

# Impact of the Great Recession on Middle Class Aspiration: An International Comparison

Roshin Paul P. (Reserve Bank of India)

Paper prepared for the 34<sup>th</sup> IARIW General Conference

Dresden, Germany, August 21-27, 2016

PS1.1: Development, Growth and Savings

Time: Monday, August 22, 2016 [Late Afternooon]

# Impact of the great recession on middle class aspiration: An International Comparison

## Roshin Paul P1

#### Abstract

The great global recession which was the aftermath of 19 month period U.S crisis ranging from December 2007 to June 2009, affected the middle class. By creating a productive workforce, a strong middle class helped revive economic growth. Hence, it is crucial to study the impact of the great recession on them. The middle class classification varies from country to country and even for different time period. The basic aspirations of the middle class are to earn enough to purchase a house, assemble a sufficient amount for retirement, cover the cost of children's education and maintain the standard of living. In this paper, we examine the impact of great recession on household expenditure of middle class. The study is conducted for six nations who are having the highest middle class population and those who are having emerging middle class.

JEL Classification: D1, G01, I30, O57

Key Words: Recession, Middle class, Household Expenditure, Gross domestic product, Inflation,

Unemployment

## Introduction

The great recession began in U.S. with the housing price bubble in many parts of the country and the coincident stock market bubble. The crisis lasted from December 2007 to June 2009, ensuing global recession in 2009. The old proverbial truth that the rest of the world sneezes when the US catches a cold appeared to be vindicated as systemically important economies in the European Union and Japan went collectively into recession by mid-2008. Many of the developing and emerging economies felt the deleterious effects of the US recession by the end of 2008. The typical outcome was a growth deceleration (ranging from mild to major) in many parts of the developing world. Armenia, Mexico, South Africa, Turkey, the Baltic States, and Ukraine were hit hard by the

The author is presently working as Assistant Adviser, Department of Statistics and Information Management (DSIM) at Reserve Bank of India (RBI), Bengaluru. The views expressed in this paper are of the author and not of the organization to which they belong. The author sincerely acknowledges the guidance and support received from Shri Joyce P John, Assistant Adviser, Monetary Policy Department, RBI, Mumbai in this paper.

recession. At the same time, the two most successful globalizers of recent times, China and India, have avoided a major downturn due to the timely stimulus package from the authorities.

Studies have been conducted to examine the impacts of the recession on various countries. The economies which are effected by the global recession started contracting the real GDP during the recession period. There was a rise in the unemployment rate which resulted in low consumer confidence and reduction in residential private investment. The housing prices also cut down and the debt to GDP ratio increased. The effects of this recession are different from prior recessions because of simultaneous shocks in the stock market, the housing market and the labor market. After the collapse of the Lehman Brothers, the central banks, around the world, tightened their monetary policy, As a result, the liquidity dried up quickly. This greatly impacted the households in many ways. Many studies have been conducted to check the impact of great recession on households.

Middle class is the foundation of most of the economies. A strong middle class promotes the development of human capital through a well-educated population, creates a stable source of demand and supports political and economic institutions and creates and fosters the next generation of entrepreneurs. They generate increases in productivity and employment for society. Middle class contribute to higher levels of savings in a country. So it is necessary to check the impact of the great recession on middle class economy and to stimulate them for the growth of economy. The middle class usually enjoy stable housing, healthcare and educational opportunities (including college) for their children, reasonable retirement and job security, and discretionary income that can be spent on vacation and leisure pursuits. We analyze the spending pattern and level of middle class during the 10 year period of 2003 to 2012.

#### Literature review

Easterly (2001) and others have defined the middle class as those in the second, third, and fourth quintile of the income distribution, while Birdsall, Graham and Pettinato (2000) have defined it to include individuals earning between 75% and 125% of a society's median per capita income. Other researchers have also defined the middle class in absolute terms. Banerjee and Duflo (2008) have used two alternative absolute measures—individuals with daily per capita expenditures of \$2–\$4 and with daily per capita expenditures of \$6–\$10. By excluding individuals who would be considered rich in the poorest advanced countries (Portugal) and poor in the richest advanced societies (Luxembourg), Kharas (2010) comes up with daily expenditures of \$10–\$100 per person, after adjusting household distribution data with national accounts means, as the criterion for a "global middle class".

Michael D. Hurd and Susann Rohwedder (2010) conducted a study on Effects of the Financial Crisis and Great Recession on American Households after conducting surveys during the recession period. The study reveals that households had been affected either by unemployment, negative home equity, arrears on their mortgage payments, or foreclosure. Additionally economic preparation for retirement, which is hard to measure, has undoubtedly been affected. Timothy Smeeding (2012) found out that during the Great Recession, Median household income has declined from the beginning of the Great Recession through to 2011 and the wealthiest Americans lost the most wealth in absolute terms, whereas the middle classes lost the most in proportional terms.

Bell and David G. Blanchflower (2010) studied the impact of Great Recession in UK. The UK economy went into recession during the second quarter of 2008 based both on declines in output and increases in unemployment. The major finding of the study is that during the recession period there was sharp increase in unemployment and decrease in employment is largely concentrated on the young. Sher Verick and Iyanatul Islam (2010) states European Union and Japan went collectively into recession by mid-2008 and it hit the labour market which increased the unemployment rate.

In 2008, as the International financial crisis spread from the developed countries to emerging economies. In 2011, World Bank published the Impact of great recession on emerging economies. In that study, Vincelette, Manoel, Hansson and Kuijs conclude China began to feel the effects of the crisis in November 2008. In the last quarter of 2008, China's exports declined dramatically. The impact has been mainly through the trade channel, and not so much through private capital flows and the financial sector. Dipak Das Gupta and Abhijit Sen Gupta studied the case in India. The global financial crisis erupted at this time of slowing growth momentum in India. Like other emerging markets, India was affected by the crisis through the channels of trade, credit, and capital flows. The most important channel for transmitting the global shock was indirect: the loss of domestic consumer and investor confidence, the shrinking of domestic financial credit markets (despite their limited exposure to offshore financial markets), and the negative wealth effects of stock market losses. Jean Boivin (2011) says in his speech that financial crisis was clearly leading to a massive slowdown of global economic activity in Canada, with a direct impact on foreign trade.

In developing countries consumption is the standard measure of material well-being. Myer and Sullivan (2003) found substantial evidence that consumption is better measured than income for those with few resources. They also found that consumption performs better as an indicator of low material well-being.

## Methodology

In this paper we have followed the definition defined by Easterly (2001) i.e, the middle class as those in the second, third, and fourth quintile of the distribution of income. As per OECD study, we have selected three nations who are having high middle class population viz. United States, United Kingdom and Japan and those who are having emerging middle class population viz. Canada, China and India. The consumption expenditure data for the second, third and fourth quintiles of income of these 6 countries have been collected for ten years (2003-2012). The data includes the average expenditure on current market price for Food, Alcoholic beverages, Housing, Apparel and services, Transportation, Healthcare, Entertainment, Personal care products and services, Reading, Education, Tobacco products and smoking supplies, Cash contributions, Personal insurance and pensions and Miscellaneous. Further it had been deflated to the CPI of 2003 for all 6 countries. A growth rate analysis is conducted on the expenditure of various items for the second, third and fourth quintiles of income in each country.

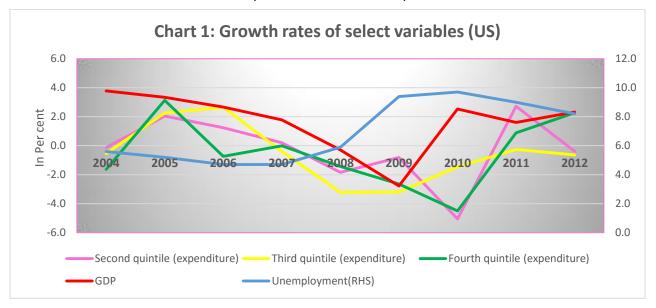
Growth rate on expenditure  $_{(i)} = [(Expenditure in the current year <math>_{(i)}$  - Expenditure on previous year  $_{(i)}]$ \*100

## **United States**

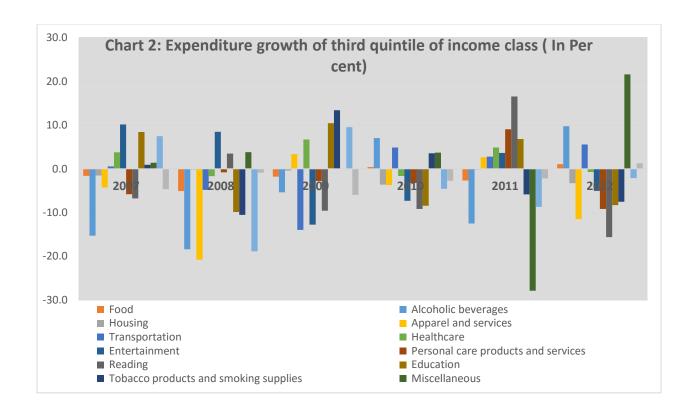
The recession in U.S. began with the housing price bubble in many parts of the country and the coincident stock market bubble. The crisis effected the banking sector, stock market and the housing market. According to the study conducted by Michael D. Hurd and Susann Rohwedder (2010), during recession period almost 40% of households have been affected either by unemployment, negative home equity, arrears on their mortgage payments, or foreclosure. Additionally economic preparation for retirement, has undoubtedly been affected. Many people nearing approaching retirement suffered substantial losses in their retirement accounts. Some persons retired unexpectedly early because of unemployment and some younger workers who have suffered unemployment will not reach their expected level of lifetime earnings. Spending has been approximately constant since it reached its minimum in about November, 2009.

In US, the Consumer Expenditure Survey (CE) is conducted for the Bureau of Labor Statistics by the U.S. Census Bureau, that provide information on the buying habits of American consumers, including data on their expenditures, income, and consumer unit (families and single consumers) characteristics. The quintile wise consumer expenditure data have been collected and analyzed for 11 years i.e. 2003-2012 from this survey and the results are given below. The data include the expenditure on food, housing, apparel and services, transportation, healthcare, entertainment,

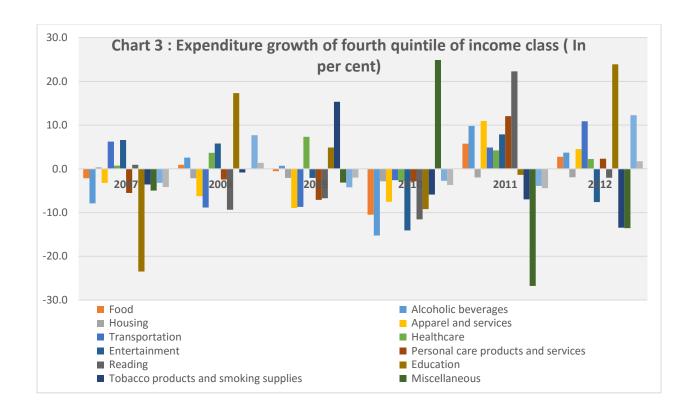
personal care products and services, reading, Education, Tobacco products and smoking supplies, Miscellaneous, Cash contributions and personal insurance and pensions.



The average annual expenditure was declining during the 3 year period 2008 to 2010 for all three middle class classification i.e. second, third and fourth quintile of income classification. The unemployment rate was also high during those period. The real average annual expenditure growth of second quintile of income classification was moderate at 0.2 per cent in 2007, which further declined by 1.8 percent in 2008 followed by a decline of 0.8 per cent in 2009. In 2008, the expenditure declined in Alcoholic beverages( -2.6 per cent ), Housing (-2.1 per cent), Transportation (-4.7 per cent), Healthcare (-3.3 per cent), reading (-1.0 per cent), tobacco products (-11.1 per cent) ,miscellaneous (-10.8 per cent),cash contributions (-1.9 per cent) and personal insurance and pensions (-11.8 per cent). During the year 2010, the reduction in average annual expenditure was the maximum at -5.1 per cent. During that year, second quintile of income classification reduced their expenditure on almost all items except on Healthcare, Education and cash contributions. The expenditure was reduced in food (-9.3 per cent), Alcoholic beverages (-17.0 per cent), Housing (-5.4 per cent), Apparel and services(-2.2 per cent), Transportation (-3.1 per cent), Entertainment (-14.5 per cent), personal care products (-4.3 per cent), Reading(-9.8 per cent), Tobacco products and smoking supplies (-10.7 per cent), Miscellaneous (-13.1 per cent) and personal insurance and pension ( -9.4 per cent). In 2011, the real average annual expenditure was increased by 2.7 per cent, but in 2012 it again reduced by 0.4 per cent. The expenditure on almost all items except education had tampered during the years 2007 to 2011, while expenditure on education was tampered in 2012.



The real average annual expenditure of the third quintile had disturbed during the 6 year period of 2007 to 2012. It started declining in the year 2007 (-0.4 per cent), which further declined by 3.2 per cent in both the years 2008 and 2009. The reduction was smeared to almost all items including food. This reduction in annual expenditure continued up to the study end period 2012.



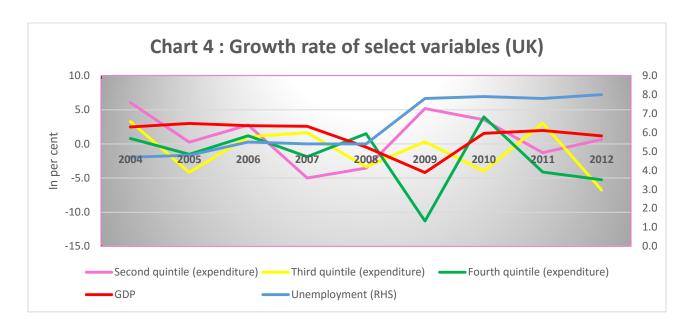
For fourth quintile of income classification the deceleration in expenditure started in 2006 itself. In 2006, annual expenditure declined by 0.7 per cent and during 2007 it stood same as 2006. Then it further declined by 1.4 per cent in 2008 which is due to reduction in housing (-2.1 per cent), apparel and services (-6.2 per cent), Transportation (-8.8 per cent), personal care products and services (-2.4 per cent), reading (-9.4 per cent) and Tobacco products and smoking supplies (-0.8 per cent). In 2009, expenditure further reduced by 2.6 per cent, which hampered expenditure on food, entertainment, miscellaneous, cash contributions and personal insurance and pension along with the items reduced in 2008. The deceleration of annual expenditure was maximum at -4.5 per cent in 2010, which effected the reduction in almost all items except miscellaneous.

## **United Kingdom**

The great recession in US effected UK starting from the second quarter of 2008 based on decline in output and increase in the unemployment. This was the most substantial shock to UK economy since the great depression during the world war. GDP fell by 0.5 per cent in 2008 and by 4.2 per cent in 2009. Unemployment rate rose from 5.4 per cent in 2008 to 7.8 per cent in 2009. It reached 8.0 per cent in 2012.

Office for National Statistics, UK conducts Integrated Household Survey to collect information on the living costs of household in UK. The average weekly household expenditure data have been

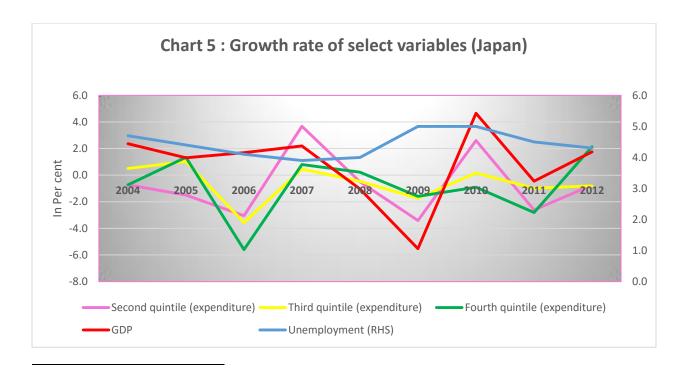
collected from this survey for 11 years (2003-2012). It includes the expenditure on food & non-alcoholic drinks, Alcoholic drinks, tobacco & narcotics, Clothing & footwear, Housing (net)1, fuel & power, Household goods & services, Health, Transport, Communication, Recreation & culture, Education, Restaurants & hotels, Miscellaneous goods & services and Others. The consumer expenditures are further deflated by inflation to get the real expenditure.



The total expenditure started reducing for second quintile of income classification in 2007 by 5.0 per cent which followed by reduction of 3.5 per cent in 2008. During 2007, the expenditure reduced for all items except housing. The expenditure on education declined by 30.7 per cent. In 2008, expenditure on education further reduced by 63.7 per cent. For third quintile the total expenditure reduced in 2008 by 3.4 percent. It was mainly due to the reduction in the expenditure on housing (-8.2 per cent), household goods and services (-16.6 per cent), Education (-44.9 per cent), Restaurants and hotels (-8.4 per cent) and miscellaneous (-10.1 per cent). But in 2009, total expenditure increased moderately by 0.3 per cent. Further in 2010, total expenditure reduced by 4.0 per cent and during this year the expenditure on 'food', 'Alcoholic drinks, tobacco and narcotics', 'household goods and services', 'health', 'transport', 'recreation and culture', 'restaurants and hotels', 'miscellaneous goods and services' and 'other expenditure' are disturbed. The total expenditure on fourth quintile of income classification is jumbled by showing ups and downs in alternate years. During 2009, the total expenditure decreased by 11.3 per cent, which disturbed the expenditure on all items except health and education. In 2010, expenditure increased by 4.0 per cent and in the next two years it declined by 4.1 per cent and 5.2 per cent respectively. During 2011 and 2012 the expenditure on education decreased by 32.1 per cent and 40.1 per cent respectively.

## Japan

During the U.S. recession period, Japan was facing the after effects of two large financial crisis emerged from its economy itself. The first crisis was originated from the burst of the asset price bubble in February 1991 and the second crisis emerged from a series of collapses of financial institutions during late 1990s. The first two crisis effected a prolonged economic contraction and Japan was still recovering from the impact of these crisis and the subsequent lost decades (1991-2012). During the recovery period, Japan faced the third crisis, i.e. the spillover effect of the global recession in the United States following the global financial market turmoil since the summer of 2007 and its impact was propagated to Japan's economy through trade relationship. The annual GDP growth in 2009 fell down by 5.5 percent due to the severe decline in real exports. The GDP and inflation rate have been dampened during the first and third crisis<sup>2</sup>. As a result of that Japan was facing a liquidity trap<sup>3</sup>, gradually accelerating deflation<sup>4</sup> and an unsustainable budget deficit. The unemployment rate increased from 4.0 per cent in 2008 to 5.0 per cent in 2009.



<sup>&</sup>lt;sup>2</sup> Japan's Financial Crises and Lost Decades, Naohisa Hirakata, Nao Sudo, Ikuo Takei, Kozo Ueda, Working Paper No. 220, Federal Reserve Bank of Dallas, Globalization and Monetary Policy Institute, December 2014

Japan's Negative Risk Premium in Interest Rates: The Liquidity Trap and the Fall in Bank Lending, Rishi Goyal and Ronald McKinnon, The World Economy, Volume 26, Issue 3, pages 339–363, March 2003

Japan's Lost Decade and its Financial System, The World Economy, Mitsuhiro Fukao, Volume 26, Issue 3, pages 365–384, March 2003

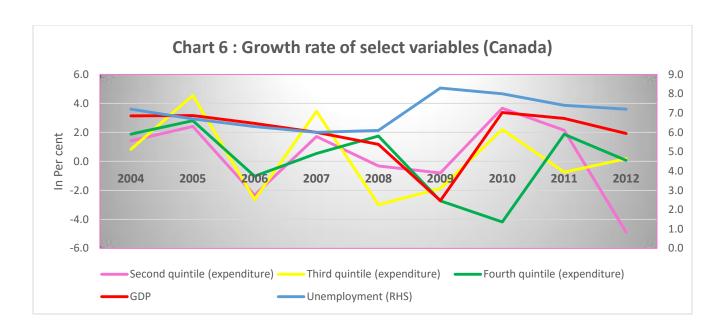
The consumer expenditure data is collected from the Family Income and Expenditure Survey (FIES) conducted by Statistics Bureau, Japan which contains the expenditure on Food, Housing, Fuel, light & water charges, Furniture & household utensils, Clothes & footwear, Medical care, Transportation & communication, Education, Reading & recreation and others. Data is collected for 10 years 2003-2012. The total expenditure of second quintile of income classification was decelerating during the early study period i.e. 2004 to 2006. It was mainly due to the reduction in expenditure on housing, furniture and household utensils, clothes and footwear, medical care and education. Then 2007, total expenditure increased by 3.7 per cent which further reduced in 2008 and 2009 by 0.5 per cent and 3.4 per cent respectively. In 2008, expenditure on education declined by 18.4 per cent while in 2009, the expenditure on transportation and communication decreased by 11.9 per cent. Total expenditure increased in 2010 by 2.6 per cent. It further declined in 2011 by 2.6 per cent and in 2012 by 0.8 per cent. The expenditure on education shrink by 33.8 per cent during 2011.

For third quintile, the deceleration of living expenditure started in 2006 by 3.6 per cent. During 2006 the expenditure on almost all items are disturbed. In 2007, living expenditure increased by 0.5 per cent which further reduced by 0.5 percent in 2008. Once again it declined by 1.7 per cent in 2009 due to the decrease in almost all items except furniture and household utensils, transportation and communications and reading and recreation. Living expenditure increased moderately by 0.2 per cent in 2010 followed by a decrease in 2011 and 2012 by -1.0 per cent and -0.8 per cent respectively.

The living expenditure of fourth quintile of income classification declined by 5.6 per cent in 2006 which was mainly due to reduction in the expenditure on housing (-10.9 per cent), education (-14.7 per cent) and others (-12.5 per cent). Living expenditure increased in 2007 and 2008 by 0.8 per cent and 0.2 per cent respectively. It further reduced by 1.6 per cent in 2009 followed by a reduction of 0.9 per cent in 2010 and 2.8 per cent in 2011. In 2011, it affected all items. In 2012, living expenditure increased by 2.1 per cent.

#### Canada

The financial crisis clearly lead to the slowdown of economic activity with a direct impact on foreign trade. It also weakened the financial market, shaken the consumer and business confidence and effected the capital investments. The gross domestic product increased only by 1.0 per cent in 2008 compared to 2.1 per cent in 2007. During 2009, GDP decreased by 2.9 per cent. The unemployment rate increased to 8.3 per cent in 2009 from 6.1 per cent in 2008.



Survey of Household Spending is conducted in Canada to collect the information about the household spending in Canada. The data of 10 years 2003-2012 have been collected from the publication 'Spending patterns in Canada' from the website of Statistics Canada. Data includes the expenditure on 'Food', 'Shelter', 'Household operation', 'Household furnishings and equipment', 'Clothing', 'Transportation', 'Health care', 'Personal care', 'Recreation', 'Reading materials and other printed matter', 'Education', 'Tobacco products and alcoholic beverages', 'Games of chance (net)', 'Miscellaneous expenditures', 'Personal Taxes', 'Personal insurance payments and pension contributions' and 'Gifts of money and contributions'. The shrinking of average expenditure of the second quintile of income classification started in 2006 by 2.3 per cent. In 2007, it increased to 1.7 per cent which further declined by 0.3 per cent in 2008. During 2008, the expenditure on education decreased by 26.4 per cent. During 2009, the total expenditure further decreased by 0.8 per cent. In 2010 and 2011 the total expenditure was increasing, but in 2012 it reduced by 4.9 per cent.

For third quintile, the total expenditure decelerated in 2006 by 2.6 per cent, which followed by an increase of 3.5 per cent in 2007. During 2008 and 2009 total expenditure declined by 3.0 per cent and 1.9 per cent respectively. For Fourth quintile of income classification also the total expenditure decelerated in 2006 by 1.0 per cent, which further increased in 2007 and 2008 by 0.5 per cent and 1.7 per cent respectively. During 2009 and 2010, total expenditure declined by 2.7 and 4.2 per cent respectively.

## China

China was experiencing an impressive GDP growth averaging 8.9 per cent per year during 1995-2001 and an annual average of 11.0 per cent during 2002-2007. Even though China had impacted by Asian crisis, it recovered fast due to a strong reform agenda. When the global financial crisis hit, China had strong macroeconomic fundamentals with large current account surpluses, low public and external debt, and substantial foreign exchange reserves. In beginning in November 2008, China's real economy began to feel the effects of the crisis, especially through the trade channel. To counter the effects of the rapidly deteriorating economic conditions of late 2008, the Chinese authorities took strong and quick action through a huge fiscal stimulus package and through the substantial loosening of monetary policy which limited the impact of the crisis on China. The unemployment rate rose to 4.4 per cent in 2008 from 3.8 per cent in 2007. It stood same as 2008 in 2009, then it reduced to 4.2 in 2010. GDP growth also reduced to 9.6 per cent in 2008 from 14.2 per cent during 2007. It further reduced to 9.2 per cent in 2009, which increased to 10.6 in 2010. It further reduced to 9.5 percent in 2011 followed by 7.8 per cent in 2012.

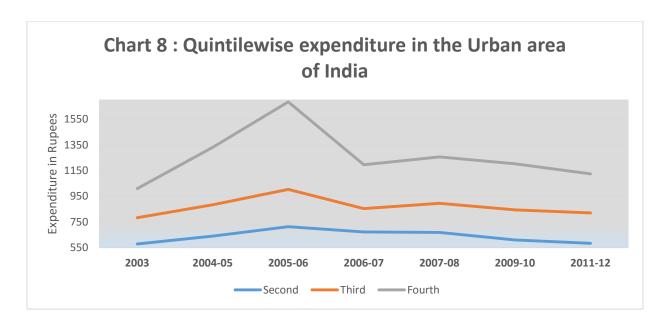
National Bureau of Statistics of China conducts consumer expenditure survey in both urban and rural areas to collect the expenditure of household on various items. The quintile wise data on urban and rural household expenditure have been collected for 10 years 2003-2012. Data includes expenditure on 'food', 'Clothing', 'Household Appliances and Services', 'Health Care and Medical Services', 'Transport and Telecommunications', 'Education', 'Cultural and Recreation' and 'Other Goods and Services'. The growth rate of total expenditure decreased in 2008 for all the classes' i.e. second, third and fourth quintile of income classification in both urban and rural areas. It is observed that the expenditure on education decreased in all the classes in urban areas during 2008. While in rural areas, expenditure on education declined for second quintile of income classification during 2006 to 2008, for third quintile of income classification during 2007 and 2008 and for fourth quintile of income classification during 2007.

## India

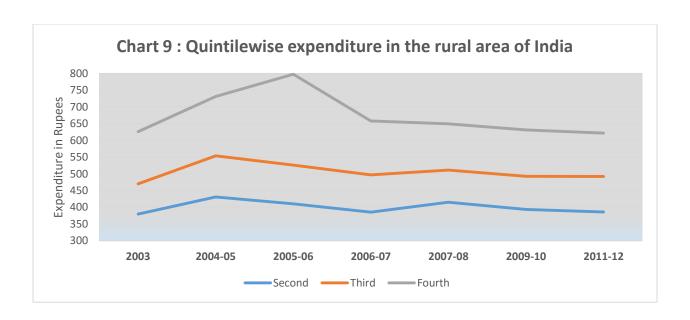
During 2002-2007, India was growing fast with rising private investments financed by domestic savings and with the expansion of foreign trade and capital flows. The GDP increased by 9.8 per cent during 2007. However, when the crisis hit, India was already experiencing a sizable cyclical slowdown, caused domestic overheating and other supply side constraints, which have exacerbated the downturn. India's most recent growth cycle began in 2001, peaked in 2007 and started decelerated in 2008. India effected by the global financial crisis through the channels of trade, credit and capital flows. But the global shocks transmitted indirectly through the loss of consumer and investor confidence, the shrinking of domestic financial credit market and the negative wealth effects

of stock market losses. The GDP growth was minimum at 3.9 and the unemployment was maximum at 4.1 in 2008.

National Sample Survey Organization (NSSO) conducts surveys on Household Consumer Expenditures on a thin sample of households and a quinquennial survey on a large sample of households. As per their definition, Household consumer expenditure is the sum total of monetary values of all the items (i.e. goods and services) consumed by the household on domestic account during the reference period. The data have been collected from this survey conducted on the following years, 2003, 2004, 2004-05, 2005-06, 2006-07, 2007-08, 2009-10 and 2011-12. Since the data is not collected for the continuous years the growth rates could not be calculated. The data includes the expenditure on 'food', 'pan, tobacco & intoxicants', 'fuel and light', 'clothing', 'footwear', 'education', 'Medical', 'misc. consumer goods', 'consumer services', 'rent', 'taxes and cesses' and 'durable goods'.



The expenditure was maximum in urban area and the fourth quintile in rural area during the year 2005-06. Then it reduced considerably in 2006-07 and continued to be in the low level in the following years of study viz. 2007-08, 2009-10 and 2011-12. It was minimum in the year 2011-12. The reduction of expenditure was visible in almost all items. The fourth quintile suffered from top to bottom reduction in expenditure growth in both urban and rural areas.



#### Conclusion

During the global recession period the household expenditure of middle class population of all the six countries had been disturbed. However its effect varied from year to year among countries. In U.S. the consumer expenditure of second, third and fourth income quintiles reduced during the period 2008 to 2010. The consumer expenditure of the third quintile declined during the period 2007 to 2012 and consumer expenditure of fourth quintile declined from 2006 to 2010 which effected almost all items of consumption expenditure. However in UK the global financial crisis was mostly effected the fourth quintile of income classification. The expenditure on almost all items are disturbed during recession. The expenditure of second quintile was disturbed little later i.e. during 2010 and 2011. In Canada, the consumer expenditure reduced in 2006 for all middle class classifications i.e. the second, third and fourth quintiles. For second quintile and third quartile, it further reduced in 2008 and 2009. Financial crisis effected the expenditure of almost all items. The consumer expenditure of fourth quintile is reduced in 2009 and 2010 which disturbed the expenditure on almost all items. During the recovery period of the after effects of other two large financial crisis emerged from its economy itself, Japan faced the third crisis, i.e. the spillover effect of the global recession, which effected the expenditure of middle class. For the second and third quintiles, the living expenditure reduced during 2008 and 2009 which disturbed almost all items of expenditure. For fourth quintile, living expenditure shrink during 2009-2011. Since China was experiencing an impressive growth before the global recession period, the expenditure had not reduced in China, but the growth of expenditure moderated during global recession period. The expenditure growth moderated during 2008, 2010 and 2011 for second, third and fourth quintile of income classes. In rural area the expenditure growth was moderated during 2008 and 2010 and it effected the expenditure on almost all items. However India was in the peak of its growth cycle, the expenditure was maximum in rural and urban area during the year 2005-06. Then it reduced considerably in 2006-07 and continued to be in the low level in the following years of study viz. 2007-08, 2009-10 and 2011-12. It was minimum in the year 2011-12. The reduction of expenditure was visible in almost all items and it was high for the fourth quintile of income in both urban and rural areas.

### References

- 1. Effects of the Financial Crisis and Great Recession on American Households, Michael D. Hurd and Susann Rohwedder, NBER Working Paper No. 16407
- 2. Income, Wealth, and Debt and the Great Recession, Timothy Smeeding, The Russell Sage Foundation and The Stanford Center on Poverty and Inequality, October 2012
- 3. Uk Unemployment In The Great Recession, David N.F.Bell and David G. Blanchflower, National Institute Economic Review No. 214 OCTOBER 2010
- 4. Measuring the Well-Being of the Poor Using Income and Consumption, Bruce D. Meyer, James X. Sullivan, NBER Working Paper No. 9760, June 2003
- 5. Japan's Lost Decade and its Financial System, The World Economy, Mitsuhiro Fukao, Volume 26, Issue 3, pages 365–384, March 2003
- Japan's Negative Risk Premium in Interest Rates: The Liquidity Trap and the Fall in Bank Lending, Rishi Goyal and Ronald McKinnon, The World Economy, Volume 26, Issue 3, pages 339–363, March 2003
- 7. Japan's Financial Crises and Lost Decades, Naohisa Hirakata, Nao Sudo, Ikuo Takei, Kozo Ueda, Working Paper No. 220, Federal Reserve Bank of Dallas, Globalization and Monetary Policy Institute, December 2014.
- 8. Why was Japan Hit So Hard by the Global Financial Crisis?, Masahiro Kawai and Shinji Takagi, ADBI Working Paper Series, No. 153, October 2009
- Effects Of The Financial Crisis And Great Recession On American Households, Michael D. Hurd and Susann Rohwedder, Working Paper 16407, National Bureau Of Economic Research, September 2010
- 10. The Great Recession and Developing Countries: economic impact and growth prospects, World Bank, 978-0-8213-8513-5.2011
- The Emerging Middle Class In Developing Countries, Homi Kharas, Working Paper No. 285,
  OECD Development Centre, January 2010
- 12. What is Middle Class About the Middle Classes Around the World?, Abhijit Banerjee and Esther Duflo, Working Paper 07-29, December, 2007, Massachusetts Institute of Technology

 The Middle Class Consensus and Economic Development, William Easterly, World Bank, July 2001

## **Annexure**

Table 1: Expenditure growth of Second Quintile (US)

Table 1.	Lxpend	illule g	IOWLIIO	i Secon	u Quint	iie (U3)			
Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Average annual									
expenditures	-0.1	2.1	1.2	0.2	-1.8	-0.8	-5.1	2.7	-0.4
Food	-1.7	-5.0	2.7	-3.8	3.1	0.6	-9.3	7.2	-4.9
				-			-		
Alcoholic beverages	11.8	-5.5	10.4	10.0	-2.6	-8.8	17.0	21.7	-3.9
Housing	-0.3	3.7	4.3	0.9	-2.1	2.5	-5.4	3.5	-1.0
				-					
Apparel and services	-4.0	9.5	-3.5	15.1	6.4	1.2	-2.2	-4.2	-2.7
Transportation	-0.9	3.0	-4.1	5.3	-4.7	-9.9	-3.1	-0.3	4.1
Healthcare	-2.3	5.3	2.2	-3.1	-3.3	1.7	4.6	-4.5	4.6
							-		
Entertainment	2.6	-6.2	-7.8	15.1	9.8	-2.5	14.5	8.4	-3.2
Personal care products and		-							
services	5.9	14.6	5.7	-6.3	4.3	-0.9	-4.3	2.5	-2.3
			-						
Reading	-9.2	0.3	16.8	-5.4	-1.0	-1.0	-9.8	5.8	-6.1
									-
Education	6.6	-3.3	-9.0	14.0	0.5	2.6	8.8	12.6	10.9

Tobacco products and smoking supplies	- 11.3	14.2	-1.4	-5.0	- 11.1	33.3	- 10.7	-7.2	-6.7
					1		1		
Miscellaneous	1.8	-2.7	1.9	5.4	10.8	2.3	13.1	21.8	7.4
				-					
Cash contributions	-2.5	22.9	7.8	21.8	-1.9	-4.8	11.2	-8.0	16.7
Personal insurance and					-				
pensions	11.2	0.7	2.6	9.3	11.8	-4.4	-9.4	5.2	-6.7

Table 2: Expenditure growth of Third Quintile (US)

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
	2004	2005	2006	2007	2008	2009	2010	2011	2012
Average annual									
expenditures	-0.5	2.3	2.7	-0.4	-3.2	-3.2	-1.5	-0.3	-0.6
Food	2.7	-4.8	2.7	-1.6	-5.1	-1.8	0.4	-2.6	1.1
		-		-	-			-	
Alcoholic beverages	20.8	13.7	26.2	15.3	18.4	-5.4	7.0	12.5	9.8
Housing	1.0	5.4	4.0	-1.5	-0.2	-0.4	-3.6	-0.1	-3.3
					-				-
Apparel and services	-1.3	-1.2	7.9	-4.3	20.8	3.4	-3.7	2.7	11.5
						-			
Transportation	-7.8	5.4	-0.2	0.6	-4.8	14.0	4.9	2.8	5.6
Healthcare	-3.5	-1.8	-0.1	3.8	-1.7	6.7	-1.6	4.9	-0.7
						-			
Entertainment	-5.2	1.5	1.4	10.1	8.5	12.7	-7.3	3.6	-5.0
Personal care products and		-							
services	2.0	10.0	5.3	-5.8	-0.8	-2.8	-3.2	9.1	-9.2
									-
Reading	-4.3	-9.3	-9.6	-6.7	3.5	-9.6	-9.2	16.6	15.6
Education	9.9	7.2	5.3	8.4	-9.9	10.4	-8.4	6.8	-8.3
Tobacco products and					-				
smoking supplies	-4.6	7.2	-5.7	0.9	10.5	13.4	3.6	-5.8	-7.5
Miscellaneous	6.5	5.9	-7.6	1.4	3.8	0.1	3.7	-	21.6

								27.9	
					-				
Cash contributions	0.6	6.9	11.9	7.5	18.9	9.5	-4.6	-8.7	-2.1
Personal insurance and									
pensions	5.4	1.8	1.2	-4.6	-0.9	-6.0	-2.7	-2.2	1.3

Table 3: Expenditure growth of Fourth Quintile (US)

	. Lxpcii	a.ca. c <sub>8</sub>				(00)			
Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Average annual									
expenditures	-1.6	3.1	-0.7	0.0	-1.4	-2.6	-4.5	0.9	2.3
							-		
Food	0.6	2.9	-3.1	-2.1	0.9	-0.5	10.5	5.8	2.8
							-		
Alcoholic beverages	-2.3	-7.8	-2.0	-7.9	2.6	0.7	15.3	9.8	3.7
Housing	-0.2	3.5	5.9	0.3	-2.1	-2.1	-2.8	-1.9	-1.9
Apparel and services	-1.0	1.8	-5.7	-3.2	-6.2	-9.0	-7.5	10.9	4.5
Transportation	-9.2	2.1	-6.7	6.2	-8.8	-8.7	-2.6	4.9	10.9
Healthcare	5.3	-1.9	1.4	0.7	3.7	7.3	-2.8	4.2	2.3
							-		
Entertainment	7.8	2.0	-8.7	6.6	5.8	-2.1	14.1	7.9	-7.6
Personal care products and									
services	-2.1	-6.3	11.2	-5.5	-2.4	-7.1	-2.8	12.0	2.3
			-				-		
Reading	-6.5	-4.6	11.3	0.9	-9.4	-6.7	11.5	22.3	-2.0
				-					
Education	26.8	8.6	-6.5	23.5	17.3	4.9	-9.2	-1.4	23.9
Tobacco products and	_								-
smoking supplies	10.5	1.2	5.9	-3.6	-0.8	15.3	-5.9	-7.0	13.5
Miscellaneous	-	33.8		-4.9	0.1	-3.1	24.9		

	16.0		14.2					26.8	13.6
Cash contributions	-5.0	13.7	6.3	-3.2	7.7	-4.2	-2.7	-3.9	12.3
Personal insurance and									
pensions	-0.9	2.7	-1.6	-4.2	1.4	-2.0	-3.7	-4.4	1.7

Table 4: Expenditure growth of Second Quintile (UK)

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Food & non-alcoholic drinks	1.4	-1.3	2.4	-0.5	0.8	11.8	-0.7	-2.7	3.7
Alcoholic drinks, tobacco &									
narcotics	-9.4	-1.2	0.9	-1.4	-4.6	1.2	6.4	-8.6	-1.2
Clarking O foot	0.4	6.6	2.0	6.7	-	7.0	0.0	2.4	0.6
Clothing & footwear	0.4	6.6	-3.0	-6.7	11.3	7.3	9.9	-2.1	-0.6
Housing (net)1, fuel & power	10.3	6.0	3.7	5.5	3.4	5.7	-0.8	7.4	5.9
				-				-	
Household goods & services	15.4	-2.0	-4.7	11.0	2.4	-11.2	22.4	19.8	-2.5
					-				-
Health	-11.2	-2.6	25.5	-5.4	20.8	16.1	-13.7	6.1	20.5
				-					
Transport	-2.7	1.2	10.3	11.4	-9.0	7.4	17.0	-8.2	-4.2
Communication	5.4	-1.0	-0.3	-2.0	-8.4	7.7	12.9	-4.3	6.6
Recreation & culture	3.9	-6.5	-0.9	-1.9	-7.9	8.2	-3.1	3.7	-2.3
		-		-	-			-	
Education	106.2	51.4	6.1	30.7	63.7	517.4	39.3	22.9	-3.8
Restaurants & hotels	5.1	1.4	-3.0	-7.9	-3.4	10.3	1.9	7.0	-5.6
				-					
Miscellaneous goods & services	9.4	-4.8	12.6	15.6	-6.2	11.0	0.8	8.3	-5.4
Other expenditure items	13.5	11.1	2.3	-5.9	-0.3	-12.4	-4.1	-3.8	9.2
Total expenditure	6.1	0.3	2.8	-5.0	-3.5	5.2	3.5	-1.3	0.7

Table 5: Expenditure growth of Third Quintile (UK)

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Food & non-alcoholic drinks	1.9	-3.7	1.6	1.6	3.2	5.3	-5.5	2.1	-3.3
Alcoholic drinks, tobacco &									
narcotics	-6.8	-5.4	2.6	-3.9	-7.0	0.5	-2.3	3.6	0.8
Clothing & footwear	0.4	-6.0	-3.9	-2.6	-5.9	0.7	12.0	-9.8	-5.3
Housing (net)1, fuel & power	-3.9	4.8	4.5	18.2	-8.2	-1.0	9.4	0.9	-1.9
Household goods & services	0.0	12.3	-0.6	4.4	- 16.6	14.6	-10.2	-5.7	-3.5
Trouseriora goods & services	0.0	12.0	0.0	-	10.0		10.2	3.7	0.5
Health	-4.2	0.1	13.5	11.5	-1.0	-2.1	-9.8	22.6	1.2
Transport	0.5	-1.4	-5.8	4.4	0.0	-3.8	-9.5	8.8	-6.9
Communication	6.9	-4.7	1.9	-0.4	-0.5	-5.6	4.4	-0.7	-2.4
		-							-
Recreation & culture	9.2	16.1	4.6	-5.5	9.2	-10.3	-8.9	21.8	16.8
			-		-			-	-
Education	40.2	8.6	20.1	66.0	44.9	25.3	137.5	34.2	59.5
Restaurants & hotels	1.3	-2.9	-1.4	-1.8	-8.4	9.2	-5.0	0.9	-4.8
					-				
Miscellaneous goods & services	-0.7	-5.3	3.6	0.8	10.1	11.6	-7.4	6.2	-9.7
Other expenditure items	14.2	2.6	3.1	-4.2	-1.7	-3.8	-13.0	-3.1	-4.5
Total expenditure	3.3	-4.2	1.1	1.6	-3.4	0.3	-4.0	3.0	-6.8

Table 6: Expenditure growth of Fourth Quintile (UK)

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Food & non-alcoholic drinks	3.3	-0.5	0.9	2.0	0.0	-4.7	3.5	-5.8	0.2
Alcoholic drinks, tobacco &				-					
narcotics	-1.0	-5.6	3.5	11.1	-0.5	-5.8	-5.4	7.9	-2.7
		-		-				-	
Clothing & footwear	3.5	13.1	8.6	12.6	-3.4	-11.3	13.9	12.9	2.5
Housing (net)1, fuel & power	-1.3	9.8	3.5	3.4	8.0	-3.0	1.2	0.6	-0.4
		-			-			-	
Household goods & services	-5.6	14.1	6.4	7.8	10.2	-16.3	7.3	10.3	4.4
			-	-					-
Health	3.0	30.3	19.9	16.0	8.8	11.5	-18.7	41.8	30.2
Transport	-1.7	-3.2	-4.4	-3.5	1.3	-3.7	3.8	-2.3	-8.4
Communication	2.6	1.0	-4.0	-1.8	-2.5	-8.9	4.3	2.6	-1.2
Recreation & culture	-3.6	0.0	1.1	-7.3	-2.5	-8.7	0.7	2.2	-5.6
					-			-	-
Education	33.7	27.0	-5.9	30.8	23.9	6.8	69.4	32.1	40.1
Restaurants & hotels	-7.0	-0.1	5.3	-4.1	-1.0	-9.6	3.0	-8.0	-5.4
				-					
Miscellaneous goods & services	1.8	-6.6	6.4	11.4	5.7	-13.1	2.8	-1.8	2.4
									-
Other expenditure items	11.3	0.3	-0.9	4.5	9.6	-27.3	3.8	-8.3	14.6

Total expenditure	0.8	-1.5	1.2	-1.9	1.5	-11.3	4.0	-4.1	-5.2	ĺ

Table 7: Expenditure growth of Second Quintile (Canada)

	ic / . Expc				, , , , , , , , , , , , , , , , , , ,				
Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total expenditure	1.4	2.4	-2.3	1.7	-0.3	-0.8	3.7	2.1	-4.9
Food	-0.5	-0.6	-3.3	3.1	-1.0	-3.2	8.6	0.1	-8.0
Shelter	-0.7	6.2	-2.5	0.4	2.9	0.0	10.0	1.4	-0.4
Household operation			2.5	1.1	-0.9	-1.1	16.6	4.2	-8.2
Household furnishings and			13.0	-9.0	2.6	-11.7	12.2	15.9	6.0
equipment							13.3		-6.0
Clothing	1.8	-0.5	11.1	0.9	-10.8	3.3	34.7	-6.2	4.0
Transportation	3.8	6.2	-5.3	-0.6	5.5	1.2	19.6	-4.2	-7.3
Health care			-1.7	10.3	-0.3	-4.7	16.4	1.5	-4.9
Personal care			1.9	4.8	-8.8	7.3	-17.1	13.4	-8.5
Recreation			-3.7	6.5	-2.0	-3.1	-7.4	13.3	-8.8
Reading materials and other printed									
matter			-10.7	6.9	-12.6	3.2	-24.1	11.5	-0.2
Education			11.2	-5.3	-26.4	66.4	-18.2	12.1	6.4
Tobacco products and alcoholic									
beverages			-0.3	1.1	-4.8	-3.8	-28.2	-7.9	-9.0
Games of chance			6.0	-20.6	36.4	-27.3	-45.6	22.2	-3.3

(net)									
Miscellaneous									
expenditures			23.8	-13.6	6.6	-4.7	8.8	52.4	-28.8
Personal Taxes	8.4	-3.4	-8.7	7.8	-6.9	-2.4	-40.6	0.7	-0.9
Personal insurance									
payments and									
pension									
contributions			-11.0	14.0	-8.9	-1.5	-3.0	-2.1	-3.4
Gifts of money and								_	_
contributions			-12.3	-7.4	18.8	-3.8	-14.6	9.7	-5.2

Table 8 : Expenditure growth of Third Quintile (Canada)

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total expenditure	0.8	4.6	-2.6	3.5	-3.0	-1.9	2.2	-0.7	0.2
Food	0.2	2.7	-4.5	3.8	-2.0	-0.6	-0.6	0.0	-4.3
Shelter	4.7	-0.3	0.8	3.2	0.0	1.0	8.9	-5.0	0.5
Household operation			-0.8	0.5	-0.1	4.3	7.9	7.5	-1.6
Household furnishings and equipment			3.2	-8.8	-3.0	-5.9	19.9	-11.5	15.0
Clothing	1.4	3.1	4.0	4.7	-0.8	-8.3	28.2	0.3	-1.5
Transportation	-6.7	11.2	-2.3	3.1	-5.0	-1.9	20.5	1.5	-2.0
Health care			-3.6	5.1	-7.4	1.8	12.2	0.2	1.0
Personal care			-1.2	1.9	3.4	-8.2	-17.7	0.2	21.6
Recreation			2.7	-0.9	-4.3	-5.2	2.8	-1.1	-11.2
Reading materials and other printed matter			-2.4	-11.7	2.5	-14.1	-11.6	-0.1	18.7
Education			-10.2	-15.9	20.1	-3.9	19.0	-5.6	0.1
Tobacco products and alcoholic beverages			1.6	0.4	-7.6	4.1	-31.7	7.0	14.3
Games of chance (net)			-12.7	-2.5	0.7	-7.0	-43.6	14.2	29.6

Miscellaneous expenditures			-1.5	-7.3	13.7	-4.4	5.2	14.4	-2.1
Personal Taxes	3.3	3.9	-6.7	7.1	-6.2	-5.0	-26.8	-2.0	7.0
Personal insurance									
payments and									
pension									
contributions			-12.6	5.6	-5.9	3.1	-5.0	3.0	-4.7
Gifts of money and				•	_				
contributions			-5.6	36.8	-12.6	-13.8	-3.9	-5.5	6.7

Table 9: Expenditure growth of Fourth Quintile (Canada)

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total expenditure	1.9	2.8	-1.0	0.5	1.7	-2.7	-4.2	1.9	0.1
Food	0.0	-1.4	-2.1	0.8	0.7	-3.4	5.8	-4.0	-3.2
Shelter	4.3	3.9	-2.9	5.1	3.3	-3.3	-0.7	0.2	3.4
Household operation			3.5	-1.8	-2.6	4.5	6.6	10.1	-3.2
Household furnishings and				11.0	4.4	0.1	12.4	0.0	42.2
equipment			3.0	-11.9	-1.4	0.5	-12.4	9.0	12.3
Clothing	1.4	-0.8	8.5	-4.2	-3.3	-0.2	23.4	-7.5	-5.2
Transportation	-0.9	-2.4	3.7	3.3	-0.3	-1.1	8.0	0.9	-2.0
Health care			5.3	2.6	1.0	-2.1	8.3	-6.6	6.6
Personal care			7.8	-6.3	0.9	2.5	-21.1	4.6	7.0
Recreation			3.3	-5.3	5.9	-13.0	-6.1	4.1	-3.6
Reading materials and other printed matter			-9.0	-4.6	-8.5	-9.5	-22.1	5.3	9.3
Education			9.5	-28.8	27.3	-19.2	6.8	8.6	6.0
Tobacco products and alcoholic beverages			-7.3	6.0	2.0	-1.5	-23.9	5.0	-4.1
Games of chance (net)			-7.5	-19.8	10.7	10.6	-33.3	-9.6	25.8
Miscellaneous			5.8	-1.5	1.3	4.8	-0.2	25.8	-11.2

expenditures									
Personal Taxes	2.0	3.2	-2.3	2.8	0.7	-9.9	-19.6	1.9	2.6
Personal insurance									
payments and									
pension									
contributions			-2.0	-3.2	6.4	19.8	-24.1	7.5	0.5
Gifts of money and									
contributions			-39.4	10.4	1.0	-4.5	-2.8	11.4	-10.0

Table 10: Expenditure growth of Second Quintile (Japan)

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Living expenditure	-0.7	-1.5	-3.0	3.7	-0.5	-3.4	2.6	-2.6	-0.8
Food	1.4	-3.3	-1.8	2.2	-2.4	0.6	0.3	1.1	-0.6
Housing	-8.4	-5.7	-2.4	1.7	0.1	-6.9	2.7	0.6	-1.6
Fuel, light & water charges	0.8	1.4	2.9	0.8	1.9	-3.2	4.4	0.1	0.8
Furniture & household utensils	-4.7	-3.4	-6.4	5.1	-3.0	7.4	-1.9	6.2	-4.8
Clothes & footwear	-4.5	0.4	- 10.4	2.4	-3.2	-3.7	0.1	-2.2	-3.5
Medical care	-6.1	13.7	- 10.1	8.4	-7.2	0.1	-0.9	6.4	-6.3
Transportation & communication	1.2	1.2	-2.0	0.0	8.4	- 11.9	4.7	-8.1	6.3
Education	- 19.8	25.6	-7.0	-0.6	- 18.4	-4.7	45.1	33.8	4.7
Reading & recreation	6.1	-2.7	-1.0	0.4	-3.4	4.0	8.8	-9.7	-4.1
Other living expenditure	-0.3	-4.0	-4.7	10.7	0.4	-6.8	0.2	-3.8	-1.1

Table 11: Expenditure growth of Third Quintile (Japan)

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Living expenditure	0.5	1.0	-3.6	0.5	-0.5	-1.7	0.2	-1.0	-0.8
Food	-2.0	1.0	-2.9	-0.1	1.0	-2.5	1.7	0.0	0.8
									-
Housing	3.6	-3.2	-2.0	-4.6	-0.2	-7.0	2.0	7.4	14.1
Fuel, light & water charges	-0.9	3.9	2.9	-2.1	4.1	-4.3	1.7	0.3	7.1

	_								
Furniture & household utensils	10.3	3.1	-3.2	2.6	-6.3	4.3	3.1	4.6	-6.1
Clothes & footwear	1.8	0.3	-7.4	0.5	-3.2	-1.1	-8.1	2.0	-5.6
Medical care	-3.7	6.2	-2.4	0.7	-0.7	-0.4	6.5	-0.2	3.6
Transportation & communication	5.2	5.4	-5.1	-5.5	2.7	1.5	-1.8	-7.1	5.5
	-						-		
Education	14.3	4.1	-5.8	1.3	2.1	-4.4	11.9	-2.4	3.6
Reading & recreation	2.0	2.9	-4.9	4.8	-6.2	4.5	1.9	-8.9	-3.6
Other living expenditure	3.1	-3.1	-4.7	5.5	-1.5	-3.9	-1.4	0.9	-2.0

Table 12: Expenditure growth of Fourth Quintile (Japan)

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Living expenditure	-0.7	1.3	-5.6	0.8	0.2	-1.6	-0.9	-2.8	2.1
Food	0.6	-0.9	-2.7	0.3	-0.3	-1.7	-0.3	-2.4	0.8
			-						
Housing	-5.5	4.2	10.9	1.1	-0.6	-0.5	8.4	-3.5	10.1
Fuel, light & water charges	0.2	3.5	1.9	-3.7	3.1	-4.1	2.6	-0.4	5.3
Furniture & household utensils	-3.1	0.3	-4.1	-2.2	7.5	0.6	-0.1	-2.5	9.0
						-			
Clothes & footwear	-0.5	-4.1	-0.6	-0.2	0.5	10.9	-3.6	0.0	0.3
Medical care	-1.4	8.8	-3.6	-4.4	0.7	4.2	-2.3	-4.4	4.8
Transportation & communication	1.3	-1.8	0.8	-0.1	-1.7	2.9	-2.9	-1.8	6.8
			-						
Education	-0.8	-3.7	14.7	9.4	-6.3	7.1	-3.9	-0.3	-4.9
Reading & recreation	-0.3	3.9	-4.7	3.0	3.6	-4.7	-1.4	-6.9	-3.7
			-						
Other living expenditure	-1.7	3.7	12.5	2.3	-0.4	-3.0	-2.6	-3.0	-0.1

Table 13: Expenditure growth of Second Quintile (China Urban)

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Living Expenditures (yuan)	7.6	7.4	8.0	11.3	6.0	10.1	6.9	6.9	10.1
Food	10.0	4.2	4.8	13.1	10.1	6.9	4.9	9.0	8.0
Clothing	3.4	13.3	16.1	11.4	2.5	15.0	8.2	10.3	9.7
Household Facilities, Articles and Services	-0.6	11.9	10.5	21.9	7.3	20.1	11.5	5.2	11.1

Medicine and Medical Services	5.3	12.7	2.8	12.6	10.6	8.3	-2.3	13.0	6.8
Transport, Post and Communication Services	7.9	9.8	12.1	11.1	1.7	13.5	18.2	3.7	18.0
Education, Cultural and Recreation Services	7.3	4.8	7.0	7.1	-8.3	12.8	5.3	6.3	11.1
Residence	7.8	10.7	11.4	4.6	10.6	5.4	11.0	-3.9	10.5
Miscellaneous Commodities and Services	7.0	9.0	13.7	9.9	6.9	20.5	-2.5	6.3	11.8

Table 14: Expenditure growth of Third Quintile (China Urban)

Table 14 . Experiation 8	510 11 111	o a	Quintin	<del>~ (~</del>	. O. Da	<i></i>			
Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Living Expenditures (yuan)	7.0	10.4	6.6	9.9	7.4	10.1	7.9	5.5	9.2
Food	8.3	8.0	4.8	11.9	11.6	6.2	4.8	8.6	8.0
Clothing	3.1	16.5	11.1	9.8	5.5	12.0	7.8	9.7	5.7
Household Facilities, Articles and Services	-1.9	11.6	10.3	17.1	6.8	14.6	15.1	5.1	9.1
Medicine and Medical Services	8.3	18.2	3.6	4.5	9.4	12.2	0.3	0.0	17.2
Transport, Post and Communication Services	12.1	7.8	10.8	10.3	2.6	20.0	22.1	3.2	14.1
Education, Cultural and Recreation Services	6.9	7.3	4.7	6.9	-5.6	10.9	6.6	9.3	6.3
Residence	5.1	13.9	5.7	4.4	14.6	7.4	7.9	-7.2	9.4
Miscellaneous Commodities and Services	6.4	13.7	11.3	14.0	7.0	12.9	5.0	3.5	10.8

Table 15 : Expenditure growth of Fourth Quintile (China Urban)

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Living Expenditures (yuan)	6.4	10.7	7.0	8.1	8.7	13.2	4.4	6.7	6.4
Food	9.1	7.5	4.9	10.7	12.6	7.2	3.0	8.2	6.2
Clothing	3.3	16.9	9.3	8.9	5.9	12.5	8.0	8.6	5.4
Household Facilities, Articles and Services	-2.1	11.6	5.4	17.2	10.4	17.5	10.1	9.1	2.7
Medicine and Medical Services	14.3	12.8	-1.8	7.9	7.2	10.4	-4.3	1.7	7.0
Transport, Post and Communication Services	9.3	12.5	15.9	7.2	8.6	26.2	11.5	6.5	9.0
Education, Cultural and Recreation Services	3.2	11.1	8.3	0.3	-0.3	11.7	7.2	6.1	6.6
Residence	0.4	11.3	8.0	3.6	9.2	18.8	-2.5	2.7	2.3
Miscellaneous Commodities and Services	9.5	13.5	7.7	12.4	10.2	21.7	-1.5	4.8	16.0

Table 16: Expenditure growth of Second Quintile (China Rural)

	200	200	200	200	200	200	201	201	201
Item	4	5	6	7	8	9	0	1	2
Living Expenditure	10.5	18.8	5.1	10.4	6.3	9.0	8.5	16.8	9.8
Food	13.4	10.9	1.6	10.0	8.3	2.5	7.6	12.1	7.2
Clothing	4.5	26.6	7.1	12.5	1.3	10.8	12.3	24.6	11.9
Housing	6.4	22.7	17.0	20.5	8.2	25.6	1.8	14.3	11.5
Household Appliances and									
Services	6.5	31.2	11.0	10.4	16.6	16.6	18.7	22.8	8.2
Health Care and Medical Services	8.0	37.7	5.2	13.2	8.7	12.9	13.8	43.3	14.8
Transport and Telecommunications	25.1	38.1	14.4	11.0	2.1	7.9	13.2	19.7	13.4
Education, Cultural and Recreation	0.1	22.6	-4.9	-6.9	-6.8	8.9	8.1	7.8	7.3

Other Goods and Services	9.7	20.3	11.0	14.7	0.7	0.1	20.1	23.5	18.2	
--------------------------	-----	------	------	------	-----	-----	------	------	------	--

Table 17: Expenditure growth of Third Quintile (China Rural)

	200	200	200	200	200	200	201	201	201
Item	4	5	6	7	8	9	0	1	2
Living Expenditure	8.4	17.1	8.7	9.2	5.6	8.7	8.2	15.3	9.8
Food	12.9	11.6	1.5	9.7	8.7	2.2	7.3	11.0	6.5
Clothing	6.0	20.8	11.7	12.5	2.7	9.8	10.5	22.7	12.9
Housing	1.2	21.5	28.0	16.4	2.7	22.5	6.1	13.2	12.6
Household Appliances and									
Services	3.5	31.9	13.3	16.0	9.6	15.7	19.7	24.3	7.5
Health Care and Medical Services	8.4	23.9	15.2	6.3	9.8	15.1	11.5	35.5	15.4
Transport and Telecommunications	14.7	32.4	15.8	11.8	0.2	9.1	10.0	21.3	11.9
Education, Cultural and Recreation	-3.0	17.0	2.6	-7.9	-0.6	7.6	4.0	2.7	9.5
Other Goods and Services	14.6	11.9	16.8	7.8	2.0	5.6	8.9	26.7	17.2

Table 18: Expenditure growth of Fourth Quintile (China Rural)

	200	200	200	200	200	200	201	201	201
Item	4	5	6	7	8	9	0	1	2
Living Expenditure	8.1	15.0	10.6	8.8	7.5	10.3	5.9	13.3	12.4
Food	12.5	9.1	3.9	9.7	9.1	3.3	6.5	11.0	8.7
Clothing	4.5	20.6	14.0	9.2	5.5	9.3	10.0	24.5	13.3
Housing	-2.0	16.9	24.0	19.0	11.9	17.9	1.1	10.3	20.2
Household Appliances and									
Services	2.5	30.0	13.9	14.4	9.7	21.7	8.0	28.0	6.2
Health Care and Medical Services	15.2	20.6	12.5	8.8	8.2	22.9	10.5	23.6	16.9
Transport and Telecommunications	14.3	27.1	21.8	5.7	0.7	15.1	8.3	14.5	12.6
Education, Cultural and Recreation	1.6	16.0	6.1	-8.8	2.0	9.3	3.8	0.3	10.2
Other Goods and Services	5.8	17.2	12.7	12.9	-2.5	10.7	5.3	26.2	19.1