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INSIDE THIS ISSUE:

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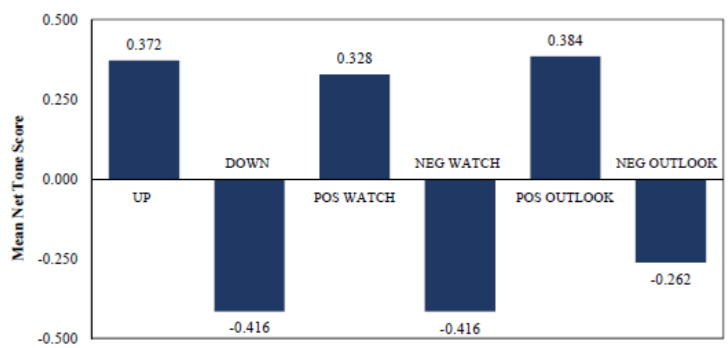
The Information Value of Sovereign Credit Rating Reports.

Sumit Agarwal (NUS), Vincent Chen (NUS), Geoffrey Sim (Credit Suisse), Weina Zhang (NUS)

The recent Eurozone sovereign debt crisis has highlighted the economic importance of an accurate assessment on the sovereign default risk. While sovereign credit ratings are crucial in understanding sovereign default risk, other information provided by credit rating agencies, for instance sovereign credit rating reports, is rarely explored.



Mean Net Tone by Report Type for Moody's Credit Rating Reports
This figure presents the mean net tone scores of Moody's credit rating reports sorted by report type: upgrades (UP), downgrades (DOWN), positive (POS WATCH) and negative watch (NEG WATCH), and positive outlook (POS OUTLOOK) and negative outlook (NEG OUTLOOK).

Source : Authors

In **The Information Value of Sovereign Credit Rating Reports**, authors *Sumit Agarwal, Vincent Chen, Geoffrey Sim and Weina Zhang* fill this void by investigating the information content of sovereign credit rating reports in sovereign credit default swaps (CDS) markets. They find evidence that sovereign credit rating reports provide incremental information value beyond sovereign rating actions.

The authors perform textual analysis on sovereign credit rating reports published by Moody's for more than 70 countries from 2003 to 2013. They classify every sentence in each report into two linguistic tone categories—positive and negative.

The results show that negative tone is significantly related to abnormal CDS spread change within a 3-day event window and rating downgrades in a one-year or two-year horizon. The tone reaction is also economically significant compared to market reaction to upgrades and downgrades.

The authors then identify the most valuable information content in the rating reports. They classify each sentence into six content categories—macroeconomic, public & external finance, debt dynamics, financial sector, political & institutional, and others. Negative debt dynamics-related sentences are found to be related to most significant CDS market reaction. More interestingly, a systematic decrease in the information value of negative financial risk-related sentences after the Eurozone sovereign debt crisis in 2009 is observed. This could be due to a loss of confidence among investors on the financial risk assessment in credit rating reports.

This study has both practical and policy implications. First, investors can employ sovereign credit rating reports as an additional source of information to assess default risk of the country. Second, regulators and policymakers need to improve regulation on the format and content of sovereign credit ratings to provide better and more reliable information to investors.

State Capitalism vs. Private Enterprise

Donghua Chen (NJU), Dequan Jiang (WHU), Alexander Ljungqvist (NYU), Haitian Lu (PolyU), Mingming Zhou (UCCS)

As the key function of an economic system is to allocate scarce resources efficiently, the authors ask: how efficiently do state firms allocate capital compared to private firms in China. While China's capital markets are underdeveloped, firms cannot access them without political approval. Therefore, Chinese firms rely much more heavily on capital obtained from internal capital markets (fellow group members) than on the external capital market.

In **State Capitalism vs. Private Enterprise**, the authors *Donghua Chen, Dequan Jiang, Alexander Ljungqvist, Haitian Lu, and Mingming Zhou* estimate the efficiency of internal capital allocation empirically, contrasting how state business groups and privately owned business groups in China allocate capital across their member firms. Using data on within-group capital flows, the study finds stark differences in that while study finds stark differences in that while private groups allocate more capital to units with better investment opportunities, state groups do the opposite.

In private business groups, capital flows from units with relatively worse investment opportunities to units with relatively better investment opportunities. This is consistent with private business groups allocating capital efficiently, i.e., in a way that increases overall group value.

In China, the state groups do the opposite as on average they reallocate capital from firms with the best prospects to the firms with the worst prospects. Product market competition and external monitoring by minority private shareholders help discipline state groups' tendency to allocate internal capital inefficiently.

The study's results suggest that state capitalism does a poor job of allocating capital efficiently, at least in the context of China's state business groups. This no doubt reflects the fact that the principal (i.e., the Chinese Communist Party) does not desire its agents to maximize profits or shareholder value above all else. Its agents are instead given incentives to pursue potentially conflicting goals, including raising productivity and pursuing social objectives such as the preservation of jobs.

Consistent with these incentives, the study shows empirically that a state group's chairman is more likely to be promoted to higher political office if he raises productivity and if he avoids layoffs at group firms. As career concerns affect state group behavior, the authors find that capital allocations are used to prop up large and struggling employers. While perhaps desirable in the short-run, propping up struggling group members in this way is unlikely to further the state's interest in the long-run: all else equal, a given amount of capital will likely create more jobs if allocated to a high-*Q* firm than if allocated to a low-*Q* firm. Letting capital flow to low-*Q* firms may thus avoid job losses in the short-run, but it is likely to do so at the expense of job creation at high-*Q* firms. Thus, this approach is unlikely to maximize the overall number of jobs.

Finally, the study shows that state groups allocate capital inefficiently only if the chairman has a realistic chance of being promoted and if the cost of self-interested behavior is not too high. These findings suggest a misalignment between the interests of the state and the actions of its agents.

Cross-Sectional Asset Pricing with Individual Stocks: Betas versus Characteristics

Tarun Chordia (Emory), Amit Goyal (UNIL), Jay Shanken (Emory)

A fundamental paradigm in finance is that of risk and return: riskier assets should earn higher expected returns. It is the systematic or non-diversifiable risk that should be priced, and under the Capital Asset Pricing Model (CAPM) this systematic risk is measured by an asset's market beta. While some scholars do find a significant positive cross-sectional relation between security betas and expected returns, more recently others find that the relation between betas and returns is negative, though not reliably different from zero. This calls into question the link between risk and expected returns.

The behavioral finance literature points to psychological biases on the part of investors to explain the breakdown of the risk-return relationship. The authors say that it is legitimate to ask whether the underlying firm characteristics or the factor loading do a better job of tracking expected returns in the cross-section. Answering this question is the main objective of the paper.

In **Cross-Sectional Asset Pricing with Individual Stocks: Betas versus Characteristics,** the authors *Tarun Chordia, Amit Goyal and Jay Shanken* develop a methodology for bias-corrected return-premium estimation from cross-sectional regressions of individual stock returns on betas and characteristics. They find that over the period from July 1963 to December 2013, there is some evidence of positive beta premiums on the profitability and investment factors of Fama and French (2014), a negative premium on the size factor and a less robust positive premium on the market, but no reliable pricing evidence for the book-to-market and momentum factors. Firm characteristics consistently explain a much larger proportion of variation in estimated expected returns than factor loadings, however, even with all six factors included in the model.

The authors point out that despite strong theoretical and practical reasons for conducting asset pricing tests using individual stocks, there are relatively few studies doing so. The flexibility of the two-pass methodology is an advantage over the more general GMM approach in this context. However, the major difficulty in two-pass regressions is to properly account for the bias introduced by imprecisely estimated individual betas. Therefore, the study uses bias-corrected coefficient estimators that are adjusted to reflect these estimation errors. Simulations indicate that the correction for the errors-in-variables bias is effective and also reduces the mean-square error in estimating the beta premia.

A number of important findings are documented. As in many other studies, the premium for CAPM beta is not reliably different from zero. The premium for the Fama and French (1993) size factor is always negative in the presence of the characteristics, and often reliably so. The premiums on the book-to-market factor and the momentum factor are both statistically insignificant. The study finds significant premiums for the profitability factor and the investment factor, CMA. The premium for CMA loses significance in the presence of the investment characteristic. The coefficients on all the characteristics – firm size, book-to-market, six-month past return, profitability and investment – are highly significant across all specifications, with the usual signs.

The study also offers new results on the “loadings versus characteristics” controversy. The previous literature has tended to focus on whether it is one or the other that ultimately explains differences in expected returns. In contrast, the authors provide an intuitive and simple way to disentangle the *relative importance* of betas and firm characteristics in explaining the cross-section of expected returns. Regardless of the factor model and whether premiums are allowed to be time-varying, it is mainly the characteristics that contribute to the cross-sectional variation in expected stock returns.

Bond Vigilantes and Inflation: Do Domestic Bond Markets Promote Price Stability?

Andrew K. Rose (Berkeley), Mark M. Spiegel (Federal Bank of SF)

Countries issue debt in many varieties—public and private, long-maturity and short-maturity, nominal and real. Since most countries do not have a complete set of bond markets, new ones are sometimes added. For instance, Poland introduced 10-year fixed rate government bonds in 1999 and Korea followed in 2000. After the introduction of a domestic bond market, bond holders are exposed to capital losses through inflation, giving rise to a potential anti-inflationary force. Hence, it is interesting to ask whether the existence of a long nominal local-currency bond market help to control inflation.

In **Bond Vigilantes and Inflation: Do Domestic Bond Markets Promote Price Stability**, authors *Andrew K. Rose and Mark M. Spiegel* explore the relationship between inflation and the existence of a local, nominal, publicly-traded, long-maturity, domestic-currency bond market.

The authors assume that large numbers of poor households are forced to hold cash and are thus not protected from inflation, while wealthy asset-holders can influence inflation outcomes through their asset holdings. Their model suggests that when bond markets are created, the rich who hold the bond find themselves exposed to inflation. Therefore, they respond by acting politically to lower inflation. Their model formalizes the contention that domestic financial market development can influence macroeconomic outcomes. By issuing debt that is not protected from inflation, the government creates a powerful political group opposed to inflation, and ends up choosing less inflation than it would otherwise.

Using annual data for over 200 countries from 1970 to 2012, the authors find evidence that supports their prediction: the very existence of a market for long maturity, nominal bonds denominated in local currency appears to lower inflation by three to four percentage points while bonds that were either indexed to inflation or denominated in foreign currency do not have a similar effect. This finding is consistent with the intuition provided by their theoretical model that countries with bond markets have a powerful interest group opposed to inflation.

Other monetary regimes, such as those dedicated to maintaining hard fixed exchange rates, do not have the same reaction. Finally, no effect of the bond market on real output is observed.

Accounting Measurement of Assets and Earnings and Market Valuation of Firm Assets.

Qi Chen (Duke), Ning Zhang (Queen's)

While it is commonly agreed that accounting reports perform an important valuation role by providing firm-specific information to investors to assess firm performance and assign value, consensus is lacking in how to evaluate and therefore improve the valuation usefulness of accounting reports. On the one hand, standard setters have taken a balance-sheet centered view, which emphasizes the importance of accurate recognition and measurement of assets under the belief that assets represent firm decisions that generate future incomes and therefore are conceptually more fundamental and logically prior to income. On the other hand, however, proponents of the income statement-based approach criticize the balance sheet approach for introducing significant noise in accounting earnings, thus destroying earnings' valuation usefulness by reducing its forward-looking usefulness.

	(1)	(2)	(3)	(4)
	Tobin's Q			
R^2	**0.426*** **			
	(12.58)			
R^2_{Firm}		**0.311*** **		**0.377*** **
		(8.31)		**(11.10)**
$R^2_{Industry}$			**0.826*** **	**0.977*** **
			(7.75)	**(9.18)**
Age	-1.763***	-1.969***	-2.088***	-1.671***
	(-12.68)	(-13.54)	(-13.14)	(-11.90)
Dividend	-0.126***	-0.130***	-0.126***	-0.123***
	(-7.68)	(-7.90)	(-7.90)	(-7.61)
Log(Total assets)	0.0355***	0.0417***	0.0460***	0.0335***
	(6.99)	(8.18)	(8.45)	(6.63)
Leverage	-1.214***	-1.226***	-1.250***	-1.203***
	(-6.37)	(-6.39)	(-6.27)	(-6.30)
ROA	0.784**	0.926***	1.016***	0.774**
	(2.65)	(2.93)	(3.34)	(2.66)
ROA(1)	1.522***	1.529***	1.563***	1.532***
	(6.00)	(6.05)	(6.30)	(6.11)
ROA(2)	1.122***	1.147***	1.136***	1.113***
	(4.31)	(4.10)	(4.22)	(4.40)
ROA(3)	0.650***	0.649***	0.624***	0.627***
	(3.77)	(3.58)	(3.46)	(3.68)
ROA(4)	0.968***	0.993***	1.029***	0.982***
	(4.56)	(4.54)	(4.82)	(4.71)
ROA(5)	1.203***	1.235***	1.266***	1.206***
	(5.11)	(5.09)	(5.27)	(5.18)
VOLP	5.365***	5.248***	5.283***	5.413***
	(14.83)	(14.34)	(14.55)	(15.11)
Ret(1)	-0.334***	-0.339***	-0.344***	-0.334***
	(-8.65)	(-8.65)	(-8.96)	(-8.74)
Ret(2)	-0.275***	-0.281***	-0.287***	-0.277***
	(-6.30)	(-6.26)	(-6.59)	(-6.43)
Ret(3)	-0.241***	-0.246***	-0.251***	-0.242***
	(-5.27)	(-5.25)	(-5.52)	(-5.40)
Ret(4)	-0.178***	-0.183***	-0.190***	-0.181***
	(-4.83)	(-4.77)	(-5.06)	(-4.98)
Ret(5)	-0.138***	-0.141***	-0.148***	-0.141***
	(-4.22)	(-4.20)	(-4.37)	(-4.33)
Average adj. R-sq	0.45	0.44	0.44	0.45
Average N	1,370	1,370	1,370	1,370
Number of Years	35	35	35	35

Panel B: Pastor-Veronesi specification

This table reports results from estimating Tobin's Q on R2 (R2 Firm and R2 Industry) and control variables using the Pastor and Veronesi (2003) specification. Age is one minus the reciprocal of one plus the number of years appeared in CRSP database. Dividend is a dummy variable that takes 1 if a firm-year pays dividends. Leverage is market leverage defined as total debt over the sum of total debt and the market value of equity. Log(Total assets) is the logarithm of total assets. VOLP is the volatility of profitability defined as the standard deviation of return on equity (assets) five years ahead. ROA is the current-year return on assets. ROA(i) is the return on assets in the i th year in the future (up to five years). Ret(i) is the compounded annual return in the i th year in the future. Regressions are estimated annually and the averages of coefficient estimates from the annual regressions are presented (Fama-MacBeth method). T-statistics are presented underneath the coefficient estimates. ***, **, and * denote significance levels for two-sided tests at the 1%, 5%, and 10% level, respectively.

Source : Authors

In **Accounting Measurement of Assets and Earnings and Market Valuation of Firm Assets**, authors *Qi Chen* and *Ning Zhang* propose a framework that reconciles these two views. Specifically, they argue that the accuracy of accounting constructs (i.e., accounting assets and accounting earnings) in measuring their underlying corresponding economic constructs (i.e., economic assets and economic income) is not important per se; what matters is the accuracy of investors' inference about a firm's marginal return on assets (i.e., marginal productivity of the firm's assets) based on the accounting reports of assets and earnings. Under this perspective, accounting assets and earnings can be noisy measures of their underlying economic constructs. However, as long as the noise in balance sheet (asset measurement) is properly correlated to the noise in income statement (earnings measurement), the valuation usefulness of accounting report can be maximized.

The authors demonstrate their argument in two steps. First, they study a theoretical framework where the expected firm value is increasing in the amount of (unverifiable) information firm managers have with respect to the marginal rate of return on their investments, and where the role of accounting reports is to provide verifiable information on the amount of investments (in the form of assets) and the subsequent return from the investment (in the form of earnings) to communicate such information. They show that under a perfect reporting system, the amount of information can be measured as the R-squared from a firm-specific regression of future earnings on lagged assets. This R-squared measure corresponds to the theoretical concept of the proportion of uncertainty reduction that investors can obtain from observing firms' past assets and earnings.

The authors then use data from non-financial and non-utility US firms from 1960 to 2010 to show that empirically the market valuation of a firm indeed increases with this measure of information in ways consistent with the predictions from the theoretical framework. This relation is robust to a variety of specification and robustness checks. The authors discuss how their approach differs from other existing measures of accounting quality, and how their analyses can provide alternative perspective on the important question of how to evaluate accounting measurement constructs.

Learning through a Smokescreen: Earnings Management and CEO Compensation over Tenure

Cristina Cella(Stockholm), Andrew Ellul (Indiana), Nandini Gupta (Indiana)

This paper examines the dynamics of CEO compensation as boards learn about managerial ability over the CEOs tenure. The research idea is to look into uncertainty about ability (and business strategy) being greater for new CEOs; career concerns may lead CEOs to manage earnings; and earnings management may also be informative about underlying business conditions. Over time, boards observe information about CEOs and disentangle informative from strategic earnings management.

In **Learning through a Smokescreen: Earnings Management and CEO Compensation over Tenure**, the authors *Cristina Cella, Andrew Ellul and Nandini Gupta* start with examining the fact that career concerns may lead CEOs to distort reported performance, especially in their early years of tenure when there is greater uncertainty about their ability. They investigate whether the presence of reporting distortions affects CEOs' compensation over their tenure. Consistent with the view that career concerns are likely to be stronger in the early years of tenure, they find that earnings management is highest in the early years and decreases gradually over the CEO's tenure.

The results show that compensation is positively associated with earnings management in the early years of a CEO's tenure, but this relationship becomes negative over time, indicating that during the period of greater uncertainty about a CEO's ability, distorting earnings may pay off for some CEOs. Importantly, boards learn about CEOs' ability over time, and do not reward those who continue to distort reported performance.

The authors also show that the relationship between reporting distortions and compensation varies based on CEO characteristics that capture uncertainty about ability and career concerns: earnings management is more strongly correlated with the compensation of younger CEOs, and those without a fixed term employment contract who may be at higher risk of being fired. These results indicate that boards adjust compensation in response to potential earnings distortions in the early years of a CEO's tenure.

To examine the dynamics of CEO compensation over the tenure of the CEO and in the presence of earnings management, data on 1,624 CEO turnovers in 1,023 firms forming part of the S&P 1500 index has been used. Earnings management is highest in the early years when there is greatest uncertainty about a CEO's quality, decreasing gradually over his tenure. The results on the dynamics of earnings management are consistent with the career concerns argument that CEOs may use earnings management to show higher ability when survival is at greatest risk.

The paper then examines the effects of tenure, various measures of earnings management, and the interaction between the tenure and earnings management, on total CEO compensation, controlling for other firm characteristics that are likely to affect compensation and using a methodology that treats tenure and earnings management as endogenous. The authors find that compensation is positively associated with earnings management in the early years of a CEO's tenure, but this relationship becomes negative over tenure, indicating that during the period of greatest uncertainty about a CEO's ability, distorting earnings may pay off for some CEOs, but boards learn about CEOs' ability over time, and do not reward those who continue to distort reported performance.

The study also finds that the relationship between reporting distortions and compensation varies based on CEO characteristics that capture uncertainty about ability and career concerns.

Boards' learning about CEO's ability in the presence of earnings management is the most plausible explanation of the sequence of results found in the paper. The authors find that learning about the CEO takes place, is convex in tenure and faster when there is greater *ex-ante* uncertainty about ability. The evolution of CEO compensation over tenure responds to this learning process.

Price Pressure from Coordinated Noise Trading: Evidence from Pension Fund Reallocations

Zhi Da (Notre Dame), Borja Larrain (UC), Clemens Sialm (UT), Jose Tessada (UC)

The impact of noise traders on asset prices is central to the debate on market efficiency as noise might cause market inefficiencies. The role of noise traders in financial markets has already been formalized by showing that they can create mispricing and excess volatility if the trading horizon of risk-averse arbitrageurs is short. On the other hand, there is an ongoing debate regarding whether noise traders can survive in the long-run and continue to affect asset prices.

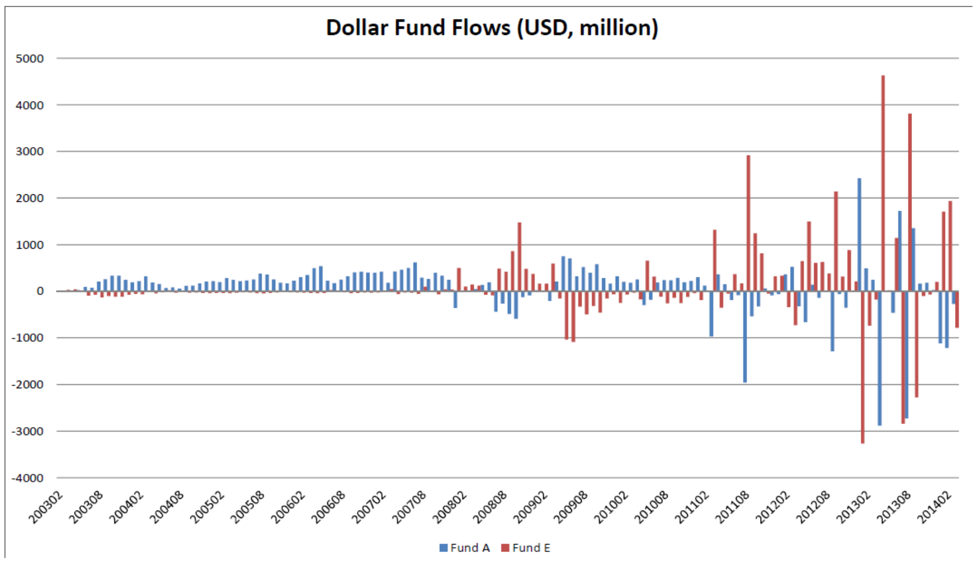
In **Price Pressure from Coordinated Noise Trading: Evidence from Pension Fund Reallocations,** the authors *Zhi Da, Borja Larrain, Clemens Sialm* and *Jose Tessada* focusing on Chile as its pension system has obtained substantial attention in economics and finance research over the last decades due to its early adoption of personal retirement accounts. The authors document a new channel through which coordinated noise trading can exert large price impact in both equity and bond markets, even when asset ownership is dominated by institutions. In Chile, where pension assets account for 30% of free float in the stock market, pension investors often switch their entire pension investments from fund A (holding mostly risky stocks) to fund E (holding mostly risk-free government bonds), or vice versa, in an attempt to "time the market".

These frequent portfolio reallocations are coordinated across individual investors by an investment advisory firm that has recently gained substantial popularity on social media. It sends investors switching recommendations (fund A to E or E to A) by e-mail or private website login. The impact on the recommendations has increased over time as the firm has gaining popularity. The authors' analysis also suggests that young investors are more likely to follow the firm's recommendations. In order to implement the resulting fund switches, pension fund companies often face redemption requests amounting to 10% of their domestic equity and 20% of their bond portfolios within a few days.

The evidence in the paper suggests that noise traders can affect asset prices even when the assets are held directly by large financial institutions. As social media makes it easier to coordinate noise trading, the noise traders can still leave sizable footprints in the financial market. The authors find that this coordinated noise trading leads to large price pressure of almost 2.5% in the equity market and more than 30 basis points even in the relatively liquid government bond market. This has also led to excessive volatility.

The findings have implications for the optimal design of a pension system. The literature on defined contribution pension plans has documented that participants are often inert, follow default investment options, and are subject to behavioral biases. This paper says that the design of a defined contribution pension plan can create incentives for participants to reallocate their assets that can harm long-term retirement investors. Indeed, as a response to these frequent fund switches, private sector pension funds in Chile in the past two years have significantly reduced their holdings of less liquid equity and debt securities and replaced them with cash.

In addition, the frequent fund switches make Chilean pensions funds less willing to invest in illiquid assets even though they might be particularly beneficial for long-term retirement investors. Thus, the rebalance across different funds could actually limit arbitrages in the context of open ended fund structures.



Source : Authors

The Great Gatsby Curve in China: Cross-Sectional Inequality and Intergenerational Mobility

Yi Fan (LSE), Junjian Yi (NUS), Junsen Zhang (CUHK)

Since its market-oriented reform in 1979, China's impressive economic growth is matched by rising income inequality, of which the latter has yet to be fully understood. The Gini coefficient for measuring income inequality has rocketed from 0.26 to 0.43 between 1980 and 2010.

Will this rising inequality continue? To what extent will cross-sectional inequality be persistent across generations? How does cross-sectional inequality interplay with intergenerational mobility? In **The Great Gatsby Curve in China: Cross-Sectional Inequality and Intergenerational Mobility,** authors *Yi Fan, Junjian Yi and Junsen Zhang* answer these questions.

The authors analyze the temporal patterns of cross-sectional inequality and intergenerational mobility during the period of China's economic transition and growth. Specifically, they investigate intergenerational mobility in income and education with respect to cohort, gender, and region using multiple micro data sets.

Their results show that intergenerational mobility has declined sharply. Further, this trend is particularly significant for females and residents from economically disadvantaged regions such as rural and western areas.

By linking cross-sectional inequality to intergenerational mobility, the authors also show their dynamic evolution. They found that cross-sectional inequality is negatively correlated with intergenerational mobility in China.

They further identify structural forces that drive the decline of intergenerational mobility and the negative correlation between cross-sectional inequality and intergenerational mobility. These forces are increases in return to human capital and educational cost, as well as decentralization of government expenditure on education and rising income.

Their results imply that the cross-sectional inequality in China may increase in the future. On the one hand, the increase in inequality in the parental generation intensifies the severity of family credit constraints, thereby decreasing intergenerational mobility. On the other hand, low intergenerational mobility enhances the level of cross- sectional inequality in the long run. Together, the increase in cross-sectional inequality and the decline in intergenerational mobility may be dynamically and mutually reinforcing, thus aggravating the inequality in the future.

To promote intergenerational mobility, the Chinese government may consider reducing household credit constraints on investment in children's education. It can also initiate various programs to subsidize the education of children from disadvantaged families, such as the left-behind children whose parents are rural-to-urban migrating workers. In addition, the efficacy of loan and scholarship programs at the tertiary level can be enhanced. Finally, the central government can increase spending on education and enhance the efficiency of its usage.

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- *to connect globally prominent academic researchers, practitioners and public policy decision-makers on Asia-Pacific related financial and economic issues;*
- *to enhance the research capabilities and development of strong clusters of finance and economic research groups in academic institutions and other institutions in Singapore and Asia-Pacific.*

This Digest summarizes selected papers presented in the ABFER's 3rd Annual Conference which was held in May 2015 at the Shangri La Hotel, Singapore. More information on the conference can be found here

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