to avoid a rapid contraction of that sector--may be crucial in maintaining popular support for the transformation effort and making it credible that the reform program can be sustained. This in turn may be crucial for obtaining the financial support of domestic savers and foreign private investors.

JEL Classification Numbers
E31, E43, E44

Summary of
WP/93/7

"High Real Interest Rates Under Financial Liberalization:
Is There a Problem?" by Vicente Galbis

In the mid-1980s, concerns arose about the possible detrimental effects of high real interest rates under financial liberalization. Using a sample of 28 countries that have undergone financial liberalization since the mid-1970s, this paper examines the incidence of high real interest rates and finds that they emerge rather frequently following liberalization. In contrast, virtually all countries experienced highly negative real interest rates before undertaking financial liberalization. Numerically high real interest rates are not necessarily out of equilibrium, however, and adverse consequences will not inevitably follow. High real interest rates can be efficient if they are the result of a large demand for funds associated with a high propensity to invest in sound projects that is engendered by favorable macroeconomic conditions and technological innovations.

However, high real interest can be undesirable in some cases, as a result of many diverse and complex causes. Among them are unabating inflationary expectations, exchange rate risk perceptions that accompany stabilization efforts that are not fully credible, attempts to stabilize an economy with stringent monetary policies but with inadequate fiscal consolidation, and attempts by oligopolistic financial institutions to capture a larger market share of deposits. Other causes are the financing by banks of distressed borrowers in an attempt to avoid provisioning and write-offs for loan losses and the moral hazard resulting from explicit or implicit deposit insurance in the absence of appropriate prudential regulations and bank supervision.

The effects of high real interest rates are equally complex and diverse and will vary according to their origins and to each country's circumstances. The paper finds much evidence for favorable effects of liberalization. However, unfavorable conditions may lead in some cases to lower investment and growth, corporate and financial sector distress, destabilizing capital inflows, and increases in budget deficits and government debt. Countries must understand the causes and effects of their high real rates before applying remedies, either preventive or curative. Countries that are still contemplating interest rate liberalization should take preventive measures to stabilize prices, achieve fiscal consolidation, improve indirect monetary policy instruments, and strengthen prudential regulation and supervision of the financial system before problems emerge.

JEL Classification Numbers
H5, I3, P2

Summary of
WP/93/8

"Alternative Social Security Systems in CIS Countries"
by S. Ehtisham Ahmad and Jean-Luc Schneider

In 1990 in the U.S.S.R., a large and demographically diverse country, social security reforms led to the imposition of a uniform system of benefits that involved interregional transfers. Since the dissolution of the U.S.S.R., this system is no longer feasible and other options must be considered, including during the successor countries' transition to market economies.

This paper presents a simple demographic model to compare pay-as-you-go (PAYG) and funded options for providing benefits. It concentrates on pensions and standardized family allowances although the argument could be extended to provisions for the unemployed.

The empirical investigations, for Belarus, Russia, Turkmenistan, Ukraine, and Uzbekistan, illustrate the effects of different demographic characteristics in the European and Central Asian countries in 1991. They show that if interest rates are negative in the medium term, a move away from a PAYG system would be undesirable and, specifically, that a move toward a funded system would greatly increase contribution rates. Even if rates of return are positive, they would need to exceed population growth rates for a funded system to be desirable. Thus, the funded option would be less attractive in the Central Asian countries than, say, in Belarus or Ukraine.

Alternative methods of lowering net overall outlays are also discussed, including the basic benefit-in-kind system that involves providing basic food items through food stamps or the cash equivalent. The paper concludes that a combination of PAYG benefits and basic benefits in kind would be most effective in minimizing overall costs while providing adequate benefits during the transition period.

JEL Classification Numbers
H5, I3, P2

Summary of
WP/93/9

"Poverty, Demographic Characteristics, and Public Policy in CIS Countries" by S. Ehtisham Ahmad

The demographic characteristics of different regions in the former Soviet Union influence the nature of poverty in the successor independent states. Despite a common policy inheritance, substantial adjustments are needed in the major social protection instruments to reflect differences in demographics as well as a changing resource base.

The states of the former Soviet Union represent two broad demographic archetypes. The first group of countries--which includes Belarus, Ukraine and the Russian Federation--is characterized by relatively low birth rates and a mature and aging population. Because of the extremely high loss of life, particularly among males in the European republics during the Second World War, many of the current retirees are single women. Countries in the second group, which includes, for example, the Central Asian republics of Turkmenistan and Uzbekistan, typically have lower per capita incomes, relatively high population growth rates, high youth-dependency ratios, and relatively few retirees. Although countries will base their policy choices on these key characteristics when adopting permanent social security instruments, they are likely to need similar policy interventions during the transition period, involving as it does major changes in relative prices.

The concentration of people at relatively low income levels is a feature common to all countries of the Commonwealth of Independent States (CIS) and, in some, the reforms have increased the concentration of "vulnerable" groups. As a result, their options for reforming the formal social security instruments--in particular, pensions and allowances--are limited. The differences in demographic characteristics will govern the emphasis to be paid to each instrument.

Although means-testing may be useful for restricting outlays, the distribution of incomes suggests that savings are likely to be small in the former Soviet Union. Moreover, administrative outlays may be substantial. It will take time to develop adequate local social assistance mechanisms in the CIS countries. One alternative is a combination of measures that includes targeted subsidies for essential goods, as discussed in Tanzi (1991).

JEL Classification Number
G11

Summary of
WP/93/10

"Portfolio Performance of the SDR and Reserve Currencies: Tests Using the ARCH Methodology" by Michael G. Papaioannou and Tugrul Temel

This paper tests the common assumption used in portfolio theory that returns on various currency fixed-income investments do not vary over time. This assumption underlies most optimal portfolio models investors use in managing their financial assets. If this assumption does not hold, the resulting allocation of assets is not necessarily optimal, and the obtained measure of the riskiness of a portfolio may not be accurate. Suboptimal allocations may have significant implications for the hedging approaches necessary to control the implied interest and exchange rate risk and may thus expose investors to greater risk of loss than they are willing to accept. If estimates of changing variances can be made with reasonable accuracy, appropriate portfolio shifts can be made over time. Such a strategy can help central banks manage their foreign exchange reserves.

The tests employ the autoregressive conditional heteroscedasticity (ARCH) methodology. The existence of heteroscedasticity makes it difficult to base inferences and predictions on least-squares estimation. When the conditional variances of returns are not constant through time, they can be calculated with the estimation procedure used in ARCH models. Estimation is possible because the autoregressive (AR) representation of a time series with ARCH disturbances allows for the changing variances of investment returns to be forecast, even though the level of returns cannot be predicted. For this study, the standard univariate ARCH model was estimated using weekly data on short-term investment returns on various currencies, including composites such as the ECU and the SDR, for February 1982 to December 1991.

The empirical results indicate that the returns on nine currency investments exhibit statistically significant and persistent changes over time. Specifically, the estimated constant term in an autoregressive specification for returns is positive for all currencies, implying an upward trend in total returns, although the process is generally not explosive. The estimated ARCH parameter for SDR returns is the smallest among all currency returns exhibiting one lag of ARCH effects, indicating that SDR investments provide greater insulation from unexpected shocks. Finally, the statistical tests presented in the paper indicate that the conventional assumption of a standard normal distribution for the errors of the underlying portfolio model is not consistent with the data for the 1982-91 period.

JEL Classification Numbers
E23, F15, O32, O52

Summary of
WP/93/11

"Capital and Trade as Engines of Growth in France:
An Application of Johansen's Cointegration Methodology"

by David T. Coe and Reza Moghadam

The importance of trade and capital as determinants of trend or potential economic growth is widely acknowledged. Empirical studies of the determinants of output based on aggregate production functions, however, rarely incorporate any variable to capture the impact of trade. Empirical studies have also usually focused only on a narrow definition of capital, typically the business sector capital stock. This paper presents new estimates of an aggregate production function for France, focusing on the role of trade and the importance of capital accumulation by government, households, and businesses, including their expenditures on research and development.

The production function is estimated with recent cointegrating techniques suggested by Johansen (1988, 1989). The cointegrating methodology emphasizes the identification of long-run relationships and, hence, is particularly appropriate for the study of the determinants of trend or potential output. The empirical results suggest that increased trade within the European Community has spurred efficiency and productivity in France. They also indicate that, in addition to the stock of business sector capital, the stock of government infrastructure capital, the stock of residential capital, and the stock of research and development capital have contributed to the growth of output in France.

The estimated production function is used to calculate potential output. These calculations indicate that trade and capital--broadly defined--account for all of the growth in the French economy in the last two decades. Although labor input is also an important determinant of output, it made no contribution to growth during 1971-91. Thus, over the past two decades trade and capital have been the engines of growth in France. The growth of potential output is estimated to have averaged 3 1/4 percent a year in 1987-91; this figure is projected to decline to slightly less than 3 percent a year in 1992-97. To foster more robust growth, France must encourage capital accumulation, implement labor market policies to reduce unemployment, and take steps to revitalize the trade-liberalization process.

JEL Classification Numbers
C70, D40, D44, D60, P21, P23, P50

Summary of
WP/93/12

"Auctions: Theory and Possible Applications to Economies in Transition" by Robert A. Feldman and Rajnish Mehra

A major effort is taking place in many parts of the world to establish and improve market-oriented institutions. This development is particularly evident in the context of the transforming economies in Eastern Europe and the states of the former Soviet Union. Auction mechanisms are useful as one way of guiding price determination and the allocation process in a market-oriented setting. Indeed, introducing auction techniques for various commodities and assets can be used to help acclimate economic agents to operate in a world of market-determined and changing prices.

One of the main goals of this paper is to survey the extensive literature on auctions in order to shed some light on the advantages and disadvantages of various auction techniques. A second goal is to assess the application of alternative auction techniques to four specific assets, namely, government securities, refinance credit, foreign exchange, and state assets in the context of privatization. In the process, the paper explains basic auction formats and tries to clarify some of the confusion that can arise because of the differing terminology applied to these formats.

The paper concludes that auctions offer advantages of simplicity in determining market-clearing prices where markets may otherwise not exist and in allocating the auctioned items efficiently. The appropriate choice of auction format is less clear. This ambiguity stems in part from the difficulties in applying the theoretical literature to real world settings, and in part from the importance of individual country circumstances. When all is said and done, there are no unambiguous answers to the question of what is the best auction technique to use. This paper has tried, however, to rank the various auction formats according to their appropriateness in different circumstances.

On balance, uniform second-price auctions are the preferred technique. They are simpler, perform well in terms of the expected revenue to sellers, and may offer considerable gains in promoting economic efficiency. In some circumstances, the English, ascending-price auction is more favorable but, at the same time, may be difficult to use because of technical considerations. English auctions are also more prone to collusive behavior. Discriminatory auctions would tend to be appropriate only in cases where collusion was considered to be a problem. The paper describes the advantages of double auctions in the case of foreign exchange. It emphasizes that irrespective of the choice of auction technique, every effort needs to be made to ensure that auctions are run on a competitive basis with safeguards against monopoly positions.

JEL Classification Numbers
F3, F4, N2, P5

Summary of
WP/93/13

"Exchange-Rate Unification with Black Market Leakages: Russia 1992" by Linda S. Goldberg

In 1992 the Russian authorities unified the multiple exchange rates that had applied to international transactions. This paper describes the multiple exchange rate system that existed in Russia before mid-1992 and undertakes a theoretical exploration of the effects of the exchange rate unification measures that were implemented in July 1992. The model developed here takes account of leakages between official and black markets and allows for flexibility of the exchange rates in both official and parallel currency markets. Within this multiple exchange rate system with black market leakages, the paper traces the dynamic effects on the official and parallel foreign exchange markets of changes in the types of policy instruments that were associated with the reform of Russia's exchange rate regime. These instruments include adjustments in pegged interbank market exchange rates, rates of foreign exchange surrender taxation, and rates of taxation of capital account transactions.

JEL Classification Numbers
F41, H20

Summary of
WP/93/14

"A Comparative Analysis of the Structure
of Tax Systems in Industrial Countries"
by Enrique G. Mendoza, Assaf Razin, and Linda L. Tesar

This paper proposes a method for computing effective average rates of taxation on consumption and factor incomes based on data from revenue statistics and national accounts. The method estimates the wedges that distort optimal plans in a representative agent framework by computing percentage differences in measures of aggregate post- and pretax incomes and prices. It is used to compute time series of tax rates for the group of seven largest industrial countries covering the period 1965-88. The paper then compares these tax rates with existing estimates of effective marginal tax rates and examines the relationship between the tax rates and savings, investment, net exports, hours worked, and unemployment. This analysis highlights the features that distinguish the stance of tax policy among industrial countries and suggests some potential implications of tax-harmonization policies.

The estimates of effective average tax rates show that labor income, capital income, and consumption taxes have fluctuated noticeably in response to changes in statutory taxes and policies regarding credits and exemptions. Capital and consumption taxes do not exhibit a marked trend. The tax on labor income, on the other hand, has increased over time in all of the countries studied. Taxes on consumption and labor income tend to be higher in European countries relative to Japan and the United States, while taxes on capital income in the United States have been higher than in other countries--except the United Kingdom and, in recent years, Japan. Despite significant differences in tax systems, tax rates have tended to converge for groups of countries--particularly in the case of consumption taxes in European countries (except France); labor income taxes in North America, Japan, and the United Kingdom; and capital income taxes in Canada, France, Germany, Italy, and the United States.

The statistical analysis relating the tax rates to macroeconomic variables indicates that capital income tax rates are negatively related to savings rates, and consumption and labor income tax rates are negatively correlated with the number of hours worked, as predicted by neoclassical equilibrium models. Moreover, the level and trend of the rate of unemployment are positively correlated with the tax on labor income, as predicted by models of equilibrium unemployment or the "natural rate." These relationships are stronger in panel tests that combine time-series and cross-sectional information, but they remain strong even for time series of several individual countries. These empirical regularities are also documented using detrended and non-detrended data. The relationships between macroeconomic variables and tax rates are generally stronger at low frequencies relative to business cycle frequencies.

JEL Classification Numbers
C3, E13, G12, G14, G15

Summary of
WP/93/15

"Asset Pricing in the International Economy"
by José Barrionuevo

Neoclassical models with complete markets and without distortions usually imply that asset pricing conditions should be satisfied for a representative closed-economy measure of consumption growth and for any measure of asset returns. Hansen and Singleton (1983), Harvey (1987), and Ferson and Constantinides (1989), among others, have found that models with closed-economy measures of consumption fit best with low risk aversion.

This paper provides statistical and economic interpretations of the low risk aversion estimates obtained for fixed-income assets throughout the finance literature. For a statistical interpretation, Monte Carlo simulations are used to demonstrate that there is a serious downward bias in parameter estimates derived from the consumption asset pricing model when there is measurement error in consumption and in real rates of return. For an economic interpretation, an international version of the asset pricing model is introduced. It is shown that by reducing the effect of country-specific disturbances, the international model produces higher risk aversion estimates than do national models, provided that there is indeed a common consumption component across economies.

Alternative measures of consumption growth that may reduce the bias introduced by measurement or specification errors are examined. An important feature of this approach is that these measures are differentially subject to these errors. Two arguments that characterize the properties and the extent of specification error in various measures of consumption are presented. First, a signal extraction problem is used to show that a measure of international consumption growth across countries reduces the noise introduced by idiosyncratic measurement errors in national measures and, hence, may reveal a common consumption growth signal across countries. Second, it is shown that there are important differences in the way in which the various measures of consumption growth are affected by specification errors owing to difficulties in measuring accurately changes in the quality of nontraded goods.

An econometric method is used to estimate the coefficient of risk aversion and the subjective discount factor in the class of national and international asset pricing models implied by constant risk aversion for alternative measures of consumption growth and asset returns across major industrial countries. The results of asset pricing tests suggest that risk aversion estimates derived from the international asset pricing model are significantly higher than those obtained for national models. Moreover, the international model implies a common degree of risk aversion across industrial countries that is close to unity. More important, the results provide evidence of the international integration of securities markets.

JEL Classification Numbers
E24, P20

Summary of
WP/93/16

"Economic Restructuring, Unemployment, and Growth in a Transition Economy" by Bankim Chadha, Fabrizio Coricelli, and Kornélia Krajnyák

This paper develops a simple model of the process of reallocation of labor from the state to the private sector and examines several questions relating to the dynamics of the transition process. The transition economy is characterized by the asymmetric behavior and market power of labor in the two sectors. In the state sector, labor dominates the decision process of enterprises, while in the private sector employment and wage decisions are determined by profit-maximizing firms. It is assumed that firms in the private sector are concerned with worker effort and productivity, while these considerations play a minor role in the state sector. Worker effort in the private sector is endogenously determined by an efficiency-wage mechanism. In order to boost work force productivity, firms find it optimal to pay a premium over the market-clearing wage, resulting in unemployment.

The paper examines two alternative processes driving growth and restructuring: a neoclassical exogenous productivity growth model, where transition is inevitable; and an endogenous growth model, where human capital is acquired through learning by doing, and restructuring is endogenously determined. When growth and restructuring are exogenously determined, the paper shows that, in the initial stages of transition, as a natural consequence of the reallocation of labor that accompanies the restructuring of production, the economy will not only suffer a cost in terms of unemployment but this cost will rise over time. Only after a critical stage in the transition process is restructuring accompanied by a decline in unemployment. The paper demonstrates that, when growth is endogenously determined, the level of human capital in the private sector and the rate of unemployment determine whether or not restructuring of production toward the private sector eventually occurs. With low levels of human capital or skills specialized in the production of the private sector good, a relatively high rate of unemployment is necessary to place the economy on a self-sustaining path of restructuring of production toward the private sector.

The paper analyzes the way in which various shocks--such as changes in relative prices--and government policies affect the dynamic path of unemployment. The role of government policies differs significantly depending on whether growth is viewed as an exogenous or an endogenous process. When growth is exogenously determined, the speed of transition has no long-run impact, and restructuring is inevitable. Therefore, policies that reduce unemployment in the early stages of transition--for instance, through subsidies to the state sector--may reduce short-term costs without affecting the long-run equilibrium. By contrast, when growth is endogenous, policies that reduce unemployment may slow down the transition process and jeopardize restructuring and eventual convergence to long-run specialization in the private sector good.

JEL Classification Numbers
F47, H56

Summary of
WP/93/17

"Economic Consequences of Lower Military Spending: Some Simulation Results" by Tamim Bayoumi, Daniel Hewitt, and Jerald Schiff

Recent changes in international politics offer the possibility of general reductions in military expenditures, the so-called "peace dividend." This paper reports the results from simulations designed to estimate the economic and financial impact of a 20 percent decrease in worldwide military expenditures. No attempt is made to measure the impact on security of lower military expenditures or to estimate its associated welfare impact.

The initial impact of lowering military spending is a modest reduction in the growth of GDP, with those countries whose military expenditures (in proportion to their GDP) are above the world average experiencing greater losses. At the same time, lower government spending reduces interest rates and allows governments to lower taxes, which raises private sector consumption and investment. In the medium and long run, GDP rises significantly above baseline values. Hence, in the short run military spending creates jobs and stimulates the economy, but in the long run it lowers economic growth by crowding out investment.

Tracing the movements of GDP provides insight into changes in total output and employment, but GDP is not an appropriate measure of economic welfare in the present case. The correct measure of economic welfare is the gain in current and future nonmilitary consumption. A 20 percent cut in military spending is estimated to produce long-run increases in both private consumption and investment in industrial countries. Economic welfare is estimated to rise by 48 percent of 1992 GDP, with those countries that implement the largest cuts having proportionally higher benefits. Less developed countries could experience gains in economic welfare that are significantly larger than those of industrial countries (79 percent of 1992 GDP).

Since most of the gains in economic welfare come in the longer run, these results are relatively insensitive to short-term factors, such as the timing of tax cuts associated with lower government expenditures and the speed of the spending cuts. They are affected, however, by the size of the government spending multipliers and the percentage of military spending that is assumed to represent productive investment. Nonetheless, in all cases, the simulations indicate a substantial gain to economic welfare.

Another result that emerges from the simulations is that a positive international economic externality is found to exist. The economic benefits to all countries are found to be greater when a coordinated reduction in military expenditures is carried out than when a nation undertakes a unilateral decrease in military expenditures. This externality results from lower world interest rates and increased volumes of international trade. The external benefits to developing countries appear to be particularly pronounced. This externality implies that there are economic, as well as security, reasons for coordinating expenditure cutbacks.

JEL Classification Number
H56

Summary of
WP/93/18

"Military Expenditures 1972-1990: The Reasons Behind
the Post-1985 Fall in World Military Spending" by Daniel P. Hewitt

After increasing during the first half of the decade, world military expenditures as a proportion of GDP have fallen steadily since 1985. For the more than 120 countries covered in this study, military expenditures fell from an estimated 5.6 percent of GDP in 1985 to 4.3 percent, a decrease of 23 percent. In industrial countries military expenditures fell to 3.4 percent of GDP in 1990 from 4.4 percent in 1986, and in Eastern Europe and the former Soviet Union (FSU), from 14.6 percent of GDP in 1985 to 13.1 percent. Over the same period military spending in developing countries dropped from 5 percent of GDP to an estimated 3.8 percent. In the different regions, the North African countries decreased military spending to 3.9 percent of GDP in 1990; Middle Eastern countries, to 8.1 percent; the Asian developing countries, to 3.5 percent; Western Hemisphere developing countries, to 2.1 percent; and in sub-Saharan Africa military spending increased slightly to 3.2 percent of GDP.

Empirical findings confirm that financial and economic variables influence military expenditures. Econometric analysis of these determinants suggests several factors that might explain the observed drop in military spending. Military expenditures tended to increase with GDP, population, inflows of external financing (either directly or indirectly through increasing government spending), and to be higher in countries that have a high ratio of central government expenditures to GDP. Small low-income and heavily indebted countries are found to generally spend less. Therefore, the decline in military spending after 1985 can be attributed to the slowdown in economic growth in developing countries throughout the 1980s and to the decrease in economic activity in the industrial countries in the latter part of the decade.

Political factors are also found to have a strong impact on military spending decisions. Democratic countries spend the least. Countries involved in international war spend the most, followed by those engaged in civil war; monarchies, military governments, others (mostly one-party states), and socialist countries follow. The profound political changes of the past half-dozen years would therefore be expected to have a strong effect on military expenditure policies. The changes in Eastern Europe and the FSU are well known. In addition, 8 new democracies emerged between 1983 and 1989, replacing 7 military governments. Since 1990, 15 countries have either fully implemented or made moves toward democratic government. In most of these countries military expenditures relative to GDP fell from 1985 to 1990, due, at least in part, to internal political changes. Other contributing factors are the improved worldwide security environment and the fall in military assistance.

The other important factors are the improved world security environment and a fall in military assistance. For instance, among countries that did not shift political categories, the majority in all groups lowered their expenditures, probably in reaction to these factors.

JEL Classification Number
E32, G12

Summary of
WP/93/19

"The Yield Curve and Real Activity" by Zuliu Hu

Do the capital markets contain information relevant for forecasting real output growth? For a long time, academics and the public have believed that the stock market in particular is a good forecasting mechanism. Fischer and Merton (1984), for example, claim that the stock price is the single best predictor of the business cycle. This paper makes the case that the bond market may actually be a better predictor of economic growth than the stock market.

This paper presents a simple model that yields a closed-form formula for the term structure of interest rates. It explicitly demonstrates the link between equilibrium interest rates and the real output process. Then, the paper documents how a term structure variable or, more specifically, the yield spread between long-term and short-term government bonds can be used to forecast GDP growth in the seven major industrial countries.

To evaluate the forecasting performance of the yield curve, the yield spread model is compared with the alternative stock price-based model and a univariate time-series model for GDP growth. It appears that the yield spread outperforms both models for the majority of the countries studied and also retains marginal forecasting power when other relevant information variables are included in the regressions.

These results suggest that it may be useful to add some measure of the term structure to the list of leading indicators, a status that the stock market price index has long enjoyed.

JEL Classification Numbers
E42, F33, F36

Summary of
WP/93/20

"Monetary and Exchange Rate Arrangements for NAFTA"
by Tamim Bayoumi and Barry Eichengreen

This paper considers the advisability of having a single currency across the North American Free Trade Area (NAFTA)--comprising the United States, Canada, and Mexico--through the dual lenses offered by the theory of optimum currency areas and the experience of the European Community (EC). In the EC, the Single Market Program has created growing momentum for deeper economic integration, of which a single European currency is regarded as an integral part. In North America, by contrast, the debate over economic integration has barely touched on altering current monetary arrangements.

In principle, the paper finds that the European Commission's argument that reaping the full benefits of economic integration requires firmly fixed exchange rates, and ultimately a single currency for Europe, applies with equal force to North America. But the benefits of permanently fixing the exchange rate must be weighed against the costs of relinquishing it as an instrument of adjustment. To gain insight into these comparative costs, the paper analyzes the incidence of supply and demand disturbances to different North American regions and EC member countries.

The analysis suggests that the costs of truly fixed exchange rates (or monetary union) are likely to be higher for North America than for the EC's continental core (Germany, France, Belgium, the Netherlands, and Denmark). Even when the entire EC is used for the comparison, the negative correlation of underlying shocks in Mexico with those to the industrial regions of the United States, and the exceptionally large magnitude of Mexico's shocks, suggest that Mexico would incur higher costs than Southern Europe from a rigid currency link. This, the authors suggest, reflects the importance of petroleum production in the Mexican economy.

Of course, energy production is also important to the South Western United States and to Western Canada. The correlation between their shocks and those to their respective currency areas is also strikingly low, which is where other elements of optimum currency area theory come into play. Labor mobility between the South West and the rest of the United States and between Western and Eastern Canada is high and accompanied by relatively little social and political strain. Similarly, the United States and Canada both possess highly articulated systems of fiscal federalism that work to minimize the dislocations caused by region-specific shocks. While fiscal federalism is under active discussion in the EC, the creation of such institutions at the North American level has not been broached in NAFTA negotiations. For all these reasons, the paper concludes that North America is less of an optimum currency area than the EC.

JEL Classification Number
H26

Summary of
WP/93/21

"A Primer on Tax Evasion"
by Vito Tanzi and Parthasarathi Shome

Tax evasion is a universal phenomenon that has existed for thousands of years. It occurs in such forms as the nondeclaration or underreporting of income, sales or wealth; overreporting of deductible expenses; smuggling activities; or any number of other ways. Opportunities to evade taxes vary according to the type of income earner (professionals and independent contractors versus wage earners); structure of the economy (agriculture and commerce versus industry, or large enterprises and establishments versus small shops and operators); and structure of the tax system (number of taxes, level of tax rates, dependent versus nondependent income sources, accounting concepts of tax liabilities, withheld final taxes versus a global tax structure based on declarations).

Although tax evasion has received little attention in the post-Second World War literature on public finance, it has recently been resurrected as a control instrument for reducing the fiscal deficit. It is also receiving more attention as a result of an increasing concern about underground economic activities and their ramifications for economic policies.

The theory of tax evasion has many limitations since it is heavily dependent on assumptions about the attitude toward risk and on knowledge of the probability of detection (with full applicability of the penalty laws). In reality, tax evasion may be influenced by many other factors. The probability of detection is kept confidential by the tax administration. Also, the penalties may not be fully applied if tax evasion is widespread.

Various countries have recently attempted to develop methods that will help them estimate tax evasion. These include estimating the size of the underground economy or the amount of cash held in the economy and comparing the value of a particular tax declared to the tax administration with potential revenue from that tax calculated on the basis of the national accounts and the input-output matrix. The latter method, currently being used by selected country authorities, has been often used and refined by IMF tax missions.

Countries vary widely in the share of resources they allocate to tax administration and in the share of those resources in total tax collection. Tax administration plays an important role in determining the level of tax evasion. A tax administration, like an efficient firm, given its budget, should maximize output--that is, tax revenue--while ensuring equitable treatment of taxpayers and minimizing compliance costs. Among the instruments a tax administration has at its disposal to address evasion are withholding; presumptive and minimum taxes; selective auditing; penalties and sanctions; and controls that allow for cross checks between, for example, the value-added tax (VAT) and customs information or the VAT and income tax.

JEL Classification Numbers
H2, H3, H5, H6, P2, P3

Summary of
WP/93/22

"Fiscal Policy and the Economic Restructuring of Economies in Transition" by Vito Tanzi

This paper discusses several important fiscal issues faced by previously centrally planned economies in their transition to market-based systems.

It shows that in countries that are currently defining the explicit role of the government, where the budget needs to assume some of the social responsibilities that had been carried out by the state enterprises, and where "property rights" within the public sector are still vague and being established, the budget deficit has far less informational value than generally assumed. The budget deficit--calculated on the basis of the relationship between budgetary revenue and expenditure--often differs widely from the true public sector fiscal deficit and may even move in a different direction. In these situations, total credit expansion will be a more important guide to macroeconomic policy than the deficit. The paper argues that if limits on the budget deficit are too tight, they may create inverse incentives for policymakers that may actually slow down the transition. Although tax reform and the containment of public spending remain important goals, the paper concludes that fiscal policy should be assessed on the basis of specific structural reforms rather than on the basis of its impact on the budget deficit.

The paper discusses various tax issues, in particular, the inevitable reduction in the tax/GDP ratio during the transition, the need for simplicity in tax reform, and the importance of tax administration. It emphasizes that simply transplanting the fiscal institutions of advanced industrial countries to economies in transition may lead to costly mistakes.

The paper also discusses several public expenditure issues, including the need to reduce and streamline social expenditure, which continues to be too high and inappropriately allocated; the probability that public spending will fall more slowly than public revenue; and the need to create efficient institutions to manage public spending. The importance of modern budget and treasury offices is highlighted.

JEL Classification Number
E52

Summary of
WP/93/23

"Conducting Monetary and Credit Policy in Countries of the Former Soviet Union: Some Issues and Options" by Hugh Bredenkamp

This paper surveys some of the principal monetary policy issues facing countries of the former U.S.S.R., emphasizing their immediate problem of imposing financial discipline to bring down inflation quickly and decisively. It considers possible options for the essential nominal anchor, together with the problems of selecting the appropriate targets and instruments of monetary policy to make the anchor effective. It is suggested that, in most of these countries, a floating exchange rate regime will be appropriate in the early stages of stabilization, which in turn requires that a monetary aggregate be identified as an intermediate target.

The paper also considers some factors that affect the relative stability of different monetary aggregates and concludes that a flexible and somewhat eclectic approach will be necessary in practice. As regards policy implementation, the paper argues for greater central bank independence in the former Soviet republics, particularly from parliamentary interference. It advocates the liberalization of interest rates, uniform interest-bearing reserve requirements, and quantitative controls on central bank credit. It also discusses a possible role for temporary bank-by-bank credit ceilings, which should be freely transferable between banks. Finally, the paper argues that, if these countries are to sustain the stabilization effort, they must impose discipline at the micro as well as the macro level, and it suggests a possible transitional arrangement for allocating credit in the absence of well-functioning credit markets.

JEL Classification Number
E41

Summary of
WP/93/24

"The Demand for M1 in the United States:
A Comment on Baba, Hendry, and Starr" by James M. Boughton

A 1992 paper by Yoshihisa Baba, David Hendry, and Ross Starr presents a model of the demand for narrowly defined money (M1) in the United States that shows a dramatic improvement in both fit and stability over earlier models. This note estimates an alternative model that is based on the same data set, uses a similar error-correction methodology, and has very similar statistical properties to the original. Both models show remarkable stability throughout the past three decades.

Two conclusions are that the improvements are due more to the use of complex dynamics than to the introduction of variables representing financial innovation (as alleged by Baba, Hendry, and Starr) and that some of the economic properties are not robust with respect to minor changes in specification. Notably, whereas in the original model, money demand has a low elasticity to real income, which suggests substantial economies of scale in money holdings, this alternative has a unitary elasticity, which suggests that money and income should grow proportionately in the long run.

JEL Classification Number
J30

Summary of
WP/93/25

"Centralized Bargaining, Efficiency Wages, and Flexibility"
by Ramana Ramaswamy and Robert Rowthorn

Until now, "wage bargaining" literature has focused primarily on macroeconomic outcomes. This paper, in contrast, examines the micro-economic issues of wage bargaining, which have received scant attention to date. Specifically, the paper uses an efficiency wage model with insider-outsider features to appraise the following questions: (a) under what conditions is centralized wage bargaining more profitable than decentralized bargaining for an individual firm? (b) what are the characteristic features of firms that prefer decentralized to centralized bargaining? and (c) has the proportion of firms that prefer decentralized to centralized bargaining been increasing or decreasing over time?

The paper provides useful theoretical insights into the issues involved in shifting from centralized to decentralized wage bargaining in the Swedish case. It concludes that (a) both high-technology and low-technology firms will increase their profitability by shifting from centralized to decentralized bargaining; (b) firms in the "intermediate" technology range may not benefit by moving from centralized to decentralized bargaining; and (c) given the recent shift to more flexible work practices that characterize the "post-Fordist" environment, firms may prefer decentralized wage bargaining. That is, the pressure to decentralize wage bargaining, as evidenced recently in Sweden, may be based on objective criteria. Simulations are carried out to illustrate and reinforce these theoretical results.

JEL Classification Numbers
E2, E6, H3

Summary of
WP/93/26

"Intertemporal Substitution in Consumption Revisited"
by Zuliu Hu

The elasticity of intertemporal substitution is an important determinant of the response of saving and consumption to the real interest rate. Summers (1984) argued that the intertemporal substitution effect was strong, whereas Hall (1988), drawing evidence from U.S. data, concluded that its value is close to zero. Hall maintained that the previous higher estimates obtained by Summers (1982) and others are due to inappropriate treatment of the time aggregation bias and can therefore be dismissed.

This paper, which addresses the specification issues raised by Hall, extends the earlier research to an international context by examining data from twenty OECD countries. The Kreps-Porteus nonexpected utility preference is adopted, and distributional restrictions are imposed to derive a simple relation that governs the covariation of consumption growth and asset returns, which allows unambiguous identification of the intertemporal substitution parameter.

The single-equation generalized method of moments estimates for each of the seven major industrial countries are typically small and imprecise, corroborating Hall's earlier finding from the U.S. data. The full information maximum likelihood estimation, however, gives larger and more precise values for the parameter, possibly because of the efficiency gain of system estimation. The panel procedure also yields relatively large estimates. Overall, the multicountry evidence seems to contradict the hypothesis of zero intertemporal substitution.

The results presented in this paper imply, among other things, that a shift toward expenditure taxation would probably lead to increases in private savings.

JEL Classification Numbers
Q28, Q38

Summary of
WP/93/27

"Public Expenditure Policy and the Environment:
A Review and Synthesis" by Ian Parry,
Sanjeev Gupta, and Kenneth Miranda

The most commonly cited environmental instruments are intended primarily to address market failures by ensuring that economic agents take into account the social costs that arise as they pursue their goals. However, the underlying causes of environmental degradation are often rooted in policy failures rather than in market failures. In many countries, the policy failures that often lead to environmental degradation are linked to public expenditure policies.

This paper focuses on the implications of public expenditure policy for the environment and illustrates how countries can reform environmentally harmful subsidies, increase operations and maintenance expenditures for public investment projects, and incorporate the environmental aspects of projects into their cost-benefit analyses. Subsidy reduction that leads to expenditure savings would also allow a country to raise social expenditures and to establish or strengthen an appropriate safety net for the vulnerable population groups. In addressing environmental concerns, countries need to recognize that expenditure policies have a broad and important role to play.

JEL Classification Numbers
F31, F47

Summary of
WP/93/28

"Evaluating the EMS and EMU Using Stochastic Simulations: Some Issues" by Paul R. Masson and Steven Symansky

Since the Delors Report was published in April 1989, a lively debate has ensued about the costs and benefits of economic and monetary union (EMU) in Europe. The EC Commission's study on monetary union, "One Market, One Money," which used stochastic simulations of the IMF's MULTIMOD model to compare variability of output and inflation under different exchange rate arrangements, was sanguine about the favorable effects of monetary union. Their simulations suggested that although the European Monetary System (EMS) of the mid-1980s produced more output variability (but less inflation variability) than freely floating rates, the evolving EMS and, even more so, EMU would produce improvements in both output and inflation variability for the EMS countries taken together.

This study was, however, criticized by Patrick Minford and collaborators, who presented their own simulations of the operation of the EMS and of monetary union, using a different model, the Liverpool World Model. They concluded that EMU is unambiguously bad for the United Kingdom, and also bad for the other three major EC countries if the United Kingdom joins. Especially where the EMS countries pursue monetary targets (either independent targets, as under floating, or a joint target, as would be the case in EMU), floating dominates monetary union. They criticize the EMS even more strongly; it is destabilizing, and the system itself is subject to instability, which throws doubt on whether it can survive in its current form.

This paper attempts to understand the sharply contrasting conclusions of these two significant model simulation studies of monetary union. Its major conclusion is that the EMS seems to be much less of an engine of instability than is implied by the studies of Minford and associates. At the same time, the paper does not, on the basis of stochastic simulations that admittedly account for only a limited set of factors, find a strong case for EMU.

The differences in findings seem to relate to fairly arbitrary choices in modeling realignments and in estimating the size of risk premiums in foreign exchange markets. On the one hand, the treatment of realignments by Minford and associates appears to account for the instability in their results. The paper does not find their choice of the rule as a description of how the EMS actually operates to be particularly convincing. Moreover, the fact that the rest of the world seems to be equally, or even more severely, affected by the EMS than the member countries themselves throws doubt on their results. On the other hand, the EC Commission's method of estimating risk premiums produces much larger gains from EMU than those obtained using other methods. It may well be, however, that existing econometric models are not well suited to capture the advantages of a common currency insofar as they do not capture the saving of transactions costs and the anti-inflationary discipline resulting from a multilateral central bank.

JEL Classification Number
F41

Summary of
WP/93/29

"Stabilization Dynamics and Backward-Looking Contracts"
by Guillermo A. Calvo and Carlos A. Végh

Exchange rate-based stabilizations often result in an initial output expansion and real appreciation. One explanation is that, in the presence of inflation inertia, a reduction in the nominal interest rate causes the domestic real interest rate to fall, thereby increasing aggregate demand. Inflation inertia also causes a sustained real appreciation of the domestic currency. This paper re-examines this phenomenon in the context of an intertemporal optimizing model.

The paper's central finding is that a credible, once-and-for-all reduction in the rate of devaluation gives rise to appreciation of the real exchange rate and an initial expansion in aggregate demand only if the <u>intertemporal</u> elasticity of substitution <u>exceeds</u> the static elasticity of substitution between traded and nontraded (home) goods. Otherwise, aggregate demand does not increase during the first stages of the program. Specifically, when the intertemporal elasticity of substitution is <u>lower</u> than the elasticity of substitution between traded and home goods, aggregate demand for home goods falls following a permanent reduction in the devaluation rate. The paper also confirms the findings of earlier, reduced-form models (under all parameter configurations) that real interest rates initially fall on impact, and the domestic currency appreciates in real terms during the first stages of the program.

JEL Classification Numbers
E22, O16

Summary of
WP/93/30

"Determinants of Private Investment in Pakistan"

by Khaled Sakr

The paper investigates the determinants of private investment in Pakistan, in particular, the impact upon it of government investment. A selected review of the theoretical and empirical literature indicates that investment functions in developing countries differ from those in developed countries in that credit availability and government investment--especially in infrastructure--play a far more important role in the former. The impact of government investment is shown to depend primarily on both its structure and the characteristics of the economy.

Building on the above, the paper specifies and estimates a private investment function for Pakistan for the period 1973/74-1991/92. The results suggest that private investment was positively correlated with GDP growth, with credit extended to the private sector, and with government investment. To investigate the issue further, the paper disaggregates government investment into its infrastructural and noninfrastructural components. It concludes that noninfrastructural government investment appears to be negatively correlated with private investment.

In assessing policy implications, the paper stresses the importance of taking into account the prevailing macroeconomic framework, including the contribution of macroeconomic stability to stimulating private investment. The paper argues that in promoting both infrastructural government investment and credit extended to the private sector, policymakers must give due consideration to maintaining macroeconomic stability.

Finally, it is noted that, as in other countries undergoing fundamental structural changes, the investment function in Pakistan is likely to evolve. For example, with further liberalization of financial markets, the interest rate variable is expected eventually to supersede the availability of credit in the investment function. Similarly, the impact of government investment is expected to evolve, with a shift in the relative importance of crowding-out and crowding-in effects in favor of the former. It is unlikely, however, that the positive impact of infrastructural government investment will decline significantly in the next few years provided that qualifications regarding efficiency and macroeconomic stability are not seriously violated.

JEL Classification Numbers
E21, O16, O41

Summary of
WP/93/31

"Savings, Growth, and Capital Markets Imperfections:
The Case of Borrowing Constraints" by José De Gregorio

The determinants of savings have long been a fundamental concern of economists and policymakers. Recent developments in the theory of economic growth that emphasize the importance of savings in sustaining long-run growth have made them the focus of renewed interest and suggest that understanding savings behavior may help in designing policy to promote economic growth.

The savings literature has highlighted the effects on savings of capital market imperfections, in particular, the effects of borrowing constraints, arguing that, when individuals are not allowed to borrow against future income, they will save more (or dissave less) than otherwise. This paper examines the corollary to this argument--namely, that the existence of borrowing constraints leads to higher growth. First, it is shown that borrowing constraints increase savings. Then, this result is incorporated into an endogenous growth model to illustrate other effects that borrowing constraints may have on growth. Although growth may be favored by high savings rates, it may be hindered by low productivity of accumulated physical capital, often caused by low investment in human capital. Whereas borrowing constraints may increase savings, and hence physical capital accumulation, they are likely to reduce the accumulation of human capital.

The paper cites the experience of the industrial countries to highlight the importance of the issue of savings, growth, and borrowing constraints. In particular, the Italian experience is seen as a clear case in which borrowing constraints have been associated with high savings rates. The paper compares the degree of capital market development, as well as savings, investment, and growth rates across the seven major industrial countries and also presents evidence of the correlation between human capital accumulation and the extent of borrowing constraints for the OECD countries.

JEL Classification Numbers
E24, J64, J65

Summary of
WP/93/32

"Labor Market Issues in Belgium:
An International Perspective" by Reza Moghadam

In Belgium, underutilization of labor imposes a heavy burden on government expenditure. The labor market displays a lack of flexibility, suggesting not only policy-induced distortions but also structural problems. The number of persons receiving some form of unemployment benefit has been rising steadily since 1980; the nonemployment rate is very high; there are large regional disparities in unemployment; female and youth unemployment are prevalent; and long-term unemployment is significantly higher than in other industrial economies. This paper assesses the effectiveness of recent labor-market initiatives in Belgium in the light of these characteristics.

Cross-country evidence suggests that the generosity of long-term unemployment benefits helps to explain the prevalence of long-term unemployment. High, long-term unemployment in turn helps to explain low participation rates. Many more people receive unemployment insurance than are unemployed and actively seeking work, yet unemployment benefits are not means-tested, whereas the income support system is. Employee and employer tax wedges in Belgium are also higher than in other industrial countries. In addition, there is some evidence of a mismatch in the labor market. Relative to other industrial countries, Belgium spends a higher proportion of its labor market expenditure on passive measures, such as unemployment compensation, and less on active measures, such as training.

Recent government measures to limit the duration of unemployment benefits and tighten eligibility have helped to alleviate the labor market problems. The initiative that could have the most significant impact on the labor market is the plan d'accompagnement. By providing and monitoring an action program for those who are on the verge of becoming long-term unemployed, the plan could help to prevent long-term unemployment and reduce the nonemployment rate. Furthermore, by providing targeted training, this initiative could help to reduce mismatches in the labor market.

However, these initiatives are unlikely to rectify the underlying problems. Further measures are needed to ensure that Belgium will not face a supply constraint when the economy recovers. Such measures could include separating the unemployment compensation system from income support; reducing the generosity of long-term benefits; tightening the provisions for claiming part-time unemployment compensation; extending the plan d'accompagnement to more of the unemployed and making its provisions more specific, particularly with regard to training; and reducing employee and employer tax wedges.

JEL Classification Numbers
F32, F34

Summary of
WP/93/33

"Net Foreign Assets and International Adjustment:
The United States, Japan, and Germany"

by Paul R. Masson, Jeroen Kremers, and Jocelyn Horne

This study confirms the presence of mechanisms that stabilized the net foreign asset positions of the three largest industrial countries in the post-World War II period. Persistent and large current account imbalances in the past decade have led to quite dramatic changes in the net international positions of the United States, Japan, and Germany. However, various feedback effects from foreign asset stocks may act as stabilizing mechanisms to prevent a continued increase of these net foreign asset or liability positions and to ensure an eventual return to long-run equilibrium.

Cointegration tests are used to investigate empirically the long-run equilibrium relationship for net foreign assets of the United States, Japan, and Germany using postwar data. These tests suggest the existence of a long-run relationship between the net foreign asset-GNP ratio, the public debt-GNP ratio, and dependency ratios relative to other major industrial countries. Lower public debt divided by GNP and a higher proportion of elderly people in the population are associated with higher net foreign assets divided by GNP.

Developments in the 1980s in the United States differed from those in Japan and Germany in one important respect: the conditional long-run net foreign asset equilibrium of the United States moved sharply downward, reflecting a rapid accumulation of public debt. In contrast, the Japanese and German authorities implemented policies to consolidate the public finances; the net foreign assets of these countries increased strongly.

To identify the channels through which stabilizing feedback occurs, error correction models for components of domestic absorption are also estimated. These results suggest, however, that stabilizing feedback operates through different linkages in different countries. It operates primarily through private investment in the United States and Germany and through government spending in Japan. There is also weaker evidence of consumption feedback in the United States and Japan.

JEL Classification Number
F32, F41, F47

Summary of
WP/93/34

"Do Capital Flows Reflect Economic Fundamentals in Developing Countries?" by Atish R. Ghosh and Jonathan D. Ostry

This paper proposes a methodology for testing whether capital flows to developing countries are determined by economic fundamentals or by purely speculative forces. The methodology is based on the familiar notion that capital flows should act as a buffer to smooth consumption in the face of shocks to income, investment, and government expenditure. Under high capital mobility, transitory income shocks, for example, will not elicit corresponding changes in consumption, and the difference will be reflected in changes in the level of capital flows.

The consumption-smoothing approach therefore provides a benchmark for judging what capital flows ought to be, given the specific shocks affecting the economy. Optimal capital flows, according to this approach, are those that allow agents to smooth their consumption fully in the face of shocks to national cash flow, defined as output less investment less government expenditure. Once this benchmark for the optimal level of capital flows has been obtained, it is possible to compare the benchmark series with actual data.

Using data from a large cross-section of developing countries, the paper finds considerable support for the consumption-smoothing view of capital flows. Specifically, it uses a variety of formal statistical tests as well as simple time-series plots of the predicted and actual data and finds that the level and volatility of capital movements predicted on the basis of the consumption-smoothing model are very close to the actual level and volatility of such movements observed in the data. The results suggest that capital flows in developing countries are indeed determined to a significant degree by economic fundamentals and, in line with other recent research, that effective capital mobility in developing countries may be quite high.

JEL Classification Numbers
E52, E58

Summary of
WP/93/35

Reserve Requirements and Monetary Management:
An Introduction" Daniel C. Hardy

Reserve requirements, which have been imposed by most central banks, can be rationalized on several grounds. First and foremost, they may help to stabilize the demand for base money and thus facilitate the use of other instruments in the implementation of monetary policy. In the absence of more flexible instruments, reserve requirements may themselves be varied as a means of implementing monetary policy. Reserve requirements have a fiscal impact insofar as they require banks to hold an asset that yields less than the market rate of return; they are an inefficient means of taxing financial services if alternatives are available. Finally, reserve requirements can be used to ensure that banks hold a prudent level of liquid assets.

The design of reserve requirements can strongly influence their effect on banks' behavior. It is normally most efficient to define the reserve base to include all and only those bank liabilities that are included in the targeted monetary aggregate. Most arguments suggest that the reserve base should be measured contemporaneously with the holding period, or designed to approximate a contemporaneous requirement, and that a bank's compliance with reserve requirements should be based on the average of its reserve holdings. For efficiency, the remuneration of reserves should be set close to their opportunity cost--that is, the safe lending rate--adjusted for the proportion of reserves held voluntarily. Assets eligible to fulfill the requirement may or may not include cash in vault. The penalty for non-compliance should be explicit: the penalty rate needs to be at least twice the opportunity cost to be effective.

JEL Classification Numbers
F31, O16, O57

Summary of
WP/93/36

"Experience With Floating Interbank Exchange Rate Systems in Five Developing Economies" by Vicente Galbis

This paper examines the experiences under floating interbank exchange rate systems of five developing countries--The Gambia, Guyana, Jamaica, Nigeria, and Sri Lanka--which employed a variety of institutional and regulatory arrangements in the interbank market. It describes their prefloat economic conditions and exchange arrangements and the factors affecting their choice of an interbank system. The role of financial institutions and the official regulatory framework in making the transition to the interbank exchange rate system are also discussed, along with the macroeconomic adjustment framework and the exchange and trade system reforms adopted. The paper assesses the performance of the interbank floats in terms of both exchange market and macroeconomic developments.

All five countries introduced an interbank floating exchange system to provide a more efficient, noninterventionist mechanism for determining the official rate and allocating scarce foreign exchange resources. However, some phased in the new system, removed exchange and trade restrictions, and liberalized interest rates more gradually than did others; in several countries, too, remaining regulations constrained banks and other authorized exchange dealers in negotiating the exchange rate between themselves and the public. The interbank floats and the accompanying exchange and trade liberalizations generally resulted in convergence between the official and parallel exchange rates; an appropriate flexibility and movement of nominal and real exchange rates; and spreads between the buying and selling rates that stayed within reasonable limits. Economic gains from the floating interbank systems also appear to have accrued more visibly to the countries that moved early and decisively to abandon previous restrictions--The Gambia, Guyana, Jamaica, and Sri Lanka.

The paper concludes that interbank exchange rate markets can operate relatively well with minimal banking infrastructure (for example, The Gambia and Guyana); licensing of nonbank foreign exchange dealers can provide additional market competition. However, the paper argues, these markets can operate well only if the authorities remove trade barriers and exchange restrictions on both current international transactions and capital transfers, liberalize interest rates, and introduce prudential regulations and supervision over exchange transactions. Segmented exchange markets may persist if regulations prevent the free flow of resources across market participants (as shown by the experience of Nigeria with a composite exchange rate system--an official auction and an interbank market). Moreover, any residual official restrictions that remain are likely to foster the continued existence of parallel, informal markets. Finally, the paper concludes, floating exchange rates and liberalized exchange and trade systems--although they are helpful in balancing the external sector--are not substitutes for sound macroeconomic policies.

JEL Classification Number
E31

Summary of
WP/93/37

"Private Saving, Public Saving, and the Inflation Tax: Another Look at an Old Issue" by A. Javier Hamann

The distortions caused by inflation on conventional national account aggregates have been widely discussed in the literature. Two aspects of the problem have received particular attention: monetary correction of interest payments on nonindexed debt instruments and the proper classification of the proceeds from the inflation tax in measures of the public sector deficit. This paper focuses on the second issue, analyzing the consequences of omitting the inflation tax from standard national account definitions. It uses the framework developed by Calvo (1986 and 1987), a model that has solid microeconomic foundations and is simple enough as an expositional tool.

The model portrays a representative individual who maximizes his lifetime utility over an infinite horizon. The individual faces two types of taxes: a lump-sum tax and the inflation tax. It is shown that, in a steady state with a constant inflation rate, the optimal level of private consumption depends on the overall tax burden but not on the structure of the tax system--that is, on the relative importance of the inflation tax. This result implies that it is impossible to infer the effects on the economy of certain government policies exclusively on the basis of national accounts figures. Rather, it would be necessary to take into account the evolution of seigniorage collection by the government. In particular, the paper shows that standard national account definitions of private saving and the budget deficit create the illusion that heavier reliance on the inflation tax is associated with higher saving by the private sector when, in fact, private saving is unrelated to inflation in the model developed here. Using figures from Mexico and Uruguay, the paper shows that the inflation tax bias may represent a significant percentage of domestic saving.

JEL Classification Numbers
E52, E61, F31, F41

Summary of
WP/93/38

"Real Exchange Rate Targeting Under Imperfect Asset Substitutability" by J. Saul Lizondo

This paper presents a model of an economy that uses nominal exchange rate policy to keep the real exchange rate constant at a certain target level, under the assumption that domestic and foreign assets are imperfect substitutes. The paper discusses the determinants of inflation under such a policy and examines the consequences of exogenous and policy-induced shocks on inflation, the external accounts, and the fiscal accounts.

The paper concludes that under real exchange rate targeting, there seems to be a trade-off between external trade performance and inflation. The more ambitious the external trade objectives, and thus the more depreciated the real exchange rate target, the higher the resulting rate of inflation.

How fiscal tightening affects inflation depends on the instrument that is used. An increase in taxes or a reduction in public sector expenditure on nontraded goods would reduce inflation in both the short run and the long run. A reduction in public sector expenditure on traded goods, on the other hand, would have no effect on inflation. The consequences of fiscal tightening for the trade balance are also instrument-specific. While reducing public sector expenditure on traded goods would improve the trade balance by the same amount, increasing taxes would have no effect on the trade balance as private sector expenditure would remain constant due to reduced inflation tax payments. Furthermore, a reduction in public sector expenditure on nontraded goods would cause the trade balance to worsen; the decline in inflation tax payments would cause private expenditure to rise by more than the reduction in public expenditure.

The model indicates that high domestic interest rates brought about by open market sales of domestic bonds can be effectively used to contain inflation, but only in the short term. Eventually, private sector demand will expand owing to increased real interest receipts on private sector holdings of domestic bonds, thereby generating higher inflation.

This pattern also has implications for designing a response to exogenous changes in world financial markets. For example, a fall in foreign interest rates in the absence of a policy response would induce capital inflows, a decline in domestic interest rates, and higher inflation in the short run. Eventually, however, lower real interest receipts by the private sector would lead to lower private expenditure and, in turn, to lower inflation. If the monetary expansion resulting from the capital inflows were sterilized by sales of domestic bonds, the authorities would be able to contain the initial increase in inflation but would forfeit (at least part of) the fall in inflation that would follow if sterilization did not occur.

JEL Classification Numbers
E60, O11, O53

Summary of
WP/93/39

"Economic Reform in Arab Countries: A Review of Structural Issues for the Remainder of the 1990s"

by Mohamed A. El-Erian and Shamsuddin Tareq

Arab countries' economic and financial performance in the 1980s was mixed relative to that of developing countries as a whole. Although economic growth lagged behind that in developing countries, inflation performance was more favorable and the group's current account position improved despite the impact of lower international petroleum prices. Macroeconomic aggregates for Arab countries as a group, however, conceal important differences among individual countries, especially when developments in oil and non-oil economies are compared.

Notwithstanding the diversity in economic and financial conditions, many of the countries in the Arab region face similar policy challenges, particularly in the structural reform area. It is in this context that the paper identifies a "core" set of required structural reforms. These include rationalizing the activities of a large public sector with a view to limiting them to areas warranted by market failure; strengthening the structure of government budgets and increasing their developmental impact; improving the mobilization and allocation of loanable funds from domestic and external sources; enhancing the institutional framework to encourage private investment and production; and rationalizing the external trade and payments system. The paper also discusses, as part of a comprehensive poverty alleviation policy, the importance of measures to protect the most vulnerable groups of the population during the process of adjustment and reform. To be fully effective, the structural reform efforts need to be supported by prudent demand management, an open international trading system, and, for some countries, appropriate external financial assistance.

There is a growing recognition among Arab countries of the need to strengthen their economic performance in the 1990s in a sustainable manner. Indeed, some countries have already embarked on programs aimed at correcting structural weaknesses. The analysis of experience to date under these programs provides an important input into the paper's specification of an overall framework for policy reform.

JEL Classification Numbers
F33, F34

Summary of
WP/93/40

"Toward an Economic Theory of Multilateral Development Banking" by Gerd Schwartz

Multilateral development banks (MDBs), such as the World Bank and the various regional development banks, have been in existence for a number of decades now. Despite their obvious significance for both world capital markets and developing country borrowers, the provocative question whether MDBs are needed after all has usually been answered on either moral or political grounds, often with little economic foundation. This paper addresses the apparent lack of economic theory in the analysis of multilateral development banking by offering a simple comparative statics framework, adapted from the credit union literature, through which MDB lending behavior can be studied.

In the model, MDB members fall into two groups: "net contributors" (the industrial countries) and "net borrowers" (the developing countries). The benefits derived by each group are nonhomogeneous. Within each group, member countries try to channel the MDB's financial resources into those uses that yield the highest expected benefit. The level of benefits member countries can expect to derive depends critically on a number of exogenous market parameters, institutional variables, and the preferences of other member countries. Although the MDB management has to trade off the interests of the two groups, once it has established its preferences, the preferred group of member countries usually has to absorb positive as well as negative exogenous shocks.

The model may be used to predict potential areas of conflict, agreement, and indifference between MDB member countries, analyze lending policy proposals against the background of distributional conflicts, and show how various institutional reforms may improve allocative efficiency and overall member benefits.

JEL Classification Numbers
F41, F43

Summary of
WP/93/41

"Exports and Economic Development" by Delano Villanueva

Exports affect, and are affected by, long-term economic growth through various mechanisms, including production and demand linkages, learning effects and improvement of human resources, adoption of superior technology embodied in foreign-produced capital goods, and the general easing of the foreign exchange constraint associated with the expansion of the export sector. After surveying these mechanisms, this paper formally incorporates one--the learning effect that leads to the improvement of human capital--into a modified neoclassical growth model via the dependence on exports of labor-augmenting technological progress and vice versa.

A key analytical result is that, both in the short run and in the long run, an increase in export activity will raise the growth rate of output. Although the short-run transitional dynamics in the standard neoclassical analysis of the relationship between exports and economic growth remain valid, the modified model's long-run result is at variance with the standard proposition that the growth rate of output is independent of export activity. Another important result is that, for the level of long-run real consumption per unit of effective labor to be maximized, the rate of return to capital should be higher than the population growth rate adjusted for any exogenous labor-augmenting technical change. Capital is thereby partially compensated for its additional effect on the long-run growth rate of output through learning effects and improvement of human resources brought about by the positive externalities of export activities and their interaction with investment and capital accumulation.

Because of the central role of exports in the absorption of the latest technology and the interdependence of investment, technical change, and the size of the export sector, several important policy implications can be drawn for the external area. First, a key policy objective should be to adopt an outward-looking strategy to export manufactures early in the process of industrial development. High protective tariffs tend to create an inefficient industrial sector, prevent the introduction of modern techniques, and stunt factor productivity. Second, a crucial policy instrument is a competitive, market-determined or market-related exchange rate, complemented by low, nondiscriminatory tariffs and the elimination of nontariff import barriers. Third, strong anti-inflationary financial policies are essential to keep domestic input prices and wages lower than those in competitor countries, so as to maintain external competitiveness. These policies would necessitate strict limits on fiscal subsidies, tax exemptions, and credit expansion.

JEL Classification Numbers
H5, H55

Summary of
WP/93/42

"Poland: The Social Safety Net During the Transition"
by Xavier Maret and Gerd Schwartz

This paper argues that the brunt of the reform-induced increase in Poland's social expenditures has been borne by social insurance arrangements (mainly pensions and unemployment compensation) rather than by social assistance schemes targeted to the poor or by more temporary schemes, largely because of the ease of access to social security and its more attractive benefit structure. A major policy challenge for Poland will be to avoid a further burdening of social security by needs that should be addressed through basic income support and emergency assistance policies or general transfers (e.g., family allowances). The paper illustrates current reform needs, using unemployment compensation and pensions as examples.

As regards unemployment compensation, the introduction of flat-rate benefits and duration limits has addressed some major concerns, but others remain to be resolved. These include the administration's capacity to enforce existing rules, the problem of adjusting benefits to inflation, the limited use of active labor market measures given that labor mobility is constrained by a severe housing shortage, and issues of fiscal federalism that arise as the local authorities are forced to take on more responsibility for the long-term unemployed.

As regards pensions, it is estimated that, without reform, costs of the current pay-as-you-go system will continue to increase significantly and further threaten the financial viability of the system, notwithstanding Poland's relatively favorable demographics. Five tasks demand policymakers' immediate attention. First, the average retirement age should be increased from the current 55 years to over 60 years, for example by reducing the high number of disability pensioners, limiting benefits to early retirees through actuarial adjustments of pension benefits, and further restricting the right to, and enforcing existing rules regarding the simultaneous receipt of, pension and wage income. Second, the problem of contribution evasion and arrears needs to be addressed by increasing enforcement authority and capacity. Also, introducing employee contributions may help to make employees more interested in their employer's compliance.

Third, there is no room for special treatment of specific occupational groups in the form of discretionary adjustments in the pension base or highly favorable early retirement provisions. Fourth, benefits that do not address social security contingencies, such as family allowances, should not be financed through contributions and paid from the pension funds, but financed from general taxation and paid directly from the budget. Finally, the mechanism for indexing pensions remains flawed. If the pension system is frequently hard-pressed to meet its payment obligations, nominal entitlements must change.

As regards more systemic reforms, a public two-tier pension system, with a flat-rate minimum pension as the first tier and a defined-benefit second tier, none of it covered by a budget guarantee, would probably serve the country best. More radical, Chilean-type reforms should not be considered because they have strong budgetary implications, particularly in the short to medium term, and could easily increase macroeconomic imbalances.

JEL Classification Numbers
C8, E6, H3, H5

Summary of
WP/93/43

"On Improving Public Expenditure Policies for the Poor:
Major Informational Requirements" by S. Ehtisham Ahmad and Nigel Chalk

Increasing budgetary constraints in many countries, and a recognition that unproductive expenditures contribute to macroeconomic instability, have made it necessary to reassess the composition of public expenditures. Evaluation criteria need to incorporate the scope of public sector activities, overall revenue constraints, the effects of public expenditures on sustainable growth, and poverty reduction and distributional concerns.

This paper briefly reviews some of the theoretical underpinnings of this approach, which permits the assessment of trade-offs--both within and across sectors--and highlights the major data requirements to make the approach operational. A survey of the existing cross-country data sets for selected African countries reveals a dearth of household data that would permit an evaluation of the effects of policies on the poor and also of appropriate functional classifications of major expenditure items at various levels of government. There is also a summary of the types of relevant data that might be available from various international agencies.

More effective policymaking would thus require improvements in methods as well as in the related information base. The role of the major international agencies in supporting the improvements in policymaking is highlighted.

JEL Classification Numbers
J31, E32, J41

Summary of
WP/93/44

"The Relation Between Skill Levels and the Cyclical Variability of Employment, Hours, and Wages" by Michael Keane and Eswar Prasad

This paper uses microeconomic panel data to examine differences in the cyclical variability of employment, hours, and real wages for skilled and unskilled workers. The data come from the National Longitudinal Survey of Young Men, a panel containing 12 surveys conducted over a period of 16 years. The panel enables the authors to obtain estimates that control for aggregation bias on the basis of observed worker characteristics and also for unobserved individual fixed effects and selectivity effects. The paper surveys a number of models of labor market contracting to provide a conceptual framework for organizing and interpreting the empirical results.

Contrary to conventional wisdom, skilled and unskilled workers at the aggregate level appear to be subject to essentially the same degree of cyclical variation in wages. More precisely, after correction is made for observed and unobserved worker heterogeneity, relative offer wage differentials are shown to have no consistent procyclical or countercyclical tendencies. However, after controlling for other characteristics, older workers do appear to have more procyclical wages than younger workers.

Important differences emerge in the patterns of the variation of employment and hours for skilled versus unskilled workers, especially when a college degree is used as a proxy for skill level. Workers with a college degree have little cyclical variation in employment probabilities or weekly hours, while both are highly procyclical for workers without a degree. The greater procyclical variation in employment and hours for workers without a degree implies that the average quality of labor input per man-hour rises in a recession. Thus, a substantial countercyclical bias may exist in measures of the real wage that simply divide aggregate compensation by total man-hours.

The industry-level estimates reveal striking differences across industries in the cyclical variation of employment, hours, and wages. For instance, the relative wage premium for skills is strongly procyclical in durable and nondurable manufacturing and is countercyclical in retail trade and services. In some industries, such as nondurable manufacturing and retail trade, a large fraction of the variation in total hours worked appears to be accounted for by variation in average weekly hours rather than in the number of persons employed. In most other industries, as in the aggregate, employment variation seems more important than variation in weekly hours in accounting for cyclical fluctuations in total hours.

JEL Classification Numbers
F3, F4

Summary of
WP/93/45

"The Behavior of Nontradable Goods Prices in Europe:
Evidence and Interpretation" by José De Gregorio,
Alberto Giovannini, and Thomas H. Krueger

This paper examines the evolution of the relative price between tradable and nontradable goods in a group of European countries. A model of an open economy is used to analyze different factors that can account for an increase in the relative price of nontradable goods.

The labor market plays a crucial role in the economy, transmitting shocks to the real wage and the real exchange rate. This paper postulates a centralized bargaining arrangement, where unions act as monopolists by setting the wage rate and employers decide the level of employment. The key element of this market is that the unions' target real wage and target level of employment are above the labor demand schedule. The target real wage could be determined, for example, by expectations of an unsustainable real exchange rate. The model also allows for a government that finances spending on nontradable goods through lump-sum taxation and productivity growth in both sectors.

The model is applied to the data to analyze the joint behavior of the current account, the relative price of nontradable goods, average labor productivity across sectors, government spending, and the sectoral composition of aggregate output. Econometric evidence on the determinants of the real exchange rate is also provided. The findings broadly reveal that demand shifts in the private sector as well as faster productivity growth in the tradable goods sector underlay the appreciation of the real exchange rates in Europe. In addition, the slow adjustment of nontradable goods prices may have played an important role in France during the second half of the 1970s and the early 1980s, in Italy since the late 1970s, and in Spain and the United Kingdom during the second half of the 1980s. In contrast, government expenditure does not appear to have played a major role, through its impact on the demand for nontradable goods, in the evolution of the real exchange rate.

JEL Classification Numbers
053, P17, P27

Summary of
WP/93/46

"Viet Nam--Reform and Stabilization, 1986-92"
by Gabrielle Lipworth and Erich Spitäller

Viet Nam has made substantial progress in the transition to a market economy and toward financial stability since embarking on economic reform in 1986. Piecemeal measures were adopted at first, followed by the launching of a bold and comprehensive program of structural reform in March 1989. Progress has included far-reaching land reform, comprehensive price liberalization, exchange rate unification, tax reform, public enterprise restructuring, modernization of the financial system, and steps toward freer trade. These reforms have taken place against the background of a more general decentralization of decision making.

The initial conditions for reform were set by the unsuccessful period of central planning, the damage incurred during the years of war, and the period of isolation from the international community. Notwithstanding, Viet Nam's structure of production was amenable to a quick supply response, while the recent legacy of a market economy in the South, enhanced by its endowment of natural and human resources, helped that region emerge as the driving force of growth. In addition, Viet Nam's low degree of integration into the Council for Mutual Economic Assistance (CMEA) and its proximity to the dynamic Southeast Asian economies cushioned the effects of the collapse of the CMEA. Finally, the growth in oil exports boosted fiscal revenue, thereby contributing to financial stability.

Since 1989, the structural reform process has been complemented by policies designed to achieve financial stabilization. The main features have included a reduction in the budget deficit, restraint in the growth of money and credit, and a rationalization of the interest rate structure. In the initial stages of stabilization, however, the withdrawal of external financing from the former Soviet Union and the breakdown of preferential arrangements with the CMEA area resulted in the temporary weakening of economic performance. Notwithstanding these constraints, the Vietnamese intensified the adjustment process and hastened the transition to a market economy. Viet Nam has since resumed its progress toward financial stability and sustained growth.

JEL Classification Numbers
F31

Summary of
WP/93/48

"DEER Hunting: Misalignment, Debt Accumulation, and Desired Equilibrium Exchange Rates"

by Michael J. Artis and Mark P. Taylor

This paper tackles the issue of hysteresis in the desired equilibrium exchange rate (DEER) arising from misalignment and changes in debt stocks. The DEER is a "steady state" concept, calculated as that (real) rate of exchange that will ensure external balance when the economy is operating at a full rate of utilization (internal balance). When the actual exchange rate is different--a so-called misalignment--the external balance realization will, in general, be different from that implicit in the DEER. This implies that the economy's net foreign asset stock will also be different from that implicit in the DEER, as will debt-service obligations. But different debt-service obligations require a different DEER, which must be recomputed. The dependence of the desired equilibrium exchange rate on the actual rate of exchange indicates that it is subject to hysteresis.

The first task of the paper is to formalize the presence of hysteresis effects in the DEER. This process is straightforward and indicates that a misalignment has an effect of opposite sign on the DEER. That is, if the actual exchange rate is depreciated relative to the DEER, the DEER value appreciates. This result suggests that the stability properties of a system in which the actual rate may respond to the desired equilibrium exchange rate should be examined. Such an examination yields some quite intuitive results with respect to the adjustment speed.

The presence of hysteresis effects in the DEER is not in doubt, but particular interest attaches to their empirical significance. Three relevant sets of calculations are performed in this respect. First, the analytical formalization derived below is used to examine the possible significance of hysteresis effects for the Group of Five during 1975-90. For the United States, particularly, a prolonged misalignment over this period indicates a sizable hysteresis effect. Second, rules of thumb are derived for computing the amount by which the desired equilibrium exchange rate will shift for a given initial misalignment and the length of the period of adjustment envisaged for the actual rate to converge on the desired rate. Finally, a 1990 set of DEERs for the Group of Five is used to compute by how much the DEERs would need to be adjusted if convergence were to take place over five or ten years, with account being taken at the same time of the adjustment of utilization rates over the same horizons. The results broadly confirm the rules of thumb and suggest that the extent to which the desired rate shifts, relative to the initial amount of misalignment, is not negligible.

JEL Classification
F31, F33, E42

Summary of
WP/93/49

"Introduction of a New National Currency:
Policy, Institutional, and Technical Issues"
by Richard K. Abrams and Hernán Cortés-Douglas

In the last few years, a number of countries in the former Soviet Union and Eastern Europe have become independent or have regained their independence. Many have chosen to issue their own currencies, and more are likely to do so. Drawing on these and earlier experiences. this paper summarizes the main policy and institutional arrangements necessary for the introduction of a new currency and discusses the key features of, and procedures for, the conversion.

The paper is designed as a working document for those involved with currency reforms to help ensure that all the necessary steps are taken before, during, and immediately after a new currency is introduced. It focuses on issues directly related to the introduction of a new currency. In many areas, checklists present the steps that must be taken and the most reasonable options. Other related issues, for example, supporting financial sector legislation, will arise whether or not a country remains in a wider currency area.

First, the paper discusses the main macroeconomic and operational measures required to prepare for the orderly transition to the new currency, including decisions regarding the choice of exchange regime, the issuance of coupons, and the costs and benefits of currency reforms. The next section covers issues relating to the production of the new currency bank notes. Next, the main features and terms of the conversion are discussed, as well as certain special issues, such as speculative inflows and the treatment of banks' customers and old currency contracts. The last section covers the operation of the foreign exchange market and maintenance of exchange rate stability in the period immediately following the introduction of the new currency. An appendix covers the technical aspects of currency handling, accounting, and management.

JEL Classification Number
F13, F14

Summary of
WP/93/50

"Optimal Tariffs: Theory and Practice"

by Arvind Subramanian, Ali Ibrahim, and Luis A. Torres-Castro

This paper examines the theory behind the design of optimal tariffs in a developing economy under various policy objectives (revenue, protection, income distribution, and balance of payments) and the experience of their implementation in a sample of six developing countries. It addresses the central question of whether a case can be made for a uniform tariff structure and, if so, under what circumstances. Theory generally advocates a differentiated tariff structure: it should be differentiated according to the price elasticity of demand for imports under a revenue objective, according to the stage of processing under a protection objective, and according to the income elasticity of demand under an income distribution objective; only under a balance of payments objective would theory call for a uniform tariff structure. In practice, however, inadequate information, administrative convenience, and political economy result in a minimally differentiated tariff structure with about three to five rates. The paper also examines the process of reform, including the revenue and welfare effects of reductions in the maximum tariff and increases in the minimum tariff. Increases in the minimum rate have favorable welfare consequences if coupled with duty drawbacks for tariffs on intermediate goods used in the production of exportables; however, there are practical problems in administering such arrangements.

The experience of reform shows that countries generally aim (1) to simplify their tariff structures by assimilating all charges applied on imports, and to reduce the number of rates, thereby reducing distortions and increasing the transparency of the tariff system; and (2) to reduce the average tariff level and dispersion in effective protection. Tariff <u>structures</u>, before and after reform, are mainly influenced by income distribution and protection objectives, which determine how they are differentiated. A successful reduction in tariff <u>levels</u> often calls for complementary measures--for example, domestic tax reforms and exchange rate action--to alleviate the impact of lower tariffs on the fiscal and external positions. The authorities' ability and willingness to overcome pressures from special interest groups are also important. Many countries are cognizant of the anti-export bias induced by tariffs and attempt to offset it through duty-drawback or similar schemes.

JEL Classification Numbers
H50, O41, O47, O57

Summary of
WP/93/51

"Public and Private Investment and the Convergence of Per Capita Incomes in Developing Countries"
by Mohsin S. Khan and Manmohan S. Kumar

This paper examines the extent to which real per capita incomes have converged across developing countries during the last two decades, paying particular attention to the differential effect of private and public investment on growth. In addition, it investigates the role of human capital, trade orientation, and foreign direct investment in determining growth. A theoretical framework is developed within which the separate roles of private and public investment in the convergence process can be examined, and empirical tests are conducted on a sample of 95 developing countries over the period 1970-90.

The results suggest that during the last two decades, there was no relationship between initial per capita GDP and its subsequent growth, thereby rejecting the convergence hypothesis. However, once aggregate investment rate and population growth are taken into account, there is evidence of convergence, although its speed differed markedly between the two decades. The effects of private and public sector investment on growth differed significantly, with private investment being consistently more productive than public investment, especially during the 1980s. The relative effects of public and private investment also exhibited pronounced regional variations. The stock of human capital, trade orientation, and foreign direct investment had positive but generally weak direct effects on per capita GDP growth.

From the standpoint of policy, the results suggest a clear need to improve the productivity of public sector investment by identifying more rigorously the types of investment that have positive net returns and are likely to be complementary to the private sector. At the same time, measures should be undertaken to stimulate private investment, which in turn would lead to a sustainable rate of growth. An increased emphasis on education, and the adoption or maintenance of outward-oriented policies, could also help raise private investment and spur long-term economic growth.

JEL Classification Numbers
F11, F14, F47

Summary of
WP/93/52

"Revisiting Japan's External
Adjustment Since 1985" by Guy Meredith

After peaking at over 4 percent of GDP in the mid-1980s, Japan's external surplus declined sharply in the second half of the decade. Since 1990, however, part of this adjustment has been reversed, leading to renewed interest in the factors that underlie movements in Japan's external balance. Traditional models explain movements in trade flows as resulting from changes in relative prices and levels of demand across countries. Some observers, in contrast, have maintained that Japan's import performance is determined primarily by explicit and implicit barriers to market access and shifts in preferences, while export performance reflects the desire of Japanese firms to maintain foreign market shares.

This paper examines how well conventional determinants of trade flows--specifically, changes in relative prices and aggregate demand--explain the adjustment in Japan's external balance after 1985. The results indicate that the evolution of trade flows has been consistent with conventional determinants. Adjustment was initially slow following exchange rate changes in 1985-86 because of the lagged response of import volumes to relative prices, causing the surplus to "overshoot" its underlying level. Similarly, in 1990, adjustment in the external balance was distorted by the terms of trade deterioration that resulted from a temporary weakening of the yen. A decomposition of the causes of the external adjustment indicates that relative price changes played a major role in reducing the surplus. In the absence of price changes, the surplus would have widened owing to both a high demand elasticity for Japanese exports by trading partners and rising investment income on foreign assets.

At a more fundamental level, external balances are determined by underlying patterns of savings and investment; over the medium term, changes in the savings-investment balance are manifested in the external balance via movements in relative prices. This transmission mechanism will function smoothly only as long as the response of trade flows to price changes is sufficiently large and systematic. Japan's experience with external adjustment since 1985 suggests that these conditions are likely to be satisfied.

JEL Classification Numbers
Q2, Q3

Summary of
WP/93/53

"An Analytical Framework of Environmental Issues" by Jonathan Levin

Environmental effects that were insignificant when fewer concentrations of population or products of modern technology allowed the vast absorptive capacity of nature to act as a sink are quite evident today in air and water pollution, the overuse of potentially renewable fishing or forestry resources, or the wasteful extraction of nonrenewable, mineral resources. Besides the analyses of such problems undertaken by various disciplines, it would be useful to gain an overall understanding of environmental issues through a general analytical framework that encompasses the physical character of environmental problems, the behavioral factors that contribute to them, and the principal approaches to preventing or correcting them.

Downstream environmental problems are the result of physical actions, and are most readily classified by the element initially affected, that is, either soil, air, or water. Actions with an initial impact on one of these elements frequently affect another, reflecting the volume and mobility of the disturbing or polluting elements, their toxicity, their bioaccumulative potential, and their persistence through space and time.

The physical actions that have an impact on the environment have been affected by several behavioral aspects of human interaction with the environment, some with roots lying far in the past. The "scientific revolution" of the sixteenth and seventeenth centuries broke the previously intimate spiritual or magical relationship between people and nature, and with it any earlier inhibition against human manipulation of nature. Some progress in manipulating nature, however, has later proven to be based on incomplete, and therefore mistaken, knowledge, with adverse consequences for the environment. Other adverse effects result from strong time preferences--personal, corporate, or political--and from assigning low or no priority to avoiding damage to others, referred to as externalities. These pose the public policy issues of what value to place on human life and health and what weight to give to the environment itself, distinct from its economic uses or effects on human health.

One approach to preventing the environmental effects that have become public policy concerns favors increasing private property rights. Another favors mandatory government regulation--the command and control approach, which now predominates--and a third espouses the application of economic incentives to incorporate the social costs of polluters' actions in their economic calculus, that is, to internalize externalities. One combination of the latter two approaches is found in the system of tradable pollution rights.

When prevention fails, cleaning up past pollution poses a number of issues: priority of each site, minimum acceptable level of cleanliness, cost effectiveness, financial responsibility, and eventual deposit site.

JEL Classification Numbers
E62, H2, H5, P35

Summary of
WP/93/54

"Lessons in Fiscal Consolidation for the Successor States of the Soviet Union" by George Kopits

The recent experience of Central and Eastern Europe provides a number of useful lessons in fiscal consolidation for the new independent states of the former Soviet Union during their transformation to a market economy. The relevance of these lessons is largely determined by the macroeconomic, structural, and institutional context in which fiscal policy is conducted. In general, the new states seem to suffer greater macroeconomic disequilibria and microeconomic distortions than do the economies of Central and Eastern Europe. Compared with most of these economies, the new states have experienced more severe initial imbalances, are relatively less open, have a far more concentrated industrial structure yet less integrated commodity and factor markets, are less equipped to formulate and implement macroeconomic policies and to build market-based institutions, and, for the most part, are more vulnerable to centrifugal forces toward fiscal decentralization.

The lessons that seem particularly relevant for the new independent states can be grouped in five areas. First, a front-loaded fiscal adjustment should be implemented, eliminating or narrowing significantly budget deficits financed by the domestic banking system. Second, consistent with this adjustment and with criteria of allocative efficiency and fairness, tax reform should aim at broadening bases and lowering marginal rates and should be sequenced largely in accordance with administrative constraints. Third, in line with the same criteria, deep cuts in consumer and producer subsidies and in transfers to loss-making enterprises should be accompanied by the creation of targeted transfers to deserving households. In addition, there are medium-term reform tasks in the areas of social security, infrastructure investment, and public expenditure management. Fourth, revenue shortfalls or expenditure overruns, owing in part to an unanticipated fall in output and to administrative weaknesses, should be met with contingency measures ranging from nondistortionary indirect tax increases to cash rationing of outlays. Finally, elimination of submerged fiscal imbalances, stemming from quasi-fiscal activities conducted mainly by state-owned nonfinancial enterprises and commercial banks, is just as important as correcting the measured budget deficit.