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# Abstracts

## Inequality and Growth

ROLAND BÉNABOU

Using two unifying models and an empirical exercise, this paper presents and extends the main theories linking income distribution and growth, as well as the relevant empirical evidence. The first model integrates the political-economy and imperfect-capital-market theories. It allows for explicit departures from perfect democracy and embodies the tradeoff between the growth costs and benefits of redistribution through taxes, land reform, or public schooling: such policies simultaneously depress saving incentives and ameliorate the wealth constraints which impede investment by the poor. The second model is a growth version of the prisoner's dilemma which captures the essence of theories where sociopolitical conflict reduces the security of property rights, thereby discouraging accumulation. The economy's growth rate is shown to be a decreasing function of interest groups' rent-seeking abilities, as well as of the gap between rich and poor. It is not income inequality per se that matters, however, but inequality in the relative distribution of earning and political power. For each of the three channels of political economy, capital markets, and social conflict, the empirical evidence is surveyed and discussed in conjunction with the theoretical analysis. Finally, the possibility of multiple steady states leads the author to raise and take up a new empirical issue: are cross-country differences in inequality permanent, or gradually narrowing? Equivalently, is there convergence not only in first moments (GDP per capita), but in distribution?

## Mismeasurement in the Consumer Price Index: An Evaluation

MATTHEW D. SHAPIRO AND DAVID W. WILCOX

A number of analysts have claimed recently that the Consumer Price Index overstates the annual increase in the cost of living. This paper develops a frame-

work for studying measurement problems in the CPI and systematically analyzes the available evidence concerning the magnitude of these problems. The evidence suggests that the bias is centered on 1.0 percentage point per year. To take into account uncertainty about the extent of the bias, the paper presents a probability distribution for the bias rather than a point estimate or range. It is estimated that there is a 10% chance that the bias is less than 0.6 percentage point and a 10% chance that it is greater than 1.5 percentage points per year. CPI methodology overstates the price increase for medical procedures that are subject to technological improvement. To illustrate this point and to show how better to measure medical care prices, the paper presents a prototypical price index for cataract surgery. This index grows much more slowly than a price index for cataract surgery constructed using the CPI methodology.

## *A Scorecard for Indexed Government Debt*

JOHN Y. CAMPBELL AND ROBERT J. SHILLER

Within the last five years, Canada, Sweden, and New Zealand have joined the ranks of the United Kingdom and other countries in issuing government bonds that are indexed to inflation. Some observers of the experience in these countries have argued that the United States should follow suit. This paper provides an overview of the issues surrounding debt indexation, and it tries to answer three empirical questions about indexed debt. First, how different would the returns on indexed bonds be from the returns on existing U.S. debt instruments? Second, how would indexed bonds affect the government's average financing costs? Third, how might the Federal Reserve be able to use the information contained in the prices of indexed bonds to help formulate monetary policy? The paper concludes with a more speculative discussion of the possible consequences of increased use of indexed debt contracts by the private sector.

## *Can Technology Improvements Cause Productivity Slowdowns?*

ANDREAS HORNSTEIN AND PER KRUSELL

We explore two channels through which increases in the rate of investment-specific technological change can lead to decreases in measured productivity growth. The first channel is learning; with an increase in the rate of adoption more resources are devoted to new technologies where experience is low. As a result, labor productivity and TFP growth fall temporarily. Second, if the unmeasured quality of final outputs depends significantly on capital input, then declines in productivity growth will be recorded as the growth rate of capital goes up. We document the recent productivity slowdown in the United States and elsewhere and discuss evidence suggesting that an increase in the rate of investment-specific technological change may have occurred at about the same time as the slowdown began. We then use a simple, parameterized vintage capital model in order to gauge the potential importance of this phenomenon for productivity measurements.

## *Business Fixed Investment and the Recent Business Cycle in Japan*

NOBUHIRO KIYOTAKI AND KENNETH D. WEST

To analyze business fixed investment in Japan, which has been unusually volatile in recent years, we develop and apply a log-linear flexible accelerator model. We find that movements in business fixed investment are consistent with movements in output and the tax-adjusted cost of capital, both on average during our entire 1961–1994 sample and during the recent 1986–1994 business cycle.

## *Are Currency Crises Self-Fulfilling?*

PAUL KRUGMAN

Recent theoretical analyses of currency crises have argued that, when a government's decision to defend its exchange rate depends on the government's broader macroeconomic objectives, then an exchange-rate crisis can be triggered by self-fulfilling expectations of traders. Some authors have been willing to draw strong policy implications from this result, in particular that fixed exchange rates cannot coexist with free capital mobility. This paper shows that the recent literature's result that expectations of crisis can be self-fulfilling is due less to the new assumption of endogeneity of government policy than to the dropping of the classical assumption that fundamentals are deteriorating. When objective economic conditions are steadily deteriorating, these fundamentals can be shown to determine uniquely the timing of a currency crisis, even if policy is endogenous and even if people are uncertain about the government's objective function. If fundamentals evolve randomly and are not certain to deteriorate, then self-fulfilling expectations can play a role, though even here this role may be tempered by the presence of well-financed speculators. The paper also argues that, as an empirical matter, the actual currency experience of the 1990s does not make as strong a case for self-fulfilling crises as has been claimed by some researchers. In general, it is very difficult to distinguish between currency crises that need not have happened and those that were made inevitable by concerns about future viability that seemed reasonable at the time.