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Research Summaries

Herding in Financial Markets

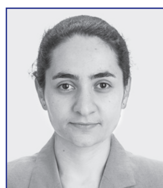
Marco Cipriani

Herd behavior occurs in financial markets when traders base their decisions on the actions of other traders, and not on the information to which they personally have access. When traders herd, information about financial assets is not reflected by their prices. As a result, asset prices may diverge from their fundamental values: a financial crisis can occur when the fundamentals of the economy are strong, and asset price booms can take place when the fundamentals are weak. This article describes the research carried out at the IMF on herd behavior in financial markets.

Over the past year, financial markets in the United States and across the world have experienced episodes of major turmoil. Large financial institutions whose soundness no one previously questioned have suddenly collapsed, financial market operations have been disrupted, and governments and central banks have had to resort to extreme policy measures to reduce the likelihood of systemic market failure. The recent market turmoil is by no means exceptional: indeed, the last three decades have witnessed a series of major international financial crises, from the Latin American debt crisis in the 1980s to the bursting *(continued on page 2)*

Fiscal Decentralization

Lusine Lusinyan



As worldwide trends toward more democratization and more participatory forms of government deepen, so does the interest by practitioners and academics in the potential fiscal aspects of such reforms, which often involve devolution of fiscal roles and responsibilities. Political economy considerations come to the fore of understanding decentralization processes while existing intergovernmental relations become more sophisticated, and new economic challenges give rise to new tasks for the decentralized systems. Relatedly, there remains a need to better understand the relationship between fiscal decentralization and efficiency and macroeconomic outcomes, in general, and fiscal policy, in particular. The research done at the IMF over the last few years has covered many of these issues in the context of a comprehensive examination of the recent approaches to fiscal decentralization, country-specific work, and cross-country analyses.

Intergovernmental arrangements, including their fiscal dimension, are in general shaped by historical and political developments. Thus, although the key argument in favor of fiscal decentralization is improved efficiency in public service provision—related to the government's allocation *(continued on page 4)*

Herding in Financial Markets

(continued from page 1)

of the dot-com bubble at the beginning of this century. As a result, over the past 30 years there has been a vast empirical literature in international finance on the determinants of financial crises. A common finding of this literature is that the fundamentals of an economy help to predict when a crisis occurs, but crises may also occur when fundamentals are strong. Moreover, crises in emerging markets are often triggered by a synchronous change of sentiment by financial market participants that results in a sudden drying up of international capital inflows (Calvo, 1998).

A possible explanation of why sound fundamentals are not reflected in asset prices is that information about them is spread among market participants and prices may fail to aggregate it. This would happen if investors, instead of acting according to their private information, were to decide to simply herd. Indeed, during a herding episode, traders neglect their own private information in order to follow the actions of their predecessors. As a result, a trader's private information will not be reflected by the market price, and, if many traders herd, financial asset prices will be misaligned with respect to their fundamental values.

Over the past 15 years, several studies of social learning have shown that herding is not necessarily an irrational phenomenon. The first papers on herding (Banerjee, 1992; Bikhchandani, Hirshleifer, and Welch, 1992) do not discuss herd behavior in financial markets, but rather in an abstract environment, where agents with private information decide in sequence. A celebrated example is that of people who have to choose in which of two restaurants to dine on the basis of some personal information and by looking at how many other people have chosen one restaurant instead of the other. These papers show that after a finite number of agents have made their decisions, all following agents will find it optimal to disregard their private information and herd (that is, they imitate the predecessors). In a more recent work, Khamfula, Mlachila, and Chirwal (2006) show that the same mechanism explains debt crises in developing countries. In particular, in the presence of information and payoff externalities, herd behavior among foreign donors can cause the supply of external funds to an emerging market to dry up.

These original models of herding, however, are not appropriate for a discussion of herd behavior in financial markets because they study an economy where the cost of taking an action (e.g., investing) is constant. In financial markets, instead, prices are certainly flexible and react to the order flow. Avery and Zemsky (1998) tackle this issue by studying herd behavior in a financial market where the price is set by a market maker and adjusts to the order flow. They show that if prices are efficiently set, agents will always use their private information when trading. As a result the price always converges to the fundamental value of the asset. Nevertheless, a benign form of herd behavior can arise if there is multidimensional uncertainty (e.g., uncertainty not only on the fundamental value of the asset, but also on its volatility).

Recent theoretical work by Cipriani and Guarino (2008a) shows that, in financial markets, herd behavior can also occur if traders have noninformational reasons to trade (such as the need for liquidity, and to hedge against financial or nonfinancial risks). In this case, herding generates pathological misalignments between the price and the fundamental value of the asset. During a herding episode, the price does not aggregate private information, since traders act independently of it. This may happen at a level far from the fundamental value of the asset being traded; as a result, herd behavior can be a reason why, at times, we observe financial crises even in economies with sound fundamentals.

In addition to trying to understand the theoretical reason for herd behavior in financial markets, it is also important to study its empirical relevance. However, it is difficult to test for the presence of herd behavior with actual financial market data. Herding consists of neglecting one's private information to follow previous traders' decisions; therefore, to test for its presence one would need data on traders' private information, which is difficult to obtain. Over the past few years, economists have tried to overcome this problem by using laboratory experiments in which students or practitioners are asked to trade in an artificial financial market; both their behavior and information set are observed by the researcher. The researcher can directly detect when agents neglect their private information and follow the actions of their predecessors.

In this line of research, Cipriani and Guarino (2005) study herd behavior in a laboratory market where subjects receive private information on the value of a security and observe the history of past trades. Given these two pieces of information, they choose, sequentially, if they want to sell, buy, or not trade one unit of the asset. By observing the way in which they use their private information and react to the decisions of the previous traders, the occurrence of herding can be directly detected. The experimental results are encouraging for the theory. Although the experiment reveals some anomalies in subjects' behavior, what is observed in the laboratory is quite consistent with the theoretical predictions. In particular, in a laboratory financial market where trading occurs for informational reasons only, they detect very few instances in which subjects decide to herd. Therefore, the theoretical result that herding only arises when traders have noninformational reasons to trade (beside informational ones) is confirmed by the experimental analysis.

In a related paper, Cipriani and Guarino (2008b) study herd behavior using a sample of financial market professionals instead of students. Most of the experimental literature (both in finance and in other fields) uses students as subjects because of the convenience and lower cost of recruiting them. An obvious concern, however, is the external validity of the results, since students are not representative economic agents. This is particularly important in financial markets, where traders are assumed to be very sophisticated, and where the recruitment of financial market professionals is exceptionally difficult. The results of this paper show that financial market professionals behave quite similarly to students; one noticeable difference, however, is a higher propensity to trade against the market (by acting as contrarians).

A different strand in the empirical literature has instead studied herd behavior by using field data. Since data on private information available to market participants is not available, this literature does not test models of herd behavior directly; instead, it studies whether in the market we observe uniformity of actions among investors, irrespective of whether it stems from disregard of one's private information. Lakonikosh, Shleifer, and Vishny (1995) detect the presence of herding by measuring the degree of decision clustering within subsets of market participants (since for the whole market, there is always a seller for any buyer, and therefore, by definition, there is no herding). Using quarterly data for 1985–89 on the portfolios of a sample of mutual funds, they find relatively scant evidence of herding. The incidence of herding is only high on stocks of small companies, where the role of private information is more significant.

Borensztein and Gelos (2003) use the same methodology to study herding by money managers, using a database on monthly asset allocation by equity funds with a focus on emerging markets. They find that herding, although statistically significant, is moderate. Moreover, contrary to anecdotal evidence, it is not more prevalent during crises than during tranquil times. In a similar spirit, Kodres and Pritsker (1995) study herding in daily trading by large institutional investors in several futures markets. They find that herding is more prevalent on the S&P index for broker-dealers, pension funds, and hedge funds; herd behavior is also statistically significant for the German deutsche mark and the Japanese yen futures for broker dealers and non-U.S. banks. Similar to the findings of the other studies, however, the estimated proportion of herding, although statistically significant, explains a relatively small proportion of the variability in trading activity.

As explained above, the existing field literature on herding does not attempt to identify informational herding; instead these studies present a purely statistical analysis, which measures the extent of decision clustering by financial market participants independently of its underlying reasons (see Bikhchandani and Sharma, 2001). Cipriani and Guarino (2007) overcome this problem by developing a model of informational herding that can be brought to the data and estimated. They use transaction data on the New York Stock Exchange and are able to detect the periods of the trading day when traders herd. Although data on private information are not available, the structural model allows to infer traders' beliefs from their actions; it is therefore possible to directly test whether traders follow their private information or imitate the actions of their predecessors. The paper finds that herding accounts for a substantial proportion of trading activity; moreover, there are trading days when most trading activity is characterized by herding behavior. As a result, informational inefficiency caused by herding, although not extremely large on average, is very significant on certain days of trading.

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Fiscal Decentralization

(continued from page 1)

objective in the Musgravian taxonomy—it is not always the main motivation for decentralization processes where various political economy considerations come into play (Ahmad, Brosio, and Tanzi, 2008). Not surprisingly, traditional normative approaches based on the hypothesis of benevolent policymakers, which imply government models devoid of meaningful political institutions, have proven inadequate in explaining the wide range of existing intergovernmental arrangements.

The limitations of the normative approach to local public economics in general and fiscal federalism and fiscal decentralization, in particular, have long been recognized. In his contribution to the *Handbook of Public Economics*, Rubinfeld (1987) suggested that positive models and a more careful specification of the political process by which public goods are provided would be a way forward for the research in this interesting and increasingly relevant area of economics. Indeed, almost 20 years thereafter, the emphasis on more realistic approaches to analyzing intergovernmental fiscal relations was the unifying theme of the papers published in the *Handbook of Fiscal Federalism* (Ahmad and Brosio, 2006). In particular, the main contribution of the positive or political economy approach is argued to be its ability to explain key benefits—preference-matching and accountability—widely believed to arise from increased fiscal decentralization, and give more precise predictions about when such benefits might be achieved. The results, however, become less conclusive when further complexities, such as lobbying and elite capture, are introduced, leaving the support for decentralization a qualified one.

But is more decentralization associated with more efficient outcomes when looking at the data? The answer from the empirical literature does not appear much more conclusive than that from the theory, and is further complicated by important data limitations. While there is some support for the positive relationship between decentralization and production efficiency (mainly education and health outcomes), the literature on preference-matching and decentralization remains small, and there is relatively poor evidence to characterize effective changes over time using comparable administrative and household survey data (Ahmad, Brosio, and Tanzi, 2008). In addition, there are also no clear-cut conclusions concerning the practical existence and impact of fiscal competition among jurisdictions—a key building block in both normative and positive models (Ferreira, Varsano, and Afonso, 2005). Keen and Kotsogiannis (2004) argue that, within federal systems, horizontal (between the same level of government) and vertical (between different levels of government) tax externalities push tax rates in opposite directions, leaving the net outcome unclear. What seems unambiguous, however, is that the intensification of tax competition among state governments would lead to welfare-reducing outcomes by lowering/increasing taxes that are too low/high. This finding is especially noteworthy, since fiscal competition, particularly for tax bases, is expected to increase with globalization as a result of greater factor mobility (Ferreira, Varsano, and Afonso, 2005; de Mello, 2005).

Furthermore, based on a premise that local preferences are growth-oriented and that decentralization promotes more efficient use of resources, one would expect to find a positive relationship between decentralization and growth. However, a number of counterarguments, such as diseconomies of scale, externalities, and lack of coordination, would suggest that decentralization may instead inhibit growth. The mixed empirical findings seem to mirror these ambiguities (Batbold, Mati, and Thornton, forthcoming; Ahmad, Brosio, and Tanzi, 2008). In a sample of 51 countries, Iimi (2005) shows that fiscal decentralization is instrumental to economic growth. Feltenstein and Iwata (2005) confirm this result for the case of China. However, the relationship between growth and decentralization becomes insignificant for countries of the Organization for Economic Cooperation and Development (OECD) when the degree of effective decentralization is taken into account (Thornton, 2007), as opposed to the traditional measures of decentralization using a share of subnational spending (or revenue) in general government spending (or revenue), which seem to overstate the true fiscal powers available to subnational governments. In trying to explain the lack of robust empirical evidence, Plekhanov (2004) argues that the question of whether more or less decentralization will deliver superior economic outcomes may be fruitless, and shows that growth can depend on the design of decentralization (particularly revenue-sharing) arrangements.

Overall, as support for fiscal decentralization remains largely inconclusive in the literature, aspects of the design and implementation of intergovernmental fiscal relations gain a greater prominence given the potentially significant implications these structural institutional factors may have for the macroeconomic and fiscal outcomes and the conduct of the fiscal policy. First, it is generally recognized that subnational levels of government may be prone to fiscal indiscipline because of the common pool problem leading to an overspending bias, soft budget constraints, interregional competition, unfunded mandates, and short electoral

cycles (Plekhanov and Singh, 2007). The moral hazard and adverse incentives created by these problems tend to be further exacerbated by vertical fiscal imbalances, which is the gap between the subnational governments' own revenue and their expenditure responsibilities filled by transfers from the center. Reflecting the evidence that subnational governments can be a significant source of fiscal risks, resulting in some cases in costly bailouts by the center as high as 12 percent of GDP in Brazil in 1997 (IMF, 2008), subnational fiscal indiscipline can translate into a deteriorated overall fiscal stance and affect fiscal sustainability. Also, Fabrizio and Mody (2006) show that, while the quality of institutions matters strongly in determining fiscal outcomes, governments with an ideological disposition toward greater fiscal decentralization tend to be less fiscally conservative.

Thus, depending on the balance in spending and taxing powers between the national and subnational levels of government, the match between the devolution of spending responsibilities and financial resources, the transfer systems that can affect subnational governments' incentives to manage their finances efficiently (Ahmad and Searle, 2005), institutional arrangements for subnational borrowing (Plekhanov and Singh, 2007), enforcement and sanctions for noncompliance, existing public financial management systems (Ahmad, Albino-War, and Singh, 2005), including quality of fiscal reporting, and administrative and technical capacity at lower levels of government, the subnational fiscal operations can potentially complicate the national government's ability to conduct successful stabilization and countercyclical fiscal policies, including through the impact on effective fiscal policy coordination. However, some more recent cross-country empirical studies argue that this danger has been overstated (Thornton and Mati, 2008) and that, in line with recent research on OECD economies, subnational governments in emerging market economies have played an important supporting role in fiscal consolidation efforts (Adedeji and Thornton, forthcoming).

The issues concerning the design and implementation of intergovernmental fiscal relations and their role in helping achieve the desired macro-fiscal as well as social outcomes have indeed been the focus of a number of country-specific studies undertaken by the IMF staff, including in the context of Article IV Consultations. Over the last few years, these included countries such as Bolivia, China, Georgia, Germany, India, Iraq, Italy, Japan, Lao P.D.R., Mexico, Nigeria, Peru, Russia, Senegal, Spain, Switzerland, Sweden, and Uganda. Dabla-Norris (2006) provides a comparative analysis of the decentralization process and institutions in transition economies. A paper by the Fiscal Affairs Department (forthcoming) discusses lessons from IMF technical assistance on various aspects of intergovernmental fiscal relations, and Ahmad and Brosio (forthcoming) present further evidence on what works and why, including case studies on efficiency and distributional aspects of decentralization, with a greater emphasis on the risks associated with decentralization.

New priorities and new country circumstances continue to pose new challenges to fiscal decentralization. In Switzerland, for example, with its extensive federal structure and significant state-level fiscal autonomy, enhancing horizontal and vertical coordination is put forward to help ease the aging-related pressures on existing entitlement programs (IMF, 2006). Despite its centralized appearance, Japan is much decentralized in the sense that the major providers of public expenditure are the local governments. Hence, given the size of the necessary fiscal adjustment, reforming intergovernmental fiscal relations in order to strengthen the incentives of local government to bolster their fiscal capacities and address soft budget constraints, is seen as a key element of Japan's fiscal consolidation plans (Kaizuka and Krueger, 2006).

Poverty alleviation has been a key objective of decentralization reforms, particularly in developing countries, but the literature on decentralization in the context of development is still in its infancy (Bardhan, 2006). For decentralization to be effective, it would be essential to address pervasive problems of monitoring and enforcement, lack of local accountability structures, capacity constraints, and weak public financial management systems. Finally, the sharing of natural resource revenues among levels of government poses special challenges for decentralized systems in resource-rich countries. While the literature recommends that such revenues be centralized, assigning some natural resource rents to subnational governments can have its pros and cons (Ahmad and Brosio, 2006).

To summarize, in the words of Rubinfeld (1987), to be effective both in terms of proscription and prescription, the models of fiscal decentralization must include reasonable assumptions about politics as well as economics. But more realism often comes at a cost of more ambiguity in theoretical predictions, to which the empirical investigations do not always provide straightforward answers either. While key institutional aspects of fiscal decentralization are the focus of country-specific studies, future cross-country analyses would benefit from a better integration of these essential elements into a more refined approach to understanding this increasingly challenging area of research at the intersection of economics, politics, and history.

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Visiting Scholars, August–December 2008

Yongsung Chang; University of Rochester; 10/16/08–10/17/08

Michael Hutchison; University of California, Santa Cruz; 9/10/08–9/12/08

Sung Wook Joh; Seoul National University, Korea; 6/30/08–8/20/08

Marianne Johnson; Bank of Canada; 10/24/08–4/30/09

Giovanna Labartino; Università Commerciale "Luigi Bocconi;" 8/13/08–8/25/08

Alberto Miguel Martin; Universitat Pompeu Fabra; 9/29/08–10/10/08

Peter Montiel; Williams College; 9/11/08–9/10/09

Learning from the Nobels

The Nobel Laureate Meetings in Lindau, Germany offer a unique opportunity for young researchers from universities and other institutions to meet with their peers and with leading figures in their field. In August 2008, eight young IMF economists traveled to the third meeting in economic sciences, where 15 Nobel laureates included Robert Solow, Joseph Stiglitz, George Akerlof, Robert Mundell, Myron Scholes, and Peace Prize laureate Muhammad Yunus, creator of the Grameen Bank.[1] *The laureates discussed a range of topics, but the focus was inevitably on the current financial and economic crisis. In this article, participant Chris Crowe provides a brief account of his impressions.*

The global credit crunch took center stage both in the formal program of the economic sciences meeting and in informal discussions. The meetings were held August 20–23, five months after JP Morgan Chase swallowed up Bear Stearns and two to three weeks before the rescue of Fannie Mae, Freddie Mac, and AIG by the U.S. government. The first day commenced with a wide-ranging panel discussion of systemic risks in financial markets, moderated by David Wessel of the *Wall Street Journal* and taking in comments from Stiglitz, Scholes, and Yunus, as well as Daniel McFadden. Stiglitz in particular was highly critical of both the behavior of financial market participants and the government response, arguing that much of the blame for the crisis could be assigned to inadequate regulation and an "anything goes" culture on Wall Street. Scholes offered some defense of the laissez-faire status quo, although he too had some criticisms at the margins. Both elaborated further on their arguments at their individual speaker sessions later in the program.

For Stiglitz, the current crisis—the worst faced by the United States since the Great Depression—is an example of microeconomic failures translating into macroeconomic ones. He argued that financial sector firms, despite record profits in recent years, failed in their core roles of allocating and managing risk, an example of market failure more generally.

Information asymmetries were at the center of his account. For instance, securitization, while creating opportunities for efficient risk dispersal, also exacerbated agency problems. Mortgage originators, who made loans to borrowers with inadequate assets and incomes that they quickly repackaged and sold on as apparently safe securities, provide the most obvious example, but these kinds of information and agency problems were widespread throughout the system. The difficulty in valuing many of these opaque securities and related contracts, which has been hampering efforts to clean up banks' balance sheets, further illustrates Stiglitz's point.

Other market failures have come to the fore. For instance, Scholes emphasized how externalities in financial markets have been heightened by the increased leverage of market participants. Leveraged financial firms that are forced to dump assets in an effort to strengthen their own balance sheet create externalities for others holding the assets, who see the price slump and may be forced into fire sales of their own. This downward spiral is exacerbated by mark-to-market accounting rules.

In Stiglitz's assessment, the market failures highlighted by the current crisis have lessons for policy and theory. On the policy side, he argued that regulation should be strengthened, and indeed that the whole philosophy of regulation should be changed, as many of the current problems stem from the appointment of regulators who do not believe in regulation. For theorists, he argued that the current crisis should mark the death knell for models based on rational, representative agents.

Scholes focused more on the detail of the financial sector's woes. For instance, highly leveraged financial firms (with a high debt-to-equity ratio) face what he calls an "inflexibility trap." When debt levels are high, debt becomes more risky, taking on more equity-like characteristics. A financial firm that has to rebuild its capital base can then face particular difficulties. Efforts to issue new equity transfer value from equity holders to debt holders, because the risks to the latter fall as the equity cushion expands. This slashes the value of existing equity to such an extent that issuing new equity might worsen the debt/equity position.

More generally, the crisis has highlighted the costs of the inflexibility associated with leveraged capital structures and specialization in profitable but risky core activities. Flexibility can be increased, Scholes argued, by taking on a more diverse set of activities, having a less debt-heavy capital structure, or creating more "optionality"—that is, insuring against big downside risks but surrendering some of the upside as a result. Subsequent events proved Scholes' point: the model of specialized, highly leveraged financial firms relying on wholesale markets for funding has been

[1]The IMF participants were Rabah Arezki (FAD), Bergljot Barkbu (SPR), Chris Crowe (RES), Rishi Goyal (SPR), Roberto Perrelli (FIN), Martin Sommer (APD), Sven Jari Stehn (FAD), and Geneviève Verdier (INS). Some of the presentations are available online at http://*www.lindau-nobel.de.*

IMF staff with Nobel Laureate Professor Robert Mundell in Lindau, Germany. From left to right, top row: Rabah Arezki, Geneviève Verdier, Mundell, Chris Crowe, and Roberto Perelli. Bottom row: Rishi Goyal, Bergljot Barkbu, and Sven Jari Stehn.

the most prominent casualty of the current crisis, with one of the "big five" investment banks driven to bankruptcy, two merging with commercial bank groups, and two set to covert themselves into regular bank holding companies. On the other hand, the bailout of AIG—which took on too much of the downside risk by issuing debt insurance contracts to other financial institutions—illustrates the difficulties in achieving "optionality" in practice, particularly when downside risks represent aggregate shocks.

A second panel discussion focused on globalization and income inequality across and within countries. A diverse panel, including Akerlof and Solow as well as Finn Kydland and Robert Fogel, and moderated by the *Financial Times*' Martin Wolf, offered a range of insights. Underlying all the discussions was unease at the rising inequality in countries such as the United States, where median incomes have flat-lined in recent years as incomes of the richest 1 percent or above have increased dramatically. Stiglitz—not the only commentator to pick up on this aspect of the U.S. mortgage crisis—linked the stagnation of median U.S. incomes to the subprime debacle. When incomes are stagnant or falling, house purchases have to be "paid for" by projected capital gains as house prices increase. However, an asset whose price is only supported by expected price increases and not by fundamentals is by definition experiencing a speculative bubble—which usually ends badly for all concerned, as the current crisis has shown.

Three days of discussions were brought to a close with a boat trip on the lake of Konstanz. Here some of the IMF economists were treated to a wide-ranging informal discussion with Martin Wolf, who had his own perspective on the international dimensions of the crisis and the role of the IMF. However, amid the focus on high finance and trillion-dollar economies, perhaps the highlight of the conference was Muhammad Yunus' account of the creation of the Grameen Bank, a microcredit institution in Bangladesh that lends almost exclusively to poor rural women.

Returning to his home country in the mid-1970s with a PhD from the United States, Yunus became interested in the problems affecting the poor in a village close to the university campus where he was teaching. Denied access to regular credit channels, many of the poor were indebted to loan sharks: Yunus discovered 42 people in the village who were in debt to these exploitative lenders. The total value of the loans was $27. In the face of skepticism from the financial establishment, Yunus created the Grameen ("village") bank as a means of mobilizing the poor's savings and providing them with credit to start small businesses and help educate their children. The bank now has more than seven million customers, 97 percent of whom are women. Despite lending to "sub-sub-sub-prime" borrowers, it has a repayment rate that would be the envy of any U.S. mortgage lender.

Access to credit has transformed lives beyond recognition. The children of the indigent have been able to attend school and university and achieve professional success. Amid the crisis in global financial markets and the pain caused by mortgage mis-selling in the U.S. subprime market, Yunus provided a reminder of the positive, transformative role that credit can play in people's lives. As we seek to reform the global financial system in the wake of the current crisis we would do well to keep it in mind.

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Reddy, Sanjay; Minoiu, Camelia
"Efficiency of Government Social Spending in Croatia"
Financial Theory And Practice

Spilimbergo, Antonio
"Democracy and Foreign Education"
American Economic Review

Call for Papers

Conference on "Structural Reforms Without Prejudice"

The International Monetary Fund, Fondazione Rodolfo Debenedetti, and the Centre for Economic Policy Research will sponsor a conference on "Structural Reforms Without Prejudice" in Milan, Italy on March 2, 2009. The conference will provide a forum for researchers and policymakers to discuss theoretical and empirical research on the causes and consequences of structural reforms, and to examine innovative research on the impact of structural reforms on economic performance.

Those interested in submitting papers for the conference must complete a Call for Papers Reply Form by December 15, 2008. Those forms are available at http://www.cepr.org/R19728168849-2089821184344. Final versions of the papers selected for the conference will then be due by February 1, 2009.

Submissions should shed light on aspects of how structural reforms operate in practice, and how they interact with each other as well as with macroeconomic policies and political institutions. The conference aims to advance understanding of these issues, especially in relation to the following topics:

- New datasets for measuring financial, labor, product, trade, and public sector reforms
- Political institutions and structural reforms
- Impact of structural reforms on economic growth and welfare
- Timing and sequencing of structural reforms
- Interactions between structural reforms and macroeconomic policies.

Submissions that do not fit into these categories but are related to the main theme of the conference are also welcome.

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