William Fuchs

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Education

2000-2005   **Stanford Graduate School of Business**   **Stanford, CA**

- PhD. Candidate in Economic Analysis
- Thesis: Dynamic Contracts
- Advisors: T. Sargent and A. Skrzypacz
- Awards: Jaedicke Prize, GSB Fellowship, SIEPR Dissertation Fellowship, Mariscal de Ayacucho Fellowship

1995-1999   **Universidad Torcuato Di Tella**   **Buenos Aires, Argentina**

- Licenciatura in Economics and Licenciatura in Business
- Thesis: Deregulation of the Argentine Healthcare Sector
- Advisor: Juan Pablo Nicolini
- Awards: Gold Medal for best GPA

Teaching Experience

Spring 2003/04   TA for PhD. Core Microeconomics
Fall 2001/02   TA for MBA Core Microeconomics
Winter 2002   TA for MBA Advanced Macroeconomics
Spring 2002   TA for PhD. Core Macroeconomics
1998-1999   TA for International Macro and Finance courses at UTDT

Research

My main research interests are problems related to coordination and/or asymmetric information in Macroeconomics. My approach to these problems draws heavily on game theory and dynamic contracts. Although I focus on Macro applications, I'm also interested in the development of the tools from a theory perspective.

Job Market Paper:

Contracting with Repeated Moral Hazard and Private Evaluations

A repeated moral hazard setting in which the Principal privately observes the Agent's output is studied. The optimal contract for a finite horizon is characterized, and shown to require burning of resources. These are only burnt after the worst possible realization sequence and the expected amount is

independent of both the length of the horizon and the discount factor (δ). For the infinite horizon case, a family of fixed interval review contracts is characterized and shown to achieve first best as $\delta \to 1$ (asymptotic efficiency result). The optimal contract when $\delta \ll 1$ is partially characterized. Incentives are optimally provided with a combination of efficiency wages and the threat of termination but not through feedback or variable pay. Finally, tournaments are shown to provide an alternative solution to the problem.

Other Completed Work:

Monetary Union with Voluntary Participation (with Francesco Lippi)
Revise and resubmit status at ReStud.

CEPR/ESI Prize 2004 for the Best Central Bank Research Paper.

A Monetary Union is modeled as a technology that makes surprise devaluations impossible but requires voluntarily participating countries to follow the same monetary policy. Voluntary participation is modeled as the right of a country to exit the union and reestablish its local currency. It is shown that for low discount factors and sufficiently correlated shocks welfare in the union is higher than that achievable when countries coordinate while retaining their own independent policy. Optimal policy, when participation in the union is voluntary, is characterized and shown to respond to agents' incentives to leave by tilting current and future policy in their favor. This contrasts with the static nature of optimal policy when participation is imposed and exogenously enforced. This finding implies that policy in the union will not be exclusively guided by area-wide developments but will occasionally take account of member countries' national developments. Finally, we show that there might exist states of the world in which the union breaks apart, as occurred in several historical episodes. The paper thus provides a first formal analysis of the forces behind the formation, sustainability and disruption of a Monetary Union.

Work in Progress:

Subjective evaluations: The bonus as a signal of performance

A setup in which the quality of a job match is not known and the principal privately observes the stochastic product of the agent's effort is analyzed. It is shown that there can exist two types of equilibria depending on the parameters. The first is a separating equilibrium in which the principal gives the agent truthful feedback about the agent's performance. To make sure the principal does not lie, positive feedback must be accompanied by a bonus. The other type of equilibria is a pooling equilibrium in which the principal gives no feedback to the agent.

Repeated Coordination with Privately Observed Preference shocks (with Yuliy Sannikov)

We characterize the structure of the optimal dynamic contract in an environment where two agents privately observe independent preference shocks and then, collectively choose a single action that affects the payoff of both players. This problem is complementary to the one studied in Fuchs-Lippi since the issue is not one of participation but rather an informational one. Potential applications include alliances or partnerships in which the value of individual decisions is small relative to the value of the relationship or the cost associated with a cessation.

Dynamic Signaling and Reputation in a Monetary Policy Game

The optimal path for monetary policy by the non-inflationary type in an asymmetric information environment with two types of central bankers, inflationary and non-inflationary is studied. The analysis leads to an interesting and complex dynamic signaling game. The objective is to characterize the optimal policy followed by the independent central banker to signal its type. The resulting dynamics for inflation will be compared to those observed in developing countries where successful stabilization programs have been implemented.

Conference Participation

- ITAM Summer Camp Mexico, August 2003. Presented "Monetary Union with Voluntary Participation".
- VI Workshop in International Economics and Finance UTDT Argentina, December 2003. Discussant.

Other

- Visiting Student NYU Fall 2003
- Business Analyst at Hermes Management Consulting 1999-2000
- Fluent in Spanish and working knowledge of Italian
- US Citizen

References

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