Annotated Bibliography:
Financial Deepening, Risk Sharing and Inequality


This article develops a model of growth and income inequalities in the presence of imperfect capital markets and analyses the trickle-down effect of capital accumulation. There are three main conclusions. First, when the rate of capital is sufficiently high, the economy converges to a unique invariant wealth distribution. Second, even though the trickle-down mechanism can lead to a unique steady-state distribution in the competitive market, there is room for government intervention; in particular, redistribution of wealth from rich lenders to poor and middle-class borrowers improves the production efficiency of the economy. Third, the process of capital accumulation initially has the effect of widening inequalities but in later stages it reduces them; in other words, this model can generate a Kuznets curve.


This paper presents a qualitative and quantitative analysis of the standard growth model modified to include precautionary saving motives and liquidity constraints. The author addresses the impact on the aggregate saving rate, the importance of asset trading to individuals, and the relative inequality of wealth and income distributions.


This paper investigates the optimal quantity of debt that a country must hold. The authors find that the welfare gains to having the optimum quantity of debt -- rather than the current U.S. level -- are small, and, therefore, concerns regarding the high level of debt in the U.S. economy may be misplaced. The authors base the study on a model of a large number of infinitely-lived households whose saving behavior is influenced by precautionary saving motives and borrowing constraints. Using a small change in the role of government used in standard models, this version captures different cost–benefit trade-offs. On the benefit side, government debt enhances the liquidity of households by providing an additional means of smoothing consumption. On the cost side, the implied taxes have adverse wealth distribution and incentive effects.

This article models economic development as a process of institutional transformation by focusing on the interplay between agents' occupational decisions and the distribution of wealth. Because of capital market imperfections, poor agents choose working for a wage over self-employment, and wealthy agents become entrepreneurs who monitor workers. If inequality is sufficiently high, there will be trade in employment contracts; otherwise, there is either subsistence or self-employment. Thus, in static equilibrium, the occupational structure depends on distribution. The authors try to demonstrate the robustness of this result by extending the model dynamically and studying examples in which initial wealth distributions have long-run effects.


This article studies endogenous growth and develops a model with multiple assets. Agents who face random future liquidity needs accumulate capital and a liquid, but unproductive asset. The authors study the effects of introducing financial intermediation into this environment. They find that the introduction of intermediaries shifts the composition of savings toward capital, causing intermediation to be growth promoting. Also, intermediaries generally reduce socially unnecessary capital liquidation, again tending to promote growth.


This document develops a dynamic general equilibrium model that is intended to help clarify the role of credit market frictions in business fluctuations, from both a qualitative and a quantitative standpoint. The authors introduce a “financial accelerator”, in that endogenous developments in credit markets work to amplify and propagate shocks to the macroeconomy. They also introduce ad-hoc features to the model in order to enhance the empirical relevance (for example: money, price stickiness, lags in investment, etc.). Finally, they allow for heterogeneity among firms to capture the fact that borrowers have differential access to capital markets. Using different parametrizations of the model, the authors conclude that the financial accelerator has a significant influence on business cycle dynamics.


In this article, the authors develop a simple neoclassical model of the business cycle in which the condition of borrowers’ balance sheets is a source of output dynamics. The mechanism is that higher borrower net worth reduces the agency costs of financing real capital investments. Business upturns improve net worth, lower agency costs, and increase investment, which amplifies the upturn; vice versa, for downturns. Shocks that affect net worth (as in a debt-deflation) can initiate fluctuations.

In this paper, the author discusses one formulation of the consumer demand functions, where the permanent income hypothesis is tested. This hypothesis suggests that consumers spend their resources in such a way that the marginal utility of the expenditure is constant over time, and independent of prices. This article attempts to provide a utility maximization model to support such a hypothesis.


Using experimental data from Indian communities, this paper studies household attitudes toward risk by using two methods: an interview method eliciting certainty equivalents and an experimental gambling approach with real payoffs which, at their maximum, exceeded monthly incomes of unskilled laborers. The interview method is subject to interviewer bias and its results were totally inconsistent with the experimental measures of risk aversion. The author finds that using experimental measures, at high payoff levels, virtually all individuals are moderately risk-averse with little variation according to personal characteristics. Wealth tends to reduce risk aversion slightly, but its effect is not statistically significant.


This paper studies a model with full equilibrium dynamics of an economy with financial frictions. Due to the so-called “amplification effects”, this economy is inclined to instability and occasionally enters volatile crisis episodes. There is also endogenous risk present in this model, driven by asset illiquidity, which persists in crisis even for very low levels of exogenous risk. This phenomenon, called “volatility paradox”, is explained by the authors. Endogenous leverage determines the distance to crisis. The authors conclude that securitization and derivatives contracts that improve risk sharing may lead to higher leverage and more frequent crises.


This paper studies a model with financial frictions and heterogeneity and investigates the mapping from a credit crunch, modeled as a shock to collateral constraints, to simple aggregate wedges. The authors study three variants of this model that only differ in the form of underlying heterogeneity. Also, they find that in all three model variants a credit crunch shows up as a different wedge: efficiency, investment, and labor wedges. Furthermore, all three model variants have an undistorted Euler equation for the aggregate of firm owners. These results highlight the limitations of using representative agent models to identify sources of business cycle fluctuations.


For more than a half a decade, the fact that expenditure on durables can be well approximated by a random walk has remained a hidden puzzle, challenging almost any theory in which agents smooth the use of their wealth. This paper shows that once a non-parsimonious approach is used, or lower
frequencies of the data are examined, the fact itself disappears; changes in expenditures on durables reveal a degree of reversion consistent with the permanent income hypothesis (PIH), although this reversion occurs at a rate significantly slower than what is suggested by a frictionless PIH model.


This paper studies the effects of credit shocks in a model with heterogeneous entrepreneurs, financing constraints, and an empirical firm size distribution. As entrepreneurial firms can grow only slowly in this set-up, the authors show that, by reducing entrepreneurial firm size, negative shocks have a very persistent effect on real activity.


This article describes a Monte Carlo procedure to evaluate dynamic nonlinear general equilibrium macroeconomic models. The procedure makes the choice of parameters and the evaluation of the model less subjective than standard calibration techniques; it provides more general restrictions than estimation by simulation approaches and provides a way to conduct global sensitivity analysis for reasonable perturbations of the parameters. The technique is applied empirically to three examples involving different models and statistics.


This paper argues that the typical household’s saving is better described by a “buffer-stock” version than by the traditional version of the Life Cycle/Permanent Income Hypothesis model. Buffer-stock behavior emerges if consumers with important income uncertainty are sufficiently impatient. In the traditional model, consumption growth is determined solely by tastes. In contrast, buffer-stock consumers set average consumption growth equal to average labor income growth, regardless of tastes. The author explains three empirical puzzles: the “consumption/income parallel”; the “consumption/income divergence” first documented in the 1930s; and the stability of the household age/wealth profile over time despite the unpredictability of idiosyncratic wealth changes.


This article proposes a solution method for numerical dynamic stochastic optimization problems that avoids rootfinding operations. This solution is applicable to many microeconomic and macroeconomic problems, including life cycle, buffer-stock, and stochastic growth problems.


This paper is studies the relationship between household balance sheets, unemployment expectations, and household purchases. The authors find an empirical robust positive correlation between lagged debt growth and the current level of spending. They also find that their measure for uncertainty (lags of expected unemployment) is robustly correlated with every measure of consumer spending, after controlling for permanent income effects. To rationalize these findings, the authors
develop a model of durable-goods purchase for consumers that face unemployment spells. They find that the model predict some of the variation found empirically. For example, the model implies that a financial liberalization which loosens liquidity constraints will cause a run-up in aggregate and that the liberalized economy the reaction of durables purchases to uncertainty is intensified.


This paper studies the macroeconomic implications of time-varying precautionary saving within a general equilibrium model with borrowing constraint and both aggregate shocks and uninsurable idiosyncratic unemployment risk. This framework generates limited cross-sectional household heterogeneity as an equilibrium outcome, thereby making it possible to analyze the role of precautionary saving over the business cycle analytically. The authors find that the behavior of aggregate consumption generated by the model is closer to the data than that implied by the comparable hand-to-mouth and representative-agent models.


This paper shows, in a model of equilibrium, that when private agents want to accumulate more liquidity (fixed in the aggregate) the fall of total employment generates a higher private demand for liquidity which is self-fulfilling. The author also finds that an increase of pessimism may be sufficient to set an economy on a path of unemployment with a search for liquidity, but a shift from pessimism to optimism may not be able to restore full-employment.


This article uses panel data to analyze how individuals’ portfolio allocation between risky and riskless assets varies in response to changes in total financial wealth. The authors find that the elasticity of the risky asset share to wealth to be small and statistically insignificant, supporting the assumption that the distributions of wealth and preferences are independent; this finding is robust when the sample is restricted to households experiencing large income variations. The authors also find a small but significant negative correlation between wealth and risk aversion.


In this paper, the authors employ Monte Carlo methods to investigate the finite-sample properties of generalized method of moment procedures for making inferences about statistics that are of interest in the business-cycle literature. These statistics include the second moments of data filtered using the first-difference and Hodrick–Prescott filters, and they include statistics for evaluating model fit. The results indicate that, for the procedures considered, the existing asymptotic theory is not a good guide in a sample the size of quarterly postwar U.S. data.

In this paper, the authors argue that the government-spending multiplier can be larger than one when the zero lower bound on the nominal interest rate binds. The larger is the fraction of government spending that occurs while the nominal interest rate is zero, the larger is the value of the multiplier. In addition to providing intuition for these results, they investigate the size of the multiplier in a dynamic, stochastic, general equilibrium model. In this model the multiplier effect is substantially larger than one when the zero bound binds. The authors conclude that this model is consistent with the behavior of key macro aggregates during the recent financial crisis.


This article studies the following question: are consumers effectively insured against idiosyncratic shocks to income or wealth, either by formal institutions such as charities, private insurance, and government programs or by informal mechanisms such as gifts and “loans” from relatives, friends, and neighbors? The author suggests that, under full insurance, consumption growth should be cross-sectionally independent of idiosyncratic variables that are exogenous to consumers. This proposition is tested by cross-sectional regressions of consumption growth on a variety of exogenous variables. The author finds that full insurance is rejected for long illness and involuntary job loss but not for spells of unemployment, loss of work due to strike, or an involuntary move.


This paper examines why many households remain exposed to large exogenous sources of non-systematic income risk. The authors use a series of randomized field experiments in rural India to test the importance of price and non-price factors in the adoption of an innovative rainfall insurance product. Demand is significantly price sensitive, but widespread take-up would not be achieved even if the product offered a payout ratio comparable to U.S. insurance contracts. The authors present evidence suggesting that lack of trust, liquidity constraints and limited salience are significant non-price frictions that constrain demand. Finally, they suggest contract design improvements to mitigate these frictions.


This article considers the desirability of modifying a standard Taylor rule for interest rate policy to incorporate adjustments for measures of financial conditions. The authors consider the consequences of such adjustments for the way policy would respond to a variety of disturbances, using the dynamic stochastic general equilibrium model with credit frictions. According to this model, an adjustment for variations in credit spreads can improve upon the standard Taylor rule, but the optimal size of adjustment depends on the source of the variation in credit spreads. A response to the quantity of credit is less likely to be helpful.

This paper is concerned with the theory of saving when consumers are not permitted to borrow, as well as the ability of such a theory to account for some of the stylized facts of saving behavior. Assets act like a buffer stock, protecting consumption against bad draws of income. In the extreme case when labor income is a random walk, it is optimal for impatient liquidity-constrained consumers simply to consume their incomes. The findings in this paper suggest that a liquidity-constrained representative agent cannot generate aggregate U.S. saving behavior if that agent receives aggregate labor income. The models presented in the paper seem to account for important aspects of reality that are not explained by traditional life-cycle models.


This paper develops a model of households which cannot borrow but which accumulate assets as a buffer stock to protect consumption when incomes are low. The author revisits the evidence in this matter, and concludes that it is as consistent with this view of saving as it is inconsistent with standard views of smoothing over the life-cycle, and with explanations of the link between saving and growth in terms of life-cycle saving behavior. Finally, the author revises important policy issues in developing countries related to issues of consumption and smoothing. He states that research on these issues is currently likely to be more productive than work on the relation between saving and growth.


In this paper, the authors investigate empirically the prediction of the permanent income hypothesis, using cohort data constructed from 11 years of household survey data from the U.S.; 22 years from Great Britain; and 14 years from Taiwan. The data show that within-cohort consumption and income inequality measures do indeed increase with age in the three economies and that the rate of increase is similar in all three. This evidence on the spread of inequality can therefore be used to help quantify the extent to which private and social arrangements moderate the impact of risk on the distribution of individual welfare.


In this paper the authors propose a test for accuracy that is easy to implement and can be applied to a wide class of models without knowledge of the exact solution. This is discussed because since the actual solution to intertemporal rational expectations models is usually not known, it is useful to have criteria for judging the accuracy of a given numerical solution. The authors discuss the power of the test by simulating several models with the linear-quadratic approximation and with the method of parameterized expectations; the test is found to be useful.
This article introduces liquidity frictions into an otherwise standard DSGE model with nominal and real rigidities, explicitly incorporating the zero bound on the short-term nominal interest rate. Within this framework, the authors attempt to respond the following questions: Can a shock to the liquidity of private paper lead to a collapse in short-term nominal interest rates and a recession like the one associated with the 2008 U.S. financial crisis? Once the nominal interest rate reaches the zero bound, what are the effects of interventions in which the government exchanges liquid government assets for illiquid private paper? The findings are meaningful. The authors conclude that the effects of the liquidity shock can be large and show some numerical examples in which the liquidity facilities prevented a repeat of the recession from 2008 to 2009.


This article develops a model with two investors, each with the same degree of impatience, but one of them being logarithmic and the other having an isoelastic utility function. As both investors with different risk aversions trade competitively in a capital market, the allocation of wealth fluctuates randomly among them and acts as a state variable against which each market participant will want to hedge. This hedging motive complicates the investors’ portfolio choice and the equilibrium in the capital market. They face one risky constant-return-to-scale stationary production opportunity and they can borrow and lend to and from each other. The authors show the characterizations of the behaviors of the allocation of wealth and of the aggregate capital stock, along with the behavior of the rate of interest, the security market line, and the portfolio holdings.


This paper studies the consequences for monetary policy of the zero floor for nominal interest rates. In particular, the authors show, in the context of an intertemporal equilibrium model, that open-market operations, even of “unconventional” types, are ineffective if future policy is expected to be purely forward looking. They find that a credible commitment to the right sort of history-dependent policy can largely mitigate the distortions created by the zero bound. In this model, optimal policy involves a commitment to adjust interest rates so as to achieve a time-varying price-level target, when this is consistent with the zero bound. The article also discusses ways in which other central bank actions may help to make a central bank’s commitment to its target more credible.


In this article the authors present a simple new Keynesian–style model of debt-driven slumps—that is, situations in which an overhang of debt on the part of some agents, who are forced into rapid deleveraging, is depressing aggregate demand. According to them, making some agents debt-constrained is a powerful assumption. Fisherian debt deflation, the possibility of a liquidity trap, the paradox of thrift and toil, a Keynesian-type multiplier, and a rationale for expansionary fiscal policy all emerge naturally from the model. The article argues that this approach sheds light both on
current economic difficulties and on historical episodes, including Japan’s lost decade and the U.S. Great Depression.


This paper develops a simple model of borrowing and lending with asymmetric information. The authors show that the optimal, incentive-compatible debt contract is the standard debt contract. The also illustrate that the second-best level of investment never exceeds the first-best and is strictly less when there is a positive probability of costly bankruptcy. The authors then compare the second-best with the results of interest-rate-taking behavior and consider the effects of risk aversion. Finally the article provides conditions under which increasing the borrower's initial net wealth must reduce total investment in the venture.


This paper attempts to assess both the aggregate growth effects and the distributional consequences of financial liberalization as observed in Thailand from 1976 to 1996. The authors develop a general equilibrium occupational choice model with two sectors, one without intermediation and the other with borrowing and lending. They estimate key parameters of the production technology and the distribution of entrepreneurial talent using distinct Thai datasets. They claim that without an expansion in the size of the intermediated sector, Thailand would have had lower growth rate, high residual subsistence sector, non-increasing wages but lower inequality. The authors conclude that the financial liberalization brings welfare gains and losses, and also induces greater demand by entrepreneurs for workers.


This purpose of this book is to provide a comprehensive summary of the evolution, coverage and importance of the financial intermediaries in the U.S. since 1900. Among the main findings of this study, the author highlights the following salient points: the explosive growth of total assets of financial intermediaries; the remarkable variation of rate of growth of total assets across time; differences among institutions in rate of growth; and changes in the number of financial intermediaries.


This paper presents a model in which both the extent of financial intermediation and the rate of economic growth are endogenously determined. In this framework, financial intermediation promotes growth because it allows a higher rate of return to be earned on capital, and growth in turn provides the means to implement costly financial structures. Thus financial intermediation and economic growth are inextricably linked. This model also generates a development cycle reminiscent of the Kuznet hypothesis. In particular, in the transition from a primitive slow-growing economy to a developed fast-growing one, a nation passes through a stage in which the distribution of wealth across the rich and poor widens.

This paper presents a stochastic macroeconomic model with no free parameters. The authors test this model by comparing its features, such as moments, with those of data. Repeated simulation allows exact tests and gives the distribution of the sample moment under the null hypothesis that the model is true. The authors calculate the size of tests of the model studied by Mehra and Prescott and find the approximate size of this test (which seeks to match model-generated, mean, risk-free interest rates and equity premia with historical values) is 0 although alternate, empirical representations of this model economy or alternate moment-matching tests yield large probabilities of Type I error.


Using household survey data, this paper constructs a direct measure of absolute risk aversion based on the maximum price a consumer is willing to pay for a risky security. The authors relate this measure to consumer’s endowments and attributes and to measures of background risk and liquidity constraints. They find that risk aversion is a decreasing function of the endowment. Then they estimate the elasticity of risk aversion to consumption at about 0.7. The findings suggest that a consumer’s environment affects risk aversion. That is, individuals who are more likely to face income uncertainty or to become liquidity constrained exhibit a higher degree of absolute risk aversion, consistent with recent theories of attitudes toward risk in the presence of uninsurable risks.


This classic book discusses the role of financial markets and institutions in a growing economy. The authors develop for the first time a theory of finance in which monetary theory is part of the model. The purpose is to make a pioneering contribution that will place money in the broader context of financial assets. This is one of the first attempts to incorporate money in a comprehensive macro financial model.


This paper provides a first order asymptotic theory for generalized method of moments (GMM) estimators when the number of moment conditions is allowed to increase with the sample size and the moment conditions may be weak. Examples in which these asymptotics are relevant include instrumental variable (IV) and some panel data models that cover moderate time spans and have correspondingly large numbers of instruments. Under certain regularity conditions, the GMM estimators are shown to converge in probability but not necessarily to the true parameter, and conditions for consistent GMM estimation are given. The authors provide some illustrations, including consistent GMM estimation of a panel model with time varying individual effects, consistent limited information maximum likelihood estimation as a continuously updated GMM estimator, and consistent IV structural estimation using large numbers of weak or irrelevant instruments.

This classic paper studies estimators that make sample analogues of population orthogonality conditions close to zero. Strong consistency and asymptotic normality of such estimators is established under the assumption that the observable variables are stationary and ergodic. Since many linear and nonlinear econometric estimators reside within the class of estimators studied in this paper, a convenient summary of the large sample properties of these estimators, including some whose large sample properties have not heretofore been discussed, is provided.


This paper reviews experimental evidence collected from risky choice experiments using poor subjects in Ethiopia, India, and Uganda. Using these data, the authors estimate that just over 50 percent of the sample behaves in accordance with expected utility theory and that the rest subjectively weight probability according to prospect theory. The results show that inferences about risk aversion are robust to whichever model they adopt when these models are estimated separately. Interestingly, when the authors allow both models to explain portions of the data simultaneously, risk aversion for subjects behaving is inferred, according to expected utility theory and risk-seeking behavior for subjects behaving according to prospect theory.


This paper studies an economy in which agents cannot write contracts contingent on future labor income. In this framework, the agents face aggregate uncertainty in the form of dividend and systematic labor income risk, and also idiosyncratic labor income risk. The agents trade in financial securities to buffer their idiosyncratic income shocks, but the extent of trade is limited by borrowing constraints, short-sales constraints, and transactions costs. The authors decompose the effect of transactions costs on the equity premium into two components. The direct effect occurs because individuals equate the net-of-cost margins. A second, indirect effect occurs because transactions costs result in individual consumption that more closely tracks individual income. Findings show that the direct effect dominates and that the model can produce a sizable equity premium only if transactions costs are large or the assumed quantity of tradable assets is limited.


This paper attempts to identify the crucial characteristics associated with this dynamic relationship between growth and income inequality, by studying the evolution of the income distribution in Thailand between 1976 and 1996, during which the economy experienced strong growth with diminution of poverty, but with a rapid increase in income inequality. The author shows that growth and income distribution dynamics were closely related to an expansion of education and credit, and to an occupational transformation. Each of these factors contributed to growth by a similar magnitude. However, the expansion of education and credit was concentrated among wealthy households and increased inequality while the transformation of occupation occurred mainly among middle class and reduced poverty.

This paper describes a general numerical approach, the projection method, to solve operator equations which arise in economic models. Principles from numerical analysis are then used to develop efficient implementations of the projection method for solving aggregate growth models. The author also derives error measures which are related to optimization errors by agents and argues that the numerical approximations can be viewed as equilibria with boundedly rational agents. Finally, he present programs which run several times faster than competing methods in the literature while achieving high accuracy.


This paper presents cross-country evidence consistent with Schumpeter’s view that the financial system can promote economic growth, using data on 80 countries over the period from 1960 to 1989. The authors present various measures of the level of financial development which are associated with real per capita GDP growth, the rate of physical capital accumulation, and improvements in the efficiency with which economies employ physical capital. Results show that the predetermined component of financial development is highly correlated with future rates of economic growth, physical capital accumulation, and economic efficiency improvements.


The purpose of this classic paper is to characterize and study the causes of long term changes in the personal distribution of income. Questions such as: “Does inequality in the distribution of income increase or decrease in the course of a country's economic growth?” and “What factors determine the secular level and trends of income inequalities?” are addressed. In particular, the article discusses the struggles with scarcity of data and speculation of this theory. The main contribution of this paper is the idea that inequality and economic growth are related to each other, and that both have to be studied in conjunction in order to have a better knowledge of development economics.


This paper presents an equilibrium growth model which has been modified and used to explain the cyclical variances of a set of economic time series, the covariances between real output and the other series, and the autocovariance of output. This framework is then tested using quarterly data for the post-war U.S. economy. The authors impose non trivial features of the model, which are the assumption that more than one time period is required for the construction of new productive capital, and the non-time-separable utility function that admits greater intertemporal substitution of leisure. The authors find that the fit is surprisingly good in light of the model’s simplicity and the small number of free parameters.


This paper examines the role of individual risk attitudes in the decision to adopt a new form of agricultural biotechnology in China. The author conducts a survey and a field experiment to elicit the
risk preferences of Chinese farmers, who faced the decision of whether to adopt genetically modified cotton a decade ago. He also expands the measurement of risk preferences beyond expected utility theory to incorporate prospect theory. Findings suggest that farmers who are more risk averse or more loss averse adopt cotton later. Also, farmers who overweight small probabilities adopt cotton earlier.


In this relatively non-technical book, the author reviews the nature and consequences of developments in monetary and business cycle theory. The book discusses the usefulness of alternative models in determining the effects of economic policy on consumption streams and individual welfare. Drawing on a specific model of aggregate activity which represents the current frontier in business cycle research, he then examines the contemporary theory of unemployment. Finally and perhaps most interestingly, the role of monetary disturbances is discussed.


This paper tests implications of full consumption insurance. The object is to determine how much mileage can be obtained from a model with complete markets, with such features as private information or liquidity constraints omitted. The author states that individual consumption responds to aggregate risk but not to idiosyncratic risk. She finds that variables other than the change in aggregate consumption are predicted to be insignificant in explaining the change in household consumption. Using data from the Consumer Expenditure Survey, the conclusions are mixed. The results for one specification are mostly consistent with full consumption insurance; the results for the other specification are not.


This article proposes a method that facilitates tests of efficient risk sharing even when households have different risk preferences. The method is composed of three tests. The first determines whether in the data households have homogeneous risk preferences. The second and third evaluate efficient risk sharing when the hypothesis of homogeneous risk preferences is rejected. The authors use this method to test efficient risk sharing in rural India. Using the first test, they strongly reject the hypothesis of identical risk preferences. Using the second and third tests, they reject efficiency at the village but not at the caste level.


In this paper the authors argue that the relevant monetary decision for the majority of U.S. households is not the fraction of assets to be held in interest, but rather the product of the interest rate times the total amount of assets. This implies that the interest elasticity of household money demand at low interest rates can be estimated from the variation in asset holdings in a cross section of households rather than historical interest rate variations. They authors estimate this by using the 1989 Survey of Consumer Finances. Their main findings are that the elasticity of money demand is very small when the interest rate is small; the probability that a household holds any amount of
interest, bearing assets is positively related to the level of financial assets; and the cost of adopting financial technologies is negatively related to participation in a pension program.


In this paper, the authors discuss from the microeconomic perspective how the production activities of Thai domestic commercial banks changed under the progress of the financial liberalization policy during the period from 1985 to 1994. Using microeconomic data on domestic banks, the authors study the major business activities. In addition, they formally estimate the cost functions of Thai domestic banks and demonstrate that financial liberalization policies promoting market competition helped create more efficient business operations of banks. The paper suggests that the medium-sized banks, which were the first to fail during the economic crisis in 1997, were deeply involved in unsound business operations and engaged in excessive lending.


This document presents a model for the study of risk and return of household assets in village economies. The model yields similar insights and predictions to those derived from the traditional Capital and Consumption based Asset Pricing Models in finance literature. The authors find that higher exposure to aggregate, non-diversifiable risks is related to higher expected return on household assets. This result is robust to different definitions of markets (aggregate economy, province, village), and when household demography, asset sizes, and household occupations is controlled for. Contrary to the standard “the equity premium puzzle” in the finance literature, these estimations deliver estimates with a reasonably magnitude. The authors also find that the larger the definition of the market, the more unreasonable magnitude of the implied risk aversion coefficient.


In this paper, the author studies the welfare cost of business cycles in a complete-markets economy where some people are more risk averse than others. In this framework, relatively more risk-averse people buy insurance against aggregate risk, and relatively less risk-averse people sell insurance. These trades reduce the welfare cost of business cycles for everyone. The author finds that when there are complete insurance markets, aggregate fluctuations in consumption are essentially irrelevant not just for the average person, no matter how risk averse they are. If business cycles matter, it is because they affect productivity or interact with uninsured idiosyncratic risk, not because aggregate risk per se reduces welfare.


The purpose of this paper is to study how people share risk. Standard risk-sharing regressions assume that any variation in households’ risk preferences is uncorrelated with variation in the cyclicity of income. This paper uses a different approach. The author combines administrative and survey data to show that this assumption is questionable: Risk-tolerant workers hold jobs in which earnings carry more aggregate risk. The correlation makes risk-sharing regressions in the previous
literature too pessimistic. In addition, the author derives techniques that eliminate the bias, apply them to U.S. data, and find that the effect of idiosyncratic income shocks on consumption is practically small and statistically difficult to distinguish from zero.


This article studies models that display growth with financial deepening and increasing inequality along the way to perpetual steady state growth. The authors provide a benchmark model, which is essentially a complete markets model but with transaction costs of financial intermediation. In addition, they provide proof for stochastic dynamic programming for the case of unbounded return functions and perpetual growth with a non-convex transaction technology. The authors calibrate the model and report quantitative predictions for Thailand over the period 1976 to 1996. They conclude that a discrepancy between the model and the data, suspect barriers to financial deepening as a cause, and evaluate the associated welfare loss.


Credit contracts play a direct role in pooling risk between households in northern Nigeria. Repayments owed by borrowers depend on realizations of random shocks by both borrowers and lenders. This paper develops two models of state-contingent loans. The first model is a competitive equilibrium in perfectly enforceable contracts. The second permits imperfect information and equilibrium default. The author estimates both models, and finds that quantitatively important state-contingent payments are embedded in these loan transactions, but that a fully efficient risk-pooling equilibrium is not achieved.


This paper uses micro data on income and asset holdings from the Panel Study of Income Dynamics and other U.S. household-level data sets to analyze reasons for nonparticipation in the stock market and for heterogeneity in portfolio choice within the set of stock market participants. The author finds evidence of a positive effect of mean nonfinancial income on the probability of stock market participation and on the proportion of wealth invested in stocks conditional on being a participant. However, no evidence of an effect of the correlation of nonfinancial income with the stock market return on portfolio choice is found. Using three different costs structures of stock market participation, the author finds evidence of structural state dependence in the stock market participation decision supporting the importance of fixed transactions costs.


This article presents an equilibrium model of the term structure of interest rates when investors have heterogeneous preferences. The basic model considers a pure exchange economy of two classes of investors with different (but constant) relative risk aversion and gives closed-form solutions to bond prices. The author uses the model to examine the effect of preference heterogeneity on the behavior of bond yields. The model is also extended to cases of more than two classes of investors.