

**Volume 18, Number 1**

**ISSN 2150-5063**

**Allied Academies  
International Conference**

**New Orleans  
April 8-10, 2015**

**Academy of Economics  
and Economic Education**

**PROCEEDINGS**

**Copyright 2015 by Jordan Whitney Enterprises, Inc, Weaverville, NC, USA**

All authors execute a publication permission agreement taking sole responsibility for the information in the manuscript. Jordan Whitney Enterprises, Inc is not responsible for the content of any individual manuscripts. Any omissions or errors are the sole responsibility of the individual authors.

The Academy of Economics and Economic Education Proceedings is owned and published by Jordan Whitney Enterprises, Inc., PO Box 1032, Weaverville, NC 28787. Those interested in the *Proceedings*, or communicating with the *Proceedings*, should contact the Executive Director of the Allied Academies at [info@alliedacademies.org](mailto:info@alliedacademies.org).

Copyright 2015 by Jordan Whitney Enterprises Inc, Weaverville, NC

# **Table of Contents**

# **A DICHOTOMY: WHAT THE STATE OF LOUISIANA STATES IT IS DOING ABOUT ECONOMIC DEVELOPMENT AND WHAT IS ACTUALLY HAPPENING AT THE PARISH (COUNTY) LEVEL**

**Biruk Alemayehu, Southern University at New Orleans  
Louis C. Mancuso, Louisiana State University of Alexandria**

## **ABSTRACT**

*The top goal of economic development is to improve the economic wellbeing of a community and its residents. The main factors for economic development are viable community, business and local governments. Local governments are the catalyst and responsible for creating opportunities to enhance economic development and businesses are a backbone of Economic Development. In terms of business tax competitiveness, Louisiana currently ranks number two in the United States for new firms and number ten in the United States for mature firms, which has improved significantly over the past few years. Louisiana ranked No. 8 in the country in overall economic performance with strong job and income growth. However, there is a dichotomy with the data shown in the United States Census Data; the average median income in Orleans Parish is \$36,681 and in the State of Louisiana the median income is \$44,673. Coupled with this data is the poverty level in Orleans Parish which is 27.2% and in the State of Louisiana it is 18.7%. Whereas, in the United States the average median income is \$51,371 with Maryland having the highest median income of \$71,122 and Mississippi having the lowest at \$37,095.*

*The above data reveals a disparity between the claims of the Louisiana Economic Development Agency and the actual numbers presented in the U.S. Census Data. Thus, this begs the question, the effectiveness of the state economic development program and its impact on the well-being of the citizens of the State of Louisiana, as well as, the local government agencies.*

*The purpose of this paper is first, to explore the local government economic development initiative to enhance economic development in the State of Louisiana for their specific areas. Second, to identify the coordination effort between local, regional and state economic development program. Third, to explore the types of programs offered by local governments.*

# **RETIREMENT FINANCIAL LITERACY: THE ROLE OF CULTURALLY SENSITIVE FINANCIAL EDUCATION WORKSHOPS**

**Ruby Beale, Hampton University**  
**Leona Johnson, Hampton University**  
**Claudia Calder, Hampton University**  
**Ziette Hayes, Hampton University**  
**Sylvia Rose, Hampton University**

## **ABSTRACT**

This study examined the effects of culturally sensitive financial education workshops on the financial knowledge of low income minority participants. The questions were designed to measure the basic knowledge on basic retirement topics. Participants attended four culturally sensitive financial education workshops and were given a pre-questionnaire and post-questionnaire at the beginning of the workshops followed by the delivery of culturally sensitive financial literacy training on retirement topics. Questions included: 1) I know the difference between a will and a living will; 2) I know the difference between employer retirement benefits and social security retirement benefits; and 3) I can live primarily on social security retirement benefits. The findings demonstrate that substantial pre-workshop knowledge deficiencies existed on basic retirement financial literacy issues. The results confirmed that there was an increased understanding of the fundamentals of retirement planning based on culturally sensitive training.

*Keywords: financial literacy, retirement, social security, money management*

This study examined the effects of culturally sensitive financial education workshops on the financial knowledge of low income minority participants. Retirement financial literacy is important, because financial stability and job security is important to the quality of life for many individuals in today's society.

The National Financial Educators Council define financial literacy "as possessing the skills and knowledge on financial matters to confidently take effective action that best fulfills an individual's personal, family and global community goals" (NFEC, 2012, p. 8). Fletcher (2013) confirms that fewer than half of Black and Latino workers have retirement plans on the job, which leaves the vast majority of workers without savings for their golden years.

Social Security benefits were created in 1935 by President Roosevelt and have been a vital component of retirement since then. In 2010, 54 million people were receiving social security benefits that equaled to about \$702 billion. Social Security was designed to keep individuals out of poverty, raise the standard of living for low income workers, and provide financial security to family members upon death or disability (Government Relations and Policy, 2011). Having social security means retired workers have basic protection and a source of income upon retirement.

Some factors that affect how individuals will plan for retirement include their marital status, level of education, and race. Butrica and Smith (2012) compared African American and Hispanic divorced women with White divorced women and how these women plan for income including retirement income, pensions, and education. Butrica and Smith (2012) concluded that the factors that highly affect divorced woman are historical demographics and marital trends including lower incomes and higher poverty rates in retirement. Another factor that affected the income rate of white divorced retirees and minority divorcees is the income of the spouse; white divorcees' husbands tend to make more than minorities' husbands. The study showed that divorced Hispanic women are slightly more likely to be poor at age 70 than divorced black women, the assumption is based off of lack of education of Hispanic women. Lastly, the study recognized that many of the current Social Security provisions fail to benefit lower-income divorced women.

Caldera (2010) found that African-Americans nearing retirement were found to be less prepared for retirement than their white counterparts. African Americans and Hispanics were found to be less prepared for retirement because Social Security was used as their primary source of income. Over a quarter of older African-Americans and Hispanics depend on Social Security for more than 90 percent of their family income. Even with African Americans and Hispanics using social security to keep them out of poverty there is still a high poverty rate among older minorities (Caldera, 2010).

Wood (2012) and Rhee (2012) confirm that Black and Latino seniors are more likely to be in the lowest income groups among retirees. Wood (2012) and Rhee (2012) also found that the elder poverty rates are twice as high among Blacks and Latinos compared to the US elderly population as a whole. Less than half of employed Blacks and less than a third of employed Latinos in full-time jobs are covered by employer sponsored retirement plans (Wood, 2012) and (Rhee, 2012).

Government Relations and Policy (2011) reviewed four solutions that could help the social security problem. The first solution is to offer a private form of social security to older individuals who have not yet reached retirement age. The second option is to increase the retirement age by five years, since people are working longer and live longer now. The third option is to change how the benefits are divided among senior citizens. The last option is to shift

payroll taxes into private accounts to provide valuable benefits for retirees and the younger generation. The current lack of retirement planning can be solved through restructuring of the social security problem and an increase of retirement based financial literacy workshops.

### **HYPOTHESIS**

It was hypothesized that culturally sensitive training on retirement would increase the participants' understanding of retirement financial literacy.

We expected that participants who completed the culturally sensitive financial education workshops would report an increase in their knowledge of financial issues concerning retirement.

### **Method**

#### **PARTICIPANTS**

Participants were recruited from low-income communities initially through word-of-mouth by the housing re-development authority property liaison and printed advertisements distributed at community events. There were 71 participants, with 10 percent males and 90 percent females ranging from 18-60 years old. The majority had an annual income of less than \$20,000.00.

#### **PROCEDURE**

Sessions lasted approximately 2 hours, and participants received dinner and the opportunity to win raffle door prizes and gifts in exchange for their participation and the completion of pre- and post-questionnaires. The pre-questionnaire was collected before the financial training began. After completing the training, each participant completed a post-questionnaire, asking the same questions from the pre-questionnaire, to gauge changes in the level of knowledge of retirement-related financial literacy.

#### **INSTRUMENTATION**

Three questions were included to measure the participants' current level of knowledge and familiarity with topic related to retirement financial literacy. Questionnaires also included a section to collect demographic information.

#### **DATA ANALYSIS PLAN**

A one-sample t-test was conducted on the pre-test and post-test data from the workshop and the mean scores compared to determine any change in the level of understanding of retirement-related financial literacy. The one-sample t-test also displayed the standard deviation scores for the three questions that were related to retirement topics.

### **RESULTS**

The results from the one-sample t-test were inclusive for: Question #1: I know the difference between a will and a living will; Question #2: I know the difference between

employer retirement benefits and social security retirement benefits; and Question #3: I can live primarily on social security retirement benefits.

In workshop 1, on all questions, the mean scores increased from the pre-to post tests.

Table 1 - Workshop 1							
Questions	N	Mean -Pre	s.d -Pre	Mean -Post	s.d -Post	t	p
Q1 – I know the difference between a will and a living will	34	3.38	1.045	4.32	.806	4.556	<b>.000*</b>
Q2 – I know the difference between employer retirement benefit and social security retirement benefit	35	3.63	1.114	4.06	.938	2.039	<b>.049*</b>
Q3 – I can live primarily on social security benefits	32	3.06	1.216	3.75	1.107	2.731	<b>.010*</b>

**\*P< .05**

In workshop #2, on all questions the mean scores increased from the pre-tests to post-tests. See Table #2.

Table 2 Workshop 2							
Questions	N	Mean -Pre	s.d -Pre	Mean -Post	s.d -Post	t	p
Q1– I know the difference between a will and a living will	7	4.00	.816	4.86	.378	3.286	<b>.017*</b>
Q2 – I know the difference between employer retirement benefit and social security retirement benefit	7	3.86	1.069	4.43	.535	1.333	.231
Q3 – I can live primarily on social security benefits	6	3.33	.816	4.17	.753	5.000	<b>.004*</b>

**\*P< .05**

In workshop #3, on all questions the mean scores increased from the pre-tests to post-tests. See Table #3.

Table 3 Workshop 3							
Questions	N	Mean -Pre	s.d -Pre	Mean -Post	s.d -Post	t	p
Q1 – I know the difference between a will and a living will	18	3.61	1.243	4.17	1.150	1.342	.197
Q2 – I know the difference between employer retirement benefit and social security retirement benefit	18	3.44	1.149	3.94	1.349	1.144	.269
Q3 – I can live primarily on social security benefits	18	3.00	1.366	3.25	1.483	.808	.432

**\*P< .05**

In workshop #4, on all questions the mean scores increased from the pre-tests to the post-tests. See Table 4.

Table 4 Workshop 4							
Questions	N	Mean -Pre	s.d -Pre	Mean -Post	s.d -Post	t	p

Q1– I know the difference between a will and a living will	11	3.45	1.036	5.00	.000	4.949	<b>.001</b> *
Q2 – I know the difference between employer retirement benefit and social security retirement benefit	11	3.45	1.214	4.73	.467	3.825	<b>.003</b> *
Q3 – I can live primarily on social security benefits	11	2.27	1.421	2.82	1.471	.837	.422

**\*P < .05**

There were statistically significant differences between the scores on the pre- and post-tests for all questions in Workshop 1 with Q1,  $t=4.556$ ,  $p<.000$ , Q2,  $t=2.039$ ,  $p<.049$ , and Q3,  $t=2.731$ ,  $p<.010$ . In Workshop 2 there were statistically significant differences between scores on pre and post tests for Q1,  $t=3.286$ ,  $p<.017$ , Q3,  $t=5.000$ ,  $p<.004$ . In Workshop 4 there were statistically significant differences in Q1,  $t=4.949$ ,  $p<.001$ , Q2,  $t=3.825$ ,  $p<.003$ . However, there were no statistically significant differences in Workshop 3.

### DISCUSSION

Continued research on retirement financial literacy is merited. Future research topics should include the decision making behavior of participants once they receive financial literacy training. Longitudinal studies to determine if the information being taught at the workshops is being retained over a period of time and if the information is being applied would also be beneficial.

### CONCLUSION

Poor financial literacy may lead to making bad retirement decisions such as not accurately planning for retirement or planning to live off of Social Security solely. Once individuals learn more about the importance of retirement-financial literacy there can be a change in the way Social Security benefits are viewed and the importance of planning other retirement income sources.

### REFERENCES

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision making Processes*, (50), 2

Butrica, B. A., & Smith, K. E. (2012). Racial and ethnic differences in the retirement prospects of divorced women in the baby boom and generation X cohorts. *Social Security Bulletin*, (1), 23.

Caldera, S. (2010). AARP Public Policy Institute. Social Security: A Key Retirement Income Source for Minorities Fact Sheet. fs201-economic.pdf. Retrieved from <http://assets.aarp.org/rgcenter/ppi/econ-sec/fs201-economic.pdf>

Fletcher, M. (2013, December 9). Many blacks, Latinos have no retirement savings, report finds. *The Washington Post* Government Relations and Policy. *Social Security Primer*. Retrieved from National Committee to Preserve Social Security & Medicare: [http://www.ncpssm.org/ss\\_primer](http://www.ncpssm.org/ss_primer) National Financial Educators Council (NFEC) Certified Financial Education Instructor Manual (2012).

Rhee, N. (2012). *Black and Latino Retirement (In) Security*. Retrieved from University of California, Berkeley Center for Labor Research and Education: [http://laborcenter.berkeley.edu/research/retirement\\_in\\_security2012.pdf](http://laborcenter.berkeley.edu/research/retirement_in_security2012.pdf)

Shattuck, A. (2010). Older Americans working more, retiring less. *The Carsey Institute at the Scholars' Repository*. Retrieved from <http://scholars.unh.edu/carsey/112>

Shin, E. H. (2010). Black-White Differences in Wealth Accumulation Among Americans

Nearing Retirement. *All Graduate Theses and Dissertations*. Retrieved from <http://digitalcommons.usu.edu/etd/803>  
Wood, A. (2012). *Retirement Securities Crisis Must be Addressed for Minority Workers*. Retrieved from Service  
Employees International Union, CTW, CLC: <http://www.seiu.org/2012/02/retirement-security-crisis-must-be-addressed-for-m.php>

# **REAL EXCHANGE RATE ADJUSTMENTS TO FOREIGN EXCHANGE INFLOWS IN A FIXED EXCHANGE RATE SYSTEM**

**Man-Ching Stella Chan, Grinnell College**

## **ABSTRACT**

*This paper surveys a number of developing countries with a fixed exchange rate system and analyzes the adjustment mechanism of their real exchange rates in response to a surge in foreign exchange inflows. In most cases, these countries witnessed a rise in domestic price level and a real exchange rate appreciation as their levels of international reserves and money supply increased, while some experienced a substantial increase in imports following the real appreciation that helped draw down the accumulated reserves. On the other hand, we observed that a number of emerging economies underwent periods of surging inflows with little inflation or changes in their real exchange rates. In some of these cases, the central banks engaged in sterilization activities, a common practice among developing countries, in order to control the monetary base and to mitigate the impact of the inflows on the domestic price level under its fixed exchange rate regime. However, there were episodes in which the public, not the central bank, increased their holdings of real monetary balances because of a rise in income or change in preferences. By demanding as cash balances what might otherwise be excess liquidity, it helped alleviate some of the inflationary pressure on the economy, and thus making further real exchange rate adjustment unnecessary. In addition, the easing of import restrictions also achieved similar effects by offsetting some of the extra foreign exchange coming into these countries.*

# **THE SEPARATION OF OWNERSHIP AND CONTROL IN HIGHER EDUCATION INSTITUTIONS**

**Yu Peng Lin, University of Detroit Mercy**

## **ABSTRACT**

*The managerial structure of a typical university has evolved very significantly in the past few decades. Today's universities borrow more and more practices from their counterparts in the corporate world. In the current study, we argue that the managerial structure shift occurred in the higher education institutions intensifies the separation of ownership and control which translates into many forms of agency costs. Indeed, our empirical evidence suggests that from 1987, the employment of administrators and professional staff largely substantially outpaces those of full-time faculty which contributes to the escalating tuition and fees. The year of 2011 marked the first year in the history of higher education that part-time faculty outnumbered full-timers. We speculate this is an effort of trying to mitigate rising tuition. Yet, the tuition and fees a typical student paid for higher education service still doubled since 1987.*

## **INTRODUCTION**

The managerial structure of a typical university has evolved very significantly since the last few decades. In the 1970s and earlier periods, top administrators as well as midlevel managerial tasks were generally drawn and directed by the faculty. They typically occupied the administrative slots on a part-time basis and planned (and certainly did) in due course to return to full-time teaching and research (Ginsberg, 2011). Today's universities adopt more and more practices from the business world. Consider, for example, universities fill their top administration positions mostly by professional administrators recruited externally. Although some middle managerial tasks are still drawn and directed by the faculty, those administrators tend to view management as an end in and of itself. Most hope to make management their life's work and have no plan of returning to faculty.

While the management level largely views the tasks as their very final end, it inevitably intensifies the separation of ownership and control. Consequently, the majority of the stakeholders are no longer involved in the managerial tasks, at least not as it used to be. Agency problems are natural outcomes.

Some solutions have been proposed and experimented to solve the difficulties derived from the separation of ownership and management in the context of corporate firms. However, we believe those solutions are not readily applicable in the academic world because of its very nature. In turn, the drawbacks universities inherited from the practices leaning toward business firms are further intensified. We argue that the increasingly separation of ownership and control brings out the agency problems which are related to many issues such as rising tuition rates, mounting student loans, and some irrational racing for ranking as well as accreditations.

In the current effort, we study the management structural shifts of a typical university. We believe that today's universities share many similarities with corporate firms resulting in

more pronounced agency problems than commonly believed. The paper is organized as following. Section II includes a literature review. The empirical evidences are in Section III. Section IV concludes.

## LITERATURE REVIEW

The managerial structural shift in higher education institutions occurred since the 1970s and its implications can be examined via the Principal-agent Theory (or Agency Model). Similar to a corporate firm, in an average university, there are principals as well as agents. The principals would be the stakeholders including (but not limited to) the board of regents, faculty, students, parents, and alumnus. On the other hand, the agents would largely include administrators and professional staff. The agency costs may result because complete convergence of the interests between the two parties is highly improbable (Lin, 2014). In other words, the seriousness of agency problems depends primarily on the degree of the separation of ownership and control.

The agency problems on the realm of academia did not attract too much scholarly attention in the past because the separation was not substantial. This is true when the faculty occupied most of the administrative slots on a part-time basis and returned to full-time teaching and research. Given this very special system of managerial tasks assignment and rotation, the groups of ownership and control in universities largely overlap. A reasonably (if not perfectly) aligned interests of the two groups is only a natural outcome without too much need of designing an incentive mechanism. Yet, we speculate that ever since universities adopt more practices from the corporate world, the separation of ownership and control becomes substantial. The agency problems in turn come to be as serious as they are in a corporate firm. Indeed, in his 2011 book, Ginsberg contends that the external recruitments in universities are usually organized and overseen by corporate search firms. Before the 1960s, corporate search firms were seldom retained by universities. Today, however, as college administrators imitate the practices of their corporate counterparts, search firms are a fixture of academic life. This common practice enlarges the market for professional administrators. Yet, it also generates incentives of being a professional manager in higher education institutions.

While there is a degree of a separation of ownership and control, the asymmetric information generates many misalignments of the interests of the principal and the agents. The agents may pursue the interests of their own in the cost of the principal's welfare. Many forms of agency costs can occur in academia. Niskanen (2007) argues that administrators have strong incentive to maximize the power and prestige of their office by attempting to increase its staff and budget. Indeed, according to Ginsberg (2011), between 1937 and 1995, administrative costs increased from barely 9% to nearly 15% of college and university budgets. Over the same periods, overall university spending increased by 148%. Administrative spending increased by a whopping 235%. Yet instructional spending increased only 128%. Moreover, for many of these career managers, promoting teaching and research is becoming less important than expanding their own administrative domains. They hope to make administration their life's work and have no plan of returning to faculty. Hence, under their supervision, the means unfortunately have become the end.

Many solutions to the agency problem have been proposed and experimented with some success in the corporate world. Consider, for instance, the bonus/equity component in a typical executive compensation arrangement is developed in an attempt to align the interests of shareholders (principals) and managers (agents) (Lin, 2014). The design serves as a solution to

the agency problems in corporate firms. Borrowing from this practice, performance bonuses are becoming increasingly acceptable in higher education and throughout the nonprofit world. According to a survey by the College and University Professional Association for Human Resources (2014), the most common executive only benefits at colleges were performance-based incentives, often in the form of bonuses, designed to push priorities like improved retention rates or fun-raising goals. More than 25% of single-institution presidents had the opportunity to earn performance-based incentives. According to the report, those percentages have grown as more executives are recruited from the private sector.

### EMPIRICAL EVIDENCE

In this section, we present the evidence showing the structural changes in universities over the past two decades. The empirical evidence is compiled by hand-examining the Digest of Education Statistics published by the Center for Education Statistics from 1987 to 2011 (the most recent year the data is available).

In Table 1, we calculate the percentage growth of faculty, administrators, professional staff, as well as student enrollments. Since 1987, while student enrollment increased by 64%, full-time faculty grew by a comparable 46%. Yet, the full-time administrators increased by 80% and the professional staff employed by universities increased by a shocking 137%. Perhaps the most stunning, part-time faculty employed over the same periods grew by 183%, a rate more than triples the growth of full-time faculty. At 2011, universities hired 761,996 part-time faculties which are more than the 716,619 full-time faculties employed. The year of 2011 marks the first year that more than 50% of the instructional duties are conducted by part-timers. Further, while the growth rates are calculated using 1975 as the base year, the percentage change shows an even more staggering picture. The administrators and professional staff grew by 126% and 320%, respectively, while the student enrollment increased by a not-even-comparable 88%. The category of full-time faculty, yet, showed a reasonable and healthy 70% increase.

<b>Table 1: % CHANGE OF FACULTY AND ADMINISTRATORS</b>					
	1975	1987	2011	%Change from 1975	%Change from 1987
Full-time faculty	446,830	523,420	761,619	70%	46%
Full-Time Administrators	102,465	128,809	231,602	126%	80%
Full-Time Other Professionals	166,487	295,504	699,867	320%	137%
Part-time faculty	N/A	269,650	761,996	N/A	183%
Enrollment	11,184,859	12,766,642	20,994,112	88%	64%

*Sources: NCES, Digest of Education Statistics, World Bank; The 1975 figures are borrowed from Ginsberg (2011).*

Overall, the trend of the employment of faculty and administrators suggest that the number of full-time faculty employed was comparable to the growth of student enrollment but the employment of administrator and other professional staff grew at a disparate rate. As mentioned in the previous section, on form of the agency cost is that administrators have strong incentive to enlarge their domain by attempting to increase its staff and budget. The empirical data seems to agree to this argument. This surpassing growth of the sizes of administrator and professional staff inevitably translates costs to the consumers, namely the students, in the higher education sector. In an attempt to control the rising costs, we believe administrators try to substitute part-timers for full-time faculty which explains the outpacing growth of part-time faculty.

Table 2 further shows the growth of tuition and fees. The tuition and fees are deflated using 2011 ~ 2012 constant dollars. From 1987 to 2011, the tuition and fees grew at a rate of 109%. This growth rate is comparable between 4-year and 2-year institutions. However, from 1975, it increased by a whopping 197%. In other words, the tuition and fees a typical student paid for higher education almost tripled over three decades! And this increase is on top of the inflation rate which approximates at 160% from 1975 to 2011. Over the same periods, the size of full-time faculty grew only by 70%. The mounting tuition and fees clearly cannot be justified by the growing size of full-time faculty. This is particularly true while we consider the 88% increase in student enrollments. As a result, the escalating tuition and fees can be largely attributed to the astounding increases in the sizes of administrators and professional staff.

<b>Table 2: THE GROWTH OF TUITION AND FEES – CONSTAND 2011 ~ 2012 DOLLARS</b>					
	1975	1987	2011	%Change from 1975	%Change from 1987
All Institutions	3,402	4,829	10,111	197%	109%
4-year Institutions	4,403	6,288	13,608	209%	116%
2-year Institutions	1,220	1,590	3,258	167%	105%

*Sources: NCES, Digest of Education Statistics*

### CONCLUSION

The higher education sector appears to experience a very significant shift in its managerial structure toward some common practices in the corporate sector. This structural change intensifies the separation of ownership and control. Our empirical evidence reveals that while full-time faculty employment from 1987 to 2011 grew at a rate comparable to the student enrollment growth, the number of administrators and staff seems to increase at a significantly disproportionate rate. The percentage growth of the employments is even more substantial while using 1975 as the base year. Those sizeable employment increases in the categories of administrators and professional staff, we believe, also translate costs onto students. At constant 2011 ~ 2012 dollars, from 1987 to 2011, the average tuition and fees for undergraduate education nearly doubled. While from 1975, it tripled.

We believe that the agency problems/costs are becoming more pronounced in higher education institutions. They exist with different forms. The one we observe in our data is the trend the administrators trying to enlarge their domain. The escalating size of professional staff

is clear evidence. According to the data, it will be difficult not to predict a much enlarged group of staffers in the near future given its quickly narrowing gap with the size of full-time faculty. Perhaps in a few years, the total employment of professional staffers would exceed those of full-time faculty. Further, in an effort to mitigate the rising tuition and fees, administrators seem to substitute part-timers for full-time faculty. Indeed, as the data shows, the year of 2011 marked the first year in the history of higher education that full-time faculties are outnumbered by part-timers.

## REFERENCES

- Administrators in Higher Education Salary Survey (2014), College and University Professional Association for Human Resources
- Bebchuk, Lucian, Jesse Fried, and David Walker (2002), Managerial Power and Rent Extraction in the Design of Executive Compensation” *University of Chicago Law Review*, 69, pp. 751 ~ 846
- Ginsberg, Benjamin, 2011, *The Fall of the Faculty*, Oxford University Press
- Holmstrom, B., and Milgrom, P. (1991), Multitask Principal-Agent Analysis: Incentive Contracts, Asset Ownership, and Job Design. *Journal of Law, Economics, and Organization*. Vol.7, pp.24~52
- Jensen, M. C. and Meckling, W. H. (1976), Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure. *Journal of Financial Economics*, 3: pp.306~360
- Lin, Yu Peng (2014), The Scope and Structure of Executive Compensation in China and the U.S., *Journal of International Finance and Economics*
- Lin, Yu Peng (2015), Association to Advance Collegiate Schools of Business Accreditation: A Long-Term Perspective, forthcoming, *Business Education & Accreditation*
- William A. Niskanen, Jr. (2007), *Bureaucracy and Representative Government*, Aldine Transaction

# **EXPLAINING WHY INDIAN TRADE BALANCE DIDN'T IMPROVE WITH ITS CURRENCY DEVALUATION**

**Harmeet Singh, Texas A&M University  
Hans Schumann, Texas A&M University**

## **ABSTRACT**

*Since the 2008-2009 Global Financial crisis, world economies have witnessed significant changes. Monetary authorities across many countries actively pursued policies to boost domestic economic outlooks. One of these occurrences has been the dramatic drop in the value of the Indian currency, Rupee, as compared with other currencies such as the US Dollar. This is in sharp contrast with the Chinese currency, Renminbi (RMB/ CNY-¥) which held its value, even though both economies had been leaders in GDP growth and shared similar characteristics in the prior periods. When looking at the sharp decline in the value of the Rupee (at an annualized rate of 6 percent since the global recession), we would expect to see significant changes and growth in exports and foreign investment and a significant reduction in imports. Little of this has happened and the purpose of this paper is to explain potential reasons for this economic anomaly.*

*Our analysis finds multiple explanations that can explain this phenomenon. In turn, we explore how the different inflationary tendencies of the two countries, differences in the consistency and direction of monetary policy, the effects of importation of Gold and precious metals interacted with or caused the currency fluctuations. We end by exploring why traditional balance of trade accounts may be unsuitable for discussing the trade balance in an environment like India in which large industrial sectors provide a “value added” services to intermediate goods that are themselves imported. We believe that the results of this analysis is interesting in its own right and also could be used as an interesting case study for readers to use in their Macro-economics and International Economics courses.*

## **REFERENCES**

- Bosworth, B., and S.M. Collins, 2008, “Accounting for Growth: Comparing China and India,” *Journal of Economic Perspectives*, 22, pp. 45-56.
- Cheung, Yin-Wong, 2012, “Exchange Rate Misalignment –The Case of the Chinese Renminbi” *Handbook of Exchange Rates*, edited by Jessica James, Ian W. Marsh and Lucio Sarno.
- Dornbusch, R., 2002. A primer on emerging market crises. In Frankel, J.A., Edwards, S. (Eds.), *Preventing Currency Crises in Emerging Markets*, University of Chicago Press, Chicago, pp. 743-754.
- Hutchison, M., R. Sengupta, and N. Singh, 2012, “India’s Trilemma: Financial Liberalisation, Exchange Rates and Monetary Policy,” *The World Economy*, doi: 10.1111/j.1467-9701.2011.01381.x.
- International Monetary Fund, *World Economic Outlook, Legacies, Clouds, Uncertainties.*, October 2014, retrieved from [www.imf.org/external/pubs/ft/weo/2014/02/pdf/c2.pdf](http://www.imf.org/external/pubs/ft/weo/2014/02/pdf/c2.pdf) on March 1, 2015.
- Iyer, S. 2015. “Indian economic growth forecasts pegged back, despite rate cuts: Reuters Poll”, Reuters, Edition : India, retrieved from <http://in.reuters.com/article/2015/01/23/g20-economy-india-growth-idINKBN0KW0NG20150123> on March 1, 2015.

- Iversen, D., A. Kalwij, A. Verschoor, and A. Dubey, 2014, "Caste Dominance and Economic Performance in Rural India Caste Dominance and Economic Performance in Rural India," *Economic Development and Cultural Change*, 62, pp. 423-457.
- Krueger, A.O., 2002, "Economic Policy Reforms and the Indian Economy", Chapter #1: The Indian Economy in Global Context by Krueger, A.O. and Chinoy, S. The University of Chicago Press, Chicago 60637.
- Meese, R.A. and Rogoff, K., 1983, "Empirical Exchange Rate Models of the Seventies Do They Fit Out of Sample," *Journal of International Economics*, 14, pp. 3-24.
- Rudiger Dornbusch, R., 1976, "Expectations and Exchange Rate Dynamics," *Journal of Political Economy*, 84, pp. 1161-1176.
- Song, Z., K. Storesletten, and F. Zilibotti, 2011, "Growing Like China," *American Economic Review*, 101, pp. 196-233.
- The Reserve Bank of India, (2015), Handbook of Statistics on Indian Economy, retrieved from [http://rbidocs.rbi.org.in/rdocs/Publications/PDFs/100T\\_SHE130914L.pdf](http://rbidocs.rbi.org.in/rdocs/Publications/PDFs/100T_SHE130914L.pdf) on February 4, 2015.
- The World Bank, (2014) <http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG/countries>.
- Trivedi, P., and Behera, S.R. (2012) "The Macroeconomics Determinants of Gold Prices in India: An ARDL Approach". *Journal of International Economics*, 3(2), 2-26.
- Kumar V. and Maurya V., 2012, "Is India's trade Balance Sensitive to Real Exchange rates? A Bilateral trade Data Analysis," *Reserve Bank of India Occasional Papers*, 33 (1&2), 113-138.
- Prakash A., 2012, "Major Episodes of Volatility in the Indian Foreign Exchange Market in the Last Two Decades (1993-2013): Central Bank's Response. *Reserve Bank of India Occasional Papers*, 33 (1&2), 162-199.

# CHRONICLING THE DECLINE AND FALL OF THE MONEY MULTIPLIER

Robert D. Campbell, Hofstra University

## ABSTRACT

*This paper presents a statistical analysis of the behavior of the U.S. Money Multiplier over a fifty five year period 1959-2014. The Multiplier is the ratio computed by dividing M1 by M Zero (M0), M0 being the Monetary Base, comprised of currency in circulation plus bank reserves held at the Federal Reserve Bank (Fed). Data for M1 and M0 are from FRED (Federal Reserve Economic Data). I use variance analysis to identify three stages of changing performance over the period of study. In Stage One (1959-1994), M1 and M0 are cointegrated and the Multiplier is stable and mean reverting at a value of approximately 2.7. In Stage Two (1994-2008) the Multiplier declines. However, we observe evidence that M1 and M0 remain cointegrated, the change in the Multiplier resulting from technical changes in the measurement of M1. In Stage Three (2008-2014), M1 and M0 both expand explosively, in such a way as to cause the Multiplier to invert to a value well below zero and to become volatile and unstable. We observe evidence of a breakdown in the cointegration between M1 and M0, suggesting the possibility of fundamental changes in the effectiveness of Fed monetary policy.*

## INTRODUCTION

The purpose of this paper is to quantify and statistically analyze changes in what is commonly known as the U.S. Money Multiplier in an historical context extending back more than fifty years to the 1950s.

### M1

M One (M1) is a fundamental, widely-accepted measure of the Money Supply, familiar to all students of elementary economics (See Hubbard 2000). Roughly speaking, it equals currency in circulation, plus demand deposits in financial institutions. M1 may be thought of as spendable wealth, wealth that may be spent quickly without being transformed in any way.

### M ZERO

M Zero (M0) is a much less well-known money aggregate. In fact, it is not really a money aggregate at all. The British often call M Zero “narrow money”, while the Americans like to call it the “Monetary Base”. Like M1, M Zero includes currency in circulation, but it does not include demand deposits (See Hubbard 2000). Instead, it includes bank reserves held at the Federal Reserve (the Fed). The identification of M Zero as the Monetary Base is a result of the view that bank reserves are a critically important constraint on banks’ ability to lend money, and thus to create new M1 in the form of new demand deposits.

## THE MONEY MULTIPLIER

The Money Multiplier expresses the relationship between M1 (Money) and M Zero (the Monetary Base) as a simple ratio. Thus the Money Multiplier =  $(M1/M\ Zero)$ .

### THE DATA

I use monthly data reported from FRED (Federal Reserve Economic Data) 1959-2014, as maintained in the Quandl Data Base (quandl.com) for M1, M Zero, and the Money Multiplier.

### PHASE ONE

In Phase One, we observe evidence of AR1 Cointegration between MB1 and MB0, especially during the modern period 1970-1994. During Phase One, M1 and M Zero both change, maintaining consistent positive slopes with different first derivatives such that cointegration between the two is maintained, resulting in a stable Money Multiplier throughout the period.

The existence of cointegration during this period of time has implications for the efficacy of Fed policy in controlling the Money Supply. The Fed has no reliable instrument to directly control M1. Through the Fed's Open Market operations, however, it has a much greater ability to control the size of M Zero. Reliable cointegration between the two metrics implies that the Fed is able to control the Money Supply indirectly, by controlling M Zero. Without this cointegrative relationship, the Fed would not be able to control the money supply in this manner. Possibly it would not be able to effectively control the Money Supply at all.

### PHASE TWO

In Phase Two, 1994-2008, we observe a significant disturbance in the Money Multiplier, as it declines sharply from its previous level of approximately 2.7. The slope of M Zero is substantially unchanged during this period of time, so that the transformation of the Multiplier is caused primarily by a change in the slope of M1. Stauffer (2008) offers an explanation for the change. In 1994, banking rules changed in a manner that permitted banks to offer so-called "sweep" accounts to savers. Sweep accounts are technically savings accounts, which are subject to relaxed reserve requirements. However, in the sweep account context, bank customers are permitted to write checks drawing directly from these accounts, without going through an intermediary process of transferring funds to a separate demand deposit account. This change in policy encourages depositors to move idle funds out of demand deposits and into the sweep accounts, which are not counted as M1 because technically they are savings accounts. This being the case, we would expect to see the Money Multiplier curve slope downward, but at a diminishing rate as the deposit transfer process winds down toward a new equilibrium.

The shape of the Money Multiple curve during Phase Two supports Stauffer's view, and is consistent with the position that the observed changes in M1 during this phase do not result from any effective change in depositors' liquidity preference, but rather result from changes in their depository habits. This being the case, we would expect to see a negative first derivative in the Money Multiplier curve, but a positive second derivative, creating a curve convex to the origin, and approaching a new equilibrium as the transfer process winds down. The cointegrative relationship between M Zero and M1 would survive, with a new, constant value for the Money

Multiplier resulting in the asymptote. Such is exactly what we do observe in this curve, as the Money Multiplier approaches a new equilibrium value of approximately 1.7.

However, the establishment of this new equilibrium level is seismically disturbed by explosive changes emanating from the financial crisis at the end of 2008.

### **PHASE THREE**

Phase Three begins at the end of 2008, and continues until now. The disturbances observed are explosive, historic, and unprecedented. The M1 curve is broken, and becomes dramatically steeper. The M Zero curve is also broken, and is even more steeply sloped. These changes cause the Money Multiplier to collapse sharply, so sharply that it falls significantly below 1.0, and becomes what we might call a divisor rather than a multiplier. At the same time, the volatility of the Multiplier increases to unprecedented levels.

As a result of these changes, the cointegration between M Zero and M1 is corrupted and breaks down. The implication of this statistical reality is that the Fed has lost its ability to control M1 indirectly through the manipulation of M Zero, at least temporarily. Therefore, we have evidence that at the present time Fed Open Market policy may no longer a primary influence on the level of M1.

### **THE CRUCIAL QUESTIONS**

The behaviors of M1 and M0 since 2008 are unprecedented. Therefore, we find ourselves attempting to navigate in uncharted waters. The questions can and should be clearly stated, but the answers are speculative and debatable.

There can be little doubt that the explosion in M Zero is related to Fed policy, and is guided by an astounding increase in bank reserves held at the Fed. Federal reserve data shows that total M Zero increased from \$872 billion at the end of 2007 to \$4,400 billion at the end of the third quarter of 2014. Currency in circulation also increased during this time, but accounts for only \$468 billion of the increase.

The challenge for economists now is to anticipate the consequences of these changes. If the central banking system continues to carry an added three trillion dollars in reserves, or worse yet, continues to expand M Zero, what will eventually happen to bring that situation to an end? Can it continue indefinitely? On the other hand, if the Fed were to act to reverse Quantitative Easing by selling government bonds, what would be the effects on the integrity of the money supply, on interest rates, on the economy, and on the Federal budget?

These questions are of central importance, and deserve our attention. Nothing will be gained by pretending that our monetary condition is essentially normal. It is not normal, and if we believe that all will work out well in the end, we need to be much clearer about how that end can be reached.

### **REFERENCES**

- Hubbard, G. (2000). Money, the financial system, and the economy (3<sup>rd</sup> Ed.). Addison-Wesley Publishing Co., Inc.  
Stauffer, R.F. (2008). The monetary base and Institutional Change. *The Atlantic Economic Journal* 36: 119-120.