

## A Global Outlook on Consumption and Sustainable Growth

Jiarui Lu<sup>1)</sup>

**Abstract:** Consumption, resources and environmental problems are connected with human development and existence. It is the common commission of all the nations in the world to fight against consumerism, stick to sustainable consumption and push ahead sustainable growth. As far as China and America are concerned, China should achieve a transition from investment to consumption while America should switch from consumption to investment. The main issues this paper studies is how the developing and developed countries to deal with the relationship between investment and consumption, and how to achieve sustainable development when they face the common human resources and environmental difficulties. The research mainly uses China and the United States as an example. The main research methodologies are qualitative analysis and quantitative analysis.

One Common Consensus: Consumption, Resources and the Environment are Connected with Human Existence and Development.

Since the 1970s, human understanding of consumption, resources and environment has achieved three advances, each of which has significantly narrowed the gap of understanding and shortened the distance of interaction between nations. It is our belief, therefore, that all the nations in the world will make concerted effort to turn the earth into a beautiful home for the human race.

Earth, one of the numerous planets in the vast solar system, has been inhabited by people for several millions of years. She offered humankind generously abundant natural resources and a pure and beautiful natural environment, feeding thousands, millions and thousands of millions up to the present 7 billion people. Not until the 1970s and '80s did some men of insight, in the background of population explosion, give warnings of the consequences brought about by the earth's generosity, people's barbaric exploitation of the natural resources and their unscrupulous destruction to the environment.

The report "*the Limits to Growth*", issued by the Club of Rome in 1972 analyzed the one-hundred year history of the 20<sup>th</sup> century, reached the conclusion that unlimited industrial growth and the earth's finite resources and capability of sustaining increased population and pollution had become extremely incompatible. "Population, industrialization, pollution, crop production and resource depletion" made the economic growth unsustainable. In its second edition 30 years later, the report pointed out again that it was a contradiction in itself to achieve unlimited expansion using limited environmental resources. Economic expansion meant the overconsumption of such resources as energy and material, which was bound to bring about a catastrophic outcome. This is the first advance in human under-

---

1) Professor, Beihai College of Beihang University.

standing of consumption, resources and environment, and it is also a historically significant leap in human cognition.

Population explosion is the twin brother of resource depletion and environmental pollution. One thousand years ago, the world had a population of only 1 hundred million; by the end of the 19<sup>th</sup> century, the world population had been growing at an unprecedented rate and now has topped 6.5 billion! The population explosion has brought about a sharp increase in all the existing problems, and it is also the cause of many significant social problems. Just in terms of consumption, it has triggered three grave problems in the world: first, more inequitable consumption has resulted from worsening disparities with the wealthy indulging in extravagance and overconsumption and a quarter of the population struggling in cold, hunger and despair at the same time; second, increased depletion of resources has raised concern over the problems of “no food”, “no drink” and “no oil”; third, environmental deterioration has presented a serious threat to human health and quality of survival. In spite of these, problems connected with global consumption haven't caused enough attention among some people with some encouraging it, some strongly defending it, and still some showing indifference to it. It is a relief, however, that an increasing number of people have become alarmed and the concept of “sustainable growth” is being accepted by more and more people.

In 1984, the World Commission of Environment

and Development, chaired by former Norwegian Prime Minister Mrs. Brundtland, sent a team of experts from 21 countries on an investigation tour in various parts of the world and published a report entitled “Our Common Future” (i.e. the Brundtland Report) in April, 1987. This report elaborates on a series of substantial economic, social and environmental problems that human beings are facing and based on this; put forward the concept of “sustainable development”, which is defined in the report as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” Obviously, sustainable development has two essential implications: first one is that development must meet the need of all the people of the present, and this represents a kind of equity; second one is that the development mustn't bring any damage to the future generations' survival and this indicates the inter-generational equity and the sustainability of development. This is the second advance in human understanding of consumption, resources and environment.

In recent years, frequent disasters coupled with climate change have made the climate problem the focus of global attention. The United Nations Climate Change Conference which took place in Bali, between 3-15, December, 2007 brought together more than 10,000 participants including representatives from almost all sovereign states. This shows that all the countries of the world have reached a consensus on the importance of the conference. At the end of the conference,

when the US had finally agreed to make some concessions, the Bali Road Map was adopted. The main contents include: global emission of greenhouse gas should be sharply reduced; future negotiations should consider specifying the amount of greenhouse gas emitted by all developed countries including the United States; developing countries should strive to curb the increase of greenhouse gas emission but without specified targets; in order to cope with the warming climate effectively, developed countries has the obligation to assist developing countries in technological development, technological transfer, fund etc.; by the end of 2009, a new agreement to slow down the global warming will be reached as the substitute of the "the Kyoto Protocol" (Xin Benjian, 2007). The passage of the Bali Road Map is a historic landmark and indicates the third advance in human understanding of consumption, resources and environment.

### **One Common Enemy: Consumerism**

Consumerism started in the 19<sup>th</sup> century. Increased productive forces, pushed by the technological revolution, made it possible for western capitalism to complete the transition from shortage economy to an age of surplus. As a result, production became increasingly dependent on consumption, and the conditions of consumption were crucial to the growth and survival of an enterprise. Thus, waves of public cries for stimulating consumption kept rising and new and diverse tricks to promote sales were emerging. In their wake, hedonism, which started in the 18<sup>th</sup> century, developed rapidly into conspicuous

consumption and consumerism, and reached its peak in the 1950s and '60s, when all the wealthy countries were in the growing tide. With economic globalization and the worldwide expansion of transnational capital, consumerism permeated the whole world. After the 1970s, in view of the serious consequences that the values and life styles of consumerism had produced to the resources and environment, some men of insight and even some international communities started to reflect on consumerism and give constant warnings of the consequences. Eventually, cries for sustainable development and consumption prevailed. Consumerism, instead of grinding to a halt, turned to moderately developed and developing countries. By the 1980s, consumerism, along with the surging waves of various western doctrines and schools of thought, began to flood in our country, exerting its impact on people's values and views.

What is consumerism? It is a kind of value orientation which upholds and pursues excessive possession and consumption in order to achieve personal self-gratification and life goals; it also refers to the actual behaviors induced by such values. It is neither a pure value nor a pure action but the mixture of the two. It retains some general features: (1)it is self-centered, that is, every possible means is adopted to satisfy personal needs, regardless of whatever consequences these may cause to nature, society or humans; (2)materialism rules everything, thus leading a life of excessive possession and consumption; (3) seeking pleasure is above everything else, enjoy-

ing excessively a life of luxury and dissipation; (4) indulging in a low and vulgar cultural life and following eagerly the current trend for such cultural junk as pop songs and other cultural products that contain neither positive messages nor aesthetic appeal 5) ignoring the practical use value of commercial goods and perceiving them as marks of social status and showing them off willfully in the irrational purchases of luxuries and conspicuous spending (Lu Jiarui, 2005).

Consumerism manifests itself worldwide in the polarized consumption, as a result of income polarization with excessive possession and consumption of developed countries at one pole and, at the other, starvations and threats from diseases to the health and life of the poor people in poor countries. Statistics show that developed countries, which make up only a quarter of the world population, swallow up as much as three quarters of the world's energy and resources, America being the biggest consumer, whose per capita consumption of oil, coal and crops is 1000 times, 500 times and 8 times respectively the amount of an African. It was calculated that, to support globally such material societies as America, 5 times the total sum of the earth's resources would be needed (Guo Jiping, 2007). clear data from the UN also reveal clearly that the one fifth of the world's most wealthy population consume 87% of the world's meat and fish while the one fifth of the poorest people consume only 5%; the one fifth of the earth's population in developed countries expend 46% of the world's meat, 65% of the electricity, 84% of the paper

and 85% of the metal and chemicals. In striking contrast, of the world's poorest population, one out of every five cannot live and work normally due to of the food deficiency. This mode of consumption, with some consuming excessively and some others struggling in cold and hunger, has lost its fundamental meanings and functions (Geng LiPing, 2004). And this mode of consumption has given rise to the situation that developed countries live with extravagance and waste while the poor in backward regions survive on excessive land cultivation and overgrazing, coupled with their helplessness in the face of pollution which will incur ecological degradation.

Consumerism results in resources being misused, ecological environment damaged and environmental pollution aggravated. Excessive possession and consumption have depleted the earth resources and are exhausting the earth's capability of sustaining the world's 7 billion people. A report in 2005 issued jointly by a team of 1360 scientists from 95 countries shows those human beings, whose activities have used up two thirds of the earth's natural resource, is confronted with a rather grim future (Lu Jiarui, 2007). Undoubtedly, this kind of unsustainable consumption has not only jeopardized the interest of the present but will also threaten the survival and growth of future generations.

Environment deterioration is another serious consequence of consumerism. Economic globalization has obscured geographical boundaries. Most developing countries think developed coun-

tries, which have long emitted carbon dioxide and now have a high per capita emission, are the leading culprit of warming climate. Developing countries, though with an extremely low greenhouse gas emission, have become the major victim of the climate change. Developed countries should not only bear their responsibility for the cumulative carbon dioxide in the atmosphere that causes the global warming but also should take the major share of the responsibility for the pollutions in the soil, the ground water and the sea, all of which are caused by waste water and solid waste from living and industry. Because of the rapid globalization, developed countries, which are on the high end of the industry chain and the forefront of high technology, are using every means available to switch the manufacture industry that is high in both consumption and pollution to China and other developing countries. China, on the low end of the international industry chain, has actually been turned into a world factory that exports resources (export trade of goods). In this sense, China's substantial quantities of material resources, such as steel, coal and oil, have been consumed by the whole world. In addition, globalization has aggravated China's environmental situations. Environmental deterioration has not only incurred immense economic loss but has posed a big threat to people's health as well. "The Stern Review" published by the British government indicates that global economic loss as a result of warming climate will take up 5 percent to 10 percent of GNP. A report published by the United Nations Environmental Program stresses that in 50

years there will be an annual economic loss of \$300 billion unless some action have been taken (Guo Jiping, 2007). According to another relevant investigation by the UN nearly 1 billion people are exposed directly to air pollution, and every year 3 million people die from air pollution (Geng LiPing, 2004)

So consumerism has become the common enemy of humanity. Every country in the world should condemn and combat it.

One Common Mission: Upholding Sustainable Consumption and Promoting Sustainable Growth  
The goal of combating consumerism is to achieve sustainable growth. According to the report by United Nations Environment Program, sustainable consumption is defined as "the use of services and related products which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life-cycle so as not to jeopardize the needs of future generations." Thus sustainable growth means providing services and various consumer goods to meet the basic human needs, improving human life quality, minimizing the use of natural resources in production, minimizing environmental and ecological degradation induced by production and consumption, and guaranteeing the intra-generational equity and the intergenerational equity. Life quality cannot be improved constantly without minimizing natural resource consumption, environmental pollution as well as ecological

destruction. Nor can life be improved constantly without eliminating the intra-generational equity that arises from rich countries' excessive and poor countries' inadequate consumption, and the intergenerational inequity which results from the unscrupulous resource use and ecological damage.

Sustainable consumption pursues the following principles: (1) both the limits of earth's resource and the right and interest of consumption of future generations should be recognized; (2) current generations' consumption should present no harm to the future generations' survival; (3) environmental safety should be guaranteed; (4) indicators of sustainable consumption involve both life quality and resource consumption; (5) sustainable consumption seeks expenditure on spiritual culture and opposes unchecked depletion of material resources.

The ultimate goal of sustainable consumption is to improve comprehensively human life quality. As pointed out clearly by the report at the 16<sup>th</sup> National Congress, "the fundamental goal of economic growth is to uplift the living standards and quality of life of the people." China aims to achieve a better-off living standard for all the people and move the construction of an overall better-off society to a new stage in the first 20 years of the century. Yet the fundamental goal of economic development is not only to raise people's living standard, enhancing the quality of people's life should also be on top of our agenda. It is one of the most important objectives of

building a better-off society of a higher level. Living standard and life quality are two concepts that have both associations and distinctions. The former is measured mainly by per capita income and levels of consumption while the latter is reflected, apart from these two aspects, by the quality of consumer goods, the consuming environment, consumers themselves etc. So life quality covers much more profound contents, including fully fulfill people's requirements, overall improve a person's quality and achieve an individual's all-round development as its ultimate goals. And these are the same ultimate aims of sustainable development of an economic society (Lu Jiarui, 2002). What's more, the fundamental goals of sustainable consumption is to narrow the gap between the rich and the poor, lower the consumption of natural resources, provide continually all kinds of consumer goods and services to meet the human basic needs, create a sound living environment, and thereby fulfill the human requirement of improving life quality. These primary goals of sustainable consumption comply with those demanded of economic growth and therefore, in reaching the final goals of economic growth, sustainable consumption is the choice we have to make (Lu Jiarui, 2003).

Though sustainable consumption is closely linked to sustainable growth, there are differences between the two. Sustainable growth is a big system, which embraces sustainable production and sustainable consumption as its two subsystems, which in turn are the two wheels in pushing sustainable development forward. Sus-

tainable production requires that human capital should be the predominant factor in designing and manufacturing products and that production should be made with minimal use of resources and minimum environmental damage. To meet these requirements, recycled as well as alternative materials are called for in production. On the one hand, waste and industrial garbage should be maintained to the lowest possible level, and these waste and garbage produced should go back into production as raw material and reused over and over again until the use value of these resources has been exhausted in these recycling processes. On the other hand, new products should be created constantly, new use value should be attached to the old stuff, the variety and range of the raw materials (energy included) and consumer goods should be broadened, and cheaper materials but of the same or higher use value should be used with every effort to replace the originally used raw materials and alternative consumer goods should be used with every effort. In short, sustainable consumption reduces maximally in the production process the exhaustion of natural resources, and the destruction to the environment and the ecological system, and fully fulfills the basic human needs without sacrificing the benefits of future generations.

Sustainable consumption, production and growth all adhere to the principles of intra-generational and intergenerational equity and regard protecting the environment and ecosystem as the integral part of duty. Sustainable growth is a comprehensive category, with the goal of seeking

harmony among economy, society, environment, and resources as well as maintaining the sustainable, stable and lasting growth of economy; sustainable consumption and sustainable production, on the other hand, are two components of sustainable growth, and constitute the mechanism for achieving sustainable growth. As a result, only by pursuing a consistent development of the two can sustainable growth be achieved. Since sustainable consumption and production underline the production and consumption phases of sustainable growth, which will eventually lead to the harmonious development of economy, society, environment and ecology as well as the overall development of human beings, they make the backbones of the sustainable growth.

On the other hand, sustainable consumption is distinct from sustainable growth in that the latter calls for equity, moderation, economy and efficacy when choosing consuming ideas and behaviors, consumption patterns and consumption policies with the aim of nurturing public awareness of cherishing nature, conserving resources, safeguarding the environment and the ecosystem and treasuring life quality. Sustainable development contains more contents, not only including what's involved in economic lives such as production, distribution, spending but also those aspects of our social lives such as political democracy, civil liberty and social equity etc.

As far as wealth involved in sustainable growth is concerned, all natural resources including those not involved in human work and in trans-

actions are all of value, and the value depends on their utility to humans as well as their scarcity. As a whole ecosystem, all natural resources have to be integrated into wealth. Sustainable development follows the principle that wealth cannot be created without using the three kinds of capitals, that is, physical capital (output capital), human capital (capital of knowledge) and ecological capital (natural resources) are need to create wealth; each serves a unique, irreplaceable function in creating wealth, and these three have to function wholly, simultaneously and harmoniously in raising the value of each so that the national wealth of a country can be increased.

Though there are some distinctions between the two, they are more associated, dependent on and complementary to each other. It is the common mission of the whole humanity to stick to sustainable consumption and push ahead sustainable growth. With the trend for economic globalization, capital flows across nations and resources are reallocated throughout the world and pollution becomes transnational too. Therefore developed countries should under the guidelines of the United Nations assist developed nations in technological development, financial support and other things. Developing countries should make the utmost effort to conserve resources and reduce pollutant discharges.

One bidirectional Transition between Consumption and Investment: America and China as Examples

In view of the global shortage and depletion of

mineral resources as well as grave environmental degradation, how to conserve mineral and energy resources is crucial for settling the world's economic problems and achieving sustainable economic growth. In this view, countries with a wasteful economy, like America and China, should perceive the soaring oil prices as a good opportunity to push forward the adjustment of existing economic structure and switch to the frugal economy.

Consumerism has spread and prevailed in developed countries. Thus high consumption characterizes the wasteful economy of these countries, and among them America being is a case in point. Take America, France, Germany and UK as an instance. The average consumption rate of these countries reached 79.86% in 2000 while the investment rate hit merely 20.05%. In terms of oil consumption, according to the statistics given British Petroleum, the world's consumption of first-rate energy, such as oil, coal, natural gas, nuclear energy and water power, was 10.2 billion, of which America used up 23 tons, that is, 23% of the world's total sum or 5 times the amount consumed by Japan. Furthermore, America exhausted nearly *double the energy used* by Japan to produce \$1 worth of GDP (Zhong Qianzhong et al, 2006). Neglect of investment in production and persistent pursuit of high consumption also reveal their complete disregard for their social responsibilities, and the unsustainable growth of the economy. The "Empire State Building", with ever-growing consumption, subprime lending crisis and the falling of US dollars, has begun



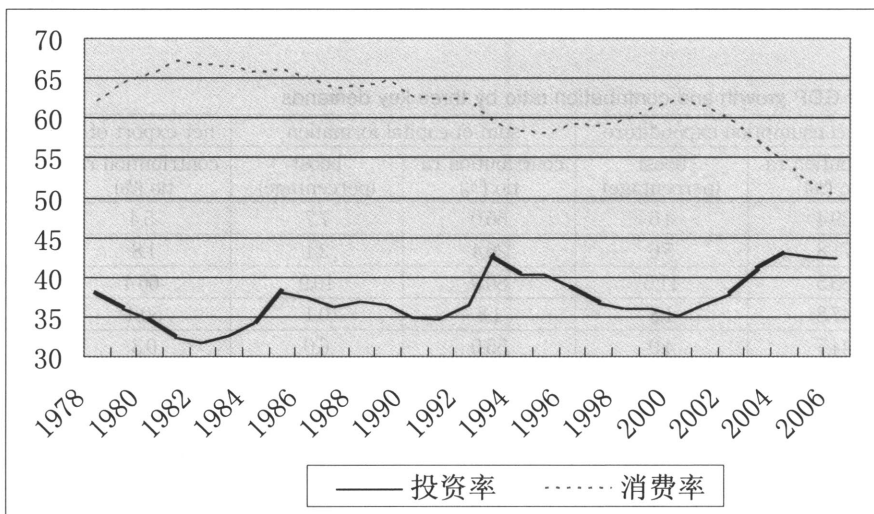
shaking alarmingly. America is having a difficult time in 2008. America and other developed countries should use the rising oil price as a turning point and start to change the bad spending customs and patterns, curb high expenses, make more investments both in the high-tech research and development of energy-saving and other resources and in the development and utilization of new resources and energies and thereby turn the economic trend successfully from consumption to investment and strike a balance between consumption and investment in national economic growth. Furthermore, developed countries should not just, in the process of economic globalization, conserve national resources and energy, but also, through the transfer of high technology as well as financial support, offer assistance to developing countries, fulfilling the social responsibility neglected while attaining the national economic sustainability. In this sense,

to maintain the sustainable growth of the global economy, America and other developed countries, must be pushed to work along with other countries to establish under the guidelines of the United Nations the relevant international conventions. In spite of the tremendous difficulty in drawing it, the Bali Road Map presents us some first light of the day when every country in the world will work together to combat global resource exhaustion and energy crisis.

Over the 20 years since the mid 1980s, China's economic economy has been operating in an unbalanced state of heavy investment, low consumption and a low contribution ratio of consumption.

Figure 1 shows the variation of investment and consumption in each GDP in the period 1978—2006. As disclosed, final consumption rates (con-

Figure 1 variation trend of rate of final expenditure and rate of capital formation



Note: rate of consumption= final expenditure/gross domestic product (calculated by the expenditure approach)\*100%; rate of capital formation= sum of capital formation/ gross domestic product (calculated by the expenditure approach)\*100%

sumption rates) declined from the top of 61.1% in 1981 to the bottom of 49.9% in 2006, a total decline of 17.2 %; by contrast, capital formation rates (investment rates) followed an upward trend showing a rise of 10.6% from the lowest 31.9% in 1982 to the highest 42.5% in 2006. Over the 7 years since 2000, in particular, the consumption rate fell annually from 62.3% in 2000 to 49.9% in 2006, a rapid fall of 12.4% in 7 years; by contrast, investment undertook an almost annually upward trend, increasing from 35.3% in 2000 to 42.5% in 2006, a sharp increase of 7.2 in 7 years. Since 2000 (2003 especially), China has enjoyed a rapid economic growth with a two-digit rise in GDP. Yet a fast-growing economy, supported mostly by investment and accompanied by a drastically falling consumption, cannot afford economic sustainability.

Table 1 presents the variation trend in contribution ratio in terms of China's consumption, investment and export, which further verifies the

imbalance between investment and consumption. Table 1 shows that, since 1995, investment has been the dominant force in China's economic growth. Consumption, by comparison, lost this predominance in the 1980s and 90s, becoming secondary to investment since the mid 1990s, and this downfall has accelerated since 2000. Neglect of consumption means attaching no importance to the super market of China, and this is extremely unwise. I consistently contend that China's economic growth should be founded on the domestic market, which is the biggest international market and also the most potential and appealing market. Increasing consumption promptly and expanding consumption demands properly will enlarge domestic market efficiently, maintain the smooth operation of national economy and boost substantially the economic, political and military strength (Lu Jiarui, 2007).

In the final analysis, overdependence on investment and inattention to consumption cannot

**Table 1 rise of GDP growth and contribution ratio by three key demands**

year	final consumption expenditure		sum of capital formation		net export of goods and services	
	contribution ratio (%)	boost (percentage)	contribution ratio (%)	boost (percentage)	contribution ratio (%)	boost (percentage)
1978	39.4	4.6	66.0	7.7	-5.4	-0.6
1980	71.8	5.6	26.4	2.1	1.8	0.1
1985	85.5	11.5	80.9	10.9	-66.4	-8.9
1990	47.8	1.8	1.8	0.1	50.4	1.9
1995	44.7	4.9	55.0	6.0	0.3	1.2
2000	63.8	5.4	21.7	1.8	14.5	0.7
2001	50.0	4.1	50.1	4.2	-0.1	0.1
2002	43.6	4.0	48.8	4.4	7.6	0.6
2003	35.3	3.5	63.7	6.4	1.0	2.5
2004	38.7	3.9	55.3	5.6	6.0	2.2
2005	38.2	4.0	37.7	3.9	24.1	
2006	38.9	4.2	40.7	4.3	20.4	

Source: *China Statistical Abstract* (2007) page 36, China Statistics Press, May, 2007

guarantee economic sustainability. China, therefore, should achieve the transition from investment-dominated economy into consumption-dominated economy, sustained by the equilibrium between investment and consumption

As a developing country, China is also confronted with serious resource wastefulness and environmental pollution. In 2003, for example, our country consumed a total of 5 billion tons of various domestic and imported resources, with crude oil, raw coal, iron ore, steel, aluminum oxide and cement making up 7.4%、31%、30%、27%、25%、and 40% respectively of the world's consumption (Lu Jiarui, 2004); in contrast, the GDP produced constituted only 4% of the world's total. Growth coming from high consumption will result in high discharge of waste and environmental deterioration. Besides, China has a low recycling rate. Chinese government acknowledges this fact and has made a great effort to correct the situation and promised to do more. China's sincerity and hard work has won acclaim from countries attending the Bali conference.

## References

- Geng LiPing. (2004). *Survival and Consumption---a Research into the Problem of Consumption, Growth and Sustainable Development*. Beijing: Economic Management Press.
- Geng LiPing. (2004). *Survival and Consumption---a Research into the Problem of Consumption, Growth and Sustainable Development*. Beijing: Economic Management Press. 238.
- Guo Jiping. (2007, December 7). Common Care of the earth: the Home of Human Survival. *People's Daily*, pp. A1
- Guo Jiping. (2007, December 7). Common Care of the earth: the Home of Human Survival. *People's Daily*, pp. A5.
- Lu Jiarui. (2002, September 14). From Improving Living Standard to Improving Life Quality. *People's Daily*, pp. A1.
- Lu Jiarui. (2003, Oct. 14). Some Problems on Sustainable Consumption. *Guangming Daily*, pp. A1.
- Lu Jiarui. (2004, October 8). The Strategic Choice of Transforming the Ways of Economic Growth. *People's Daily*, pp. A1.
- Lu Jiarui. (2005, December 7). A Brief Analysis of Consumerism. *Guangming Daily*, pp. A1.
- Lu Jiarui. (2007). *Economic Theory of Consumption and Practical Study*. Shijiazhuang: Hebei Renming Press. 267.
- Lu Jiarui. (2007). *Economic Theory of Consumption and Practical Study*. Shijiazhuang: Hebei People's Press. 57.
- Xin Benjian. (2007, December 17). Road Map, the Significant Landmark. *People's Daily*, pp. A3.
- Zhong Qianzhong et al. (2006, June 8). Rising Oil Prices are Good Opportunity for Reforming China's and America's Economic Structure. *Reference News*, pp. A5.